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ONE HUNDRED SIXTY YEARS OF GENDER INEQUALITY IN ITALY. A RESEARCH AGENDA

by Giulia Mancini

The goal of this paper is to take stock of where we stand in the reconstruction of the long-run dynamics of gender inequality in Italy, focusing on the post-unification period (from 1861 to the present, namely the last 160 years). This is accomplished in two ways: first, by proposing a list of indicators that can be thought of as the essential building blocks for such a reconstruction, and that can be assembled based on historical data. The emphasis is placed on quantification and comparability (both over time and across countries, or within areas of the country). Second, the paper assesses the available evidence within the economic history literature, and argues that the effort of building a quantitative economic history of Italian women is just at the beginning.

Keywords: gender inequality, Italy, capability approach, economic history, long run.

Il presente saggio ha l'obiettivo di descrivere lo stato dell'arte della ricostruzione dell'andamento di lungo periodo delle disuguaglianze di genere in Italia, nel periodo post-unitario (dal 1861 ad oggi, gli ultimi 160 anni). A tal fine, viene in primo luogo proposta una lista di indicatori che possono essere interpretati come elementi essenziali di questa ricostruzione, e che possono essere costruiti sulla base dei dati storici. L'enfasi è posta sulla quantificazione e sulla comparabilità (sia nel tempo che nello spazio). In secondo luogo, il saggio conduce una valutazione dei dati disponibili nell'ambito della letteratura di storia economica, e mostra come il processo di costruzione di una storia economica quantitativa delle donne italiane sia ancora nelle sue fasi iniziali.

Parole chiave: disuguaglianza di genere, Italia, approccio per capacità, storica economica, lungo termine.

Introduction

Italy stands out against its European neighbours for the persistence of gender gaps, particularly in the dimension of economic opportunity. As for most high-income countries, gender gaps in education in Italy have closed, and even reversed, but the gender employment gap is currently the largest in the EU, around 20 points[1]. Italian women do three times as much unpaid domestic work as men, the second highest ratio in the European Union (EU)[2]. As a

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[1] Data on the education and employment gender gaps are from Eurostat.

[2] Data are from the Organisation for Economic Co-operation and Development (OECD) Gender, Institutions

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consequence, about one in three coupled women in Italy reports having no income of her own, which again beats all EU countries but one (Ponthieux, 2015). As for political representation, Italy, with a 31% share of women representatives in Parliament, is in line with the EU average, but is far removed from comparable countries, like Spain or France, where women's parliamentary share is closer to 40% and where gender-split or female-majority cabinets were recently named[3]. As for most social processes in Italy, these aspects of gender inequality, and the culture that upholds them vary widely over the national territory, dividing the northern regions from the more traditional south (Amici and Stefani; 2013; Bozzano, 2014).

When has Italy started lagging behind its European neighbours? How fast or slow has progress been made in the different dimensions of gender inequality? How entrenched are regional divides within the country? More generally, what do we know about the history of gender inequalities in Italy?

These questions, which seek to establish quantifiable facts to find out *what* happened before formulating theories as to *why* it happened, may seem simple. Yet, we know surprisingly little about them. Some scholars (Humphries, 1991; Sharpe, 1995) described the integration of women and gender into economic history as going in consecutive stages: first is the recovery of "invisible women", that is, the establishment of women's lives as a legitimate object of study, to rectify previous lack of research; then comes the integration of women into the mainstream of economic history, meaning that even questions and debates that are not about gender, *per se*, are tackled by factoring in both women's and men's specific experiences, rather than neglecting the former. If one were to apply this step-wise view to the Italian economic history, the conclusion would probably be that we are moving through stage one. Therefore, despite its intimidating scope, the reconstruction of the long-run dynamics of gender inequality in Italy is but a piece of the puzzle, one of many tasks facing economic historians wanting to reverse the invisibility of women. For this reason, my focus on this question does not exhaust the research agenda for an economic history of Italian women, but it lays down the groundwork for further exploration.

