Justice of Pensions:

A Factorial Survey Approach

Juan Carlos Castillo[ab], Francisco Olivos[ab] & Ariel Azar[ab]
[a]Pontificia Universidad Católica de Chile, [b] Centre for Social Conflict and Cohesion Studies
FONDECYT grant 11121203
Contact: jcastillov@uc.cl , web: jc-castillo.com

June 17, 2015

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- Increase in life expectancy and pension systems implications
- Challenge to traditional pension schemes based on welfare policies (issue of intergenerational justice)
- Policy consequences: increase in retirement and introduction of individual capitalization pension systems
- Concerns about the legitimacy of reforms that go from solidarity to individualistic principles have called the attention of public opinion researchers

- What factors are taken into account when evaluating a pension as just (or unjust)?
- Which kind of factors have a larger weight?
- Do individuals emphasize individualistic (meritocratic) distribution criteria over egalitarian ones?
- Main hypothesis: the political culture associated to the private pensions reform in Chile will be reflected on a larger weight given to meritocratic criteria in the definition of a just pension.

- Self-interest perspective: Social policy preferences may be influenced by people's probability of being beneficiaries of these policies.
- But ... preferences towards the welfare state may also be affected by the context in which people live, as for instance welfare state arrangements (Esping-Andersen, 1990).
- Chile's market-oriented policies and privatization of pension system (Martinez Franzoni 2008; Filgeuira & Martinez Franzoni 2002).

- The empirical study of social or distributive justice refers to individuals' attitudes, perceptions, and beliefs about how goods and rewards are and should be allocated in society.
- The few studies in the area of justice of pensions are mostly based on the analysis of attitudinal survey items and not the pension amount itself.
- But, what elements play a role at the moment of proposing a just pension? Common surveys are limited to this regard, need of alternative approchaes as factorial surveys.

- In factorial surveys, respondents are presented a series of fictitious situations or vignettes that represent a possible case, and then they are asked to give a judgment about each vignette. In the present case, about what is a just pension.
- Each respondent evaluated 19 or 20 descriptions vignettes
- Example: Mr. Perez had a salary of $ 1,500,000 before retirement, he has a university degree, worked during 40 years, had two children, and has a dependent partner. Mr Perez pension is $500,000

- Each hypothetical description was followed by the respondent's task of evaluating the pension given in an 11-point scale from too low (-5) to too much (+5), with a zero value reflecting the fair pension.
- If respondents declared some degree of unfairness (i.e. response different from 0), they should indicate a just pension for the correspondent vignette.

4. La señora Minchiqueo tenía un sueldo de $200.000 antes de jubilarse, obtuvo un título técnico, trabajó durante 40 años, tuvo dos hijos y la pensión que recibe la usa para mantenerse solo ella.
La señora Minchiqueo recibe una pension de $200.000.

Esta pensión es ...

Demasiado baja					Lo justo				Demasiado alta	
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Y ¿Cuál cree Ud. que sería una pensión justa para la señora Minchiqueo? $ ___ ___ ___ . ___ ___ ___ . ___ ___ ___ pesos

- Our vignettes describe people in terms of eight dimensions:
  - Sex
  - Last name (social background)
  - Educational level
  - Years in the workforce
  - Number of children
  - Dependent partner
  - Last income
  - Pension
- Each dimension has a different number of levels

- The vignette population resulted from the full crossed combination of the levels of each dimension= 2(sex) x 4(last name) x 8(income) x 5 (working years) x 6(children) x 2(dependent partner) x 3 (educational level) x 8(pension) = **92,160**
- Sample of 192 vignettes (D-efficient design).
- The vignettes were randomly allocated into 10 decks, each of them containing between 19 and 20 vignettes.
- We randomly assigned one deck to each respondent.

- The study was based on a face-to-face survey implemented as part of the second wave of a Chilean two-wave panel study (Social Justice and Citizenship Participation Survey, Fondecyt Grant 11121203)
- Fieldwork from July to October 2014.
- N=443, 18 years and older, Satiago de Chile.

Table 4: Means of vignette's pension and pension proposed by rating task categories

Rating	Percent	Vignette's pension	Pension proposed
Too low	21.5	158970	917757.6
-4	10.0	268426.2	895315.5
-3	10.1	302569	736542.6
-2	6.3	434854.9	772461.1
-1	2.8	589823	891486.5
Just	26.4	753376.3	-
1	2.1	913372.1	648604.7
2	6.0	962729.1	566028.5
3	7.1	1062755	532415
4	4.2	1100000	476849.7
Too high	3.6	1157338	469160.4
Total		573846.9	755178.7

- Estimation consider clusterization of vignettes in respondents in a multilevel framework
- Respondents: level 2, vignettes: level 1.

