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The politics of quantification: The General Confederation of Italian Industry and the cost-of-living index in the late 1920s

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ABSTRACT

Business interests can indirectly affect political decisions through the definition of statistical procedures to produce the quantitative indexes used to assess policy choices. This observatory capture takes on peculiar technocratic features in authoritarian contexts. This paper focuses on the role of the General Confederation of Italian Industry (Confindustria) in the construction of an official cost-of-living index at the time of the Fascist regime's corporatist turn and the revaluation of the Italian lira in 1926. Wage cuts were determined following the price index, and official procedures to collect data on prices from workers' outlets were adopted to dispel Italian industrialists' concerns about the rise in the cost of production. Following the loss of archival documentation on this matter, the authors have reconstructed the events from indirect sources. The issue of cost-of-living index numbers in Italy under the Fascist regime raises concerns about the credibility of statistics and economic data under dictatorships.

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Introduction

In modern times, defining official statistical procedures became an important instrument for different interest groups to influence policy choices, particularly as economic measures started to be grounded on statistical data with the emergence of index numbers and economic governance during the interwar period (Stapleford, 2009; Tooze, 2001). Although the literature on business interest associations has mostly focused on mechanisms of direct regulatory capture (Laffont & Tirole, 1991)—and, in particular, on lobbying—the concept of the 'deep capture' of the regulator (Hanson & Yosifon, 2003) can be used to identify different means of exerting an indirect and less visible influence on public opinion and legislators.

The literature on indirect or deep capture has tended to deal with the ability of industrial interests to make people engage in 'seeing like a corporation' (Dietrich, 2011, p. 1460) through ways those same people mostly cannot discern. Among these means, advertising (Yosifon,

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2006) and cultural pressure, in general, are prevalently identified as most effective in liberal democracies, while hybrid forms of media capture coupling direct government censorship with indirect influence on publishing decisions through collusion with business are more usual in authoritarian and semi-authoritarian regimes (Frisch et al., 2018). Yet the role of culture and information in framing opinions also includes the data that are made available by authoritative sources. When the presumed neutrality of official statistical data and indicators is exploited to affect decisions, it is possible to speak of an 'observatory capture' (Favero, 2010), which may take place in both liberal democracies and authoritarian regimes, albeit with different implications. In fact, the possibility of a free public debate on official data, which is common in democracies, makes the capture of the observatory more difficult, whilst censorship and intimidation make it easier in authoritarian regimes. Observatory capture—and deep capture in general—is evidently possible not only for business but also for other interest groups and organisations.

Studies in the history of statistics highlight the determinant role of the definition and classification of commensurable objects as a preliminary condition for quantification, which is the transformation of qualities into measurable quantities. Desrosières (1998/1993) has identified in these 'conventions of equivalence' the most important element in a modern system of governance based on the use of quantification to rationalise the assessment of the political conflict on complex issues. The long history of the Consumer Price Index is perhaps the most evident example of the ups and downs of depoliticisation and repoliticisation of a statistical indicator (Stapleford, 2009). The paradox of the purported neutrality of statistics, which has become increasingly necessary for political decisions in modern states, is present in many different institutional contexts and allowed historically for different solutions, ranging from public accountability to technocratic authority (Porter, 1995).

Technocratic governance took on a crucial role in twentieth-century authoritarian contexts when some interest groups tried to make use of technical and administrative rules and procedures to constrain government discretion. This attitude finds its antecedents in the same origins of statistics as a science of the state in the absolutist context of eighteenth-century central Europe (Lindenfeld, 1997; Schiera, 1969) and in the subsequent development, in Germany and in Italy, of an administrative science of which statistics was part (Rapini, 2023). In Fascist Italy, the role of statistics as an instrument for policy became increasingly explicit with the 'Italian school of statistics' led by Corrado Gini, which emphasised specific methodological features focusing on the description of statistical distributions rather than on the probabilistic approach of 'Anglo-Saxon' inferential statistics (Prévost, 2009). The 'reciprocal legitimisation' (Favero, 2017) between the Fascist regime and (neo)descriptive statistics was instrumental to the creation of a consensus towards the regime and used numbers in the interest of the strategic purposes of the regime, from the renegotiation of war debts (Prévost, 2015, p. 67) to the assessment of wage levels (Favero, 2010).

This article seeks to understand how specific statistical series and indexes could become an instrument for political propaganda or for achieving specific political measures. Were the technicalities of index construction under fascism affected by political power or specific interest groups? Were the numbers directly manipulated for publication, or were it the same methods for the construction of the indexes that were devised to attain specific results rather than others? Were such technical choices taken at the government level or by official statisticians?

One of the most important groups of interest in Fascist Italy was the General Confederation of Italian Industry (Confindustria). This research focuses on its role in the construction of a new official cost-of-living index at the time of the Fascist regime's corporatist turn and the stabilisation and revaluation of the Italian lira in 1926. Benito Mussolini's government then adopted a deflationary policy that went together with the legal imposition of an increase in working hours and consumption restrictions.

At the same time, as our findings show, the government asked industrialists to open outlets for their workers, declaring that their prices would be used to calculate the cost-of-living index numbers on which workers' wages would be assessed. This agreement on the official procedures to collect data on prices was useful to dispel Italian industrialists' concerns about the possible divergence between production costs and sales prices in the wake of the revaluation of the currency. To implement the agreement, local bodies, including municipal and provincial authorities, were deprived of any regulatory and statistical competence on consumer prices, but their previous experience in the field was used as a model. It was the same secretary general of Confindustria, Gino Olivetti (Fasce, 2013), who suggested to Mussolini the opening of outlets for workers like the ones that municipalities had set up during the First World War, which the same Fascist government had closed. Il Duce accepted the idea and, in 1926, asked the industrialists to do what their association had proposed, with the agreement that cost-of-living index numbers would be constructed based on those prices. From 1927, the Central Statistical Institute (Istituto Centrale di Statistica, ISTAT) constructed cost-of-living index numbers that went on decreasing until 1934, thus justifying the four consecutive wage cuts that the government deliberated.