The contribution of this paper is twofold. First, it proposes a well-defined list of long-run indicators of gender inequality that ought to be explored for the Italian case. These indicators can be thought of as the essential building blocks, the factual basis, for a historical account of gender inequality in Italy. The term "indicators" places emphasis on what is measurable, quantifiable: a penchant for comparability, both over time (linking historical developments of the condition of Italian women with the present) and across space (comparing the history of Italian women with what we know about other countries), naturally follows from espousing such an approach. The list of indicators is put together by drawing from the concepts and methods used in the analysis of gender inequalities today and from the economic history of women in other countries: the paper taps into the work of Martha Nussbaum within the framework of the capability approach to conceptualise gender inequality, as well as into the literature on composite indices of gender inequality to pin down measurable dimensions of this phenomenon. As a second contribution, the paper argues that there is a serious lack of information on many of these dimensions throughout the history of post-unification Italy, thus

and Development Database 2019, indicator "Female to male ratio of average time spent on unpaid domestic, care and volunteer work in a 24-hour period".

[3] Data on the share of women in national Parliaments are from the OECD Gender, Institutions and Development Database 2019, indicator "Percentage of women in the total number of representatives of the lower or single House of the Parliament". The information on female-majority cabinets is from the 8 June 2018 issue of *The Economist* (https://www.economist.com/graphic-detail/2018/06/08/spain-now-has-the-most-female-cabinet-in-europe).

mapping out the work ahead for quantitative economic historians, historical demographers, and economists interested in the evolution of gender inequalities in Italy.

The paper is organised as follows: Section 2 identifies a set of candidate dimensions and indicators of gender inequality; Section 3 narrows down the set to a shortlist, and assesses the evidence available in the Italian economic history literature, to highlight areas of where further research is needed; and Section 4 concludes.

1. Measuring gender inequality: dimensions and indicators

Measuring gender inequality over a span of centuries is a daunting task. This is not solely because as we go back in time, reliable quantitative evidence about social and economic facts becomes harder to track down, although that is certainly a concern. Arguably, the key challenge is one that faces economists interested in assessing the state of gender inequalities today as much as it does economic historians, and it lies in capturing such a complex phenomenon, using quantitative indicators. Gender inequality is an intrinsically multidimensional issue: it manifests itself in many spheres, from the workplace to the family, to the institutional landscape, and no single measure is able to encompass all of these facets.

The choice made here is to avoid reducing this complexity. The procedure I adopt is as follows: first, I select relevant *dimensions*; then, I proceed by identifying a set of *indicators* within each of these dimensions, to serve as their quantitative counterparts. The result is a grid that is of both conceptual and empirical use: it is a conceptual framework for thinking about the building blocks of a history of gender inequality in Italy, and provides a blueprint for identifying areas where quantitative evidence is lacking, as well as for prioritising future research efforts.

In selecting dimensions and indicators, I must strike a balance between goals that are partly at odds with one another. The first one is *breadth of scope*: to stand a chance of representing the complexity of gender inequality, any choice of dimensions must encompass a wide enough range of issues relevant to women's lives. The second goal is *pragmatism*: in this context, there is an empirical constraint to the scope of the concepts under consideration, as the final selection must be comprised of viable quantitative measures of wellbeing and inequality. The third goal is *relevance* to economic history: the indicators we choose should be able to "time-travel" and be pertinent to the economic history literature. I see this last requirement as related with a need for *parsimony* as well, given that the set of indicators here proposed is likely to be more useful for future research if, rather than being encyclopaedic, it is focused on crucial pieces of information, without which our knowledge of women's economic history is gravely lacking. For all these reasons, it should be clear that the set of indicators described in what follows has no presumption of being a complete enumeration of all issues that deserve attention in the study of women's experience in historical perspective.

To even begin circumscribing the problem, one needs to start from concepts, and answer the fundamental question: "Equality of what?" This is the title of Amartya Sen's Tanner Lecture at Stanford (Sen, 1980), and Sen's theory of equality and wellbeing is a natural candidate for providing a well-rounded definition of gender equality. The cornerstone of Sen's view is the notion of *capabilities*, that is, people's actual opportunities to do and to be what they have reason to value (Robeyns, 2016)[4]. At the end of the Tanner Lecture, Sen

[4] "The difference between a functioning and a capability is similar to the difference between an achievement and

puts forward the concept of "basic capability equality", which, seen through a gender lens, implies that gender equality should be interpreted as men and women being equally free to achieve certain fundamental goals that matter for individual wellbeing.

