

# Measuring Female Labor in France at the Turn of the Twentieth Century

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From the 1890s to the Second World War, modes of production underwent significant changes in France.<sup>2</sup> As wage labor expanded for both men and women, the labor sphere became gradually distinct from the family unit: between 1891 and 1936, the share of wage earners in the female labor force rose from 30 to 44 percent, while it rose from 34 to 50 percent in the male labor force. In addition, women consistently made up about a third of the total labor force throughout this period, a relatively high level compared to the 1950s and 1960s. This trend is consistent with a U-shaped pattern of female labor force participation rates over time, as highlighted by Claudia Goldin's research on the United States.<sup>3</sup>

In parallel with their growing presence in the labor market, women's representation in labor institutions also advanced, almost half a century ahead of their political rights. Indeed, from 1907–8, women gained the right to elect members of chambers of commerce, were eligible to sit on industrial tribunals (*conseils de prud'hommes*), and – for married women – were free to manage their own wages. How has the nature of women's work changed as a result of these mutations? There is no simple answer to this seemingly straightforward question, as alongside shifts in the modes of production and the representations of work, the methods used to measure labor also underwent significant changes during this period.

This chapter examines the evolution of the measurement of female labor in the French population censuses at the turn of the twentieth century.<sup>4</sup> After exploring the emergence of the notion of active population and its implications for measuring female labor, I address this issue through the lens of the nominative lists of the population census.

## 1. The Measure of Female Labor in the Population Censuses

During the Third Republic (1870–1940), the population census was the cornerstone of public statistics. It played a key role in shaping the representations of market activity, particularly regarding women's work. In particular, the methods used to measure female labor varied significantly between the censuses of 1891 and 1906.

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<sup>2</sup> For a general treatment of these labor-related changes in Europe, see Fabien Knittel, Nadège Mariotti et Pascal Raggi (2020), *Le travail en Europe occidentale des années 1830 aux années 1930* (Paris: Ellipses).

<sup>3</sup> See, e.g., Claudia Goldin (1990), *Understanding the gender gap: an economic history of American women* (Oxford: Oxford University Press).

<sup>4</sup> For complementary approaches on the history of the measurement of female labor in France, see Françoise Battagliola (2000), *Histoire du travail des femmes* (Paris: La Découverte); Sylvie Schweitzer (2002), *Les femmes ont toujours travaillé. Une histoire du travail des femmes aux XIXe et XXe siècles* (Paris: Odile Jacob); Margaret Maruani et Monique Meron (2012), *Un siècle de travail des femmes en France. 1901–2011* (Paris: La Découverte); Marie-Laure Sronek, Sophie Brouquet, Christine Dousset-Seiden et Manuela Martini (2022), “Le travail des femmes, de l'ombre à la lumière” in *Histoire des femmes et du genre. Historiographie, sources et méthodes*, edited by Sylvie Chaperon, Adeline Grand-Clément et Sylvie Mouysset (Paris: Armand Colin).

### *The emergence of the notion of active population*

The notion of individual activity within the market sphere did not truly emerge until the 1896 census.<sup>5</sup> Prior to this census, individuals' economic activity was solely defined through their relationship to the head of their household. Initially, this dependency was absolute: from 1836 to 1856, the occupation of the head of the household was the only one to be recorded, and it was assigned to all other household members. From 1861 to 1891, the notion of the active population evolved, and included both heads of households and household members who declared an occupation different from that of the head. All other household members – including domestic servants – were classified as inactive.

The 1896 census marked a significant shift: from this point on, the notion of activity became individualized, and its dependency transitioned from the household to the establishment to which the individual was attached. Individual census forms then made a clear distinction between market and non-market work, as indicated by the questions in the section entitled “Information on main occupation or industry on the date of the census.” A key question asked, “What is your primary occupation?” Explanatory notes on the back of the form clarified that the purpose of these questions was to link individuals with the establishment that *currently* provided their livelihood. Respondents with multiple occupations were instructed to indicate their *primary* occupation, defined as the one that took most of their time (italics in original).

However, market activity could still take place within the family unit. According to the explanatory notes on the individual census form, an establishment was defined as “the gathering of several people working together on a permanent basis, in a specific place, and under the authority of one or more representatives of the same establishment.” These notes further clarified that “those who work in their own homes, under no one's authority, must consider themselves as heads of their establishment. If they employ others, *even family members*, they must declare how many. These family members must then, of course, indicate on their individual census form, the occupation they hold under the authority of the family head” (italics original).

