Industrial Wages and Workers' Protest in Italy during the "Biennio Rosso" (1919-1920)

Vera Zamagni
University of Cassino

Within the framework of a discussion on the revolutionary potential of the Italian urban working classes in the "biennio rosso" after the 1st World War, there is now a question that can be clarified with the help of recent material on industrial wages and the cost of living. The question refers to the role played by economic demand in the workers' protest of the years 1919-20. Was this demand unsatisfied or accommodated by employers? If it was accomodated, when did the protest become more "political"?

The paper starts by reviewing the available information on industrial wages; the features of the process of inflation in the years 1914-22 will then be analysed in the second section, with the aim of assessing the trend in real wages.

The final section will be devoted to a discussion of the turning point of the "scioperomania" (strikemania) of the biennium 1919-20 which changed from having a mainly economic content to a prevailingly political one.

1. The trend in daily wages

There is no overall official survey of wage rates for the years before 1923.[1] A very partial one exists for 1923,[2] a more comprehensive one for 1925,[3] while data become highly reliable only from 1928 onwards. Fragmentary official and unofficial data exist for all the missing years for various sectors, oc-

[1] V. Zamagni, "La dinamica dei salari nel settore industriale" in *L'economia italiana nel periodo fascista*, edited by P. Ciocca and G. Toniolo, Il Mulino, Bologna, 1976; idem, "Le alterazioni nella distribuzione del reddito in Italia nell'immediato dopoguerra (1919-1922)", in *La transizione dall'economia di guerra all'economia in pace in Italia e in Germania dopo la I guerra mondiale*, edited by G. Mori and P. Hertner, Il Mulino, Bologna, 1983; Idem, "The Daily Wages of Italian Industrial Workers in the Giolittian Period (1898-1913)", *Rivista di storia economica*, 1984.

[2] It surveyed only 314, 254 textiles workers and 18,602 metal workers.

[3] The survey was extended to 759,937 workers: 477,939 in textiles, 256,265 in the metal-engineering sectors, 20,961 in paper making and 4,772 in artificial fertilizers production.

cupations and towns. Their selection and combination in a weighted average is based on:

a) two solid bench-mark years (1911 and 1928, carefully reconstructed in previous works of mine) indicative of the average levels reached by industrial wages (mining and construction included);

b) the reconstruction of yearly series of wage rates for strategic sectors;

c) the selection of weights appropriate to the economic events of the time.

This procedure has been followed in tables 1 and 2, using all the material available in an effort to check by means of an independent estimate the results already reached previously. In table 1, eight series for metal-engineering workers appear plus three series for textile-workers. Some short comments might be useful, starting with the metal-engineering series. It must first of all be noticed that all series refer to nothern firms and therefore their level is slightly higher than average.[4] Moreover, with the exception of series (1), they clearly refer to skilled workers, whose wages were not only higher than average, but were known to have risen less over the war than wages of women and unskilled workers, while making a more sudden jump in late 1920-early 1921. These remarks are useful in trying to build a series representative of the trend in the average wage rates in metal engineering (col. 1 of tab. 2): starting from an average 3.98 lire in 1913 for almost 76,000 workers surveyed, the series progresses year after year by a percentage increase which is the average for the known series, remaining well below, in absolute levels, all the series in table 1, with the exception of (1), and ending up in 1922 at a level compatible, through subsequent year-to-year changes, with the 1928 bench-mark.

In cols. (9)-(11) of table 1 wage rates of textiles workers are also reported. The difficulty here is to find appropriate weights to combine silk, cotton and wool wages. Weights in 1913 being 50-32-18 respectively, they were kept constant in 1914, changed to 30-40-30 in the years 1915-18, in consideration of the slump in silk production and of the relative boom in cotton and wool production for war purposes. In the post-war years, while silk was not reviving appreciably, wool slightly contracted in relative terms (35-40-25). The adoption of these weights yields the series of average textile wages reported in col. (3) of table 2, which differs only marginally from my previously computed one, although the weights adopted here are more carefully selected.

Finally, in table 2 a series for construction workers (col. 5) is reported which starts in 1913 with 3.10 lire and progresses according to the average trend of construction workers' wages in Milan, Brescia and Rome. The three series available — textiles, metal-engeneering, construction — are then taken as representative of wage trends in all sectors, while the levels of the two

[4] The evidence yielding this conclusion comes from the regional data reported in G. Lasorsa, *La statistica dei salari industriali in Italia*, Padova, Cedam, 1931, pp. 27 and 57.

