How, Why and in What Sectors Employment Informality Decreased in Argentina from 2003 to 2012

Bertranou, Fabio and Casanova, Luis and Sarabia, Marianela

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How, Why and in What Sectors Employment Informality Decreased in Argentina from 2003 to 2012[1]

Fabio Bertranou

Luis Casanova

Marianela Sarabia

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Abstract

In a brief period of time after the 2001-2002 crisis, there was a dramatic fall in informal salaried employment in Argentina. Informal employment—also called "non-registered employment"—refers to employment for which no social security contribution is made. This indicator dropped by fifteen percentage points, from 49% to 34% from 2003 to 2012. This paper analyzes the recent evolution of informal employment and the main policies designed to reduce its scope and to encourage the creation of quality employment. It has been observed that the decline in informal employment, measured as non-registered salaried employment, is primarily due to net creation of formal employment and, to a lesser extent, to net destruction of non-registered employment. The rate of informal employment declined in all sectors of the economy and in establishments of all sizes. Extensive mobility between non-registered salaried employment and inactivity (mainly among low-skilled women workers) has been observed as well and, albeit to a lesser extent, between non-registered salaried employment and formal employment. Since most informal workers are unskilled and perform their jobs in work units that are difficult for public policies to identify, a comprehensive policy approach is necessary, one that considers economic, social and employment issues.

Key words: *Informal employment, informal economy, labor market, labor policies, Argentina*

JEL: O17, J21, J80

[1] Fabio Bertranou (ILO in Argentina; bertranou@ilo.org), Luis Casanova (ILO in Argentina; casanoval@oit.org.ar), Marianela Sarabia (Centro de Estudios-Unión Industrial Argentina; marianela.sarabia@gmail.com). The opinions expressed in this article reflect the authors' viewpoints and do not necessarily represent those of the organizations with which they are affiliated. The authors would like to thank Marta Novick, Ximena Mazorra, David Glejberman, Juan Chacaltana, Catherine Saget, Rodrigo González, Fernando Groisman, Analía Calero, Juan Carlos Cid and the participants in the *Novenas Jornadas sobre Mercado de Trabajo y Equidad* at the Universidad Nacional de General Sarmiento for their valuable comments.

1. Introduction

Informal employment has serious consequences for workers and their families, as well as for society as a whole. On the one hand, informal employment constitutes an obstacle to recognition of workers' rights; it is associated with various facets of poverty. Likewise, informal workers rarely receive necessary protection from a number of social risks such as workplace accidents and unemployment. On a more aggregate level, informal employment has an impact on equity, efficiency, the State's ability to collect resources, the breadth of social security, productivity and growth (ILO, 2002; Jüting and de Laiglesia, 2009). For all of these reasons, an integral approach to informal employment is necessary in order to design efficacious public policies.

For decades, informal employment in Argentina has been an extremely serious and widespread socioeconomic phenomenon. Indeed, currently 3.5 of every ten salaried workers are affected by informal employment. While there was a major turnaround in the 2000s, it is still one of the primary forms of precarious employment in the country.

The aim of this paper is, on the one hand, to describe the reduction in informal employment in Argentina, identifying the factors that explain this tendency. Our analysis will focus on non-registered salaried employment, which is measured statistically as employment for which no contributions are made to social security. In Argentina from 2003 to 2012, there was a slight increase (from 73% to 76%) in the incidence of salaried employment in relation to overall employment. This article also attempts to connect the drop in informal employment with certain public policies implemented in the 2000s.

This paper is structured as follows: the section after this introduction describes the evolution of employment and the performance of the economy in the 2000s; a third section provides an account of the sources of information and an estimate of the scope of informal employment considering that, on the basis of data from the *Encuesta Permanente de Hogares* [Permanent Household Survey, henceforth EPH for the acronym in Spanish], it is only possible to analyze non-registered status amongst salaried employees in the country's principle urban agglomerations; the fourth section analyzes the evolution of non-registered salaried employment on the basis of aggregate decompositions, microeconometric decompositions, and by tracking employment histories; the fifth section describes policies adopted to reduce informal employment; and the final section present a summary of the paper, as well as an account of the main challenges facing public policies devised as part of the strategy to continue reducing informal employment.

2. The evolution of employment since 1991

The macroeconomic performance of Argentina in the last two decades has been associated with two different models. In the 1990s, the macroeconomic structure was characterized by an appreciated real exchange rate and commercial and financial openness, along with privatization and other pro-market reforms in different sectors of the economy. The hyperinflation that characterized the late 1980s and early

1990s was brought under control, and the GDP grew for the first five years of the decade (Beccaria and Groisman, 2007). Nonetheless, the overall level of economic activity was highly volatile partly due to the inability of the currency convertibility's bi-monetary scheme to offset external "shocks" by means of the nominal flexibility afforded by monetary and currency policy (Damill *et al.,* 2011). After the currency convertibility crisis in 2002-2003, a macroeconomic approach different from the one adopted in the 1990s was implemented. This new approach entailed an administered floating exchange-monetary system geared to protecting competiveness abroad, promoting sustained growth of economic activity in non-traditional tradable sectors, and stimulating greater levels of investment and employment by expanding the domestic market (Ministry of Labor, Employment and Social Security, henceforth MTEySS for the acronym in Spanish, and ILO, 2012).

Starting in 2003, the economy began to show high levels of growth. From 2003 to 2011, the average annual growth rate was 7.8% despite the deceleration registered in 2009 as a result of the international crisis and a major drought that affected the agricultural sector. This contrasts with the growth rate during the period of currency convertibility (an average of 3.4% annually) and the highly volatile nature of economic activity during that period.

The change of regime brought changes as well in relation to which sectors of the economy were most dynamic. From 1991 to 2001, the sectors that showed the highest rates of growth were financial intermediaries; electricity, gas and water suppliers; mines and quarries, and transportation, storage and communications. While the financial intermediaries, transportation, storage and communications sectors continued to be dynamic from 2003 to 2011, construction, commerce and industry showed growth rates considerably higher than those observed during the previous period. The growth of these sectors, however, was not substantial enough for them to gain weight within the productive structure: the weight of industry in the productive structure is similar to what it was in 2003 and lower than in 1991, whereas construction has gained participation relative to those earlier periods.

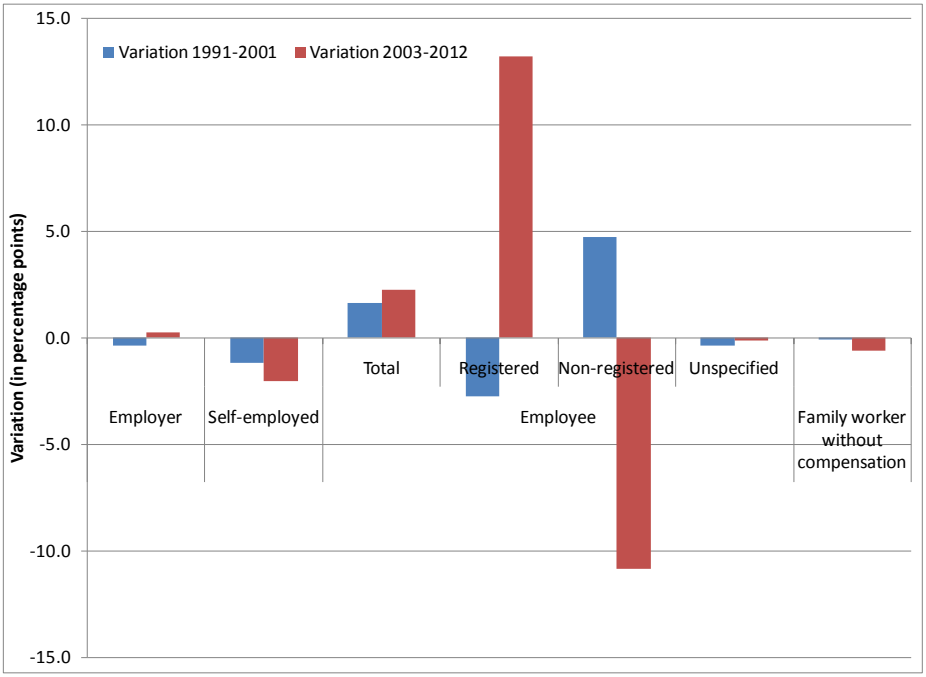
Debate on the impact of the growth pattern implemented from 2003 to 2011 on the productive structure is ongoing. Fernández Bugna and Porta (2009) maintain that whereas currency convertibility, whose industrial policy was limited to a relative-price system, led to moderate growth in services and activities connected to natural resources, the devaluation that marked the end of convertibility meant a change in relative prices and a relative fall in the cost of labor, which favored the production of tradables. Beccaria and Groisman (2007), on the other hand, indicate that all sectors showed significant growth thanks to the positive performance of domestic and foreign demand.

Employment indicators evidence a correlation with the greater economic activity starting in 2003. The unemployment rate dropped from 16.1% in mid-2003 to 7.2% in mid-2012, whereas the employment rate during the same period climbed from 38.8% to 42.8%.

At the same time, between the third quarter of 2003 and the second quarter of 2012, the number of employed persons residing in urban areas (including registered and non-registered employment, as well as self-employment) increased by almost 3.6 million. The increase in the number of jobs was even greater, as many as 5 million from 2003 to 2009 (MTEySS, 2010). In contrast to the 1990s, during this period the level of formal salaried employment was restored, and the participation of informal salaried employment and self-employment diminished. Data on Greater Buenos Aires illustrate this phenomenon. From 1991 to 2001, the rate of salaried employment grew annually by 0.5%, and its participation increased by 1.6

percentage points,[2] largely due to the increase in non-registered employment, since the participation of registered salaried employment diminished. From 2003 to 2012, total salaried employment in Greater Buenos Aires grew at an annual rate of 2.1%. This time, though, growth was driven by an increase in registered employment, which grew at an annual rate of 5.3%. Due to this, the participation of registered employment in the employment structure increased by 13.3 percentage points. This pattern in Greater Buenos Aires repeats, with some minor variations, in the other urban agglomerations in the country. The greater growth of salaried employment, especially registered salaried employment, over self-employment meant an increase in the participation of the former in overall employment.[3]

Graph 2.3. Change in the structure of employment according to occupational category, 1991-2012
Greater Buenos Aires Urban Agglomeration



Note: The year 2002 is not considered in these comparisons due to the major impact of the 2001 crisis on employment indicators for the following year.
Source: Own elaboration on the basis of EPH data.

3. Informal employment in Argentina: sources of information and its approximate scope

The primary source of data for intercensal monitoring of the state of employment in the main urban agglomerations in Argentina is the *Encuesta Permanente de Hogares* collected by the Instituto Nacional de Estadística y Censos [National Institute of Statistics and Census, henceforth INDEC for the acronym in

[2] There were, however, cyclical variations in self-employment during this period (Bertranou and Maurizio, 2011).
[3] For the 1991-2001 period, the data is from the EPH Puntual, or non-ongoing household survey, whereas the data for the 2003-2011 period is from the EPH Continua, or the ongoing household survey. The changes in methodology introduced in 2003 affect the comparability of some employment statistics between the two periods (see INDEC, 2003).

Spanish]. This source provides information on urban agglomerations with 5000 inhabitants or more, and it covers approximately 70% of the country's urban population. Starting in 2010, the *Encuesta Anual de Hogares Urbanos* [Annual Survey of Urban Households, henceforth EAHU for the acronym in Spanish] has been performed on a yearly basis. It covers the entire urban population of the country (somewhat more than 90% of the total population), though given the fact that this is a recent instrument it cannot be used to assess performance over longer periods.

