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An Analysis of the "Biagi Law"

On March 19, 2002, a college professor was murdered.

After firing several bullets into his body, his assassins sent a 26-page letter to newspapers and other organizations explaining that their objective was to strike down the men who assisted the government's efforts to restructure the labor market. Then, in response, the government passed legislation implementing the professor's proposed reforms and gave his name to the law.

It is, of course, inappropriate to name controversial legislation after a murder victim. But after controversial legislation has already been passed in a murder victim's name, I believe that it is especially important to study and discuss that legislation.

So today, 15 years later, the dramatic change in labor law lends itself to a test of the null hypothesis that the law did not increase the employment rate.

As one of Marco Biagi's students, I remember how much he wanted more job opportunities for young workers. In his memory, I hope this analysis helps Italian policymakers understand the effects of the "Biagi Law" and I hope it helps them create the job opportunities that Marco Biagi wanted for young Italians.

More broadly, I hope that this analysis helps policymakers everywhere develop policies that improve labor market outcomes for their workers. I cannot possibly know if Prof. Biagi would agree with the analysis presented in these pages, but I am certain that he would agree with its spirit.

This analysis suggests that the "Biagi Law" did not achieve the goal of improving labor market outcomes for Italian workers. It also suggests that macroeconomic policy may affect employment rates more than labor market regulation does.

Figure 1: Phillips Relationships
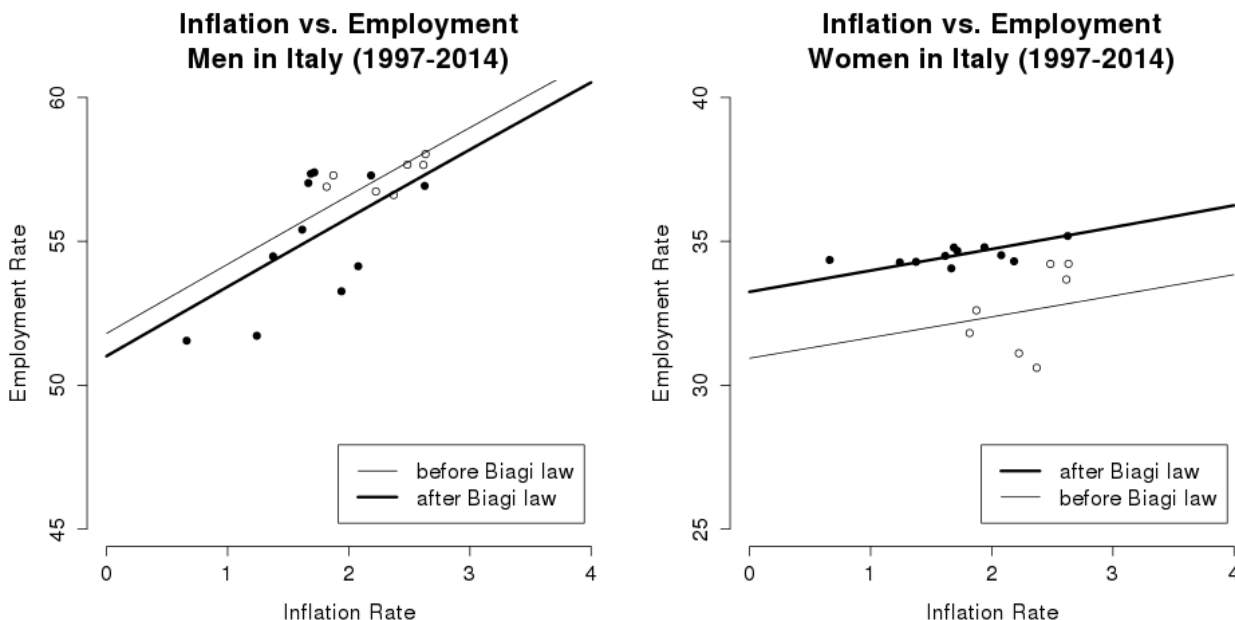
Prior to passage of the "Biagi Law," rigid labor laws and high unemployment characterized the Italian labor market. The labor market reforms aimed to increase total employment by introducing flexibility into employment contracts.