But what are these goals, exactly? The issue with this definition is that it is too abstract for the purpose of measuring gender inequality and the way it changes across societies, both over time and across countries. According to philosopher Martha Nussbaum, «[Sen's arguments] give us a general idea of what societies ought to be striving to achieve, but because of Sen's reluctance to make commitments about substance (which capabilities a society ought most centrally to pursue), even that guidance remains but an outline» (Nussbaum, 2003, p. 37). Therefore, she proposes a list of "central human capabilities" that, while still general, is specifically formulated for conceptualising and assessing gender inequality (Nussbaum and Glover, 1995; Nussbaum, 2000 and 2003). The list is reproduced below[5]:

1) *life*: the ability to live to the end of a human life of normal length;
2) *bodily health*: the ability of living in good health;
3) *bodily integrity*: agency over one's own body, including safety from violence, freedom of movement, and sexual and reproductive choice;
4) *senses, imagination, and thought*: the ability to express oneself intellectually, in a way cultivated by adequate education;
5) *emotions*: the ability to form attachments to things and people;
6) *practical reason*: protection for the liberty of conscience and religious observance;
7) *affiliation*: engagement in social interaction and non-discrimination;
8) *other species*: engagement with nature;
9) *play*: the ability to enjoy recreational activities;
10) *control over one's environment*: both political, in the form of the right to political participation, and material, in the form of command over commodities (through the ability to work and to exercise property rights).

Nussbaum makes a strong claim for the universality of the list – based on a "broad cross-cultural consensus" – as it is designed to be politically actionable and to form a basis for the advancement of constitutional rights. Even if one approaches such universalistic claims with scepticism (Robeyns, 2005), the list still serves our purposes well: it is useful because of its wide reach over a multitude of aspects of the human experience where we witness gender inequality; this is consistent with the goal of *breadth of scope* for our final set of indicators. It is also pliable enough to be adapted to very different social contexts, including those we encounter going back in time.

Precisely because of its broad scope, Nussbaum's list still needs to be "grounded", and in many ways restricted, by empirical considerations – our *pragmatism* requirement – in order to fit the purpose of this paper. The literature on composite indices of gender inequality provides a way forward in this direction. In general, the formulation of any composite index – be it of gender inequality, individual welfare, or human development – involves two steps: first, the selection of a set of sub-indices, or individual measures, of the facets of a complex phenomenon; then, the choice of a method of aggregation to collapse these sub-indices into a singular measure. For the purposes of the current discussion,

the freedom to achieve something, or between an outcome and an opportunity" (Robeyns, 2005, p. 65). See also Sen (1980 and 1985).

[5] This version of the list appears in Nussbaum (2003, p. 41). The descriptions of each item have been slightly shortened.

the appeal of gender inequality indices lies in step 1: the building blocks of indices that are currently used by international organisations and by academia for monitoring gender inequalities can be seen as operational versions of Nussbaum's list. At the core of these indices is a conviction that their components capture enough, if not all, of the fundamental dimensions of gender inequality; but in contrast to the list, they are conceived as a collection of concrete, quantifiable metrics. On the other hand, step 2 – the method of aggregation – will be disregarded entirely, as the purpose of this paper is not the construction of a composite index, but rather the selection of a "dashboard" of measures[6].

Table 1. Dimensions and indicators underlying selected composite gender inequality indices

	Global Gender Gap Index (GGGI) (WEF, 2006)	Gender Inequality Index (GII) (UNDP, 2010)	Gender Equality Index (GEI) (EIGE, 2013)	Historical Gender Equality Index (HGEI) (OECD, 2021)
Health	Sex ratio at birth Healthy life expectancy	Maternal mortality ratio Adolescent birth rate	Self-perceived health Life expectancy Healthy life years Unmet medical and dental needs	Child sex ratio Life expectancy ratio
Education	Literacy Primary, secondary, and tertiary enrolment rate		Share of graduates of tertiary education Educational segregation (share of students in the fields of education, health, and social work) Share of adults in education and training	Average years of schooling
Work	Labour force participation Wage equality for similar work Earned income Female to male legislators, senior officials, and managers Female to male professional and technical workers	Labour force participation	Full-time equivalent (FTE) employment rate Duration of working life in years Sectoral segregation (share of workers in education, health, and social work)	Labour force participation

(*continued on next page*)

[6] The use of composite indices in economic history, in particular the Human Development Index (HDI), has been criticised because any composite index «reflects the preferences of their creator, with no clear connection to the preferences of the individuals whose lives are being described» (Amendola *et al.*, 2018, p. 1).

