

Conference of the Regulating for Decent Work Network

**Regulating for Decent Work: innovative regulation as a
response to globalization**

**EARNINGS EFFECTS AND EMPLOYMENT CONSEQUENCES OF
LABOUR REFORMS IN ARGENTINA: NEW EVIDENCE**

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The main objective of this document is to analyze the effects of changes in labour regulations on employment and earnings levels and dynamics. Specifically, the study aims at analyzing to what extent such modifications have implied changes in the probability of accessing to high-quality jobs (i.e. registered in social security system). Following the same topic changes in wages associated to modifications in labour norms will be also analyzed. The focus will be on what happened by the middle of the nineties and in the current decade. During both periods, different orientations in labour policies prevailed.

Labour regulations have changed systematically during the last 18 years in Argentina.

This research focuses in the 1998 and 2004 labour reforms.

Both reforms increased labor protection to workers. The reform of 1998 limited the use of fixed-term contracts that had been introduced by previous laws -1991 and 1995- and the labour reform of 2004 reduced the extension of trial period for new recruitments. In addition, since 2004 there was a marked increase in collective bargaining agreements.

The presentation is organized as follows:

1. A brief review of the macroeconomic and labour market performances during the period is presented
2. Main changes in labour legislation are introduced.
3. Method and data used are described.
4. Results obtained are shown.
5. Final remarks.

Macroeconomics

In 1991, after the hyperinflationary episodes of 1989 and 1990, a stabilization program was implemented that managed to halt inflation and led to an increase in GDP.

The Mexican crisis in late 1994 impacted negatively on GDP though the Argentine recession associated with this event was brief.

From 1996 to 1998 the economy resumed a rapid growth path as soon as conditions on the international capital market improved. By the end of 1998, however, when this market became more problematic and Brazil (a major export destination) went into recession, there was a new downswing in GDP. From 1999 to 2001 the economic difficulties increased markedly.

Following the crisis of 2001 and the change of the macroeconomic regime, Argentina experienced a steady and lasting economic recovery until 2008.

Employment and earnings

Since the early nineties there was a marked increase in the rate of open unemployment and underemployment. Between 1991 and 2001 total employment grew at 0.6% per year -about one third of the rate of increase of the active population-.

Simultaneously, there was a marked advance in the share of non-registered salaried workers. Their share in total salaried labour force rose from 29% to 41% (excluding employment plans and domestic service).

The rise of open unemployment (in a context of absence of a generalized unemployment insurance) and these changes in the occupational structure contributed to the higher occupational instability, another characteristic of the labour panorama. Not only was it difficult to get a job but, on average, duration of jobs was lower, raising uncertainty about future income flows, and therefore vulnerability.

During the first years of the nineties real wages increased substantially from the very low levels during the period of high inflation. This process was halted in 1994, registering a fall during the Tequila crisis. During the recovery phase from 1996-1998 wages increased, but by 2001 they had fallen to a level similar to those in 1991.

From May 2002 to the first quarter of 2007 employment and earnings grew steadily. Employment increased by 31% while the purchasing power of earnings grew by 29%. Both variables were already recovering by the second quarter of 2003, albeit at differing rates in certain sub-periods.

The unemployment rate reduced markedly but the incidence of non-registered salary workers remained high.

Inequality

In the first half of the nineties the level of income concentration fell, after reaching very high levels because of the hyperinflationary episodes at the end of the previous decade. By contrast, in the second half of the 1990s distribution worsened again, first in the context of the Tequila crisis (1995) and then persistently between 1998 and 2001.

Inequality in 2007 was only slightly less pronounced than in 1995, and similar to the level of the early 1990s. Evaluation of different indicators of per capita household income distribution confirms that there was a marked improvement in equity at the start of the expansion phase (2002-2003), but that this then tailed off. Indeed, estimating the statistical confidence intervals of the Gini coefficient reveals that there are no differences between the 2004 measurements and subsequent ones.

