

Pension Reforms and Gender Equality in Latin America

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Acronyms

AFP	Administradora de Fondos de Pensiones (Pension fund administrators)
APS	Aporte Previsional Solidario (Solidarity Pension Contribution)
ANSES	Administración Nacional de la Seguridad Social (National Social Security Administration)
Bs	Bolivian boliviano
FCC	Fondo de Capitalización Colectiva (Collective Capitalization Fund)
CENDA	Centro de Estudios Nacionales de Desarrollo Alternativo (National Center for Alternative Development Studies)
CEPAL	Comisión Económica para América Latina y el Caribe <i>(Economic Commission for Latin America and the Caribbean)</i>
ENTEL	Empresa Nacional de Telecomunicaciones (National Telecommunications Company)
PASIS	Pensión Asistencial (Social assistance pension)
PAYG	Pay As You Go
PBS	Pensión Básica Solidaria (Basic Solidarity Pension)

Summary/Resumé/Resumen

Summary

As most other components of social protection systems, pension schemes can have a substantial impact on gender equality. The way in which pension systems distribute rights, resources and risks can affect men and women differently and serve to mitigate, reproduce or amplify the gender inequalities emerging from the labour market, the distribution of work in the household, and so on. Pension systems can also favour some family arrangements over others and introduce incentives that consolidate specific gender roles. The types of benefit that a pension system provides, the mechanisms for the calculation of benefit levels and the eligibility conditions vary between countries with different effects on the gender distribution of old-age protection and the relative position of men and women vis-à-vis the pension system.

Latin American countries originally embraced the Bismarckian model of old-age protection with earnings-related contributory systems. Coverage in contributory systems depends on participation in the formal labour market, earning levels and family composition, and hence they tend to reproduce the labour market inequalities between men and women. Starting with Chile in the 1980s, a number of Latin American countries implemented structural pension reforms that fully or partially replaced these systems with fully funded schemes of individual accounts, in which benefits depend on individual pension savings. By strengthening the connection between lifetime contributions and benefits, the new pension schemes raised a new set of gender equality issues.

More recently, increasing concern about the capacity of women to build sufficient pension savings over their lifetimes to obtain adequate protection in old age has motivated a number of studies and policy innovations. Some Latin American countries have started to introduce gender-friendly elements in their pension systems to try to improve women's access to social security. This paper evaluates the sources of gender inequality in old-age protection and the way in which recent pension reforms in Latin America have tried to compensate and overcome some of the gender biases in previous systems. It reviews the features of the labour market and of the pension system which can affect pension coverage and benefits for men and women. It also studies the gender equality implications of contributory systems and of individual pension accounts in Latin America. Three case studies are presented: first, the case of Chile, which is one of the first examples of a post-privatization reform; second, the case of Bolivia, which combines universal protection with a recently reformed social security system that covers a relatively small share of the labour force; and third, Argentina, where private individual accounts have recently been replaced by pay-as-you-go pensions, along with other innovations in pension coverage and benefit indexation.

The paper shows that recent pension reforms in the three countries studied have embraced some of these measures, and the gender equality issue is slowly being introduced in Latin American pension reform agendas. However, gender gaps are unlikely to disappear. Differences in pension rights and benefits between men and women may lessen if women enter the labour force in greater numbers, and gender gaps in the labour market diminish. Until this happens, pension systems need to keep redesigning the basis for allocation of rights and benefits to avoid, reduce and compensate the gender gaps that still exist.

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Résumé

Comme la plupart des autres composantes des systèmes de protection sociale, les régimes de retraite peuvent avoir un impact considérable sur l'égalité entre les sexes. La façon dont ils distribuent les droits, les ressources et les risques peut produire des effets différents sur les

hommes et les femmes et atténuer, reproduire ou creuser les inégalités provenant du marché du travail, de la répartition des tâches dans le ménage et ainsi de suite. Les régimes de retraite peuvent aussi favoriser certains arrangements familiaux par rapport à d'autres et introduire des incitations qui renforcent certains rôles assignés à l'un ou l'autre sexe. Les types de prestation qu'offre un régime de retraite, les modes de calcul du niveau des prestations et les conditions d'affiliation varient selon les pays et ont des effets différents sur la distribution de l'assurance vieillesse chez les hommes et les femmes et sur leur situation relative vis-à-vis du régime de retraite.

Les pays d'Amérique latine ont initialement adopté le modèle bismarckien d'assurance vieillesse, financé par des cotisations calculées en fonction des gains. Le nombre des bénéficiaires des régimes financés par des cotisations dépend de la participation au marché du travail officiel, des niveaux de revenu et de la composition de la famille et ont donc tendance à reproduire les inégalités entre hommes et femmes sur le marché du travail. À commencer par le Chili dans les années 1980, nombre de pays d'Amérique latine ont appliqué des réformes structurelles qui ont remplacé tout ou partie de ces régimes par des régimes de comptes individuels reposant sur la capitalisation, dans lesquels les prestations dépendent de l'épargne retraite individuelle. En renforçant le lien entre les cotisations versées la vie durant et les prestations, les nouveaux régimes de retraite posent des problèmes d'égalité entre hommes et femmes et femmes d'un genre nouveau.

Récemment, des craintes quant à la capacité des femmes de se constituer au cours de leur vie une épargne retraite capable de leur assurer une protection suffisante dans leur vieillesse ont motivé nombre d'études et d'innovations politiques. Certains pays d'Amérique latine ont commencé à introduire dans leurs régimes de retraite des éléments de réégalisation en faveur des femmes pour essayer d'en améliorer l'accès à la sécurité sociale. Le présent document analyse les origines de l'inégalité entre hommes et femmes dans l'assurance vieillesse, ainsi que la manière dont les récentes réformes des retraites en Amérique latine ont essayé de compenser et d'annuler certains des biais liés au sexe dans les régimes précédents. Son auteur examine les caractéristiques du marché du travail et du système de retraite qui peuvent influer sur le nombre des bénéficiaires de la retraite et sur les prestations versées aux hommes et aux femmes. Elle étudie aussi ce que devrait impliquer l'égalité des sexes pour les régimes financés par des cotisations et les comptes de retraite individuels en Amérique latine. Elle présente trois études de cas : premièrement, le cas du Chili, qui est l'un de premiers exemples de réforme postérieure à la privatisation; deuxièmement, le cas de la Bolivie, qui allie une protection universelle à un régime de sécurité sociale récemment réformé dont bénéficie une proportion relativement faible des actifs; et troisièmement, celui de l'Argentine, où les comptes individuels privés ont été remplacés récemment par des retraites financées par une retenue à la source et par d'autres innovations touchant à l'affiliation au régime de retraite et à l'indexation des prestations.

Ce document montre que les réformes récentes des retraites dans les trois pays étudiés ont repris certaines mesures d'égalisation et que, peu à peu, la question de l'égalité entre hommes et femmes fait son entrée dans le débat sur la réforme des retraites en Amérique latine. Il est cependant peu probable que les écarts entre hommes et femmes disparaissent. Les différences touchant les droits à la retraite et les prestations entre hommes et femmes peuvent se réduire si les femmes sont plus nombreuses à exercer une activité économique et que se gomment les inégalités entre hommes et femmes sur le marché du travail. En attendant ce jour, les régimes de retraite doivent continuer à retravailler la base d'allocation des droits et des prestations pour éviter, réduire et compenser les écarts qui existent encore entre hommes et femmes.

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Resumen

Al igual que casi todos los otros componentes de los sistemas de protección social, los planes de pensión pueden tener una repercusión sustancial sobre la igualdad de género. La forma en que los sistemas de pensión distribuyen los derechos, recursos y riesgos puede afectar de forma diferente a los hombres y las mujeres, y pueden servir para mitigar, reproducir o amplificar las desigualdades de género provenientes del mercado laboral, la distribución del trabajo en el hogar, etc. Los sistemas de pensión también pueden favorecer ciertos arreglos familiares frente a otros e incorporar incentivos que consolidarían funciones específicas al género. Los tipos de beneficios que aporta un sistema de pensión, los mecanismos usados para calcular los niveles de prestaciones y las condiciones de admisibilidad varían con cada país, y sus efectos son diferentes sobre la distribución de la protección de la vejez en relación con el género y la posición relativa de los hombres y las mujeres frente al sistema de pensión.

Los países latinoamericanos adoptaron en un principio el modelo bismarckiano de protección de la vejez con sistemas de reparto vinculados a los ingresos. La cobertura de los sistemas de reparto depende de la participación en el mercado laboral formal, los niveles de ingreso y la composición de la familia, por lo que dichos sistemas tienden a reproducir las desigualdades entre los hombres y las mujeres en el mercado de trabajo. En la década de los ochenta, y con Chile a la cabeza, varios países latinoamericanos pusieron en marcha reformas estructurales de sus planes de pensión que remplazaron, total o parcialmente, los sistemas existentes por planes completamente financiados de cuentas individuales, en los cuales las prestaciones dependen de los ahorros individuales de pensión. Al fortalecer la conexión entre los aportes durante la vida laboral y las prestaciones, los nuevos sistemas de pensión generaron todo un conjunto nuevo de problemas relacionados con la equidad de género.

Más recientemente, la creciente preocupación en torno a la capacidad de la mujer para generar suficientes ahorros para su pensión a lo largo de su vida laboral y obtener una protección adecuada durante su vejez ha motivado la elaboración de nuevos estudios y políticas innovadoras. Algunos países latinoamericanos han comenzado a introducir en sus sistemas de pensión algunos elementos favorables a la cuestión del género para tratar de mejorar el acceso de la mujer a la seguridad social. En este documento se evalúan las fuentes de la desigualdad de género en la protección de la vejez y la forma en que las recientes reformas a los sistemas de pensión en América Latina han tratado de compensar y superar algunos de los sesgos de género que caracterizaban a los sistemas precedentes. En el documento se estudian además las características del mercado laboral y del sistema de pensión que pueden afectar la cobertura de la pensión y sus prestaciones tanto para los hombres como para las mujeres. También se analiza en este trabajo las implicaciones de los sistemas de reparto y las cuentas individuales de pensión para la igualdad de género en América Latina. Se presentan tres estudios de caso: el primero es el caso de Chile, que representa uno de los primeros ejemplos de la reforma posterior a la privatización; seguidamente se presenta el caso de Bolivia, en el cual se combina la protección universal con un sistema de seguridad social reformado recientemente y que cubre a una porción relativamente pequeña de la fuerza laboral; y finalmente, Argentina, donde las cuentas individuales privadas han sido sustituidas recientemente por pensiones contributivas, junto con otras innovaciones sobre la cobertura de la pensión y la indexación de las prestaciones.

En el documento se indica que las recientes reformas a los sistemas de pensión en los tres países estudiados han incorporado algunas de estas medidas, y que el tema de la equidad de género está introduciéndose lentamente en los planes de reforma de los sistemas de pensión en América Latina. No obstante, es poco probable que las brechas desaparezcan; las diferencias entre los hombres y las mujeres en cuanto a los derechos de pensión y las prestaciones podrían reducirse si aumenta el número de mujeres en la fuerza laboral y disminuyen las brechas entre los géneros en el mercado de trabajo. Hasta entonces, los sistemas de pensión deberán seguir rediseñando las bases de asignación de derechos y prestaciones con el fin de evitar, reducir y compensar las brechas de género que aún existen.

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1. Introduction

As most other components of social protection systems, pension schemes can have a substantial impact on gender equality. The way in which pension systems distribute rights, resources and risks can affect men and women differently and serve to mitigate, reproduce or amplify the gender inequalities emerging from the labour market, the distribution of work in the household, and so on. Pension systems can also favour some family arrangements over others and introduce incentives that consolidate specific gender roles. The types of benefit that a pension system provides, the mechanisms for the calculation of benefit levels and the eligibility conditions vary between countries with different effects on the gender distribution of old-age protection and the relative position of men and women vis-à-vis the pension system.

Latin American countries originally embraced the Bismarckian model of old-age protection with earnings-related contributory systems. Coverage in contributory systems depends on participation in the formal labour market, earning levels, and family composition, and hence they tend to reproduce the labour market inequalities between men and women. Starting with Chile in the 1980s, a number of Latin American countries implemented structural pension reforms that fully or partially replaced these systems with fully funded schemes of individual accounts, in which benefits depend on individual pension savings. By strengthening the connection between lifetime contributions and benefits, the new pension schemes raised a new set of gender equality issues.