The following section details the methodological difficulties we encountered in an inquiry into the influence exerted by interest groups on official statistics in an authoritarian context and the strategy we adopted to cope with them. Information on the antecedents in the construction of a cost-of-living index in Italy follows, which highlights the role of municipalities in the national and international debate on the issue in the early 1920s. We then move on to explain the conditions that made possible an agreement between the Fascist government and Confindustria, and its focus on the construction of a cost-of-living index that the latter would consider to fit their interests, thanks to the role of ISTAT and its president, the renowned statistician Corrado Gini, who collaborated with both Confindustria and the Fascist regime. A final paragraph discusses the relevance of this agreement in the context of the interwar evolution of the Italian economy and economic policy, while also highlighting the implications for the relationship between business and politics under fascism and the reciprocal influences.

Methods and data

A consequence of the technical focus of the agreement between the government and the industrialists on the cost-of-living index was to keep hidden its political implications from the public. Only a few observers were able to detect and denounce them from abroad, although without fully understanding the complexity of the calculation mechanism. The historical literature has also had difficulties in appreciating its relevance, as the archival fund of the Ministry of Corporations was dispersed and Confindustria's archives are incomplete on this period. The available sources on these events are thus scattered in different archives and in the press, which forces the researcher to complete the puzzle piece by piece.

The difficulties in reconstructing the events highlight different methodological issues concerning the historical study of quantification as a political process and as a possible instrument for deep capture of the regulator. One of the effects of the technical nature of quantitative indicators is that most of the relevant choices made in constructing the procedure for their calculation are in fact 'black-boxed'—that is, they are hidden as technicalities and made public only for a very specialised readership acquainted with statistical methods. Even for expert readers, however, ISTAT's official publications were not fully explicit about the details of the criteria adopted to construct the cost-of-living index numbers. The use of examples rather than explicit standards in the same regulations for the collection of prices (ISTAT, 1927) makes it more difficult to assess the possible bias that were introduced in the assessment of the cost of living because of the agreement between the industrialists and the government on workers' outlets. An expert debate on such issues is usually hosted in scientific publications, but this was not often the case in the authoritarian and totalitarian context of Fascist Italy. In private letters, some scholars indeed highlighted the risk of authoritarian silencing of publications questioning ISTAT official statistics or providing different data.¹ The result was that discussions on the index numbers, after some early criticism from the unions, were rare if not absent in the economic and scientific publications of the time, aside from direct appreciation or mentions in textbooks for teaching use.

A second issue, which relates to the political and international context, concerns the same availability of archival information on the details of the negotiations and the agreements between the government and the industrialists on the construction and use of cost-of-living index numbers. The disappearance of the archive of the Ministero delle Corporazioni (Ministry of Corporations), which since 1929 incorporated a large part of the competence of the Ministero dell'Economia Nazionale (Ministry of the National Economy), happened in the context of the transfer of the Ministries from Rome to Northern Italy that followed the armistice of 8 September 1943, and the establishment of the Repubblica Sociale Italiana (Italian Social Republic) under the military protection of Nazi Germany. The subsequent return of documentation to Rome in 1945 did not include the archive of the Ministry of Corporations. War vicissitudes and the lack of conservation, then, justify the loss of the whole archive documenting the relationship between the Fascist government and other actors in the Italian economy, at the same moment when purge trials were started in 1945. The prosecutors thus could not find any official evidence of the involvement of industrialists and other business actors with the regime itself (Nemore, 2018).

The 'silence of the archives' (Decker, 2013) on the matter has forced scholars to adopt an indirect approach, triangulating information from the archives of the institutional and private correspondents of the Ministry of Corporations to reconstruct its same evolution, as Francesca Nemore (2018) has done in a more general perspective. In the case of the agreement between Confindustria and the government on the cost-of-living index numbers, however, given the parallel disappearance of Confindustria papers preceding 1945, this strategy has been made difficult by the lack of archival sources on both sides of the relation of influence.

In this situation, even demonstrating that negotiations took place and that an agreement was reached may be a problem. We have therefore resorted first to the perusal of the main Italian newspaper (the *Corriere della Sera*), which provides evidence of the events concerning such arrangement and makes it possible, first, to locate them exactly in time and to identify further possible documentation by 'following the names' (Ginzburg & Poni, 1991) of other minor institutional actors involved. Specialised periodicals dealing with labour and business

issues and the published proceedings of the meetings of different, minor associations offer some evidence of the discussions going on at different levels on the matter of the cost-of-living index. The archives of Mussolini's Segreteria Particolare (Personal Secretariat) and the archival transcript of official government meetings provide further details to clarify how technical experts, government representatives, and the Duce himself interpreted what was going on. The reader will find in the text specific references to the different sources we mobilised for our reconstruction of the events.

This strategy made it possible to give voice to subjects who were, in large part, silenced or neglected in the authoritarian context of Fascist Italy, but who nevertheless managed to produce writings and comments that highlighted events and deeds that were not well known and that suggest a different interpretive perspective. At the same time, minor actors who were directly involved in the negotiations concerning the index construction and may speak more explicitly could be identified, thus providing further evidence. Following such clues and connecting them with the scattered information available in the historical literature, it was possible to construct a contextual narrative explanation of the agreement between Confindustria and the Fascist government to obtain cost-of-living index numbers from ISTAT, based on which the government would then be able to inaugurate the so-called corporatist turn by reducing wages and satisfying the industrialists' need to reduce labour costs after the currency revaluation decided in 1926.

We have also tried to provide a quantitative assessment of the bias resulting from the political criteria adopted in the calculation of the index. A close reading of the official instructions for the survey of prices, in light of the available economic historical studies on the trend of prices for the different goods included in the basket, reveals that the examples included in the instructions were far from being randomly chosen. The same items mentioned as examples in the instructions were in fact the ones that were the largest contributors in pushing down the index trend, following the historical literature. What is more, some statisticians at the time were able to calculate the actual proportion of goods purchased in workers' outlets out of the total in the most important industrial city, Milan. Comparing their findings with the proportion suggested in the instructions and using the wholesale price trend as a proxy of the trend for prices charged in these outlets, we could then provide an estimation of the effect of the adoption of these instructions on the resulting index. This bias was not enormous, but it was big enough to allow the industrialists to claim further wage cuts when the purchasing power of workers had already fallen below what it had been before the revaluation of the currency.

