

Does the introduction of non-contributory social benefits discourage registered labour? Testing the impact of pension moratoriums on unregistered employment in Argentina (2003-2015).

Leonardo Eric Calcagno

Univ. Orléans, CNRS, LEO*

Introduction

Argentina's pension system has seen various modifications in the past twenty-five years, but surprisingly few papers have studied the impact of these changes on the labour market, and most specifically on Labour supply¹. We feel in particular that the successive pension moratoriums carried out in 2006 and 2014, which substantially increased access to retirement pensions in a country with a history of large unemployment and unregistered employment², may have had a sizeable effect on labour-market behaviour of individuals nearing retirement age. The pension moratoriums, by granting retirement pensions without the need of having contributed the 30 minimum required years³, granted access to retirement pensions to people of retiring age⁴ with incomplete careers or long unregistered employment, unemployment or inactivity spells. These moratoriums, however, and the ensuing consensus that there

*(Univ. Orléans, CNRS, LEO, UMR 7322, F45067, Orléans, France). e-mail: leonardo.calcagno@univ-orleans.fr

¹Other developments, such as the introduction of a universal child benefit, the AUH, have nevertheless been thoroughly studied in the literature. These are thus left out of the scope of this paper.

²In our paper, we will consider a worker is unregistered when he is a dependent worker who does not contribute to social security, or an unqualified independent informal sector worker.

³The only non-contributory retirement benefit available were old-age non-contributory pensions. These are means-tested and accessible only to individuals aged 70 or more.

⁴It is 60 for women, 65 for men

ought to be universal pension coverage for the elderly ⁵, may have affected individual expectations. Particularly, the expected income to be gained from unregistered employment may have increased relative to registered labour, and discouraged the latter among individuals not having yet reached retirement age. This possible unintended consequence would further reduce contributions to social security in a country with over a third of dependent workers being unregistered, and hamper its sustainability.

Its existence, sign and magnitude are not however trivial, and is at the core of the ongoing debate on the voluntary or involuntary nature of unregistered labour. If we find these moratoriums significantly changed transitions between registered and unregistered employment, this would contradict the literature stating there is a segmentation of developing countries' labour markets, where informal workers are rationed out of the formal sector, with its more stable, protected and better paid jobs. Our results would advocate hence for the voluntary nature of unregistered employment. In this literature, informal labour is the workers' decision. They weigh its advantages and disadvantages relative to registered employment and choose whichever suits them best, in a non significantly segmented labour market. Even if we do find a significant impact of these moratoriums on labour-market transitions, its sign is not straightforward. On the one hand, we could expect a negative impact of these moratoriums on registered labour. Since they redistribute income toward workers with incomplete contributions, they may be an incentive to stop contributing to social security, following Ulyssea (2010) or Bosch & Guajardo (2012). But on the other hand, these moratoriums may actually be a (dis)incentive to (de)formalisation for senior workers. Indeed, a worker with incomplete contributions, having reached an age where he knows it will be impossible to retire eventually ⁶, had thus no reason to contribute for retirement pensions. This may no longer have been the case with the moratoriums: they allow buying back missing contribution years, and the resulting social security debt is discounted from future pensions in the form of payment plans. So each contributed month before retirement means one fewer month to buy back, and hence a higher expected retirement pension net of the moratorium instalments.

⁵As shown, for instance, by the unanimous approval by both chambers of the Argentinian Congress, of the Law 26970 pension moratorium passed the 27th of August 2014

⁶For instance, a woman aged 50 who would have only contributed 10 years so far.

So it may be that the unintended consequence may actually have worked the other way around. Finally, there may be conflicting incitations which cancel each other out and result in a non-significant impact of the moratoriums in labour-market transitions.

Argentina's recent social security history makes it a fit case for studying social security policies' impacts on labour supply. First, there was a social security reforms ⁷ that merged a multitude of sectoral, chronically deficitary Pay-As-You-Go (PAYG) pension systems into the SUSS⁸ run by an agency called ANSES⁹. It also introduced a fully-funded pension pillar run by private funds, the AFJPs¹⁰, where workers were affiliated by default and that soon captured most retirement contributions. This generated a huge deficit in the PAYG branch, which kept on paying the benefits of people that had contributed to the previous existing PAYG systems. Finally, requirements for retiring were toughened, with the retirement age progressively being pushed by five years, reaching 60 for women and 65 for men, and the required minimum contribution years for receiving a contributive pension being established at 30 years. These measures introduced a tighter link between contributions and benefits, reinforcing the pensions' contributory and "Bismarckian" nature. However, Argentina had experienced throughout the 1990's rising unemployment and informal employment, which peaked during the 1998-2002 crisis. This led to a significant decrease in social security coverage of the elderly, aged 65 or more, dropping from 80,90% in 1993 to 66,75% in 2003 according to Rofman & Oliveri (2011). Together with the freeze of pensions¹¹, this resulted in a significant decrease in social security benefits for the elderly.