Table 1

DAILY WAGE RATES IN METAL-ENGINEERING AND IN TEXTILES, 1913-1922

(lire)

	METAL-ENGINEERING								TEXTILES		
						ENGINEERING					
	AMMA	FIAT	METAL	Northern Italy	Ship-building	Lombardy		FIOM	Silk	Cotton	Wool
			Falck	FIOM	Trieste	Jarach	Buozzi	Milan			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1913	3.63	5.86	5.64	—	—	—	—	5.10	1.17	2.05	2.40
1914	—	6.21	5.69	5.56	4.40	4.30	5.48	4.90	1.17	2.20	2.56
1915	—	6.81	5.78	5.74	4.40	—	5.74	5.34	1.17	2.40	2.80
1916	—	7.62	6.64	6.79	4.70	—	6.27	5.97	1.20	2.50	3.04
1917	—	9.82	8.45	8.50	6.30	—	9.18	9.18	1.57	2.72	3.94
1918	—	13.28	10.92	11.05	9.90	10.90	11.00	11.50	1.85	3.58	5.32
1919	—	16.26	12.82	13.25	13.45	14.96	13.92	12.98	3.44	5.99	7.31
1920	18.76	25.28	17.88	18.04	19.45	22.16	18.74	18.84	6.60	11.06	12.63
1921	21.89	29.88	22.06	23.69	24.40	26.00	26.00	25.89	6.98	13.10	14.91
1922	22.56	25.36	—	—	23.18	23.52(a)	23.68(a)	23.68(a)	7.61	12.41	12.80

Sources: (1) G. Prato, *Il Piemonte e gli effetti della guerra sulla sua vita economica e sociale*, Bari, Laterza, 1925, p. 137; data collected by the metal employers and referring to 30.000 workers, 54% of whom piece workers, 12% women and apprentices.

(2) daily wage rates of Fiat workers.

(3) -(8) Ministero dell'economia nazionale, *Atti della Commissione di indagine sulle industrie*, v. II, *Relazione sulle industrie metallurgiche, meccaniche e navali*, Roma, 1925. See A. Pescarolo, *Riconversione industriale e composizione di classe*, Milan, Franco Angeli, 1979, for republication of relevant passages.

(9) -(11) Ministero dell'economia nazionale, *Atti della Commissione di indagine sulle industrie*, v. I, *Relazione sulle condizioni delle industrie tessili in Italia*, Roma, 1924.

Notes: (a) first semester only.

Table 2

RECONSTRUCTION OF THE TREND IN AVERAGE DAILY WAGE RATES OF INDUSTRIAL WORKERS 1913-1922 (lire)

	Metal-engineering		Textiles		Construction		New average series	Old series	% difference (7) over (8)
	wage rates (1)	weights (2)	wage rates (3)	weights (4)	wage rates (5)	weights (6)	(7)	(8)	(9)
1913	3.98	25	1.67	33	3.10	42	2.84	2.96	− 4
1914	4.06	25	1.75	33	3.10	42	2.89	3.22	−10
1915	4.26	28	2.15	31	3.10	41	3.13	3.55	−12
1916	5.00	30	2.27	32	3.38	38	3.51	3.88	−10
1917	6.80	31	2.74	33	4.71	36	4.71	5.26	−10
1918	9.60	28	3.58	33	5.15	39	5.88	7.05	−17
1919	12.00	28	5.43	33	8.12	39	8.32	9.34	−11
1920	17.40	28	9.89	33	14.17	39	13.66	13.53	+ 1
1921	22.50	25	11.41	35	16.86	40	16.36	16.63	− 2
1922	21.40	25	10.83	37	16.80	38	15.74	15.68	=
1925	25.09	27	13.71	42	18.79	31	18.35	17.91	+ 2
1928	18.63	27	11.00	40	15.10	33	14.42	14.42	=

Sources: Table 1; G. Lasorsa, *La statistica dei salari industriali in Italia*, Padova, Cedam, 1931 for col. (5); V. Zamagni, "La dinamica dei salari nel settore industriale, *cit.*, for col. (8) and for sources relative to 1925 and 1928.

bench-mark years (1913 and 1928) are comprehensive of most (1911) or all (1928) other sectors. Their combination into one average is the last step carried out in table 2 by means of the set of weights reported in cols. (2), (4), (6). Such weights have been selected to comply with two basic principles: a) textiles rates are representative of wage trends in light industry; metal-engineering rates are representative of wage trends in heavy industry, while construction rates are meant to pick out wage trends in infrastructures, mining, bricks and the like; b) the weights selected must produce the well-established 1913 and 1928 bench-mark values.

As can be seen in table 2, there are two notable changes in the weights adopted. On the one hand, heavy industry's weight has been increased in the war years 1915-17 (not in 1918, because war production collapsed); on the other hand the importance of construction has been diminished in favour of light industry (especially artificial fibres, clothing) in the 1920s, starting in 1922 and peaking in 1925, while leaving heavy industry's weight to fluctuate around its pre-war weight. The resulting over-all average (col. 7), computed with more attention to details than in my previous work, yields a trend that differs only marginally, though in an interesting way, from my previous series reported in col. 8. The interesting difference is to be found in the war years, when the new series appears to remain coherently about 10-11% be-

low the old one, showing that the war dynamics of industrial wages in my old estimate had been overstated (due mainly to an excessive weight granted to the metal-engineering wages and to the failure to use the construction series in computing the overall average).

The relative post-war peak level of industrial wages (1921) remains, therefore, fixed at between 5.5/6 times the 1913 level, with construction wages slightly less dynamic than average, metal-engineering wages and textiles wages more dynamic (almost 7 times the 1913 level) as a result mainly of the shrinking weight of silk, the lowest paid sector, in favour of cotton and wool.