Specifically, the "Biagi Law" introduced new types of employment contracts, such as apprenticeships, part-time work, job-sharing and project-based contracts. The legislation also aimed to increase women's labor market opportunities (in particular, by reducing the social insurance contributions that employers must pay on behalf of their female employees).

1 Background

Italy is a democratic Republic founded on labor.
– Article 1 of the Italian constitution

The Republic recognizes to all citizens the right to work and promotes the conditions that render effective this right.
– Article 4

And according to Article 3, the task of the Republic is to promote the liberty and equality of its citizens. As such, the Republic intervenes in the labor market to remedy the disparity in economic power between employer and employee.

According to Del Giudice, Izzo and Solombrino (2016), the two parties – employer and employee – are equal from a juridical perspective, but not from an economic perspective. Consequently, labor contracts are more tightly regulated than other private contracts in Italy. The Italian state also recognizes labor unions' scope for protecting worker interests.

Of particular importance is the distinction between subordinate employment and self-employment. The latter is generally handled by commercial law because it covers works and services performed without subordination.

Recognizing however that work performed at the direction of an employer is the historically prevalent form of work, Italian law established full-time, permanent contracts as the primary basis of employment. Importantly, Italian law also prohibited unjustified dismissals.

According to Del Giudice, Izzo and Solombrino, these features entered Italian law in the post-war period characterized by large industrial enterprises and remained in place for several decades despite technological change in the workplace. But during the 1980s and early 1990s, high rates of unemployment and competition from producers around the globe led to a change in commercial strategies.

To adapt to oscillations in global demand, firms would need flexibility from the labor force. Labor force flexibility was also seen as a solution to the problem of youth unemployment. The "Biagi Law," which took effect on October 24, 2003, introduced the desired flexibility. It created a range of new employment options such as apprenticeships, part-time work, job-sharing and project-based contracts.

In response to the inequality that emerged between protected subordinate employees and unprotected employees on project-based contracts and in response to abuses of the project-based contracts, legislation passed in 2015 prohibits employers from renewing a project-based contract (Del Giudice, Izzo and Solombrino). To continue working with the employee after the initial contract expires, the employer now must offer a full-time contract.

2 Employment Statistics

The statistics and estimates presented in this analysis suggests that the "Biagi Law" reforms increased the female employment rate, but reduced the male employment rate.

A cynic might look at these estimates and ask if employers responded to the change in law by replacing one full-time male employee with two part-time female employees. A more perceptive observer might ask why the Italian government focused on labor market flexibility instead of focusing on the "Southern Question."

Prior to passage of the "Biagi Law," regions in Northern Italy already had employment-population ratios comparable to those in other European countries. Regions in Southern Italy, by contrast, have historically had fewer employment opportunities for their residents.

Although the EU statistics presented in Table 1 show a small increase in the Italian employment rate after the "Biagi Law" was enacted, the employment rate was almost the same in 2015 as it was in 2003 – about 60 percent. At its peak in 2008, the Italian employment rate was only modestly higher – 63 percent.

The "Biagi Law" did affect the Italian labor market however. In particular, it appears to have greatly increased the share of part-time and temporary contracts in total employment. It also appears to have shifted employment opportunities from males to females.