Table 1 (*continued from previous page*)

			Share of employees with flexible work schedules Self-perceived safety at work Share of workers having undergone training	
Time			Share of workers spending time in childcare/domestic /leisure/volunteering and charitable activities	
Money			Mean earnings Mean income Poverty (headcount, relative poverty line) Inequality (income quintile share)	
Empowerment and decision-making	Share of parliamentary seats Share of ministerial positions Number of years with a female head of State	Educational attainment (secondary level and above) Share of parliamentary seats	Share of ministerial positions Share of parliamentary seats Share of seats in regional assemblies Share of seats in quoted company boards Share of seats in central banks	Age at first marriage Share of parliamentary seats

Note: the HGEI conceptualises average years of schooling and labour force participation as belonging to the domain of "socio-economic standing"; the two indicators are assigned to the education and labour market dimensions here, to facilitate comparisons with other indices.

The indices reviewed are: the Global Gender Gap Index (GGGI) of the World Economic Forum (WEF) (Lopez-Claros and Zahidi, 2005; WEF, 2006); the Gender Inequality Index (GII) of the United Nations Development Programme (UNDP) (UNDP, 2010); the Gender Equality Index (GEI) of the European Institute for Gender Equality (EIGE) (EIGE, 2013); and the OECD's Historical Gender Equality Index (HGEI) (Carmichael *et al.*, 2014; Dilli *et al.*, 2019 and 2021). The choice of the indices is based on their scope: their goal is to measure gender inequality as a broad concept, and to do so across a diverse range of societies (they are designed for international comparisons, either currently, as for the GII, GEI, and GGGI, or in historical perspective, as for the HGEI)[7]. Table 1 contains a summary of the indices.

[7] The first global gender inequality indices ever proposed, the Gender Development Index (GDI) and the Gender

The choice of dimensions forming the basis for each index is a first useful indication of how concepts can be brought to data. In essence, the dimensions underlying the indices can be traced back to the following list: health, education, work (economic participation), time (activities performed outside the domain of work), income, empowerment, and decision-making. Most indices do not incorporate all dimensions explicitly, but they might do so implicitly, through the selection of indicators. For instance, the dimension of "money" is exclusive to the GEI, but the GGGI includes income in its "work" dimension; similarly, the GII does not have an explicit "education" dimension, but it uses educational attainment as a measure of "empowerment". That is to say, regardless of the phrasing used, all indices seem to be concerned with measuring the dimensions listed in the first column of Table 1[8]. Overall, these dimensions are not too far removed from Nussbaum's list, although the most "immaterial" aspects, which are difficult to measure, are necessarily left out.

While the composite indices in Table 1 are consistent with regard to the choice of dimensions, the measures chosen *within* each dimension show some variation. All four indices are conceived as composite measures of gender inequality, but each one is constructed to serve a specific agenda, and this informs their composition. The GGGI focuses on producing evidence for policy making, and its proponents are adamant about choosing outcome variables rather than input measures: "For example, the index includes a variable comparing the gap between men and women in high-skilled jobs such as legislators, senior officials and managers (an outcome variable) but does not include data on length of maternity leave (a policy variable)" (WEF, 2006, p. 5). The GII is parsimonious, on par with its genesis as an offspring of the HDI. It attempts to minimise the "urban élite bias" that had been criticised in previous gender inequality indices, by selecting indicators that are relevant for high and low-income countries alike: "None of the underlying measures pertains to a country's general level of development, so developing countries can perform relatively well if gender disadvantages are limited" (UNDP, 2010, p. 90). The GEI skews almost completely the other way: its focus is Europe and its specific socio-economic context. For this reason, the GEI might not be as fitting as other indices for our "time-travelling" purposes. However, it is the only one that goes beyond labour force participation as a measure of economic activity, by factoring in hours worked, and that attempts to measure gender differences in tasks outside the realm of paid work (domestic and care work). Both aspects are crucial when describing the gender division of labour, both today and in the past. Finally, the HGEI is clearly relevant in the context of this paper, given its historical focus. Overall, the index is very parsimonious, because it is intended for international comparisons since 1900: some additional indicators, such as wages, the share of female-headed households, and the allocation of housework, are deemed relevant by the authors, but ultimately set aside because of data gaps (Dilli *et al.*, 2019).

