

OFF THE RECORD: RECONSTRUCTING WOMEN'S LABOR FORCE PARTICIPATION IN THE EUROPEAN PAST

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ABSTRACT

Conventional histories of women's labor force participation in Europe conceptualize the trends in terms of a U-shaped pattern. This contribution draws on historical research to challenge such an account. First, it demonstrates that the trough in participation is in part statistically manufactured by uncritical reliance on official sources that systematically undercount women workers. Second, it exploits nonstandard sources to construct alternative estimates of women's participation. Third, it analyzes the reconstructed rates to determine their congruence with neoclassical economics and modern empirical studies. Not all posited relationships time travel. Supply-side factors such as marital status and number and age of children are major determinants of modern women's decision to enter the labor force, yet appear less prominent in historical contexts. Instead, the demand for labor seems decisive. Finally, the U-shaped curve is not entirely a statistical artifact, but appears to evolve at higher levels of participation than usually suggested.

KEYWORDS

Economic development, economic history, economic growth, women's labor force participation, family wage, labor market inequality

JEL Codes: J01, J16

INTRODUCTION

Granie altho a very little woman got thro a lot of work. There was a silk factory about 3 miles from our cottage. She used to go there about once a week and bring back some hanks of silk wind it off her spinning wheel onto Bobbins take them back to the mill and bring back some more. Sometimes she worked for the farmers spurling dung about the fields and picking stones off the land. I remember going with her at harvest time gleaning with two of my aunts who were not much older than myself ... Then came the potatos picking. All

these little jobs help'd to keep the pot a boiling. (Jane Humphries 2010: 103)

As long ago as 1978, no less authoritative a commentator than the *Wall Street Journal* described the post–World War II entrance of women into paid employment as “a revolution” that, while “subtle,” loomed “at least as large as the Industrial Revolution that shook Europe nearly two centuries ago” (Alfred L. Malabre, Jr. 1978). The increase in women’s, particularly married women’s, labor force participation has had profound effects on living standards, fertility patterns, labor markets, employment legislation, union practices, and national politics, not to mention gender roles.¹ The simultaneous, though much less dramatic, recent decline in men’s participation rates in all Western countries makes the evolution of women’s participation rates even more remarkable.

The Off the Record symposia (*Feminist Economics* 2012 and forthcoming) place these recent trends in their historical context; but it is a context that, we contend, requires systematic revision. Conventional histories of women’s work based on official sources are misleading, and feminist economic historians must tackle the demanding but not impossible task of reconstructing alternative accounts. Such feminist alternatives challenge both orthodox neoclassical economists and mainstream economic historians; the former insofar as they hold that supply-side factors could readily explain women’s labor input and the latter insofar as they contend that women’s labor input was unimportant or impossible to quantify or both. Through this dual challenge, feminist readings rescue the history of women’s work from its marginal, “off the record” status, revamping chronology and providing new interpretations with incidental implications for metanarratives of economic growth and development.

The post–World War II rise in women’s participation rates has attracted the attention of economists. In pioneering work, Jacob Mincer (1962) recognized that in allocating their time, married women did not just choose between paid work and leisure but had a third option: unpaid work in the home. The standard choice theoretic framework of orthodox economic theory explained the rise in women’s labor force participation in terms of an increase in the value of women’s time in the market relative to the home. However, results seemed conflicting: cross-section studies showed an inverse relationship between husbands’ incomes and wives’ participation; time series implied a positive relation. Mincer argued that in addition to her husband’s earnings a wife’s potential wage would influence her time allocation, and he solved the apparent contradiction by projecting the dominance of the own-wage effect through time. Increasing remuneration for married women in the twentieth century had attracted them into paid employment as it raised the opportunity costs of both leisure and domestic work. Price responsiveness explained the subtle revolution!

Innovative as Mincer's model was, the projection of cross-section findings, in terms of the application of price and income elasticities based on cross-section regressions to secular changes in such explanatory variables, could not explain the large increases in married women's activity rates observed in almost all advanced industrial economies since the 1950s. Historical factors also apparently contributed, and there was no shortage of suspects. Most studies mentioned a long list, including changes in attitudes toward married women's market-oriented work, increased availability of and decline in the price of substitutes for labor in the home, increased availability of nonmaternal childcare, and falling fertility.

The next step was to model these factors in historical settings, which raised the issue of the prehistory of the post-World War II boom. What had happened to women's participation in the economy before the upsurge? The most influential contribution was by Claudia Goldin (1995). Goldin began by observing that several students of development economics had made reference to a U-shaped relationship between women's labor force participation rates and economic development. Pursuing these ideas, Goldin combined a cross-section description of countries at different levels of income, a choice theoretic model of time allocation, and a historical case study of US women. Goldin (1995) appealed to a theoretical model, which suggested how, as household incomes increased, women's choices would rationally involve first a retreat from the labor force and only much later, when their educational levels had caught up to men's, reengagement in market work. In explicating the downward phase of the U, Goldin cited the pioneering work of Ester Boserup (1970), which had argued that the structural changes associated with economic growth reduced women's participation rates – an idea that had become a standard of development economics.² In addition, Goldin used her historical analysis of the evolution of US women's educational levels and labor force attachment to substantiate the evidence for the recovery of women's involvement in the economy and its explanation in terms of their choices and endowments. Summarizing, Goldin asserted confidently that “[A]cross the process of economic development the adult women's labor participation is U-shaped” (1995: 62). However, many of the explanatory factors alleged to be behind the evolution of women's participation rates remained hypothetical.

There are various interpretations of the downward portion of the U. Most accounts began with a poor and underdeveloped economy in which survival required everyone to contribute. In such settings, women often worked with other household members on family farms or in domestic manufacturing (Eric Richards 1974). Explanations of the retreat from economic activity were intensely debated. Boserup (1970) emphasized changes in farming systems and their interaction with a gender division of labor, while some

historians thought industrialization itself a depressing factor. As production moved to factories and firms, waged work began to predominate. These new arrangements afforded opportunities – often at higher wages as productivity increased – but stigmas existed against women, especially married women, working outside a family setting or performing manual labor. At the same time, rising family incomes prompted a reallocation of women’s time from work outside the home or in family enterprises toward leisure or childcare. New technologies, if they replaced jobs hitherto done by women or involved machinery traditionally operated by men, may also have operated against women’s continued employment, while workers’ campaigns for breadwinner wages – that is, wages that could support dependent wives and children – endorsed a gender division of labor, with a homemaker wife as the ideal standard. Simultaneously, and as Goldin emphasized, women’s educational attainments lagged behind those of men, rendering women relatively less productive in market work and confirming a comparative advantage in home activities. Describing and explaining the era of retreat became itself contested terrain conflated with another disputed topic: the appearance and implications of the male-breadwinner family. Male breadwinners responsible for the maintenance of dependent women and children were the direct corollary of women’s reduced involvement in the labor force, so accounts of the former had implications for explanations of the latter. But however these intertwined developments were approached, there was no consensus on chronology, causes, or implications (Pat Hudson 1995; Jane Humphries 1995; Angélique Janssens 1997; Colin Creighton 1999; Nigel Goose 2007).