Labour Regulations

Promoted contracts

Labour relations in Argentina are regulated by the Contract of Employment Law passed in 1974 (i.e. Law 20.744). This norm establishes the requirement for the employer to register the labour relationship in the social security system and presumes that all contracts are for an undetermined period. This implies that the labour contract remains in force until the worker is dismissed or he/she voluntarily resigns. In addition, the termination of the contract requires notice and compensation in case of dismissal.

According to these characteristics of the labour regulations in Argentina, the perception about the potential disincentive these norms would have on the generation of permanent and registered employment led to the introduction of reforms. The usual agenda for more flexible labour norms includes the reduction of the cost of dismissing a worker by diminishing both severance payments and notice periods. Simultaneously it is recommended a broader use of fixed-term contracts. The degree of labour market flexibility would be also facilitated by the reduction of payroll taxes. Finally, it would be also important to reduce the influence of labour unions through and increase in the degree of decentralization of the bargaining process.

In recent years many changes have been implemented with the purpose of altering the basis of the labour regulations: four national laws in a period of 13 years were passed -Law 24013 in 1991, Law 24465 in 1995, Law 25013 in 1998 and Law 25877 in 2004-.

Those from 1991 and 1995 were inspired by the paradigm of *flexibilization* while the others may be assigned to a more *protective* orientation.

The National Employment Law of 1991 (24.013) included new types of fixed-term contracts. Even though these were not major reforms, they introduced flexibility at the margin. Various types of temporary contracts were created with strong reductions in dismissal costs and payroll taxes.

In 1995 Law 24,465 extended the use of these fixed-term contracts. In this case the norm sought to promote the generation of new jobs in which workers are recruited from groups that face special problems in accessing employment: workers over 40 years old, people with disabilities, women and Malvinas War Veterans.

Contracts must be a minimum of 6 months and a maximum of 2 years. Employers were exempted from 50% of employers' contributions to the social security system.

The incentives at the margin provided by the 1995 reform to use fixed term contracts were sizably larger than those provided by the 1991 reform, both in terms of the reduction of the severance pay and in terms of labour tax cuts.

Promoted contracts were repealed by 1998 (Law 25013). However, the new regulation created a special apprenticeship contract aimed at young people (between 15 to 28 years).

The trial period

In 1995 Law 24,465 included for the first time within the Employment Contract Law the trial-period. All new contracts will be under a trial-period during the first 3 months, enabling collective labour agreement to extend the period to 6 months. Employer contributions to social security were eliminated during this period, although not those related to the health system. The impact of this reform was unambiguous and strong. There is agreement that since 1995, a vast majority of new recruitments in the formal sector of the economy were under a trial period.

Law 25013 (1998) reduced the trial period to 30 days. This period could be extended to 6 months by collective bargaining and the exemption for contributions to Social Security was allowed only during the first 30 days.

In 2000, Law 25,250 returned to the original time extension of 3 months, extensible to 6 months by collective labour agreement. In the case of small firms (and for skilled workers) the trial-periods changed to 6 and 12 months respectively. Under this norm payroll taxes are mandatory. Finally, Law 25,877 (2004) set the trial period for the first 3 months. Also in this case payroll taxes are mandatory.

Other relevant regulations

Law 25,877 also established that firms with up to 80 workers (whose annual turnover does not exceed the amount set by the regulations) and to produce a net increase of workers on its payroll will have reductions in contributions to social security during 12 months for each new employee joined. The reduction consists of a partial waiver of contributions to the Social Security System equivalent to one third of the current value. If the worker hired to fill a new job is a beneficiary from the Jefes de Hogar programme the partial exemption will rise to half of those contributions.

Finally, since 2004 many collective bargaining agreements have been signed. A vast majority were restricted to the issue of wages, especially since the second half of 2005.