The EPH includes a specific survey on the labor market conducted according to international standards in order to ensure a certain degree of comparability. The EPH provides information on rates of activity, employment and unemployment, as well as non-registered salaried employment, on the basis of statements made by salaried workers regarding their contributions to social security. It does not, however, provide information on compliance with the tax code or social security regulations on the part of self-employed workers.

In 2005, to complement the EPH, a specific module was introduced to address informal employment in order to obtain further information on the degree of compliance with the tax code and employment regulations not only in the case of salaried workers, which is habitually studied, but also in the case of self-employed workers and productive units employing salaried workers according to the definitions of the informal economy (ILO, 2002). This module was implemented in the Greater Buenos Aires urban agglomeration and later, in 2009, in Greater Mendoza. In both cases, it was observed that the level of informal employment amongst self-employed workers was higher than amongst salaried workers. It can therefore be deduced that the greatest number of informal workers (almost one third of the total) hold salaried jobs and work in formal units. This group is followed in order of importance by the self-employed and salaried workers who perform their tasks at home and in informal productive units.

Lastly, another source of pertinent information for tracking registered employment is the data furnished by the *Sistema Integrado Previsional Argentino* [Integrated Argentine Social Security System, henceforth SIPA for the acronym in Spanish] which, as an administrative record, evidences the universe of salaried and self-employed workers who contribute to the *Administración Nacional de la Seguridad Social* [National Social Security Administration, henceforth ANSES for the acronym in Spanish].

On the basis of these sources, as well as some data published in the 2010 *Censo Nacional de Población y Vivienda* [National Population and Housing Census, henceforth CNPyV for the acronym in Spanish], an estimate of levels of informal employment was reached for all occupational categories (except unpaid work performed in the family context) in both urban and rural sectors for the year 2010. According to this estimate, the level of informal employment in the country as a whole is 43.8%. Amongst salaried workers (76% of all employed individuals), informal employment, measured as a lack of recorded contribution to social security, is around 38%, whereas the rate amongst self-employed workers (employers and the self-employed) is approximately 58%.

4. Evolution of non-registered salaried employment from 2003 to 2012

On the basis of the EPH, more specifically by means of the information provided on a quarterly basis on salaried workers not registered with social security, it is possible to track informal employment in major urban agglomerations periodically. While this information enables observation of informal employment in relation to non-registered salaried employment, it is important to emphasize that this sector contains the

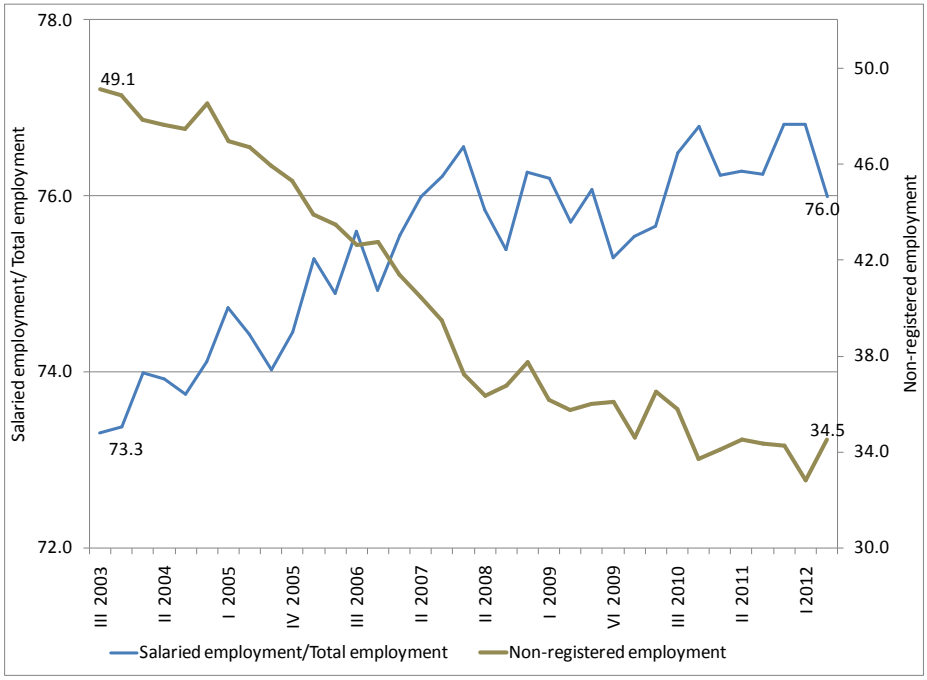
largest proportion of informal employment, even when its rate is lower than amongst self-employed workers.

By constructing a time series from 2003 to 2012, it is possible to analyze both the recent evolution of informal employment and the factors that help explain changes in it. This section explores both the static and dynamic dimensions of informal employment amongst salaried workers due to the fact that, as mentioned above, the EPH does not systematically disclose this specific information in the case of self-employed workers.

As discussed above, the macroeconomic approach implemented starting in 2002-2003 transformed the pattern by which employment was generated in favor of the creation of formal positions (MTEySS, 2010; Bour and Susmel, 2010; ILO, 2011a). The rate of non-registered employment dropped by 14.6 percentage points between the historical high recorded during the third quarter of 2003 (49.1%) and the second quarter of 2012 (34.5%). This, along with growth in the participation of salaried employees in overall employment, suggests that, even if the level of informal employment remained the same amongst self-employed workers, overall informal employment would have dropped during this period, given that the weight of self-employment in the total workforce had diminished.

Graph 4.1. Evolution of non-registered salaried employment and of the participation of salaried employment in overall employment, 2003-2012

(Total urban agglomerations, in percentages)



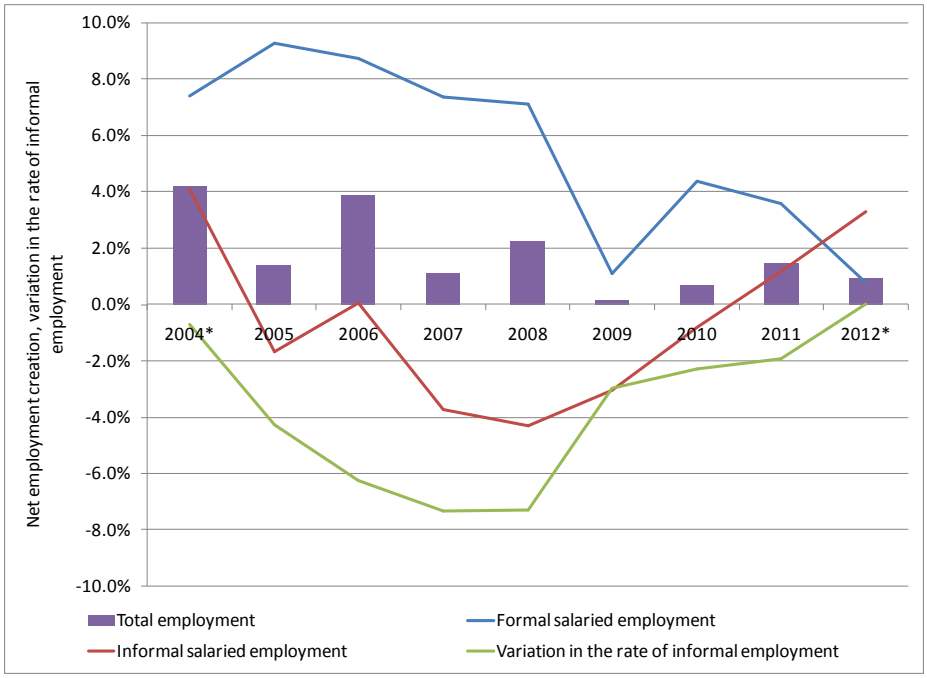
Source: INDEC on the basis of the EPH.

In absolute terms, the MTEySS's data (published in the *Boletín de Estadísticas Laborales* [Bulletin of Labor Statistics]) indicates that the number of non-registered salaried workers (in urban areas) grew to 4

million in the second quarter of 2012. That figure is 10.1% (453,000) less than the number recorded for the third quarter of 2003, when the rate of non-registered salaried employment reached 49.1%.

Thus, both the net creation of registered salaried employment and the net destruction of non-registered salaried employment contributed to the reduction in the rate of non-registered employment. Graph 4.2 shows that, during the period when the rate of non-registered employment dropped most dramatically (2006-2008), the net creation of registered salaried employment was greater than the net destruction of non-registered salaried employment (in absolute terms). Later, starting in 2009, both the net creation of registered salaried employment and the net destruction of non-registered employment dropped (indeed, 2011 and 2012 witnessed a net creation of non-registered employment), due to which the rate of non-registered employment fell, albeit at a slower pace.

Graph 4.2. Net creation of employment and variation in the rate of informality in salaried employment, 2004-2012*



Note: (*) until the second quarter.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

4.1. Description of the evolution of non-registered employment on the basis of aggregate decompositions

As outlined in the previous section, informal employment amongst salaried employees has dropped considerably in recent years. While there are a number of causes for this, transformations in the overall composition of salaried work and the rates of different subgroups shed a great deal of light. In other words, if the incidence of non-registered employment varies from one field of economic activity to another, a change in the relative participation of a sector in the economy as a whole can alter the average

level of informal employment. At the same time, a decrease in informal employment might also be associated with an overall contraction of all sectors (Gasparini, 2000).

On the basis of these hypotheses and for the sake of further understanding informal employment and its dynamic, and of designing public policies geared to promoting decent work, we will provide a detailed description of the evolution of non-registered employment by means of an empirical analysis containing aggregate decompositions by the characteristics of the productive units in which salaried workers perform their jobs and by relevant personal attributes.

Box 1. Keys to interpreting aggregate decompositions

The *rate effect* analyzes the impact on the aggregate rate of employment informality of an alternation in a sectoral rate of non-registered employment when there is no alternation in the overall structure of salaried employment. The *structure effect*, on the other hand, analyzes how a change in the overall structure of salaried employment would impact the aggregate rate of non-registered employment when the sectoral rates of non-registered employment remain unchanged. For example, Chart 4.1 shows that primary activities yield a negative *rate effect* (that is, they contribute to a reduction in non-registered employment), because the rate of non-register employment in that sector drops; likewise, because the rate of non-registered employment in the primary activity sector is higher than average, the *structure effect* is negative as well because the weight of that sector within overall salaried work has diminished (in 2003, base year of the decomposition).

4.1.1. Evolution of non-registered employment by economic sectors

When analysis is focused on aggregate decompositions by economic sectors, an overall drop in the rate of non-registered employment in all areas is observed between the third quarter of 2003 and the second quarter of 2012.[4] While the greatest reductions in non-registered employment rates occurred in the social service and health sectors (-35.6 percentage points), construction (-19 percentage points) and manufacturing (-7.2 percentage points),[5] the *rate effect* places the social service and heath sectors at the top of the ranking, that is, they are most pertinent to explaining the reduction in the overall rate. These sectors are followed by industrial manufacturing, commerce, then public administration, defense, and mandatory social insurance.[6]

The impact of the *rate effect* predominates and that of the *structure effect* is minimal since there has not been a major change in the sectoral composition of salaried employment. Only 0.5 percentage points of the 14.6 drop is due to a transformation in the structure of salaried employment by area of activity. In the

[4] This is the most longstanding quarterly data series to analyze the recent evolution of informal employment due to changes in methodology and data available to carry out analysis.

[5] Disregarding primary activities, which are largely uncovered by the survey due to its urban nature.