The upward section of the U, which of course tapers into “the subtle revolution,” came at much higher levels of economic development, when women’s educational attainments had caught up to men’s and their labor supply was able to complement the demand for service workers generated by economic growth and structural change. Participation rates were driven up by “positions in the white collar sector” (Goldin 1995: 68).

In contrast to the varying interpretations of women’s participation rates, men’s commitment to work remained unquestioned. Men’s high participation rates were simply back-projected, assumed to be universal, and seen as unresponsive to economic and structural changes. Thus, when identifying total factor productivity (TFP) as the unexplained residual in standard growth accounting exercises, the growth in labor input was equated with population growth or the growth in the population deemed of working age (N. F. R. Crafts 1985). If participation rates vary over time, the consequences are potentially misleading. For example, if Hans-Joachim Voth’s suggested reduction of leisure is correct, then his revision of British labor input per capita for the fifty years before 1800 would practically wipe out any residual in the standard accounting and transform our understanding of the British

industrial revolution (Voth 2000; and for elaboration of this point, see Joel Mokyr [2004]); in contrast, any decline in women's participation, as suggested by the U-shaped curve, would leave a larger share of output growth to be explained by TFP.

The U-shaped curve has captured the imagination of social scientists and become a stylized fact of economic development. As a result, commentators have too readily chopped up and packaged the history of women's work in terms of a quadratic trend. Retreat, trough, and reengagement provided a model which researchers assumed fit all historical contexts regardless of local conditions, specific chronologies, or individual circumstances. In fact, the absence of consistent series on women's participation rates and the changing nature of work itself as economies moved from subsistence to market production hindered attempts to fit U-shaped curves to secular trends. All too often, the intense engagement associated with subsistence economies was simply assumed to be a logical corollary of poverty itself, while the retreat was supported by references to occasional and fragmentary evidence, and, as noted above, spawned an intense debate about the effects of industrialization on women's work and family lives. There is more support for the low participation at the bottom of the U and for the subsequent increase in women's activity levels. Such support comes almost invariably from national population censuses and is only as credible as are such sources. Goldin's historical work made extensive (though careful) use of the US census. Thus, the 1890 and 1900 US census estimates of white women's participation rates at 2.5 and 3.2 percent suggested an economy at the bottom of its U. Thereafter, participation rates for women 16 and older increased steadily (Goldin 1995), exploding in the post-World War II period, to 49.3 percent in 1980 and 58.6 percent in 2010, which compares with 71.2 percent for men (US Bureau of Labor Statistics 2011: table 587).

Contributors to these symposia aim at qualifying this putative revolution (see, for example, Paul Atkinson [2012]; Cristina Borderías [forthcoming]; George Grantham [2012]; Ricardo Hernández [forthcoming]; Luisa Muñoz Abeledo [2012]; Pilar Pérez-Fuentes [forthcoming]; Ariadne Schmidt and Elise van Nederveen Meerkerk [2012]; Beatrice Zucca [forthcoming]). They offer eight conclusions. First, population censuses, commonly used to construct participation rates, fail to reflect the actual dimensions of women's economic activity rates, both in the past and – as the development literature shows – in today's poor economies. Second, the problem of undercounting is neither wholly explained by the way work has been defined, nor by women's performance of different types of work. Women's stable, regular, skilled work was consistently underreported as well. Third, undercounting women workers resulted from neither industrialization nor the rise of the breadwinner family: it preceded both, and was widespread in preindustrial Europe. Fourth, although both

censuses and other historical records such as surveys of occupations systematically underrecord women's work, it is possible, using alternative sources and consistent methodologies, to reconstruct more meaningful participation rates. Fifth, errors in administrative documentation are not restricted to women workers; though in the case of men, over- rather than undercounting occurs, which inflates rather than depresses official participation rates. The consideration of potential bias in official sources and comparison with alternative documents shades the conventional accounts of men's consistently high participation and facilitates comparison with women's reconstructed rates. Sixth, revised women's participation rates suggest that the U-shaped curve is, partly at least, a statistical mirage. In European history, working women were ubiquitous, and the research aims to document and measure the extent of their economic involvement. Seventh, supply-side factors, such as marital status and number and age of children, which are conventional determinants of women's decision to enter the labor force, appear to have been less prominent in historical contexts. Instead, women responded to opportunities; the demand for labor was decisive. Eighth, the U-shaped curve is not entirely a statistical artifact but is detectable in the evidence assembled for different times and places representing different levels of economic development.

WHY WOMEN'S WORK WAS LEFT OFF THE RECORD

Without careful archival research our knowledge of women's employment in the past would be woefully lacking. In 1890, for example, less than 3 percent of all married, white women gave the census taker an occupation. But we now know that a far greater percentage worked for pay or produced for the market sector in their own homes, on the family farm, or in the family business . . . Given the social stigma against their working it is not surprising that the reported labor force participation of married women was extremely low when women's work was primarily in domestic service and manufacturing. (Goldin 1995: 79)

The argument that women's work is seriously underregistered in population censuses and other statistical sources traditionally used to calculate participation rates relies on two interrelated historical traditions. The first involves recognition that national and local censuses, household listings, and surveys of occupations are historical constructs that reflect the multiple purposes and prejudices of tiers of bureaucrats, enumerators, and householders. The second involves deployment of alternative sources to compute women's participation rates and comparison of such alternate estimates with official figures.