There is wide consensus about the order of magnitude of the increase of between 5.5 and 6 times for the period 1913/14-1921 in the relatively abundant literature of the time. Mortara accepts 5.5 as the correct estimate;[5] the widely — and rightly — criticized article by G. Madia[6] reaches an estimate of 5.7; the more careful work by C. Gini[7] gives 6.2, but includes transport workers and agricultural labourers.[8] Even the incorrectly weighted *Cassa Nazionale Infortuni*[9] series yields 5.3, which is certainly to be considered a too low factor of increase, because the unskilled workers, whose wages increased more rapidly in the period considered, are underrepresented in the series, although less so after the war than before the war.

The fragmented data quoted in Camarda-Peli,[10] Musso,[11] Procacci,[12]

[5] G. Mortara, "Sulle variazioni dei salari nell'industria italiana dal 1913 al 1922", *Rassegna della previdenza sociale*, 1923. He states on p. 17: "Il salario medio del 1921 è, all'ingrosso, cinque volte e mezza maggiore del salario del 1913".

[6] G. Madia, "L'aumento dei salari dal 1914 al 1921", *Giornale degli economisti*, 1921.

[7] C. Gini, "Sul livello dei salari reali nel dopoguerra in Italia in confronto al loro livello prebellico", *Rivista di politica economica*, aprile 1923.

[8] As has been illustrated in another work of mine, agricultural labourers show a rate of increase of 5.4 for the period 1914-21 which does not significantly change the average; but transport workers' wages and the set of weights used might raise the estimated increase. For agricultural labourers' wages, see V. Zamagni, "Distribuzione del reddito e classi sociali nell'Italia fra le due guerre", *Annali 1979/80*, Feltrinelli, Milan, 1981.

[9] See C. Vismara, "I salari degli operai dalle statistiche della Cassa Infortuni", *Rassegna della previdenza sociale*, nov. 1921; C. Lasorsa, *op. cit.* Cfr. also the argument advanced by C. Gini in appendix G of C. Mc Guire, *Italy's International Economic Position*, New York, 1926, p. 533.

[10] In the interesting work by A. Camarda and S. Peli, *L'altro esercito. La classe operaia durante la prima guerra mondiale*, Milan, 1980 there is a discussion of the intensification of piecework, of the structure of wages, including cost of living allowances, of the composition of the working class in the armaments industry. Wage data are also reported for various firms from which weighted averages can be computed for 1916 and 1917, ranging from 4.28 to 6.60 for 1916 and from 4.69 to 7.86 for 1917. Unfortunately, no data are quoted for the same firms for 1913 or 1914.

[11] S. Musso, *Gli operai a Torino 1900-1920*, Feltrinelli, Milan, 1980 reports aver-

Bigazzi,[13] plus the official survey of the wages of 33,482 metal-engineering workers in armaments production plants at the end of 1917[14] are unfortunately not very useful, but do not contrast with the conclusions reached. The widely quoted article by Vicentini[15] on the wages of 67 categories of Milanese workers gives a factor of increase of almost 7 for construction workers, 5.8 for metal engineering workers, 6.2 for textiles, 5.8 for printing and 4.6 for wood workers, exceeding on average the 1913-1921 increase credited above.

Before turning to the much more controversial issue of inflation, it is worth mentioning that the cost of labour for employers increased more than is portrayed by the trend in daily wages, because in early 1919 the 8-hour day was adopted, equating the 8-hour-day wage to the previous 10-12 hour-day remuneration,[16] plus cost of living allowance.

age wages in Fiat 1913-22 (p. 175) and other fragmentary information. On p. 174, the A. notes: "come... un effettivo appiattimento dei ventagli [salariali] si verifichi solo a partire dalla fine della guerra".

[12] G. Procacci (ed.), *Stato e classe operaia in Italia durante la I guerra mondiale*, Milan, Feltrinelli, 1983. The book illustrates the impact of WWI on the composition of the industrial working class (more women and unskilled personnel were put to work), on the organization of the production of arms, on the intensification of piece-rate work. Unfortunately, wage data are rare and fragmentary.

[13] D. Bigazzi, *Il Portello. Operai, tecnici e imprenditori all'Alfa Romeo 1906-1926*, Franco Angeli, Milan, 1988 gives some fragmentary data on wage rates at Alfa-Romeo.

[14] E. Redenti, "Salari degli operai (maschi) nelle industrie metallurgiche e meccaniche mobilitate sul finire dell'anno 1917", *Bollettino del Comitato Centrale di mobilitazione industriale*, oct. 1918, n. 16. The workers surveyed were 33,482, and the average wage 8.86 lire (including cost of living allowance, which was between 0 and 23% of the wage, according to the region). Wages were highest in Piedmont and lowest in Sicily (half those of Piedmont); 74% of the workers surveyed were located in the industrial triangle with an average wage of 9.42 lire (6% higher than the average, 29% higher than in the remaining areas). The average for the metal-engineering sector as a whole computed in table 2 for 1917 is well below 8.86 lire, because it included women, less well-paid workers in non-armament producing firms and a higher proportion of workers outside the industrial triangle. See also M. Antonioli and B. Bezza (eds.), *La Fiom dalle origini al fascismo 1901-1924*, Bari, De Donato, 1978. Some interesting remarks on wages and consumption during the war can be found in P. Melograni, *Storia politica della grande guerra 1915-1918*, Laterza, Bari, 1977, pp. 359-69.

[15] R. Vicentini, "Sulle variazioni dei salari dal 1914 al 1924 in alcune industrie di Milano", *Giornale degli economisti*, 1926.