Data

The data used in this study come from the micro databases of the Permanent Household Survey (PHS) conducted regularly by the National Institute of Statistics and Censuses (Indec). Up until May 2003 the data were collected in May and October. Since then this has been done continuously every week of the year, giving rise to quarterly and half-yearly estimates. The Permanent Household Survey is urban in coverage and is conducted in 31 urban areas.

Although Argentina does not undertake longitudinal surveys, PHS provides longitudinal data. They derive from the fact that PHS's sample panel is of a rotating type: households are interviewed on successive occasions.

Data refer to all urban areas of the country from 1996 to 2007. I exclude those groups with observations in 2002 because of the big crisis that affected Argentina in that time.

Due to the differences mentioned about the changes in the sample design (before and after 2003) I analyze both periods separately.

Rotation Groups

1	May-96	Oct-96	May-97	Oct-97
2	Oct-96	May-97	Oct-97	May-98
3	May-97	Oct-97	May-98	Oct-98
4	Oct-97	May-98	Oct-98	May-99
5	May-98	Oct-98	May-99	Oct-99
6	Oct-98	May-99	Oct-99	May-00
7	May-99	Oct-99	May-00	Oct-00
8	Oct-99	May-00	Oct-00	May-01
9	May-00	Oct-00	May-01	Oct-01

10	Quarter 3 - 03	Quarter 4 - 03	Quarter 3 - 04	Quarter 4 - 04
11	Quarter 4 - 03	Quarter 1 - 04	Quarter 4 - 04	Quarter 1 - 05
12	Quarter 1 - 04	Quarter 2 - 04	Quarter 1 - 05	Quarter 2 - 05
13	Quarter 2 - 04	Quarter 3 - 04	Quarter 2 - 05	Quarter 3 - 05
14	Quarter 3 - 04	Quarter 4 - 04	Quarter 3 - 05	Quarter 4 - 05
15	Quarter 4 - 04	Quarter 1 - 05	Quarter 4 - 05	Quarter 1 - 06
16	Quarter 1 - 05	Quarter 2 - 05	Quarter 1 - 06	Quarter 2 - 06
17	Quarter 2 - 05	Quarter 3 - 05	Quarter 2 - 06	Quarter 3 - 06
18	Quarter 3 - 05	Quarter 4 - 05	Quarter 3 - 06	Quarter 4 - 06
19	Quarter 4 - 05	Quarter 1 - 06	Quarter 4 - 06	Quarter 1 - 07

Method

For the period 1996-2001 I will use the fact that the labour reform of 1995 was concentrated in specific population groups (i.e. young workers, older workers, the long-term unemployed, women under-represented in their occupations and disabled workers). I set up a quasi-experimental model attempting to assess the impact of the 1998 reform on earnings levels and on the probability of having access to registered jobs.

In the latter case fixed effects probit regressions are used (dependent variable taking value of 1 if the individual is a registered worker and 0 otherwise) while in the former a fixed effects wage equation is used (dependent variable being the log of monthly wage).

Treated groups are composed with workers under 25 and over 40 years of age while the control group includes middle-aged workers.

Specifically, I am interested in the impact of eliminating the reduction in the payroll taxes for the older group as the 1998 reform did not eliminate the reductions in payroll taxes for younger workers.

The incidence of the modifications in the trial period is also indirectly assessed. The term used to capture this effect during the period 1996-2001 is a dummy variable assuming the value of 1 if the observation corresponds to October 1998 or later.

A similar model is used to approximate the effects of the 2004 reform and the progress in collective bargaining in 2005. For this phase two dummy variables were generated. The first captures the effects from the second quarter of 2004 through the first quarter of 2005 and the second variable takes the value of 1 if the observation lies in the second quarter of 2005 and after.

I also analyze the evolution of inequality. The idea is that the evolution of inequality can be decomposed into a transient component and a permanent one. The variance in current relative earnings is the sum of the variance in the permanent component of earnings plus the variance of transitory earnings.