Empowerment Measure (GEM) (UNDP, 1995), are not considered here. The GDI is not intended as a measure of gender inequality *per se*, but rather as a measure of gender gaps in the HDI, and, as such, is computed as the ratio of HDIs calculated separately for women and men. Similarly, the GEM focuses on political participation, economic participation, and income gaps, rather than on gender inequality broadly. The Relative Status of Women's Index (Dijkstra and Hanmer, 2000) uses the same dimensions as the HDI, and has therefore also been excluded from consideration. The OECD's Social Institutions and Gender Index (SIGI) measures discrimination against women in social institutions (formal and informal laws, social norms, and practices).

[8] The HGEI is the only indicator for which Table 1 uses different dimensions than the original sources (OECD, 2021). In fact, average years of schooling and labour force participation are both described as belonging to the domain of "socio-economic standing". These same indicators appear under the more descriptive domains of "education" and "work" for other indices, so this is the way they are presented for the HGEI as well. This choice is intended to facilitate comparisons with other indices, and does not change the substance of the HGEI.

Table 1 cannot provide a definitive answer to the question of which indicators are essential to a quantitative long-run account of gender inequalities. However, it does provide useful clues: it puts a number of candidate measures on the table, some recurring (like life expectancy, educational attainment, and labour force participation) and some specific to the genesis and purpose of each index. The goal is to find a synthesis between these different configurations, one that is relevant to the Italian context and its history and that captures enough facets of a complex phenomenon while still being manageable in terms of data requirements – these are the criteria of *relevance* and *parsimony* stated above. The next section proposes a solution.

2. Gender inequality in the history of Italy

My shortlist of "essential facts" for a historical account of the evolution of gender inequality in Italy is based on the dimensions identified in the previous section: health, education, work, time, money, empowerment, and decision making. The indicators selected for each of these dimensions are listed in Table 2.

Table 2. Dimensions and indicators for measuring historical gender inequality in Italy

Dimensions	Indicators
Health	Life expectancy Sex ratio Nutrition Height
Education	Literacy Enrolment rates by level
Work	Labour force participation Hours worked Occupations/Tasks
Time	Time spent in domestic and care work
Money	Wage
Empowerment and decision making	Age at first marriage and family patterns Legislative blocks to women's agency (inheritance legislation, family law, property rights, and labour laws)

Source: author's elaboration.

The proposed indicators can be interpreted in absolute or relative terms, that is, as levels (women's outcomes) or gaps (male/female ratios or differences). The purpose of the two approaches is explained effectively in Francine Blau's review of the major trends in the wellbeing of US women over the previous 25 years:

> An interest in relative outcomes of women flows naturally from a concern that women are in some sense in a disadvantaged position in the labor market, in the family, and in the larger society. But […] even if gender differences in outcomes were entirely due to differences between men and women

in preferences and qualifications, it is still of interest to know whether such factors have resulted in widening or narrowing differences in outcomes over time. In addition to permitting an appraisal of progress toward gender equality per se, women's relative progress is also of interest because data on males provide a useful benchmark against which to assess women's progress, in effect enabling us to estimate a period effect. […] Absolute trends in indicators of wellbeing among women are also important. So for example, it instructive to know not simply that the gender wage gap is declining, but also the magnitude of any real wages increases for women (Blau, 1998, p. 113).