More recently, increasing concern about the capacity of women to build sufficient pension savings over their lifetimes to obtain adequate protection in old age has motivated a number of studies and policy innovations. Some Latin American countries have started to introduce gender-friendly elements in their pension systems to try to improve women's access to social security. This paper evaluates the sources of gender inequality in old-age protection and the way in which recent pension reforms in Latin America have tried to compensate and overcome some of the gender biases in previous systems. The following section reviews the features of the labour market and of the pension system which can affect pension coverage and benefits for men and women. The third and fourth sections study the gender equality implications of contributory systems and of individual pension accounts in Latin America. Three case studies are presented in the fifth section: first, the case of Chile, which is one of the first examples of a post-privatization reform; second, the case of Bolivia, which combines universal protection with a recently reformed social security system catering to a small share of the labour force; and third, Argentina, where private individual accounts have recently been replaced by pay-as-yougo pensions along with other innovations in pension coverage and benefit indexation. The last section summarizes the main findings and presents the conclusions.

2. Gender, Pension Design and Labour Markets

Through alternative designs, pension systems can institutionalize different ways to distribute the responsibility for the well-being of the elderly among the market, the state, individuals and families. The rules by which pension schemes define "who gets what and how" in old-age protection are central to the distribution of social citizenship for both men and women. The capacity of pension systems to guarantee adequate levels of old-age protection for different groups in society (men and women, but also high and low-income families, rural and urban sector workers, and so on) also indicates the extent to which they distribute social citizenship rights in an equal way.¹

In practice, both pension design and labour market factors matter for gender equality in pension policy (Barr and Diamond 2009). Both factors vary from country to country: labour market conditions differ across time and space, and so does the position of women in the labour market in terms of participation rates, earnings and work trajectories. Similarly, pension systems operate under a wide range of rules guiding eligibility, benefit levels, financing and administration, which can exacerbate, reproduce or mitigate the gender inequalities produced elsewhere. Some of these rules are particularly prone to reproduce gender inequalities existing in the labour market or to produce new ones.²

The gendered nature of labour markets has been widely acknowledged in recent research. Labour market factors affecting pension outcomes include participation rates, career breaks, part-time work, self-employment, informal employment, unemployment, and earnings. Women tend to dedicate a significant part of their working lives to non-remunerated household work and to take care of children and elderly members of the family. When pension entitlements are related to paid work and/or contributory history, women are more likely to accumulate limited pension rights of their own. In urban areas of Latin America, in spite of the gradual increase in women's participation rates, only between 45 per cent and 62 per cent of women were economically active in 2008, compared to between 73 per cent and 85 per cent of men (table 1). Working women are also more likely to take career breaks than men. Many women leave the labour market when they have children, especially when they are not the head of the household. In Chile, for instance, about 28 per cent of women work full-time in the household when they have one child below the age of six (the percentage rises to 33.5 per cent when they have two or more children of that age). In contrast, 15.5 per cent of women who have no small children work full-time on housework. Similar patterns are found across Latin American countries (table 2). Career breaks reduce contributory records and can also negatively affect earnings trajectories and future pension levels.

¹ Dion 2008; Giménez 2003; Orloff 1993.

² See, among others, Frericks and Maier (2008); Gilbert (2006); Ginn (2008); Marco (2004); Pautassi (2002).

					Sex and	per capi	ta householo	l incon	ne			
			1	1en					Wo	omen		
Country	I (poorest)	II	III	IV	V (richest)	Total	I (poorest)	п	III	IV	V (richest)	Total
Argentina ^a	67	71	74	80	87	75	39	43	46	57	69	50
Bolivia	78	76	75	78	79	77	49	51	51	57	58	55
Brazil	77	80	80	80	79	79	47	57	60	60	60	57
Chile	65	69	73	77	79	73	32	39	44	51	60	45
Colombia	_	_	_	_	_	76	_	_	—	_	_	54
Costa Rica	60	74	78	81	80	76	32	40	50	55	61	50
Dominican Republic	56	78	80	82	89	79	36	47	54	57	65	52
Ecuador	75	79	81	81	81	80	39	43	52	58	64	53
El Salvador	—	—	—	—	—	74	—	—	—	—	—	52
Guatemala	86	84	87	85	83	85	38	46	52	57	62	55
Honduras	76	73	77	77	76	76	28	35	39	47	55	47
Mexico	82	81	80	80	80	81	37	45	51	57	57	51
Nicaragua	—	—	—	—	—	—	—	—	—	—	—	—
Panama	67	77	79	82	81	79	31	37	50	59	63	51
Paraguay	75	81	85	85	82	83	47	51	52	59	68	57
Peru	77	81	82	79	82	81	54	58	61	64	63	62
Uruguay	78	73	72	73	74	74	52	53	55	57	57	55
Venezuela ^b	73	79	80	82	85	80	33	42	52	60	67	51

Table 1: Economic participation rate of the population aged 15 and over, by quintile of household per capita income, urban areas, 2008 (per cent)

Notes: ^a 31 urban agglomerates. ^b National total. **Source:** Economic Commission for Latin America and the Caribbean Data taken from household surveys carried out by countries in 2008, except for Argentina, Chile, El Salvador and Guatemala in 2006; Bolivia, Colombia and Honduras in 2007. Updated data to 22 July 2010, taken from CEPALSTAT (www.cepal.org/estadisticas, last accessed 10 March 2011).

Table 2: Women aged 15 and over dedicated full-time to household work, by position in the household and number of children under the age of six, urban areas, 2008 (*per cent*)

	Numbe	er of children a	iged 0-6 in the house	ehold
	None	One	Two or more	Total
II women aged 15 and over				
Irgentinaª	19.7	30.2	41.9	24.0
Bolivia	16.5	26.1	37.9	22.4
Chile	15.5	28.0	33.5	20.1
Colombia	30.2	31.5	38.4	31.4
Costa Rica	25.0	30.3	35.3	26.8
Dominican Republic	20.0	26.3	34.1	23.1
cuador	24.2	31.1	39.4	27.7
l Salvador	23.6	33.8	42.0	28.7
Guatemala	27.6	34.8	43.6	32.8
londuras	27.3	37.6	43.3	33.0
1exico	32.7	42.4	48.5	37.0
licaragua	24.9	35.7	39.5	31.2
anama	22.4	32.5	36.3	26.4
araguay	10.4	13.8	19.7	12.7
Iruguay	12.7	22.0	32.4	15.5
′enezuela ^b	27.4	32.4	40.3	30.7
Vomen head of household				
urgentina ^a	8.3	16.1	30.4	10.5
Bolivia	9.7	15.2	24.8	12.7
Chile	8.0	17.8	22.4	10.6
Colombia	31.9	28.1	32.6	31.2
Costa Rica	16.3	20.0	22.8	17.2
ominican Republic	20.0	25.3	30.7	22.0
cuador	17.5	21.9	23.5	18.7
il Salvador	21.4	28.0	34.2	24.2
Guatemala	24.7	28.4	40.8	27.7
londuras	26.0	30.1	34.9	28.2
1exico	23.9	31.4	34.2	26.0
licaragua	24.0	30.6	36.4	27.7
Panama	20.5	26.6	32.5	22.7
Paraguay	7.4	16.8	23.2	11.6
Iruguay	4.6	12.0	21.7	6.2
'enezuela ^b	30.3	28.9	36.0	30.7
pouse				
rgentinaª	39.0	42.0	54.4	41.6
Bolivia	33.5	37.9	52.3	38.3
Chile	30.1	42.5	46.7	34.9
Colombia	43.8	41.6	51.5	44.0
Costa Rica	47.0	46.4	49.3	47.0
Dominican Republic	33.5	38.9	44.3	36.6
icuador	41.3	45.0	53.8	43.9
il Salvador	36.8	47.7	53.8	42.4
Guatemala	43.6	47.4	53.3	47.0
londuras	45.9	54.5	58.9	51.1

PENSION REFORMS AND GENDER EQUALITY IN LATIN AMERICA CAMILA ARZA

Mexico	51.0	55.3	59.9	53.3
Nicaragua	37.1	48.0	54.5	44.1
Panama	37.3	45.5	50.2	40.9
Paraguay	19.5	19.2	31.8	21.0
Uruguay	24.0	29.9	40.1	26.4
Venezuela ^b	41.5	45.7	52.0	44.2

Notes: ^a 31 urban agglomerates ^b National total. **Source:** Economic Commission for Latin America and the Caribbean. Data taken from household surveys carried out by countries in 2008, except for Argentina, Chile, El Salvador and Guatemala carried out in 2006; Bolivia, Colombia and Honduras in 2007, Nicaragua in 2005. Updated data to 28 April 2010, taken from CEPALSTAT (www.cepal.org/estadisticas/, last accessed 10 March 2011).

Table 3: Urban population employed in low productivity sectors of the labour

market (informal sector) by sex, 2007–2009 (per cent of total urban employed population)

		Т	otal informal secto	r
		Both sexes	Men	Women
Argentinaª	2009	39.9	38.2	42.1
Bolivia	2007	62.5	57.7	71.6
Brazil	2009	41.1	36.5	46.9
Chile	2009	30.0	25.6	36.5
Colombia	2009	59.9	57.7	62.6
Costa Rica	2009	36.1	33.1	40.5
Dominican Republic	2009	50.0	52.8	45.5
Ecuador	2009	56.5	52.1	62.5
El Salvador	2009	56.4	49.9	63.7
Guatemala	2006	58.1	52.5	65.4
Honduras	2007	43.9	45.4	41.9
Mexico	2008	43.7	40.0	49.1
Panama	2009	35.4	33.4	38.3
Paraguay	2009	58.5	53.0	65.9
Peru	2009	57.6	50.7	66.3
Uruguay	2009	42.6	37.8	48.2
Venezuela ^b	2008	49.8	51.8	46.7

Notes: ^a 31 urban agglomerates. ^b National total. **Source:** Economic Commission for Latin America and the Caribbean. Data based on special tabulations of the respective country's household survey data. Updated data to 24 November 2010, taken from CEPALSTAT (www.cepal.org/estadisticas/, last accessed 10 March 2011).

	-								
	I	Both sexe	S		Men			Women	
	2007	2008	2009	2007	2008	2009	2007	2008	2009
Argentina	—	—	8.6	—	—	7.8	—	—	9.8
Bolivia	7.7	—	—	6.3		—	9.4	—	—
Brazil	9.1	8.0	9.2	6.9	5.9	6.9	11.8	10.5	12.0
Chile	—	—	10.5	—		9.2	—	—	12.3
Colombia	—	12.1	13.2	—	10.2	11.1	—	14.4	15.7
Costa Rica	4.8	4.9	7.7	3.3	4.3	6.5	6.8	5.6	9.3
Dominican Republic	5.1	5.1	6.2	3.6	3.8	4.5	7.4	7.2	8.7
Ecuador	6.1	7.3	7.9	4.9	5.6	6.5	7.6	9.6	9.8
El Salvador	5.8	_	7.1	8.0	_	9.1	3.4	_	4.9
Guatemala									
Honduras	3.9	_	_	4.0	—	_	3.7	_	—
Mexico	_	4.8	_	_	5.7	—	_	3.5	—
Nicaragua									
Panama	7.8	6.5	7.9	6.5	5.4	6.3	9.6	7.9	9.9
Paraguay	7.1	7.1	8.3	6.0	6.1	7.9	8.5	8.5	8.8
Peru	6.1	5.9	5.7	5.5	5.1	5.4	6.9	6.8	6.0
Uruguay	9.5	7.8	7.6	6.9	5.7	5.5	12.6	10.4	10.0
Venezuela	7.5	6.9	_	7.1	6.5	_	8.1	7.4	_

Table 4: Unemplo	yment rate by	sex (urban	area), 2007-20	09 (per cent)

Source: Economic Commission for Latin America and the Caribbean: Statistical Division and Economic Projections. Social Statistics Unit. Data based on special tabulations of household surveys in the respective countries. Updated data to 1 December 2010, taken from CEPALSTAT (www.cepal.org/estadisticas/, last accessed 10 March 2011).