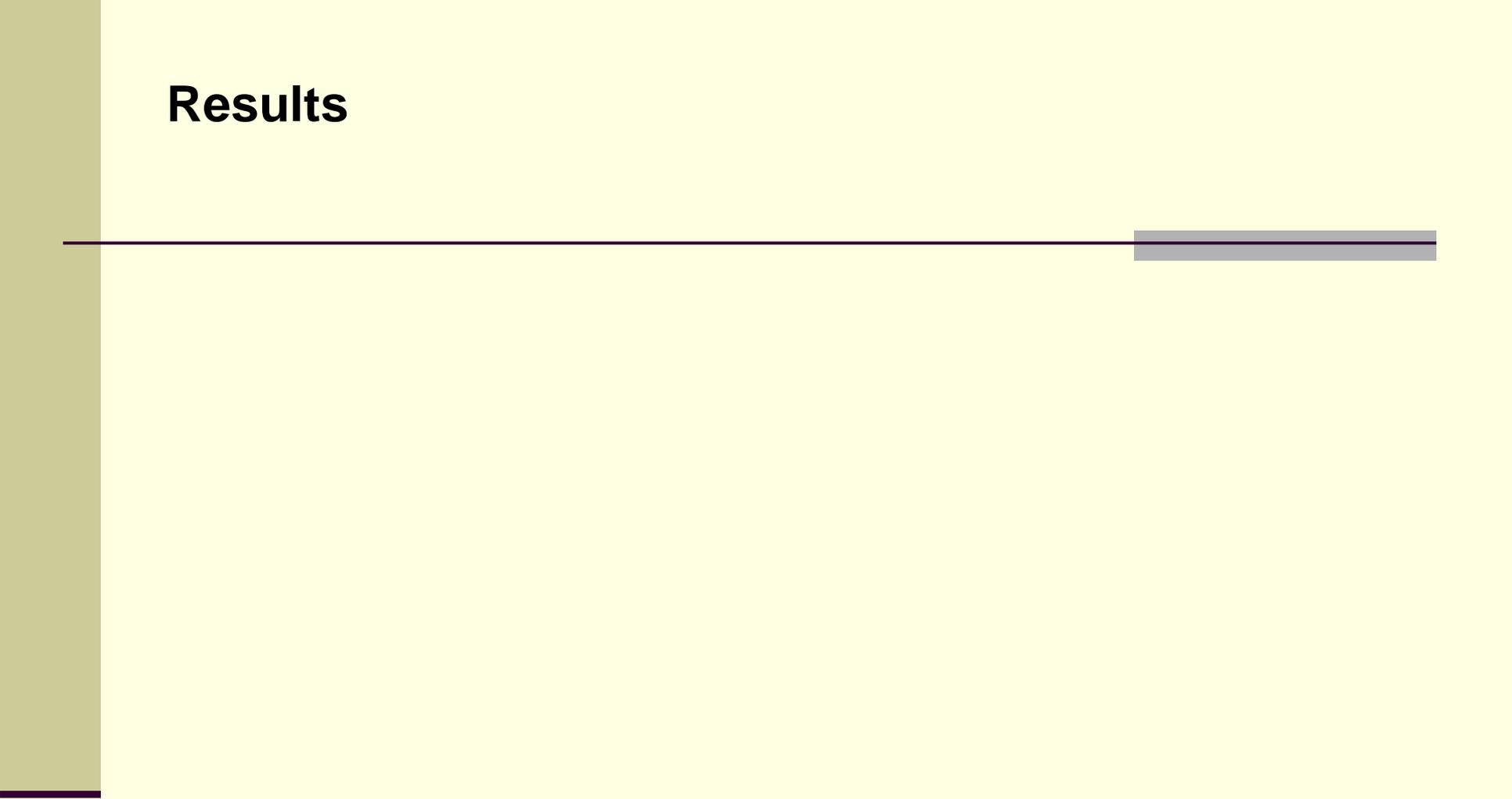
The variance of the permanent component (which fully determines the covariance) represents the persistent dispersion of earnings. Due to the limited number of observations available for each individual (four) I use the simple model of auto-covariance structure that assumes earnings to be composed of a permanent component and a white-noise transitory component to estimate these components.