In the wake of the aforementioned crisis, the government elected in 2003 undertook several policies in order to improve the most vulnerable of the elderly's condition. These policies meant a shift from a Bismarckian perspective of retirement benefits towards a more universalistic, or "Beveridgian", sys-

⁷Most notably, Decree 2284 of 1991, that created the SUSS and dissolved previous family allowances funds; Law 24241, passed in 1993, that created a two-pillars pension system; and Law 24714, passed in 1996, that formalised the new family allowances system.

⁸*Sistema Único de Seguridad Social*, or Unified Social Security System

⁹*Administración Nacional de la Seguridad Social*

¹⁰*Administradoras de Fondos de Jubilaciones y Pensiones*

¹¹The minimum retirement pension was for instance frozen at 150 pesos (150 US\$) a month from December 1995 to December 2001. Source: DNPE (2012)

tem, where retirement benefits became nearly universal at the expense of weakening the link between contributions and pensions. First of all, that government decided to raise significantly in real terms the minimum pension in the 2003-2008 period, increasing it from 200 pesos (71 US dollars) on May 2003 to 690 pesos (189 US dollars) on March 2009, at the onset of the 26417 Pension Mobility Law's application. However, the other pensions were not fully adjusted¹² to the high inflation rates triggered by the abandonment of the Convertibility plan in early 2002 and only partially quelled afterwards. These two elements significantly decreased the dispersion of retirement pensions given by ANSES. Also, the private pension funds nationalisation decided in late 2008¹³ dissolved the fully-funded pillar, where there was a close link between contributions and benefits, and strengthened the sustainability of the PAYG pillar, renamed SIPA¹⁴. However, the main drivers of the universalisation of Argentina's pension system were pension moratoriums, which effectively increased retirement benefits coverage even above pre-reform levels, reaching 95% of people aged 65 or more in 2014¹⁵. These moratoriums, that were accessible starting from late 2005 and are scheduled to end by September 2016¹⁶, were so massively subscribed 56,5%¹⁷ of total direct retirement benefits given by ANSES in 2014 resulted from these moratoriums. So despite their temporary nature, they changed considerably the nature of Argentina's pension system. It is hence possible to wonder whether they modified the labour-market behaviour and retirement decision of individuals.

These pension moratoriums are policy shocks that, in the case of the permanent Law 24476 moratorium¹⁸ and the temporary, but more generous and accessible, Law 25994 moratorium¹⁹, were scarcely advertised and hence not anticipated by workers, as explained in the paper by Bosch & Guajardo

¹²This insufficient adjustment gave way to increased litigiousness, with the Supreme Court of Justice ordering through the Verdicts Badaro (2007) and Elif (2009) to use benefits indexation rules for this period that were often more generous than the readjustments that ANSES had made.

¹³through Law 26425, issued the 4th of December 2008

¹⁴*Sistema Integrado Previsional Argentino*

¹⁵Source: own calculus using demographic projections from INDEC and total direct retirement benefits from the 2014 *Cuenta de Inversión*, Tomo II Anexo II.3

¹⁶The right-wing government elected in November 2015 recently stated (TELAM, 2016) it will not issue new moratoriums and plans to replace them with a minimum universal non-contributory benefit. The project has not been formally issued yet, and thus remains out of the scope of this paper.

¹⁷Source: own calculus using the 2014 *Cuenta de Inversión*, Tomo II Anexo II.

¹⁸Accessible since the 25th of November 2005 through Decree 1454/2005

¹⁹Accessible from the 6th of July 2006 through joint general resolutions 2091 and 579/2006 to the 30th of April 2007

(2012). This latter moratorium, due to its limitation in time, concerned only specific generations of individuals near, or beyond, retirement age, a fact that is also true for the temporary Law 26970 moratorium²⁰. These moratoriums hence resemble natural experiments, where we can observe the reaction of individuals to an unforeseen policy. Provided we can distinguish a treatment group, affected by the policy, from a similar test group unaffected by the policy, a difference-in-difference technique (or a propensity score matching if the test group significantly differs from the control group) could be carried out to test whether these moratoriums changed labour-market behaviour. There is furthermore available data for this period. Indeed, the EPH²¹ is a quarterly household survey that starts at the third quarter of 2003. It consists of a randomised sample of the urban population of 31 Argentinian cities and metropolitan areas. These represent most of Argentina's urban population, and hence most of its total population, since about 91% of Argentinians live in towns of 2000 and more inhabitants²². It contains detailed information on individual characteristics, family links, education, various sources of income and most of all on the labour-market situation of the respondent. Each household is surveyed four times all in all: two consecutive quarters first, then after a break of six months two other consecutive quarters. This allows for a rotation in the studied population while still making it possible to study quarterly as well as yearly transitions. An average of around 50000 individuals are interviewed each quarter.

