

Giacomo Gabbuti

Da: Editors of the Annals of the Fondazione Luigi Einaudi
<editors@annalsfondazioneLuigieinaudi.it>
Inviato: sabato 3 giugno 2023 23:24
A: Giacomo Gabbuti
Oggetto: Decision on your submission

Dear Giacomo,

on the behalf of the Editors of the *Annals of the Fondazione Luigi Einaudi*, I'm glad to inform you that your paper titled

"*Fiscal Sources and the Distribution of Income in Italy: The Italian Historical Taxpayers' Database*" has been accepted to be

published in the forthcoming volume n.1/2023 of the Journal .

Thank you for contributing to our Journal

best

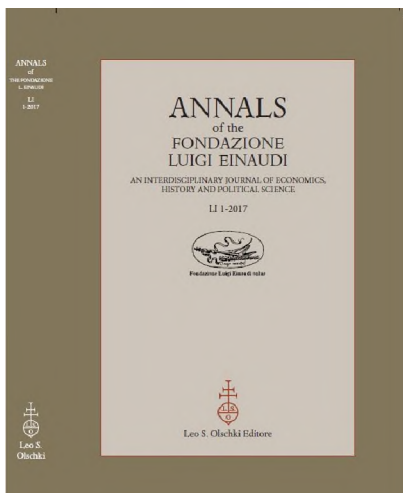
Angela Ambrosino

--

Annals of the Fondazione Luigi Einaudi.
An Interdisciplinary Journal of Economics, History and Political Science

The Editors

www.annalsfondazioneLuigieinaudi.it



INSTITUTE
OF ECONOMICS



Scuola Superiore
Sant'Anna

LEM | Laboratory of Economics and Management

Institute of Economics
Scuola Superiore Sant'Anna

Piazza Martiri della Libertà, 33 - 56127 Pisa, Italy
ph. +39 050 88.33.43
institute.economics@sssup.it

LEM

WORKING PAPER SERIES

Fiscal Sources and the Distribution of Income in Italy: The Italian Historical Taxpayers' Database

Giacomo Gabbuti ^a

^a Istituto di Economia and L'Embeds, Scuola Superiore Sant'Anna, Pisa, Italy.

2023/24

June 2023

ISSN(ONLINE) 2284-0400

Fiscal Sources and the Distribution of Income in Italy: The Italian Historical Taxpayers' Database¹

Giacomo Gabbuti

(Istituto di Economia and L'Embeds, Scuola Superiore Sant'Anna, Pisa)

giacomo.gabbuti@santannapisa.it

JEL Codes : D31, H26, N34.

Keywords: income inequality; fiscal sources; Fascist Italy; Imposta di ricchezza mobile.

This draft: May 15, 2023.

Abstract

This paper documents the ongoing construction of the Italian Historical Taxpayers' Database (IHTD), currently consisting of 1,593,563 micro-records of income declarations filed by Italian autonomous workers in 1889, 1922 and 1933. Such a database results from the digitisation of a so far overlooked source, the printed lists of taxpayers' declarations for some categories of the *Imposta di ricchezza mobile*, the most important Italian direct tax on income until the early 1970s. To contribute to the 'rediscovery' of these sources (and Italian fiscal sources in general), the paper surveys the history of the taxpayers' lists in post-unification Italy, as well as the 'classic' arguments against the reliability of fiscal sources, in the light of available evidence. This makes possible to discuss how, while inevitably affected by biases and limitations, these sources offer historians a new perspective on the incomes of important social groups, and do so with an unparalleled level of granularity in terms of activities, geography, and gender, contributing in this way to the history of inequality during the Fascist period, and potentially to the broader economic history of post-unification Italy.

¹ This paper, resulting from my doctoral dissertation (Gabbuti, 2021b), benefitted from comments and help by many scholars over the years in which that dissertation was conceived and written. Among many, I am grateful to Brian A'Hearn, Paolo Bozzi, Mario Cannella, Stefano Fenoaltea, Stefania Licini, Francesco Maccelli, Stefano Manestra, Sauro Mocetti, Marco Molteni, Dario Pellegrino, Paolo Piselli, Stefano Ungaro, Vera Zamagni.

1. Income Distribution and the History of Fascist Italy

What happened to economic inequality during the Fascist period? This simple question can be easily complicated by specifying what we mean by economic inequality: Wealth or income? Personal or functional distribution? And what about differences between genders, groups, territories? Within the recent, renewed interest for the economic and social history of Fascist Italy (Segreto, 2020), new research has tried to improve our understanding of the distribution of incomes between the period, in order to address at least some of these questions. What is now commonly defined as ‘inequality’ has indeed represented a standard component of more classic approaches, addressing the political economy of the Fascist regime: an early, still unparalleled macro-economic history of the period, such as Toniolo (1980), discussed at length the distributive consequences of economic policies, mostly relying on the extensive work on workers’ wage series carried on by Vera Zamagni since the 1970s (e.g., Zamagni, 1975). Personal income inequality was also among the major interests of applied Italian economists and statisticians between the end of the liberal period and the Fascist regime (Gabbuti, 2020), making the comparison between modern and ‘historical’ estimates of inequality a further reason of interest, in between economic history and the history of economics (Gabbuti, 2019).

Among the crucial distributive ‘legacies’ of the Fascist regime we can also include the divergence in the relative fortunes of Italian regions: according to the seminal works by Emanuele Felice, the whole interwar decades, and especially the 1930s, were characterised by an acceleration in the increase of regional divides, peaking with World War II. Rather than accidental, Felice (2011, p. 947) attributes these results to ‘the demographic, agrarian, anti-migratory, and autarkic policies of the fascist regime’, that ‘may have further hampered the prospects of economic progress in the south’. Developments in political and social history, such as the discussions on the alleged support paid by particular social groups and classes across the twenty years of Fascist rule, the peculiar developments in the many local contexts in which Fascists did interact with pre-existing elites (Melis, 2018, pp. 213-251), or the increasing attention to the condition of women under the Fascist rule, after the

pioneering study by Victoria De Grazia (1992), contribute to making more fine-grained quantifications of the distribution of income and wealth in Italian society during the interwar.

As for wealth, the quantitative discussion is currently prevented by the lack of sufficient statistical evidence, at least in the absence of large-scale digitisation projects.² In terms of income, the aforementioned works on wages do not allow to discuss the entirety of the distribution; when, combined with labour inputs and national accounts, they do so in terms of factorial distribution, this leaves the historian reader with curiosity about specific groups and classes.³ Similar problems affect also the more advanced estimates, such as those obtained by Giovanni Vecchi and co-authors, based on an innovative database of historical household budgets (Amendola et al., 2011; A’Hearn et al., 2016; Amendola and Vecchi, 2017). Their decadal Gini estimates for household incomes, while capturing the ‘exceptionality’ of the Fascist period by describing the increase in the share of households in absolute poverty and the inequality extraction ratio between 1921 and 1931, are silent on later years; shorter-run variations; regional, gender and class differentials; and so on.

To try to overcome at least part of these limitations, some of the aforementioned new researches have thus explored the adoption of fiscal sources – possibly the most common source for historical studies on the distribution of income, since the earliest works in the 19th century (Gabbuti, 2020, p. 437), and even more after the launch in 2011 of the World Top Income Database, now World Inequality Database (WID.world), run by the World Inequality Lab at the Paris School of Economics.⁴ In Gabbuti (2022), I adopted the Italian equivalent of the very same fiscal source adopted by Piketty and co-authors – the tabulation of the *Imposta complementare*, the income progressive surtax introduced by the same Fascists in 1923⁵ – to proxy the incomes of the richest Italians. Different fiscal sources – the average declarations of individual taxpayers for the *Imposta di ricchezza mobile*, the

² For a discussion of the existing evidence on regional aggregate wealth, and the archival evidence produced by the inheritance tax, see Gabbuti and Morelli (2023).

³ For estimates of the labour share in 1895-1950, and a discussion on the importance of factorial distribution in historical analysis, see Gabbuti (2021a).

⁴ For an insightful survey of alternative methodologies in historical income inequality research, see A’Hearn et al. (2016).

⁵ For a survey of fiscal policies in interwar Italy, see Fausto (2007).

most important direct income tax in Italy until the 1970s – were adopted by Gómez León and Gabbuti (2022) to proxy the incomes of self-employed workers, in turn to estimate between-group inequality by means of the dynamic social tables methodology (Gómez León and De Jong, 2019).

Paolo Frascani (1978, p. 1069) had already pointed to the economic and social historians' attention the existence of discontinuous publications, started in the late 19th century, of the universe of individual declarations of some categories the *Imposta di ricchezza mobile* – a source that could 'be considered completely overlooked by historiography'. After several decades of further overlooking,⁶ in the most recent years researchers have started exploring the potential of these taxpayers' lists, also thanks to the improvement in digitisation technologies. Taking advantage of the digitisation, carried on by *Google* at the Central National Library of Rome, of 24 provincial volumes of the lists published in 1924, Galletta and Giommoni (2022) explored the impact of the 1918 influenza pandemic on the distribution of incomes. The same Galletta and Giommoni (2023) then exploited information on tax compliance, reported by the same source, to investigate the impact of war violence on individual fiscal behaviour. In my doctoral dissertation, I also worked on these sources: after personally digitising the whole lists for 1933, as well as a smaller number of provinces for 1889 and 1924, I used them to apply name-based indicators of social mobility (Gabbuti, 2021b).

What can we learn from these sources? In line with Frascani's conclusions, the aim of this paper is to highlight the 'potential of application of a so-far overlooked source' (Frascani, 1978, p. 1099). To contribute to the 'rediscovery' of fiscal sources, and to the broader literature on inequality in Fascist Italy, this paper documents the ongoing construction of the *Italian Historical Taxpayers' Database* (IHTD), resulting from Gabbuti (2021b), and argues for its potential in illuminating the distributive history of the interwar period. While inevitably affected by biases and limitations, these sources offer historians a new perspective on the incomes of important social groups and do so with an unparalleled level of granularity in terms of activities, geography, and gender. In order to do so, in

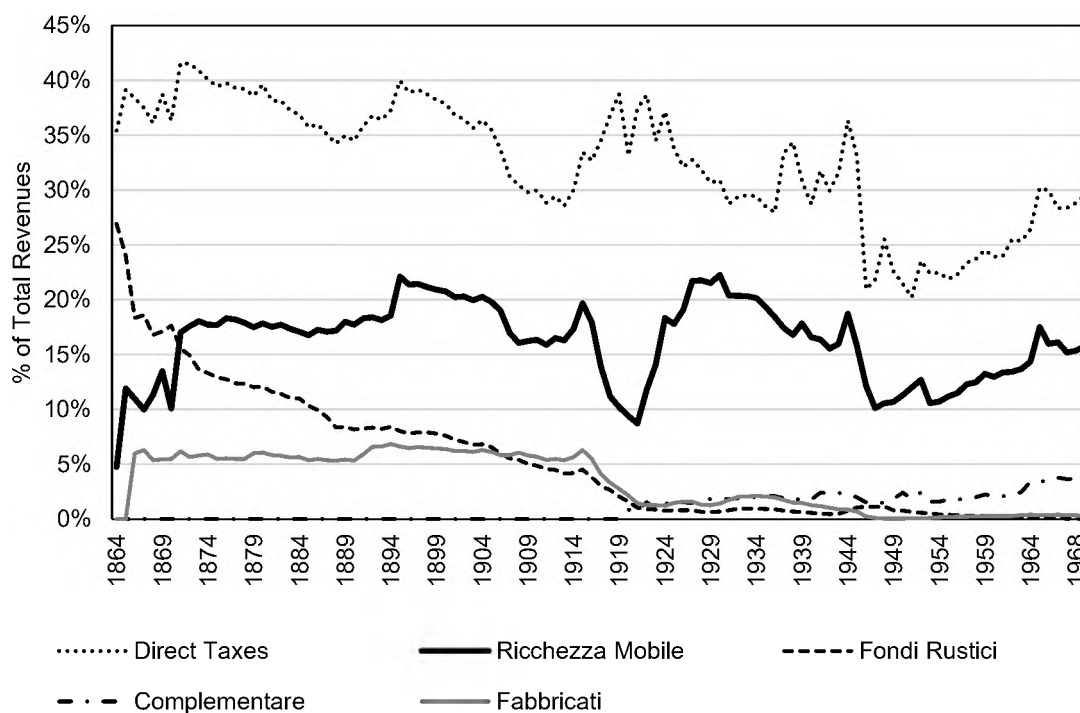
⁶ Among the few exceptions, Licini (2018, 2020).

section 2, I first summarise the history of the taxpayers' lists in post-unification Italy. I then discuss the 'classic' arguments against the reliability of fiscal sources, in the light of available evidence (section 3). Section 4 documents the database: its potential for contributing to the study of personal and regional income distribution in Fascist Italy is the object of section 5. Section 6 briefly concludes.

2. The Taxpayers' Lists in Liberal and Fascist Italy

Soon after its introduction in 1864, the *Imposta di ricchezza mobile* – the 'most modern tax in the Italian fiscal system' (Frascani, 1978, 1068) – became also the most important direct income tax of the country (Figure 1); it retained this role until the fiscal reforms of the early 1970s (Bozzi, 2021).

Figure 1 – Revenues from Direct Taxation in Italy, 1864-1973



Source: author's elaborations on RGS (1969).