Building a cost-of-living index in liberal Italy: municipal statistics and the international debate

Measuring the cost of living before fascism

During the First World War, some large Italian municipalities began to calculate cost-of-living index numbers led by the Statistical Union of Italian Cities (USCI), which was established in Florence in 1905 by the mayor of the city, a liberal member of the moderate conservative party that ruled Italy at the time. He was advised by Ugo Giusti, a Florentine municipal statistician (Marucco, 2001), familiar with the International Statistical Institute (ISI; Nixon, 1960, p. 72), who had been inspired by the model of the Verband Deutscher Städtestatistiker (VDSt,

Union of City Statisticians of Germany). The USCI was very close to the Association of Italian Municipalities (ANCI), which was led by Catholics and liberals; established in Parma in 1901, it was dissolved by the Fascist government in 1925. However, the USCI also had the support of the League of Socialist Municipalities, led by reformists, the moderate wing of the Italian Socialist Party (PSI). The League was established in Bologna in 1916, and dissolved in 1922 by PSI, as a new majority of maximalists and revolutionaries took over the party before fascism could suppress it (Gaspari, 2016, 2022).

In Italy, cost-of-living index numbers were calculated monthly, starting in 1912, by the Labour Bureau of the Ministry of Agriculture, Industry, and Commerce (MAIC), which had incorporated the Direzione di Statistica in 1911. Interest in cost-of-living index numbers in Italy and around the world grew along with inflation due to the war. During the war, the municipalities of Florence, Rome, and Milan recorded the prices of food weekly. In Florence, the shopping basket of a typical family of five people (two adults and three children) was used for index calculations. The interest in the cost of living was related to the high inflation that then affected the big Italian cities, along with most other cities around the world (Schiavi, 1920, pp. 11–15). As the national administration of statistics was in a state of deep crisis (D’Autilia & Melis, 2000, p. 56), the municipal index numbers were the most reliable and, at least in 1925, the only ones available in Italy (BIT, 1925a, p. 44).

In July 1920, the socialist reformist municipality of Milan organised, together with the USCI, a conference in which it established the budget of a typical working family, following which it was possible to collect the relevant prices and calculate the cost-of-living index.² The index numbers started from July 1920, the month taken as the basis for index (Schiavi, 1920, pp. 108–117). The conference was part of the municipalities’ attempt to stem the protests of 1919–20, the so-called Two Red Years, when major strikes occurred due to both the economic recession coupled with high inflation and the call of the Bolshevik Revolution. Einaudi (1921, 1924), a well-known liberal economist—who was, since 1922, the Italian correspondent for *The Economist* (Fauci, 1993)—highlighted the importance and validity of the index numbers issued by municipal offices.

The largest Italian cities acted on two levels. The mayors pressed the government through the prefects—that is, the government representatives in provincial capitals—and through ANCI at the national level for a reduction in prices to be pursued through regulatory measures (Einaudi, 1933, pp. 247–256, 359–365). On the technical side, using the index numbers, they laid the foundations for agreements between companies and workers, starting with their own municipal agencies, to adjust wages to inflation. This had been an explicit objective for socialist municipalities since the war years (Schiavi, 1918, pp. 165–166), which was shared by the USCI after the war (Schiavi, 1920, pp. 104–105).

The cities stemmed social conflict with municipal outlets, which sold necessities at low prices. These outlets opened during the war with the consent of the government to limit popular protests for the lack of products or for their high price, as these protests would have hindered the war effort (Gaspari, 2016, pp. 61–64). From the war years until their closure, the municipal cost-of-living index numbers were constructed on the prices charged in these shops, which were open to all customers.

In pre-Fascist liberal Italy—so called because it was ruled by Liberals until the aftermath of the First World War—the USCI had the technical and financial support of the national statistical office (at the time, the Direzione di Statistica inside the MAIC), thanks to the reformist socialist Giovanni Montemartini, the first director of the MAIC Labour Bureau in 1903

(De Nicolò, 2012). On the political level, the liberal government did not hinder the municipalities and their organisations, despite the presence in the local government of socialists, who opposed the government.

Fascism and the rising cost of living

With Fascism, the situation changed radically. On a national level, Benito Mussolini came to power in October 1922 after having trade unionists and politicians killed or intimidated and having conquered the municipalities by driving out socialist and Catholic administrations. He did so with the support of the liberal government, which was worried about strikes and underestimated the subversive potential of the Fascist movement. In 1923, the new Fascist government established offices for statistics inside each of the provincial chambers of commerce and entrusted them with price surveys and the calculation of index numbers with the Royal Decrees (RDs) No. 750 of 8 May 1924, and No. 29 of 4 January 1925. This reform was not, however, pursued: Law No. 731 of 18 April 1926, dissolved the chambers of commerce and transferred their previous competences to the Consigli provinciali dell'economia corporativa (Provincial councils of corporatist economy). Gini's ISTAT would not have any competitor.

At the local level, several municipal offices for statistics were suppressed or reduced, but those of the main cities continued to work and publish their index numbers, led by the USCI, with the support of the new municipal administrations close to Fascism or completely Fascist.

In 1924 and 1925, *La Riforma Sociale*, a prestigious political-economic magazine directed by Einaudi, which was initially close to Fascism, published articles that underlined the deficiencies of the index numbers calculated by the national administration and the reliability of the municipal ones. On the other hand, other liberal economists, who were also close to *La Riforma Sociale*, opposed the construction of index numbers *per se*. In 1925, the magazine published an article by Alberto Geisser, president of the Cassa di risparmio di Torino (i.e. the Turin savings bank; Bocci, 1999), who judged price surveys harmful, because they made people afraid of inflation. Geisser (1925, p. 257) used the metaphor of Molière's imaginary invalid who constantly checked his temperature, despite being healthy. Members of the more conservative ruling class, not just the Fascists, were afraid that the construction of index numbers for prices would provoke conflicts. As Amendola and Vecchi (2017) wrote:

although our knowledge of price movements can help us to understand and solve problems, it can sometimes increase them by creating the premises for political or social conflict: in recording price variations, price indexes highlight and certify the accompanying redistribution of purchasing power. (p. 526)

Italian statisticians in the international debate on the cost-of-living index

In the period after the First World War, the French socialist Albert Thomas, director of the Bureau International du Travail (BIT) (Maul, 2019) sought to affirm the role of the BIT with technical and scientific initiatives, one of which concerned cost-of-living index numbers (Kévonian, 2008, p. 104). The subject was discussed at the first and second Conférence internationale des statisticiens du travail, sponsored by the BIT, held in Geneva in 1923 and 1925 (BIT, 1924, 1925b).