[6] Regarding the impact of variations in social services in general and health services in particular, as well as community and personal services, on the overall non-registered employment rate, it is significant that during the third quarter of 2003 these sectors contained 33.6% and 29.1% respectively of the beneficiaries of employment programs. The insertion of these workers into registered jobs in these and other sectors explains the major drop in the specific rates of non-registered employment in these two areas and the reduction of their weight within salaried employment. Thus, the fact that the beneficiaries of these employment programs moved into registered jobs reinforces the *rate effect* and the *structure effect* of these two areas of activity.

cases of social and health services, however, like that of domestic service, the *structure effect* shows a contraction in informality since the participation of those sectors, which have high rates of non-registered employment, dropped during the period analyzed. This is not the case with construction, though, where the *structure effect* operates in the opposite direction: when the participation of this sector, which has a high rate of non-registered employment, increases, so does the incidence of non-registered employment in overall salaried employment. Indeed, in this sector, as with the hotel and restaurant sectors, the *structure effect* outweighs the contractive impact of the *rate effect*.

In the second quarter of 2012, the sector with the highest percentage of non-registered employment was domestic service: one of every four non-registered salaried workers is employed in this area.

Chart 4.1. Breakdown of the change in non-registered employment by economic sectors, III quarter, 2003 - II quarter, 2012

Economic sector	Q3 2003			Q2 2012						Variation		
	Non-registered salaried employment		Structure of salaried employment (2)	Non-registered salaried employment				Structure of salaried employment (4)		Rates Effects 5 = ((3-1)*2)	Structure effect 6 = ((4-2)*1)	Incidence 7 = (5+6)/Tot.Var.
	Rates (1)	Structure		Rates (3)		Structure						
Primary activities	61.2	2.2	1.8	17.8	(-)	0.6	(-)	1.1	(-)	-0.7	-0.4	7.7
Manufacturing industry	46.5	12.7	13.4	29.3	(-)	10.9	(-)	12.8	(-)	-2.2	-0.2	16.6
Construction	79.6	8.1	5.0	60.6	(-)	11.9	(+)	6.8	(+)	-0.9	1.4	-3.1
Commerce	56.6	16.3	14.2	40.1	(-)	17.3	(+)	14.9	(+)	-2.2	0.4	12.7
Hotels and restaurants	57.2	3.2	2.7	47.9	(-)	5.2	(+)	3.7	(+)	-0.2	0.5	-2.1
Transportation, storage and communications	45.4	6.2	6.7	33.0	(-)	7.2	(+)	7.6	(+)	-0.8	0.4	2.8
Financial services, real estate, rentals and business	34.4	5.8	8.2	21.9	(-)	6.2	(+)	9.7	(+)	-1.0	0.5	3.4
Education	19.0	4.3	11.1	8.3	(-)	2.3	(-)	9.4	(-)	-1.1	-0.3	9.8
Social and health services	57.0	10.3	8.9	21.4	(-)	3.8	(-)	6.2	(-)	-3.0	-1.5	30.5
Domestic service	95.4	19.7	10.1	83.7	(-)	24.1	(+)	9.9	(-)	-1.1	-0.2	9.0
Public administration, defense and mandatory social security	22.9	5.3	11.3	10.0	(-)	3.2	(-)	11.1	(-)	-1.4	0.0	9.8
Other community, social and personal services	53.3	5.7	5.3	41.3	(-)	6.4	(+)	5.3	(+)	-0.6	0.0	4.0
Other economic sectors	9.1	0.2	0.9	18.0	(+)	0.4	(+)	0.8	(-)	0.1	0.0	-0.5
Unspecified	14.3	0.1	0.4	27.7	(+)	0.6	(+)	0.8	(+)	0.1	0.0	-0.7
Total	49.1	100.0	100.0	34.5		100.0		100.0		-15.1	0.5	100.0

Note: The sign in parenthesis indicates the change (in rates, structure of non-registered employment and structure of salaried employment) from 2003 to 2012.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

In sum, the changes in the social service and health sectors have made the greatest contribution (30.5%) to the fall in the overall rate of non-registered employment, followed by manufacturing (16.6%) and commerce (12.7%). Together, these areas account for 60% of the reduction in the overall rate of non-registered employment from 2003 to 2012. Nonetheless, the drop in sectoral rates of non-registered employment captured by the *rate effect* played a key role in reducing the overall incidence of non-registered employment, whereas the slight alteration in the sectoral composition of salaried employment captured by the *structure effect* offset that overall contraction.

Just as there were no major sectoral changes in the structure of employment, there were no major modifications in the sectoral structure of the Gross Domestic Product. Significantly, though, from 2003 to 2012 the areas of construction, commerce and industry were among the most dynamic in the economy, along with financial intermediation and transportation, storage and communication which registered high

levels of growth in the 1990s. This growth was driven by domestic demand, mostly consumer and investment demand. The former was driven by marked growth in real income—mostly from employment—and the second was closely tied to the expansion of capacity in a context of sustained growth and extraordinary return during the period immediate after the devaluation in 2002.

In keeping with these conclusions, a recent study of several countries in Latin America asserts that in Argentina, despite the significant growth from 2003 to 2007 in both Gross Domestic Product and Industrial Product, especially in those areas that make intensive use of natural resources, the growth in overall productivity was due more to improvements that took place in each sector than to overall structural change (Abeles and Rivas, 2011).

4.1.2. Evolution of non-registered employment by size of establishment

A differential reduction in the rates of non-registered employment was observed according to size of establishment. Those establishments with between six and forty workers showed the greatest drop in the rate of non-registered employment (21.2 percentage points). Significantly, of the 14.6 percentage point reduction in the overall rate of non-registered employment, 12 percentage points (82.3% of the total drop) can be accounted for by the reduction in the rate of non-registered employment at establishments employing up to forty persons and by a change in the structure of salaried employment in relation to size of establishment, which furthered this tendency. At the same time, the overall participation of the smallest establishments in which, in the third quarter of 2003, the incidence of non-registered employment was greater than average[7] also dropped. The weight of employment at establishments with over forty employees increased by 5.3 percentage points. The change in the structure of salaried employment in relation to size of establishment accounts for 18% (2.6 percentage points.) of the drop in the aggregate rate of non-registered employment.

Chart 4.2. Breakdown of the change in non-registered employment by size of establishment, III quarter, 2003 – II quarter, 2012

Size of establishment	Q3 2003			Q2 2012			Variation		
	Non-registered salaried employment		Structure of salaried employment (2)	Non-registered salaried employment		Structure of salaried employment (4)	Rates Effects 5 = ((3-1)*2)	Structure effect 6 = ((4-2)*1)	Incidence 7 = (5+6)/Tot.Var.
	Rates (1)	Structure		Rates (3)	Structure				
Up to 5 persons	81.2	51.0	30.8	74.1 (-)	59.2 (+)	27.5 (-)	-2.2	-2.7	33.0
From 6 to 40 persons	48.4	30.6	31.1	27.1 (-)	23.4 (-)	29.7 (-)	-6.5	-0.7	49.3
Over 40 persons	18.0	10.6	28.9	9.2 (-)	9.1 (-)	34.2 (+)	-2.5	0.9	10.8
Unspecified	41.8	7.9	9.2	33.6 (-)	8.4 (+)	8.6 (-)	-0.8	-0.3	6.9
Total	49.1	100.0	100.0	34.5	100.0	100.0	-12.0	-2.6	100.0

Note: The sign in parenthesis indicates the change (in rates, structure of non-registered employment and structure of salaried employment) from 2003 to 2012.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

Despite a significant drop in the rate of non-registered employment in establishments with fewer than forty employees, 82.5% of all non-registered employment occurs in this type of establishment.

[7] Significantly, according to data published by the MTEySS, over 50% of all registered employment created between 2004 and 2010 was in large establishments.

4.1.3.Evolution of non-registered employment by occupational category

For the period analyzed, the scope of non-registered employment diminished for all occupational categories, though it did so to a larger extent amongst workers performing operational tasks (a drop of 18.8 percentage points), followed by those performing unskilled labor (a drop of 12.3 percentage points). This largely explains the reduction in informal employment: these two categories account for 92.5% of the reduction in the rate of non-registered employment (51.3% is attributable to unskilled workers and 41.2% to operational workers). Along these lines, the recovery of production facilitated employment insertion in more skilled occupations: the participation of operational workers amongst salaried employees rose by 4.4 percentage points at the expense of the participation of unskilled workers.

Chart 4.3. Breakdown of the change in non-registered employment by skills category, III quarter, 2003 – II quarter, 2012

Skills category	Q3 2003			Q2 2012						Variation		
	Non-registered salaried employment		Structure of salaried employment (2)	Non-registered salaried employment				Structure of salaried employment (4)		Rates Effects 5 = ((3-1)*2)	Structure effect 6 = ((4-2)*1)	Incidence 7 = (5+6)/Tot.Var.
	Rates (1)	Structure		Rates (3)		Structure						
Professional	22.0	3.4	7.5	16.1	(-)	3.8	(+)	8.0	(+)	-0.4	0.1	2.3
Technical	18.1	6.2	16.9	14.1	(-)	6.7	(+)	16.3	(-)	-0.7	-0.1	5.4
Operational	46.6	40.2	42.4	27.8	(-)	37.7	(-)	46.8	(+)	-8.1	2.1	41.2
Unskilled	75.4	49.8	32.5	63.1	(-)	51.2	(+)	28.0	(-)	-4.1	-3.4	51.3
Unknown	24.3	0.4	0.8	26.9	(+)	0.7	(+)	0.8	(+)	0.0	0.0	-0.3
Total	49.1	100.0	100.0	34.5		100.0		100.0		-13.3	-1.3	100.0

Note: The sign in parenthesis indicates the change (in rates, structure of non-registered employment and structure of salaried employment) from 2003 to 2012.
Source: Own elaboration on the basis of EPH data, all urban agglomerations.

While the participation of professional and technical categories in overall employment experienced almost no variation, the participation of the operational category grew to the detriment of unskilled occupations. In keeping with this, the *structure effect* of operational workers tended to increase the overall rate of non-registered employment while its effect in the case of unskilled workers was diametrical.

Finally, in the second quarter of 2012, one of every two non-registered salaried workers performed an unskilled task.

4.1.4. Evolution of non-registered employment by employee tenure

The greatest drop in the incidence of non-registered employment was observed amongst employed workers with between seven and twelve months tenure. For this group, the rate of informal employment dropped from 75.9% to 48.5%, which accounts for 3.9 percentage points (26.7%) of the overall variation in the rate of informal employment (14.6 percentage points). This is due to a combination of *rate effect* and *structure effect*, since the participation of this group of workers diminished by almost 5 percentage points. Likewise, the drop in the rate of non-registered employment amongst workers with between one and five years tenure implies a reduction of 4.2 percentage points in the aggregate rate of non-registered

employment due to the weight of this group in the total. In this case, however, the *rate effect* is partly outweighed by the *structure effect*.

Significantly, the lesser weight of low-duration employment (less than six months) is associated with a major *structure effect*, which explains the fall in the rate of non-registered employment. This *structure effect* accounts for 4.3 percentage points of the drop in informal employment when the evolution of this rate is disaggregated for the variable of tenure. The empirical analysis therefore suggests not only that the duration of employment relations has increased but also, implicitly, that establishments have prolonged their lifecycle and/or size in conjunction with the cycle of economic growth.