Like most 19th-century taxes, the *Imposta di ricchezza mobile* was not applied on overall, personal incomes: earnings from different activities were individually reported (and taxed) by source. While rents from land and buildings were separately taxed by the *Imposta fondiaria* and *Imposta sui fabbricati*, respectively, the *Imposta di ricchezza mobile* covered capital incomes (schedule 'A'),

‘mixed’ incomes (i.e., from entrepreneurial activity), filed under the ‘B’ schedule, and labour (mostly made by professionals, given that dependent work was exempt until the early 1920s) – divided between private (‘C’) and public employees (‘D’) (Alvaredo and Pisano, 2010, pp. 644-650). Contrary to a personal income tax, the same taxpayers could thus have different incomes (from capital and a profession; but also, if she ran different businesses, they would be reported separately).

Table 1 – The Categories of the *Imposta di ricchezza mobile*

<i>Category</i>	<i>Object of taxation</i>	<i>Expected Reliability</i>
<i>A</i>	<i>Capital Income</i>	<i>High – taxed at source</i>
<i>B</i>	<i>Mixed Income (Labour & Capital)</i>	<i>Potentially low – individual taxpayers had no reliable benchmark, but also firms had room for hiding profits</i>
<i>C</i>	<i>Labour Income</i>	<i>Mixed – potentially low for professionals (C1), in line with individual taxpayers of category B; high for dependent workers (C2), taxed at source</i>
<i>D</i>	<i>Public Employees</i>	<i>High – taxed at source</i>

Source: author’s elaborations.

As summarised in Table 1, fiscal authorities and coeval observers attributed different likelihood of tax evasion to the various types of taxpayers. The usual suspects were, first of all, private taxpayers (*contribuenti privati*) – as opposed to legal and collective entities (*enti collettivi*), such as firms, whose declarations were more easily checked against ‘objective’ sources. While official budgets were clearly not necessarily preventing firms from evading on their profits,⁷ for their salaried workers (as well as for public employees) the *ritenuta diretta*, a withholding tax deducted at source, was considered more effective than the individual tax returns filed in the *ruoli nominativi* by self-employed workers and personal businesses (Galletta and Giommoni, 2023, p. 9).⁸ Securities taxed under the schedule ‘A’ were also easily taxed at source when issued or traded.⁹ As a result, the most unreliable categories were considered the private taxpayers of categories B and C: not by chance,

⁷ To make just an example, Perugini (2014, p. 56) documented the creation of hidden reserves by Montecatini between 1925 and 1930.

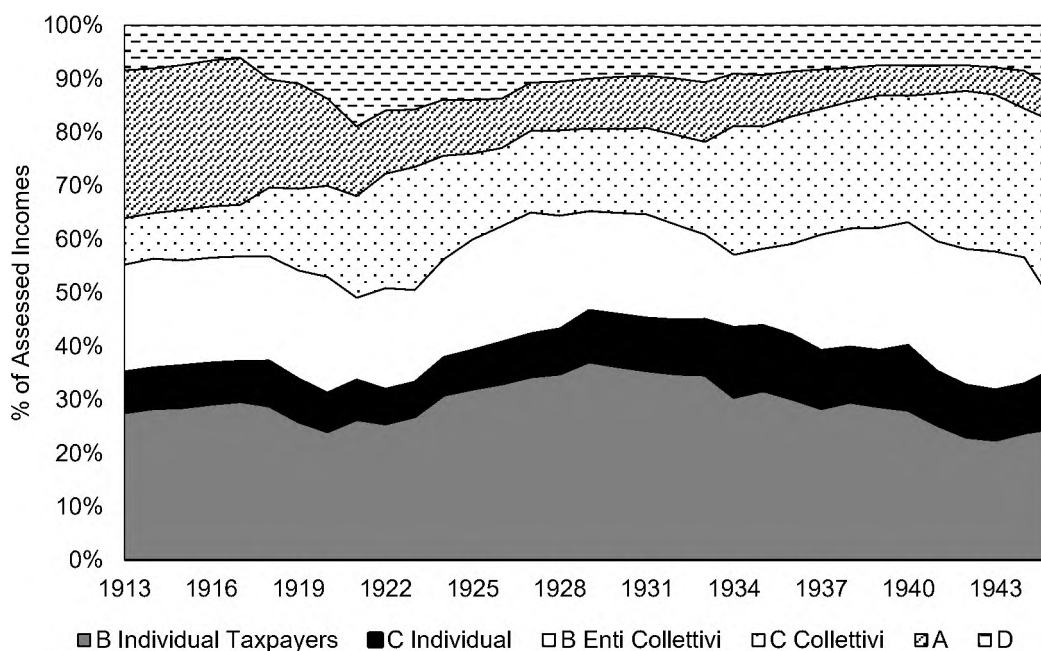
⁸ It should be kept in mind that not all workers had to pay the tax: most notably, industrial workers were subject to the *Imposta di ricchezza mobile* only from 1923.

⁹ A very different business was their taxation, under the *Imposta complementare*: by abolishing the certification of financial asset, introduced but continuously postponed by the last liberal governments, the new Fascist government put an end on any serious attempt of applying progressive taxation on capital income, given the impossibility of linking individual assets to individual taxpayers (Gabbuti, 2022, p. 30).

together with ‘top taxpayers’, their declarations were the protagonists of dozens of lengthy volumes.¹⁰ Indeed, from 1919, the C category was split between C1 – those directly filing their own declarations – and C2 – dependent workers taxed under *ritenuta diretta* or similar methods (MEF-ID, 1926, p. 136-137).

These concerns influenced the production of official statistics. Alongside regular figures on revenues from the tax, most often disaggregated at the level of regions and provinces, the Directorate General for Direct Taxation of the Ministry of Finance published regular figures on the total and average amounts declared under the different schedules, reporting separately for private taxpayers and legal entities. In Figure 2, thus, it is possible to reproduce composition of the incomes assessed for the four main schedules of the *Imposta di ricchezza mobile*, reporting separately the two ‘usual suspects’, individual taxpayers for the schedules B and C – that is, broadly speaking, the category of the self-employed. According to the figures, these two categories always account for no less than a third of the total income assessed for the purpose of the *Imposta di ricchezza mobile*.

Figure 2 - Incomes Assessed for the Imposta di ricchezza mobile by Schedule, 1913-1945



¹⁰ In fact, as discussed recently by Ecce (2023) and before by Einaudi (1927) with respect to World War I-related profits, collective entities were extremely able (and could take advantage of several loopholes in the system) to evade taxes.

Source: author's elaborations on MEF-ID (1926, 1932, 1950, 1951).

Moreover, from time to time, the same Directorate General issued volumes reporting individual declarations (Table 2). The publication of lists of taxpayers by the Italian fiscal authorities – an activity most recently performed on April 30, 2008, when all fiscal declarations had been made available online by *Agenzia delle Entrate* – is indeed almost as old as the country itself. As documented by Manestra (2010), a royal decree disposed the publication of lists of taxpayers' incomes already in 1871, when Finance Minister Quintino Sella expressed the belief that 'public opinion' would cooperate to promote public scrutiny and fiscal compliance. This led to the publication of a list of the 83,372 'top-earning taxpayers', identified as those declaring more than 1,000 lire for the aforementioned *Imposta di ricchezza mobile*, and those who paid at least 150 lira of land income tax (respectively, some 4,500 and 700 euro at current prices).¹¹ For this reason, the 1871 list included IDs, to link to individual taxpayers the various incomes reported under the different schedules and the land tax. According to one of the most accurate 'scrutinisers' among the Italian public, Silvio Amì (1885) (an engineer who had published some pamphlets on the 'statistical oddities' on fiscal data), Sella's 'heroic remedy (...) in practice turned out to be ineffective', and the publication of these lists was interrupted in 1874.

New lists were issued again in 1889: this time, they focused only on incomes declared by individuals for the schedules B and C of the *Imposta di ricchezza mobile* (in the latter case, largely coinciding with the C1 type).¹² Together with a shorter publication reporting the 1,343 taxpayers who declared more than 10,000 lire (some 45,000 euro at current prices), 69 volumes (one for each Province) were published, reporting the universe of individual taxpayers. It is important to notice that a sizeable number of self-employed – those cultivating their own plots, and the sharecroppers – were not subject to the *Imposta di ricchezza mobile* and were therefore excluded from the lists. Still, for

¹¹ Licini (2020) created a database based on the entry for Milan and suburbs, to discuss the presence of women in business and finance.

¹² See Appendix I for examples of the lists issued between 1889 and 1933.

the primary sector, they included the non-negligible group of renters of land,¹³ as well as breeders, and few ‘skilled’ peasants. Overall, the B and C schedules included 29 categories, grouping all sorts of trades, industries, professions, even some employees.¹⁴ The occupations and activities within these categories are reported in great detail, and the categorisation of data on occupations requires considerable effort. Moreover, contrary to the 1870s lists, the ‘codes’ of the different categories of the tax were not reported.

Table 2 - Published Taxpayers' Lists

Year	Incomes Reported	Taxpayers	Thresholds	Number of Taxpayers
1872	<i>Imposta di ricchezza mobile</i> (all categories) and <i>Imposta fondiaria</i> * (land tax)	All	1,000 lire (declared) for the <i>Imposta di ricchezza mobile</i> , or 150 lire for <i>Imposta fondiaria</i> (paid)	83,372
1889	<i>Imposta di ricchezza mobile</i> , B and C	Individual	10,000 (declared)	1,371
1889	<i>Imposta di ricchezza mobile</i> , B and C	Individual	No threshold	450,000 (estimated)
1922	<i>Imposta di ricchezza mobile</i> , B and C	Individual	No threshold	705,000 (estimated)
1929-30	<i>Imposta di ricchezza mobile</i> , B and C	Individual	No threshold	1,115,000 (estimated)
1933	<i>Imposta di ricchezza mobile</i> , B and C	Individual	No threshold	1,225,443
1955, 1959 and 1962	<i>Imposta di ricchezza mobile</i> (all) and <i>Imposta complementare</i> (personal income surtax)	All	5,000,000 lire (assessed)	27,883 (1955)
1977	<i>IRPEF</i> (personal income tax)	Individual	40,000,000 lire (declared)	24,611

Source: author’s elaboration. “Year” refers to the year in which incomes were (reasonably) declared.
* Only for owners of *fondi colonici*.

In the midst of the battle for the ‘financial restauration’, Fascist Finance and Treasury Minister Alberto De Stefani promoted the issue of new lists in 1924 (when provinces had become 75); the initiative was then replicated in 1929 and 1933. It is important to note that the lists, as the ‘individual’

¹³ Using the 1901 census as a reference, tenants were in the order of 700,000, while owners and sharecroppers amounted to 2,5 and 2 million, respectively. Indeed, tenants are the largest single category in the sample digitised by Galletta and Giommoni (2023, p. 44): some 14.5% of 215,180 individual declarations; shepherds account for slightly more than 4%.

¹⁴ The categories are reported in Appendix II.

categories of Figure 2, are not affected by the extension of the taxpayers of the *Imposta di ricchezza mobile* promoted by the Minister. As mentioned, in 1923, after a first unsuccessful attempt made during the Great War, the Fascist government extended the *Imposta di ricchezza mobile* to industrial workers, as well as to small farmers, tenants, and sharecroppers, who had not been paying the tax until that point (MEF-ID, 1926, pp. 138-142). While the latter were filed under a special *Imposta sui redditi agrari di ricchezza mobile*, industrial workers' taxes were paid every other months directly by their employers, and were thus also reported separately (MEF-ID, 1926, p. 145): as for the other dependent workers taxed under *ritenuta diretta*, they did not file and individual declarations, and were not included in the taxpayers' lists.

As noted by the statistician Silvio Orlandi (1934, pp. 46-47), the incomes published in 1924 'referred to the year 1922' – and this is why, for convenience, I refer to them as the 1922 lists; but for both this and later lists, one should consider that after the 1907 reform of assessment (Frascani, 1978, p. 1071), incomes were assessed over three- or four-year periods (so, the 1924 lists covered the 1919-1922 period, and so on). This is especially important to note, because only from 1918 to 1924, in the effort of raising further resources for the troubled state finances, the *Imposta di ricchezza mobile* had been made progressive (MEF-ID, 1926, pp. 136-137): for instance, 'for category B there were four tax brackets ranging between 10% (income lower than 1,500 lire) to 16% (income higher than 5,000 lire)' (Galletta and Giommoni, 2023, p. 9).¹⁵

Compared to previous lists, the interwar ones seem to have had wide circulation: they stimulated empirical work on income distribution, including Orlandi's ones (Gabbuti, 2019), and copies were sent to public offices to 'post' them in public, as testified by a 1933 internal communication to local branches by the Governor of the Bank of Italy.¹⁶

¹⁵ Contemporary observers noted how this progressivity had no theoretical rationale, being applied not on the overall fiscal capacity of the individual. For a broader discussion see Einaudi (1927).

¹⁶ Archivio Storico della Banca d'Italia, Numero Unico n. 27810, 17 aprile 1933.