The first tradition argues that censuses are not mere technical instruments designed to count workers and relate them to population totals (Louise A. Tilly and Joan W. Scott 1978; Desley Deacon 1985; Bridget Hill 1993; Edward Higgs 1996). Census enumerations were costly political operations, justified in the case of preindustrial Europe by the need to estimate military reserves or fiscal competence. The designation *worker* had strong connotations, early on in terms of political and property rights and later in terms of transfers from the state, such as retirement pensions and social security. For these reasons, men often monopolized the title. Similarly, land reforms throughout Europe redistributed this vital preindustrial asset to male heads of households, thereby both responding to and reaffirming the economic status of men, a procedure replicated in similar reforms in Latin America as documented by Carmen Diana Deere and Magdalena León (2003; see also Carmen Diana Deere and Cheryl R. Doss [2006]). Moreover, ideas, cultural norms, and stereotypes acted as filters between the reality of labor markets and their historical images as reflected in official documentation. Taken-for-granted ideas about caste, class, and gender shaped both official questions and poor people's answers and molded nascent labor statistics, with cautionary implications for historians interested in women's work and women workers. There is now a large literature that shows why and how the definitions, procedures, and operational practices of enumerators hid women's work and undercounted women workers in many times and places (Lourdes Benería 1981, 1992; Edward Higgs 1983, 1987, 1995, 2005; Deacon 1985; Marjorie Abel and Nancy Folbre 1990; Andrew August 1994; Sara Horrell and Jane Humphries 1995, 1997; Humphries 1995; Amanda Wilkinson 2010).

One influential explanation for the underrecording of women's work cites certain distinctive features of the work itself: it was seasonal, irregular, interrupted, performed at home, unspecialized and unskilled, and consisted, in part, of subsistence production. Moreover, women's work often looked like and blended into the unpaid care and domestic work that women performed for their families in the home and that was firmly excluded from nascent labor statistics, providing further reason to discount and overlook its worth (Christine Delphy 1984). The implicit contrast was with men's work, which was assumed to be stable, year-round, full time, continuous, performed in centralized workplaces, specialized, skilled, and always paid. The comparison implied that there was something peculiar about women's work that explained, perhaps even justified, its exclusion. Thus, Leigh Shaw-Taylor (2007), while agreeing that the evidence for the underestimation of women's employment is "overwhelming," argues that this underreporting occurred because the instructions ordered enumerators to count only "regular" work (see also Goose [2007]). However, even if women's work was less regular, does this mean that it should not count? If censuses failed to see and record forms of work

common among women, surely this was a defect of the enumeration procedures and machinery, not of the way in which women disposed of their working time and exploited whatever opportunities were available.

In any case, most women's work was not irregular. Nor indeed were men's and women's jobs and employment histories so different. Feminist research has demonstrated that many women worked for pay throughout their lives, and research confirms these findings (see, for example, Atkinson [2012]; Schmidt and van Nederveen Meerkerk [2012]). Women worked at well-defined workplaces, and year-round, and they did so regardless of marital status, number of children, and even age. Thus, Henry Price's grandmother, whose working life is remembered in the epigraph at the beginning of this introduction, integrated several seemingly part-time jobs into a busy annual schedule that spread over several sectors. Countrywomen like her often worked day in and day out, as paid workers or unpaid family workers, producing market goods that sustained the rural economy. Yet, many were never recorded as workers. Moreover, while it is true that some women worked irregularly, at peak seasons, or at home partly for family consumption, many men worked on the same basis. The empirical evidence presented in these studies suggests that men's participation rates of near 100 percent are just as much historical and ideological constructs as are women's depressed rates (see, for example, Hernández [forthcoming] and Zucca [forthcoming]).

The point is that official surveys systematically defined adult men as workers. Their seasonal and structural unemployment and associated irregularity mattered little. The declarations of 60-year-old Manuel Siruela that "My occupation is to bring in a bundle of woods, to guard a vineyard sometimes" and 28-year-old Ignazio Zárate that "My occupation is working on the fields when they call me" do not suggest continuous year-round employment, yet both appeared in the cadastre of male heads of households in mid eighteenth-century Spain as agricultural *workers* (Carmen Sarasúa 2000). Wealthy landowners were defined by censuses and fiscal sources as "farmers," a misrepresentation compounded when historians later converted this into "agricultural workers" (2000: 87).

Moreover, men's very high participation rates recorded in official surveys are inconsistent with likely levels of illness and incapacity, not to mention the idleness and alcoholism of which there is much historical evidence. Hampshire's Jon Hogyn, who in 1371 spent his time sleeping during the day and playing "penypryk" in taverns at night (Simon A. C. Penn and Christopher Dyer 1990: 367), was not alone among the late-medieval male population in manifesting strong leisure preferences, however irritating to the authorities. Nor had commitment to disciplined and continuous work triumphed in all cases four centuries later, according to working men's own accounts of their time allocations (Humphries 2010). Nor do men today always live up to the stereotypes projected in official statistics. Thus,

Lourdes Benería coined the term “the paradox of Chaouen” to describe the inconsistency that she observed in Morocco in 1978 between the observed division of labor, with women toiling all day long while men rested, smoked, and drank, and the official statistics that implied men’s high and women’s low participation rates (2003: 131).

Underrecording was not only the result of official definitions of work. Enumerators were not simply describing the organization of families or the numbers of workers they contained: enumerators had their own assumptions about how families should be organized and who should be a worker, and they expected their priors to be confirmed. Social, legal, and cultural forces identified men as *workers* and women, especially married women, as *nonworkers*. As Hill has pointed out in the case of the 1880 US census: “It is taken for granted that every man has an occupation . . . it is precisely the other way with women” (1993: 84). Or, put more bluntly still, as Deacon argues in the case of Australia, the census contributed to “the construction of the dependent woman” (1985).

Women also collaborated in this gendered worldview. The Dutch census of 1899 explicitly mentioned that married women’s work was underrecorded because women “were ashamed to report that they performed paid work” (Schmidt and van Nederveen Meerkerk 2012: 80).³ By the late 1800s, coinciding with economic expansion, men’s rising wages, and the push for breadwinner remuneration, both sexes had internalized their “natural” gender roles. Yet the construction of women as dependents was not a novelty of the nineteenth century. This construction had developed much earlier, fundamentally shaped by religious teaching: women’s God-given destiny was marriage, childrearing, and care work. Women belonged in the home, as much as men belonged in the public sphere. Every early modern European moral treatise prescribed such a role and slotted it into their vision of a divinely ordered society. Fray (Friar) Luis de León’s ([1583] 1987) influential religious and ethical guide for noble and bourgeois women embarking on married life, *La perfecta casada* (The perfect married woman), illustrates the role of prescriptive literature in disseminating such gendered aspirations and encouraging such “womanly” behavior.