Table 5: Vignettes - Level 1 multilevel models of the pension evaluation and the just pension

	(1) Evaluation	(2) Just Pension	(3) log(Just Pension)
Female	0.075*	3145.850	0.022*
	(2.09)	(0.34)	(2.45)
Last name: Indigenous	*ref.*	*ref.*	*ref.*
Vasco-Castellano	−0.099	1211.966	0.001
	(1.95)	(0.09)	(0.10)
Spanish	−0.004	−3402.485	−0.015
	(0.08)	(0.26)	(1.14)
European	0.141**	−5142.758	−0.004
	(2.78)	(0.39)	(0.34)
Children	0.008	1961.391	−0.000
	(0.74)	(0.71)	(0.17)
Dep. partner:No	*ref.*	*ref.*	*ref.*
Dependent partner	−0.080*	11540.384	0.027**
	(2.22)	(1.23)	(3.02)
Education:Intermediate	*ref.*	*ref.*	*ref.*
Technical	−0.286**	10203.279	−0.006
	(6.46)	(0.88)	(0.54)
University	−0.265**	−8608.101	−0.000
	(6.01)	(0.75)	(0.03)
Working years	−0.011**	2237.946**	0.004**
	(6.90)	(5.17)	(9.58)
Last income	−0.000**	0.347**	0.000**
	(57.62)	(64.39)	(86.68)
Pension	0.000**	0.170**	0.000**
	(127.76)	(16.58)	(33.36)
_cons	−2.262**	178913.134**	12.493**
	(27.26)	(8.16)	(556.67)
var(id)	0.462**	$3.737e+10$**	0.061**
	(8.73)	(286.83)	(36.17)
var(_cons)	2.656**	$1.800e+11$**	0.166**
	(60.91)	(1614.98)	(111.88)
Observations	8230	8220	8220

Absolute z statistics in parentheses
Restricted maximum likelihood estimation, N level 2=443
* $p < 0.05$, ** $p < 0.01$

- Education, years in the workforce, last income and pensions show the largest weights

- Level 2 predictors: pension normative preferences
  - Pension (not) income based: "It is unfair that those who won more money in their jobs also receive lager pensions"
  - Basic needs by the state: "It is enough if the state cover the basic needs of those without private pension"
  - Fatalism: "It does not make sense to prepare for retirement as nobody knows what the future brings"
  - Rich-to-poor transfers: "A percentage of rich people pensions should be transferred to those with lower or without pensions"

Table 6: Respondents - level 2 multilevel models of the pension evaluation and the just pension

	(1) Evaluation	(2) Just Pension	(3) log(Just Pension)
Female	−0.062	25850.812	0.033
	(0.81)	(1.25)	(1.30)
Age	0.003	−340.031	−0.001
	(1.22)	(0.58)	(1.36)
University	−0.179	53228.117*	0.066*
	(1.91)	(2.08)	(2.13)
Pension income based	0.068	−20152.402	−0.029*
	(1.74)	(1.90)	(2.21)
Basic needs by state	−0.149**	40951.875**	0.042**
	(3.87)	(3.87)	(3.28)
Fatalism	−0.153**	60847.457**	0.064**
	(3.59)	(5.21)	(4.48)
Rich-to-poor transfers	0.069	−29418.757*	−0.041**
	(1.65)	(2.55)	(2.91)
_cons	−1.880**	61010.437	12.446**
	(8.88)	(1.06)	(182.40)
var(id)	0.415**	$3.167e+10$**	0.052**
	(9.13)	(257.10)	(35.15)
var(_cons)	2.626**	$1.843e+11$**	0.166**
	(57.14)	(1535.44)	(106.19)
Observations	7418	7418	7418

Absolute z statistics in parentheses

Restricted maximum likelihood estimation, N level 2 (respondents)=400

* $p < 0.05$, ** $p < 0.01$

- Consensus between individuals regarding the (in)justice evaluation of pensions, which in most of the cases are considered as underrewarding.
- Meritocratic elements as educational level and years in the workforce show a clear predominance over redistributive / egalitarian criteria such as having a dependent partner or number of children raised.
- Pensions and last income present the larger effects (anchoring?)
- Individual beliefs about distributive justice in pensions are associated to pensions' evaluation and to the proposed just pensions.

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