After World War II, new lists of top taxpayers – this time, earning at least 5 million of lire (slightly less than 80,000 current euros) - were issued three times in the 1950s and early 1960s, for both the *Imposta di ricchezza mobile*, and the personal *Imposta complementare*. Interestingly, these lists were issued after tax agencies had ‘checked’ the incomes, and report both their ‘declared’ and ‘assessed’ level, and for this reason, they include people who had declared less than the threshold, but who, according to the agencies, had earned more than that. The Finance Ministry Chief Statistician actually used the 1955 list to estimate an index of ‘attempted evasion’ (Maresca, 1965). His elaborations reveal this first list reported some 28,000 taxpayers, slightly more than the top 0.1% of Italian active population. Since then, while top taxpayers have been sporadically brought to the attention of the media, the publication of these lists stopped.¹⁷ A list of some 24,000 taxpayers (those declaring more than 40 million lire in 1977, just above 150,000 euros at current prices), most likely intended for internal circulation within the Ministry, is available in few public libraries. The document reported in compact way information on names, incomes, main activity, but this time also education and age. Why, despite the considerable resources devoted to the publication of these lists, were this information ignored by historians? This will be the object of the next sections.

3. Taxpayers’ Lists and Tax Evasion: A Survey of Traditional Critiques

The very origin of the taxpayers’ lists, conceived as an instrument to fight tax evasion, makes inevitable to raise the issue of whether evasion affects their accuracy. As surveyed by Manestra (2010, pp. 8-10), the allegedly enormous evasion inaccuracy of registers periodically ignited parliamentary debates. MPs and experts expressed three types of concerns, often hard to be objectively addressed, but useful to structure the discussion of this section.

¹⁷ See, for instance, ‘Paperoni d’Italia: sempre più calciatori e stilisti’, *Corriere della Sera*, 17 gennaio 2003, commenting the top 500 taxpayers for 2001, revealed on the Ministry of Finance blog, *Fisco Oggi*.

i) How Many Taxpayers?

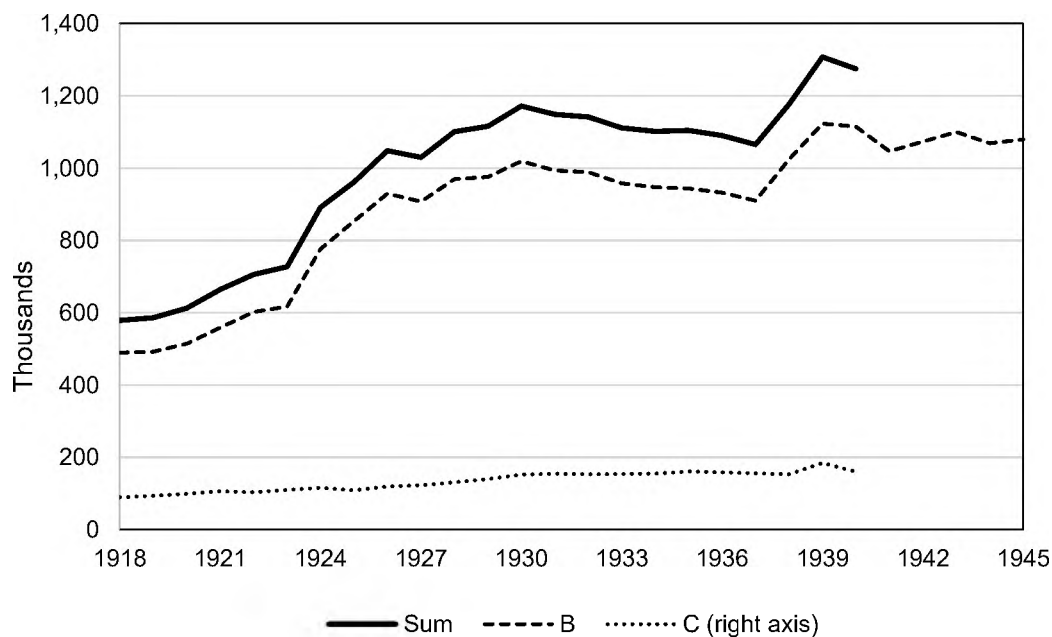
First, contemporary observers considered the absolute number of taxpayers too low. The number of firms and professionals included in the schedules raised from 380,000 in 1872, to 450,000 in 1889; by 1922 it had exceeded 1 million. This does not reach even half of the number of ‘self-employed’ listed by the population censuses: ‘owners’ in industry and services, artisans, professionals, summed up to some 2.4 million in 1921 and 2.65 in 1931 (Gómez León and Gabbuti, 2022). However, as already noted by Amì (1885), censuses greatly overestimated the number of registered businesses: in family businesses, they counted all relatives involved. Total evasion was arguably more substantial for professionals (lawyers, notaries, doctors, and engineers were the preferred targets of accusations), who should have always filed their incomes individually. Moreover, incomes that did not reach the (rather low) minimum thresholds (400 lire in 1889; 2,000 in 1929; both around 1,800 euros at current prices) were reported only ‘for accumulation’ (*per coacervo*) (Orlandi, 1934, p. 48) – that is, when declared by taxpayers who cumulated them with other earnings. It is therefore reasonable to assume that the smallest, poorest and more uncertain business (such as street-vendors, 70,000 according to the 1901 census, and home-workers) account for some of the ‘missing’ self-employed.¹⁸

This problem clearly affected the different lists, but also the different parts of the country, in a different way. The 1872 lists, fruitfully analysed by Licini (2020) for the city of Milan, was produced just few years after the unification of the country, in a period in which unified Italy was still building its fiscal system and capacity. According to Frascani (1978, p. 1071), in some of the 1889 volumes, ‘no more than five or six taxpayers were included’: this was surely also the result of the more limited structural change in more backward areas, the different structure of employment, but might have also signalled differences in tax evasion across provinces. This type of bias clearly deserves more in-depth analysis.

¹⁸ As discussed by Fenoaltea (2015), home-workers contribute to explain the large discrepancies in the industrial labour force reported in the 1911 population and industrial censuses (4.3 million vs. 2.3, respectively).

In dynamic terms, clearly the number of taxpayers increased. For the interwar decades, Figure 3 reproduces the absolute number of private taxpayers, who had file at least one declaration under the schedules B and C. According to the original sources, this number are net of multiple declarations by the same individual: the sum, reported in the same graph to give an order of magnitude, while underestimating the number of total declarations, is an overestimation of the number of individuals. The series show a marked increase in individuals filling a declaration under the schedule B between 1923 and 1926 – vindicating, under this metric, De Stefani’s early 1920s ‘fight to tax evasion’, but possibly also the effect of the improved tools of tax assessment introduced during the War (Ecca, 2023, pp. 232-3). This series peaks in 1930, when taxpayers reached 1 million. This number, however, was to be repeated only in 1938: it is hard to say whether this was the genuine result of the Great Depression, and to a later recovery more favourable to big businesses. The 1930s also saw the stagnation of professionals filing declarations for the C schedule; they had also grown before, but only from 1926, and following a more gradual path.

Figure 3 - Number of Private Taxpayers under Schedules B and C, 1918-1945



Source: authors’ elaborations on MEF-ID (1932, 1950, 1951).

ii) Aggregate Figures

Another, apparently more solid argument raised by contemporaries to denounce tax evasion, was to compare assessed incomes with the first, very tentative attempts of estimating national income. To make just one example, the legal scholar Bompani (1937) compared fiscal revenues to an ‘official figure’ for national income in 1925, to conclude that no less than 50% of income was ‘evaded’. While even these pioneering estimates of national income, as modern GDP, had probably inconsistent definitions with personal incomes, and Italian statistical bodies and academics were quite late in adopting modern definitions, based on value added, and to try to consistently measure this metric,¹⁹ the *Imposta di ricchezza mobile* clearly covered only a subset of the economy, excluding wages and the great majority of all incomes from agriculture. Surely, fiscal compliance was an issue (already) in 19th-century Italy, at the very least because taxation ‘technologies’, in Italy as elsewhere, were still primitive; however, most contemporaries’ complaints were based on ‘ideal’, rather unrealistic terms of comparisons, and did not take into account the real structure of the fiscal system, as well as the stage of development of the Italian economy. Lacking modern economic statistics, observers were bound to an impressionistic, largely unfounded opinion on the underlying economic reality of the country.

A confirm to fundamental lack of knowledge, and absence of reliable terms of comparisons, is provided by the project of the so-called *contingenti di studio* (literally ‘quota’, or ‘allotment’, studies), pursued by Paolo Thaon De Revel, Finance Minister from 1935 to 1943. An economist and statistician, Thaon urged in 1938 fiscal authorities to ‘collect data to give quantitative figures on the distribution of income by space (nation, region, province, municipality, ...), or by professional category or production sector’. These data, he clarified, were to be used ‘*exclusively* to study and check’ the level of evasion and/or fiscal pressure (Manestra, 2010, pp. 30-33). In this sense, it is of

¹⁹ As mentioned in Baffigi (2015, pp. 62-63), Gini was among the fiercest opponents of ‘Anglo-Saxon’ definitions, based on productive activity, ‘preferring a definition of income as a measure of wellbeing’, and the first attempt of measuring national income in modern ways was the industrial and commercial census of 1937-1940.

some interest to read the evaluation of a notable advisor of Thaon De Revel, Ezio Vanoni (Minister of Finance from 1948 to 1954). Writing after the war, but using 1938 as a reference, Vanoni calculated that 48.3% of private incomes were not ascertained by tax authorities; however, only 7.7% was due to 'evasion'. The 40.6% difference was actually due to what Italian scholars defined as 'erosion' – those incomes that were legally excluded from the tax base (Manestra, 2010). In the context of pre-WWII Italian fiscal system, this came from the fact that, as discussed, the tax was never meant to assess a large part of citizens and their incomes. Also in this case, the severity of the bias depends on the structure of the economy, the prevalence of self-employment and the dimension of firms, suggesting potential differences across provinces.

If one compares total incomes declared for the *Imposta di ricchezza mobile* to the GDP, one still observes an interesting increase, from some 5% in 1913, to a peak of some 18.5% in 1934, arguably reinforced by the economic crisis (but it was already 13.4 in 1929, showing a constant growth) (Gabbuti, 2022, p. 23); considering categories B and C, and expressing them as a share of industrial and private tertiary value added, the increase is even faster, from 6% in 1913, to 19% in 1929, and 26% in 1934. Not surprisingly, the increase in declarations brings an increase in tax revenues: in terms of the new series of national accounts (Baffigi, 2015), the mid-1930s represented indeed a peak (around 15% of the GDP), before the decline of the 1940s; the same levels were to be reached again only in the 1960s, and to be permanently overcome only after the reform of the system in the 1970s (Bozzi, 2021, p. 155).

While this signals that the later interwar lists might be the most reliable, confirming earlier assessment by Frascani (1978), it is important to note that, as soon as the distance between national income and assessed incomes has to be attributed to tax erosion rather than tax evasion, it does not signal any particular limitation on the adoption of the taxpayers' lists, apart for their coverage in terms of categories. The economic historian working on these sources should only be extremely careful not to generalise the results obtained for a very identifiable subset of the Italian population. On the contrary, is the evolution of assessed incomes and value-added estimates is completely unrelated, this

would prevent the possibility to exploit the granularity of the source to proxy sub-national GDP figures – a way recently explored for France by Monnet et al. (2021).

iii) Average Declarations

The most serious concern, according to Amì (1885), was the modest amount of the incomes reported in tax declarations – indeed, a very relevant issue for the adoption of the taxpayer's lists. Fiscal authorities were often the first responsible of these opinions. In the first edition of what later became Italy's official statistical yearbook, the chief of the Directorate for Statistics showed a tabulation of incomes from the *Imposta di ricchezza mobile*, but expressed his doubts on the 'truthfulness of richest capital owners' returns' (Maestri, 1868, p. 257); three decades later, in introducing the lists for top taxpayers in 1889, the incumbent Minister Grimaldi considered an evident proof of evasion the fact that only 31 professionals reported taxable incomes for 10,000 lire (MEF-ID, 1889a, p. 3) – more than 25 times the average GDP of the time, according to Baffigi (2015). Real evidence, however, is scarce and hardly decisive.

To emphasize the low levels of assessed incomes, two types of comparison were common: first, within the industrial incomes, critics denounced the great difference between *contribuenti privati* and *enti collettivi*. As mentioned, firms' assessments had an objective 'anchor', represented by the (mandatory) financial statements; the fact that their incomes were on average much higher than those of private taxpayers was to prove the dishonest behaviour of the latter. However, the two were, clearly, rather different kinds of taxpayers, and sizeable differences in the incomes of a legally formed, anonymous firm, and an artisan working in the same industrial sector or the same tax category, are entirely reasonable for an economic standpoint. The point was raised also in MEF-ID (1895), one of the few cases in which officials responsible for publishing these voluminous statistics defended their quality: group differences 'reflect with decent accuracy the effective economic condition of the industries and trades considered here'; rather than resulting from evasion at the top,

the limited amount of income ‘produced by associate capital’ reflected, ‘sadly’, the real conditions of the country.²⁰

A more stringent comparison was made between the incomes of the private taxpayers of categories B and C (those included in the lists published between 1889 and 1933) and public employees. The remuneration of the latter tended to be around two or three times the average B or C type income (Manestra, 2010, pp. 8-9). Even this comparison, however, overlooks the very different nature of incomes reported in these lists. First of all, the incomes reported under the B schedule – the large majority, around 87% of the total from 1922 to 1933 (MEF-ID, 1932, p. 94; MEF-ID, 1951, p. 206) – should not be imagined as representing rich entrepreneurs and capitalists. As discussed in Gabbuti (2022, pp. 15-16), among the taxpayers included in the 1933 lists, only 10,129 declared more than 50,000 lire: neither of the ‘great barons’ of the period – Agnelli, Volpi or Conti – is included, given their fortunes had to be taxed under different schedules and taxes; smaller entrepreneurs, such as the emerging typewriter producer, Camillo Olivetti, and even more, the representative of ‘older’, first industrial revolution sectors such as textile, who could more often lead their firms as individual entrepreneurs. The vast majority of these taxpayers was rather made by self-employed workers, family businesses, and similar categories. As discussed in Gabbuti (2021a), contrary to the assumption often made by economists, both in contemporary developing economies and in history, the self-employed might well earn less than dependent workers – especially those employed by larger, industrial firms.