Recognition that the framing, machinery, and procedures of national and local censuses and other official investigations, particularly early on, were likely to be systematically negligent of women workers and women’s work raised the possibility that at least part of the downward section of the U was a statistical artifact and so prompted interest in attempts to remedy defects in the registration process and hence amend census estimates. Goldin, while remaining a proponent of the fall and rise account of women’s participation rates, noted, in a footnote, that the 2.5 percent women’s participation rate recorded in the 1890 US census at the bottom of the U-shaped curve would be revised to 12.9 percent if various “omitted

categories such as boarding house keepers and unpaid family farm laborers ... and manufacturing workers not included in the population census" were counted (1995: 80). Leonore Davidoff (1979) and J. K. Walton and P. McGloin (1979) noted a similar mistreatment of landladies and lodging-house keepers in the nineteenth-century British censuses and attempted to work out how many working women were lost by misclassification. Higgs's (1987) pioneering work turned attention to another problematic category: women agricultural workers, whose seasonal schedule meant they were undercounted –which he attempted to remedy by inflating the participation rates for the mid nineteenth century (see also Osamu Saito [1979]; Richard Wall [1994]; Sarasúa [2000]; Nicola Verdon [2002]; Joyce Burnette [2004]; Shaw-Taylor [2007]). On the other hand, Higgs thought that domestic servants were likely overestimated in the same censuses, though the extent was uncertain, because of the confusion between domestic servants and women relatives in the family home (1983; see also Carmen Sarasúa [1997]).

Misallocation and neglect do not cause trivial differences. Including farmers' wives and boarding-house keepers boosts women's participation rates in the mining area near Bilbao, Spain, in 1877 from 57.8 percent to 81.1, in 1887 from 10.4 to 33.1, in 1900 from 10.2 to 45.1, in 1913 from 5.4 to 33.7, and in 1920 from 2.3 to 21.7 percent (Pilar Pérez-Fuentes 2004). Still a U-shaped curve? Yes, but 25 percent higher than the official one.

The second historiographical tradition took this critical approach to census and similar official data further by augmenting standard sources with new types of evidence. Researchers sought alternative sources from which to estimate participation and then compared the substitute figures with official estimates. Business historians were in the vanguard. They used employment records to identify women workers and then searched contemporaneous censuses to see how they were listed. Large nineteenth-century firms with mostly women workers, such as textile mills or tobacco factories, might have thousands of workers on their rolls. Linkage was laborious but informative. When historians checked information from employment records against official listings, the extent of women's underregistration emerged. Thus, in 1924 Seville, only 26 percent of women documented as working at the tobacco factory were identified as cigar makers in the population census; the rest were registered as housewives (Lina Gálvez-Muñoz 2000). Cigar makers were not irregular, seasonal, or unskilled workers. During their entire working lives, they worked regularly, at the largest factory in town, in well-defined jobs, recognized and respected by society and sufficiently well paid to be in many cases families' breadwinners. Nonetheless, most cigar makers were designated as nonworkers. In Barcelona, around the same time, 35 percent of women workers at the *Compañía Telefónica Nacional de España*, 60 percent at the city's largest textile factory, and 60 percent at a

large metallurgical factory were full-time workers according to their firms but appeared as nonworkers (housewives) in the census rolls (Cristina Borderías 2004). Similarly, British censuses for the period 1851–1901 routinely enumerated less than half of a sample of women silk workers who appeared in employment records for the Courtauld mills correctly; only in 1861 and 1871 did the British census correctly describe more than half of the sample, and then only 65.7 and 57.3 percent (Wilkinson 2010; see also Judy Lown [1990]).

The research of business historians was vital because it showed that undercounting was not limited to seasonal agricultural workers or ambiguous domestic workers, as defenders of census estimates contended (John McKay 1998; Michael Anderson 1999; Shaw-Taylor 2007). Errors were more widespread, contaminating even those sectors, industries, and establishments that champions of the census held to be well documented. Checks on censuses using alternative local and national evidence such as wage books and oral histories suggested considerable underreporting of women's regular and full-time work in agriculture, services, and even manufacturing. Underreporting even extended, as the examples cited above suggest, to women working in large-scale industrial enterprises. Moreover, married women, in all circumstances, appeared more likely to be missed (Elizabeth Roberts 1984; August 1994; Wilkinson 2010).

Underreporting was not an innocent byproduct of the nature of women's work or the marginality of women workers but instead reflected deep ideological preconceptions that rendered women's work invisible, whether or not it conformed to the stereotypes. These problems are acute for economic historians who deal with past societies in which ideas about unequal and segregated gender roles were pervasive, but they are also common in many developing countries today. Early work on gender in international development acknowledged the problems caused by official data, which undercounted and misallocated women workers (Benería 1981). While progress has been made since the 1980s, with important work on time use that yields information on both unpaid and paid work participation of women (see, for instance, Caren Grown, Maria S. Floro, and Diane Elson [2010]; United Nations Development Programme [1995]), such problems have not been totally eliminated. An International Labour Organization project on the improvement of data collection and measurement methods showed that the accuracy of information on labor force data on women remains "influenced by the type of questionnaire used, the sex and age of the interviewer and the extent to which respondents are proxies for others" (Benería 1992: 1556). More recently, Saniye Dedeoğlu, in seeking to quantify women's work in Turkish garment manufacturing, reported that while statistics indicate that women's informal work in Turkey is extensive and expanding, it remains underestimated as a result of the "conceptual gender biases and practical

problems associated with data gathering” (2010: 9). Thus, potential solutions retain more general importance for feminist scholars. Other recent studies, such as the one by Schmidt and van Nederveen Meerkerk (2012), are in the spirit of both historical traditions but go beyond the criticism of censuses or footnotes offering partial and ad hoc revisions to build systematically on the pioneering attempts at reconstruction. The entrenched opinion among economic historians that recovering meaningful women’s participation rates from the historical records would be impossible, and its corollary that women’s contribution to past economic growth and development (sadly) must be ignored, provide a powerful incentive. Research by Grantham (2012) and Muñoz Abeledo (2012), for example, proves such pessimism premature.

OVERCOMING UNDERREGISTRATION: ALTERNATIVE APPROACHES

Is it possible to put some quantities to the possible distortions into the model of women’s employment in the nineteenth century? ... The figures are really an invitation to others to make more refined calculations. (Higgs 1987: 73)

A general methodological approach that emerges across the research involves three main steps: first, a critical investigation of official sources; second, the identification of historical documents that can be used to generate alternative estimates of participation; and third, the investigation of variation in the alternative rates, to uncover their proximate and deeper determinants and see if these are the same as the causal factors suggested by economic theory and shown to influence women’s official participation rates. The third step usually involves the statistical testing of relationships between participation and demographic, economic and social factors either in cross-tabulations or by regression analyses.