As a final general remark, it is important to bring up the issue of aggregation. The indicators proposed in Table 2 can be seen as aggregate, country-level statistics that lend themselves to long-run, cross-country comparisons. However, gender gaps, as well as their causes and consequences, tend to differ substantially across segments of the population: considering women's outcomes *at least* by age cohort and by marital status is essential to any reconstruction of the evolution of gender inequalities over time (Goldin, 1990 and 2021); similarly, disaggregation across regions or provinces is crucial to a context like Italy, where many of the social and cultural determinants of gender gaps show wide territorial variation (Bozzano, 2017). Although the few subgroups mentioned here certainly do not exhaust the long list of intersections that are relevant to the analysis of gender inequality, hoping to construct long-run series that consistently can be broken down along these lines is a lot to ask of historical data. Still, keeping these goals in mind can help in the prioritisation of research efforts.

In the rest of this section, I motivate the choice of the indicators presented in Table 2, and review the literature that explores the available evidence for the Italian case, to highlight the progress made and the remaining data gaps.

2.1. Health and education

There is little need to elaborate on the relevance of health as an essential human capability. Being born, and, once born, being able to live a long life can be seen as two of its essential components (Robeyns, 2005): this leads to the choice of the sex ratio and life expectancy as indicators that should be given priority when measuring this dimension. Regarding sex ratios, the analysis of this indicator as a long-run measure of gender discrimination has recently garnered much attention in the economic history literature, many years after Amartya Sen (1990) first brought to light the fact that the birth or survival of Indian girls was being thwarted by female infanticide and/or mortal neglect at a young age, thus generating an otherwise unexplained imbalance in child sex ratios. The study of sex ratios allows for tracking the evolution of this fundamental gender gap back to pre-industrial times, demonstrating that girls were "missing" from population counts in many European countries up until the turn of the 20th century (Beltrán-Tapia and Gallego-Martínez, 2017; Beltrán-Tapia, 2019). For the Italian case, research on this topic is currently at an early stage, and is beginning to bear fruit (Beltrán-Tapia and Cappelli, 2022). On the other hand, abundant evidence is available on women's life expectancy: long-run series of this indicator disaggregated by gender appear in the works of historical demographers (Del Panta *et al.*, 1996; Caselli, 1991; Caselli and Lipsi, 2002) as well as economic historians (Vecchi, 2017).

The other two indicators associated with the health dimension in Table 2 are nutrition (calorie intakes and dietary composition) and human height, which have been included because of the position they occupy in the economic history literature as proxies of

wellbeing. In practice, though, these indicators are extremely data demanding. A'Hearn (2003) and Federico (2003) headline a stream of literature that enlists anthropometrics for the arsenal of the economic historian, and uses heights as a proxy for Italian living standards. These studies, and those that followed, are based on data on the heights of military conscripts, and are therefore silent on gender differences in standards of living. Granted, data on the statures of women are rare and less readily available than military data, but there have been successful attempts to examine gender inequality based on heights in other countries (Humphries, 1991; Nicholas and Oxley, 1993; Horrell and Oxley, 2013) by using, for instance, data on female convicts. Similar considerations apply to nutrition: Italian economic history has produced precious insight on the evolution of nutritional outcomes of the general population (Vecchi and Coppola, 2006; Sorrentino and Vecchi, 2017), but little evidence has yet emerged on mechanisms of intra-household allocation of resources in the country's past (one exception is Mancini, 2020). To be sure, it is unlikely that consistent long-run series could ever be constructed for female heights and for gender gaps in nutritional outcomes, but even a few data points can go a long way in documenting how far, or how close, is the time when gender gaps manifested in such elementary dimensions of welfare.

The next dimension considered in Table 2 is education. Gender differences in education tell us a great deal about the wellbeing of women, and the extent to which they have reached equality in society. While education can be seen as intrinsically valuable, and thus as one of the activities and states that make up wellbeing itself, there is little doubt that it is also a means to access other components of wellbeing, expanding individual capabilities. For women, in particular, links have been established between education and health outcomes, bargaining power within the family, labour market opportunities, and children's wellbeing (Duflo, 2012; Klugman *et al.*, 2014).

While only one of the composite indices reviewed in Table 1 uses literacy as an indicator of gender inequality in education, it is an important metric to consider when looking back in time, especially for a country, like Italy, where less than 30% of the population was literate at the time of unification, in 1861 (A'Hearn and Vecchi, 2017). As a consequence, literacy is included in Table 2, together with enrolment rates by level. The latter set of indicators makes it possible to track the extent to which the expansion of primary, secondary, and tertiary education, which happened by successive stages in today's rich countries, left girls and women behind (Lee and Lee, 2016).