The averages, indeed, included even some taxpayers reporting incomes below the threshold: in 1929, the 9.23% of taxpayers in schedule B who declared less than 2,000 lire, accounted for just 1.66% of incomes. Scholars such as Gini and D’Addario (1931, p. 324) and Orlandi (1933), when estimating income inequality, excluded these incomes, to avoid a potentially biased truncation of the

²⁰ For a discussion on the difficulty of tracing top incomes, see Gabbuti (2022); Gómez León and Gabbuti (2022) decided to proxy capital incomes by means of the capital share, obtained as in Gabbuti (2021a) as the residual of the labour share.

distribution. Still, it should be noted that similar values are not implausible: in 1922, the threshold is slightly above the annual poverty line estimated by Amendola et al. (2017) for 1921 (c. 950 lire per individual). According to the same authors, more than 27% of Italians (and c. 40% of Southerners) fell below this level in that period. Thanks to Orlandi's works, we can see how, once incomes below the threshold are taken out, the bottom 90% of self-employed working in secondary sector (that, in first approximation, could be considered a proxy for 'artisans') earned an average of 3,294 lire in 1922, and 4,516 lire in 1929.

Taking advantage of the collection of wages and salaries from Gómez León and Gabbuti (2022), we can appreciate how the figure for 1922 – at the peak of the red biennium, just before the strong reduction of industrial wages of the first years of Fascist rule – is just below the average male wage across industry (slightly less than 4,000 lire). In nominal terms, the workers wage had remained very similar in 1929: as a result, 'artisans' earned more on average. In both years, male salaried workers could earn substantially higher incomes: this should not be surprising, when considering that fiscal sources averaged incomes, not only for both sexes – and thus including a non-negligible share of women who, as will be evident soon, enjoyed lower incomes; but also, from all around Italy. Especially in inner, peripheral areas of Southern Italy, incomes must have been substantially low when compared with those of 'privileged' wage-earners, working for large firms or in public employment. The top decile, however, earned substantially more (33,500 and 42,350 lire respectively). By replicating this exercise on the tabulations available for services only, we obtain figures that are consistent with the only, very detailed direct estimate of the incomes in this sector, provided by Zamagni (1981) for 1938: according to her data, if the average retailer earned 10,000 lire, some 25% of them were street vendors, earning less than 2,500 lire; only the wholesalers (less than 5% of owners) earned some 35,000 lire per year.

In dynamic terms, comparing, as in Gómez León and Gabbuti (2022, p. 48), industrial and commercial average wages and average income declared by taxpayers under the Schedule B of the *Imposta di ricchezza mobile*, after allowing for a relatively standard, fixed, correction for under-

report, the latter allow us to appreciate both the relative advantage of self-employed workers in the late Liberal period, the losses of this ‘traditional’ middle class compared to the industrial working class in the post-WWI period, in line with the perception of contemporary observers (Gabbuti, 2019), and the restoration and widening of gaps after the March on Rome, and particularly after the deflationary turn in the late-1920s. It is hard to ‘objectively’ argue that these trends do not reflect genuine variations in the underlying incomes, but rather differences in the quality of fiscal declarations: a careful analysis should also be carried out with respect to sectoral and regional differences.

Figures are much less reassuring in the case of professionals. In this case, not only the top decile, but the category as a whole can be considered to be a privileged social group. It should be reminded that, as documented by Barbagli (1974), Italy has a long tradition of intellectual unemployment – an issue that had already attracted the interest of coeval social scientists, most famously Robert Michels (1936). Another element to be considered is how many of the professionals listed in this category probably enjoyed other incomes, that would not be listed under the schedule C, but possibly under the A one, or for other taxes: according to Banti (1996, pp. 143-155), it was common for these professionals to be the sons of landowners, when not of aristocrats. Still, it does not seem plausible that almost 20% of them declared incomes below the minimum threshold in 1929. Indeed, most of the anecdotal evidence on tax evasion referred to this group. Notably, Favilli (2009, p. 43) surveyed several cases raised by contemporary observers, such as the average private doctor in Naples declaring less than medical officers working in peripheral towns; or the striking anecdote of a Southern lawyer, MP, ‘insulted’ by an imprudent tax officer who had raised his professional taxable income from 1,200 to 4,000 lire. Clearly, a man of his fame earned ‘at least five times’ the revised amount; but his taxes were enough, ‘proportioned’, as they were, with what his colleagues paid.

While anecdotal, this evidence is important to realise the potential limitations of the IHTD, resulting from the digitisation of these lists, that is the object of the next section. In aggregate terms, as shown by Figure 2, it is interesting to observe how the years from 1929 to 1934 were the period in

which the incomes assessed for the private taxpayers under schedules B and C – those reported by the lists included in the IHTD – reached the higher share of the overall incomes assessed for the *Imposta di ricchezza mobile*, amounting to almost 40% of the total.

4. The Italian Historical Taxpayers' Database, 1889-1933

Contrary to the 2008, when the Data Protection Authority obscured the website after few hours, the hard copies of the historical taxpayers' lists are still available to interested researchers in Italian public libraries. The object of this section is thus to document the IHTD, currently consisting of 1,593,563 micro-records of income declarations filed by Italian autonomous workers between 1889 and 1933, resulting from the digitisation of these lists (Table 3). The digitisation effort is still in process: while the 1889, 1922 and 1929 lists have been only partly scanned, names, surnames, gender and incomes – the information needed to attempt an estimation of social mobility trends and geographical differences in Gabbuti (2021b) – were cleaned first; occupations and municipalities, that have obvious applications for different empirical exercises, are still in the cleaning process.

The discussion of the previous section highlighted several reasons why the 1933 lists – the last of this kind to be published – could be a good, starting candidate for digitisation, not only because of the clear structure of their layout, and the fact that surnames are printed in capital letters (see Appendix I). By that year, the efforts of tackling evasion seem to have produced some results, in terms of assessed incomes (Figure 2), number of declaring taxpayers (Figure 3) and revenues. Compared to 1922, the early 1930s were also a period of monetary stability, reassuring us on the relative consistency of the values, declared by the taxpayers in different years. In order to digitise the lists, I first personally scanned all the 92 volumes of MEF-ID (1933-34). The resulting PDFs were digitised applying a professional OCR-software, *ABBYY*; results were personally checked - especially taxpayers' names.

Unfortunately, I was unable to find all the 1929 volumes in any library: this list was an ideal alternative candidate for digitisation, due to the greater information on taxpayers tax groups, and the

possibility to link individual taxpayers to different declarations (see Appendix I); in the absence of the full lists, and to the proximity with the 1933 ones, I preferred to postpone the digitisation of its surviving volumes, some of which are also available on *Google Books*. I then applied the same OCR technique to the 1922 volumes available from *Google Books*, and a small number of other provinces I was able to scan for the same year, expanding the database to 33 provinces (Genoa and Rome only for the capital district), as well as also 4 provinces for the 1889 lists.

The careful examination of the lists in the digitisation process provided me with first-hand, extensive knowledge on the most recurrent errors performed by the automatic optical character recognition (useful, for instance, to correctly clean income figures) and the nature of the source. For instance, I realised that, in some provinces, firms and collective entities were occasionally included (such as the newspaper *Corriere della Sera*); parishes; municipalities paying for their employees; even some leisure club, such as the local branches of the *Organizzazione nazionale dopolavoro*. Thus, I made the best effort to identify these collective entities by means of a dummy variable. Even though, as mentioned, the *Imposta di ricchezza mobile* did not work as a ‘personal’ tax, in practice, the great majority of the declarations for private taxpayers in categories B and C still referred to a single individual. In few cases, brothers or relatives running together the family business are recorded together; much rarer is the possibility of firms composed by more, non-relative associates. In any case, it should be considered that most of these incomes reflect some form of family businesses, in which more family members were involved, even when not officially listed for fiscal purposes. In cases, such as those of professionals, in which the income is instead referring to a single family member, it is still plausible that the one (more or less accurately) reported was the major, if not only, source of work income for the household.

While wives are the most obvious case of non-reported, working family members, the lists still report a non-negligible number of female taxpayers. Notably, Italian naming conventions imply that the great majority of married women would be registered by their maiden name, possibly with the (signalled) addition of the husband’s – as in the case of Luigia Abati, *married* (in) Ferraris, first

taxpayers in Bergamo 1922 list, or Bianca Arcellazzi, *widow* (ved.) Daina. We cannot be absolutely sure that all the women listed under these schedules were real ‘entrepreneurs’: the very strict Italian regulation on personal bankruptcy, discussed by Di Martino (2005), could have created the incentive for husbands to shield themselves from the consequences of failure; but for sure, these women were legally responsible for the businesses. Another possibility opened by the lists and their digitisation, is to investigate the presence of women among the taxpayers. Women are indeed normally hidden by Italian fiscal sources. On the contrary, the identification of first names made it possible to assign a gender to 89% of the observations for 1922, 90% for 1889, and more than 93% for 1933 – almost all, considering the collective entities, and more importantly, taxpayers for which only initials or abbreviations were reported for the first name. For few of these latter cases, it was still possible to assign gender, based either on abbreviations signalling a profession precluded to women (such as notary), or on particles introducing married names. While most Italian wives maintained their maiden names, in some cases the source records also the married name, after particles such as ‘in’.²¹ Finally, I coded as women the very few ‘collective’ taxpayers in which it was possible to identify at least one woman (for instance, when the source reported ‘and wife’, or ‘sisters’).

For the 1933 list, the adoption of capital letters for surnames made it possible to automatise with the greatest precision their identification within the taxpayers’ name string.²² In previous lists, the only way was to select the first word of each string, apart for the cases in which, as for “Di” or “Del”, it clearly signalled two-word surnames – in these cases, the following word would be added to the surname. Alternatively, the second word might be an abbreviation, such as “Don”, “Doctor”, that should be discarded, in order to detect the correct personal name, hopefully the third word of the taxpayer string. This procedure, sufficiently precise in the greatest majority of cases, fails to recognise double or more composite surnames, or the relatively few cases in which two individuals are listed

²¹ In these cases, I recorded both the marital status (including widowhood) and the married name; see, for instance, *Abati Luigia in Ferrari*, the first entry in the 1922 list reported in Appendix I.

²² In the manual check, I also corrected the cases in which the source incorrectly reported the surname in lower letters, or whenever I recognised the absence of an actual surname, as in the aforementioned *Corriere della Sera* case.

together. With the automatic procedure made possible by capital letters, both surnames would be easily detected; on the contrary, this alternative procedure captures only part of the composite surname, or the first of the two.²³ To try to deal with the minority of taxpayers referring to multiple individuals – whether ‘brothers’, family members or simply business associates – I took note of all those words that could signal this case (from ‘& C.’ to ‘and’) and recorded all these as ‘collective taxpayers’.

Thanks to the work of Francesco Maccelli, who classified the professions reported by Italian censuses (including the 1931 one) according to the HISCO and HISCLASS conventions, it is possible to reconstitute most of the activities and professions reported by the taxpayers’ lists to those classifications. As mentioned, this activity is particularly time consuming: thanks also to the cooperation with Mario Cannella, section 5 shows preliminary results for almost three quarters of the sample, together with some evidence on the way in which the IHTD unveils new details on the distribution of income in interwar Italy.

5. A ‘Fiscal’ Perspective on Income Distribution in Fascist Italy

The discussion of section 3, while reassuring, does not imply that the incomes reported in the lists can be taken at the face value. As mentioned, these lists were not devised to provide proxy of national accounts, and clearly suffer from limitations. Indeed, the few ‘advocates’ for the use of fiscal data were adamant in stressing that their value was not in assessing mean incomes (and absolute living standards), but rather in exploring relative differences. Interestingly for cliometricians, the economist Vittorio Amato (1965) advanced a comparison with conscripts’ anthropometric data: truncation, evasion and selection biases affected the reliability of the absolute, mean value, but ‘comparative’, ‘static’ or ‘spatial’ analysis of the difference by means of fiscal data was still informative. In a similar vein, Frascani (1978) stressed the value of the lists to investigate income distribution, especially when limiting the geographical scope of the analysis (and indeed, did use the lists to discuss the ‘tendency

²³ For instance, the two associates “Rossi Mario e Bianchi Carlo” would be recorded under the surname “Rossi” under the alternative procedure, and under “Rossi Bianchi” exploiting the capital letters.

of concentration' of different industries and activities in the province of Salerno). Drawing on the IHTD and on secondary literature, this section shows the potential of these sources in highlighting overlooked details in the personal and regional distribution of incomes.

i) Regional Inequality in the Fiscal Sources

As a starting point, Figure 4, panel a) reports the mean value of the declarations and the Gini index, obtained from the taxpayers' lists of 1933, for all Italian provinces in that year.²⁴ It is important to stress that, if we exclude Orlandi's works – based on the tabulations of the taxpayers' lists – historical estimates of personal and regional inequality for this period would be limited to the regional level, for average income, or to the simple distinction between 'North' and 'South' (Amendola et al., 2011). While average declarations and revenues are normally available with yearly frequency at this level of aggregation (for the *Imposta di ricchezza mobile* as well as for all other major taxes), the digitisation of the lists makes possible to obtain tax district, or even municipal level averages and concentration indices. That said, the picture offered by the lists is in line with the economic historian's expectations: average declarations increase moving from South to North, and especially North-West, but show differences within the regions, and the role of important cities such as Rome and Naples.