The first step requires an investigation of the standard sources and a critical perspective on their estimates of women’s economic activity. This perspective usually involves highlighting the fiscal and military motives behind population counts and the narrowness of the census definitions of economic activity, which led them to fixate on men and manpower and ignore much of women’s labor whether it was part time, informal, or at home. Researchers have also underlined the unrealism of the results of many censuses. However, criticism of census evidence is not enough. After all, counterarguments can be mounted. The second step then becomes essential. Researchers must move beyond criticism to identify alternative sources that are relatively free of the biases built into official surveys and that *demonstrate* the extent of undercounting. Such alternate sources – if they predate census enumeration – have a secondary but equally important

role, enabling researchers to trace women's participation back in time to the pre-census era. In this way, they can chart the hypothetical downward section of the U-shaped curve. However, alternative sources are not easy to find and, even if located, are often difficult and laborious to use, especially if the aim is to go beyond qualitative generalities to establish orders of magnitude – as is essential if this research tradition is to impact the mainstream.

What sources have creative historians mined? Occasional or nonstandard censuses – which for one reason or another document women's work in more systematic detail, often providing finely-grained accounts of women's occupations and careful listings of the economic status of all household members – constitute a fruitful source. Grantham (2012) makes excellent use of such a document: the 1851 French census, which was unique in reporting the means of support of all listed persons and distinguishing working from nonworking dependents. This census provides a rare window into the labor force participation of women and children, even including those who worked at home but were not independently remunerated. However, extracting the relevant material is laborious, and inconsistencies in the published tables, alongside the 1851 census's idiosyncratic methodology, have caused it to be neglected by French economic historians, as George Grantham and Franque Grimard (2010) document. However, it affords a wonderful opportunity to establish meaningful activity rates, one that Grantham seizes.

Other studies, such as those by Muñoz Abeledo (2012), Hernández (forthcoming), and Pérez-Fuentes (forthcoming) use traditional sources such as censuses and fiscal records but do so in a new way, drilling down to the underlying documentation. Household declarations, for example, often included the occupations of all family members and can be used to recover evidence about women's work. Ironically, the official census enumerators often ignored or dispensed with the detail on women's occupations, developing summaries that failed to reflect their own micro data. For this reason, the building-blocks of official censuses, the enumerators' books or household returns, often provide more relevant detail than the published tables.

Charitable and poor law institutions also recorded the economic structures of families that appealed for assistance. Instead of the fiscal and military objectives of official headcounts and occupational surveys, they sought to ascertain the need of poor families for relief and so were motivated to investigate real economic conditions and to record in some detail the contributions of women and children. The comparison of these more honest and pragmatic surveys with census documents suggests the extent of the undercounting of women workers and the misreporting of their occupations. Zucca's (forthcoming) study mobilizes such material in the form of records of the Ospedale di Carità in eighteenth-century Turin

to uncover the large numbers of women that the charity held to be occupied but the census regarded as nonworking (for other work based on eleemosynary records, see K. D. M. Snell [1985]; Samantha Williams [2011]). Similarly, philanthropists or social commentators who wanted to gauge the extent of poverty among working families, and so recorded their incomes and expenditures, had an incentive to register the contributions of women and children. Thus, studies of working people's household budgets also unlock women's participation rates, uncovering a suggestive gap between the participation rates based on whether women were described by an occupational title and the much higher rates based on whether women contributed to family incomes (Horrell and Humphries 1995, 1997).

Court proceedings, which record the economic status of witnesses, victims, or accused, in passing and without reference to legal agendas or consideration of social propriety, also provide useful accounts of women's occupations or degree of dependence on husbands and fathers (Peter Earle 1989; Amy Louise Erickson 2008). Vagrancy rates by gender and age, and the intervals that lapsed before recently bereaved widows resorted to poor relief, also offer insight (Nicholas Rogers 1991; Jeremy Boulton and Leonard Schwarz forthcoming). Historians use such sources to establish snapshots of women's participation at different points, compare these benchmarks with contemporaneous or later census estimates, and so build up a coherent picture of trends over time (Atkinson 2012; Grantham 2012; Schmidt and van Nederveen Meerkerk 2012).

Individual women's lifetime experience can be reconstituted using rare autobiographical evidence and then used to test hypotheses about discontinuity and lack of commitment to work (Humphries 2010). It is also possible to work back from trends in production to infer the evolution of women's work. The combination of output and raw-material usage with productivity estimates based on contemporary technology can generate estimates of labor input over time. Inferences from output trends have proved particularly useful in tracing the labor required in hand-spinning in the extensive textile protoindustries of both the Netherlands and Britain (Elise van Nederveen Meerkerk 2007; Robert C. Allen 2007; Craig Muldrew 2012). As Schmidt and van Nederveen Meerkerk (2012) show, production-based inferences facilitate the extension of analysis back into the era before census enumeration and when carefully linked to census evidence provide long period estimates of women's involvement in the economy, which can inform mainstream analyses of secular growth by providing more accurate accounts of labor inputs.

Business historians have used local trade cards, insurance records, and rental agreements to track women's involvement in small-scale commercial activities. These sources often allow the identification of women who acted without the assistance and support of male kin, and when integrated with local demographic data give some idea of participation rates within

particular sectors and occupations (Hannah Barker 2006; Nicola Phillips 2006; Alison C. Kay 2009; Jennifer Aston 2012; Bernadita Escobar 2012). Wills and probate records also provide insight into women’s activity rates (Mary Beth Combs 2006, 2012; Juanjo Romero-Marin 2006; Angels Solà 2006).

Figure 1 summarizes the revised rates presented in the research, including those studies published in *Feminist Economics* 18(4) and forthcoming volumes.⁴ Although periods and regions studied and methodologies and sources used differ greatly, at least three points emerge with clarity. First, the heterogeneity of women’s participation rates suggests that local demand was dominant in shaping their place in European labor markets; women who were offered jobs by and large took them, a finding that sits uneasily with the neoclassical emphasis on the importance of individual choice in the determination of participation rates. Local economies determined the level and the visibility of women’s work and accounted for differences in women’s participation rates, even in the same year and country. Second, rural (and preindustrial) participation rates were in general higher than urban rates. Perhaps, urban culture had a negative impact on women’s decisions to enter the labor market. The breadwinner ideology, which diffused not only among the elite and the