Table 1

		1998	2003	2004	2008	2015
	Employment Rates – ages 20-64					
total	Italy	55.7	60.0	61.6	62.9	60.5
	Euro area (13)	63.5	66.9	67.3	70.2	68.9
men	Italy	71.7	74.6	74.9	75.3	70.6
	Euro area (13)	74.9	76.4	76.3	78.1	74.5
women	Italy	39.9	45.6	48.5	50.6	50.6
	Euro area (13)	52.1	57.4	58.3	62.3	63.3

note: There is a break in the Italian series between 2003 and 2004.

source: Eurostat

Table 2

		1998	2003	2004	2008	2015
	Part-time and Temporary Contracts in Italy – ages 20-64					
Part-Time	total	7.2	8.4	12.4	14.0	18.2
	men	3.2	2.9	4.3	4.7	8.0
	women	14.3	17.3	24.8	27.6	32.4
Temporary	total	5.8	7.0	8.2	9.7	10.6
	men	4.8	5.4	6.4	7.8	9.7
	women	7.7	9.5	11.0	12.4	11.8

note: Statistics are as a percentage of total employment

source: Eurostat

Table 3

		1980	1991	1998	2003	2004	2008	2015
	Employment Rates in Italy – ages 15-64							
total	Italy	54.6	54.9	53.7	57.5	57.6	58.6	56.3
	North	58.5	60.2	60.7	65.1	65.1	66.9	64.8
	Central	54.0	56.5	55.5	60.5	61.1	62.8	61.4
	South & Islands	49.7	47.0	44.0	46.4	46.3	46.0	42.5
men	Italy	74.6	71.2	67.5	70.0	69.8	70.1	65.5
	North	76.3	74.0	72.3	75.3	75.0	76.1	72.6
	Central	74.9	72.8	68.8	72.0	71.9	73.0	69.1
	South & Islands	72.3	66.7	60.7	62.2	61.9	61.0	54.4
women	Italy	35.1	38.7	40.1	45.2	45.5	47.2	47.2
	North	41.0	46.5	49.1	54.9	55.0	57.6	57.0
	Central	33.9	40.5	42.5	49.3	50.5	52.8	54.0
	South & Islands	27.8	27.8	27.7	31.0	30.9	31.3	30.9

source: I.Stat

The EU statistics presented in Table 2 suggest that the percentage of Italian workers with part-time positions and temporary contracts has almost doubled since the "Biagi Law" took effect. Between 2003 and 2015, the combined percentage (part-time and temporary) rose from 15 percent of total employment in 2003 to 29 percent in 2015.

Across Europe, a larger percentage of women were working in 2015 than in 2003, but in Italy the incentives to hire women may have reduced opportunities for men. According to Table 1, women's employment rate rose throughout the Euro Area with only a small decrease in men's employment rate, whereas in Italy the men's decrease was more dramatic.

Between 2003 and 2015, men's employment rate fell 2 percentage points in the Euro Area and fell 4 percentage points in Italy. By comparison, women's employment rate rose 5 percentage points in Italy and 6 percentage points in the Euro Area over the same period.

The I.Stat statistics presented in Table 3 exhibit similar trends in men's and women's employment rates. Using the slightly broader age range of 15-64 years, the Italian National Institute of Statistics estimates that men's employment rate fell 4 percentage points, while women's rose 2 percentage points between 2003 and 2015.

The I.Stat statistics also indicate that the gap between Northern Italian regions and Southern Italian regions grew after the "Biagi Law" was enacted. The larger gap may reflect continuation of pre-existing trends, but the law does not appear to have reversed those trends.

The North's (total) employment rate was approximately the same in 2003 and 2015 (about 65 percent), while the South's (total) employment rate fell from 46 percent to 43 percent over the same period. And it's particularly important to note that women's employment rate rose in the Euro Area, in Northern Italy and in Central Italy, but remained unchanged in Southern Italy.

Much ink has been spilt over the "Southern Question." From an economist's perspective, one of the more interesting theories is that Southern Italy is still suffering from the monetary effects of Italian Unification.

In particular, Foreman-Peck (2005) argues that agricultural shocks and real exchange rate appreciation in the late 19th century have left Southern Italy with persistently lower employment rates. He also argues that those shocks and appreciation were the cause of mass emigration from Southern Italy in the late 19th century and early 20th century.

If monetary factors are responsible for low employment rates (as the analysis presented here suggests), then creating employment opportunities requires either large fiscal transfers from North to South or monetary independence for the South.