[16] M. Abrate, *La lotta sindacale nella industrializzazione in Italia 1906-1926*, Franco Angeli, Milan, 1967, p. 211; the A. writes: "Per il nuovo orario di lavoro vennero calcolati coefficienti di reintegrazione in modo che l'importo delle paghe per 48 ore settimanali risultasse uguale ai precedenti di 55, 60 e 72. Oltre all'aumento così accordato alle paghe orarie, furono pure stabilite nuove e più elevate percentuali di cottimo. Per la determinazione dei minimi di paga e della indennità di carovita le parti

2. How much did the cost of living increase?

This is a question I had previously answered in a rough and ready way, simply applying to the series of money wages the ISTAT cost of living index, which yields an increase in real wages for the period 1913-1921 of little more than 1/3,as can be seen in cols. (7)-(8) of table 3. The magnitude of the increase may appear too high in view of the fact that some commentators of the time tended to conclude that the pre-war wage level was hardly reached again in the post-war years. I think I am now in a position to explain why this discrepancy of views may arise.

It must at first be noticed that during the war controls were introduced on the price of certain basic food-stuffs, while rationing was adopted, informally at the beginning and then in a more organized way from early 1917 to the middle of 1921. An increasingly tighter administration of the supply of foodstuffs by the state avoided the total break down of markets through a broad policy of encouraging imports and an effort to prevent acute local shortages[17] though it could not prevent completely the rise of prices. To this it must be added that the state had to requisition large amounts of foodstuffs for the army.[18]

This vast dislocation produced an increase of about 10% in consumption of foodstuffs per capita (average for the years 1915-21), but also a change (though marginal) in the composition of such consumption towards more unusual products like sugar, coffee, beer and meat.[19] Obviously, not every-

concordarono, date le difficoltà di valutazione, di nominare una commissione di studio paritetica". This was the content of the agreement signed in Milan the 20 February 1919 by FIOM and the Engineering Employers Federation.

[17] Which sometimes proved impossible, in spite of all efforts, because of the repeated sinking of cargoes loaded with imported wheat in the Mediterranean sea.

[18] All the details on the Italian government policy of food supplies during and after the war are to be found in R. BACHI, *L'alimentazione e la politica annonaria in Italia*, Bari, Laterza, 1926, which carries a quite interesting appendix by G. ZINGALI on *Il rifornimento dei viveri dell'esercito italiano durante la guerra* where it is shown that the average consumption of foodstuffs by Italian soldiers, while hardly lavish by international standards (it was the lowest in terms of calories), was higher than the average available to the Italian population. See now the works by M.C. DENTONI, "La politica degli approvvigionamenti alimentari in Italia nella grande guerra", in *Studi e ricerche in memoria di Paolo Spriano*, quad. n. 30 degli Annali della facoltà di Magistero di Cagliari, 1988 and idem, "Il problema alimentare in Italia dopo Caporetto: i 'dittatori ai viveri' nel governo Orlando", in *Studi in onore di Gerolamo Sotgiu*, Cagliari, 1990. For a summary statement, see V. ZAMAGNI, *Dalla periferia al centro*, Bologna, Il Mulino, 1990, ch. 7.

[19] This increase in the consumption of non-basic commodities by the popular classes was widely criticized as "waste" (sperpero)! See, for example, V. PORRI, "Riflessioni statistiche sul commercio annonario italiano", *Riforma sociale*, 1920, who accused the state of having produced this "bad" result through its organization of foodstuffs supplies at public expense.

body benefited from this increase in consumption. Those who certainly were better fed than before were the young male peasants who fought the war. The families of industrial workers in armaments firms also had more work and comparatively higher wages, while, as many commentators have pointed out, middle classes generally suffered because their rigid incomes were curtailed by inflation and also because of rationing.[20] We must not forget, in any case, that even after the Giolittian improvements in the standard of living of the Italian population and the relatively positive performance in terms of overall consumption levels during and immediately after WWI, average consumption of foodstuffs per capita in the first half of the 1920s was — according to an expert of the time — equal to the State food allowance granted in the US to the unemployed.[21]

In view of what has been said, it is now possible to appreciate the difficulties that arise in measuring the pace of inflation especially between 1915 and 1920: results will vary widely if more or fewer items with controlled prices are considered, if the content of the reference basket is kept fixed or adjusted to include less expensive items and finally if non-food items (the price of which, especially rent, did not increase as much as the price of foodstuffs) are also considered. The practical difficulties encountered in trying to deal with the additional complications of an already complicated procedure as that of measuring the changes in the cost of living were discussed at the time,[22] but no central statistical office existed which would adopt an accepted procedure and issue an "official" rate of inflation.[23] The task was left to municipal offices, the most active of which was that of Milan which issued four indices (reported in cols. (2)-(5) of table 3), carefully described in their content by Ricci.[24]

It is worth entering into some details. Of the four indices, two include only foodstuffs while the other two are based on the full budget of a working

[20] On the shrinking income of the middle classes see my article "Le alterazioni nella distribuzione del reddito, etc.", *cit.*

[21] M. Camis, "Intorno alle condizioni alimentari del popolo italiano. Considerazioni statistico-fisiologiche", *Riforma Sociale*, 1926. The full quotation (p. 75) reads: "... risulta da queste ricerche che il popolo italiano è un popolo povero. Esso si mantiene in stato di efficienza per compiere il suo durissimo lavoro quotidiano con una alimentazione paragonabile a quella provveduta dalla pubblica beneficenza americana alle famiglie dei *disoccupati*".