### *The measure of female labor*

Changes in the definition of active population had significant implications for the measure of female labor. This is evident from the shifts in the female population classified as economically active between 1891 and 1921 (see Table 1). Between 1891 and 1896, the number of working women increased by nearly 2 million, from 4.6 to 6.4 million—a rise of almost 38 percent. Consequently, women's share of the economically active population grew by nearly 5 percentage points, from 30 to 35 percent. By 1901, the number of working women had increased further to 6.8 million, although their proportion within the overall workforce had remained stable.

Commentators of the census attributed this increase to the improved wording of the questions on individual forms and to more efficient counting operations, which were centralized in Paris at the Office du travail (Labor Office) and conducted using punch card machines. For instance, Arthur Fontaine, then director of the Office du travail, acknowledged that “from 1891 to

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<sup>5</sup> For two treatments of the emergence of the notion of activity in the population censuses, see Christian Topalov (1999) “Une révolution dans les représentations du travail. L'émergence de la catégorie statistique de ‘population active’ au XIXe siècle en France, en Grande-Bretagne et aux Etats-Unis”, *Revue française de sociologie* 40(3), 445-73 and Agnès Hirsch (2022), “Classer les individus selon leur participation au système productif: les ‘actifs’ et les ‘inactifs’ à la fin du XIXe siècle en France”, *Population* 77(1), 117–40.

1896, the number of people registered as holding a gainful occupation, the so-called economically active population, increased by more than two million. This rise is not due to a reduction in the number of idle individuals, but simply the result of better procedures. Individual forms were designed to prevent vague responses, which had previously led to classifying many people who worked as inactive” (*Résultats statistiques du recensement des industries et professions en 1896*, tome IV, p. VII). Other commentators noted that “the discrepancy in the proportional numbers suggests that in 1896, a number of forms had likely been missed during counting operations” (*RP 1901*, tome IV, p. XV).

However, given the changes in classification mentioned earlier, it is evident that much of this increase reflects women engaging in market activities within their households. This is primarily due to the participation of female farm owners working alongside their husbands, as well as to women employed in domestic services. Between 1891 and 1896, the number of female farm owners rose from 700 thousand to nearly 1.3 million. By 1896, they accounted for nearly 20 percent of the economically active female population, compared to 15 percent in 1891. Similarly, nearly 740 thousand female domestic servants were counted as part of the working population in 1896.

Still, measuring female labor remained challenging for statisticians at the turn of the twentieth century. For instance, they observed that “the classification of women is often a matter of interpretation” (*RP 1896*, tome IV, p. 15). This was especially true for the wives of farm owners, as census enumerators acknowledged that they “lacked a precise criterion for classifying women as either active or inactive, making their classification often somewhat arbitrary” (*RP 1901*, tome IV, p. 17). This ambiguity was resolved in the 1906 census, when farm owners’ wives were systematically included in the active population. As a result, the number of women classified as economically active rose by nearly 900 thousand, with women then comprising 37 percent of the total active population. This significant increase was directly due to the reclassification of women in the agricultural sector, as their numbers grew by 800 thousand, accounting for 29 percent of the female active population in 1906, compared to 21 percent in 1901. Census enumerators noticed this shift, writing that “in 1906, a large number of farmers’ wives who, five years earlier, had been considered as not having a gainful occupation, were now counted as farm owners” (*RP 1906*, tome 1, part 2, p. 66). Similarly, they remarked that “the sharp increase, compared with 1901, is only apparent and is clearly due to the fact that in the last two censuses, farmers’ wives were more frequently associated with their husbands’ farms than in 1901” (*RP 1911*, tome 1, part 3, p. 25).

#### *Female labor at the turn of the twentieth century*

Only after the measure of female labor is deconstructed and placed in the broader context in which it was developed can census data be used to assess changes in female labor at the turn of the twentieth century. The left-hand side of Figure 1 displays changes in the proportion of women in the economically active population between 1891 and 1936 both for France as a whole and for the *département* of Haute-Vienne, which will be analyzed in more detail in this chapter. The figure reports raw data taken directly from the statistical returns of the population censuses. The impact of changes in the definition of the economically active population is evident between 1891 and 1906, both at the national level and in Haute-Vienne, a *département* with a relatively high rural population—and therefore a significant proportion of female farm owners.

The right-hand side of the figure reports the same information after subtracting male and female heads of farming establishments from the working population. This adjustment seems to

address the issues caused by classification changes, offering a view likely closer to reality for the period between 1891 and 1906: a stable proportion of women in the economically active population – around a third – except for a peak in the immediate post-war period.<sup>6</sup> Following a U-shaped long-term trend, this proportion declined in the 1950s and 1960s before rising again from the 1970s onward.<sup>7</sup>

However, the analysis based on the statistical returns of the population censuses is limited to the *département* level. Indeed, these returns do not provide data on the economically active female population for smaller administrative units, such as *arrondissements*, *cantons*, or *communes*. The nominative lists of population censuses make it possible to overcome this hurdle.