Chart 4.4. Breakdown of the change in non-registered employment by employee tenure, III quarter, 2003 – II quarter, 2012

Employment tenure	Q3 2003			Q2 2012						Variation		
	Non-registered salaried employment		Structure of salaried employment (2)	Non-registered salaried employment			Structure of salaried employment (4)			Rates Effects 5 = ((3-1)*2)	Structure effect 6 = ((4-2)*1)	Incidence 7 = (5+6)/Tot.Var.
	Rates (1)	Structure		Rates (3)		Structure						
Less than 1 month	90.8	8.5	4.4	80.4	(-)	7.2	(-)	2.9	(-)	-0.4	-1.3	11.6
From 1 to 3 months	85.4	15.4	8.5	73.5	(-)	15.8	(+)	6.9	(-)	-0.9	-1.3	15.0
From 4 to 6 months	79.8	12.9	7.6	64.5	(-)	10.5	(-)	5.2	(-)	-1.1	-1.7	19.1
From 7 to 12 months	75.9	13.5	8.4	48.5	(-)	8.8	(-)	5.8	(-)	-2.1	-1.8	26.6
From 1 to 5 years	53.2	34.4	30.6	34.6	(-)	35.2	(+)	32.6	(+)	-5.1	1.0	28.7
Over 5 years	17.9	15.3	40.4	15.5	(-)	22.5	(+)	46.6	(+)	-0.9	1.0	-0.9
Total	49.1	100.0	100.0	34.5		100.0		100.0		-10.5	-4.1	100.0

Note: The sign in parenthesis indicates the change (in rates, structure of non-registered employment and structure of salaried employment) from 2003 to 2012.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

4.1.5. Evolution of non-registered employment by observable personal attributes

When characteristics like gender, age, educational level, immigrant status and position in household are taken into account; the non-registered employment rate dropped amongst males as well as females (13 percentage points and 16.3 percentage points respectively). Female participation in salaried employment fell as well which, due to the greater initial incidence of non-registered employment amongst females, is also associated with a drop in non-registered employment.

In terms of salaried workers' educational level, the greatest drops in the rate of non-registered employment were observed amongst those groups that have finished only primary school (-17.7 percentage points.) and those who have not completed secondary school (-12.6 percentage points). Significantly, of the 14.6 percentage point reduction in aggregate non-registered employment, 13.1 percentage points (89.9%) can be explained by the lower rates of non-registered employment amongst those workers who had not finish secondary school and by a significant drop in the participation of that group within overall salaried employment, given that that group's rate of non-registered employment is much greater than the overall rate. In the second quarter of 2012, almost 60% of non-registered salaried workers had not finished secondary school.

Chart 4.5. Breakdown of the change in non-registered employment by educational level*, III quarter, 2003 – II quarter, 2012

Educational level	Q3 2003			Q2 2012				Variation		
	Non-registered salaried employment		Structure of salaried employment (2)	Non-registered salaried employment		Structure of salaried employment (4)		Rates Effects 5 = ((3-1)*2)	Structure effect 6 = ((4-2)*1)	Incidence 7 = (5+6)/Tot.Var.
	Rates (1)	Structure		Rates (3)	Structure					
No formal education	75.6	1.0	0.6	54.6 (-)	0.5 (-)	0.3 (-)		-0.1	-0.2	2.6
Incomplete primary school	78.4	10.7	6.7	71.3 (-)	8.5 (-)	4.1 (-)		-0.5	-2.0	16.8
Complete primary school	65.4	29.0	21.7	47.7 (-)	24.2 (-)	17.5 (-)		-3.7	-2.7	44.0
Incomplete secondary school	63.1	24.6	19.1	50.5 (-)	24.3 (-)	16.6 (-)		-2.3	-1.5	26.5
Complete secondary school	41.3	16.4	19.5	31.3 (-)	23.0 (+)	25.3 (+)		-1.9	2.3	-3.0
Incomplete higher education	40.3	11.1	13.5	28.5 (-)	11.8 (+)	14.2 (+)		-1.5	0.3	8.6
Complete higher education	19.1	7.3	18.8	12.3 (-)	7.8 (+)	21.9 (+)		-1.2	0.6	4.5
Total	49.1	100.0	100.0	34.5	100.0	100.0		-11.3	-3.3	100.0

Note: (*) indicates maximum educational level
The sign in parenthesis indicates the change (in rates, structure of non-registered employment and structure of salaried employment) from 2003 to 2012.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

A drop in the rate of non-registered employment has been observed in all age groups, although the most marked reduction was amongst those aged twenty-five to thirty-four (17.5 percentage points.) and fourteen to twenty-four (17.4 percentage points). The drop in the specific rate of non-registered employment amongst that first group, as well as those between the ages of thirty-five and forty-nine, had a major impact on the contraction of the aggregate rate, which was characterized by the participation of adults in the middle age bands in total salaried employment (through the *rate effect*). Likewise, there was a drop in the participation of younger people, which yielded an effect in keeping with the overall reduction in non-registered employment due to its high rate amongst young people in the third quarter of 2003.[8]

Chart 4.6. Breakdown of the change in non-registered employment by age, III quarter, 2003 – II quarter, 2012

Age	Q3 2003			Q2 2012				Variation		
	Non-registered salaried employment		Structure of salaried employment (2)	Non-registered salaried employment		Structure of salaried employment (4)		Rates Effects 5 = ((3-1)*2)	Structure effect 6 = ((4-2)*1)	Incidence 7 = (5+6)/Tot.Var.
	Rates (1)	Structure		Rates (3)	Structure					
From 14 to 24 years	74.4	25.5	16.8	57.0 (-)	26.1 (+)	15.8 (-)		-2.9	-0.8	25.0
From 25 to 34 years	50.5	29.1	28.3	33.1 (-)	26.9 (-)	28.0 (-)		-4.9	-0.1	34.3
From 35 to 49 years	39.7	28.2	34.8	27.4 (-)	27.8 (-)	34.9 (+)		-4.2	0.0	28.7
From 50 to 59 years	40.7	12.2	14.7	28.0 (-)	12.2 (+)	14.9 (+)		-1.8	0.1	11.9
Over 60 years	46.3	5.1	5.5	38.1 (-)	7.1 (+)	6.4 (+)		-0.4	0.4	0.1
Total	49.1	100.0	100.0	34.5	100.0	100.0		-14.3	-0.3	100.0

Note: The sign in parenthesis indicates the change (in rates, structure of non-registered employment and structure of salaried employment) from 2003 to 2012.
Source: Own elaboration on the basis of EPH data, all urban agglomerations.

[8] During this period, the rate of activity amongst young people dropped 2.5 percentage points. This partly explains the reduction in the rate of informal employment since the incidence of non-registered employment is very high amongst the young. Nonetheless, demographic trends indicate that the number of people between the ages of fifteen and twenty-four has increased in the last three decades, though according to the last intercensal records (2010-2001) the trend has leveled off and the weight of young people in the overall population has diminished.

In relation to immigrant status, the drop in non-registered employment is less than that of non-immigrants (11.3 versus 14.8 percentage points). Due to this, as well as an increase in the immigrant population amongst salaried workers, immigrants came to represent 8% of all non-registered salaried workers by the second quarter of 2012.

Lastly, non-registered employment dropped amongst those in all positions in households, although that drop was greatest amongst spouses (18.3 percentage points). The total drop in the non-registered employment rate can be accounted for by a *rate effect* in the cases of heads of households (6.6 of the 14.6 percentage points) and of secondary workers (8 of the 14.6 percentage points). Significantly, in the third quarter of 2012, 60% of non-registered salaried workers were secondary workers (that is, spouses, children and others who are not the heads of household), a level similar to the one observed in 2003.

4.2. Description of the evolution of non-registered employment on the basis of econometric micro-decomposition

None of the aggregate breakdowns presented above is controlled for the other factors, which means it is akin to a static comparative analysis. For instance, when the drop in non-registered employment is addressed in terms of employment category, the primary explanation is seen to lie in the lower incidence of unskilled work and the significant drop in non-registered employment in the operational category. When the drop in non-registered employment is analyzed according to educational level, the drop is explained by the reduction in salaried workers with lower educational levels and a reduction in non-registered employment amongst workers with mid-level education. It is possible, however, to relate these two dimensions (along with others) in which case, if the analysis is controlled for all the variables simultaneously, neither the *rate effect* nor the *structure effect* would have the importance ascribed to them above.

With microeconometric decomposition methodology, it is possible to model non-registered salaried employment in function of both the observable and non-observable demographic and employment characteristics of workers and of parameters that take into account the incidence of each in determining the likelihood of being a non-registered worker. The parameters are based on a model of binary choices that determines the likelihood of being an informal worker in function of a set of characteristics. On the basis of the methodology proposed by Yun (2000), it is possible to breakdown evolution in function of two factors: one, called the *characteristics effect*, indicates what the rate of non-registered employment would have been had only the observable characteristics of the population changed between one point in time and another while the parameters that ponder those characteristics remained unchanged; the other, called the *parameters effect*, quantifies what the rate of non-registered employment would have been had only the parameters that determine the status of informal employment changed while the characteristics remained unchanged. Unlike the aggregate breakdowns presented above, this econometric operation, therefore, makes it possible to consider the effect of each variable or dimension while controlling for the remaining variables to thus construct a ranking of the main variables that account for the evolution of non-registered employment.

Microeconometric decompositions require estimated non-registered employment rates, combining the population during the years analyzed with the estimated parameters for each of those years. Chart 4.7 presents these estimates: the likelihood of being an informal salaried worker during the second quarter of 2012 was 31.7% (as opposed to an observed rate of 34.5%), whereas the estimated rate of non-registered

employment for the third quarter of 2003 was 47.2% (as opposed to the observed rate of 49.1%). Thus, the rate of non-registered employment for the second quarter of 2012, estimated in function of the parameters of the third quarter of 2003, is 38.5%, whereas the rate of non-registered employment for that period calculated in function of the parameters of 2012 is 38.4%. Given the reduction in the estimated rate of non-registered employment (15.5 percentage points) on average, the results yielded by the *characteristics* and the *parameters effects* are similar: 7.7 percentage points for the first and 7.8 for the second.[9]

Chart 4.7. Simple micro-decomposition of the changes in non-registered employment, III quarter, 2003 – II quarter, de 2012

Year	Non-registered employment (estimate)	Characteristic effect *	Parameter effect *	Total effect *
2003	47.2	8.7	6.7	15.5
2012	31.7	6.6	8.8	15.5
Average		**7.7**	**7.8**	**15.5**

Note: (*) The values presented indicate drop in the rate of non-registered employment in percentage points.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

The simulation presented in Chart 4.7 entails an exercise in which all the parameters can change simultaneously. It is, however, possible to identify the effects of each parameter and each characteristic according to Yun's methodology (2000).[10] The results of this breakdown are presented in Graph 4.3, which shows how within the *parameters effect*, which indicates the importance of each characteristic in estimating the rate of non-registered employment, the intercept (or constant in the estimate) constitutes the parameter with the greatest impact, which implies the existence of a set of factors with significant impact on the drop in non-registered employment beyond those factors considered in the regression analysis. Nonetheless, both the change in the parameter associated with educational level and the one associated with size of establishment contributed to reducing non-registered employment, whereas the changes in the parameters linked to economic sectors and tenure contributed to increasing it. At the same time, the changes in the average characteristics of the population linked to tenure, size of establishment and educational level, contributed to reducing the rate of non-registered employment. This is congruent with the findings in the aggregate breakdowns, but in this case controlled for the remaining variables.