[22] See for istance A. Contento, "La guerra e l'aumento regionale dei prezzi", *Giornale degli economisti*, 1918, where among other things it is shown that the price increase was more rapid in the North and Centre than in the South.

[23] The Istituto Centrale di Statistica was created in 1926.

[24] U.Ricci, *Il fallimento della politica annonaria*, Soc. ed. La Voce, Florence, 1925. See also M.C. Dentoni, "Questione alimentare e questione sociale durante la I guerra mondiale in Italia", in *Società e storia*, 1987, n. 37.

class family composed of 5 members prepared by Pugliese.[25] The first index (col. (2)) only includes 9 basic foodstuffs and is obviously very unsatisfactory. It has been reported here only to point out its coincidence with ISTAT's index up to 1918, i.e. during the years in which basic foodstuffs prices were more tightly controlled.[26] A comparison between the full foodstuffs index (col. (3)) and the 9 items index shows that up to 1920 the prices of non-basic foostuffs grew much more rapidly, as is expected.[27] With liberalization of prices in 1921, the two indices converge although they do not necessarily proceed in parallel even in "normal" times, as is shown by the respective 1922 values.

But it is the discussion of the two full budget indices which yields the most interesting remarks. A comparison between the full budget index with fixed composition (col. (4)) and the all items foodstuffs index (col. (3)) confirms that the prices of the non-food components of the working class budget grew more slowly [28] We are then left with the task of explaining the difference between the full budget with fixed composition of foodstuffs (col. (4)) and the full budget with changed composition of foodstuffs (col. (5)). In the former one, the selection of foodstuffs remains unchanged in its pre-war configuration irregardless of what the price of each item becomes as a result of war shortages. A statistician of the time comments that this kind of exercise has "no practical importance"[29] because consumption patterns did change during

[25] Pugliese's interesting surveys have been used by the present writer in the following essay: *An International Comparison of Real Industrial Wages, 1890-1913: Methodological Issues and Results*, in P. Scholliers (ed.), *Real Wages in Historical and Comparative Perspective*, Berg, Oxford, 1989.

[26] ISTAT's cost of living index (created in the 1950s) purports to be representative of the average increases at the country level; we would therefore expect it to be lower than the Milanese index, but not lower than the index of basic foodstuffs controlled by government decrees.

[27] U. Ricci, *op. cit.*, p. 224 reports figures collected by U. Giusti in Florence that give a 140% average increase for 6 controlled items and a 400% increase for 6 non-controlled items between 1914 and 1918 (unweighted averages).

[28] Although the foodstuff indices were more widely used because they were of easier computation, it was well known that "nessuno... può confondere costo della vita e indice dei prezzi quando nel costo della vita entrano altri numerosi elementi che sono regolati in tutt'altro modo come l'abitazione, i trasporti etc", in R. Targetti, "Il cambio e la situazione monetaria dell'Italia", *Rivista di politica economica*, 1926, p. 13-14.

[29] A. Contento, "Sulla misura delle variazioni del costo della vita", *Giornale degli economisti*, 1921, p. 18. The full quotation reads: "A nostro avviso, il calcolo dell'indice di variazione ricavato sulle basi dei consumi *immutati* non ha importanza pratica. Ciò è implicitamente ammesso dall'ufficio comunale milanese del lavoro il quale, di fronte ad esso, calcola pure e vi assegna specifica importanza, quello fondato sui consumi variabili. In realtà, durante la guerra, deve ritenersi che, dovunque e in

the war in all social classes. As a result of this serious criticism, the statistical office of Milan City Council computed a full budget index with changed composition of foodstuffs, including all the rationed commodities plus other items that at each point of time were available at "reasonable" prices and brought total calories per head of the 5 members of the family taken as the unit of reference near to the agreed (and fixed) level.[30] This excercise has a great impact upon the price series up to 1920: the cost of the changed composition full budget reaches 373 while that of the fixed composition full budget reaches 442. Now, it is highly significant that ISTAT's cost of living index is very close to the Milanese changed composition full budget index, remaining slightly below it, as we would expect considering that the increase in Milanese prices was probably more rapid than the average increase.[31]

It is therefore conceivable that ISTAT has worked out its war cost of living index following the principle of the changed composition full budget (see also col. (6) of table 3, where a similar index appears for Rome). In the second half of 1920, computing procedures in the statistical office of Milan City Council were revised and the full budget calculation was put on a new basis: June 1920 = 100. Now, comparing the new Milanese cost of living index with ISTAT's, it can be seen that they are in rough agreement, with year to year compensating discrepancies up to 1927, when the newly created Central Institute of Statistics took upon itself the task of producing an official cost of living index.[32] It makes, however, obviously a great difference if this new index is linked to the fixed or to the changed compostion full index. In the former case, the Milanese cost of living index for 1921 becomes 541, in the latter case 457 (ISTAT's index is 417).