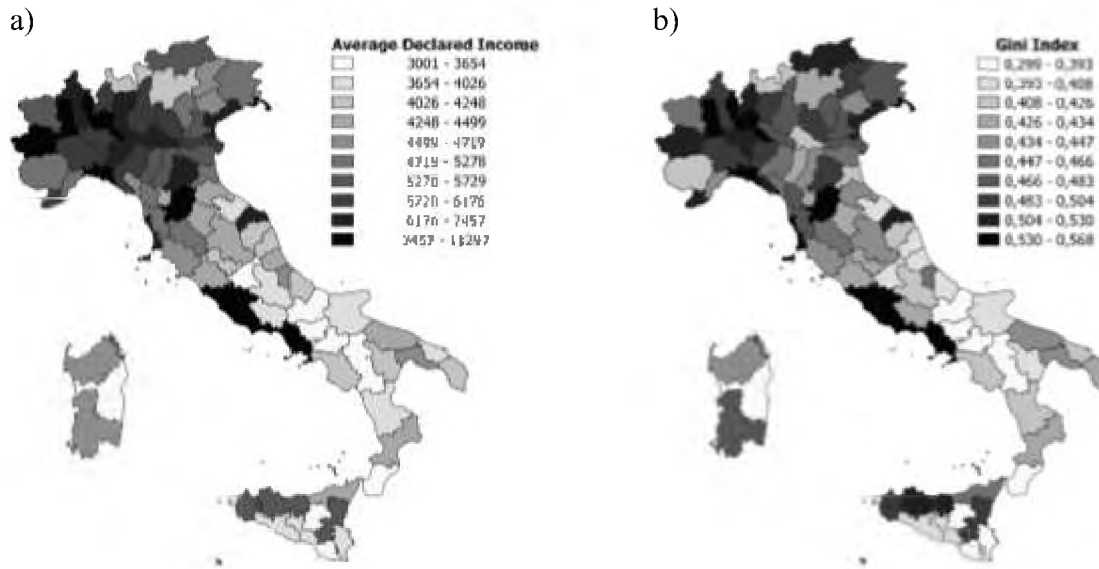
With some exception, the level of concentration (panel b) follows the same gradient. Indeed, inequality within B and C schedule taxpayers is positively correlated with economic (and industrial) development – a result also evident from Orlandi's elaborations on the 1929 lists, reported in Gabbuti (2022, p. 14). Building on other works of the times, we can say that inequality in B-type income was on the rise during the so-called first industrial take-off: according to Gini and D'Addario (1931), the Gini index among this group increased from 43.62 in 1894, to 46.53 in 1902, and then to 57.04 in 1922.²⁵ However, Orlandi detected a decrease in the Gini between 1922 and 1929, in most provinces,

²⁴ Due to administrative changes and annexations, their number had raised to 92.

²⁵ A similar evaluation based on existing estimate was reported by Zamagni (1980) and Licini (2018), who also compares national estimates obtained from the data of the *Imposta di ricchezza mobile* and those based on alternative sources in post-unification Italy.

sectors and professions: a result interpreted by the statistician as a proof of improved tax assessment (Gabbuti, 2019).

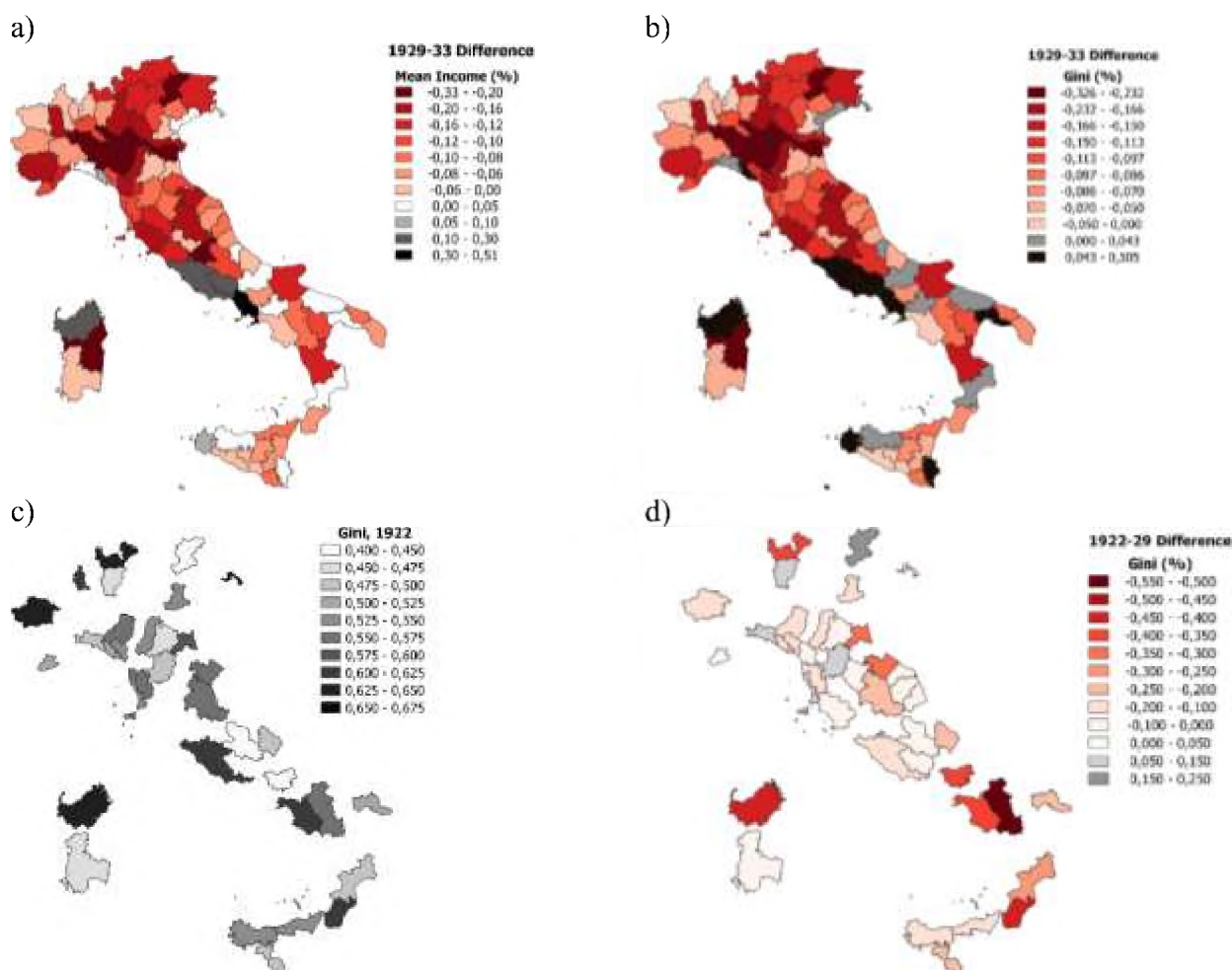
Figure 4 - Mean and Gini of Declared Income across Italian Provinces, 1933



Source: author's elaborations on the Italian Historical Taxpayers' Database (IHTD). Gini index is estimated only on incomes above the threshold of 2,000 lire.

Figure 5 compares Orlandi's (1935) figures for 1929, with province-level estimates obtained by means of the IHTD for 1922 and 1933. The comparison is only partly consistent: at the current state of the database, it was not possible to separate business incomes (schedule B) from professional ones (schedule C). Keeping this caveat in mind, while panel d) shows the almost generalised, although diversified, decrease of concentration between 1922 (whose absolute estimates are shown in panel c) and 1929, panel a) shows the more marked decrease of average declarations in richer provinces during the Great Depression. Indeed, those showing the strongest decline are the North-Western provinces. At the same time, declarations increased in some central and southern provinces (notably, Rome and Naples). A similar dynamic occurred to the distribution of these declarations, shown in panel b): this could signal that the richest taxpayers of these categories were affected the most in the North-West, and improved their position in Rome, Naples and the like.

Figure 5 - Mean Business and Professional across Italian Provinces in the Interwar Period



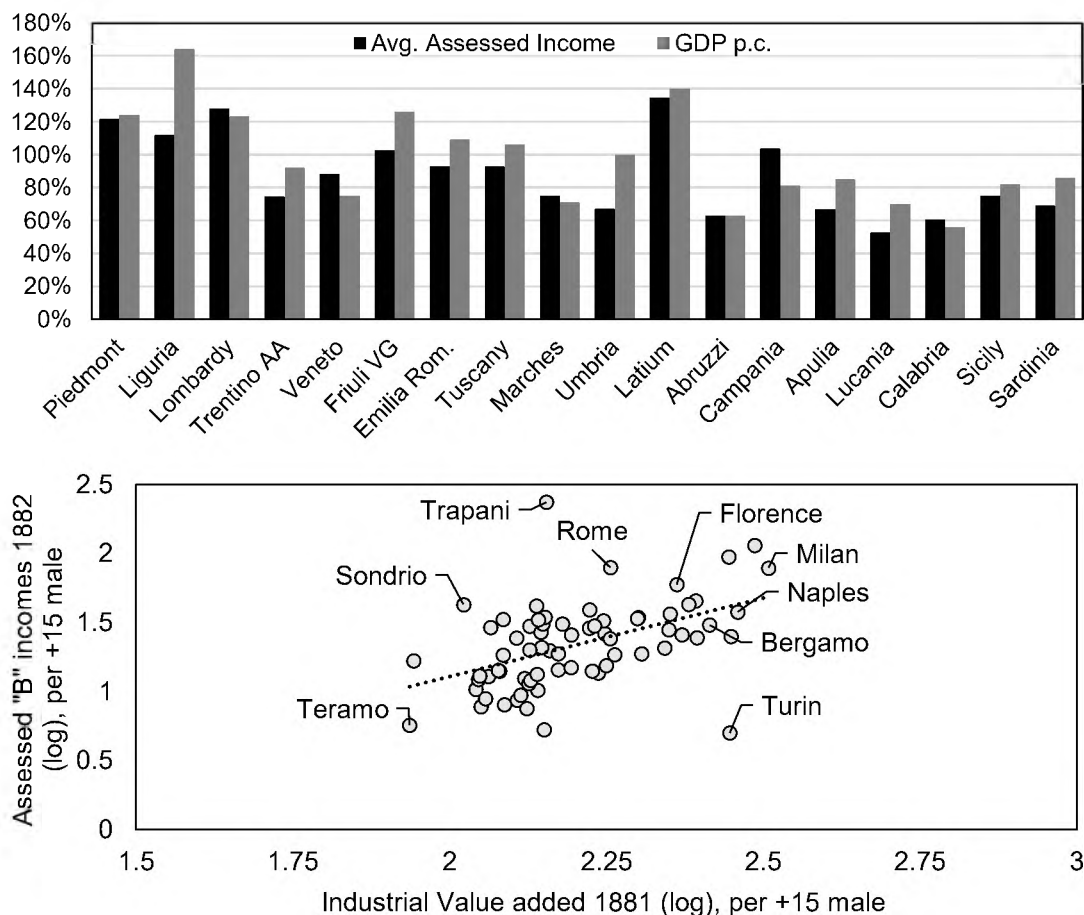
Source: author's elaborations on Orlandi (1933, 1935) and the IHTD.

In terms of regional inequality, Figure 6, upper panel, shows that a comparison between per capita regional VA estimated for 1931 by Felice (2011), and the average declaration in the 1933 lists show, if not perfect correlation, a very similar ranking, despite the latter refer to only some workers and sectors. In the bottom panel, I thus try a more precise comparison, and tried to compare province-level figures for industrial value added, estimated by Ciccarelli and Fenoaltea (2013) for the census years of the Liberal period, to average B-type income, including firms, in the same year. The correlation is even surprising, in the light of the differences between the two concepts,²⁶ and the

²⁶ While the definition of taxable income – ‘net’ of the ‘expenditures necessary to the generation of income’ and ‘passive annuities’ (amortisations, instalments, ...) (Gini and D’Addario, 1931, p. 324) – is conceptually similar, B-type include many non-industrial incomes. Services might indeed explain some of the inconsistencies, such as Florence and Rome. In 1881, Turin (the most striking outlier) was possibly still benefitting of advantageous fiscal treatment, to compensate for the loss of the status of capital city.

limitations discussed in section 3, and makes a strong case for exploring also for Italy the application of fiscal data to proxy GDP.