Some other labour market features affecting gender equality in the pension system relate to part-time work, informal employment and unemployment. In some Latin American countries, women are more likely than men to be employed in the informal sector or to be unemployed. About 46.9 per cent of women work in the informal sector in Brazil, compared to 36.5 per cent of men. In countries where informality is higher, such as Bolivia, the gender gap also widens (table 3). In 2009, unemployment rates were also higher among women than men in a number of countries; they were over 4 percentage points higher in Brazil, Colombia, Dominican Republic and Uruguay (table 4). These features tend to reduce the contributory histories of women and hence limit their capacity to obtain pension benefits of their own. Estimates for Chile, for instance, show that women have lower contribution densities³ than men in every age group (Arenas de Mesa et al. 2006).

Earnings gaps between men and women in the labour force can also generate gaps in benefit levels under earnings-related pension systems as well as in individual saving schemes. Data from 2005 indicate that the ratio of female to male earnings was 58 per cent in Paraguay, 67 per cent in Argentina and 75 per cent in Colombia. Other countries followed similar patterns (table 5). Several factors (including a higher propensity of women to work in low productivity sectors, occupational segregation, fewer managerial positions, more part-time work) interact to generate these outcomes.

³ Contribution densities are the percentage of the working life (measured in years or months) during which social security contributions have been paid. In contributory systems (both public and private) contribution densities are a key variable in determining access to benefits and benefit levels.

	2005
Argentina ^b	67.2
Bolivia	_
Brazil	67.3
Chile	_
Colombia	75.2
Costa Rica	73.4
Dominican Republic	77.2
Ecuador	74.0
El Salvador	_
Guatemala	—
Honduras	_
Mexico	58.3
Nicaragua	—
Panama	79.3
Paraguay	58.1
Peru	_
Uruguay	71.1
Venezuela ^c	75.8

Table 5: Ratio of average female income to average male income, urban areas, 2005 (per cent)^a

Notes ^a Earned income ratio: Income differential among the entire employed population. This differential is calculated as the quotient of average female income and average male income multiplied by 100. ^b Greater Buenos Aires area. ^c National total. **Source:** Economic Commission for Latin America and the Caribbean. Data based on special tabulations of data from household surveys conducted in relevant countries. Updated data to 9 March 2010, taken from CEPALSTAT (www.cepal.org/estadisticas/, accessed on 10 March 2011).

As mentioned above, along with labour market factors, pension design features can also affect the distribution of coverage and benefits between men and women (see Barr and Diamond 2009). These features refer to the norms that determine who is entitled to benefits and under what conditions, as well as the mechanism for benefit calculation. Four elements are particularly important. The first one is the *contributory requirements and vesting periods* that individuals need to meet in order to receive benefits. Pension systems that require a high number of years of contributory histories. The longer the vesting period the more likely women will fail to get a pension of their own. In contrast, universal non-contributory pension systems can provide benefits to men and women alike, avoiding the transmission of gender differences in the labour market into the pension system.

A second important element is the *benefit formula*. Different benefit formulas can have different impacts on the distribution of pensions between men and women. Defined-benefit systems typically provide either flat-rate benefits (administratively determined) or earnings-related benefits, or a combination of both. In contrast, defined-contribution systems provide benefits which depend on individual pension savings and life expectancy. In some cases, these types of benefit can be combined in two or more "pillars" of an integrated system. Whether benefits are flat-rate, earnings-related or based on individual savings is a central aspect that differentiates the distributional impact of a pension system between men and women as well as among social groups with, for example, different labour market and earnings trajectories. Many other design features associated with benefit formulas also matter: for example, the relative importance of different pillars in multi-pillar systems; the rules regarding how to fill career breaks to construct the earnings profiles in earnings-related systems; the value of minimum pension guarantees

and whether these are available; the use of gender-specific mortality tables in definedcontribution systems; and the nature of career-break compensations (for instance, for childcare) and whether these exist.

Thirdly, the mechanism for *indexation* also matters. In countries and periods where there is real earnings growth, linking benefits to wages is favourable to pensioners. If different components in the pension system are indexed to different indicators (such as wage growth, inflation, an interest rate, asset value), as in multi-pillar systems, the outcomes for each pensioner will depend on the composition of his or her total benefit (that is, how much he or she gets from each pillar). The implementation of adequate indexation mechanisms is important for all pensioners, but it can be particularly relevant for people who live longer, since there is a greater chance of their benefits depreciating over time. This is the case of women: if pensions are not properly indexed to follow inflation and/or wage growth, the living standards of women may be adversely affected as they age, because they spend in average a longer period in retirement.

The fourth design feature that can be particularly relevant for gender equality in pensions is the *retirement age*. In several Latin American countries, women have lower legal retirement ages than men. This favours women, who can retire earlier and receive benefits for a longer period. However, in defined-contribution systems (such as private individual accounts), earlier retirement can also adversely affect women's benefits because they have a shorter working period to accumulate assets and a longer post-retirement period over which those assets have to be distributed. If gender-specific mortality tables are used to calculate benefits, the impact is stronger because on average women live longer.

In some cases, socioeconomic and demographic factors interact with labour market and pension design features, increasing the vulnerability of elderly women in some social groups. Low-income women for instance can suffer more because they often have lower participation rates and are more likely to work informally than higher-income women. In Argentina, for instance, participation rates for women range from 39 per cent to 69 per cent in the bottom and top income quintiles respectively, and similar patterns repeat in other countries (table 1). Low-income women are also more likely to have no assets or savings they could use to finance old-age consumption when pension entitlements are lacking.

Moreover, as women live on average longer than men, they are more likely to spend longer periods as widows, and to live alone. Data for 2008 show that while between 9 per cent and 14 per cent of men aged 60 or over were widowers, widows represented over 30 per cent of this age group across Latin American countries (table 6). The percentage of women aged 60 and over living in female-headed households was above 50 per cent in a many countries. The elderly living alone are more vulnerable: they cannot share housing and other fixed costs and lack the care services that couples can give each other. In other words, while men are more likely to have care from their wives, women are more likely to be widows in their old age and therefore lack the care from their husbands. This can increase their vulnerability in old age.

		I	1en				Wa	men		
	Married or cohabiting	Separated or divorced	Widowed	Single	Total	Married or cohabiting	Separated or divorced	Widowed	Single	Total
Argentinaa	76.5	5.9	12.1	5.5	100.0	42.5	7.2	41.6	8.6	100.0
Bolivia	78.6	3.9	13.2	4.3	100.0	44.1	9.0	41.7	5.3	100.0
Chile	77.0	5.2	12.2	5.5	100.0	43.8	8.5	36.5	11.1	100.0
Colombia	72.3	9.4	11.7	6.6	100.0	34.5	13.9	40.0	11.6	100.0
Costa Rica	72.4	8.7	10.7	8.2	100.0	41.6	13.1	30.9	14.3	100.0
Ecuador	75.8	7.8	10.9	5.5	100.0	44.8	13.9	33.3	8.1	100.0
El Salvador	67.5	15.9	13.4	3.2	100.0	29.6	21.2	40.7	8.5	100.0
Guatemala	74.8	6.1	13.6	5.4	100.0	40.4	12.1	40.5	7.0	100.0
Honduras	74.4	4.6	10.8	10.2	100.0	33.1	8.0	34.0	24.8	100.0
Mexico	76.0	6.9	13.3	3.7	100.0	43.8	9.2	39.9	7.1	100.0
Nicaragua	_	_	_	_	_	_	_	_	_	_
Panama	74.4	11.3	9.3	5.0	100.0	40.0	22.6	33.2	4.2	100.0
Paraguay	72.3	5.8	14.2	7.7	100.0	36.8	6.4	35.5	21.4	100.0
Peru	75.3	7.1	12.6	5.0	100.0	44.2	12.1	36.8	6.9	100.0
Dominican Republic	69.8	12.1	14.2	3.9	100.0	30.1	17.4	49.7	2.8	100.0
Uruguay	71.0	10.3	11.7	7.1	100.0	39.4	10.8	42.4	7.4	100.0
Venezuela ^b	68.3	7.9	9.4	14.3	100.0	36.0	13.1	34.5	16.3	100.0

Table 6: Population aged 60 and over by sex and marital status, urban areas, 2008 (per cent)

Notes: ^a 31 urban agglomerates. ^b National total. **Source:** Economic Commission for Latin America and the Caribbean.. Data based on household surveys carried out by countries in 2008, except for Argentina, Chile, El Salvador and Guatemala carried out in 2006; Bolivia, Colombia and Honduras in 2007, Nicaragua in 2005. Updated data to 2 April 2010, taken from CEPALSTAT (www.cepal.org/estadisticas/, last accessed 10 March 2011).

3. Gender Equality in Bismarckian Pension Systems

Latin American pension systems were originally designed following the Bismarckian model adopted in much of continental Europe. This model connects old-age protection to employment and the family. It is based on the nuclear family model where a breadwinner (typically male) provides income for the household during his working life, and draws a pension in retirement. In this family structure, women who perform unpaid work in the household have access to social protection through the entitlements of their husbands, either a pension benefit for the husband while he is alive or a survival benefit in case of widowhood. Survivor pensions are based on the idea of dependency on the male breadwinner. This is why some pension systems used to provide survivor benefits for widows but not for widowers, and some even cancelled the right to those benefits if widows remarried. Over recent decades, changes in family structure and women's roles have challenged some of the assumptions underlying this pension arrangement.

Although in Latin America, significant differences remain between countries in the timing of social security development and in the levels of coverage,⁴ the pension systems originally set up in the region tended to share the following key features: (i) pension rights based on formal work and contributions; (ii) earnings-related benefits; (iii) public and pay as you go (PAYG) administration of resources and benefits (before structural reforms); and (iv) financing through payroll taxes and worker contributions, with state transfers in some cases.

⁴ See Mesa-Lago (1978); Martínez Franzoni (2006); Rofman et al. (2009b).

The first two points are particularly relevant for gender equality. The difficulties faced by Latin American contributory pension systems to provide old-age security for workers with limited participation in the formal labour market (including both workers in the informal sector and in unpaid household work) have been widely researched.⁵ This limitation affects both men and women. However, current family patterns favour a division of labour in the household in which women undertake a larger part of the unpaid work. As female participation in the labour market is typically lower than male, women find it more difficult to build sufficient contribution records over their lifetime to obtain pensions in systems that require long vesting periods. For the same reason, every year of informal work can more adversely affect women's capacity to comply with the minimum number of years required to obtain pensions.

Gender gaps in the coverage rates of contributory pensions are significant in virtually all Latin American countries (table 7). Among the countries for which data are available (for the years 2005–2007), only in Uruguay did men and women aged 65 or over have similar coverage rates, which were also relatively high (85.5 per cent and 84.8 per cent). Gender gaps in coverage are wider in every other country in the sample. In some of them, men presented coverage rates in the contributory pension system that were about twice those of women of the same age (for example, Colombia, the Dominican Republic, El Salvador, Mexico and Paraguay). In Bolivia, the coverage rate of contributory pensions was three times higher for men than for women.

		65 and over			70 and over	
Countries	Men	Women	Total	Men	Women	Total
Argentina ^b	74.6	66.9	69.9	85.5	74.4	78.6
Bolivia	38.0	12.3	23.9	41.3	16.1	27.6
Brazil	88.1	79.8	83.3	91.5	83.4	86.7
Chile	74.1	57.5	64.4	78.2	63.1	69.3
Colombia	22.1	11.4	15.8	21.5	11.3	15.5
Costa Rica	65.3	37.3	49.1	67.6	40.1	51.8
Dominican Republic	28.8	14.3	20.8	30.2	15.2	22.1
Ecuador	34.2	23.5	28.5	39.4	24.3	31.2
El Salvador	31.4	13.2	20.8	30.5	10.7	19.1
Guatemala	31.2	18.5	24.3	32.9	21.2	26.4
Honduras	16.6	10.0	12.8	16.4	8.7	12.0
Mexico	46.8	24.5	34.3	49.1	26.3	36.0
Panama	61.5	33.5	46.1	58.1	33.0	44.0
Paraguay	19.6	8.9	13.6	19.3	8.8	13.3
Uruguay	85.5	84.8	85.1	93.8	90.2	91.6

Table 7: Percentage of the elderly receiving pensions,^a by age group and sex, urban areas, 2007

Notes: ^a Includes old-age and widow's pensions. ^b 31 urban agglomerates. **Source:** Economic Commission for Latin America and the Caribbean. Data from household surveys carried out by countries in 2007, except for Argentina, Chile, El Salvador, Guatemala, Mexico carried out in 2006; Nicaragua in 2005. Updated data to 27 August 2009, taken from CEPALSTAT (www.cepal.org/estadisticas/, last accessed 10 March 2011).