The distinction between permanent and transitory earnings component may provide additional information in order to explain the evolution of inequality. Persistent differentials would be related to durable differences in individuals attributes' returns. On the other hand, earnings instability would be associated with overall changes in labour market (i.e. regulations).

The econometric models were applied to pooled data in order to increase the number of cases and improve the estimates following the scheme. The universe of individuals that was studied was limited to those males between the ages of 20 and 60 and that were once employed. This is the usual strategy to mitigate issues of endogenous female labour market participation.

Nominal wages were corrected for variations in the consumer price index (CPI).

Results



Descriptive data

Table 1a. Labour Indicators 1996-2003 (males from 21 to 60 years old)

	May-96	May-97	May-98	May-99	May-00	May-01	May-02	May-03
Unemployment	15,1	12,8	11,2	13,1	14,6	16,1	24,0	16,3
Employment plans	--	--	--	--	--	1,1	1,4	4,1
Salary workers								
% of non-registered workers	26,3	30,6	30,3	31,9	32,0	32,6	32,8	39,6
Registered workers								
% of temporary workers	4,9	5,2	5,2	3,9	3,3	4,1	3,8	3,2
Gini Coefficient (Monthly Earnings)								
Employed and Unemployed	0,503	0,492	0,494	0,492	0,514	0,529	0,588	0,554
Employed	0,415	0,418	0,430	0,415	0,431	0,438	0,458	0,467
Salary Workers	0,365	0,371	0,377	0,373	0,390	0,396	0,412	0,424

Source: Own Elaboration on FHS-INDEC

Note the rise in non-registered jobs during the period the more flexible reform was in force. In addition, it must be recalled that in 1994 it was passed a reduction in employer contributions for all workers of about 40% on average. This evolution suggests that part of the explanation is that these labour standards would have facilitated not the registration but instead the evasion of labour standards for new recruitments.

Table 1b. Labour Indicators 2004-2007 (males from 21 to 60 years old)

	Q 1-04	Q 1-05	Q 1-06	Q 1-07
Unemployment	10,7	10,2	8,8	7,1
Employment plans	3,1	1,9	1,5	0,7
Salary workers				
% of non-registered workers	43,4	42,3	38,7	35,5
Registered workers				
% of temporary workers	5,9	5,6	5,7	5,6
Gini Coefficient (Monthly Earnings)				
Employed and Unemployed	0,532	0,487	0,475	0,444
Employed	0,460	0,412	0,414	0,392
Salary Workers	0,438	0,383	0,365	0,354
Source: Own Elaboration on PHS-INDEC				

The labour reform of 2004 coincided with a marked improvement in the economic and labour market performances. It will be recalled that the 2004 reform kept the trial period (with an extension of three months) but eliminated the reductions in payroll taxes. Besides, the termination of a labour contract was discouraged: severance payments were doubled. Under these regulations, and contrary to the mainstream, firms increased markedly the percentage of registered jobs. Furthermore, the concentration of income also improved in these years, especially at the beginning of the period under analysis.

Table 2a: Effects of the Reform (1996-2001)