Shortly after that second meeting, another meeting was held by the commission, which had been established by mutual agreement between the BIT and the ISI, in which Giusti received the task of proposing and illustrating a document on index numbers at the 16th session of the ISI, which took place in Rome from 27 September to 4 October 1925 (Giusti, 1926, p. 280). That document was surprisingly contested by two other Italians: Corrado Gini, a professor of statistics at the University of Padua and, since 1926, the first president of ISTAT (Cassata, 2006), and Umberto Ricci, an economist and statistician, at the time very close to Fascism (Ciocca, 2016).

Ricci was the toughest critic and stated scornfully that index numbers were useless: *'there are neither index numbers nor other statistical inventions, more or less elegant, which have the power to change the reality of facts, nor to cause the creation of absent wealth'* (Compte Rendu, 1926, p. 117; emphasis added). The very grounds of Thomas's project, embodied in the BIT–ISI agreement, were being questioned. The debate was interrupted, and the reopening postponed. On the next day, 29 September 1925, the session of the ISI approved a new text, which was very different from the original document.

It is possible that the two Italian delegates wanted additional time, in view of the next official assignment of the matter to ISTAT, but, most importantly, they wanted to throw contempt on Giusti, the USCI, and the cost-of-living index numbers produced by the municipal offices.³ In Rome in 1925, it was also demonstrated that the protagonists on the international scene could only be the national states.⁴ The First World War had erased the international aspirations of the municipalities, which had started with the foundation of the Union Internationale des Villes in Ghent in 1913 (Gaspari, 2002).

Gini dominated the debate on the index numbers for wages starting in the first half of the 1920s. He claimed that real wages had increased compared to their pre-war level, whilst the statistician Giorgio Mortara argued they had decreased and questioned the data provided by Confindustria. Confindustria had entrusted the processing of salary data to the Statistics Laboratory of the University of Padua, directed by Gini himself. The controversy between the two statisticians ended in 1927 with the disappearance of the 'Labour' section from the magazine *Prospettive Economiche*, where Mortara published his own statistics on wages (Favero, 2010, pp. 322–327; Musso, 2016, p. 273). Also in 1927, the Fascist government suppressed the USCI: Confindustria and ISTAT remained the only research institutes dealing with wages and prices in Italy. Gini worked for both and enjoyed the confidence of the Fascist regime.

The Italian industrialists' association and the cost-of-living index

Confindustria and the creation of a corporative system

Confindustria was established in Turin in 1910, and in 1919, it moved its headquarters to Rome during the Two Red Years. Italian entrepreneurs, initially, did not have much confidence in Mussolini, although he had drastically reduced—by force—the activity of trade unions and democratic parties that had promoted workers' agitation. Fascism, in fact, was perceived as an expression of the petty bourgeoisie and middle classes, who had become impoverished during the war and were very hostile to financiers and industrialists, who had enriched themselves (Castronovo, 2010, p. 149). The seizure of power by Fascists in 1922 prompted a gradual rapprochement between the industrialists and Mussolini, starting from 1923. In

January 1925, Mussolini eventually ruled an authoritarian turn, which put an end to the free press, the right to strike, and party freedom. Following the subsequent crash of the stock exchange, in July 1925 he gave way to a protectionist turn to strengthen national industry (Segreto, 2019, p. 18). In the summer of 1925, amid an increasingly serious financial crisis, with the 'lira now on the verge of being overwhelmed by overflowing inflation', the financier and industrialist Giuseppe Volpi, Count of Misrata, was appointed to the Ministry of Finance, and Giuseppe Belluzzo became Minister of National Economy, the department which, in 1923, had absorbed the functions formerly attributed to the MAIC (Castronovo, 2010, p. 191). Belluzzo was a professor of thermal and hydraulic engineering at the Higher Technical Institute in Milan: he was elected to Parliament in 1924 on the lists of the Fascist Party and appointed as minister in 1925 with the approval of the electric industrialists (Melograni, 1966). Volpi was a well-known financier and industrialist in the electrical sector, as well as being among the leading figures in the economic development of Fascist Italy (Segreto, 2019). He was not, apparently, involved in the construction of a new cost-of-living index.

Reassured by the appointment of Volpi, Confindustria, however, was worried about the Fascist unions that had 'begun to fan the flames of the workers' demands in numerous factories in the North for an increase in the cost-of-living allowance following the resumption of the inflationary spiral' (Castronovo, 2010, p. 194). It was in this context that, on 2 October 1925, in Rome, Confindustria and the Confederation of Fascist Trade Union Corporations signed the so-called Pact of Palazzo Vidoni (then the Palazzo del Littorio in Rome, i.e. the seat of the local branch of the Fascist Party). The agreement was the starting point of a shift to corporatism (Abrate, 1966), a system that was supposed to foster 'a positive connection' between the specific interests of workers and industrialists and the general interest of the nation' (Gagliardi, 2010, p. X). Our research and this article, however, show that the corporatist system had its grounds in a political and economic deal favouring industrialists, who were thus convinced to side with the Fascist regime: from 1 January 1926, Confindustria became the General *Fascist* Confederation of Italian Industry (Castronovo, 2010, p. 202; emphasis added).

The agreement between Fascist unions and Confindustria, with the support of Mussolini, did not stop workers' protests, and the industrialists then proposed a solution identical to the one that democratic municipalities had previously elaborated and that had been erased by Fascism. The industrialists opened outlets for the sale of necessities at low prices, on the model of the shops opened by the municipalities during the First World War. However, from the beginning, the new outlets were open only for company employees, although some of them started issuing admission cards to external customers in the following years.

In December 1924, the general secretary of Confindustria, Gino Olivetti, presented to Mussolini a proposal from the Carrara marble industrialists, which provided for the establishment, in January 1925, of a food office in Carrara (Patto di lavoro, 1926), which took on the same name as the entity that had previously managed the municipal outlets, the Ente annonario. The food office that the industrialists of Carrara promoted, as reported in an article of 1926, was 'an experiment, so to speak, of indirect wages: that is, the improvement of the living conditions of the worker, without heavy repercussions on the industry' (Barzetti, 1926, p. 1).⁵

The industrialists tried to stem the workers' discontent in a very difficult economic context, as the speculation on the lira 'began to come alive again' in May 1926 (Segreto, 2019, p. 28)—so much so that, in the Council of Ministers on 31 August 1926, the Minister of Finance, Volpi, afraid 'about the very thoughtful trade balance', asked for interventions 'so that

consumption increases do not have to damage the circulation measures' intended to bolster the lira (Minute del Consiglio dei Ministri del 31 agosto, 1926).