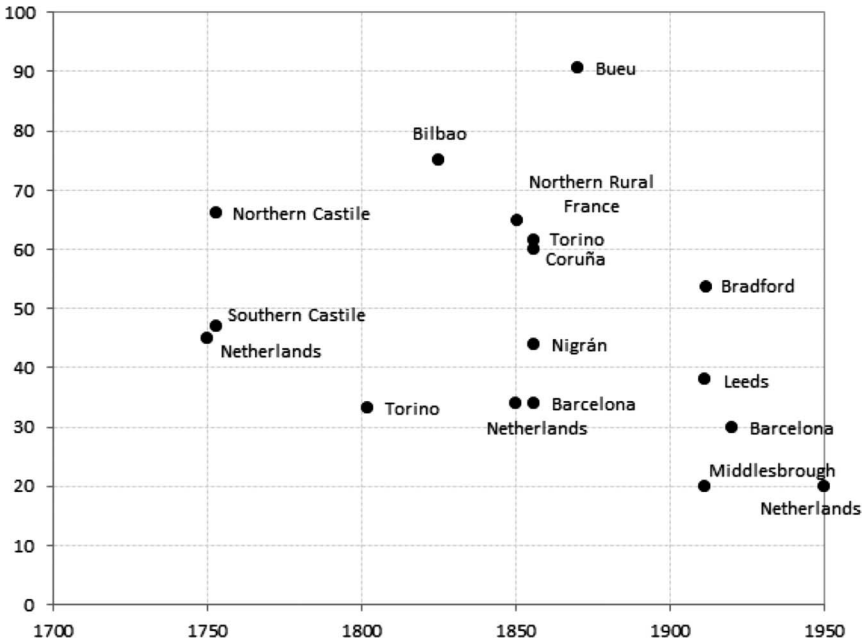


Figure 1 Reconstructed participation rates of women in historical Europe (percentages)

middle classes but among working people as well, probably depressed women's participation, though many worked at home for pay or assisted husbands in their businesses or crafts while being classified as housewives. In any case, what is clear is the importance of identifying alternative sources to reconstruct women's participation rates. The quality of the sources used here varies, and most authors suspect the persistence of underrecording; but these results show that quantifying women's participation in the past is possible. It is worth the scientific effort of searching for alternative sources, constructing large databases, and quantifying findings, as these promising results demonstrate.

As this foretaste of contributors' findings suggests, reconstructions from towns or regions can be especially fruitful when used in a comparative way, since they expose the effects of local economic conditions on women's participation rates. Thus, Muñoz Abeledo (2012) compares three very different locations in Galicia (Nigrán, Bueu, and Coruña) to illustrate the responsiveness of the supply of women workers to variations in demand. Her case studies reveal that industrialization and economic growth boosted rather than reduced women's economic activity. In a similar methodological vein, Atkinson (2012) compares participation rates across three communities in nineteenth-century northern England, showing again how women's labor supply responded to demand. Atkinson takes the analysis a step further by tracing, too, the interaction between participation and fertility, and here his work heralds the third and final methodological step: the analysis of both the census evidence and the alternative sources in more detail in order to identify what variables influenced women's economic activity. This analysis, in turn, opens up for examination whether the explanations for women's participation are universal or particular to sociocultural contexts.

REVISING BASIC ASSUMPTIONS ABOUT THE DETERMINANTS OF WOMEN'S PARTICIPATION

The machines saving muscle strength, the high demand for women in certain jobs, requested because they are paid less, the ignorance and backwardness in which they are kept, the way modern states are, requiring males for the military, the professions, the employment-mania and commerce, drive off a considerable number of men from industry, all these causes producing the coalescence of women at the factories. (Comisión de Reformas Sociales 1885, Vol. 2: 380)

Modern studies of women's participation identify marital status, age, number and age of children, income of husband, and potential own wage and educational level as the main factors influencing the decision to participate. Institutionalists seek to amend an overly neoclassical perspective by recognizing social norms and the ideological climate as

determinants.⁵ While demand conditions enter the picture through potential wages, analyses of long-run trends have emphasized changes in nuptiality, fertility, human capital acquisition, and social norms. While some explanatory variables might appear universal, not all of them time travel; to complicate things, in the long run demand and supply interact with employment opportunities, influencing decisions to marry, have children, and obtain education, even becoming culturally embedded, as Atkinson (2012) demonstrates. As noted above, the coefficients estimated from cross-sectional regressions were not stable over time, and researchers seeking to model secular trends had to include additional shift variables, such as birth cohort dummies, to capture the different behavior of successive generations of women (see, for example, Heather E. Joshi, Richard Layard, and Susan J. Owen [1985]). Historical analyses fill gaps and provide perspective on the developments since World War II.

Beginning with supply-side factors, marriage, which reduces the probability of women's participation in almost all modern studies, superficially at least appears to have had the same effect in the past. Married women had the lowest participation rates, widows and unmarried heads of households had intermediate rates, and unmarried women had rates that approached those of men. These disparities were partly the result of variable underenumeration, with census definitions, preconceptions, and procedures most likely to exclude working wives (Deacon 1985). There was less overt and covert resistance to acknowledging the participation of women who were thrown on their own resources, so widows and unmarried women's economic activity was less likely to be overlooked and undercounted. The extent to which the male-breadwinner family structure was a reality captured in the early censuses and not simply their *construct* is one of the key questions addressed in the research (Schmidt and van Nederveen Meerkerk 2012).

Comparison of the computed participation rates, as several contributors emphasize, suggests historically unrealistic levels of dependence for married women. The obvious counterargument is that households headed by working husbands and fathers enjoyed higher income levels, which enabled wives to withdraw from the labor market and devote themselves to unpaid but nonetheless welfare-enhancing domestic work. In this neoclassical view, rational decisions in the context of income and substitution effects underlie married women's lower participation rates; the spread of dependence on men and their earnings simply reflects the high income elasticity of household-based public goods such as quality childcare, hygiene, and domesticity (Joel Mokyr 2000; Jan de Vries 2008). However, this rosy view of the benign development of the male-breadwinner family sits uneasily in the historical context described by several contributors. Many husbands and fathers in the past, as in the present, were unable or simply unwilling to earn breadwinner wages or support dependent wives and children. Moreover, for many women in the past, marriage was not an exit route from work but a way to access

complementary resources and secure a better return on labor input; witness those multitudes of women that studies have uncovered working alongside husbands in family enterprises, assisting in manufacturing activities, and laboring shoulder to shoulder on family farms (see, for example, Atkinson [2012]; Grantham [2012]; Muñoz Abeledo [2012]). Evidence on married women's participation rates requires detailed scrutiny to identify what in modern terms may seem counterintuitive but historically is quite a logical effect. Specifically, the historical evidence throws up for scrutiny the standard expectation that married women participate in the labor market only if husbands' income levels are low. It follows that the effect of fathers' and husbands' income on daughters' and wives' participation, so important both theoretically and in modern empirical analysis, is problematic historically where it overlaps with the spread of new gender standards. Many contributions detect the dampening effect on wives' participation of husbands' professional employment; yet many prosperous farmers, artisans, and tradesmen relied on the contributions of women kin to their farms, businesses, and shops. Similarly, where men's earnings were low because of underemployment, wives' and daughters' contributions might also be demand constrained; household members in the past, as in the present, tend to be work rich or work poor, and the latter type tend to be trapped by underemployment in poverty.