In earnings-related systems, earnings differentials also generate inequalities in final benefit levels. On the other hand, as men typically have steeper earnings profiles than women, when pensions are based on the last-year salary, men benefit more (Bertranou 2001; James et al. 2003).

⁵ See, among others, Berstein et al. (2006); Cruz-Saco (2002); Goldberg and Lo Vuolo (2006); Holzmann et al. (2009); International Labour Office (2010); Mesa-Lago (2008).

For all these reasons, in practice, women tend to have more limited pension rights and lower pension benefits than men.

In contrast to the impact of labour market and earnings, which place women in a disadvantaged position, there are other design features in defined-benefit systems that can favour women. As mentioned above, in some countries, the legal retirement age is lower for women than men. In systems in which women can retire earlier and no adjustment for life expectancy is made (as in most defined-benefit systems) there is an implicit cross-subsidy from men to women who also live longer on average and therefore collect benefits for a longer period of time (and obtain a higher lifetime benefit). However, a lower retirement age may not always benefit women: instead, it may mean they retire with fewer years of work and contributions and lower wages (Bertranou 2001), both factors leading to lower pensions. Other design features that can favour women are the minimum benefit and flat-rate benefit pillars, when these exist. As women typically have lower earnings than men, they are more likely to receive the minimum benefit guarantees existing in public systems. Minimum benefits can increase the effective replacements rates obtained by women (and low-income workers) as compared to those obtained by men (and high-income workers in general). However, when there are long vesting periods to obtain minimum benefits, many women can remain excluded from them.

4. Pension Privatization and Gender Equality

Starting with Chile in 1981, many Latin American countries have structurally reformed their pension systems during the 1990s and early 2000s, shifting from the traditional PAYG and defined-benefit pension model to fully funded systems of individual accounts.⁶ Reforms have changed the underlying logic of existing pension systems, from a model of state-administered intergenerational transfers to a model of individual savings managed by private pension funds. In these systems, workers are expected to save for their retirement, accumulating mandatory contributions in individual accounts. Upon reaching the retirement age, the benefit each one gets results from the value of assets accumulated in his or her account and estimated life expectancy. In some cases, a public defined-benefit or minimum benefit guarantee is received on top of the self-financed pension from individual accounts.

Specific design features varied substantially across reforming countries and so did the role of the state in the post-privatization period (Mesa-Lago 2000). Some countries closed down existing public schemes for new entrants (Bolivia, Chile, the Dominican Republic, El Salvador and Mexico). In these cases, the state typically retained only the poverty-prevention function, guaranteeing a minimum benefit for entitled workers. Other countries maintained a public scheme working in parallel to the new system of individual accounts (Colombia and Peru). Finally a third group of countries established a mixed system, where the state pays part of the benefit and the rest comes from savings in mandatory individual accounts (Argentina,⁷ Costa Rica and Uruguay).

Despite these important differences, reforming countries shared the shift to individual accounts, private administration and defined-contribution benefits. The move from a defined-benefit

⁶ Barrientos 1998; Mesa-Lago 2006; Brooks 2009; Madrid 2003.

⁷ Argentina also maintained a fully public scheme, working in parallel to the system of individual accounts. Workers in both systems received a flat-rate state benefit (Basic Universal Pension). Individual accounts were abolished in 2008 and only the public section of the previous system remains (see Argentina case study in section 5).

system, in which benefit levels are typically set as a percentage of previous earnings, to a defined-contribution system is particularly important for gender outcomes. In the new model, benefits depend on a number of factors affecting individual accumulation in pension accounts (such as contribution rates, earnings levels, years of contributions, returns on pension savings, administrative costs) as well as other factors affecting benefit withdrawal (effective age of retirement, family composition and life expectancy). All of these factors matter for the calculation of benefits upon retirement, and shape the distributional impact of the pension system. Defined-contribution schemes involve a stronger link between individual contributions and benefits and a narrower pool of risks. In fact, savings schemes are designed to produce virtually no redistribution, except for transfers within the household between husband and wife or dependent children (with joint annuities) and transfers between individuals with different life expectancies who buy an annuity (within each gender group, when gender-specific mortality tables are used) or through the death and disability insurance. The redistributive function is instead concentrated in the state pillar, which to varying degrees, depending on the country, retains some capacity to distribute resources between individuals in order to protect vulnerable groups.

Reforms have thus reconfigured the way in which benefits are distributed through the pension system and the income transfers the system produces. This has also affected gender outcomes. In spite of this, gender issues were not an explicit concern during the reform process.⁸ Estimations of the specific impact on monthly benefits and lifetime receipts vary between studies and are sensitive to the assumptions used to calculate working lives, earnings history, family composition and returns in private pension schemes (Bertranou 2001). They are also sensitive to the type of measure used, either lifetime benefits (James et al. 2008) or monthly replacement rates (Arenas de Mesa and Gana Cornejo 2001; Arenas de Mesa et al. 2006), each one reflecting a different conception of pension policy and gender equality (Dion 2008).

Gender gaps in defined-contribution systems originate both at the accumulation stage (that is, over the working life, when saving takes place) and at the withdrawal stage (after retirement, when benefits are paid) (Bertranou 2001, 2003). In the first stage, pension savings (and consequently pension benefits) reflect gender differences in earnings and labour market participation. In the second, higher life expectancies for women mean that the period during which benefits are received (the withdrawal period) is longer. In a fully actuarial system this also means that monthly benefits will be lower. Pension systems that strongly connect individual benefits to individual contributions and savings tend to reproduce, upon retirement, the labour market differences prevailing in the population. Workers in low-paid or precarious jobs as well as women with short periods in paid employment cannot save much for retirement. The gender gap occurs not only because female participation in the labour market is shorter; it also occurs due to the way in which family patterns affect the timing of labour market withdrawal. As benefits closely depend on accumulated assets, each year of contribution counts. Contributions paid at early stages of the working life are particularly relevant because they can accrue more compound interest. This is precisely the period during which women are likely to withdraw from the labour market as a result of childbirth. In Chile, child credits for women have recently been established to increase contribution densities and accrue interest up to retirement precisely to deal with this problem.

⁸ Bertranou 2001; Pautassi, 2002; Arenas de Mesa and Gana Cornejo 2001; Birgin and Pautassi 2001; Bonadona Cossío 2003.

In addition, benefits from saving schemes in Latin America also reflect differences in life expectancy between men and women. While gender-specific mortality tables have generally been considered discriminatory in the United States and Europe, their use is common practice in Latin America.⁹ As a result, Latin American systems of individual accounts do not pool the risks of longevity between men and women, adding another source of gender differentiation: a lower retirement age and higher life expectancy tend to generate lower benefits for women, even for those who have similar working lives and earnings as men (for Chile, see CENDA 2011). Some of the negative effects of differential mortality can be compensated when joint annuities are mandatory (see James et al. 2008). In this case, the benefit for a married man is calculated taking into consideration his wife's life expectancy, and the number of dependent children who are entitled to a survival benefit. However, this only operates as an income transfer within the household for married couples. Among single men and women, a significant difference remains in the monthly benefit that each one can obtain from a pension fund of equal value.

In estimations for Chile made before the 2008 reform, Arenas de Mesa and colleagues show how important the gender gap in benefit levels can be.¹⁰ The authors conclude that "the system of AFP (pension fund administrators) has a differentiated effect between men and women...women assume in a direct way their higher life expectancy and lower retirement age as well as the disadvantages they confront in the labour market, lower years of contributions and lower wages" (Arenas de Mesa et al. 2006: 36, author's translation).

On the other hand, some structural reforms in Latin America have also involved changes in the benefits provided by the state, be they earnings-related benefits, flat-rate benefits or minimum benefit guarantees. State components of the benefit are particularly relevant for women who are more likely to fail to accumulate sufficient assets in their individual accounts. Many pension reforms have increased vesting periods to obtain state components of the pension benefit (including minimum pension guarantees) (Dion 2008; Kritzer et al. 2011). This has had a negative effect on both informal workers and women. In Argentina, vesting periods to obtain the public component of the pension benefit were raised to 30 years of contribution (Rofman and Grushka 2003), in Mexico from 10 to 25, and in Chile from 10 to 20 (Dion 2008: 148). In some countries, the effects of these contribution requirements became visible with falling pension coverage rates among the elderly some years later. Recent pension reforms in Chile and elsewhere have attempted to address some of these problems.

5. Gender Equality in Recent Pension Reforms: Chile, Bolivia and Argentina

The strong link between lifetime contributions and benefits has tended to translate labour market and demographic differences between men and women into differences in old-age pension rights and benefits. The public components of pension systems could not always compensate for these gender biases, especially not when contributory requirements for benefits were hard to meet. As a result, many people were left unprotected. This is one of the reasons for the growing discontent with the systems of individual accounts that has recently motivated a second round of pension reforms in Latin America.¹¹ In some cases, like in Chile and Bolivia,

⁹ See Bertranou (2001); Bertranou and Arenas de Mesa (2003); Dion (2008).

¹⁰ Arenas de Mesa et al. 2006. See also Berstein et al. (2006); Kritzer et al. (2011); CENDA (2011).

¹¹ See Calvo et al. (2010); Arza (2009); Kritzer et al. (2011).

gender issues were included in the pension policy agenda and specific measures were adopted to address existing problems (Yañez 2010; Marco Navarro 2011). In other cases, like Argentina, the issue was not explicitly dealt with, although some aspects of recent reforms can also have a positive impact on gender equality.

This section presents a more detailed account of three paradigmatic reform processes. First, the case of Chile, which approved an important pension reform in 2008, tackling some of the weaknesses of the private system and enhancing the role of the state in basic protection, while maintaining private individual accounts as the main pillar of the system. Secondly, the case of Bolivia, which has recently enacted two important reforms, including the creation of a new universal pension (Renta Dignidad) and the modification of the existing system of individual accounts, including measures to improve gender equality and benefit adequacy. Finally, the case of Argentina, which has recently eliminated the system of individual accounts established in the 1990s, returned to a fully pubic defined-benefit system, and implemented policies to increase coverage and minimum benefits.

Chile

The limitations of the Chilean pension system established in 1981 motivated a new process of reform, boosted by President Michelle Bachelet soon after taking power. In March 2006 she created the Presidential Advisory Council for Pension Reform (also known as the Marcel Commission, after its president Mario Marcel) to evaluate the pension system and produce a report which would be used as input for drafting a reform project (Délano 2010; Arenas de Mesa 2010). The reform bill was presented to Parliament in December 2006 and approved in January 2008 (Law 20.255). The first benefits under the new system were paid shortly after, in July 2008 (Yañez 2010). The reform was particularly important because it was the first substantial modification to a system which had been a model guiding pension reform in Latin America and beyond. The new law did not change the structure of pension policy in Chile, which remained based on a system of funded individual accounts managed by private pension fund companies (AFPs). However, alongside with other measures taken to improve the outcomes of individual accounts, the reform has expanded the role of the state in the protection of workers with insufficient savings (and low pensions) and has introduced some innovations oriented to greater gender equality.¹²

In fact, coverage gaps and gender inequalities were mentioned as two of the main motivations for reform.¹³ During the previous decade, several analysts had pointed to the inequalities produced by the Chilean pension system, both in terms of coverage and gender.¹⁴ Women, low-income workers, the self-employed and the young were among the groups more likely to find it difficult to build sufficient pension savings to ensure adequate protection in old-age. Between 1990 and 2003, the rates of coverage in the pension system contracted from 80 per cent to 76 per cent of the population aged 65 and older. In the same period, the reach of social insurance pensions (old-age and widow pensions in the contributory system) declined further, from 73.2 per cent to 61.5 per cent of the elderly, and the social assistance pension (Pensión Asistencial/ PASIS) became increasingly relevant. The coverage rate of the PASIS rose from 6.8 per cent of the elderly in 1990 up to about 14 per cent in 1996 and 2003 (Bertranou et al. 2006: table 1).

¹² Arenas de Mesa 2010; Berstein et al. 2009; Délano 2010; Mesa-Lago 2009; Rofman et al. 2009a; Yañez 2010.

¹³ Arenas de Mesa and Montecinos 1999; Arenas de Mesa and Gana Cornejo 2001. See also Chilean Government (2006).

¹⁴ Berstein et al. 2006; Bertranou and Arenas de Mesa 2003; Arenas de Mesa and Gana Cornejo 2003; Marco Navarro 2002; Pautassi 2002, among others.