Confindustria and the Italian truck system

With a well-known speech in Pesaro on 18 August 1926, Mussolini officially initiated a policy turn towards the revaluation of the lira, as he was apparently convinced that his political destiny was linked to the strength of the currency. Italian industrialists thought otherwise. The revaluation, in fact, would have made exports more difficult, while there was a risk of a resumption of workers' unrest (Bini, 2021, p. 194).

In the making of the new course, on 30 June 1926, the press announced the measures taken by the government to regulate consumer spending (Royal Decree Law, RDL, 30 June 1926, n. 1096, 'Provvedimenti circa la disciplina di taluni consumi'). All Italian newspapers gave great attention to the decree, which increased working hours from eight to nine and established new measures for the regulation of consumption, suspended the construction of luxury homes, reduced discretionary consumption, and prohibited nocturnal gatherings and the opening of new bars, cafes, taverns, and pastry shops.

In the *Corriere della Sera*, as in other newspapers, almost hidden among other news was the announcement, seemingly unrelated to the decree, of a 'Commission to examine rapidly *the extension, by employers, of the opening of shops of goods of absolute necessity*, to be supplied in good quantities and at a mild price to their workers and employees. *On the prices charged by these outlets, cost-of-living index numbers will be calculated*' (I provvedimenti del Governo per la restaurazione economica, 1926; emphasis added). The Fascist government imitated the 'municipal model', as the industrialists had done before, but twisted its logic. The industrialists 'had to open' factory outlets so that those outlets could sell goods whose low prices were surveyed to lower the cost-of-living index artificially—and the cost of labour with it.

The municipalities surveyed the prices of products to calculate cost-of-living index numbers in municipal outlets and in stores with goods sold at prices set by the government because they charged the lowest prices and were open to everyone (Schiavi, 1920, p. 64; Ufficio del lavoro e della statistica del Comune di Milano, 1921, p. 15). Under Fascism, ISTAT also surveyed the prices for index numbers where they were lowest, but factory outlets were reserved only for a few privileged workers, such as metalworkers.

With factory outlets, the Fascist government gained the favour of the industrialists, who were afraid about rising production costs, and stemmed the workers' protest in the large-scale industries, who were still close to socialist ideas and were concerned about rising prices. No surviving official document reports the government's decision on 29 June 1926 (formalised in the above-cited decree of 30 June 1926), about the opening of the company outlets.⁶ The archive of the 'Commission' established by Belluzzo at the Ministry of National Economy was transferred in 1929 together with all the documents about industry to the Ministry of Corporations, whose archive was, as we noted above, lost (Nemore, 2018).

On 22 July 1926, the president of Confindustria, Antonio Stefano Benni, called on industrialists to follow 'immediately' the instructions received 'for the opening of shops for basic necessities'; Benni was a self-made entrepreneur in metalworking and mechanical engineering, the promoter of the Lombard metal-working industrialist association, and was also very close to Mussolini (Melograni, 1966). The reason for his call was obvious: 'the cost-of-living

indexes to be used for the calculation of automatic variations of goods [...] shall henceforth be calculated based on the prices of the goods supplied by such outlets [opened by the industrialists] and this in accordance with the directives *desired* by the Government' (Gli spacci di consumo per gli operai, 1926; L'Assemblea generale ordinaria dei delegati della Confederazione Generale Fascista dell'Industria Italiana, 1926; emphasis added). Benni certainly did not recall that it was Confindustria that had proposed the opening of workers' outlets to the government: officially, only the government had this power.

Some criticism of this arrangement came from *Battaglie Sindacali*, the newssheet of the General Confederation of Labour (CGL), the old socialist union, which was the target of Fascist squads in the early 1920s and which the Fascist government would dissolve for good in 1927. In 1926, the newspaper wrote that 'fostering the establishment of company outlets and force workers to use them [...] would mean, in our opinion, encouraging the return of the 'truck-system', against which workers of all countries have fought' (La battaglia economica nel settore 'caroviveri', 1926). In fact, the shops opened by industrialists in Fascist Italy can be considered the Italian version of the truck system implemented by English industrialists and described by Engels (1892, pp. 182–183) in *The Condition of the Working Class in England in 1844*, for which workers were forced to accept payment of wages in goods instead of cash, to the employer's advantage (Hilton, 1958).

The well-known statistician Francesco Coletti (Magnarelli, 1982), unlike the CGL, supported the usefulness and fairness of workers' outlets. The statistician praised the most famous chain of outlets opened by industrialists, the 'Liverani outlets', which took their name from their inventor, Francesco Antonio Liverani, who was the secretary of the consortium of mechanical and metallurgical industrialists based in Milan, of which the president of Confindustria, Benni, had been the main promoter. The statistician—neglecting their instrumentality for the cost-of-living index numbers, of which he could not have been unaware—wrote that the shops reduced the burden due to price increase of necessities with 'not a dissimilar effect of higher monetary rewards, [...] the diametral antithesis of the old truck system' (Coletti, 1928, p. 14).

Even Fascist unions expressed their disagreement, not with the government's decision of June 29, but how Confindustria interpreted it, which was defined as a 'devious precondition'. In their opinion, prices for the index numbers should be collected in the company outlets only when their spread 'will be fully realised, but to attain this *much time is needed. Nothing should be changed today*' (Gli spacci degl'industriali e i salari, 1926; emphasis added). The Fascist unions could not denounce the pact between the government and Confindustria because, officially, there could be no pact—only the Fascist government had the power. Confindustria, however, had the full support of the government, and even Fascist unions were forced to accept its interpretation. This explains what Roberto Romano (1983, p. 712) defined as the 'real "flowering" of company outlets' that took place in the second half of the 1920s, despite which, however, the living conditions of workers worsened (p. 740).