Age is another explanatory variable, which might mutate on time travel. In a society where death and decrepitude happened much earlier, women's participation rates might not show the buoyancy in middle age and after childrearing that is common today (Joshi, Layard, and Owen 1985). At the very least, historians have to be careful about the age groups that they consider potential workers. Nor in the past did the presence of children always have depressing effects on women's participation. In contrast with modern studies of participation, where the presence of a child under two commonly reduces participation, several historical studies have identified an opposite effect, with a recent birth increasing the probability of participation (Horrell and Humphries 1997; see also Claudia Goldin [1979]; Elyce J. Rotella [1980]). Historically, perhaps, mothers struggled to continue working even with one small child in anticipation of more births, larger completed families and intensified demands on family resources. In any case, modern age-participation profiles cannot be simply back-projected into the past, but have to be contextualized in the different demographic and family regimes. Even the presence of older children may have effects on their mothers' participation that look counterintuitive from the standpoint of rich countries today. Thus, whereas in the contemporary US, women with older children, freed from childcare responsibilities, increase their participation, in the past or in today's poor countries, they are more likely to retire from the labor force as their older children take their place. Alternatively, if local labor markets favored women rather than children, then adolescents could substitute in the home, releasing

previously domestically constrained women for outside work. Solutions and strategies depend on the particular fit between the age and gender of a family's children and the legal regime and local labor market.

Finally, education, a key variable in the Goldin version of the U-shaped curve, is also problematic historically. The nature of the human capital that was vital in pre- and early industrial labor processes and the ways such skills were transmitted intergenerationally create problems for simple models of human capital acquisition. Once again, historians confront a world where women faced insurmountable obstacles in access to training. Apprenticeship, the most important early modern route to skilled status, was closed to girls except in rare circumstances or with respect to specific (feminized) jobs, such as dressmaking or millinery (Deborah Simonton 1998); even if a girl was lucky enough to obtain training, markets for skilled workers were shot through with various gendered barriers to entry. Skills associated with women were deprecated and could be sold only on crowded markets for customarily depreciated wages. Only to the extent to which girls have had access to the same education as boys have women's wages and employment possibilities actually followed the upward curve as predicted by the model.

Women in the past were not passive victims of cultural and religious constraints. They were purposeful and determined, struggling to do the best for themselves and their families. However, purposefulness does not translate into rationality as understood in modern economics; nor were choices as free as the standard model assumes. Remember that before the twentieth century, European countries legally defined women as minors, dependent on their fathers or husbands. Many women were isolated, illiterate, and unable to act independently. Overt and covert barriers blocked women's participation and excluded them from the more remunerative trades and occupations. Historical studies have exposed blatantly discriminatory institutions and structures. Guilds, legal restrictions, and trade-union practices excluded women (particularly married women) and crowded them into less desirable or more acceptable jobs.

Moreover, as the rich body of research now available demonstrates, barriers to entry were not anachronisms, swept away by the development of markets (Atkinson 2012). Here, historical studies connect with the findings of development economists to suggest that in the past, as in some poor countries today, discrimination often flourished within the more advanced firms and industries, serving the interests of the developmental state or global capitalism (Benería 2003; Günseli Berik, Yana van der Meulen Rodgers, and Joseph E. Zveglich, Jr. 2004). Moreover, patriarchal cultures remain insidious factors depressing women's activity rates, particularly if internalized (Dante Contreras and Gonzalo Plaza 2010), while legal barriers, such as the need for husbands' permission to seek employment, continue to exclude women from employment, as for example in Turkey,

which has one of the world's lowest participation rates for women (İpek İkkaracan 2012).

Some constraints on women's work were relatively modern innovations associated with the spread and intensification of the ideal of the male-breadwinner family structure, which several studies suggest was a late nineteenth-century phenomenon (see Schmidt and van Nederveen Meerkerk [2012]). Marriage bars, which institutionalized the idea that wives should retire from employment, gained new supporters in the twentieth century when labor markets were depressed, and there was a backlash against educated women's entry into white-collar jobs. But it was not only the fascist and Nazi states in the 1920s and 30s that promoted a reinvigorated version of "separate spheres." Catholicism and conservatism have played a crucial role in "keeping women home" (Sarasúa 1997). Such dominant ideas about gender roles shaped both the supply of and demand for women's labor through their influence over women themselves and their inspiration of public policy, law, and trade-union practices, and played a major role in depressing participation.⁶ Similarly, the studies also suggest that industrialization did not have consistent implications for women's economic opportunities. The development of some industries – textiles being the prime example – certainly created demand for the labor of women and girls, and textile factory towns were at the forefront of women's high participation rates, whether this was in Bradford and Preston in the UK; in Lowell, Massachusetts, USA; or in Barcelona, Spain (Atkinson 2012; Anderson 1999; Enriqueta Camps 1995; Borderías forthcoming). But the expanded opportunities in the factories were at the expense of the hitherto ubiquitous occupation of hand-spinning, which had for centuries proved a little gold mine for rural women, including wives (van Nederveen Meerkerk 2007; Muldrew 2012; Hernández forthcoming). Changes in the terms and conditions of women's work, and in particular the increased visibility of waged labor in factories and workshops, should not be identified with an increase in aggregate employment. Thus, part of de Vries' (2008) "industrious" revolution, in which women abandoned subsistence production for waged employment to boost income and facilitate the purchase of new desirable market commodities, might also be a mirage created by changes in the types of work undertaken. A similar oversight might be at work in contemporary arguments about feminization of the labor force globally in the late twentieth century (for example, Guy Standing [1999]).