## 2. The Measure of Female Labor in the Nominative Lists

### *The establishment and content of the nominative list*

The nominative list is a document that results from the census collection process. It lists all individuals that were present in a commune on the eve of the census and provides specific information about them—except for the so-called “separately counted population” (*population comptée à part*), which includes individuals residing in collective dwellings such as hospitals, prisons, and military barracks. Although their exact content varied during the nineteenth century, nominative lists have remained broadly stable during the early twentieth century. Specifically, between 1896 and 1936, they provided the following information: surname, first name, age or year of birth, commune of birth, nationality, relationship to the head of household, occupation, and employer in the case employees.

This information comes from original individual census forms, which content was transcribed by municipal agents onto their communes nominative lists. In particular, the “occupation” field directly comes from the answer to the question, “What is your main occupation?” Nevertheless, it is possible that in the transcription process, municipal agents imposed their own representations of the nature of women’s work, sometimes in opposition to the instructions of the central administration, e.g., after 1906, by classifying farmers’ wives as having no gainful occupation. The compilation of these lists was decentralized, unlike the compilation of census statistics, which was centralized in Paris at the Office du Travail. It is therefore likely that these two sources produce diverging views of women’s participation in market activities, even though they are initially based on the same documents—the individual census forms.

### *The nominative lists of Haute-Vienne in 1911 and 1921*

To illustrate the benefits (and limitations) of using nominative lists to better measure female labor, I focus on the lists of 37 communes in the *département* of Haute-Vienne from the 1911 and 1921 censuses. These communes belong to five cantons in the *arrondissement* of Bellac: Bellac, Bessines, Châteauponsac, Le Dorat, and Nantiat. The sample drawn from these lists is restricted to the female population aged 15 to 65 – the working-age population – and contains 15 thousand women for 1911 and 14 thousand for 1921.

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<sup>6</sup> For a historical approach linking the First World War and female labor, see Françoise Thébaud (2013 [1986]), *Les femmes au temps de la Guerre de 14*, Paris: Payot). For an economic approach, see Jörn Boehnke et Victor Gay (2022), “The Missing Men: World War I and Female Labor Force Participation”, *Journal of Human Resources* 57(4), 1209–41.

<sup>7</sup> See Margaret Maruani et Monique Meron, *op. cit.* and Claudia Goldin, *op. cit.*

For each canton and year in the sample, Table 2 reports the proportion of women that can be counted as active based on nominative lists, i.e., those with a listed occupation. In 1911, 38 percent of women aged 15 to 65 had a gainful occupation listed in the nominative lists. By 1921, this figure had risen to 60 percent—probably due to the demographic implications of the war. For instance, many war widows had to enter the labor market to compensate for the loss of their husbands income. In fact, statistical returns of the population census imply that women’s participation in market work in Haute-Vienne rose from 52 percent in 1911 to 64 percent in 1921 (see Figure 1). Both sources are therefore broadly consistent. However, there are substantial spatial differences between them: for instance, in 1911, female labor force participation rates in the rural canton of Bessines was only half that of the more urban canton of Bellac.

How reliable are these statistics? It is not possible to compare them directly with their primary source – the individual census forms – as they have not been preserved. Nevertheless, we can take a closer look at the communes where statistics seem suspect. For instance, only 11 percent of women in Rancon declared an occupation in 1911, whereas 63 percent of them did in 1921—an increase of 52 percentage points. Likewise, 8 percent of women in Saint-Amand-Magnazeix declared an occupation in 1911, whereas 64 percent of them did in 1921. Could these abnormally low rates for 1911 result from the way municipal agents transcribed women’s occupations on the nominative lists? Let’s consider the treatment of farmers’ wives in these communes, and more specifically, women whose husbands have as listed occupation “farmer” (*agriculteur, exploitant, fermier*), “cultivator” (*cultivateur*), or “sharecropper” (*métayer*). Census instructions were to have them systematically classified as economically active. However, in Rancon in 1911, none of these women had an occupation listed declared in the nominative list. In Saint-Amand-Magnazeix, they were only 3 percent on the same year. In these specific cases, we can therefore conclude that municipal agents did not follow census instructions for classifying women in the economically active population.

Was this issue latent or confined to a few communes? Of the 37 communes in the sample, only 15 classified more than 50 percent of these women as having a gainful occupation in 1911. In 1921, this was the case for 25 communes. If the method of classifying these women is interpreted as an indication of the alignment of representations between local agents and those of the administration, there seems to have been a certain dissonance in 1911 that was partially resolved in 1921, perhaps due to the employment of new agents who were more aware of these changes. Thus, although the nominative lists of the population census represent a potentially rich source for studying female labor at the individual level, they should nevertheless be considered with caution, for instance by excluding female farm owners, as in the right-hand side of Figure 1.