The difference between the two approaches is responsible to a large extent for the different perception of the relative level of post WWI real wages, a difference that persists for all following years. In general, trade unions used the fixed composition full budget,[33] while industrialists tended to use the

tutte le classi sociali, i consumi siano più o meno mutati, coll'abbandono, in tutto o in parte, di alcuni prodotti e l'assunzione di nuovi".

[30] About 2,500 calories per day, excluding wine.

[31] See footnote 22.

[32] This decision has been interpreted by certain writers as a sign of the fascist regime. It was, however, quite normal for the Central Institute of Statistics to take upon itself the task of making price indices.

[33] This is what B. Buozzi did in his hearing before the *Commissione d'indagine sulle condizioni delle industrie*, using, in addition, a wage series (reported here in col. (7) of table 1) that starts in 1914 with the incredibily high average of 5.48 lire per day, while continuing at a pace which is very similar to that of the series quoted by the representative of the employers, Jarach (which, however, starts with a more reasonable 4.30 lire, as can be seen in col. (6) of table 1). It is not surprise that Buozzi concludes that: "risulta... in modo inoppugnabile che, in confronto al costo della vita, i

Table 3
COST OF LIVING INDICES AND REAL WAGES
(indices 1913 = 100)

		MILAN				ROME		
	ISTAT cost of living index	only foodstuffs 9 basic items	only foodstuffs all items	full budget fixed composition	full budget changed composition	complete budget changed composition	real wages deflated with (1) new series	real wages deflated with (1) old series
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1913	100	100	—	—	—	—	100	100
1914	100	92	100	100	100	100	102	109
1915	107	105	—	—	—	109(a)	103	112
1916	134	123	—	—	—	122(a)	92	98
1917	189	178	255(a)	231	—	163(a)	88	94
1918	264	255	319	302	259(a)	238(a)	79	90
1919	268	301	360	327	291	216	109	118
1920	352	405	457	442	373	311	137	130
1921	417	557	558	541	—	—	138	135
1922	414	501	523	502	—	—	134	128

Sources: (1) ISTAT, *Il valore della lira dal 1861 al 1965*, Rome, 1966.
(2) (5) *Città di Milano, Bollettino municipale mensile di cronaca amministrativa e di statistica*, 1918 and following years.
(6) *L'Ufficio municipale del Lavoro di Roma. Bollettino mensile*, 1918 and following years.
(7)-(8) table 2.
Notes: (a) December.

changed composition budget.[34] Commentators of the time were divided but tended to stress the seriousness of the process of inflation. In particular, I recall that Vicentini[35] in his already quoted work on the wage trends of 67 categories of Milanese workers 1914-1924 makes use of the fixed composition full budget, coming to the conclusion that "nel 1924 il salario reale medio giornaliero dell'operaio milanese non doveva differire di molto, in più o in meno, da quello d'anteguerra"[36], after no more than 3 years (1921-23) during which it had been slightly higher. It is this view that is adopted in the article by Consonni-Tonon,[37] who add other considerations on the poverty of Italian indu-

salari attuali degli operai metallurgici e meccanici sono inferiori a quelli dell'anteguerra" (p. 223 in A. Pescarolo, *op. cit.*).

[34] A remarkable case is that of R. Targhetti, *op. cit.*, p. 13 who proposes to average out the two full budget indices.

[35] R. Vicentini, *op. cit.*

[36] *Ibidem*, p. 160 [in 1924 the average real daily wage of the Milanese worker could not be very different from the pre-war level].

[37] G. Consonni and G. Tonon, "Milano: classe e metropoli tra due economie di guerra", *Annali 1979/80*, Feltrinelli, Milan, 1981.

strial workers which appear to apply only to the postwar situation, while they are unfortunately true for the pre-war situation as well.[38] I accept instead ISTAT's view, because it appears to me to reflect more accurately the actual behaviour of working-class families.

It might be argued that it was precisely the confusion about the actual extent of the impact of inflation which helped to bring about a substantial increase in daily wages in a short span of time after the war, an increase that would have probably been more easily resisted by employers if they had been able to demonstrate its real magnitude as they were able to later on. To fully appreciate whether or not the standard of living of the working classes improved in the postwar years, it must also be recalled that the supply of foodstuffs did not get back to normal until 1921, which must have caused hardship to family life, and that the conditions of employment steadily worsened up to the 1921 crisis, before beginning to improve slowly after 1922. In addition, the size of families in consumption units increased as a result of the repatriation of soldiers. It is unfortunately impossible to measure these effects which certainly contributed to making income gains less sizeable for working-class families. Such effects, however, did not completely offset the income gains, because the increase in per capita consumption of foodstuffs already mentioned above and illustrated in detail in table 4 can only be explained by an increased consumption of the working classes (including the rural classes), given that the loss of income of the middle classes was only made up later on, during the 1920s.[39]

3. 1920 is in need of attention

In view of the conclusions reached in the previous section, we can say that, if the war had produced hardship among urban workers, who experienced a loss in their already low wages, the 1919 strikes were more than enough to restore the pre-war level of daily wages and to bring about the long-sought reduction of working time. It can certainly be argued that workers' protests during that year had mainly an economic content: to adjust wages, cut working time and curb inflation.

[38] On p. 407 (*ibidem*), they state that in 1918 no wage was in the position of meeting the expenses necessary for a family with 3.5 units of consumption. But this happened before the war as well, as I have shown in detail in my essay quoted in footnote 25.