The government, according to corporatist principles, wanted to prove, especially to Confindustria, that it was able to mobilise its own forces, in this case, the cooperatives that had been established by the socialists and the Catholics and were then controlled by the Fascist Party. On 1 July 1926, Mussolini declared that 'The increase in wages creates a vicious circle from which derives not a decrease in the cost of living but an increase in the cost of food' and asked Dino Alfieri, commissioner of the National Cooperation Agency (Pastorelli, 1988), and Bruno Biagi, president of the National Fascist Federation of Consumer Cooperatives,

to 'increase the quantity of goods available [..., and] get the middlemen out of the way' (Tre discorsi dell'on. Mussolini. Il movimento cooperativo, 1926). However, there was no mention of the cost-of-living index numbers to be calculated on the prices of products sold by Fascist cooperatives.

ISTAT and the new cost-of-living index

In July 1926, the Fascist government established ISTAT and put an end to the protracted crisis of national statistics. In February 1927, shortly after its foundation, ISTAT had the task of 'drawing up cost-of-living indexes' (RDL 20 February 1927, n. 222, Article 1) and thus translating into numbers the agreement between the government and Confindustria, which had been formalised on 30 June 1926. The work carried out by the municipalities in the previous decades was cancelled by law, after having been mocked in Italy in 1924 (Gaspari, 2022, pp. 103–105) and challenged internationally in 1925, both times by Corrado Gini. As we shall see soon, Gini was the only one who was acquainted with the 'municipal model' and who had the connections and the reliability to propose a new cost-of-living index as a solution to the converging needs of industrialists and the Fascist government. There are no records left, but Gini is the most likely mastermind, if there was one, behind the *Italian truck system* proposed by the Council of Ministers on 29 June 1926.

In the regulations for the formation of cost-of-living index numbers, prepared by ISTAT, the index was manipulated to satisfy the political and economic needs of the Fascist regime. ISTAT, while noticing the scientific inconsistency of the governmental indications of 29 June 1926, decided to take them into account for their great political importance:

A serious question arose with regard to the prices charged in the special shops set up in favor of certain classes: to ignore completely this effort, which the Government asked and the industrialists orderly accomplished, was not possible; to include these prices in the calculation instead of those borne by the majority of citizens would not have been fair: It thus seemed appropriate to take into account these prices only in part and when consumption at the shops is considerable, as it will be more explicitly indicated in the second part of the instructions. (ISTAT, 1927, p. 9; emphasis added)

The subsequent methodological chapter laid down the percentages of such shops in which prices should be recorded: 'it may be established that, out of 15 shops where the price of rice is to be recorded, 3 should be workers' shops, for example, *because it appears, or is assumed, that these shops sell about one fifth of the rice consumed by the working class*' (ISTAT, 1927, p. 11; emphasis added). ISTAT then suggested—or rather, literally established—a precise percentage only for outlets opened by industrialists, on which 20% of retail price surveys were to be made: 3 out of 15. ISTAT's instructions, however, also concerned the product: rice. De Bernardi (1993, p. 74) has shown that the collapse of 'over 40 per cent during 1927' in the price of rice, one of the nine products in the basket for calculating the cost-of-living index, strongly influenced the fall of prices in Milan. Without rice, in fact, retail prices in Milan in 1927 would have fallen by 17.7% and not 19.7%.⁷ This particular specification of the weight to be given to products sold in workers' outlets, specifically highlighting rice as an example, suggests that the same idea of using the prices of products sold in workers' outlets for the construction of index numbers was planned at the highest technical and political level.

All clues, as (Ginzburg, 1990) would call them, lead to Corrado Gini, who, as a professor in Padua, collaborated with Confindustria. In 1925, he signed the Manifesto of Fascist Intellectuals and was one of the 18 'wise men' Benito Mussolini commissioned to draft the Fascist Constitution (Giorgi, 2012). He alone would have been able to combine the economic needs of the industrialists with the political needs of Mussolini, satisfying both with a scientific mastery that would not have compromised the authoritativeness of ISTAT—nor his own, as its president. Not a single fellow statistician mentioned this manipulation, not even Coletti, who praised the Liverani outlets, which is in line with his appreciation of all corporatist measures that eliminated the conflict between capital and labour in the name of the interests of production (Magnarelli, 1982).

The industrialists had to be satisfied with ISTAT. They were so much afraid of the potential inflationary effects of a missed adjustment of wages to price deflation, that even 'their' Minister of the National Economy, Belluzzo, was so annoyed as to call the industrialists themselves 'the hornets of inflationism' in a letter to Mussolini on 23 May 1927 (Belluzzo, 1927), although Mussolini also had to be regularly reassured about the cost-of-living level, and it was his Minister Belluzzo who did this, even mocking the industrialists who had wanted him in government, as the above-cited letter in the archives of the Duce's Segreteria Particolare shows.

In March 1932, the *Corriere della sera*, the newspaper based in Milan, published partial but indicative data autonomously collected by the statistician Guglielmo Tagliacarne, the former director of the Bureau of Statistics in the Chamber of Commerce and Industry of Milan (D'Autilia, 2019). His tentative assessment of the representativeness of outlet prices was the only critical intervention in the methodological construction of the cost-of-living index that we have been able to find. By necessity, Tagliacarne could consider only the situation in his city, which was, however, by far the largest industrial centre in Italy.

The goods sold in the largest workers' shop in the city, the Liverani store, opened in 1927 by metalworking industrialists, amounted to 150,000 lire per day, equal to 3.3% of the total consumption of the Milanese population; the 'Provvida', the store managed by the Italian State Railways for railway workers and municipal employees, sold 30,000 lire of goods per day—that is, 0.6% of the total. Fascist cooperatives sold 300,000 lire worth of products, or 6.5% (La spesa per mangiare: Una interessante statistica, 1932). Thus, only 3.9% of goods were sold in the 'workers' shops. Adding to this the goods sold in the Fascist cooperatives for 6.5% of the total (even if they were not mentioned in the official instructions) only yielded a sum of 10.4%. Almost 90% of the total expenditure took place in classic retail stores, and it must be considered that Milan was the largest Italian industrial city. The prices charged by Liverani workers' shops on 3.3% of the goods sold in Milan, according to ISTAT's instructions, should then be weighted 20% of all the prices collected in the construction of the cost-of-living index numbers.