Figure 6 – Regional Inequality: Fiscal Data vs. Value Added Figures



Source: author’s elaboration. The upper panel shows regional average incomes from the IHTD, and GDP figures from Felice (2011); the bottom panel compares average incomes from MEF-ID (1883) with Industrial VA and +15 male figures from Ciccarelli and Fenoaltea (2013).

ii) Inequality Within Businesses and Professions

While the Gini of the taxpayers, such as those presented in Figure 4 and Figure 5 are not necessarily representative of overall inequality – in dynamic terms, the increase in inequality detected by Gini and D’Addario (1931) occurred while household incomes were equalising, according to Amendola and Vecchi (2017) – as for regional data, the IHTD will allow researchers to look at greater detail to some segments of the distribution. Figure 7 reports the 1933 data, classified by economic activity (HISCO) and class (HISCLASS). As mentioned, the coding of professions and activities is still undergoing: however, a first, empirical check of the potential of this information comes from

Banti (1996): despite stressing the ‘clearly uncertain’ nature of the lists, the distinguished historian relied on them to check for income dispersion within those same professionals whose incomes, as discussed, were on average unrealistically low. Indeed, assessed incomes of lawyers and notaries (pp. 115-117), doctors (pp. 125-126) and similar professionals varied considerably across cities, or in urban versus rural areas. Banti was also able to find influential entrepreneurs (pp. 175-176) in the lists, and even to follow notable individuals over time. A notable case is the internationally acclaimed opera composer Giuseppe Verdi, whose income, reported in the lists, rose between 1871 and 1889, in line with his fame (pp. 72-73).

Once again, more quantitative evidence comes from Orlandi: in 1922, while the average C-type declared income was just 3,171 lire, more remunerative professions such as medical and legal professionals reached, respectively, 4,692 and 6,104 lire. Moreover, there was a sizeable difference between Northern and Central Italy, where a lawyer earned 8,008 and 7,147 lire respectively, and Southern and Insular Italy, where the average fell to 3,979 and 3,744 lire. Even within the South, a lawyer from Campania got 4,555 lire on average, as opposed to the 2,949 of Lucania. Inequality within sectors and professions also varied a lot: the most equal were the white collars (Gini of c.35.5), the most unequal the banking sectors (73). While, on average, professional incomes seem to show lower Gini coefficients (in line with the lower average income, and the larger number of incomes below threshold), inequality is far from null, consistently with Banti’s findings.

iii) Gender Differences among Taxpayers

As recently discussed by Gómez León and Gabbuti (2022), gender gaps are possibly the major shortcoming of historical estimates of inequality in Italy. This makes even more interesting the fact, already revealed by Table 3, that the lists included a non-negligible share of women – some 15% of the sample, hiding high variation across provinces, ranging from 7.5 to 27%. While the census data show substantially higher female participation in the workforce (Mancini, 2018), it should be noted

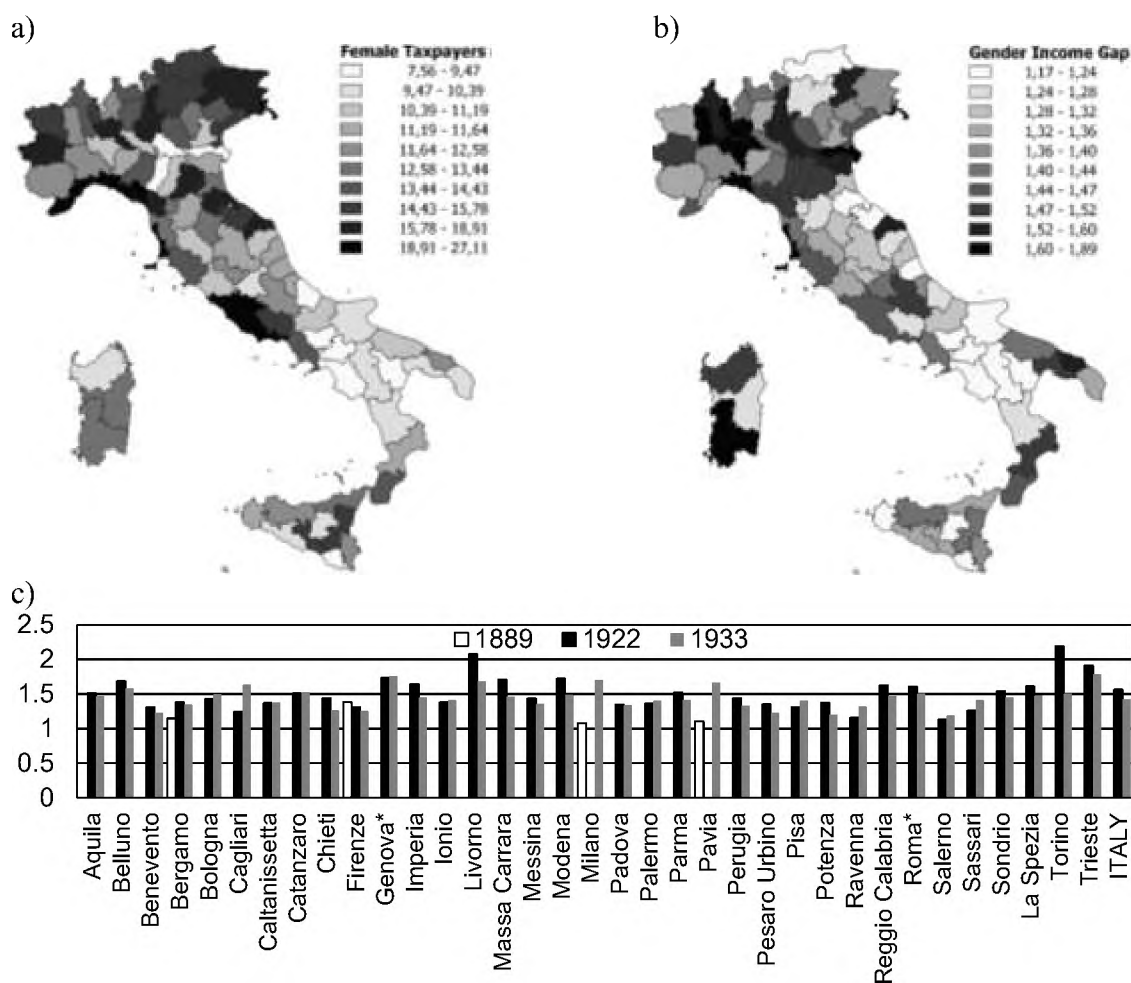
that those included in the lists are autonomous workers. As shown by Figure 8, panel a), the percentage of female taxpayers greatly varied across the country.

Figure 7 - The 1933 Taxpayers by Economic Activity and Class Status



Source: author's elaborations on the IHTD.

Figure 8 - Female Taxpayers and Gender Income Gaps, 1933



Source: author's elaborations on the IHTD. Panel a) reports the % of female taxpayers in the lists; panels b) and c) express the gaps as the ratio between the average male income declaration over the average female declaration, excluding the minority of declarations for which it was not possible to match a gender.

Panel b) of the same figure reveals how the same heterogeneity can be observed for the average income gap between women's and men's declared incomes. These gaps – for which an interpretation is not as straightforward, as in the case of the incomes of dependent workers, more frequently discussed by the literature – were calculated without considering the very different composition of female and male occupations. Even before controlling for this compositional effect, it is interesting to notice the correlation between female presence and income differentials, and of both with overall income inequality. Very small income differences in provinces where female taxpayers were less than a tenth of the total, could signal both the 'exceptional' nature of women carrying on independent activities in similar environments (including the case in which widows and

daughters inherited family businesses), or them being ‘front women’ of male family members for legal reasons.

In the subset of provinces covered in 1922, income gaps within self-employed taxpayers declined (panel c), confirming the trend observed for wages in industry and services (Gómez León and Gabbuti, 2022); of the four provinces for which we have 1889 data, only Florence shows a small, constant decline in gaps, with the share of women remaining below the average, while the other three (unfortunately, all concentrated in the same region, Lombardy) saw an increase in both gaps and female presence.

In any case, the activities and professions performed by the women included in the IHTD are extraordinarily diverse. Anecdotally, the list include ‘white collar’ jobs, such as Elvira, tax collector, Angiola, accountant, Beatrice, English professor; more artistic professionals, such as the photographers sisters R. and the painter Laura; entrepreneurs in businesses ranging ship owning (Rosalia) to a brothel (Maria); and even manual works, traditionally associated to men, such as Agnese the tinsmith, Marcella the carter, Dorotea the blacksmith, Amalia the knife grinder, and Fernanda the lifeguard. Overall, as shown in Figure 7, women were more present in accommodation and food services, trade, and social work; on the other hand, they were less represented in professions, but also in manufacturing and agriculture, where most of active women found employment. At the same time, women had much lower chances of appearing among the higher professional, even though the same holds true for unskilled and lower-skill jobs – a result that is not altered when looking separately at the North or the South. These differences, while non-negligible, do not seem sufficient to falsify Licini’s (2020, p. 121) finding that, contrary to what normally assumed in the literature, according to this source Italian ‘men and women shared the same sectors of activity’; women did not seem to limit themselves to ‘trades, jobs, and occupations consistent with the ideology of gentility, domesticity, and “respectability”’.

The sources make possible, of course, to look for the presence of women also among top taxpayers. Compared to their overall 15%, and the 7% found by Licini (2020, p. 119) among the ‘top’

Milanese from the 1872 lists, women account for 4.4% of taxpayers above 50,000 lire; we can find only 50 of them declaring more than 100,000 lire and no ‘millionaire’, compared to the 8-9% observed by Scott (2021) among the (admittedly very different) British sources.²⁷ The richest female taxpayers are the Gori Sisters, running some tailor’s shops in Turin, for 600,000 lire of declared incomes. Turin accounts also for the second richest, Maria Decoster (‘& C.’), a sweets seller, declaring 535,000 lire; Giulia Asti (‘and others’), with a number of hotels in Rome, comes third with her 350,000 lire; just out of the podium, the first Southern woman, Ginevra Buchy (also ‘& C.’), legal representative of one of the textile factories of the provinces of Salerno, declared 300,000 lire. While not as rich as the probate records discussed for Milan by Licini (2011), the IHTD will provide historians of Italian women with a source covering all Italy, from North to South, offering a new perspective on the under-researched topic of gender inequality in the access and remuneration of work.

6. Conclusions

As argued by one of the foremost Italian scholars on income inequality, when dealing with historical estimates, it is fundamental to make ‘a reasoned application of all available evidence’, rather than focusing on a single, ‘preferred’ source (Brandolini, 2000, p. 228). In this spirit, this paper discussed the case of adopting fiscal sources, and in particular, those resulting from the *Imposta di ricchezza mobile*, starting from the taxpayers’ lists, to focus on otherwise overlooked aspects of the distribution of incomes in Fascist Italy. This discussion is even more necessary, given the increasing possibilities of digitisation, and the availability of a greater number of these sources in digital repositories such as *Google Books*.

After reconstructing the history of these sources, I made a case for the ability of taxpayers’ lists to reflect, if not the absolute levels, the degree of variation of incomes within covered sectors and activities. The discussion of the potential limitations of these sources, carried on throughout the paper, will hopefully provide scholars with useful insights for addressing the most evident flaws of

²⁷ See the discussion in Gabbuti (2022, pp. 15-17).

the data. The complete cleaning of the data, starting from the information on activities and occupations, will make possible to further check the quality of the data, observing the relative ranking in average declarations by profession and activity, and possibly carrying on specific corrections for underreporting – especially for professionals (schedule C), who presented a very high share of declarations below the threshold, and as discussed in section 3, are arguably the least reliable observations.

A more complicated issue, that those willing to adopt similar sources for intertemporal comparisons will need to convincingly address, is to determine whether the incidence of evasion changed over time, and by which extent. As discussed, clear increase in both the number and the level of incomes assessed for the purpose of the *Imposta di ricchezza mobile* (both in absolute terms, and in terms of per capita GDP) is evident from the mid-1920 to the mid 1930s, consistently with the idea that the quality of fiscal data increased after the Great War, at least until mid-1930s. It is important to notice that Galletta and Giommoni (2023) have started exploring the information on tax compliance included in the same sources: this information could come useful also for more accurate regional comparisons, that also deserve more in-depth scrutiny, despite the reassuring evidence shown in Figures 4 and 6. Indeed, despite the limitations discussed throughout the paper, section 5 showed the potential offered by the sources, also in terms of gender inequality. Further investigation is required not only to investigate these aspects and extend the coverage to a higher number of lists, but also to fully exploit the geographic granularity of the sources, which could really contribute to a new wave of quantitative research on the economic history of modern Italy.