[39] It is worth mentioning that consumption of foodstuffs per capita was higher during WWI and the 1920s than after 1934; during WWII it reached 60% of the WWI level, exceeding that level only at the beginning of the 1950s. On the loss of income of the middle-classes, see, in addition to the literature used in my work quoted in footnote 20, G. Nicotra, "Della svalutazione della moneta in rapporto ai mutui ipotecari e alle rendite vitalizie", *Rivista bancaria*, 1921.

Table 4

LEVELS OF CONSUMPTION PER CAPITA 1913-1922
(constant 1913 prices)

	Total private consumption		Consumption of commodities				Consumption of services		Consumption per capita of selected foodstuffs								
			food		non-food				wheat	corn	rice	wine	meat	olive oil	sugar	coffee	beer
	lire (1)	index (2)	lire (3)	index (4)	lire (5)	index (6)	lire (7)	index (8)	Kg (9)	Kg (10)	Kg (11)	l (12)	Kg (13)	Kg (14)	Kg (15)	Kg (16)	l (17)
1913	491	100	311	100	60	100	120	100	172	34	12	135	17	2	5	0,8	2,3
1914	491	100	318	102	53	88	120	100	167	29	14	157	18	4	5	0,8	2,2
1915	500	102	328	106	50	83	122	102	153	29	15	129	18	4	6	1,1	1,5
1916	510	104	335	108	60	100	115	96	163	29	15	56	19	5	6	1,3	2,0
1917	496	101	334	107	52	87	110	92	150	24	20	116	19	6	4	1,2	1,7
1918	518	106	359	116	51	86	107	89	159	26	27	143	21	6	3	1,4	1,0
1919	504	103	339	109	58	97	108	90	175	25	18	109	23	7	5	1,0	2,1
1920	538	110	348	112	75	124	115	96	158	26	13	101	20	3	5	0,8	3,1
1921	526	107	354	114	57	95	115	96	168	30	12	122	18	6	6	1,3	3,8
1922	547	111	363	117	64	107	120	100	178	26	11	91	19	6	7	1,2	3,5

Source: B. Barberi, *I consumi nel primo secolo dell'unità d'Italia 1861-1960*, Milan, Giuffré, 1961 (my elaborations).

The agreement for the 8-hour day was reached, as already mentioned, on 20 February 1919 without much controversy; the fight over the fixing of a minimum wage was more prolonged, but it was over in the autumn. According to Abrate, employers tried to comply with workers' demands concerning wages and hours of work as much as possible[40] in order to ease social tensions, taking advantage of the economic upturn, which was sharp in the latter part of 1919 (and continued for most of 1920).[41]

Inflation was of course something that could not be settled between workers and employers, while the State, due to a vast budget deficit and an unfavourable international situation, was in no position to restore monetary normality. But workers felt able to combat inflation successfully as well, through popular revolts which broke out in July 1919 against retailers. Shops were plundered, sometimes in a form organized by the local *Camere del Lavoro*; municipal authorities intervened to appease the mob by issuing decrees of 50% cuts in prices which produced a great run on goods. Success could, of course, only be temporary, because wholesale prices did not cease to increase. However the cost of living in 1919 changed little, on average, compared to 1918,[42] making it possible to consolidate wage gains.

It is not as a result of frustration of workers' economic demands, therefore, that strikes increased in 1920, as can be seen in table 5, where I have gathered comparative data on strikes for the four largest European countries in the years 1918-23. Before setting out my argument, I will make a few comments on the data of table 5. At first sight, it would appear that the intensity of Italian strikes in 1919-20 is comparable to that of the other large European countries. The number of workers involved is comparable as well as the average length of strikes (coll. (9)-(12)), with the remarkable exception of Britain, known for its interminably long strikes, reaching an average of 48 days in 1921, 36 days in 1922 and 26 days in 1923. But this impression, supported by A. Lay and M.L. Pesante,[43] is, in my opinion, incorrect. The two years

[40] A. Abrate, *op. cit.*, p. 225. The full quotation reads: "Gli stessi Agnelli ed Olivetti, e spesso anche Vincenzo Lancia,... ritenevano onestamente di poter attenuare la tensione sindacale giungendo ai limiti sopportabili delle concessioni economiche ed in fatto di orario". See also D. Bigazzi, *op. cit.*, pp. 335-41.

[41] As I. Barbadoro reports (*Storia del sindacalismo italiano dalla nascita al fascismo v. II. La CGdL*, la Nuova Italia ed., Florence, 1973), the FIOM stated that: "la più grande battaglia combattuta dal proletariato italiano si chiude con la completa soddisfazione degli scioperanti" (p. 381).

[42] For details on the July revolts against rising prices, see R. Bachi, *op. cit.*, p. 169 ff.

[43] A. Lay - M.L. Pesante, *Produttori senza democrazia. Lotte operaie, ideologie corporative e sviluppo economico da Giolitti al fascismo*, Il Mulino, Bologna, 1981. See, for istance, p. 73: "Se quantitativamente gli scioperi italiani non sembrano avere nulla di eccezionale nel primo ventennio del secolo, sembrano invece avere una maggiore continuità, un *trend* più netto sotto le oscillazioni".