European monetary union, of course, precludes monetary independence for the South, so creating employment opportunities for Southern Italians will require large fiscal transfers. Labor market flexibility is no substitute for strong aggregate demand.

3 Econometric Analysis

3.1 Italian Regions

Ideally, there would be a comprehensive set of employment statistics with classifications by age, gender, region, education level, full-time vs. part-time status and permanent vs. temporary status. And ideally, that comprehensive set of statistics would span several decades. Such an ideal dataset would enable us to properly analyze the effects that the "Biagi Law" had on the Italian labor market.

In reality however, we must work with the data that we have, not the data that we want.

The EU statistics only cover Italy at the national level, while the I.Stat coverage of full-time vs. part-time status and permanent vs. temporary status only begins in 2004 (after the "Biagi Law" was enacted). We cannot even use the I.Stat statistics to examine the effect that the "Biagi Law" had on groups with different levels of education, because that coverage also begins in 2004.

I.Stat does however provide total employment rates for each gender and region dating back to 1993. The employment rates are only available for the "15 years and over" age range, but at least we can exploit regional and gender variations to obtain a rough estimate of the effect that the "Biagi Law" had on Italian employment rates.

The limited number of available variables prevents us from conducting a proper set of specification tests (and, therefore, from obtaining a range of estimates). Nonetheless, the different model specifications that we would create with an ideal set of data would probably all reflect the fact that Italian men's employment rates were lower after enactment of the "Biagi Law," while Italian women's employment rates were higher.

In addition to region and gender, we can also add inflation (as measured by the consumer price index) to the model. The resulting "Phillips relationship" helps us control for the effects of macroeconomic performance on employment rates.

Two such regression models are presented in Table 4. The first examines the years 1997 to 2014. The second examines the years 1997 to 2008. One should generally prefer the longer time horizon in the first model, but excluding the years after the world economic crisis began in 2008 has the advantage of focusing our analysis of the "Biagi Law" on a homogenous time period.

Assuming a two percent annual rate of inflation, the model that examines the years 1997 to 2014 predicts that

56.6 percent of Italian men would be employed in the absence of the "Biagi Law" and 55.8 percent would be employed in the presence of the law – a decrease of 0.8 percentage points.

At the same two percent inflation rate, the model based on the years 1997 to 2014 predicts that 32.4 percent of women would be employed in the absence of the "Biagi Law" and 34.7 percent would be employed in the presence of the law – an increase of 2.3 percentage points.

Excluding the years after the world economic crisis leaves the predictions of the women's employment rate almost unchanged, but predicts that the "Biagi Law" did not affect men's employment at all.

Specifically, the model based on the years 1997 to 2008 predicts that (at two percent inflation) 57.2 percent of men would be employed regardless of the "Biagi Law." For women, the second model predicts that 32.2 percent would be employed in the absence of the law and 34.6 percent in its presence – an increase of 2.4 percentage points.

The Phillips relationships for both models are presented in Figure 2. The difference in time horizon does not affect the estimate of the women's Phillips relationship, but it has a strong effect on the men's. Prior to the world economic crisis, inflation appears to have had no effect on the employment rate of Italian men, but a strong effect in the years since.

Both models also suggest that residents of Northern Italy enjoy better odds of employment than residents of Southern Italy. For example, the first model in Table 4 (based on 1997-2014) predicts that a Sicilian man's odds of employment are 36 percent lower than a Piedmontese man's, while a Sicilian woman's odds of employment are 88 percent lower than a Piedmontese woman's.

To account for the effect of geography on employment opportunities (i.e. serial correlation over space) and to account for the effect of serial correlation over time, we can also estimate the Phillips relationships with a Spatial Autoregressive Model with Autoregressive Disturbances (SARAR).

Estimates of such a SARAR model were developed with Millo and Piras' (2012) "splm" package for R and are presented in Table 5. In each regression model, the slope of the Phillips curve (i.e. the coefficient on the "Inflation Rate" variable) is roughly the same as in the fixed effects model (presented in Table 4). Higher inflation rates are associated with higher employment rates in both sets of models.