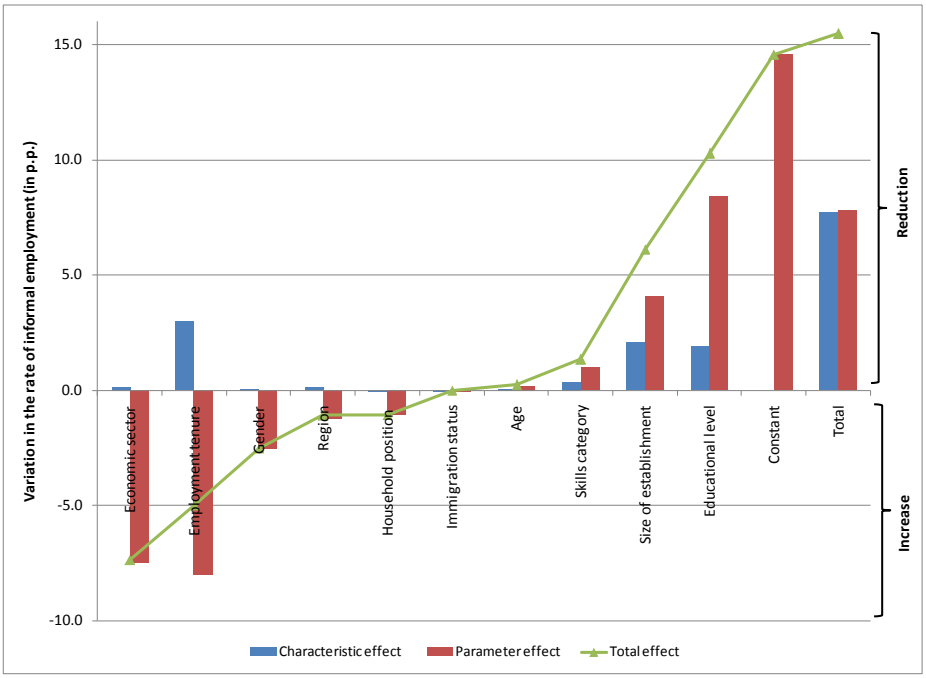
Thus, upon considering the *parameters* and the *characteristics effect* jointly for each variable, the primary variables that contributed to the drop in non-registered employment were the constant (that is, factors not considered in the regression, like economic growth, macroeconomic environment, normative aspects, inspection—a direct dissuasive effect—and others); educational level (due to both the re-categorizing of

[9] On the basis of the characteristics of 2003, the *characteristics effect* is 8.7 percentage points (47.2% minus 38.5%) whereas, on the basis of the characteristics of 2012, that effect is 6.6 percentage points. (38.4% minus 31.7%). If the parameters for 2003 are taken into account, the *parameters effect* is 6.7 percentage points (38.5% minus 31.7%) and, on the basis of the parameters for 2012, that *effect* is 8.8 percentage points (47.2% minus 38.4%).

[10] By means of this methodology, it is possible to break down the estimated drop in the rate of non-registered employment (15.5 percentage points in this case) as the sum of the *parameters* and *characteristics effects* of each of the variables taken into account to estimate the non-registered employment rate.

workers and the lower incidence of non-registered employment amongst workers with lower educational levels); size of establishment (due to the greater amount of salaried employment in larger establishments and to the lower incidence of non-registered employment in small and medium-sized establishments), and the re-categorization of the tasks performed by salaried employees (see the overall effect in Graph 4.3).

Graphic 4.3. Micro-decomposition of the changes in non-registered employment.* Individual effects of parameters and characteristics, III quarter, 2003 – II quarter, 2012



Note: (*) The values presented indicate drop in the rate of non-registered employment in percentage points.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

4.3. Description of the evolution of non-registered employment through tracking employment histories

By means of a rotating-panel structure, the EPH is able to examine the employment transitions of 25% of the sample for the period of one year and a half, and of 50% of the sample for the period of one year. The information presented in this section is based on the construction of annual panels. Two panels were constructed for each year: one encompassing the second quarter of one year and the same period of the following year, and the other encompassing the fourth quarter of one year and the same period of the following year. Significantly, the annual panels were not constructed with exactly 50% of the sample because not all of the persons who were to stay on the panel were present for the second survey. This attrition does not generate bias if the loss of information is random.

Employment trajectories from 2004 and 2012 (Graph 4.4) evidence that a significant number of workers holding precarious jobs (the self-employed and non-registered salaried workers) found registered employment, which improved their working conditions. Almost two thirds of the workers who joined a registered salaried employment came from a situation of precarious employment, mostly from a non-

registered salaried job. The remaining third of the new formal salaried workers came from the inactivity or the unemployment.

Graph 4.4. Creation of registered salaried employment on the basis of employment transitions by previous employment situations, 2004-2012

Note: The result presented as per year is an average of the two panels constructed on the basis of surveys performed in the second and fourth quarters of each year. (*) For 2012, only the second quarter is considered.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

From 2005 to 2008, this influx of new registered salaried employment represented approximately 20% of all registered workers. After the great international crisis of 2009, however, its participation decreased to 15% in the second quarter of 2012. These indicators are consistent with the slowdown in activity in 2012 and with the growth of activities relatively less intensive in registered salaried employment as a result of an appreciation in the currency, which might, in turn, have led to a bias towards non-tradable activities such as services where the level of informal employment is greater.

On average, from 2004 to 2012, women represented 42% of new registered salaried employment; the transition from inactivity to registered salaried employment is the one with the greatest level of female participation (57% of women on average over the course of the period). Men represent the largest portion of the remaining influxes towards registered employment: they constituted 75% of workers who left self-employment and 60% of those who left non-registered salaried employment for a registered salaried job. This is consistent with the evolution of female participation in non-registered employment observed previously in the aggregate breakdown by gender.

Young people between the ages of fourteen and twenty-four represent a high percentage of those who moved into formal salaried jobs (33% on average over the course of the period). Nonetheless, this group

has a lowest rate of stability in occupational category: only 75% of young people (on average throughout this period) who are formal salaried employees one year continue to be so the next year. This rate is 11 to 15 percentage points below the observed rate for middle age bands (twenty-five to fifty-nine), though it is similar to the rate for adults over the age of sixty, and yet the transition from registered salaried employment to inactivity is significant amongst this second group.

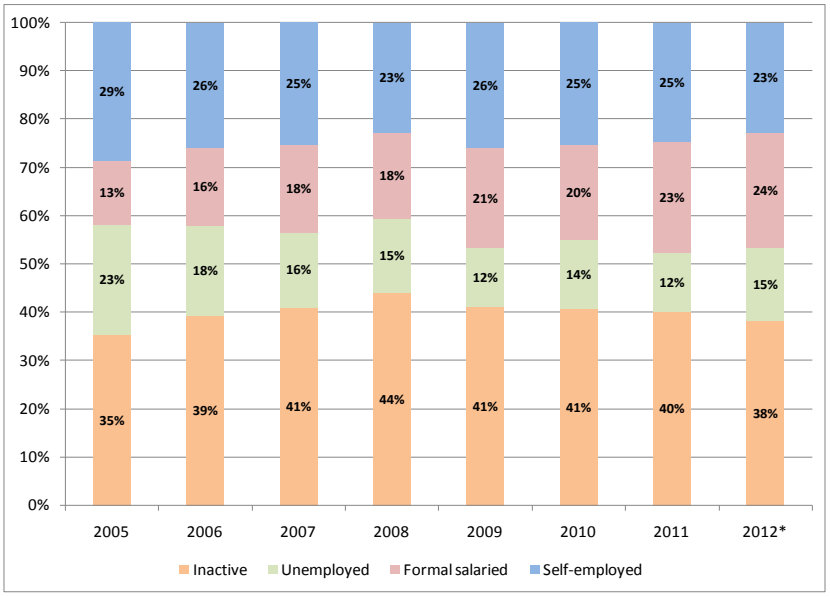
Similarly, the transition from self-employment to formal salaried employment was significant amongst individuals in professional occupational categories (26% of workers moved from self-employment employment to formal salaried employment where they performed a professional task) and in technical categories (22% of workers moved from self-employment to formal salaried employment where they performed a technical task), and those with some amount of higher education (complete or incomplete): 46% of the workers who moved from self-employment to formal salaried employment had some amount of higher education (complete or incomplete).

In other words, there seems to have been a "skimming" of self-employed workers whereby the most qualified rejoined the ranks of salaried employees. Later, amongst self-employed workers who continued in the same category, the weight of professional qualification, along with higher educational levels, diminished. This might indicate that those self-employed workers who found formal salaried employment were less vulnerable as a group to non-registered status (that is; it is possible that as self-employed workers they were registered in the social security system and complied with their tax obligations). Meanwhile, a large percentage of those informal salaried workers that found formal salaried employment performed technical tasks (46% of workers who moved from non-registered employment to a formal salaried job performed a technical task); on average, the educational level of these workers is higher than those who continued to work as non-registered employees.

Furthermore, tracking employment transitions evidences that just over 50% of workers who were non-registered salaried employees at a certain moment find themselves in the same situation again one year later, whereas nearly 90% of workers who were formal salaried employees at a certain moment continue to be so one year later. These results are confirmed by other studies of employment trajectories based on different sources (MTEySS and ILO, 2012; Benítez *et al.,* 2011).

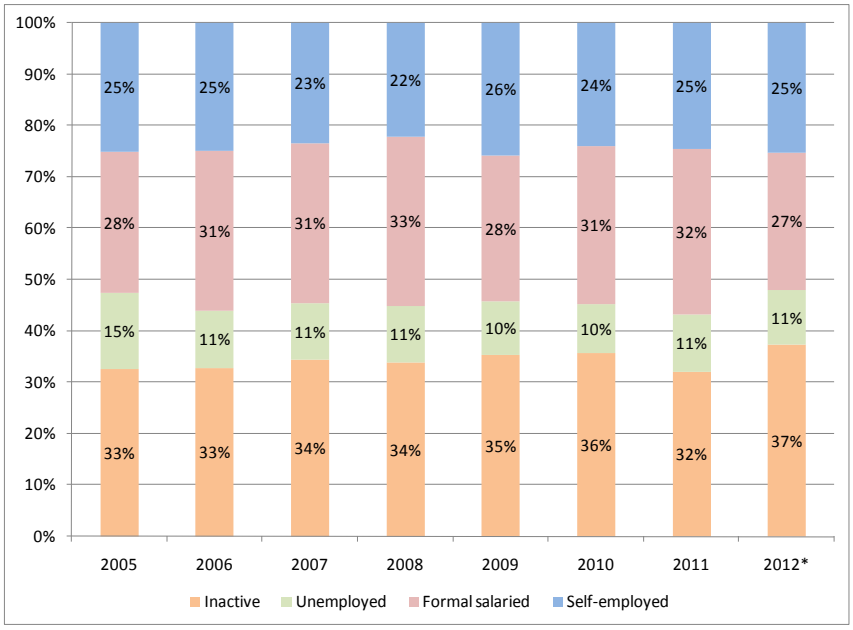
It can also be confirmed that most movement into and out of non-registered employment comes from or leads to inactivity. As shown in Graph 4.5, from 2004 to 2012 most new informal workers had been inactive (between 35% and 44%) or, to a lesser extent, self-employed (between 23% and 29%). Regarding the transition from inactivity to non-registered employment, an average of 65% of all transitions for the whole series were effected by women and, when analyzed by age band, 50% were effected by young people between the ages of fourteen and twenty-four. Seventy-one percent of those who moved to informal jobs from self-employment were men and, if those transitions are broken down by age group, 60% of those workers were between the ages of twenty-five and forty-nine.

Graphic 4.5. Creation of non-registered employment on the basis of employment transitions according to previous occupational status, 2004-2012*



Note: The result presented as per year is an average of the two panels constructed on the basis of surveys performed in the second and fourth quarters of each year. (*) For 2012, only the second quarter is considered.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

Graph 4.6. Destination of non-registered workers who changed employment status by means of employment transitions, 2004-2012*



Note: The result presented as per year is an average of the two panels constructed on the basis of surveys performed in the second and fourth quarters of each year. (*) For 2012, only the second quarter is considered.
Source: Own elaboration on the basis of EPH data, total urban agglomerations.