Table 3 - The Italian Historical Taxpayers' Database, 1889-1933

Province	Region	Area	Taxpayers	Share of Women	Average Income	Gini
<i>1933</i>						
Agrigento	Sicily	I	5,807	10%	3,952	0.400
Alessandria	Piedmont	NW	34,095	13%	5,968	0.495
Ancona	Marches	C	8,119	18%	6,391	0.505
Aquila	Abruzzi	S	5,776	12%	3,754	0.423
Arezzo	Tuscany	C	7,394	13%	4,392	0.430
Ascoli Piceno	Marches	C	6,507	11%	4,242	0.407
Avellino	Campania	S	10,920	10%	3,140	0.316
Bari	Apulia	S	25,598	10%	4,422	0.445
Belluno	Venetia	NE	5,447	19%	4,600	0.488
Benevento	Campania	S	7,265	8%	3,121	0.328
Bergamo	Lombardy	NW	17,697	14%	6,218	0.488
Bologna	Emilia-Romagna	NE	24,171	16%	7,255	0.494
Bolzano-Bozen	Trentino-Sud Tirol	NE	9,957	17%	5,458	0.528
Brescia	Lombardy	NW	24,686	17%	6,156	0.477
Brindisi	Apulia	S	5,520	12%	4,030	0.412
Cagliari	Sardinia	I	9,525	12%	4,716	0.476
Caltanissetta	Sicily	I	4,157	14%	3,912	0.395
Campobasso	Abruzzi	S	8,880	10%	3,499	0.386
Catania	Sicily	I	15,124	13%	5,608	0.492
Catanzaro	Calabria	S	9,437	11%	4,314	0.430
Chieti	Abruzzi	S	6,585	10%	3,698	0.400
Como	Lombardy	NW	21,037	13%	5,982	0.517
Cosenza	Calabria	S	10,474	9%	3,701	0.409
Cremona	Lombardy	NW	15,794	10%	6,982	0.474
Cuneo	Piedmont	NW	23,854	13%	4,948	0.422
Enna	Sicily	I	3,711	9%	3,159	0.312
Ferrara	Emilia-Romagna	NE	11,908	12%	5,653	0.462
Firenze	Tuscany	C	31,449	12%	7,715	0.534
Fiume		AT	2,993	21%	5,858	0.468
Foggia	Apulia	S	12,823	10%	4,009	0.403
Forli	Emilia-Romagna	NE	11,801	16%	4,425	0.434
Frosinone	Latium	C	7,521	15%	3,925	0.433
Genova	Liguria	NW	36,268	26%	8,103	0.542
Gorizia	Friuli Ven. Giulia	NE	4,965	23%	4,660	0.450
Grosseto	Tuscany	C	5,163	14%	4,697	0.447
Imperia	Liguria	NW	6,889	24%	5,899	0.525
Ionio (Taranto)	Apulia	S	5,827	10%	4,620	0.447
La Spezia	Liguria	NW	5,758	28%	6,021	0.524
Lecce	Apulia	S	10,679	10%	4,102	0.428
Livorno	Tuscany	C	8,703	20%	7,412	0.542
Lucca	Tuscany	C	12,510	19%	4,960	0.475
Macerata	Marches	C	6,293	11%	4,172	0.423
Mantova	Lombardy	NW	15,427	8%	6,535	0.424
Massa-Carrara	Tuscany	C	5,233	21%	4,557	0.465
Matera	Lucania	S	4,243	8%	4,041	0.404
Messina	Sicily	I	14,968	13%	4,505	0.449
Milano	Lombardy	NW	74,192	17%	11,298	0.563
Modena	Emilia-Romagna	NE	15,094	11%	5,723	0.440
Napoli	Campania	S	64,373	14%	8,233	0.566
Novara	Piedmont	NW	16,710	15%	7,396	0.504
Nuoro	Sardinia	I	2,987	13%	3,185	0.375
Padova	Venetia	NE	18,099	11%	5,594	0.477
Palermo	Sicily	I	19,807	12%	5,726	0.512
Parma	Emilia-Romagna	NE	17,495	14%	6,159	0.464
Pavia	Lombardy	NW	23,226	11%	5,964	0.520
Perugia	Umbria	C	10,540	12%	4,281	0.440
Pesaro Urbino	Marches	C	5,835	16%	3,893	0.397

Tab. 1 (Continued) - The Italian Taxpayers' Database, 1889-1933

Pescara	Abruzzi	S	3,898	13%	4,693	0.466
Piacenza	Emilia-Romagna	NE	13,937	12%	6,197	0.492
Pisa	Tuscany	C	11,670	14%	5,094	0.466
Pistoia	Tuscany	C	8,104	13%	4,261	0.428
Pola		AT	5,416	22%	3,966	0.398
Potenza	Lucania	S	9,387	9%	3,033	0.309
Pr. Friuli (Udine)	Friuli Ven. Giulia	NE	16,482	18%	5,201	0.473
Ragusa	Sicily	I	5,419	8%	2,999	0.299
Ravenna	Emilia-Romagna	NE	9,961	13%	5,029	0.423
Reggio di Calabria	Calabria	S	7,826	14%	3,557	0.375
Reggio nell'Emilia	Emilia-Romagna	NE	15,749	10%	5,298	0.426
Rieti	Latium	C	3,023	11%	3,603	0.408
Roma	Latium	C	43,508	21%	10,387	0.554
Rovigo	Venetia	NE	7,961	9%	5,981	0.467
Salerno	Campania	S	16,983	8%	4,208	0.416
Sassari	Sardinia	I	4,193	10%	4,504	0.446
Savona	Liguria	NW	9,467	25%	4,937	0.439
Siena	Tuscany	C	8,395	12%	4,954	0.452
Siracusa	Sicily	I	4,554	12%	3,977	0.385
Sondrio	Lombardy	NW	3,135	14%	4,113	0.426
Teramo	Abruzzi	S	2,848	12%	4,172	0.400
Terni	Umbria	C	4,423	14%	4,238	0.432
Torino	Piedmont	NW	53,536	19%	10,091	0.529
Trapani	Sicily	I	6,160	10%	5,483	0.495
Trento	Trentino-Sud Tirol	NE	10,636	15%	4,059	0.427
Treviso	Venetia	NE	12,933	15%	4,643	0.436
Trieste	Friuli Ven. Giulia	NE	9,660	22%	9,836	0.544
Valle d'Aosta	Piedmont	NW	8,079	16%	5,369	0.460
Varese	Lombardy	NW	14,129	16%	8,379	0.568
Venezia	Venetia	NE	16,532	15%	7,329	0.525
Vercelli	Piedmont	NW	18,482	12%	8,197	0.540
Verona	Venetia	NE	16,866	14%	5,752	0.487
Vicenza	Venetia	NE	17,591	14%	5,005	0.473
Viterbo	Latium	C	6,510	12%	4,295	0.432
Zara		AT	674	17%	4,096	0.422
<i>Total (Italy)</i>	<i>1,225,443</i>	<i>14%</i>	<i>6,388</i>	<i>0.518</i>		
1922						
Aquila	Abruzzi	S	5,940	10%	2,502	0.540
Belluno	Venetia	NE	3,661	21%	5,421	0.607
Benevento	Campania	S	4,780	7%	1,544	0.439
Bergamo	Lombardy	NW	16,150	13%	3,395	0.568
Bologna	Emilia-Romagna	NE	14,522	15%	4,879	0.536
Cagliari	Sardinia	I	13,926	12%	1,801	0.435
Caltanissetta	Sicily	I	4,540	12%	2,339	0.491
Catanzaro	Calabria	S	6,400	9%	2,246	0.508
Chieti	Abruzzi	S	5,191	11%	2,524	0.534
Firenze	Tuscany	C	27,361	12%	5,171	0.570
Genova (I)	Liguria	NW	13,683	21%	10,922	0.590
Imperia	Liguria	NW	4,193	22%	4,297	0.649
Ionio (Taranto)	Apulia	S	5,137	11%	2,297	0.470
La Spezia	Liguria	NW	4,423	32%	3,738	0.576
Livorno	Tuscany	C	3,851	21%	5,913	0.602
Massa-Carrara	Tuscany	C	3,279	20%	3,164	0.556
Messina	Sicily	I	7,156	11%	2,492	0.517
Modena	Emilia-Romagna	NE	9,947	10%	3,579	0.515
Padova	Venetia	NE	13,928	9%	3,392	0.559
Palermo	Sicily	I	12,829	13%	3,740	0.527
Parma	Emilia-Romagna	NE	11,441	13%	4,344	0.498
Perugia	Umbria	C	10,655	10%	2,577	0.529
Pesaro Urbino	Marches	C	4,866	14%	2,294	0.511

Tab. 1 (Continued) - The Italian Taxpayers' Database, 1889-1933

Pisa	Tuscany	C	7,206	15%	2,934	0.465
Potenza	Lucania	S	9,818	9%	2,094	0.488
Ravenna	Emilia-Romagna	NE	5,475	11%	3,304	0.458
Reggio di Calabria	Calabria	S	5,348	10%	2,420	0.539
Roma (I)	Latium	C	20,828	27%	6,677	0.497
Salerno	Campania	S	12,586	8%	2,092	0.572
Sassari	Sardinia	I	7,123	13%	1,771	0.417
Sondrio	Lombardy	NW	2,372	15%	2,044	0.475
Torino	Piedmont	NW	25,244	21%	9,798	0.673
Trieste	Friuli Ven. Giulia	NE	10,114	21%	4,311	0.616
<i>Total (33 Provinces – Genoa and Roma only Capitai)</i>			<i>313,949</i>	<i>15%</i>	<i>4,424</i>	<i>0.612</i>
1889						
Bergamo	Lombardy	NW	7,081	8%	1,030	0.431
Firenze	Tuscany	C	16,174	9%	1,619	0.610
Milano	Lombardy	NW	22,922	12%	1,783	0.579
Pavia	Lombardy	NW	7,994	8%	1,085	0.401
<i>Total (4 Provinces)</i>			<i>54,171</i>	<i>10%</i>	<i>1,533</i>	<i>0.561</i>

Source: author's elaborations on MEF-ID (1889b, 1924, 1933-34).

References

Official Sources

Ministero delle Finanze, Direzione Generale delle Imposte Dirette (MEF-ID) (1895). *Imposta sui redditi di ricchezza mobile: Statistica del reddito accertato e tassato per l'imposta dell'anno 1894. Parte II*. Rome: Tipografia Nazionale di G. Bertero.

--- (1883). *Imposta di ricchezza mobile. Prospetti statistici dimostranti il reddito e l'imposta iscritti nei ruoli principali e suppletivi pubblicati nell'anno 1882*. Rome: Tipografia Eredi Botta.

--- (1889a). *Imposta sui redditi di ricchezza mobile. Elenco dei contribuenti privati della categoria B e C iscritti nei ruoli principali 1889 per un reddito imponibile di lire 10000 o più*. Rome: Tipografia Eredi Botta.

--- (1889b). *Imposta sui redditi di ricchezza mobile. Elenco dei contribuenti privati della categoria B e C iscritti nei ruoli del 1889 (principali e suppletivi di 1^a serie)*. Rome: Tipografia Elzeviriana.

--- (1924). *Imposta sui redditi di ricchezza mobile: Elenco dei contribuenti privati possessori di redditi incerti e variabili delle categorie B e C esclusa la rivalsa*. Rome: Istituto Poligrafico dello Stato.

--- (1926). *La gestione delle imposte dirette dal 1914 al 1925*. Rome: Istituto Poligrafico dello Stato.

--- (1929-30). *Imposta sui redditi di ricchezza mobile. Elenco dei contribuenti possessori di redditi delle categorie B e C*. Rome: Istituto Poligrafico dello Stato.

--- (1932). *La gestione delle imposte dirette dal 1926 al 1930*. Rome: Istituto Poligrafico dello Stato.

--- (1933-34). *Imposta sui redditi di ricchezza mobile. Elenco dei contribuenti possessori di redditi delle categorie B e C*. Rome: Istituto Poligrafico dello Stato.

--- (1950). 'Dati relativi al gettito dei ruoli delle imposte dirette dal 1939 al 1945', *Bollettino Ufficiale*, Supplemento ai nn.1-2.

--- (1951). 'La gestione delle imposte dirette dal 1° luglio 1930 al 30 giugno 1940. Dati statistici', *Bollettino Ufficiale. Legislazioni e Disposizioni Ufficiali*, Supplemento ordinario N. 1.

Ragioneria Generale dello Stato (RGS) (1969). *Il bilancio dello Stato italiano dal 1862 al 1967*. Rome: Istituto Poligrafico dello Stato.

Secondary Literature

- A'Hearn, B., Amendola, B., & Vecchi, G. (2016). 'On historical household budgets', *Rivista di storia economica*, 2: 137-176.
- Alvaredo, F., & Pisano, E. (2010). 'Top Incomes in Italy, 1974–2004', in Atkinson, A. B., & Piketty, T. (eds.), *Top Incomes: A Global Perspective*. Oxford: Oxford University Press, pp. 625-663.
- Amato, V. (1965). 'Concentrazione dei redditi e sviluppo economico', *Annali di Statistica*, Serie 8., a. 94.16.
- Amendola, N., Brandolini, A. & Vecchi, G. (2011). 'Disuguaglianza', in G. Vecchi (ed.), *In ricchezza e in povertà*. Bologna: il Mulino, pp. 235-269.
- Amendola, N. & Vecchi, G. (2017). 'Inequality', in G. Vecchi (ed.), *Measuring Wellbeing: A History of Italian Living Standards Since 1861*. Oxford: Oxford University Press, pp. 293-332.
- Amendola, N., Salsano, F. & Vecchi, G. (2017). 'Poverty', in G. Vecchi (ed.), *Measuring Wellbeing: A History of Italian Living Standards Since 1861*. Oxford: Oxford University Press, pp. 333-372.
- Ami, S. (1885). *Curiosità statistiche della ricchezza mobile*. Rome: Tipografia Eredi Botta.
- Baffigi, A. (2015). *Il PIL per la storia d'Italia*: Venice: Marsilio.
- Banti, A. M. (1996). *Storia della borghesia italiana*. Rome: Donzelli.
- Barbagli, M. (1974). *Disoccupazione intellettuale e sistema scolastico in Italia (1859-1973)*. Bologna: il Mulino.
- Bompani, V. (1937). 'Considerazioni intorno all'imposta complementare progressiva sul reddito', *Diritto e Pratica Tributaria*: 303-312.
- Bozzi, P. (2021). 'Waiting for Equality: The Political Economy of Progressive Taxation in Republican Italy 1944-1974', in Sébastien Guex, Gisela Hürlimann, and Matthieu Leimgruber (eds), *Steuern und Ungleichheit / Fiscalité et inégalités* (Zürich: Chronos), 145-157.
- Brandolini, A. (2000). 'Appunti per una storia della distribuzione del reddito in Italia nel secondo dopoguerra', *Rivista di storia economica*, 2 (2000), p. 213.
- Ciccarelli, C., & Fenoaltea, S. (2013). 'Through the magnifying glass: provincial aspects of industrial growth in post-Unification Italy', *The Economic History Review*, 66: 57-85.
- De Grazia, V. (1992). *How Fascism Ruled Women: Italy, 1920-1945*. Berkeley: University of California Press.
- Di Martino, P. (2005). 'Approaching Disaster: Personal Bankruptcy Legislation in Italy and England, c.1880–1939', *Business History*, 47/1: 23-43.
- Ecce, (2023). 'War Profits and Tax Evasion: Italian Fiscal Policies in the First World War and After the War, 1915-1924', in
- Einaudi, L. (1927). *La guerra e il sistema tributario italiano*, Rome-Bari: Laterza.
- Fausto, D. (2007). 'La finanza pubblica fascista', in Id. (Ed.), *Intervento pubblico e politica economica fascista*, Milan: Franco Angeli.
- Favilli, P. (2009). *Riformismo alla prova ieri e oggi*. Milan: Feltrinelli.
- Felice, E. (2011). 'Regional Value Added in Italy, 1891–2001, and the Foundation of a Long-term Picture', *The Economic History Review*, 64: 929-950.
- Fenoaltea, S. (2015). 'Industrial Employment in Italy, 1911: The Burden of the Census Data', *Rivista di storia economica*, 2: 225-246.
- Frascani, P. (1978). 'Per la storia della stratificazione sociale in Italia: i ruoli dell'imposta di ricchezza mobile', *Quaderni Storici*, 13/39: 1063-1114.
- Gabbuti, G. (2019). L'"altra metà" della scienza economica: la misurazione della disuguaglianza in Italia tra le due guerre, *Il pensiero economico italiano*, 27/2: 107-134.
- (2020). 'Between Pareto and Gini: Notes on the Emergence of Modern Measurement of Personal Income Inequality in Italy (c. 1890-1940)', *History of Political Economy*, 52/3: pp. 435-454.
- (2021a). 'Labor Shares and Inequality: Insights from Italian Economic History, 1895-1970', *European Review of Economic History*, 25/2: 355-378.