Gender gaps in both coverage and benefit levels were also important. The 2004 Social Protection Survey showed that women represented up to 70 per cent of those not affiliated with the pension system (Government of Chile 2008:2). Women also had more limited contribution densities than men, leading to lower savings and lower pension entitlements. Berstein et al. (2006:240) estimate that Chilean women spend about 46 per cent of their working lives in formal employment and 35 per cent out of the labour force, while men work formally for about 60 per cent of their working lives. Other estimations also point to the lower contribution densities that women have on average (Arenas de Mesa et al. 2006). Low contribution densities increase the likelihood that women will depend on the state minimum pension, or on social assistance in case they fail to meet the years of contribution required for the minimum. Some estimations suggest that 45 per cent of women aged 45–50 will fail to accumulate sufficient resources to get a self-financed benefit for a value of at least one minimum pension (Arenas de Mesa et al. 2006:50).¹⁵

Arenas de Mesa and Montecinos also point to the fact that in Chile earnings differentials between men and women generate wide pension benefit gaps after retirement. Even if earning and years of contribution were equal between men and women, women would receive lower benefits (Arenas de Mesa and Montecinos 1999: 25; see also CENDA 2011). The replacement rate for women was estimated at around 43 per cent, compared to 58 per cent for a representative man (Arenas de Mesa and Gana Cornejo 2001:5). As mentioned above, this is partly because private pension systems punish household work, maternity and care giving: they make it more difficult for people who dedicate part of their lifetimes to perform unpaid work to get an adequate pension in old age. Thus women pay the costs of child-bearing themselves: when they stop working to take care of a child, they stop saving for pensions and therefore stop accumulating years of contribution to access the minimum guarantee.

In a system that strictly links individual contributions and benefits, women have to assume their own labour-market and demographic risks. In addition, in Chile, 20 years of contribution were necessary to have a right to the minimum benefit paid by the state. This requirement was more difficult to meet for women who, having lower self-financed benefits were, at the same time, more likely to need this benefit guarantee. On the other hand, as in other Latin American systems of individual accounts, the use of mortality tables differentiated by gender for the calculation of benefit annuities, generates lower monthly benefits for women. The fact that women often retire earlier further depresses their benefits since they have fewer years to accumulate savings that will need to be distributed over a longer retirement period (see Arenas de Mesa et al. 2006 for estimations).

¹⁵ See also Kritzer et al. (2011); Yañez (2010); Arenas de Mesa and Gana Cornejo (2003).

Box 1: Chile: Gender-related innovations of recent pension reform (Law 20.255)

Pensión Básica Solidaria (Basic solidarity pension)

Benefit design: flat-rate benefit. *Conditions for eligibility:*

- 65 years old or over;
- no other pension income (except beneficiaries of the social assistance pension (PASIS) who start receiving this benefit instead);
- resident in Chile for a period of at least 20 years, continuous or not, since the age of 20, with at least four years of residence over the five years prior to the application;
- Belong to a family in the lowest income groups according to the following phasing-in period:
 - 1 July 2008 to 30 June 2009 40 per cent lowest-income households
 - 1 July 2009 to 31 August 2009 45 per cent lowest-income households
 - 1 September 2009 to 30 June 2010 50 per cent lowest-income households
 - 1 July 2010 to 30 June 2011 55 per cent lowest-income households
- From 1 July 2011 onward 60 per cent lowest-income households (three bottom household income quintiles).

Benefit: 75,840 Chilean pesos per month (about \$160^a) by 1 July 2010 *Financing:* general revenues

Aporte Previsional Solidario (Solidarity pension contribution)

Benefit design: top-up for low contributory pensions.

Conditions for eligibility:

- have a contributory pension for a value below the maximum threshold (200,000 Chilean pesos in September 2010 about \$420; expected to increase to 255,000 Chilean pesos by 1 July 2011—about \$535);
- do not contribute or receive benefits from other specific pension schemes (Dipreca or Capredena);
- same requirements of age, residency and income level as for the Basic Solidarity Pension.

Benefit: top up of varying value depending on contributory benefit received. Generates a total pension that is higher than the Basic Solidarity Pension, and increases with the self-financed pension, up to the maximum threshold. *Financing:* general revenues.

Bono por Hijo (Child credits)

Design: contribution credit per child for women.

- Conditions for eligibility:
- women aged 65 years of age or older;
- retired from 1 July 2009 onwards;
- same residency requirement as for the Basic Solidarity Pension;
- affiliated to the pension system, receive a Basic Solidarity Pension or a widow's pension.

Benefit: the equivalent to 18 months of contributions on a minimum wage per child plus interest accrued from the moment the child is born, until retirement. For children born before July 2009, interest starts accruing from 1 July 2009. *Financing:* general revenues.

Gender differences in disability and death insurance premiums

Women receive the difference between the gender-neutral disability and death insurance premium they pay, and their gender-specific premium (lower) deposited in their individual accounts, thus improving their accumulation and final benefit.

Splitting of pension accumulation in case of divorce

In case of divorce or nullity of marriage, the assets accumulated in the individual account of the partner that has to provide economic compensation may be divided. It is the judge who has to determine whether that compensation applies. The compensation cannot not however exceed 50 per cent of the pension assets accumulated during wedlock.

Voluntary affiliation for workers in unpaid work

Women working in the household can pay contributions into an individual account and obtain the benefits of the contributory system.

Minimum taxable wage for domestic workers

The reform establishes that it cannot be below the minimum monthly wage for a full-time worker (or proportional to the time worked if part-time).

No fixed administrative fees

Fixed fees that were discounted from assets in individual accounts (fixed fee for deposit of contributions and fee for transference of the assets to another AFP) are abolished.

Widower's pension

Women become entitled to generate a widower's pension for their husband or the father of their children living at their expense.

Note: ^a \$ figures refer to US dollars. **Source:** Elaborated by the author based on Law 20.255 (2008), and Superintendencia de Pensiones (www.safp.cl/573/article-5784.html, last accessed 8th March 2011).

These issues were brought into the reform process starting in 2006 and guided some of the new gender-related measures that were taken (box 1). Probably the most important innovation of the reform approved in 2008 was the creation of a new solidarity pillar to provide basic protection to all individuals regardless of contributory history as well as to top up the benefits of workers with limited individual savings and low self-financed benefits from the contributory pillar. The new solidarity pillar is composed of two old-age benefits:¹⁶ the Basic Solidarity Pension (Pensión Básica Solidaria/PBS) and the Solidarity Pension Contribution (Aporte Previsional Solidario/APS). Both are financed by the state and provide basic coverage to Chilean residents aged 65 and over, who live in households that belong to the three lowest income quintiles (the poorest 60 per cent of the population). The PBS is oriented to the elderly who lack any other pension from the contributory system and requires no contribution or employment record. It also includes former beneficiaries of the social assistance pension system (PASIS) which is being phased out and replaced by the new benefit. The APS is the other element of the solidarity pillar. It is a benefit top up given under the same requirements of age, residence and income as the PBS, but only to individuals who, despite having made some contributions, obtain a low benefit from the contributory system.

Together these new benefits are expected to offer better protection both in terms of coverage and benefit level than previously existing benefit guarantees (Yañez 2010:24). The solidarity pillar is particularly relevant for gender equality. Being non-contributory, both the PBS and the APS are important for people who spend long periods out of paid employment or work in the informal sector – and thus for many women. However, one drawback of these benefits is that as family – rather than individual income – determines eligibility, there are still some limitations to the autonomy of women's rights to pensions.

A second gender-related innovation of the Chilean pension reform is oriented to recognize part of the unpaid work performed by women. Traditionally, pension systems tended to protect women who remained out of paid employment as dependants of the male providers. By and large, the design of pension systems was not oriented to foster women's autonomy but to protect women within the family. In such systems it was not considered a problem that women could not have a pension of their own as long as they were part of the household of a pensioner (male worker) and had the right to a derived benefit if the male breadwinner died (the widow's pension). Significant changes taking place in family structures and women's roles and autonomy have questioned these arrangements.

In practice, in pension systems closely connected with employment, gender differences persist as long as women continue to undertake a larger share of unpaid work. One policy oriented to partly address this problem has been the creation of child credits for women. These credits consist of the recognition of periods of "as if contributed" in the calculation of the pension rights and benefits for women who have children. They have become common in a number of pension systems in Europe and are now being applied in some Latin American countries to enhance the capacity of women to accumulate sufficient savings and contributory records to be entitled to an adequate pension of their own. The 2008 pension reform in Chile established the Bono por Hijo, a child credit equivalent 18 months of contributions on a minimum wage (plus accrued interest), that women can obtain per child born alive, to help increase their pension entitlement.

¹⁶ There are also another two benefits for the risk of disability: Basic Solidarity Pension for Disability and Solidarity Pension Contribution for Disability.

A third gender-related element of the recent pension reform in Chile regards the value of disability and death insurance premiums that women pay over their working life. Before the reform, both men and women paid the same insurance premium despite the fact that women have a lower risk of death and disability than men. The failure to use differential risk premiums was harmful for women and particularly questionable considering that gender differentials in life expectancy were used for calculating benefits upon retirement, with a negative effect on women's pensions. The reform established a new mechanism to overcome this problem and compensate women for the difference in their favour (see Yañez 2010:34).

The reform also established that, in the case of divorce or nullity of marriage, the assets accumulated in the individual account of the partner providing economic compensation may be divided. The judge has to determine whether that compensation applies. In any case, the compensation could not exceed 50 per cent of the pension assets accumulated during wedlock. The case for pension sharing is justified on the basis that women's household and caring responsibilities have in fact allowed men to work in the labour market and build pension rights for the future (Bertranou 2001:917). If adequately applied, it can help to reduce the vulnerability of divorced women who have devoted their life to household work during marriage and have therefore not built sufficient contributory records for their own retirement.

Finally, the reform creates the option for voluntary affiliation for individuals performing unpaid work (mainly women in household and caring work) who may pay contributions into a voluntary individual account, and access the benefits in the contributory pension system. Other aspects potentially relevant for gender equality are the establishment of a minimum taxable wage for domestic workers; the elimination of fixed administrative fees (which have a greater incidence on small saving accounts); and the creation of a widower's pension for the husband or the father of a deceased woman's children living at her expense (which, following a traditional "male breadwinner" model, did not previously exist).

Overall, the Chilean pension reform is a landmark for the recognition of a greater state responsibility to compensate for some of the inequalities generated in a defined-contribution system of individual accounts. It also introduces the gender equality issue in the pension policy agenda. The new solidarity pillar is likely to improve access to pensions for the population with low incomes and limited contribution records. The child credit introduces for the first time a compensatory mechanism to recognize the costs that the current division of labour in the family can have for women's protection and autonomy in old-age. Despite these achievements, some shortcomings remain. From a gender-equality perspective the main limitation of the reform is that it maintains a system that differentiates between men and women when calculating pension benefits using gender-specific mortality tables. Before the reform, single women were estimated to receive a pension 30 per cent lower than single men, simply due to their higher life expectancies (Yañez 2010: 40). Other estimations also point to a large gender gap (CENDA 2011). It is difficult to know whether the new measures adopted will outweigh the costs of differential mortality on pension benefit equality between men and women.¹⁷ Finally, targeting in the solidarity pillar also has some drawbacks. Although the target population is wide enough to favour broad coverage, the benefit remains attached to need rather than given as a matter of right. As the income test is based on household income (not on individual income), the

¹⁷ On the debate and arguments related to the use of gender-specific or gender-neutral mortality tables in competitive insurance markets, see Bertranou (2001). For a critical evaluation of the Chilean case, see CENDA (2011).

solidarity pillar can still fail to guarantee autonomy for a married women from the earnings of her husband (Yañez 2010).

Bolivia

The pension reform passed in Bolivia in 1996 (Law 1732, implemented in 1997) raised gender issues similar to other structural pension reforms in Latin America. As in other cases, the reform was conceived and designed with little or no attention to gender differences, in spite of the gender gaps in earnings, participation rates and life expectancies that prevailed and their impact on gender equality in old age (Bonadona Cossío 2003). Some features of the Bolivian pension system are however specific to that country. On the one hand, Bolivia has one of the contributory pension systems with the lowest coverage rates in the region. In 2007, 23.9 per cent of people aged 65 and over were receiving contributory pensions, and the gender gap was particularly wide, with only 12.3 per cent of women of that age receiving pensions, compared to 38 per cent of men (table 7). On the other hand, unlike other Latin American countries, the Bolivian reform also established a universal non-contributory pension called Bono Solidario or Bonosol.¹⁸ The benefit was financed through the Collective Capitalization Fund (Fondo de Capitalización Colectiva/FCC), managed by pension fund companies and composed of about 50 per cent of the shares of a number of privatized firms.¹⁹ Through the FCC, pension reform associated the universal pension to the privatization of public enterprises.