The SARAR estimates of how much the "Biagi Law" shifted the Phillips curve are also roughly the same as in the fixed effects model. In both sets of models, the labor force flexibility introduced by the "Biagi Law" appears to have increased employment opportunities for women at the expense of employment opportunities for men.

But on the question of geography, Table 5 suggests that the SARAR estimates of Italian men's employment rates may be more useful than the SARAR estimates of Italian women's employment rates. In particular, we cannot reject the null hypothesis of zero spatial correlation in the SARAR models of the women's employment rate. And in those models, several estimates of the regional fixed effects do not reflect the employment rates of women in those regions.

Development of a better model of the women's employment rate is left for future research. But the SARAR model of the men's employment rate accurately reflects the North-South employment divide.

Specifically, we can reject the null hypothesis of zero spatial correlation in the SARAR model of the men's employment rate from 1997 to 2014. And in that model, the estimates of the regional fixed effects reflect the tendency of men's employment rates to be higher in the North and lower in the South.

3.2   OECD Countries

Another way of exploring the effect of labor force flexibility on employment rates is to compare legislation across countries. Realfonzo and Tortorella Esposito (2014) conduct such a comparison with the OECD Indicators of Employment Protection and find that countries with more flexible labor markets tend to have higher unemployment rates.

To develop its indicators of employment protection, the OECD measures the strictness of different elements of each country's labor law. Those measurements are then incorporated into broader measures of employment protection.

The two of most interest are the measure of protections regulating individual and collective dismissals (the "EPRC") and the measure of protections regulating the use of fixed-term and temporary work agency contracts (the "EPT"). Both measures range from 0 to 6, with zero being the least strict and six being the most strict. Put differently, countries with low scores have more flexible labor markets.

Table 6 presents estimates of the effect that employment protections regarding dismissals and temporary employment have on employment rates in OECD countries.

After controlling for the effect of macroeconomic performance (with the inflation rate), the model suggests that men's employment rates tend to be higher in OECD countries with stronger protections against dismissal. The model also suggests that such protections have zero effect on women's employment rates.

Just as the "Biagi Law" appears to have increased employment rates among Italian women, but not among Italian men, the model suggests that OECD countries with less protections for temporary employees tend to have higher women's employment rates and lower men's employment rates.

More importantly, the effects are strong for both genders. The model predicts that increasing the level of protection for temporary employees by one point (on the OECD's scale from 0 to 6) would reduce a woman's odds of employment 8 percent but increase a man's 13 percent.

Stronger still are the effects that protections against dismissal have on men's employment rates. Increasing that protection by one point increases a man's odds of employment 35 percent, but has zero effect on women's employment rates.

Using OECD data also enables us to incorporate other aspects of the labor market into the model, such as union density (i.e. the percentage of wage and salary earners that are trade union members) and the minimum wage.

According to microeconomic theory, if labor markets are competitive, then higher minimum wages should be associated with lower employment rates. But if employers have monopsony power over their workforce, then higher minimum wages should be associated with higher employment rates.

Specifically, if workers can easily move from one employer to the next, then firms will be "price takers" in labor markets. They will hire workers up to the point where the additional revenue that an additional worker produces equals the market equilibrium wage. Under such circumstances, setting the minimum wage above the market equilibrium wage will reduce the number of workers that each firm hires and reducing the overall employment rate.

But if workers find it difficult to leave their current jobs and find an equivalent or better-paying position somewhere else, then firms will have monopsony power over their employees. Because it is the sole consumer of their labor, the additional cost that a firm faces when hiring an additional worker is more than just the wage. It's the wage plus the increase in wage that it must pay to increase the quantity of labor supplied.