- (2021b). *When The Leopard Meets Gatsby. Inheritance, Inequality, and Social Mobility in Liberal and Fascist Italy* [PhD thesis], University of Oxford.
- (2022). 'Those Who Were Better Off: Capital and Top Incomes in Fascist Italy', *LEM Working Paper Series* 2022/31
- Gabbuti G., & Morelli, S. (2023). *United but Unequal: Inheritances and Wealth Concentration in Italy from Unification to the Great War*, *mimeo*.
- Galletta, S. & Giommoni, T. (2022). 'The Effect of the 1918 Influenza Pandemic on Income Inequality: Evidence from Italy', *The Review of Economics and Statistics*, 104 (1): 187–203.
- (2023). *War Violence Exposure and Tax Compliance*. Available at SSRN: <https://ssrn.com/abstract=4316553>
- Gini, C., & D'Addario, R. (1931). 'La distribuzione dei redditi mobiliari in Italia', *Bulletin de l'Institut International de Statistique*, 25.3: 321-330.
- Gómez León, M., & de Jong, H. (2019). 'Distribution Dynamics in Turbulent Times: Income Inequality in Germany and Britain, 1900-1950', *The Economic History Review*, 73: 1073–1098.
- Gómez León, M., & Gabbuti, G. (2022). 'Wars, Depression, and Fascism: Income Inequality in Italy, 1900-1950', *EM Working Paper Series* 2022/26.
- Licini, S. (2011). 'Assessing female wealth in nineteenth century Milan, Italy', *Accounting History*, 16: 35-54.
- (2018). 'Distribuzione del reddito e della ricchezza, in Italia, tra Ottocento e Novecento: fonti e dati', in G. Gregorini (Ed.), *Le diseguaglianze economiche nella storia*. Milan: Vita&Pensiero, pp. 61-75.
- (2020). 'Women, Business, and Finance in 19th Century Milan', *Journal of Modern Accounting and Auditing*, 16: 117-129.
- Maestri, P. (1868). *L'Italia Economica nel 1868*. Florence: Stab. di Civelli.
- Mancini, G. (2018). 'Women's Labor Force Participation in Italy, 1861-2011', *Rivista di storia economica*, 1: 3-68.
- Manestra, S. (2010). 'A Short History of Tax Compliance in Italy', *Bank of Italy Occasional Paper*, 81.
- Maresca, V. (1965). 'Un indice di tentata evasione per l'imposta complementare sul reddito', *Annali di Statistica*, 94/16: 475-481.
- Melis, G. (2018). *La macchina imperfetta. Immagine e realtà dello Stato fascista*. Bologna: il Mulino.
- Michels, R. (1936). *Nuovi studi sulla classe politica. Saggio sugli spostamenti sociali ed intellettuali nel dopoguerra*. Milan: Dante Alighieri.
- Monnet, E., Riva, A., & Ungaro, S. (2021). *The Real Effects of bank runs. Evidence from the French Great Depression (1930-1931)*, CEPR Discussion Paper No. 16054
- Orlandi, S. (1933). *Su la distribuzione dei redditi mobiliari in Italia*. Rome: Guggiani.
- (1934). 'La distribuzione dei redditi mobiliari in Italia nel 1929', *La vita economica italiana*, 1: 46-64.
- (1935). 'La distribuzione dei redditi mobiliari nelle provincie e nei comuni capoluoghi di Provincia, nel 1929'. *La vita economica italiana*, 4: 11-31
- Perugini, M. (2014). *Il farsi di una grande impresa. La Montecatini fra le due guerre mondiali*. Milan: Franco Angeli.
- Scott, P. (2021). 'The anatomy of Britain's interwar super-rich: reconstructing the 1928/9 'millionaire' population', *The Economic History Review*, 74: 639-665.,
- Segreto, L. (2020) *L'indistricabile intreccio. Imprese, imprenditori e regime fascista*, *ivi*, LXI, 2020, 4, pp. 821-827
- Toniolo, G. (1980). *L'economia dell'Italia fascista*. Rome-Bari: Laterza.
- Vecchi, G. (ed.) (2017). *Measuring Wellbeing: A History of Italian Living Standards Since 1861*. Oxford: Oxford University Press.
- Zamagni, V. (1975). 'La dinamica dei salari nel settore industriale, 1921-1939', *Quaderni storici*, 10: 530-549.
- (1981). *La distribuzione commerciale in Italia fra le due guerre*. Milan: Franco Angeli.

Appendix I - The Taxpayers' Lists, 1889-1933

- MEF-ID (1889b)

This publication reports, in 69 volumes, all fiscal declarations filed by individual taxpayers for the schedules B and C, for an estimated number of c. 450,000 individuals. The lists report separately the two schedules, but this time, the sequential number does not allow to match observations across the two. The columns report names, 'Industry, profession, art, employment or condition', municipality, income (net and taxed).

CATEGORIA B.			BERGAMO:		
N.° d'ordine	COGNOME E NOME del CONTRIBUENTE	INDUSTRIA, COMMERCIO, PROFESSIONI, ARTE, IMPIEGO O CONDIZIONE	COMUNE	REDDITO	
				NETTO	TASSATO
	Agenzia di Almondo B. Salvatore.				
1	Agazzi Carlo in Cass. Battista	Negoriante vino	Palazzone Id.	504	400
2	Agazzi Gio. Ellerafe in Cass. Liberato	Osteria, macel. pignac. ed altro.		1.000	750

- MEF-ID (1924)

As for 1889, but this time for 75 provinces due to territorial annexations after WWI and administrative changes. Only net income is reported; in few cases, this is 'contested'.

Ufficio distrettuale delle Imposte di BERGAMO

COGNOME E NOME del contribuente	INDUSTRIA, COMMERCIO o professione	COMUNE	REDDITO NETTO	
			definito Lire	contestato Lire
1 Abati Luigi in Ferrari	Vino e commest.	PONTERANICA	1.800	
2 Acerbis Adalgisa	Osteria	BERGAMO	3.500	

- **MEF-ID (1929-30)**

Compared to previous editions, the 1929-30 one included the information on the year in which incomes have been assessed (fifth column), and reported taxpayers by schedule, 'group' and 'specie'; the notes should also make possible to match the same taxpayer across different sources.

Gruppo I.

Commercio all'ingrosso e manifattura di prodotti tessili, cuoi e pelli.

COMUNE	DITTA CONTRIBUENTE	INDUSTRIA commercio o professione	Reddito netto societario dell'anno precedente per il 1929	Stanziera del quadriennio di accertamento	REDDITO IN CONSERVAZIONE	
					dichiarato o confermato dal contribuente	proposto dall'ufficio

SPECIE I.

Commercio e manifattura della seta.

ALMENNO S. SAL.	Ciceri Mario	Filanda	9.000	1930		
-----------------	--------------	---------	-------	------	--	--

- **MEF-ID (1933-34)**

In the 1933 lists, the year of assessment is still reported (fourth column), but taxpayers are once again reported by municipality, without reporting schedules, groups and species.

Almenno con Villa
Almenno S. Bartolomeo PROV. DI BERGAMO - Ufficio DISTRETT. DI ALMENNO S. SALVATORE

Comune di	Cognome e Nome	Spese per	Industria	Reddito netto societario dell'anno precedente per il 1933	Stanziera del quadriennio di accertamento	Reddito in conservazione	REDDITO IN CONSERVAZIONE	
							dichiarato o confermato dal contribuente	proposto dall'ufficio
Almenno con Villa	ALBERTI CON VILLA							
Almenno con Villa	ALBERTI Antonio							
Almenno con Villa	ALBERTI Antonio							
Almenno con Villa	ALBERTI Antonio							
Almenno con Villa	ALBERTI Antonio							

Appendix II - The Categories of the Imposta di Ricchezza Mobile

Group		(Number of) Species	
1	Textile products - Leather	5	Trade and manufacturing of silk, wool, cotton, linen, ...
2	Agricultural Industries	3	Tenants, owners for the part exceeding their own land, other (breeding, ...)
3	Trade and Manufacturing of Natural Products	14	Trade and manufacturing of various foods.
4	Nourishment	6	Butcheries, grocery shops, bakeries and pasta shops, patisseries, ...
5	Various businesses	6	Hotels, house renting, pubs and restaurants, coffee shops and wineries, brothels,
6	Therapeutic Materials and Similar	3	Baths, terms, pharmacies, drugstores, ...
7	Chemical products and their industrial application; sugar, colonial goods	6	Production and trade of candles, oil, soap, fat, colours, sugar, colonial products, ...
8	Education, Arts	4	Schools, libraries, art galleries, journalism, theatres and companies
9	Clothing	7	Factories and shops of clothes, fashion, shoes, ...
10	Manufacturing and Trade of Small Items	3	Toys, masks, umbrellas, brushes, luxury goods, hats, ...
11	Mechanic Industries	4	Jewelleries, clockmakers, corals, several artisans, toolmakers, opticians, guns and knives, agricultural and industrial machineries, ...
B 11-bis	Electricity ²⁸	3	Energy production and distribution; production and gross distribution of electric supplies; trade of electric materials, workshops.
12	Manufacturing and Trade of Objects in Wood and Iron	3	Blacksmiths, farriers, ...; production and trade of iron and wooden furniture, wood flooring, ...; carpets, billiards, ...
13	Metals and Minerals	4	Mines of stones, marble, metals; peat bogs; salt works; solfatara.
14	Building Materials, Glass	4	Trade and manufacturing of building stones and marbles, ...; foundries, ...; manufacturing and trade of building timber, charcoal, ...; manufacturing and trade of China, glass, mirrors, majolica, ...
15	Transport, Maritime Trade	5	Railways; private cars, ...; maritime transports, ...; fishing, ...; production and trade of all means of transport other than railways, ways, and big boats.
16	Paper and Press	4	Paper mills; factories and traders of tapestry and play cards, stationery shops; publishers, bookshops, printing presses; photographers, ...
17	Credit and Various Business	4	Bankers, banks; changes; business agencies, commercials, auction houses; insurance firms.
18	Firms and Contractors	4	Pieceworkers and contractors in building of houses, railways, ordinary ways, bridges, and foremen; contractors of maintenance, public utilities and services, ...; municipal and provincial tax collectors; contractors of duties and tolls.

²⁸ This category was added in the mid-1920s, and first result in 1933 lists.

	19	Other Industries and Trades	1	Other industries, trades, manufacturing activities, which cannot be included in any of the previous groups
C	20	Educational Professions	2	Professors and teachers; writers, journalists, directors and editors of newspapers, ...
	21	Health Professions	2	Medical doctors, ophthalmologists; dentists, midwives, veterinaries, embalmers.
	22	Religious Professions	3	Priests and pastors of any religion, distinguished in two species on the base of whether they were entitled to celebrate religious functions.
	23	Legal Professions	2	Lawyers, solicitors; notaries; court ushers.
	24	Technical Professions	2	Architects and engineers; surveyors, consultants, ...
	25	Artistic Professions	2	Painters, sculptors, ...; Actors, singers, dancers, musicians, ...
	26	Società in accomandita semplice e in nome collettivo, ed esercenti industrie, commerci e professioni, pei loro dipendenti	3	This group basically report the part of taxes paid by business for their employees, divided in three species according to the legal nature of the business
	27	Private Employees, Annuities	2	Private employees, pensions and annuities
	28	Other Professions, Arts and Occupations	1	Other professionals, arts and jobs that cannot be classified in any of the previous groups