This made Bolivia, one of the poorest countries in Latin America, the first one to provide a basic pension for all independently of income, contributions, labour market participation, or formal employment (Willmore 2006; Molina 2006). The Bonosol was a benefit worth about \$248²⁰ per year paid from age 65 to all Bolivian citizens aged 21 or over by 31 December 1995. The scheme was substantially modified shortly after its creation. In June 1998 (Law 1864) it was replaced by Bolivida, a pension benefit for a reduced value (only about \$60 per year) limited to citizens aged 50 or over by 1995. Citizens aged between 21 and 49 by 1995 (who lost the right to access the universal pension in the future) would receive instead a government bond (Acción Popular) worth about \$500 (Bonadona Cossío 2003). Some years later, in 2002 (Law 2427), the Bonosol was reinstituted for the same original birth cohorts (paid since 2003).

In November 2007, a new universal benefit called *Renta Universal de Vejez* or *Renta Dignidad* was created to replace *Bonosol* (Law 3791). The new benefit was more generous than its predecessor, both in amount and retirement conditions. *Renta Dignidad* was extended to all Bolivian citizens who live in the country and are aged 60 years or older, independently of assets, income or contribution history. This reduces the age of eligibility by five years and abolishes the cohort restriction that limited benefits to people aged 21 or over by 1995. People receiving no other pension also enjoyed a benefit increase, from Bolivian boliviano (Bs) 1,800 to Bs 2,400), while those receiving a pension from the contributory system received a reduced benefit (at 75 per cent of the full value) which was in fact the same value as the original *Bonosol* (Bs 1,800) (box 2). Renta Dignidad is financed by part of the Direct Hydrocarbon Tax and by dividends from privatized public firms.

¹⁸ Muller 2008; Molina 2006; Bonadona Cossío 2003; Willmore, 2006.

¹⁹ Privatized (or capitalized) firms included telephone, railway, oil and gas, airway and electric generation companies such as Empresa Nacional de Telecomunicaciones (ENTEL), Ferroviaria Oriental, Ferroviaria Occidental, Petrolera Andina, Petrolera Chaco, Transredes, Lloyd Aéreo Boliviano, Corani, Valle Hermoso and Guaracachi (Bonadona Cossío 2003).

²⁰ \$ figures refer to US dollars.

Box 2: Bolivia: Gender-related innovations of recent pension reforms (Law 3791 and Law 65)

Renta Universal de Vejez or Renta Dignidad (Old-age universal pension)

Design: Universal non-contributory benefit.

Conditions of eligibility:

- Bolivian residency;
- 60 years of age or older;
- no remuneration contemplated in the National General Budget.

Benefit: Bs 1,800 per year (about \$258) for the elderly already receiving a pension, and Bs 2,400 per year (about \$344) otherwise.

Financing: a share of the revenues from the Direct Hydrocarbon Tax plus dividends from Capitalized Public Enterprises (Law 3791, Article 9).

Pensión Solidaria de Vejez (Old age solidarity pension)

Benefit design: Semi-contributory pension.

- Conditions of eligibility:
- 58 years of age or older;
- 10 years (120 periods) of contributions;

• have a self-financed benefit below the minimum threshold established for a given contribution density.

- *Benefit:* depends on contribution density (number of years with contributions) and wage level (see Article 17, Law 65 for details).
- workers with 10 years of contribution: entitled to a benefit of Bs 467 (about \$67).
- workers with 10-15 years of contribution: entitled to a benefit from Bs 467 to Bs 679 (about \$97).
- workers with 16 or more years of contribution: entitled to a replacement rate that takes into account the years contributed, with a minimum and maximum threshold. Workers who have a self-financed benefit above the maximum threshold for a given contribution density are not eligible for this benefit. Within both thresholds, the guaranteed replacement rate equals 56 per cent of past earnings for workers with 16 years of contributions, and increases by one percentage point for each additional year of contributions up to 70 per cent for workers with 30 years of contributions.

Financing:

Individual savings, contribution compensation (for contributions made before pension privatization) and the solidarity share. The latter is paid from the Solidarity Fund, made with: 20 per cent of the insurance premiums paid for common, professional and labour risk; 0.5 per cent of earnings paid by workers as a "solidarity contribution of the insurer"; employer contribution of 3 per cent ("solidarity contribution of employers"); the "national solidarity contribution" paid by workers with high earnings; 2 per cent of wages of workers in the metallurgic mining sector to be paid by their employers as a "mining solidarity contribution"; and other resources (Law 65, Article 85 and 87).

Child credits

Design: contribution credit per child for women. (Law 65, Article 77).

- Conditions of eligibility:
- women aged 58 or older;
- reach at least 120 contribution periods (10 years) (including the child credits).

Benefit: 12 periods (one year) of contributions considered paid for each child born alive, up to a maximum of 36 periods (3 years) for the calculation of the old age solidarity pension. Alternatively, a reduction of the retirement age by one year per child (up to a maximum of 3 years).

Gender-neutral mortality tables

A single mortality table will be applied in the calculation of benefits for men and women (Law 65, Article 69).

Source: Elaborated by the author from Law 65 (2010) and Law 3791 (2007).

Despite these discontinuities, the universal benefit accounted for a significant improvement in the living conditions of the elderly in Bolivia (Martínez 2006). Given the very low coverage of contributory pensions, it may often be the only source of state help that many elderly people have. It may also be particularly relevant for women who are more likely to be ineligible for benefits in the contributory system due to limited employment histories and contribution records. Besides, the benefit is an individual entitlement independent of the position in the family or the income or assets of the spouse. At the national level the benefit had a significant impact on household income and helped improve consumption levels and living conditions (Oficina Internacional del Trabajo 2011: 209).

The pension reform sanctioned by the National Parliament at the end of 2010 included a number of other gender-relevant measures (see Marco Navarro 2010). Gender equality was included as a principle of the new system, which aimed to "provide necessary and sufficient mechanisms to close the inequality gaps between men and women in the benefits of the Long Term Social Security System" (Bolivia, Law 65, Article 3(j), author's translation). In practice, the reform established a pension system made up of three pillars: (i) a contributory system (individual accounts); (ii) a semi-contributory system (also known as the Solidarity Pillar), and (iii) a non-contributory system (Renta Dignidad). The reform also established that once the new system is fully enacted, it will be administered by the Long Term Public Manager of Social Security (Gestora Pública de la Seguridad Social de Largo Plazo) which will replace the private pension fund companies in charge of administration since 1997. Although the reform maintains individual accounts, it introduces a number of measures to increase benefit guarantees provided by the state for workers with low pension savings. In contrast with worldwide trends, it also reduces the retirement ages for men and women from 60 to 58 years of age (previously 65 under the system established in 1997).²¹ Women can retire even earlier if they have children (with a reduction of one year per child up to a maximum of three, see below) and miners can retire at 56 years of age, or between 51 and 55 if they worked in unhealthy conditions.²²

One of the main innovations of the reform is the semi-contributory system, which integrates a solidarity component with the self-financed pensions from individual accounts. It provides better benefit guarantees for workers with some contributory records and low earnings, financed through a solidarity fund.²³ In order to receive benefits from the semi-contributory pillar, workers need to have made at least 10 years of contributions and be 58 years or older. The old-age solidarity benefit (Pensión Solidaria de Vejez) was set at Bs 467 per month (about \$67) for workers with the minimum contributory period (10 years), rising up to Bs 679 (about \$97) for workers with 15 years of contributions. Workers with more than 15 years of contribution, have a benefit guarantee calculated as a replacement rate on previous earnings for each contribution density (within a minimum and maximum threshold), increasing from 56 per cent of past earnings for workers with 16 years of contributions up to 70 per cent for workers with 30 years of contributions. Above the maximum threshold, workers are not entitled to benefits from the solidarity pillar.

Although the system is still too new to allow for an impact assessment, it can be expected that the solidarity pillar will improve the pensions of low-income workers with a benefit top-up. As it is oriented to workers with limited accumulation in their individual accounts, it is likely to benefit women (and men) with short contributory histories and low pension savings. However, given that pension coverage in Bolivia is low and unequally distributed between men and women, the effective gender impact of this measure remains a matter of empirical investigation. Among other things, it will depend on how many working women actually reach the minimum requirement of 10 years of contributions on their earnings and on their personal pension accumulation.

²¹ In 2010-15, the life expectancy in Bolivia was estimated at 65 years for men and 69 years for women (CELADE: Latin American and Caribbean Demographic Centre, ECLAC Population Division: The 2008 revision. Population database).

²² International Social Security Association. 2010. Government Nationalizes Pensions and Lowers Retirement Age. www.issa.int/layout/set/print/Observatory/Country-Profiles/Regions/Americas/Bolivia/Reforms2/(id)/4112, accessed 7 February 2012.

²³ The solidarity fund is mainly composed of: (i) a worker contribution of 0.5 per cent; (ii) an additional contribution by workers with income above Bs 13,000 per month; and (iii) a 3 per cent employer contribution (see box 2).

A second innovation, more specifically oriented to achieve gender equality, was the creation of a child credit for women (*aporte por hijo*) equivalent to one year of contributions per child, up to a maximum of three years. The child credit can be used by women to reach the minimum contributory record for an old-age solidarity pension (ten years), get a higher benefit replacement rate from the solidarity pillar, or anticipate retirement (box 2). Unlike the Chilean design, the Bolivian child credit does not modify accumulation in individual accounts. Like in Chile, it is likely to improve the situation of women with limited contribution records, making it more likely for them either to reach the ten years of contributions required to obtain a benefit from the solidarity pillar, increase the benefits they are entitled to (getting a higher guaranteed replacement rate from the solidarity pillar as a result of having higher contribution densities), or anticipate retirement. However, as it is designed, it cannot benefit the women who are totally outside the contributory system.

Third, the reform established that single mortality tables will be used for the calculation of benefits for men and women (Law 65, Article 69; see also DS 822, 2011, Article 106). The use of unisex mortality tables reintroduces mortality risk-pooling between men and women and avoids penalizing women for their longer life expectancy. As a result, for equal accumulation, age of retirement and family structure, men and women should receive an equal monthly benefit from their individual accounts. Once enacted, this measure is also consequently likely to increase the benefit of women (and reduce the benefit of men) who have sufficient savings to get a self-financed benefit.²⁴ Finally, under the new system, widows do not lose their benefit if they remarry (as was the case under the previous system).

Given the high levels of exclusion of the elderly from the contributory pension system, in Bolivia the insider-outsider cleavage was more salient than the gender gap, which was also wide. The universal pension established in 1997 (*Bonosol*) and expanded in 2007 (*Renta Dignidad*) was a significant contribution towards old-age equality across class, occupation, region and gender lines. As women were more likely to be excluded than men, universal policies contributed to benefit women in particular, thus reducing gender gaps along with other inequalities in access to basic old-age protection. Other measures fostering gender equality included the solidarity pillar, the child credits, and the unisex mortality tables. The explicit recognition of gender equality as a principle for reform (as in Chile) is also a significant departure from previous pension legislation which made no reference to gender equality.

Argentina

The pension system established in Argentina in 1994 was a mixed scheme, composed of two systems (public and private) with two layers.²⁵ The first layer was a flat-rate benefit provided by the state to all eligible workers. The second layer was either an earnings-related public benefit or a benefit from individual pension accounts administered by the private sector. During their working lives, workers had to choose which system they preferred and either accumulate entitlements in the public pay-as-you-go system or save for retirement in their individual accounts. The rules also established a contributory requirement of 30 years to obtain benefits from the public pillar. This made access harder for workers who spend part of their lifetimes in the informal labour market or in unpaid work. It was thus particularly harmful for women who typically have lower contribution densities (Rofman and Grushka 2003).

²⁴ Supreme Decree 822 (2011), art. 106, establishes that the Authority for Supervision and Control of Pensions and Insurance (Autoridad de Fiscalización y Control de Pensiones y Seguros) will elaborate the single mortality tables for the new system.