Consequently, the monopsonist maximizes profit by paying a lower wage and employing fewer workers than a competitive labor market. Under such circumstances, imposing a (higher) minimum wage will reduce the monopsonist's profit, but because the minimum wage will be the only additional cost associated with hiring an additional worker, the monopsonist will employ more workers after the (higher) minimum wage is imposed.

So if monopsonistic employment conditions characterize OECD labor markets, then higher minimum wages should be associated with higher employment rates. Conversely, if OECD labor markets are competitive, then higher minimum wages should be associated with lower employment rates.

To test this hypothesis, we can add the minimum wage to our regression models, but some OECD countries do not have a statutory minimum wage. The effective minimum wage in such countries (as set by union contracts or common convention) must be greater than zero however. Among the OECD countries that have a statutory minimum wage, real GDP per capita is highly correlated with the minimum wage, so we can use it as a predictor of the effective minimum wage in the countries that do not have a statutory minimum wage.

According to Table 6, including the natural log of such a minimum wage variable in our regression models suggests that higher minimum wages are associated with higher employment rates, but we cannot reject the null hypothesis that the minimum wage has zero effect on men's employment rates and we can only reject the null hypothesis of zero effect on women's employment rates at the 10 percent significance level.

Although the estimated coefficients may not be statistically significant, it is significant that they are positive. Higher minimum wage rates may increase male and female employment rates.

4 Conclusion

The data available to analyze the effect that the "Biagi Law" on employment rates are quite limited, but suggest that the law increased employment opportunities for women at the expense of employment opportunities for men.

The data also suggest that the law greatly increased part-time employment and employment on temporary contracts at the expense of full-time, permanent employment. And the data also suggest that the law did not increase employment opportunities at all in Southern Italy.

But even if the data's limitations prevent us from observing a "true" effect in which the "Biagi Law" really did increase employment opportunities for all Italians, an analysis which reveals that "true" effect would still have to explain why the overall employment rate in Italy was almost the same in 2015 as it was in 2003.

The only possible explanation would be that macroeconomic policy has a greater effect on employment rates than labor market regulation does.

I cannot know if Prof. Biagi would agree with my conclusion, but I am certain that he would agree that policy-makers should work in good faith to create more and better employment opportunities for their people.