Table 5

INDUSTRIAL DISPUTES IN EUROPE. 1918-1923
number of workers on strike and days lost, in thousands

	ITALY		FRANCE		GERMANY		GREAT BRITAIN		n. of days lost per worker			
	workers involved (1)	days lost (2)	workers involved (3)	days lost (4)	workers involved (5)	days lost (6)	workers involved (7)	days lost (8)	Italy (9)	France (10)	Germany (11)	Great Britain (12)
1918	158	906	176	980	716	1453	1116	5875	5.7	5.6	2.0	5.3
1919	1049	18888	1151	15478	2761	33083	2591	34969	18.0	13.4	12.0	13.5
1920	1268	16398	1317	23112	2009	16755	1932	26568	12.9	17.5	8.3	13.8
1921	645	7773	402	7027	2036	25874	1801	85872	12.1	17.5	12.7	47.7
1922	423	6586	290	3935	2566	27734	552	19850	15.6	13.6	10.8	36.0
1923	66	296	331	4172	1917	12344	405	10672	4.5	12.6	6.4	26.4

Source: B. Mitchell, *European Historical Statistics*, Macmillan, London, 1975 (my elaborations).
Annuario Statistico Italiano, 1919-21, 1922-25.

1919-1920 were really exceptional for Italy, if we recall that the number of workers involved in industrial disputes reached a peak of about 30% of the industrial labour force in 1920, while the percentage was around 20% in the other countries.[44] The pre-war peak of workers involved in strikes in Italy was reached in 1905 with 581,000 workers, less than half the 1920 figure. A similar picture is given by the number of workers enrolled in non-agricultural trade unions, reaching more than five times the pre-war level in 1920.

1920 is, therefore, to be considered with great attention when assessing the revolutionary potential of the Italian urban working class, a revolutionary potential that cannot be lightly dismissed.[45] Without attempting a discussion of the extensive literature existing on the "biennio rosso". I will only bind myself to a few remarks arising out of the conclusions reached in section 2 of the present paper together with a rapid overview of the motivations of the industrial strikes of 1920.

If there were no economically impellent need to strike, we would expect that motivations of strikes would turn to matters of "industrial relations" proper: working discipline, factory councils, right to dismiss workers and the like. This is in fact what happened starting in the autumn of 1919 and reaching a climax in February 1920 with the first factory occupation (the Piedmontese Mazzonis).[46] The effects of this new course of industrial disputes were twofold. On the one hand, employers realized that there had been a qualitative change in workers' unrest and called a meeting on 6-7 March 1920 specifically to discuss the matter. They decided to organize themselves more tightly and to become less amenable to workers' demands. On the other hand the traditional strategy of the reformist trade union, aimed at gradual improvements in wages, hours of work and stability of jobs, was discredited and the revolutionary trade union widely increased its popular support and was in a position to launch a major attack against employers in March-April of 1920 in Turin, the stronghold of the revolutionary union. More than 120,000 workers were involved in a dispute which had started over matters like the application of legal time in factories. It was a failure, because the employers

[44] Estimates are approximate, because the exact size of the labour force is not known. Population census data have been employed. It is worth mentioning that the actual impact of truly industrial workers involved in strikes in Italy was higher given that the extent of artisan workers and domestic workers surveyed by population censuses was larger in Italy than in the other countries (with the possible exception of France). Some duplication might also be included, as the same workers could strike more than once during a year, but this applies to all countries and, in any case, remains a sign of the intensity of industrial disputes.

[45] As is recognized by many commentators, even those, like R. Vivarelli (*Il fallimento del liberalismo. Studi sulle origini del fascismo*, Il Mulino, Bologna, 1981) who conclude denying the existence of a "revolutionary situation".

[46] For details, see M. Abrate, *op. cit.*

deployed a clever strategy of resistance; the Piedmontese working class was isolated and the reformist trade union and the socialist party did not come in support.[47]

It is at this point that the reformist trade union decided to come to the fore, again taking advantage of the temporary defeat of the revolutionaries and proposing a more traditionally conceived programme of economic claims which however, included a wage increase of as much as 40%. I doubt that these "excessive" demands would have been issued by a reformist trade union in a different context from the one existing in May-June 1920, when the latter was clearly driven to "compete" with the revolutionary wing for popular support. It comes, therefore, as no surprise that employers firmly resisted, that the reformist trade union was pushed into a corner, leaving room for spontaneous and uncoordinated protests. The end of the story is well known: factories were occupied, a stalemate followed in which no winner emerged but "revolution" did not prove possible. "Normality" was restored in October 1920, signalling the end of the revolutionary situation in Italian industrial towns, without any need to resort to the fascist squads. If two years later Mussolini rose to power, it was not as a direct result of industrial workers' unrest, but chiefly through the inability of political parties to form a stable government.

[47] These and other factors of failure are listed in the still valuable book by P. Spriano, *L'occupazione delle fabbriche*, Einaudi, Turin, 1964. See also by Spriano, *Storia di Torino operaia e socialista*, Einaudi, Turin, 1972. On the split between FIOM and the revolutionary Trade Unions, see also D.H. Bell, *Sesto San Giovanni. Workers, Culture and Politics in an Italian Town, 1880-1922*, Rutgers University Press, London, 1986.