²⁵ Goldberg and Lo Vuolo 2006; Arza 2008; Rofman 2000.

During its 14 years of existence (until the counter-reform in 2008, see below), the mixed pension system showed a number of limitations (Arza 2008). Transition costs put significant pressures on public finance. High administrative fees, at times representing around 30 per cent of contributions, reduced the saving potential of workers. Both the coverage among workers and the percentage of the elderly receiving a pension declined after the reform (see Rofman et al. 2009b). On the other hand, the absence of an automatic indexation mechanism became particularly problematic after the 2001 crisis when prices started to rise. More recently, a set of successive reforms addressed some of these shortcomings. Although the gender equality issue was not an explicit principle or aim of these reforms, as in Bolivia and Chile, a number of innovations have been relevant from a gender equality perspective (box 3).

Box 3: Argentina: Gender relevant innovations of recent pension reforms (Law 26222, Law 26417, Law 26425, Law 25994 and Decree 1454/05, among others)

Plan de Inclusión Previsional, or Moratorium (Pension Inclusion Plan)

Design: contribution waiver/moratorium to complete required contribution records. *Conditions of eligibility:*

- 60–65 years of age for men and women, respectively;
- insufficient contribution records to meet the requirement for normal retirement benefits.

Benefit: depends on earnings and contribution history.

Financing: social security budget.

Minimum benefit increases

The minimum benefit rises following subsequent benefit adjustments.

Pension reform (Law 26222, 2007)

Benefit increase for future pensioners in the public pension system (applies to all future benefits after the 2008 reform) from 0.85 per cent to 1.5 per cent of past earnings per year of contribution.

Cap on administrative fees in individual accounts (1 per cent of earnings).

Automatic transfer of workers close to retirement with limited savings in individual accounts to the public system. Possibility for workers to switch from the private to the public system.

Automatic Indexation (Law 26417, 2008)

Automatic indexation of benefits, reference earnings used to calculate benefits and contribution thresholds, to be applied twice a year. The indexation formula combines in equal proportions earnings growth (of both formal and informal workers) and increases in general tax revenues for the social security system. A maximum threshold was also established: benefit could not increase more than 3 per cent above the increase in total social security revenues.

Pension reform (Law 26425, 2008)

Eliminates the system of individual accounts. All workers are transferred to the public section of the pre-existing system (PAYG and earnings-related). The system becomes a fully defined-benefit one, with no adjustment for life expectancy.

Source: Elaborated by the author based on Law 26222 (2007), Law 26417 (2008), Law 26425 (2008), Law 25994, Article 6 (2004), Decree 1454 (2005) and other relevant country legislation.

The drawbacks of the existing system from a gender equality perspective were similar to those of other systems of individual accounts. As in other cases, the gender differences in labour market trajectories, life expectancies and earnings, generated gender gaps both in access and in benefit levels. The use of gender-specific mortality tables for the calculation of benefits in the system of individual accounts was harmful for women. Existing estimations of benefits in the private pillar suggested that under some assumptions the use of unisex mortality tables would have led to an increase in benefits by about 13 per cent for single women and 6 per cent for married women, as well as a 6 per cent reduction in the benefits of single men (Rofman and Grushka 2003:50). Women (and men) had the chance to choose to affiliate to a fully public defined-benefit system that did not adjust benefits for life expectancy. In practice, however,

regulations were designed to encourage affiliation to the private system, which included most women.²⁶

Between 1993 (just before the reform was implemented) and 2004, pension coverage fell by about 9 percentage points, from 77 per cent to 68 per cent of people aged 65 and over. Pension coverage for women was lower than for men but both rates reduced similarly over that period (Rofman et al. 2009: tables A1.1 and A1.4). The higher number of contribution years required to obtain pensions after the 1994 reform is likely to explain part of this drop.²⁷ As the new rules were applied, the gap between workers with and without a continuous life in paid formal jobs widened. As labour market informality was also growing, the problem involved an increasing share of the population.

This negative trend reversed in the post-crisis period. In March 2003, the government launched the Plan Mayores as an integral part of the Plan Jefes y Jefas de Hogar (a social assistance programme launched one year before) that provided a basic benefit for the elderly above 70 years with no other income. A budget restriction that limited the expansion of non-contributory pensions (under a pre-existing means-tested system) was lifted and new benefits were given out (Rofman et al. 2009a).²⁸ The programme with the greatest impact on coverage rates was the Pension Inclusion Plan (Plan de Inclusión Previsional, also known as Moratorium). In practice, this programme opened the possibility for the elderly with limited or no contribution records to obtain retirement pensions and simultaneously engage in a payment plan to cancel unpaid contributions under favourable conditions. The elderly could start receiving benefits as soon as they joined the programme and start contributing in monthly instalments which were typically discounted directly from the benefit they received.²⁹

By 2010, about 2.45 million benefits have been paid out under this programme (MTESS 2010: 35). This generated a substantial increase in coverage rates and contributed to reduce the gender gap. Between 2005 and 2010, coverage increased from 74 per cent to 88 per cent of the population over the legal retirement age in the case of men, and from 54 per cent to 83 per cent in the case of women.³⁰ Initially, the rules did not include limitation for the receipt of two benefits (retirement and widow pensions, for instance), and hence some duplication may have occurred, benefiting women in particular (Rofman et al. 2009a: 20). As women have a longer life expectancy and earlier retirement age, and as they typically have lower contribution records, the majority of the new benefits were given to women. From administrative records of the social security registry it is estimated that by July 2007, 87 per cent of total new benefits were given to women, and that 74 per cent of them were receiving no other national pension benefit (Boudou et al. 2007:13).

Another important measure was the establishment of a mechanism for automatic indexation of benefits. After the 2001 crisis and the end of the Convertibility regime, a legal mechanism of

²⁶ Among these regulations (modified in 2007, see below), several stand out. Upon entering the formal labour market, workers were automatically affiliated to the private pension system unless they chose the public one within a limited period of time. Once in the private system, they were not allowed to switch back to the public one (Arza, 2008). In December 2006, about 74.8 per cent of women were contributing to the private system (and 84.4 per cent of men) (data from MTESS 2008: tables 2.3.1, 2.4.1 and 2.5.1).

²⁷ Thirty years of contributions were required to access the public components of the pension benefit. A reduced benefit of "advanced age" exists for workers with at least 10 years of contribution and aged 70 or above.

²⁸ Conditions for social assistance old-age pensions include 70 years of age, no other pension benefit in the household, and absence of goods, income or resources of any kind which could provide economic subsistence.

²⁹ Arza 2011; Cetrangolo and Grushka 2008; Rofman et al. 2009a.

³⁰ Arza 2011, based on Permanent Household Surveys. In both cases, coverage is estimated at the statutory retirement age of men and women (65 and 60, respectively).

benefit indexation that could reflect price and wage increases became increasingly necessary. For some time though, pension benefit rises were discretionally decided by the government and most of them concentrated on the minimum benefit, which rose markedly. In 2008, the government proposed a reform establishing an automatic indexation mechanism with two annual adjustments following the evolution of wages and revenues of the social security system. The new law (Law 26,417) was an improvement over the previous situation in which benefit increases depended on political will and resources and were not fixed or automatic.³¹ Automatic indexation is important for everyone but it may be especially relevant for women, who have a longer period of retirement and are therefore more affected when pensions do not keep track with wages and/or prices. Considering current life expectancies (79.1 and 71.6 for women and men, respectively)³² and retirement ages (60 and 65 for women and men, respectively), women spend in average 19.1 years in retirement compared to an average of 6.6 for men. As women are more likely to receive the minimum benefit, the automatic indexation of minimum benefits can also be particularly important for them.

Two other reforms, the first being an amendment of the mixed system (Law 26,222, 2007) and the second a counter reform that eliminated individual accounts and returned to a fully public pension system (Law 26,425, 2008), also had gender implications, although none of them included gender equality as an aim guiding the reform (Arza 2009; Rofman et al. 2009a). Some of the main innovations of the 2007 pension reform were the distribution of affiliates between the public and private systems (which favoured affiliation to the public one, and allowed workers to shift from the private to the public system); a reduction of administrative fees for affiliates to the private system; and a modification of the mechanism to deal with the risks of death and disability. However, these measures had a limited impact in practice because the private system was abolished short after. The 2007 reform also introduced an increase in the expected benefit for future retirees in the public system for contributions made after 1994 (from 0.85 per cent of earnings per year of contribution to 1.5 per cent). This change was maintained after 2008 and is likely to have a growing effect on benefit levels in the future.

In November 2008, Parliament passed a pension reform bill proposed by the government (Law 26,425) which eliminated the system of individual accounts and private administration. All affiliated workers were assigned to the public pension system and pension fund assets were collectively transferred to the National Social Security Administration (ANSES). As a result, the pension system became once again fully public, defined-benefit and PAYG. The reform did not include any substantial modification of the existing public system: benefits and the eligibility conditions remained the same as they were—the main innovation was the elimination of individual accounts, defined-contribution benefits, and private administration.

The return to a defined-benefit model was important from a gender-equality perspective. In the defined-benefit system life expectancies are not taken into consideration for the calculation of benefits and therefore the monthly benefits for men and women with equal wages and contributory histories are the same, despite gender differences in retirement ages and mortality.

³¹ Indexation demands had generated (and continued to generate) a significant number of lawsuits against the state on the basis of a constitutional provision of indexable benefits. In August 2006, in response to these lawsuits, the Supreme Court of Justice had ruled that the government should define an automatic indexation mechanism within a "reasonable" time. The budget law approved in December 2007 established that the government should prepare new legislation on benefit indexation (Rofman et al. 2009a: 21–22). This legislation was finally presented and approved in 2008.

³² Projections for 2005–2010 from CELADE: Latin American and Caribbean Demographic Centre, ECLAC Population Division: The 2008 revision. Population database, taken from CEPALSTAT (www.cepal.org/estadisticas/, last accessed on 10 March 2011).

The return to the defined-benefit system was, implicitly, a return to a system that pools mortality risks between men and women. However, gender inequalities deriving from the differences in labour market participation and earnings between men and women remain—in these conditions, a Bismarckian design with no compensation for time spent in caring duties is likely to continue generating gender gaps both in access and benefit levels.

Although many women can obtain widow's benefits if their entitled husband dies, unmarried or divorced women, as well as women married to an informal worker, may have more difficulties getting protection. Besides, a system that bases women's entitlements only on the family nexus affects women's autonomy and financial independence from their husbands and reinforces traditional gender roles. While recent coverage expansion addressed these issues in the short term, no long-term measures to guarantee access to basic pension for all have yet been established, as is the case in Chile and Bolivia.

In short, despite some progress, gender equality remains a pending issue in the Argentine pension system. Although a number of recent measures (the extension of coverage, the rise of the minimum benefit and the legislation of automatic indexation) have improved the position of women in the pension system, gender issues were not really part of the debate surrounding recent pension reforms. Unlike Bolivia and Chile, which have institutionalized minimum benefit guarantees for both men and women, Argentina has addressed coverage problems (and consequently gender gaps in coverage) in the short-term, but has not created a solidarity pillar that could guarantee protection for all in the future. The establishment of a universal benefit, independent from labour market history but also from family structures, could contribute to further gender equality. Other policy options in this direction include compensating for periods out of work, due to maternity or care-related reasons, through child or care credits, a measure that several countries around the world have adopted.

Conclusions

Virtually all elements of social protection can have an impact on gender equality. In pension policy, gender inequalities result from the combination and interaction of labour market and demographic factors, gender roles, and pension design features. Women have lower participation rates and more career breaks over their working lives than men. Under contributory pension systems, this reduces their chances to qualify for a pension of their own. In most Latin American countries, women are also more likely to be unemployed, work in the informal sector, and receive lower average earnings than men. Different pension designs process these labour market features in different ways. Systems that require a long period of contributions to obtain benefits tend to penalize women for their shorter and often interrupted participation in the labour market. Benefit formulas also matter. Purely earnings-related systems tend to reproduce earnings inequalities in retirement. Defined-contribution systems which calculate benefits from individual savings and life expectancies strengthen the link between labour market and demographic factors, on the one hand, and pension benefits, on the other. When gender-specific mortality tables are used, as in Latin American private systems, further differentiation between men and women is introduced. Other features such as flat-rate or minimum benefits can favour women. Indexation is also important. If pensions are not properly adjusted to reflect rises in prices and earnings the living standards of women can be especially affected because women live longer in retirement. Other design features, such as retirement ages and mechanisms to compensate for time spent in caring and household work, are also relevant for gender equality.