Thanks to RDL 222/1927, and to subsequent regulations drawn up by Gini's ISTAT, the sales of necessities that took place in a few shops, for a minority of working families, could decisively influence cost-of-living index numbers for all Italian workers and, therefore, their wages. It was in fact thanks to this index number calculated by ISTAT, which showed a continuous decrease in consumer prices, that the Fascist government was asked by industrialists to cut the wages of workers with the justification of deflation, thus securing the support of these industrialists, who increased their profits.

The corporatist reorganization of labor markets did not align wages to the ethical and social principles claimed by fascist economists, but rather increased the pressure on wages. The share of capital remained high and increased for most of the period – possibly contributing to consolidate industrialists' support of the regime. Level, trends, timing: *all of the labor share evolution seem to vindicate classic, anti-fascist interpretations.* (Gabbuti, 2020, p. 16, emphasis added)

The only scholar of the time who raised explicit and well-grounded doubts about a manipulation of the cost-of-living index numbers carried out by the Fascist state was Gaetano Salvemini, to whom Gabbuti (2020) implicitly refers. Salvemini, a professor of modern history at the University of Florence, was an antifascist close to the left, in exile since 1925, who was appointed professor at Harvard University in 1934 (Moretti, 2017). In 1936, writing from the United States, Salvemini mentioned the cost-of-living index numbers published by the major Italian cities up to 1926 and pointed out that, following the transfer to ISTAT of their construction and publication, the trend had started a continuous decrease, thus justifying similar reductions in wages:

The index numbers of the cost of living were compiled until the end of 1926 by the municipal governments of the most important cities in Italy, and they were used in the negotiations between employers and employees as a basis for determining wages. In 1921 the industrialists began to contest these figures because, they said, they had no means to verify their accuracy. On 20th February 1927, a royal decree entrusted the duty of compiling index figures on the cost of living to the *Istituto Centrale di Statistica*, which was put under the immediate control of Mussolini. From then on, no wage cuts took place which were not declared to be justified by a decrease in the cost of living. (Salvemini, 1936, p. 256)

The economic consequences of the cost-of-living index

A tentative technical assessment

Scholars dealing with the political history of interwar Italy repeatedly refer to Salvemini when arguing that ISTAT's cost-of-living index was manipulated (Lyttelton, 1973, p. 503). Despite this, economic historians prefer to use the ISTAT index and consider it more complete than other existing indices, as well as being a consistent indicator of variations in prices (Zamagni, 1976, p. 338, 1994, pp. 352–353). The most relevant technical objection to the arguments against the reliability of ISTAT's interwar cost-of-living index concerns the supposed effects of a selective price collection not only on the level of the index but also on its trends. In fact, the inclusion of the lower prices collected in factory outlets for a larger proportion than their actual market quota has the obvious effect of decreasing the absolute average level of prices, but not necessarily its variations. To cause a steeper decrease in the index, the proportion of data collected in outlets should have been gradually increased, or prices in these outlets should have declined faster than in the general market.

However, the latter may exactly have been the case, if we consider that outlet prices probably closely followed wholesale prices rather than retail prices, as they eliminated most commercial intermediation. Data on wholesale prices were collected only for single products, but they show a decidedly faster decrease than the average cost-of-living index. The price of a litre of milk bought at the farm decreased by 54.5% from 1926 to 1933, but for a litre bought in a shop, the decrease was only 37.6%, following ISTAT's cost-of-living index. The same was true for potatoes, which were worth 65.8% less at the farm, but only 52.4% less in

the shops, or for rice, with a 63% price decrease at the farm and only 50.3% in the shops (the authors' elaboration from ISTAT, Serie storiche, Tables 21.6, 21.4, and 21.1; original data from the *Bollettino quindicinale dei prezzi*, 1927–1935). Supposing that outlet prices closely followed wholesale prices implies that the inclusion of the price of rice at the outlet in the index for a 20% quota, instead of a more realistic 10% (as shown by Tagliacarne's data mentioned above), would emphasise the downward trend in the retail price of rice by around 1.4%. The emphasis would be 1.5% for potatoes and 1.9% for milk. The correct decrease should be 48.9% instead of 50.3% for rice, 50.9% instead of 52.4% for potatoes, and 35.7% instead of 37.6% for milk. Not such a big difference, but possibly enough to support arguments in favour of further wage cuts in the years with larger gaps, such as 1930, 1931, and 1933.

The cost-of-living index as a tool to assess wage cuts

Which actual political effects did the emphasised downward trend in the cost-of-living index have? How was the industrialists' association indeed able to use it, together with the data on nominal wages, as an argument to claim for further wage cuts to be approved by the government? With the Law of 3 April 1926, No. 563, the Fascist trade unions (redenominated as workers' corporations) became legally recognised public bodies. The government supervised and controlled the workers' corporations and had the power to ratify and revoke their leaders. The same corporations were allowed to enter binding employment contracts for the whole category. The right to strike and the right to lock-out were abolished at the same time, because every dispute was entrusted to the labour judiciary, better defined in the subsequent Labour Charter of April 1927 as the Labour Court. The control of workers' organisations ensured that the scheme was a fundamental instrument for adjusting wages in the various sectors to the needs of national production through measures of legal value. It thus became possible to guarantee manufacturers a reduction in labour costs to maintain the competitiveness of Italian export products despite the revaluation of the lira, and at the same time to reduce imports by compressing workers' incomes and thus domestic demand (Toniolo, 1980, pp. 123–126).

This first experiment of forced control of the labour market was not limited to adjusting wages to the lower level reached by prices, but in fact, produced a reduction in their purchasing power. The first wage cut of 10%, proposed in May 1927 by the Fascist unions, was not considered sufficient by the Fascist Party leadership, which in October of the same year fixed at 20% the overall reduction in wage levels (Zamagni, 1976, pp. 337–338). This correction was based on the trend of ISTAT's cost-of-living index published since 1927 in the *Bollettino mensile di statistica*, with reference to the average of the different indexes calculated for 50 Italian cities on the basis of prices charged in the most popular shops, including a significant share of company outlets, for a basket of goods defined by the municipal statistics offices for a family of five relative to the specific consumption habits of each city (ISTAT, 1927, p. 9).

The sharp decrease in the cost of living, thus measured, exceeded the wage reductions agreed upon between Fascist unions and industrialists in 1929. This gap was used by Confindustria in May 1930 to ask the government for a further general cut in wages: the *Rivista di politica economica*, the house organ of Confindustria, published a note by Roberto Targetti (1930, p. 441) that estimated a 15% decrease in nominal wages between 1926 and May 1930, against a decrease in the cost of living of 20%. Following these claims, a further wage cut of 8%, on average, was granted in November 1930 (Zamagni, 1975, pp. 538–539).