Education is perhaps the domain where our knowledge of gendered outcomes over the course of Italy's history is most comprehensive. A'Hearn and Vecchi (2017) present long-run series of literacy rates and primary enrolment rates by gender, build a comprehensive overview of the evolution of the Italian education system, and offer precious insight on gender differences in education in a long-term perspective. Bertocchi and Bozzano (2015) investigate the determinants of gender gaps in education in Italian regions since the unification, focusing on family structure as a proxy for gender roles; the same authors explore the deep roots of educational gender gaps in late-19th-century Italy by focusing on the medieval pattern of commerce (Bertocchi and Bozzano, 2016). Ciccarelli and Weisdorf (2019) reach further back in time, and "predict" literacy rates for men and women at the province level for the period from 1821 to 1911. Cappelli and Vasta (2020) investigate the role played by school reforms in the spread of female education between 1861 and 1921.

2.2. Work, time, and money

The relevance of women's paid work in the path to gender equality throughout history is undisputed: economic independence has been linked to women's increased autonomy and bargaining power within the family, which in turn can impact the most basic dimensions of their wellbeing (Nicholas and Oxley, 1993; Horrell and Oxley, 1999, 2013 and 2016). Paid work performed outside the home plays a major role in the "grand gender convergence" that took place over the course of the past century (Goldin, 2014). Arguably, the study of the characteristics and transformations of women's work is one of the most fertile sub-topics in the economic history of women (Van Nederveen Meerkerk, 2014).

However, the concept of work itself is fraught with complexities, and a rich literature has been devoted to unpacking the ways in which historical measures of female work can be misleading (Tilly and Scott, 1987; Goldin, 1990; Humphries and Sarasúa, 2012; Sarti, 2018), culminating in the proposal to discontinue the use of labour force participation as a measure of female work in pre-industrial times entirely (Burnette, 2021). Yet, labour force participation is included in the shortlist of indicators in Table 2, in part for its long tradition in economic history, and most importantly because it can still be informative as a long-run indicator of economic activity, if one is aware of its shortcomings, and complements it with other indicators that describe women's work beyond the extensive margin – namely time worked –, as well as the quality of women's work, the activities they performed, and their remuneration – namely occupations and wages. Before industrialisation, when levels of both male and female labour force participation would be high (Goldin, 1995), these additional pieces of information prove essential in differentiating the work of women from that of men, as well as from that of contemporary women.

The most comprehensive and thorough account of Italian women's work through the lens of economic history is that of Francesca Bettio (1985 and 1988), which uses the Italian case to study the determinants of the gendered division of labour. This work remains unparalleled, and in many ways underutilised, more than 40 years later. More recently, attempts have been made to recover a national series of female labour force participation that is corrected for the biases that affect its measurement in the population censuses (Mancini, 2018), to explore alternative sources of information on women's productive activities (Mancini, 2020) and to estimate the gender wage gap for the agriculture and manufacturing sectors during the liberal age (Federico *et al.*, 2021). Overall, though, the dimensions discussed here appear to be the least investigated in the Italian economic history literature. On the other hand, social historians and labour historians have produced a wealth of research on the history of female work throughout different eras of Italy's history (see, for instance, Betti, 2019 and 2020, and Pescarolo, 2020). For these reasons, this particular area of study appears to be extremely promising in terms of future research prospects.

2.3. Empowerment and decision making

The dimension of empowerment is interpreted by the indices reviewed in Table 1 mostly in the political sense, as evidenced by the choice of indicators like the share of parliamentary seats and other positions of political power held by women. However, women's and men's decision-making power is also wielded at a much more private level, within the family, where empowerment and disempowerment are more difficult to measure directly, thus leading to the use of proxies.