Fixed Effects Wage Regression				Fixed Effect Probit Regression						
Dependent variable: Ln Monthly Income				Dependent variable: Acces to a registered job						
Only registered workers			Only temporary registered before reform and permanent registered after reform		Ever employed					
N	33515			N	14134		N	70024		
Rsq Overall		0,222		Rsq Overall		0,253		Log likelihood		-29569,2
	Coef.	Sig.		Coef.	Sig.	Coef.	Sig.			
High education	0,187	0,000		0,205	0,000	0,533	0,000			
Age	0,065	0,000		0,068	0,000	0,179	0,000			
Age squared	-0,001	0,000		-0,001	0,000	-0,002	0,000			
Head of Household	0,208	0,000		0,238	0,000	0,796	0,000			
Reform	0,001	0,938		0,226	0,000	0,127	0,058			
Cohort_Young	-0,019	0,515		0,065	0,285	0,020	0,864			
Cohort_>40	0,012	0,506		-0,050	0,257	-0,307	0,000			
Ref*Cohort_Young	-0,005	0,907		-0,060	0,364	-0,262	0,096			
Ref*Cohort_>40	0,033	0,093		0,094	0,026	-0,074	0,379			
Region Dummies	yes			yes		yes				
Years Dummies	yes			yes		yes				