In subsequent years, the rise in unemployment, the adoption of shifts, the reduction of overtime, and a whole series of expedients used by companies to reduce labour costs—from the revision of piecework to the downgrading of qualifications, up to the replacement of elder workers with younger ones and of men with women—brought the level of workers' incomes to the limit. In March 1932, the situation was considered untenable by the Fascist unions, so much so that the Central Corporate Council decided not to authorise further wage reductions. Nevertheless, the cuts agreed at the company level continued and gave rise to controversies in the official organ of the Fascist unions, *Il lavoro fascista*, which polemically highlighted that industrialists seemed convinced that wage reductions could solve any disadvantages deriving from the functional incapacity of a company or an industry (Clavenzani, 1932; Salvemini, 1936, p. 124).

The further drop in the cost of living measured by ISTAT's index in 1933 justified a final official wage cut of 12% in spring 1934. The introduction of the 40-h week followed in October 1934, thus reducing workers' earnings even more (Zamagni, 1976, p. 339). From summer 1934 to summer 1936, ISTAT's cost-of-living index measured a 13% growth in the average level of prices linked to the Ethiopian War, economic sanctions, and the introduction of an autarkic policy. Only in July 1936 did a deliberately lower increase of nominal wages by 8% appear. Subsequent increases of 10% each in April 1937, March 1939, and March 1940 also remained below inflation as measured by the index (Griffon, 1945, pp. 158, 183–185; Zamagni, 1976, pp. 340–341).

Such decisions were based not only on the cost-of-living index but also on an assessment of the actual adjustment of wages to changes decided or agreed upon at the central level, based on companies' accounts. Confindustria's initiation, in 1928, of an independent survey extended to all its associates convinced ISTAT to publish in the *Bollettino mensile di statistica*, from January 1930 on, the hourly earnings of industrial workers as calculated by Confindustria, whose survey was thus given official weight. In fact, according to the law, the primary criterion in defining the political adjustment of wages had to be the protection of the 'higher interests of production' (Law 1926, No. 563, art. 16): it thus made sense to take a measure of wages as the cost of a working hour for industrialists and to compare that with the trends in prices that most affected them. A privileged reference to the prices charged in the factory outlets could thus also be justified.

Conclusions

This article inquired into the indirect political influence exerted by business interest groups through their role in the construction of statistical series, with a specific focus on the construction of an official cost-of-living index in Fascist Italy. The difficulties in conducting this research have been highlighted in the second section. Following the loss of the main archival sources documenting the relationships between the industrialists and the government, we resorted to a systematic triangulation of unexploited published and archival sources to provide an assessment of the effect of the inclusion of outlet prices in ISTAT's cost-of-living index, which complied with the effort started by the industrialists and by the government to reduce the apparent cost of living for workers through outlets.

This inquiry clearly shows that ISTAT's cost-of-living index, as devised in the 1920s, was a political instrument that performed multiple tasks. As a single statistical indicator

synthesising the complexity of the price trends, it allowed the Fascist government to make centralised decisions about the level of wages throughout the whole country. What is more, the calculation procedure adopted, which included a larger than the proportional contribution of the prices charged in workers' outlets, reassured Italian industrialists of the ability of the government to protect their higher interests in the wake of the revaluation of the lira. To answer the first of the research questions put forward in the Introduction, this was how the technicalities of index construction were influenced by business interest groups. The methods for constructing the index were created following political considerations, rather than by directly falsifying the numbers for publication, which would have undermined ISTAT's reputation.

As some opponents of the Fascist regime have already suggested, ISTAT's index, as it was then devised, provided the industrialists with arguments to call for further wage cuts, which brought wages far below the purchasing power they had possessed before the implementation of the corporatist system, thus increasing the share of profits. As far as the index could be used as an argument to support such specific claims, it was also the main element in the reciprocal legitimation between the Fascist government and Confindustria (Favero, 2017). The consent of industrialists to the Fascist economic policy after 1926 also relied on their trust in the numbers ISTAT authoritatively provided on the cost of living, which were constructed following the technical judgement of statisticians of confidence—first among whom was Corrado Gini, given his long-time scientific collaboration with Confindustria and the trust he enjoyed of Mussolini.

The issue of the cost-of-living index numbers also raises a concern about the credibility of statistics and, more generally, of economic data in a nation ruled by a modern dictatorship, among which Italy was the first in contemporary Europe. Fascism in Italy proved that, along with abridging the freedoms and rights of its citizens, a dictatorship, much more easily than a democracy, can also deny freedom of research, discussion, and study on statistical and economic data, for the convenience of its own and of lobbyists supporting it.

Notes

1. Giorgio Mortara wrote on 20 May 1928, to Alberto De' Stefani that he was afraid 'that their colleague Gini may cause an *ukase* for my suppression, or at least of my *Prospettive economiche*' (Marcoaldi, 1986, p. 193).
2. The budget included expenses for food, rent, lighting, heating, clothing and miscellaneous (Schiavi, 1920, p. 16).
3. It should be noted that, according to the data published by the BIT (1925a), all of the offices of the 29 countries, mainly European, which published cost-of-living index numbers depended on the national government (especially on the administration of statistics or labor), except for Germany, where the data were published by some large cities, or in Hungary, where the Association of National Industry was in charge of them, and in Italy and the Netherlands, where they were produced exclusively by municipalities.
4. Gini highlighted this purpose the following year in the third conference of labour statisticians (International Labour Office, 1926).
5. The Carrara Authority was directed by a board of directors with 25 members, 12 industrialists, including the president, six workers, six employees, and 'a representative of the Ministry of National Economy' (Atti della associazione nazionale del marmo, 1926, p. 22).

6. In the minutes of the meeting of 29 June 1926, it is written only that: 'The Council of Ministers [...] authorized the Minister of National Economy [Giuseppe Belluzzo] to study measures to improve production with the effect of limiting imports' (Minute del Consiglio dei Ministri del 29 giugno, 1926).
7. The nine products included in the basket were bread, wheat flour, pasta, rice, beef, lard, butter, milk, and [olive] oil (Schiavi, 1920, p. 33).

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