5 References

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Table 4

Log Odds of Employment Rate – Italy
method: two-step weighted least squares

	Men 1997-2014		Women 1997-2014		Men 1997-2008		Women 1997-2008	
Economy								
Inflation Rate	0.0977	***	0.0341	***	0.0114		0.0637	***
	(0.0098)		(0.0082)		(0.0078)		(0.0134)	
Policy								
Biagi Law	−0.0345	**	0.1065	***	−0.0015		0.1109	***
	(0.0105)		(0.0088)		(0.0059)		(0.0101)	
North								
Friuli-Venezia Giulia	0.0897	**	−0.0762	**	0.1235	***	−0.0954	**
	(0.0332)		(0.0266)		(0.0205)		(0.0338)	
Veneto	0.2267	***	0.0168		0.2344	***	0.0234	
	(0.0216)		(0.0172)		(0.0134)		(0.0220)	
Lombardia	0.2087	***	0.0735	***	0.2270	***	0.0782	***
	(0.0187)		(0.0150)		(0.0116)		(0.0191)	
Emilia-Romagna	0.1356	***	0.1919	***	0.1318	***	0.2186	***
	(0.0221)		(0.0175)		(0.0137)		(0.0223)	
Liguria	−0.1550	***	−0.1356	***	−0.1797	***	−0.1304	***
	(0.0296)		(0.0238)		(0.0182)		(0.0301)	
Center								
Toscana	0.0452	*	−0.0387	*	0.0417	**	−0.0443	.
	(0.0229)		(0.0183)		(0.0141)		(0.0234)	
Marche	0.0230		−0.0346		0.0241		−0.0371	
	(0.0303)		(0.0244)		(0.0187)		(0.0312)	
Umbria	−0.0688	.	−0.0538	.	−0.0949	***	−0.0338	
	(0.0378)		(0.0305)		(0.0234)		(0.0390)	
Lazio	−0.0247		−0.1805	***	−0.0427	**	−0.2171	***
	(0.0208)		(0.0168)		(0.0129)		(0.0216)	
South								
Abruzzo	−0.1103	***	−0.2344	***	−0.1261	***	−0.1808	***
	(0.0319)		(0.0265)		(0.0198)		(0.0336)	
Molise	−0.2274	***	−0.5227	***	−0.1959	***	−0.5203	***
	(0.0582)		(0.0515)		(0.0357)		(0.0653)	
Campania	−0.2997	***	−0.8322	***	−0.2336	***	−0.7845	***
	(0.0205)		(0.0179)		(0.0127)		(0.0227)	
Puglia	−0.2710	***	−0.7881	***	−0.2492	***	−0.7678	***
	(0.0222)		(0.0195)		(0.0137)		(0.0248)	
Basilicata	−0.2593	***	−0.6238	***	−0.2283	***	−0.6222	***
	(0.0441)		(0.0399)		(0.0271)		(0.0507)	
Calabria	−0.3910	***	−0.7964	***	−0.3345	***	−0.7878	***
	(0.0274)		(0.0249)		(0.0168)		(0.0317)	
Islands								
Sicilia	−0.3596	***	−0.8806	***	−0.3244	***	−0.8772	***
	(0.0211)		(0.0187)		(0.0130)		(0.0238)	
Sardegna	−0.1600	***	−0.4248	***	−0.1005	***	−0.4424	***
	(0.0290)		(0.0249)		(0.0179)		(0.0318)	
(Intercept)	0.1166	***	−0.5669	***	0.2978	***	−0.6400	***
	(0.0277)		(0.0230)		(0.0203)		(0.0347)	
observations	324		324		216		216	
R^2	0.896		0.972		0.963		0.967	
F-statistic	137.8		544.9		293.8		328.1	
p-value	0.000		0.000		0.000		0.000	

Standard errors in parenthesis.
Each regional coefficient is the difference in log odds of employment relative to Piemonte.

Figure 2: Phillips Relationships

Inflation vs. Employment
Men in Italy (1997-2014)

Employment Rate / Inflation Rate

before Biagi law
after Biagi law

Inflation vs. Employment
Women in Italy (1997-2014)

Employment Rate / Inflation Rate

after Biagi law
before Biagi law

Inflation vs. Employment
Men in Italy (1997-2008)

Employment Rate / Inflation Rate

before Biagi law
after Biagi law

Inflation vs. Employment
Women in Italy (1997-2008)

Employment Rate / Inflation Rate

after Biagi law
before Biagi law

Table 5

Log Odds of Employment Rate – Italy
method: weighted SARAR with fixed regional effects