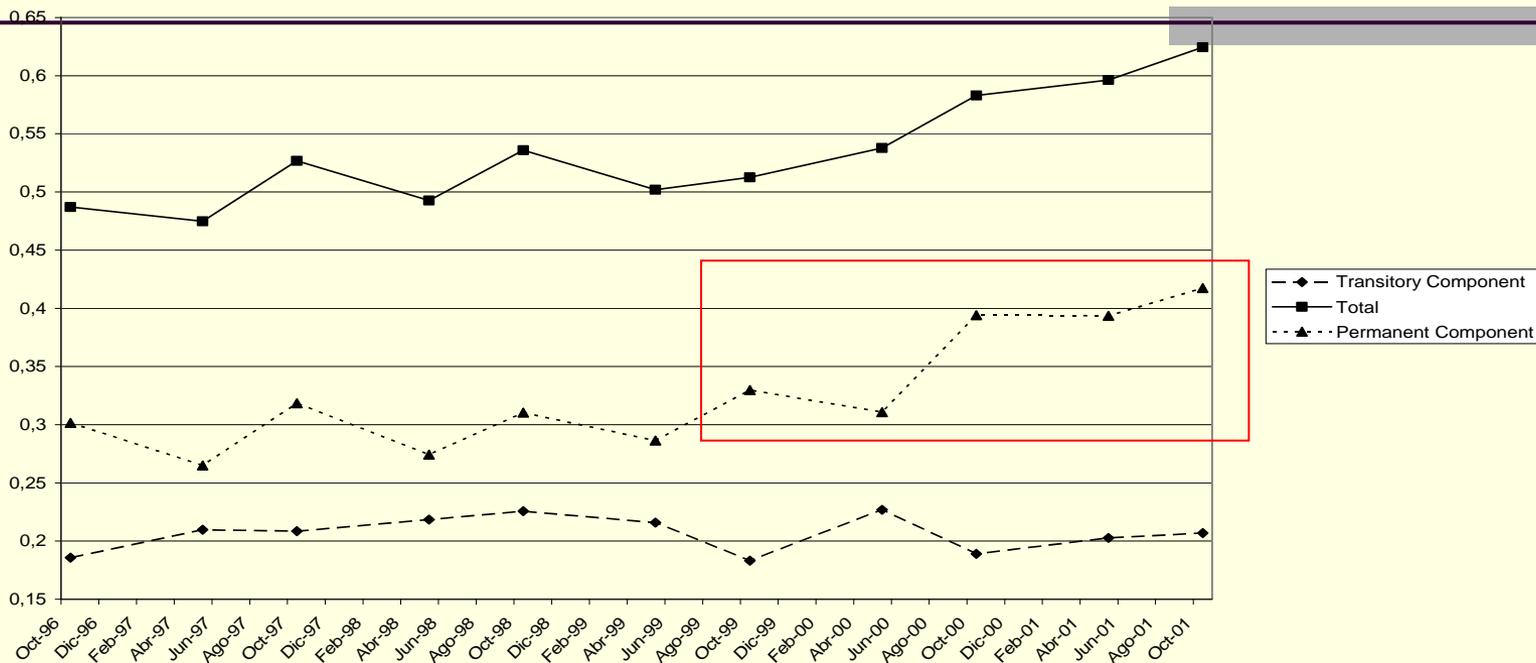
Source: Own Elaboration on PHS-INDEC

The labour reform of 2004 also had a positive effect on wages and on the probability of access to a registered job. In the first case, this is valid for all registered workers and for the subgroup comprising those who made transitions from non-registered positions to registered jobs. It is important to emphasize that the reform had no impact on the wages of those who made transitions in the reverse direction (from a registered job to a non-registered job). Positive results were also found on the probability of access to a registered job indicating the absence of a stimulus for evasion of labour norms.

Table 2b: Effects of the Reform (2003-2007)								
Fixed Effects Wage Regression						Fixed effect probit regression		
Dependent variable: Ln Monthly Income						Dependent variable: Acces to a registered job		
Only registered workers			Only from no registered jobs to registered jobs		Only from registered jobs to non-registered jobs		Ever employed	
N	19198		N	5977		N	4439	
Rsq Overall	0,273		Rsq Overall	0,2178		Rsq Overall	0,2502	
	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.
Reform_1	0,157	0,000	0,198	0,000	0,021	0,684	0,123	0,096
Reform_2	0,392	0,000	0,523	0,000	0,078	0,132	0,525	0,000
High education	0,179	0,000	0,296	0,000	0,336	0,000	0,781	0,000
Age	0,038	0,000	0,036	0,000	0,040	0,000	0,225	0,000
Age squared	0,000	0,000	0,000	0,001	0,000	0,004	-0,003	0,000
Head of Household	0,215	0,000	0,199	0,000	0,222	0,000	0,863	0,000
Region Dummies	yes		yes		yes		yes	
Years Dummies	yes		yes		yes		yes	