Despite the available data and the similarity of these moratoriums to natural experiments, there is almost no literature on the subject. To the best of our knowledge, there is only a working paper by Bosch & Guajardo (2012) that studies the impact of the Law 24476 and 25994 moratoriums on the labour-market. Using the EPH, they apply a difference-in-difference technique to individuals five years below and five years above the minimum required retirement age, and find a decrease in total employment and formal employment of the latter caused by these moratoriums. Allowing people above the minimum retirement age to effectively retire is however the very essence of a pension moratorium,

²⁰ Accessible since the 19th of September 2014 until the 18th of September 2016

²¹ *Encuesta Permanente de Hogares*

²² Source: own calculus from INDEC, 2010 Argentinian Census (*Censo Nacional de Población, Hogares y Viviendas*, 2010)

so the aforementioned results are neither surprising nor an undesired effect of the moratoriums, but evidence that the moratoriums worked. An undesired effect of the moratorium would have been to discourage people below the retirement age to supply formal employment. This effect has not however been studied so far with a difference-in-difference technique because of the impossibility to distinguish, among younger workers, a treatment group from a test group. There is not enough information on careers in the EPH to distinguish individuals that could not have retired without the moratoriums (the treatment group) from those who could eventually earn a contributory retirement pension thanks to their stable careers, so that these moratoriums are of no use for them (the test group). There is not either a publicly available dataset which lists individual acquired pension and social security rights in Argentina.

This paper intends hence to fill the gap in this literature. Using the quarterly data from the EPH ranging from the third quarter of 2003 to the second quarter of 2015, we first estimate behavioural equations depicting the relevant transitions in the labour market (between formal employment, formal independent work, informal employment, unemployment and inactivity) and Mincerian wage equations. We then feed these equations to a dynamic microsimulation model we have developed, and generate plausible careers up until the fourth quarter of 1974²³ for each individual in our dataset. Then, we identify middle-aged and senior individuals that, due to the simulated careers derived from their observed characteristics, have already not contributed enough to retire through the contributory scheme. We treat as our control group individuals of the same age groups that have contributed enough to still have a possibility to retire normally at retirement age. Finally, we analyse the impact of the Law 24476 and 25994 moratoriums, first, and of the Law 26970, afterwards, by following a difference-in-difference analysis in the manner of Bosch & Guajardo (2012) and Garganta & Gasparini (2015) to ascertain the nature, and existence, of an impact on labour-market behaviour of the successive pension moratoriums.

²³This is when the first EPH survey was carried out in the Buenos Aires metropolitan area

References

- BOSCH, MARIANO, & GUAJARDO, JARRET. 2012. *Labor market impacts of non-contributory pensions: The case of Argentina's moratorium*. Tech. rept. Inter-American Development Bank.
- DNPE. 2012. *Boletín Estadístico de la Seguridad Social, Cuarto Trimestre 2011, Primer Trimestre 2012*. Tech. rept. Dirección Nacional del Programación Económica Ministerio del Trabajo y de la Seguridad Social, Argentina.
- GARGANTA, SANTIAGO, & GASPARINI, LEONARDO. 2015. The impact of a social program on labor informality: The case of AUH in Argentina. *Journal of Development Economics*, **115**, 99–110.
- ROFMAN, RAFAEL, & OLIVERI, MARÍA LAURA. 2011. *La cobertura de los sistemas previsionales en América Latina: conceptos e indicadores*. Banco Mundial Buenos Aires.
- TELAM. 2016. "Tenemos que pensar una nueva ley jubilatoria." url <http://www.telam.com.ar/notas/201602/136151-anses-emilio-basavilbaso-tenemos-que-pensar-una-nueva-ley-jubilatoria.html>. Accessed 30/03/2016.
- ULYSSEA, GABRIEL. 2010. Regulation of entry, labor market institutions and the informal sector. *Journal of Development Economics*, **91**(1), 87–99.