The proponents of the HGEI suggest using the mean age at marriage to capture agency within the household, based on the argument that early marriage is associated with women's limited control over their sexual and reproductive health decisions, and with domestic violence outcomes in the household (Dilli *et al.*, 2019). However, the use of this indicator is also linked with the literature on the European Marriage Pattern (EMP), which is described as being characterised by nuclear residential patterns, relatively late marriage, and widespread female celibacy, as opposed to a pattern of early marriage and extended families prevailing in southern Europe (Hajnal, 1965 and 1982). Research in economic history on the implications of the EMP highlights its connection to increased female agency within the family and to a culture of gender equality that has significant long-run effects on women's labour market outcomes (see, for instance, De Moor and van Zanden, 2010). Overall, the literature suggests the age at marriage as a powerful, if simple, indicator of female empowerment, which is why it has been included in the shortlist proposed in Table 2.

On the other hand, indicators of political power do not appear in Table 2. This is because of Italy's short republican history, and consequently limited span for women's direct participation in political affairs. The alternative considered here is to systematically track the ways in which politics has imposed constraints on women's autonomy throughout Italy's history, by putting together data on discriminatory legislation in various spheres, including property rights, access to credit, and labour laws (Doepke *et al.*, 2012). An example of this approach applied across countries and over time, though still over a relatively short timespan, is in Roy (2019) and the World Bank (2020).

Some evidence on both of these aspects – marriage ages and family patterns on one hand, and legislation impacting female agency on the other – is available for the case of Italy, although much remains to be investigated. National series that categorise married men and women by age brackets, as well as some indicators of family size, covering a span of 150 years have been assembled by Italy's National Statistical Institute (Istat) (Istat, 2011). Bertocchi and Bozzano (2015 and 2019) have leveraged a long tradition of historical demography (Barbagli, 1987; Del Panta *et al.*, 1996) to produce insightful results on the roots and consequences of marriage patterns on gendered outcomes in Italy. Their work, which is based on the 1871 population census, advocates for the use of this type of indicator at the regional or even provincial level, given the wide variations documented across the national territory. A systematic analysis of the evolution of family structure from unification to the present day is yet to come. Similarly, no quantitative studies on the "institutional" aspects of women's agency exist, although the qualitative historical literature is rife with information (see, for instance, Pescarolo, 2020, and Palazzi, 1997).

3. Conclusions

Research efforts on gender inequality and women's marginalisation in the Italian context are stymied by a lack of quantitative evidence on women's past experience. The efforts made by social historians and women's historians in reconstructing the history of Italian women are still unparalleled in economic history. At least in part, this can be explained by the fact that the historical record on women's lives tends to be spottier than for men, and its interpretation requires even greater subtlety. The history of women's work, with its careful vetting of official sources and its search for alternative ones, is a perfect example

(Humphries and Sarasúa, 2012). This is the essence of the economic historian's craft, that of "reconstructing the past": "We cannot observe past objects, our sources reveal only their shadows, to reconstruct a shape from its shadows we must pinpoint the sources of light; to understand the data in the sources we must understand how, by whom, and to what purpose they were produced, we must learn to read our quantitative sources, or rather to read *through* them. This is the historian's stock-in-trade" (Fenoaltea, 2020, p. 12). This kind of foundational, painstaking, often thankless work is more necessary than ever in this field.

This paper takes a step in the direction of recovering the "facts"[9]. The shortlist of indicators it suggests prioritising, while inevitably partial and decidedly open to debate, is intended to serve as a pragmatic roadmap for future research. An assessment of the Italian economic history literature shows that, in recent years, significant progress has been made in the study of some domains of women's lives; more importantly, some of this research is brand-new, which indicates a growing interest in gendered outcomes. However, there is still a long way ahead, and coordinating efforts would help to sustain the development of the field.

Ultimately, the end goal of uncovering evidence is interpretation: Humphries (1991, p. 42) lamented the fact that, despite the progress made in fact-finding about women in British economic history, "working out the implications of gendered experience has been much less successful. To the extent that women figure in the mainstream texts they have been 'added on' with unsatisfactory implications. […] And yet the implications of women's experience for the mainstream are considerable". This is a call for women's history to not be a specialty, a niche subject, but rather a source of insight for revisiting the "big debates" in economic history, which concern women as well as men. As economic historians interested in reconstructing Italy's past, our eyes remain on that prize, while we continue to bring to light what has been selectively forgotten.

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[9] The double quotes are another reference to Fenoaltea's description of the complicated relationship between economic history and its sources (Fenoaltea, 2019).

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