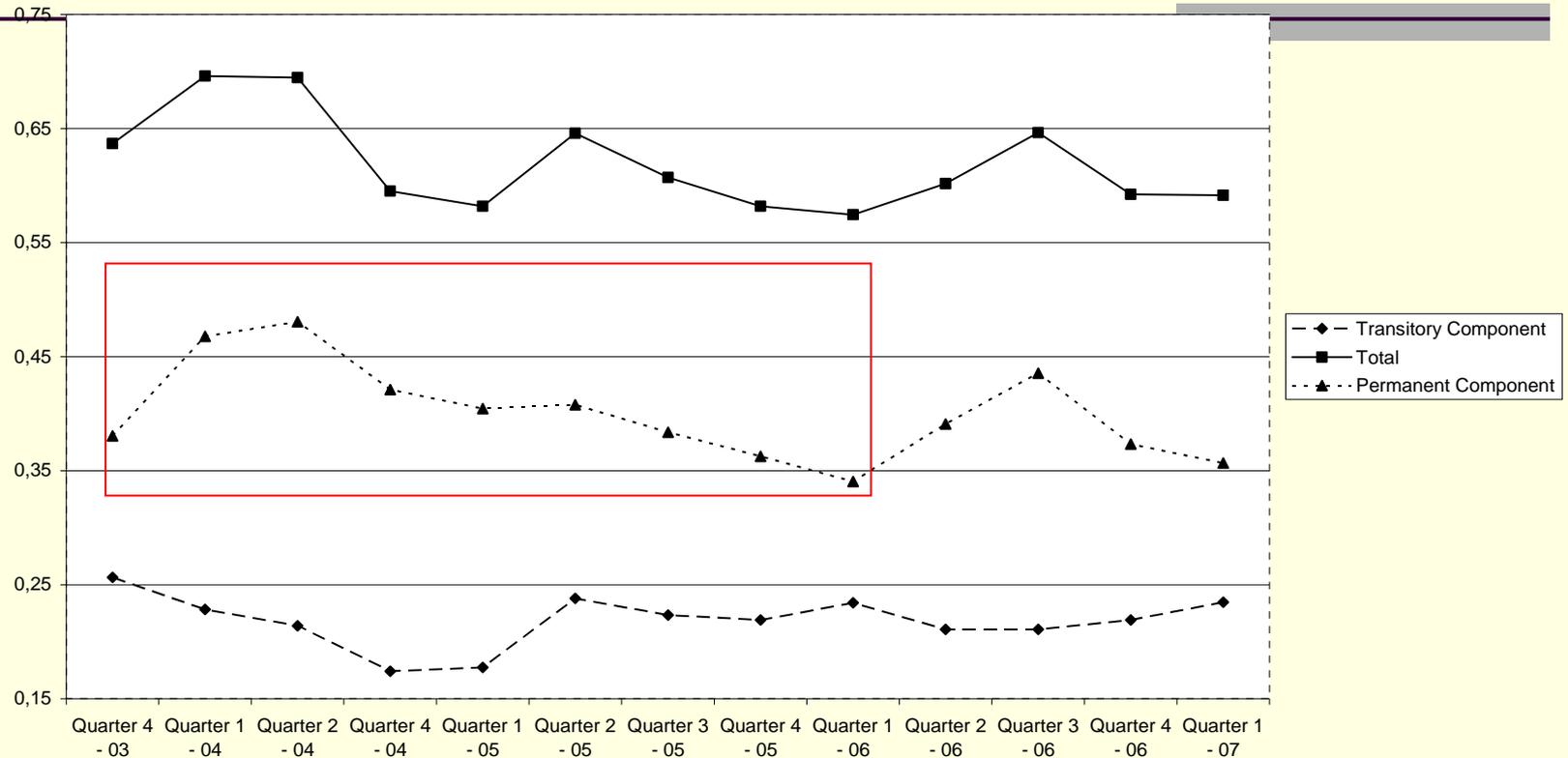
Source: Own Elaboration on PHS-INDEC

Figure 1: Decomposition of Inequality (1996-2001)



The decomposition of inequality, in both periods separately, in a transient component and a more permanent component reflects the preeminence of the latter. In the period from 1996 to 2001 the concentration of income increased and this was reflected in an increase in the permanent component of inequality. This behaviour reflects the prevalence of individual attributes' returns as the main force behind the increasing inequality during the nineties. This was mainly due to changes in returns to education (a proxy to skills). The excess of labour supply during this period would have affected more the wages of low skilled workers. As it was mentioned above, employers would have attempted to protect firms' efficiency retaining high skilled workers. Moreover, it must be recalled that workers with high education faced better chances of accessing registered jobs.

Figure 2: Decomposition of Inequality (2003-2007)



The reduction in inequality from 2004 is associated with a decrease in the permanent component. This is also consistent with a reduction in educational returns. During this phase this behaviour would express the increasing incidence of collective bargaining agreements on wages. It is reasonable that under the influence of trade unions during this period firms may agree to increase relative wages of low skill workers in the context of overall economic growth.

Final remarks

Assessing the effects of changes in labour norms remains an issue that generates controversy. This paper provides some evidence through the use of panel data to assess the effects of labour reforms on employment and wages. The results obtained confirm that labour reforms implemented in 1998 and 2004 had favourable effects on the registration of workers and on earnings levels. Labour unions also seem to have exerted similar positive effects through collective bargaining agreements between 2005 and 2007.

This panorama is coherent with the evolution of income concentration during the period. The decomposition of earnings inequality into its persistent and transitory components showed that the former prevailed all along the period. There is widespread agreement that the increases in skill returns would have been the major individual factor that led to rising inequality during the nineties. Similarly, the decrease in earnings concentration since 2003 would have been associated with a reduction in education returns. Changes in returns to education would have been the result of firms' strategies to retain skilled workers during the recessive context of the nineties. From the same perspective, the recovery phase of 2003-2006 would have reflected an improvement in inequality because of labour unions' influence.