The high rate of rotation between non-registered employment and inactivity could be characteristic of workers within a certain easily accessible segment of non-registered employment, one which certain workers enter for short periods of time.[11] The individuals, most of them women, who work in this segment have low educational levels; when they take part in non-registered employment, they perform unskilled tasks at small establishments or, to a large extent, they perform domestic service or work in commerce.

5. Strategies and Policies for Employment Formalization and the Extension of Social Protection Coverage to Families in the Informal Economy

Strategies and policies aimed at the problem of the informal economy can be placed in two groups. The first encompasses measures that attempt to bring all of those activities performed outside the framework of the law into the formal circuit. The second entails actions that attempt to prevent and mitigate the effects of informal employment. In other words, what that second group of strategies and measures attempts to do is broaden workers and their families' effective access to some of the aspects of decent work, such as economic security, provided by social protection even when work ensues at the margins of the law, as well as access to job training that facilitates transition into formal employment. Before identifying and discussing strategies and policies geared to addressing the issue of employment informality, it is necessary to review the economic context in which these strategies and policies were developed.

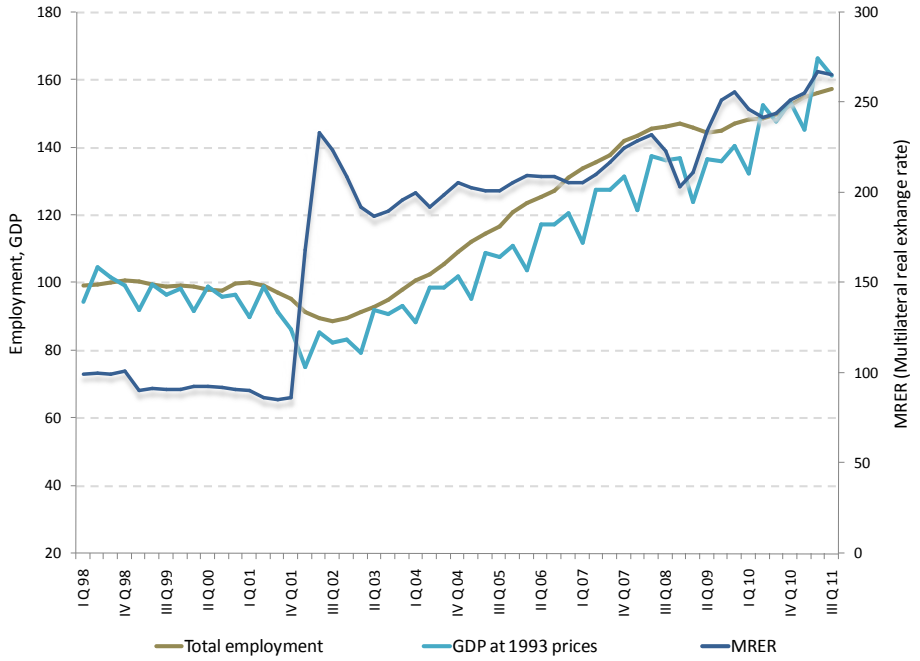
In the 2000s, public policies, at least in the sphere of employment and social protection, turned their attention to reducing the extension of non-registered employment. These measures were implemented in a context in which macroeconomic policy played an important role in the performance of the labor market in general and of employment formalization in particular. One of the cornerstones of that macroeconomic policy was maintaining a competitive real exchange rate. Frenkel (2005) has argued that this policy increases the volume of employment with a bias towards creating formal employment. Indeed, there was a strong correlation between growth in formal employment and growth in Gross Domestic Product after the devaluation that followed the collapse of currency convertibility in 2001-2002. Therefore, the multilateral real exchange rate (MRER) tended to stabilize at levels almost three times as high as in the nineties. While the number of formal jobs continued to grow, it did so at a slightly lower rate starting in 2009, especially in salaried jobs in the private sector pursuant to the impact of the international crisis. This was partly offset by greater activity in the sphere of public employment.[12]

[11] With certain nuisances, this high degree of mobility is observed in other countries with high rates of informal employment (Jütting and de Laiglesia, 2009).

[12] Results were confirmed with analysis of the absolute values of these variables using, among other things, the Hodrick-Pescott filter that makes it possible to isolate cyclical issues from the data series.

Graph 5.1. Evolution of registered salaried employment, the GDP and the multilateral real exchange rate

(Base index 1998=100)



Source: Own elaboration on the basis of data from the SIPA, INDEC and Banco Central de la República Argentina (henceforth, BCRA for the acronym in Spanish).

Also significant are the measures that have made it possible to sustain high levels of economic growth and the subsequent impact on employment. Outstanding among these measures are, for instance, policies for public investment in infrastructure[13] (which went from 1% to 4% of the GDP from 2003 and 2010). This had a major impact on (formal) employment in the construction sector (Bour and Susmel, 2010). Later, in 2012, there was a deceleration whereby the impact of public works, which were fewer than in 2011, was in the opposite direction (Asociación Argentina de Presupuesto, 2012).

The empirical analysis in the previous section evidences a significant contraction in non-registered employment. This tendency, though, resulted in a context of active public policy engagement, which must be considered for the sake of rounding out the previous analysis. As mentioned above, in recent years informal employment has been addressed by public policies that have a different perspective insofar as they attempt to combine and coordinate a range of social and economic programs and interventions linked to an array of factors that give rise to informal work (Novick, 2007). Below is a review of such actions.

[13] In keeping with MTEySS (2008) data, the level of formal employment in these enterprises is greater because they are large-scale projects. Similarly, because these are public works the employment relations are necessarily formal (Bour and Susmel, 2010).

5.1. Employment Formalization Strategies

Public policies geared to the formalization of employment in formal companies include the *Programa Nacional de Regularización del Trabajo* [National Program for Employment Regularization, henceforth PNRT, for the acronym in Spanish] put into effect starting in 2003, and measures that provide for temporary reductions in employers' contributions to social security.

- Registering workers: National Program for Employment Regularization

To meet its goal of detecting non-registered employment, the PNRT[14] has used an array of mechanisms geared to including hitherto excluded workers in the social security system. The PNRT operates in conjunction with a battery of actions aimed at reducing informal employment that, in addition, facilitates auditing. Outstanding among these actions are the *Programa de Simplificación Registral* [Program for the Simplification of Employment Registration], which established a new scheme for registration and a single procedure, thus making it easier to enroll workers, to identify employers, and to audit compliance with the regulations in place. In January 2011, the *Sistema Trabajo Registrado Digital* [Digital Labor Register] was created. By means of an online connection to the database of the Social Security office, this system makes it possible to verify, at the moment of tax audit, the registration status of the workers at the establishment in question. This constitutes a qualitative leap in the efficiency of inspection and optimizes the use of resources. All of these actions ensued in the framework of efforts to strengthen the inspection capacity of the Argentine Ministry of Labor, which now has a larger number of inspectors.[15]

Similarly, progress has been made towards the simplification of processes for employee registration and for the identification of tax obligations by means of online platforms. The Federal Tax Administration has facilitated the uploading of data related to the social security system and to the tax regime (the "My Simplification" program).[16,17] In conjunction with these measures, awareness campaigns in the mass media have explained the advantages of complying with employment, tax and social security obligations. One key component of these and like measures has been their symbolic impact, as they engage in advocacy and raise awareness amongst the actors involved.

- Reduction of social security contributions

While, in the interest of encouraging employment, reductions in employers' contributions had been put in place before the 2009 crisis, in recent years they have operated under the regime for the promotion and protection of registered employment (Law N° 26,476). This system brought a reduction of employers' contributions for recently hired employees. Pursuant to this benefit, for a period of twenty-four months

[14] Non-compliance with employment and social security regulations was detected and remedied by joint efforts of the Ministry of Labor, the *Administración Federal de Ingresos Públicos* [Federal Tax Administration, AFIP for the acronym in Spanish] and relevant authorities in the provincial governments with the intervention of the *Consejo Federal del Trabajo* [Federal Labor Council] since there are joint responsibilities for the federal and provincial governments.

[15] Ronconi (2010) presents evidence on the positive effect that enforcement of labor legislation, by means of a greater number of inspectors, has had on the level of compliance with said legislation in Argentina.

[16] The "*Mi Simplificación*" and "*Su Declaración de la AFIP*" programs simplify the process for declaring workers, as well as payment of social security contributions by small businesses. For further information, see www.afip.gob.ar.

[17] Ronconi and Colina (2011) have found evidence that these measures to simplify registration have had a small positive effect on the rate of registered employment. According to them, the limited nature of the effect could be due to the fact that the simplification was partial and hence small companies continue to require the services of accountants in order to register their new employees, as well as other factors that exceed the problem of simplification.

there is a 50% reduction in the rate of employers' contributions to the social security system for an employee's first twelve months of employment, and a 25% reduction for the next twelve months.[18]

Likewise, payment plans were established for outstanding debts and infractions in the payment of taxes and social security obligations. Similarly, systems were put in place to facilitate regularization on non-registered employment.[19] These measures were implemented to confront the consequences of the great international crisis. The reduction in contributions was extended through December 31, 2012. Due to this measure, during the months when the financial crisis had the greatest impact on the labor market (from the end of 2008 until the middle of 2009), more than 330,000 workers were registered. Of these newly registered workers, the business services sector accounted for 20.3%, the commerce sector for 19.5%, construction for 14.1%, and industry for 12.2% (Aruguete and Selva, 2009).[20] At the same time, in the year 2010, 714,000 jobs were created thanks to these measures (MTEySS and ILO, 2012). Significantly, unlike in the nineties, this time these measures acted in an anti-cyclical fashion by offsetting the impact of the great international crisis on economic activity and employment (MTEySS and ILO, 2012).

- The Formalization of Domestic Service

Specific policies have also been developed for groups of workers with a high incidence of informal employment. One such group is domestic service employees. In late 2005, employers of domestic workers were given the opportunity to deduct what they had paid as employers' contribution to the *Régimen Especial de Seguridad Social para Empleados del Servicio Doméstico* [Special Social Security Regime for Domestic Employees] from their income for income tax purposes. A measure was also taken whereby the total amount paid to domestic employees for services rendered could be deducted from gross taxable income for the fiscal year. The number of contributors to the special regime has grown substantially, from 78,389 in December of 2005 to 286,109 in March of 2012. The impact of systematic policies geared to decreasing informal employment—in this case via incentives on the demand side—in a sector where the rate of non-registered employment was over 95% in 2003 is corroborated by the previous analysis, where the *rate effect* demonstrates that the rate of non-registered employment dropped to 83.7% during the second quarter of 2012.

- Migrant Workers

Another group of workers in Argentina with a high rate of informal employment is migrant workers (Monsalvo, 2011). Though the aim of the public policies designed to address this problem was not solely a reduction in informal employment, those policies did lead to advances in this area. In 2004, the new Immigration Law (Ley N° 25.871) turned around a restrictive immigration policy and established the State as the guarantor of the right to immigrate for those who come to the country, and of equal treatment of natives and foreigners. Likewise, two special programs to normalize documentation were put in effect: one was geared to immigrants from beyond Mercosur, and the other—the "*Programa Patria Grande*"

[18] In a context of employment recovery, the *Ley de Ordenamiento Laboral* [Law of Labor Regulation] (Law N° 25.877/2004) enacted the policy of reducing employers' contributions as a tool to encourage the creation of employment (the period that the law was in effect was extended). Yet, in 2008, by means of Law N° 26.476, in a context where the effects of the great international crisis were beginning to impact domestically, these contributions were further reduced both in size and duration in order to encourage and protect registered employment.

[19] For example, declaration of actual earnings and the real date when employment began.

[20] It is important to point out that during the crisis the State systematically intervened in negotiations between employers and workers to minimize terminations and layoffs by means of what was called the *Programa Preventivo de Crisis* [Crisis Prevention Program], or PPC. See MTEySS (2010).