In areas dominated by heavy industry, for which women were perhaps physically unsuited and from which they were certainly culturally excluded, options were very limited. Women could and did move to towns and cities to work in feminized sectors, archetypically domestic service (Carmen Sarasúa 1994). But such choices were few, separation from families of origin was often painful, and domestic service, in particular, had its own drawbacks. As a result, throughout Europe, heavy industrial regions were

associated with early marriage and large families. Here, lack of employment opportunities for women encouraged high fertility. Rather than seeing fertility as an explanatory variable, part of the structure within which women made decisions about time allocation, historical studies show how fertility was codetermined by feedback from employment prospects and taken-for-granted ideas about women's place and family life (Atkinson 2012; Muñoz Abeledo 2012; see also Angélique Janssens [1993, 2007]; Jutta Schwarzkopf [2007]).

One of the most valuable conclusions of the research is that demand played a much greater role than previously thought in shaping women's economic participation (Muñoz Abeledo 2012; Pérez-Fuentes forthcoming). The historical picture is not of women *deciding* to stay at home. Limited job opportunities, legal constraints, and dominant ideas about women's proper place trapped them at home. Across Europe, there were two paths whereby women retreated from participation in the economy and became dependents in the male-breadwinner family (Horrell and Humphries 1995). The first was the benign and welfare-improving path of much neoclassical literature. It involved men's higher wages and an increasing value for women's time in the home, as families sought new domestic comforts, more cleanliness, and better-quality childcare (Mokyr 2000; de Vries 2008). The second path was less salubrious; it involved women's struggling in poor homes with fewer opportunities to contribute and insufficient basic income to produce the household-based public goods that raised living standards in the late nineteenth century. Many studies glimpse women soldiering along this route, seizing whatever opportunities were available regardless of age and family size, and doing the best they could for themselves and their families in difficult and constrained circumstances, just like Henry Price's grandmother in the opening epigraph (See Atkinson [2012]; Zucca [forthcoming]).

CONCLUSIONS: LEARNING FROM THE PAST?

The phrase "lessons from the past" might sound trite; but, going beyond the specific findings listed in this essay, we identify five ways in which our revised view of women's participation informs the metanarrative of economic development and therefore has resonance for twenty-first-century feminist economics. First, there can be no real understanding of how and when economic growth happens without clarity about the extent of women's participation and their contribution to national incomes. We have already seen that decompositions of growth rates which infer the growth of labor inputs from population growth, even though there is strong evidence for changes in women's participation, can distort the chronology of TFP and create a false narrative of the industrial revolution. Second, the titanic debate among historians and development economists about the effects of

industrialization on the standard of living is all too often conducted with reference only to trends in adult men's wages, when in reality what is most variable are contributions from other family members. Any accurate account of variations in well-being requires recognition of the economic role of women and children and inclusion of their contributions to family incomes that often helped family survival. Third, structural change in terms of the increasing relative weight of the industrial and service sectors of the economy, accepted as the key to modern economic growth, can be neither charted nor understood without including women workers in the shifting employment structure.⁷ Moreover, failure to record and understand women's work likely distorts the geographical analysis of structural change in terms of internal migration from the countryside to towns and cities. For example, if women's protoindustrial work is overlooked while work in urban factories is better measured, the towns perhaps misleadingly appear the loci of expansion. Fourth, undercounting women workers distorts estimates of sectoral and aggregate labor forces and so biases productivity calculations. If undercounting varies over time, such distortions can seriously mislead economic historians, particularly when using estimates of labor productivity to evaluate sector performance nationally or internationally. Finally, our findings that demand matters, that married women have a much more complex relationship to the labor market than some overly simple theories imply, and that all women are responsive to opportunities and actively seek to contribute to their families and communities surely have strong relevance for policymakers in these times of (unequally experienced) austerity. Times such as these revive those older dominant ideas, beaten into temporary retreat but by no means vanquished. In the 2010 Survey of the Social Status of Women in China, nearly 62 percent of men and nearly 55 percent of women were in agreement with the statement, "Men belong in public life and women belong at home," showing an increase of 7.7 and 4.4 percentage points from 2000 (Didi Kirsten Tatlow 2012). It would be tragic if governments' obsession with debt ratios, credit ratings, balanced budgets, and reduced public sectors gives sustenance to conservative gender standards and begins to throw into reverse the revolution of our time.

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NOTES

- ¹ Many feminist economists have argued that women’s care and domestic work in the home is also productive, and that the value it produces should be included in national accounts (for example, see Nancy Folbre and Barnet Wagman [1993]). We are sympathetic to this perspective, but in these symposia, participation or economic activity – while not always individually remunerated – relates to the remunerated production of goods and services exchanged on markets. This narrow definition, while likely leading to an underestimation of women’s economic activity, is consistent with standard labor statistics, enabling ready comparison with other sources. This approach constitutes a first stage in the ongoing project of reconstructing the history of women’s work. We hope that future research will address the looming question of the value of women’s unpaid work and develop more encompassing estimates of participation.
- ² Boserup’s work has been described as “the first investigation ever undertaken into what happens to women in the process of economic and social growth” and is said to have inspired the UN Decade for Women between 1975 and 1985 (Swasti Mitter 1989; see also Irene Tinker [2004]). Influential historical versions of the U-shaped curve include Eric Richards (1974), K. D. M. Snell (1981), and Anita Nyberg (1994).
- ³ Interestingly, Saniye Dedeoğlu reports similar reticence in a recent investigation of women’s work in garment production in Turkey where “low income women in Turkey tend to report themselves as housewives even if they engage in home-based piecework or other forms of informal activities” (2010: 9).
- ⁴ The reported estimates in Figure 1 are likely on the low side, as only women identified in the sources as working for the market are included as active (see note 1).
- ⁵ Thus in recent work, Rosemary Atieno (2012) has tried to include a class dimension in her analysis of women’s participation in Kenya, while Fariba Solati (2012) has focused on the dampening effects of patriarchal culture and religion on women’s participation in the Middle East and North Africa.

- ⁶ A recent study of France and Switzerland has pointed out the influence of patriarchal ideas on legislation and, in turn, on labor markets:

Encouraged by a pro-natalist and pro-family concern, thoughts on the question materialised in France through the 1932 family benefits national law [...] In accordance with the papal encyclicals, Catholics regarded the limitation of female work as a first step to re-establishing a social order seen as normal (our translation; Céline Schoeni 2012: 555).

- ⁷ In nineteenth-century Spain, rural women were concentrated in nonagricultural occupations, such as domestic manufacturing (mostly foods and textiles) and services (domestic service, wet-nursing, cloth washing, retail trade), with men in agriculture. With the exception of regions where family farming dominated, women's agricultural work was mostly seasonal. Recording all women workers would have thus implied a rise in industry and services, but because population censuses failed to record rural women as workers (they were "housewives"), 66.3 percent of Spain's total working population was still officially in agriculture in 1900.

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