	Men 1997-2014		Women 1997-2014		Men 1997-2008		Women 1997-2008	
Economy								
Inflation Rate	0.0853	***	0.0203	**	0.0122		0.0340	*
	(0.0138)		(0.0075)		(0.0160)		(0.0148)	
Policy								
Biagi Law	−0.0278	*	0.0476	***	0.0041		0.0554	**
	(0.0122)		(0.0117)		(0.0076)		(0.0177)	
North								
Friuli-Venezia Giulia	0.1071	***	0.6627	***	0.0385	.	0.6305	***
	(0.0272)		(0.0269)		(0.0234)		(0.0353)	
Veneto	0.2504	***	0.0344	.	0.2991	***	0.0299	
	(0.0201)		(0.0200)		(0.0185)		(0.0279)	
Lombardia	0.3073	***	−0.0655	***	0.3887	***	−0.0803	**
	(0.0186)		(0.0185)		(0.0174)		(0.0264)	
Piemonte	0.1006	***	0.0634	**	0.1159	***	0.0460	
	(0.0202)		(0.0202)		(0.0185)		(0.0281)	
Emilia-Romagna	0.2298	***	0.2424	***	0.2385	***	0.2591	***
	(0.0204)		(0.0202)		(0.0186)		(0.0281)	
Liguria	−0.1652	***	0.1785	***	−0.2340	***	0.1953	***
	(0.0249)		(0.0248)		(0.0216)		(0.0328)	
Center								
Toscana	0.1547	***	0.1636	***	0.1479	***	0.1317	***
	(0.0209)		(0.0208)		(0.0189)		(0.0287)	
Marche	0.0420	.	0.4802	***	−0.0225		0.4838	***
	(0.0253)		(0.0253)		(0.0220)		(0.0335)	
Umbria	−0.1034	***	0.6578	***	−0.2588	***	0.7233	***
	(0.0302)		(0.0301)		(0.0255)		(0.0388)	
Lazio	0.0303		−0.2297	***	0.0552	**	−0.2672	***
	(0.0197)		(0.0197)		(0.0182)		(0.0277)	
South								
Abruzzo	−0.0196		0.2130	***	−0.1408	***	0.2889	***
	(0.0264)		(0.0269)		(0.0228)		(0.0351)	
Molise	−0.2916	***	1.0096	***	−0.5865	***	1.1255	***
	(0.0440)		(0.0476)		(0.0356)		(0.0585)	
Campania	−0.1920	***	−0.7467	***	−0.0959	***	−0.7170	***
	(0.0195)		(0.0205)		(0.0180)		(0.0284)	
Puglia	−0.1794	***	−0.5517	***	−0.1466	***	−0.5471	***
	(0.0205)		(0.0216)		(0.0186)		(0.0296)	
Basilicata	−0.2527	***	0.5229	***	−0.4297	***	0.5640	***
	(0.0344)		(0.0378)		(0.0284)		(0.0473)	
Calabria	−0.3231	***	−0.2361	***	−0.3146	***	−0.2436	***
	(0.0236)		(0.0257)		(0.0207)		(0.0338)	
Islands								
Sicilia	−0.2657	***	−0.6766	***	−0.2048	***	−0.6916	***
	(0.0199)		(0.0210)		(0.0182)		(0.0290)	
Sardegna	−0.0801	**	0.3295	***	−0.0949	***	0.2874	***
	(0.0246)		(0.0256)		(0.0215)		(0.0339)	
SARAR parameters								
Spatial Error	0.4822	***	−0.2033		0.1472		0.0497	
	(0.1018)		(0.1694)		(1.2068)		(0.2531)	
Spatial Auto-Regressive	0.1763		0.4218	**	0.1179		0.3616	.
	(0.1198)		(0.1293)		(1.2194)		(0.2062)	

Standard errors in parenthesis.

Table 6

Log Odds of Employment Rate – OECD countries
method: two-step weighted least squares

	Men 1985-2014		Women 1985-2014		Men 1985-2014		Women 1985-2014	
Economy								
Inflation Rate	0.0323	***	0.0054		0.0340	***	0.0067	
	(0.0083)		(0.0060)		(0.0084)		(0.0060)	
Policy								
Protection: Dismissals	0.3502	***	0.0120		0.3641	***	0.0240	
	(0.0958)		(0.0637)		(0.0958)		(0.0639)	
Protection: Temporary	0.1344	***	−0.0767	***	0.1348	***	−0.0739	***
	(0.0264)		(0.0171)		(0.0264)		(0.0171)	
ln(Minimum Wage*)	−−		−−		0.1439		0.1100	.
					(0.1009)		(0.0666)	
Labor Organization								
Union Density	−0.0302	***	−0.0177	***	−0.0284	***	−0.0161	***
	(0.0040)		(0.0028)		(0.0041)		(0.0030)	
observations	475		475		475		475	
R^2	0.883		0.953		0.885		0.953	
F-statistic	46.9		123.8		46.7		122.5	
p-value	0.000		0.000		0.000		0.000	

Standard errors in parenthesis.

Models also include fixed country and year effects. In countries without a statutory minimum wage, the minimum wage variable is a prediction based on real GDP per capita.