[Greater Homeland Program]—was geared to immigrants from Mercosur full-member and associate countries. Four hundred and twenty thousand persons enrolled in this second program to obtain legal residency (Baer *et al.,* 2011). In a context of growing employment, these measures have had an impact on registered employment and on informal employment performed by migrant workers, who previously resided in the country as "illegals" (Baer *et al.,* 2011; Bour and Susmel, 2010).

5.2. Extension of Social Protection and Active Labor Market Policies

- Employment programs and programs to increase the employability of workers in the informal economy

In keeping with the second group of measures mentioned above, that is, those aimed at extending social protection, active labor market policies and income security policies have been developed. Such policies attempt to mitigate the consequences of informal employment such as the economic vulnerability. Active labor market policies include the *Seguro de Capacitación y Empleo* [Training and Employment Insurance, henceforth SCyE for the acronym in Spanish], the *Programa Jóvenes con Más y Mejor Trabajo* [Program for More and Better Youth Employment, henceforth PJMyMT for the acronym in Spanish] and the *Programa Ingreso Social con Trabajo - Argentina Trabaja* [Program for Social Income with Employment - Argentina Works, henceforth PAT for the acronym in Spanish]. These programs combine income transfer with measures to increase employability such as completion of formal schooling, as well as professional and job training.

Programs for completing schooling and professional training are not limited to the beneficiaries of employment programs. In 2011, 270,000 individuals took part in activities geared to completing school and 150,000 in those involving employment training.[21]

The jobs generated by PAT (190,000 as of June 2011) are registered under the tax category of "*Monotributo Social*." In late 2003, this system was established to foster employment insertion. By means of a special tax category, this program facilitates the legal recognition of productive and commercial activity, as well as activity in the service sector, performed by those in situations of social vulnerability. Those enrolled in this category receive a partial subsidy for health insurance (50% of the amount for the standard—that is, non-social—"*monotributo*" category) and a total subsidy for social security contributions. They are also exempt from the tax component of the general "*monotributo*" regime; they can issue invoices and be suppliers to the State in its direct purchases. As a result of the expansion of PAT, the number of individuals enrolled in this category reached 475,191 in 2011.

- Conditional cash transfer programs

The enactment of the *Asignación Universal por Hijo para la Protección Social* (Universal Allowance per Child for Social Protection, henceforth AUH for the acronym in Spanish) in November 2009 extended the coverage of the per child benefit (and the per child with handicap benefit) operative under the system of family allowances to include laid-off workers, informal workers, domestic service workers, those in the "*monotributo social*" category described above, and pregnant women. By means of this measure, 1,906,375 families and 3,565,083 children and adolescents received benefits as of September 2011 (MTEySS, 2011). This, along with an increase in formal employment, resulted in an increase in the

[21] From 2003 until January 2012, a total of 623,295 persons took part in professional training courses and another 769,597 in actions geared toward completing formal schooling.

coverage of cash transfers for the population under the age of eighteen: the figure jumped from 37% to 83% in the period that encompasses 1997 to 2009 (MTEySS, 2010).

To extend social protection, the *Plan de Inclusión Previsional* [Social Security-Pensions Inclusion Plan] was enacted in order to increase the system's coverage by means of moratoriums. Thanks to this mechanism, 2,694,825 individuals enrolled in the system from mid-2005 to September 2011 (MTEySS, 2011). This meant that social security coverage for seniors grew from 69% in mid-2005 to 90% in mid-2012.

In relation to these last two measures, there is wide debate on the effect that social protection strategies of this sort may have on the extension of informal employment. It has been argued that these types of social programs can serve to encourage employment informality by making it voluntary (Perry *et al.*, 2007; Levy, 2008). A number of empirical studies on Greater Buenos Aires performed in 2005, however, revealed that informal status at a job continued to be overwhelming involuntary; it is an alternative to unemployment in the face of the lack of an income safety net (World Bank and MTEySS, 2008).

It has also been claimed that income security programs can have other effects on the labor market (specifically on participation, hours worked, and others). It has been asserted, though, that these effects have been overestimated and that they are based on dubious hypotheses (ECLAC, 2012). While the empirical debate on the relative size of the "voluntary" informal sector is not closed, it has also been argued that some adverse effects on incentives might be seen as the price to be paid, so to speak, in order to provide income security to a vulnerable sector of the population (Jütting and de Laiglesia, 2009).

In the Argentine case, studies have been performed on the impact of income transfer programs, especially the AUH, on labor force participation and non-registered employment. Studies by Maurizio (2011) and Bustos and Villafañe (2011) demonstrate that the AUH does not act as a disincentive for labor force participation. The study by Garganta and Gasparini (2012), on the other hand, indicates some negative effect on transition from informal employment (and self-employment) to registered employment, though it does not seem significant quantitatively or in terms of percentage points, on the rate of non-registered employment. This is due to the fact that the analysis was limited to a small segment of informal workers and it disregarded other transitions that might also have an effect on the rate on non-registered employment, like the transition from non-registered employment to inactivity.

- Programs for preventing lay-offs and retaining workers to avoid greater informal employment

In recent years, measures have been taken to protect formal employment in the face of episodes of crisis. Experience has shown that it is more common for workers displaced from formal jobs to move into informal employment or self-employment than into unemployment. Measures to sustain formal employment include the aforementioned PPC and the *Programa de Recuperación Productiva* [Program for Productive Recovery, henceforth REPRO for the acronym in Spanish]. In the PPCs, the State intervenes in dialogue and negotiation with companies that are likely to dismiss or layoff a significant fraction of their personnel. Thanks to PPCs, when the great international crisis hit, negotiations on a large portion of dismissals were held, making it possible to avoid the elimination of jobs and to encourage job training rather than reductions in the workday.[22] REPRO is the instrument for preserving employment that

[22] Thanks to PPCs, approximately 56% of the decisions to dismiss workers covered by collective bargaining agreements at the onset of the international crisis of 2008-2009 were reconsidered. In 87% of the cases, the decision to dismiss was reversed,

complements PPCs. By means of REPRO, the State subsidizes a portion of salaries so that companies engaged in a PPC can maintain the size of their staff. In 2010, 2,417 companies (that is, approximately 0.4% of all registered companies) received financial support. This affected 130,305 workers (that is, approximately 2% of full-time private sector employees).

6. Closing Reflections and Challenges to Reduce Informal Employment

- Outcomes of a multidimensional strategy

From 2003 to 2012, the informal economy shrank considerably in Argentina; not only was growth in non-registered employment curtailed, but earlier tendencies were reversed while quality jobs were created. The strong association between these facts and the public policies implemented to reduce the rate of non-registered employment suggests that the intense reduction in non-registered employment was intrinsically bound to those policies. In this process, the drop in the rate of non-registered employment was furthered by certain dynamics in the local labor market and by sustained economic growth. Specific problems, like the situation of domestic workers, were also addressed.

Along these lines, there was a drop in the participation of young people and of women in overall salaried employment, which in turn had an impact on the reduction in non-registered employment due to the temporary nature of the insertion of additional workers at critical moments, such as when the head of household loses his or her job—or is at risk of losing it—or when nominal and/or real income drops. In other words, it seems that advances in the reduction of informal employment were not immune to the growth pattern or to the battery of public policies implemented.

Significantly, measures geared to improving the quality of work have not focused solely on employment questions, but have been coordinated with macroeconomic policies, and income and training policies. This is indicative of a broad vision of the world of work and of its multiple interfaces, a vision that has given rise to public policies with an orientation that exceeds the outcome indicators in the specific area of employment. It seems, therefore, essential to develop a strategy that deploys multiple instruments geared to promoting qualities jobs and increasing their number.

- Challenges due to employment heterogeneity

An ongoing challenge in Argentina is to further policies that would make it possible to increase the amount of decent employment. The heterogeneity of the social and productive structures is crucial when it comes to assessing this issue and to devising a strategy capable of reducing the size of the informal economy. While a strategy in that direction requires government leadership, the participation of other actors, principally organizations of employers and workers, is also important. The latter play an essential role in raising awareness and promoting social responsibility, whereas the government must take the lead in providing a macroeconomic, social, judicial and political context conducive to the creation of new companies and to the strengthening of those in existence in order to maintain or increase the quantity and quality of jobs.

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whereas in the remaining 13% of the cases the workday was reduced on the condition of job training and/or advancement of vacation (Novick, 2010).

When the personal attributes of employees, especially educational level, are taken into account, there is a correlation between the social heterogeneity of the labor market and the incidence of informal employment, not only in terms of specific rates of non-registered employment, but also in terms of individual employment trajectories. It is in this context that the extension of social protection becomes important, and not only on a micro-level as a source of income for the households of those workers with unstable income due to precarious status in the labor market, but also on the macro-level as an instrument to maintain a certain level of effective demand.

Along these lines, one major challenge lies in not losing sight of the complementary nature of social protection in relation to formal employment insofar as it makes it possible to improve the quality of employment insertion. At the same time, the stability of employment insertion seems to have an effect not only on employee tenure at a given job but also on the re-categorization of the task performed and the construction of upward employment trajectories.

A sharp drop in the rate of non-registered employment has been observed in all sectors. There is, though, still much to be done in relation to productive structures that have an impact on the level and quality of employment, both in terms of intersectoral heterogeneity and within each sector. The level of non-registered employment remains high and hence it can be expected that changes in the composition of sectoral employment would yield in the short term a relatively small effect (*structure effect* by sector) on the aggregate dynamic of non-registered employment. Measures that have an effect on the rate of non-registered employment in specific sectors (like domestic service), however, can lead to a major drop in the overall incidence of non-registered employment.

- Segments and sectors strategic to reducing informal employment

In keeping with data from 2012, it is possible to surmise areas of action that tend to increase the formalization of the labor market in the hope of increasing the participation of those groups whose rate of non-registered employment is lower than average, and to implement specific policies geared to reducing the rate of informal employment in those other sectors where it remains high. In terms of production, the change will not ultimately depend solely on intersectoral heterogeneities, but also on the viability of broadening structures and the intersectoral demands that they generate.

Another key issue on the structural level is the size of establishments and their potential ability to handle processes of formalization. The bulk of informal employment occurs at small and medium-sized enterprises (SMEs) that employ up to twenty-five people; on average, productivity at such companies is lower than at large companies. An array of policies has contributed to facilitating employment formalization, as has the drop in the participation of micro-establishments which explains the decrease in the informality incidence of this segment. Once again, there are new challenges in the process of coordinating the many dimensions of public policies geared to combating informal employment. Thus, due to the greater limitations on employment auditing at micro-establishments—which, in the second quarter of 2012, contained nearly 60% of informal employment——it is worthwhile to analyze the possible effects of measures that reduce the non-labor costs of formal employment without affecting workers' rights. Regarding this, Chacaltana (2009) has undertaken a review and discussed differentiated regimes for SMEs in Latin American countries.

It has been observed that the drop in the rate of non-registered employment has been largely associated with the net creation of registered salaried employment. This may be a result of the formalization of

existing jobs or of the creation of new formal jobs. Studying the relative weight of these two factors will make it possible to better analyze the impact of public policies and to devise strategies to reduce the extension of non-registered employment in absolute terms.

There are still issues to pursue more deeply in analyzing public policies geared to employment formalization. Such issues include employment rotation, especially amongst individuals who move between different non-registered jobs. It has been stated that nearly 50% of informal workers one year continue to be informal workers the following year, and the mobility of this subgroup may well further complicate the actual reach of public policies. The tie between informal work and productive heterogeneity, and between formal and informal production units (or those that operate in grey areas) is a field worthy of further analysis.