Latin American pension systems were originally designed following the Bismarckian model, which connects old-age protection to employment and the family. In those systems, pension rights are based on formal work and calculated using earnings-related formulas. Naturally, contributory systems have trouble in providing old-age security for workers with limited contribution records. This includes both individuals who spend periods of their working lives in the informal sector and those who perform unpaid work (for example in the household). Contributory requirements tend to particularly affect women's chances to get pension benefits of their own. Under a gendered division of labour in the household (where women undertake a large part of the unpaid care and household work), women's participation in the labour market is typically shorter and more interrupted than men's. In earnings-related systems, wage differentials between men and women are transferred into the retirement period. For these reasons women's own benefits tend to be lower.

In practice, Bismarckian pension systems implicitly assume a nuclear family model where a breadwinner (typically male) provides income for the household during working age, and pensions during retirement. Under this family structure and pension design, women who perform unpaid work in the household are covered through their husbands who either receive pensions in old age or generate "derived" benefits for their wives when they die. Changes in family structures and women roles, and a growing concern about gender equality and women's autonomy, have challenged some of the assumptions underlying this pension design, but pension systems have not always adapted to these changes.

In several Latin American countries, the link between labour market trajectories and benefit levels has been made stronger over the past few decades. Starting with Chile in 1981, many Latin American countries have structurally reformed their pension systems during the 1990s and early 2000s, replacing traditional PAYG, publicly administered and defined-benefit systems for a new pension model based on private defined-contribution individual accounts. Under this system, individuals are assumed to save for retirement and virtually no redistribution takes place in the private system. Savings accounts strengthen the link between individual contributions and benefits, meaning pensions more closely reflect the differences between men and women in the labour market. Short or interrupted working lives affect the benefit that each worker can obtain from individual accounts. If the years of withdrawal from the labour force occur at a young age (for example, during childbirth and childcaring) the impact can be greater because compound interest for contributions made at earlier stages in the working life is lost. In addition, the use of gender-specific mortality tables to calculate pension annuities in definedcontribution systems also makes benefits reflect differences in life expectancy and retirement ages between men and women. This adds another source of gender inequality to those deriving from differences in paid employment and earnings, which already exist (to a greater or lesser extent depending on specific rules) in public defined-benefit systems.

While by and large gender equality concerns were not present in the structural pension reform agendas of the 1980s, 1990s and early 2000s, some recent reforms have started to pay more attention to the issue. The cases of Chile and Bolivia, analysed in this paper, are examples of reforms which have included specific measures to enhance gender equality in old-age protection. Other Latin American countries have also implemented specific pension policies with a positive gender impact. These experiences can contribute to policy learning across the

region. In Uruguay, for instance, recent reforms have introduced child credits, made contributory conditions more flexible, and equalized the pension rights for cohabiting partners to those for married couples, regardless of sex (Aguirre and Scuro Somma 2010). In other cases, like Argentina, the gender-equality issue was not explicitly addressed, although a number of policies have had some positive effects on benefits for women. Two other cases that stand out are Brazil and Mexico, where a universal approach to basic old-age protection has contributed to narrow (in specific regions) the gender gaps in coverage that typically exist in contributory systems. In Brazil, the rural pension offers wide protection for both men and women.³³ Following the new Constitution, a pension reform in 1991 has set the rural pension benefit at the value of a minimum wage, and women no longer need to be heads of household to claim a benefit (Schwarzer and Querino 2002). In Mexico, two relatively new schemes guarantee universal access to elderly people in specific regions (one scheme exists for Mexico City residents, and another for the population of rural areas and small cities Yañes 2011). These experiences, which do not at all represent an exhaustive list of gender-relevant measures, suggest that the issue is slowly becoming part of the region's pension reform agenda.

Among the countries studied in this paper, recent gender-related policies can be divided into five main groups (box 4). The first group includes measures to make benefits available for all. Although these policies were not exclusively oriented to women, they are likely to have positive gender impacts because many women lack access to benefits of their own under existing pension arrangements. Something similar happens with the second group of measures, oriented to top up low benefits. Measures in the third and fourth group introduce direct compensation for women's household and care work and pool the risks of longevity between men and women. The fifth group includes all other measures that may directly or indirectly improve women's old-age security or eliminate previously existing regulations that penalized women in some way.

Despite these improvements, several obstacles to achieving gender equality in pension policy remain. Many are related to the gendered nature of the labour market and the distribution of household (unpaid) work in current family arrangements. Measures to further advance gender equality in pension policy thus need to include both compensation for the effects of current gender roles on pension entitlements, and the recognition of the value of unpaid work performed by women, as well as incentives to move towards gender equality in family arrangements and in the labour market. While recent reforms have started moving pension rules in this direction, gender inequalities in access to pensions and benefit levels in Latin America have far from disappeared. Much remains to be done. While in Bolivia and Chile, for instance, basic guarantees have been put in place, a number of pension design features that generate gender gaps remain. In Chile, despite the positive effects of the child credit, genderspecific mortality tables continue to be used, thus making women bear the costs of their longer life expectancies. On the other hand, while child credits are a positive measure, they are unlikely to compensate fully for the periods women spend working in the household or taking care of others. Since these credits only apply for women who have children, childless women working in the household (as well as those caring for an elder member of the family) are less protected. Furthermore, in Chile the credit is calculated on a minimum wage (not on women's real earnings), and in Bolivia it only contributes to improve entitlements from the solidarity pillar or reduce the age of retirement. In Argentina, child or care credits have not yet been

³³ The Brazilian rural pension is formally contributory, but contributions are not linked to earnings but rather to rural production; and benefits are not linked to past contributions but to the minimum wage (Schwarzer and Querino 2002; Rofman et al. 2009b). This has allowed for high levels of coverage in rural areas, often considered hard to achieve under traditional contributory pension systems.

established and despite the recent expansion of pension coverage among the elderly, no universal or guaranteed benefit has yet been institutionalized for the future.

Box 4: Summary of main gender-relevant measures in recent pension reforms in Chile, Bolivia and Argentina

1. Make basic benefits available for all Basic non-contributory benefit guarantee for 60 per cent lowest-income households (Chile) Universal non-contributory pension for all (Bolivia) Contribution waivers to make benefits available for people with short or no contributory records (Argentina) 2. Top up low pensions Minimum benefit guarantees for workers with at least 10 years of contributions (Bolivia) Benefit top-up for workers with low (but some) self-financed benefits (Chile) Minimum benefit increases (Argentina) 3. Reduce the gender effects of differential life expectancy Defined-benefit formulas that do not adjust benefits for life expectancy or retirement age (Argentina) Gender-neutral life expectancies to calculate benefits from individual accounts (Bolivia) 4. Reduce the impact of household work and childcare on women's own pensions Contribution credits per child to increase self-financed benefits from individual accounts (Chile) Contribution credits per child to reduce the retirement age of women or increase their solidarity pension (Bolivia) Women's right to claim part of the pension accumulation of their husbands in case of divorce (Chile) 5. Other measures Compensation in death and disability insurance premiums for women (Chile) Minimum taxable wage for domestic workers (Chile) Elimination of fixed administrative fees in individual accounts (Chile) Widower's pension (Chile) Automatic benefit indexation (Argentina) Source: Elaborated by the author based on country legislation.

Several measures could help advance gender equality in access to pensions and in pension benefit levels in Latin American. As this paper has shown, the main sources of gender inequality in pensions are associated to both gender gaps in the labour market and to pension design features, so policy interventions need to address both dimensions. For the first one, policies to improve gender equality in labour market participation and earnings will help. These could include multiple interventions designed to foster wage equity, as well as to promote a more equal distribution of household and care duties between men and women. It could also include the development of child and elderly care services to facilitate women's participation in the labour market. As some countries have shown, the expansion of public care services can also have a positive effect on the direct generation of employment for women. Among pension-related features, some policy recommendations include:

- introducing universal access to basic benefits as a social protection floor based on citizenship rights rather than on the work or family nexus. This could both disassociate access to basic protection from family status and partly avoid the impact of labour market differences (between men and women as well as between formal and informal workers) on pension coverage;
- making sure the requirements to access minimum pensions in contributory systems take into consideration the labour market participation patterns and typical contributory histories that prevail in each country, especially among women, in order to improve access to those benefits (Pautassi 2002:73);
- establishing child and care credits in countries where these have not yet been implemented. These and other compensatory mechanisms help recognize the reproductive work of women and their discontinued participation in the labour market. However, these measures should be designed in such a way as to avoid perpetuating a maternalistic conception of women's rights (women being recognized by the pension system only in their condition as mothers) (Aguirre and Scuro Somma 2010);

- exploring the possibilities of introducing gender-neutral mortality tables in countries where gender differences prevail for the calculation of benefits (see a discussion in Bertranou 2001; Yañez 2010);
- introducing progressive benefit top-ups (for instance, the solidarity pillars in Chile and Bolivia) that could improve replacement rates for low-income workers as well as workers with more limited contribution records (women, informal and low-qualified workers, and so on). Progressive replacement rates (that is, higher replacement for lower earnings) are another option to improve protection for low-income workers (including many women);
- · designing effective mechanisms for pension sharing after divorce; and
- exploring mechanisms that could effectively incorporate household workers into the pension system.

These are just some among a whole range of measures that could be integrated into Latin American pension systems to improve gender equality. Some can have an immediate impact while others will take longer to have an effect. As this paper has shown, recent pension reforms in the three countries studied here have embraced some of these measures, and the gender-equality issue is slowly being introduced in Latin American pension reform agendas. However, gender gaps are unlikely to disappear. Differences in pension rights and benefits between men and women may lessen if women enter the labour force in greater numbers and gender gaps in the labour market diminish. Until this happens, pension systems need to keep redesigning the basis for allocation of rights and benefits to avoid, reduce and compensate the gender gaps that still exist. As long as the feminization of old-age continues, decisive measures to protect the old will need to have a gender dimension. The prevention of old-age poverty, especially among the very old, will remain inextricably connected to the capacity of pension systems to guarantee adequate pension benefits for women.

Appendix I Latin America: Estimated and Projected Indicators of Population Structure by Sex and Age

Demographic indicators	1950	1960	1970	1980	1990	1995	2000	2005	2010	2015	2020	2030	2040	2050
Per cent of population														
0-14 years old	40.2	42.5	42.5	39.6	36.4	34.2	31.9	29.8	27.7	25.6	23.6	20.6	18.5	17.2
15-64 years old	56.3	53.9	53.5	56.0	58.9	60.6	62.4	64.0	65.4	66.6	67.4	67.2	65.8	63.6
65 and over	3.5	3.7	4.0	4.4	4.8	5.2	5.7	6.2	6.9	7.8	9.0	12.2	15.6	19.3
Dependency ratio (per cent)	77.6	85.5	87.0	78.6	69.9	65.0	60.2	56.4	52.9	50.1	48.4	48.8	51.9	57.3
Median age of population	25.7	26.8	27.4	27.2	27.2	27.3	27.8	28.9	30.2	31.4	32.6	35.4	38.1	40.3
Sex ratio (per cent)	100.1	100.2	100.0	99.6	98.9	98.5	98.2	97.8	97.5	97.3	97.1	96.6	96.1	95.7
Old/young ratio (per cent)	8.7	8.6	9.5	11.1	13.1	15.2	17.8	20.8	24.7	30.3	38.3	59.2	84.3	112.1
Child/woman ratio (per cent)	66.9	74.4	70.1	60.5	50.0	44.6	40.5	37.1	33.5	30.8	28.8	26.4	25.4	25.4
per cent of women of childbearing age	48.0	45.5	45.4	47.7	50.3	51.8	52.9	53.2	53.3	52.9	52.3	49.8	46.4	43.2

Dependency ratio = (population 0-14 years old plus population 65 and over/population 15-64 years old)*100. Sex ratio = (male population/female population)*100. Old/young ratio = (population 65 and over/ population 0-14 years old)*100. Child/woman ratio = (population 0-4 years old/female population 15-49 years old)*100. Percentage of women of childbearing age = (female population 15-49 years old/total female population)*100. Source: CELADE-CEPAL online at www.eclac.cl/celade/proyecciones/basedatos_BD.htm

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