- Informal work amongst self-employed workers

Another issue to be explored in greater detail is the restrictions that the self-employed face when it comes to formalizing their work and the policy instruments that might address this group. The estimates in this document show that the rate of informality amongst self-employed workers has not diminished significantly. This, in conjunction with the other evidence presented here, could indicate that many of the workers who moved from self-employed work to formal salaried work were already in the social security records. It is important to further analyze, then, the restrictions facing self-employed workers when it comes to formalizing their activities. It is also important to study options for policies geared to turning this situation around, including the simplified tax and social security schemes called "Monotributo."

- The crucial role of social protection

While in recent years the impact of wide-reaching social protection programs on informal work has been studied empirically, the debate is by no means closed. There are other topics to study in greater depth in the Argentine case, for instance, the effects of income transfer programs on the community level and on productivity. Research into these and other topics can contribute evidence useful to guiding policies geared to reducing the extension of non-registered employment. Specifically, a comprehensive analysis of informal work (in the realms of both salaried and self-employed work) would provide information to guide labor policy and social instruments in order to make more headway in the task of reducing non-registered employment beyond the progress resulting from economic and employment growth (which can be seen as a necessary condition).

- Major advances but there is still much to be done

While advances in employment formalization have been substantial, just over 30% of salaried workers—and 58% of self-employed workers—are still not registered in the social security system. Thus, despite the progress that has been made in recent years, the level of non-registered employment remains high. Most informal workers have limited skills (with incomplete formal education, they perform mostly unskilled tasks); they largely work in precarious production units that are largely unidentified by public policies. Furthermore, a large percentage of these workers are constantly moving between employment and inactivity and, albeit to a lesser degree, between formal and informal employment.

All of these factors make it difficult for certain policies—those geared to employment, the labor market and even non-contributory social protection—to reach these individuals. The identification of the patterns of mobility operative in informal employment and the characteristics of persons involved would be

extremely useful in devising policies since each group requires different sorts of intervention. That is why it is necessary to strengthen and consolidate interventions conducive to improving workers' qualifications, to reducing the risk of poverty associated with informal employment, to furthering economic and production development, and to creating a culture of formal employment with the participation of organizations of employers and workers. All of this requires that the State and the relevant set of social actors make additional efforts.

References

Abeles, M. and D. Rivas (2011), "Growth versus Development: Different Patterns of Industrial Growth in Latin America during the 'Boom' Years", ECLAC Project Document Collection.

Aruguete, E. and R. Selva (2009), "Reacciones de política económica frente a la crisis internacional", Technical note N° 18, Subsecretaría de Coordinación Económica, Ministerio de Economía y Finanzas Públicas.

ASAP (2012), "Informe de ejecución presupuestaria de la Administración Pública Nacional", Asociación Argentina de Presupuesto y Administración Financiera Pública, Buenos Aires, November.

Baer, G., N. Benítez, D. Contartese and D. Schleser (2011), "El trabajo inmigrante en una etapa de recuperación del empleo e integración sudamericana", in *La Inmigración Laboral de Sudamericanos en Argentina*, International Labor Office, Buenos Aires.

Banco Mundial and MTEySS (2008), *Aportes a una nueva visión de la informalidad laboral en la Argentina*, Buenos Aires.

Beccaria, L. and F. Groisman (2007), "Notas sobre la evolución macroeconómica y del mercado de trabajo en Argentina 1975-2007", in *Argentina desigual* (unpublished).

Benítez, N., D. Contartese, X- Mazorra, L. and D. Scheleser (2011), "La inserción laboral de la población desde una perspectiva dinámica", in MTEySS, *Serie de Estudios Trabajo, ocupación y Empleo* N° 10. *La complejidad del empleo, la protección social y las relaciones laborales*, Buenos Aires, December.

Berg, J. (2010), "Laws or luck? Understanding Rising Formality in Brazil in the 2000s", in the Decent Work in Brazil Series, Working paper N° 5, International Labor Office, Brasilia.

Bertranou, F. (coord.) (2009), *Trabajadores independientes y protección social en América Latina*, Banco de Previsión Social - ILO, Santiago, Chile.

Bertranou, F. and R. Maurizio (2011), "Hipótesis y evidencia empírica sobre el empleo independiente", in Bertranou, F. and R. Maurizio (eds.) *Trabajadores independientes, mercado laboral e informalidad en Argentina*, International Labor Office, Buenos Aires.

Bour, J. and N. Susmel (2010), "Informalidad en Argentina", in *Sector Informal y Políticas Públicas*, Konrad Adenauer Stiftung.

Bustos, J. and S. Villafañe (2011), "Asignación Universal por Hijo. Evaluación del impacto en los ingresos de los hogares y el mercado de trabajo", in *Serie de Estudios Trabajo, Ocupación y Empleo* N° 10, MTEySS, Buenos Aires.

Chacaltana, Juan (2009), "Economic Implications of Labour and Labour-Related Laws on MSEs: A Quick Review of the Latin American Experience", in *Employment Working Paper* N° 31, Employment Sector, International Labor Office, Geneva.

CEPAL (2012), *Eslabones de la desigualdad. Heterogeneidad estructural, empleo y protección social*, Economic Commission for Latin America and the Caribbean, Santiago, Chile.

Damill, M., R. Frenkel and R. Maurizio (2011), "Macroeconomic Policy for Full and Productive Employment and Decent Work for all. An Analysis of the Argentine experience", International Labor Office, Geneva.

Fernández Bugna, C. and F. Porta (2009), "El crecimiento reciente de la industria argentina. Nuevo régimen sin cambio estructural", in B. Kosacoff (ed.), *Crisis, recuperación y nuevos dilemas. La economía argentina 2002-2007*, ECLAC, Santiago, Chile.

Frenkel, R. (2005), "Una política macroeconómica enfocada en el empleo y el crecimiento", in *Revista de Trabajo*, Year 1, N° 1, Ministerio de Trabajo, Empleo y Seguridad Social, Buenos Aires.

Garganta, S. and L. Gasparini (2012), "El impacto de un programa social sobre la informalidad laboral: el caso de la AUH en Argentina", Working paper N° 133, CEDLAS, Universidad Nacional de La Plata.

Gasparini, L. (2000), "La informalidad laboral en Argentina: evolución y caracterización", in *La economía oculta en la Argentina,* FIEL, Buenos Aires.

INDEC (2003), "La nueva Encuesta Permanente de Hogares de Argentina. 2003", INDEC.

Jütting, J. and J. de Laiglesia (eds.) (2009), "Is Informal Normal? Towards More and Better Jobs in Developing Countries", Development Centre Studies, OECD.

Levy, S. (2008), *Good Intentions, Bad Outcomes: Social Policy, Informality and Economic Growth in Mexico*, Brookings Institution Press, Washington D.C.

Maurizio, R. (2011), "Las transferencias monetarias a los hogares y el comportamiento en el mercado de trabajo: el caso de la Asignación Universal por Hijo en Argentina", Consultants' report, International Labor Office, Buenos Aires.

Monsalvo, A. (2011), "Los migrantes sudamericanos en el mercado de trabajo de Argentina: informalidad del empleo y brechas salariales", in *La inmigración laboral de sudamericanos en Argentina*, International Labor Office, Buenos Aires.

MTEySS (2010), "Trabajo y empleo en el Bicentenario: cambio en la dinámica del empleo y la protección social para la inclusión", UNDP Project AGR/04/034 Information system for the evaluation and monitoring of employment, labor and social inclusion.

MTEySS (2011), "Boletín estadístico de la seguridad social. Primer trimestre 2011", Secretaría de Seguridad Social, Ministerio de Trabajo, Empleo y Seguridad Social.

MTEySS and ILO (2012), *Macroeconomía, empleo e ingresos: debates y políticas en Argentina frente a la crisis internacional 2008-2009*, International Labor Office, Buenos Aires.

Novick, M. (2007), "Recuperando políticas públicas para enfrentar la informalidad laboral: el caso argentino 2003-2007", paper presented at the Interregional Symposium on the Informal Economy - Enabling Transition to Formalization, Geneva, November.

Novick, M. (2010), "Job Creation, Job Preservation and Social Protection", Preparatory meeting in Washington D.C, MTEySS.

ILO (2002), "Decent Work and the Informal Economy", 90th Session of the International Labor Conference, International Labor Organization, Geneva.

ILO (2011a), "La formalización del empleo en Argentina", ILO notes - Trabajo Decente en Argentina, International Labor Office, Buenos Aires.

ILO (2011b), Tripartite roundtable "Desafíos de la economía informal en Argentina", at the Seminar on the Informal Economy in Argentina, Buenos Aires, October 26 and 27.

Perry, G., O. Arias, P. Fajnzylber, W. Maloney, A. Mason and J. Saavedra Chanduvi (2007), *Informalidad: escape y exclusión,* World Bank, Washington D.C.

Ronconi, L., Colina, J., (2011), "Simplification of Labor Registration in Argentina: Achievements and Pending Issues", Working paper N° 277, Inter-American Development Bank.

Ronconi, L., (2010), "Enforcement and compliance with labor regulations", Industrial & Labor Relations Review, Vol. 63, Issue 4, pp. 719-735.

Yun, M-S (2000), "Decomposition Analysis for a Binary Choice Model", in *IZA Discussion Papers* N° 145.

Appendix

Estimate of the likelihood of being a non-registered salaried worker on the basis of a logit model

Item	Coefficients	
	2003	2012
Gender		
Male	-0.378*	-0.11***
Age group		
From 25 to 34 years	-0.282*	-0.334*
From 35 to 49 years	-0.452*	-0.471*
From 50 to 59 years	-0.543*	-0.558*
Over 60 years	-0.212	0.001
Educational level		
Incomplete primary school	0.458	-0.141
Complete primary school	0.174	-0.671***
Incomplete secondary school	-0.134	-0.894**
Complete secondary school	-0.948**	-1.318*
Incomplete higher education	-0.91**	-1.344*
Complete higher education	-1.503*	-1.732*
Skills category		
Technical	-0.706*	-0.426*
Operational	-0.224***	-0.38*
Unskilled	0.229	0.11
Size of establishment		
From 6 to 40 persons	-1.291*	-1.572*
Over 40 persons	-2.267*	-2.627*
Economic sectors		
Manufacturing Industry	-0.216	0.395**
Construction	0.274	0.996*
Commerce	-0.479**	0.045
Hotels and restaurants	-0.407***	0.541*
Transportation, storage and communications	0.156	0.936*
Financial services, real estate, rentals and business	-0.495**	0.078
Education	-0.55*	-0.344
Social and health services	0.798*	0.735*
Domestic service	1.702*	0.828*
Other community, social and personal services (includes public administration, defense and mandatory social security)	-0.097	0.543*
Other areas	-1.145*	-0.024
Region		
Northwestern Argentina	0.216**	0.599*
Northeastern Argentina	0.26**	0.371*
Cuyo	0.146	0.295*
Pampas	-0.158***	-0.083
Patagonia	-0.932*	-0.763*
Employment tenure		
From 1 to 3 months	-0.25	-0.322***
From 4 to 6 months	-0.805*	-0.76*
From 7 to 12 months	-0.897*	-1.071*
From 1 to 5 years	-1.652*	-1.585*
Over 5 years	-3.542*	-2.574*
Position in household		
Spouse / partner	0.121	0.2*
Son/ daughter	0.289*	0.477*
Others	0.24**	0.258*
Immigrant status		
Migrant	0.126	0.114
Constant	4.313*	3.456*
Number of obs	10931	15541
LR chi2(41)	7015.98	7617.77
Prob > chi2	0.000	0.000
Pseudo R2	0.465	0.395

Note: (*) significant at 1%, (**) significant at 5%, (***) Significant at 10%.