## Conclusion

This chapter discusses the measurement of female labor in the French censuses at the turn of the twentieth century. Quantitative approaches based on the statistical returns of the population census or on its nominative lists must be considered with caution and require a critical approach. Of course, the analysis proposed here remains brief. Nominative lists make it possible to analyze women’s work in their family and local contexts, for instance by contrasting women’s occupations across marital status, household structure, husband’s occupation, or according to the economic specialization of their commune of residence. An interdisciplinary approach between history and economics therefore seems fruitful for studying these issues.

**Table 1: Evolution of the economically active population**

<b>Year</b>	<b>Men</b>	<b>Women</b>	<b>Share of women (%)</b>
<b>1891</b>	11.04	4.63	29.5
<b>1896</b>	12.06	6.38	34.6
<b>1901</b>	12.91	6.80	34.5
<b>1906</b>	13.03	7.69	37.1
<b>1911</b>	13.21	7.72	36.9
<b>1921</b>	12.53	8.31	39.9

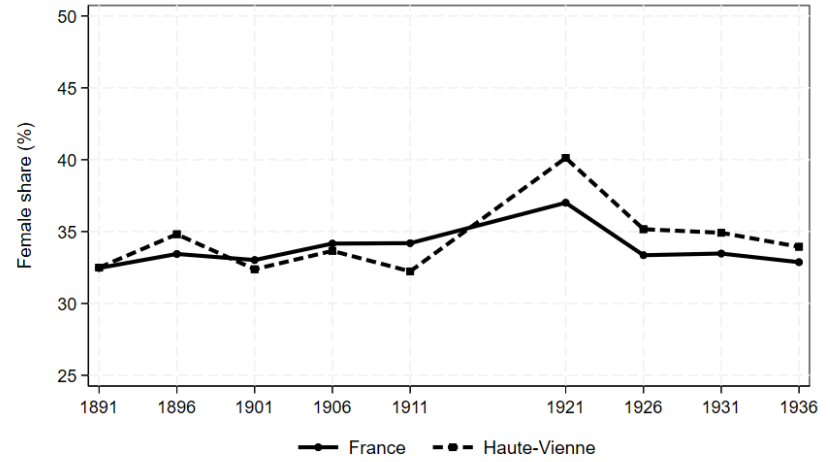
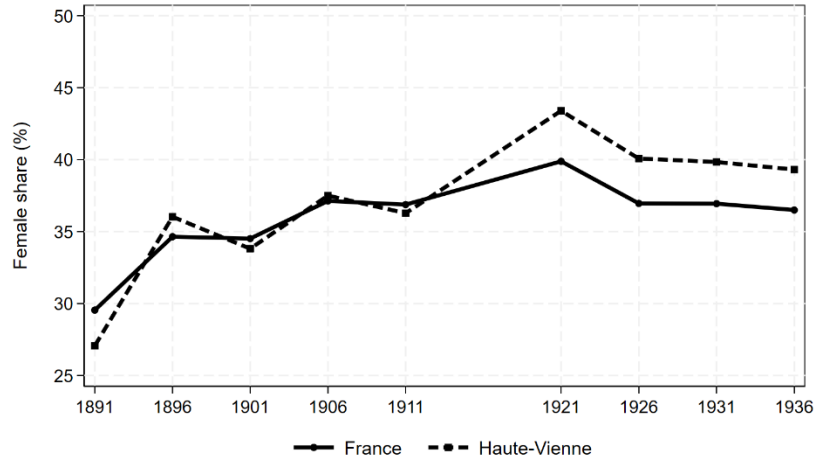
**Notes:** Active population in millions. Data for 1921 are relative to the 87 départements that made up France before the First World War.

**Sources:** Statistical returns of the population censuses.

**Table 2: Labor force participation rates among 15–65 years old women by canton in 1911 and 1921**

<b>Canton</b>	<b>1911</b>		<b>1921</b>	
	<b>Active (%)</b>	<b>Obs.</b>	<b>Active (%)</b>	<b>Obs.</b>
Bellac	50.4	3,270	56.4	3,025
Bessines	27.9	2,889	56.9	2,345
Châteauponsac	29.1	3,027	59.9	2,866
Le Dorat	48.3	2,851	51.0	2,765
Nantiat	35.9	3,330	72.3	3,153
<b>Total</b>	<b>38.3</b>	<b>15,367</b>	<b>59.3</b>	<b>14,154</b>

**Sources:** Nominative lists of population censuses.



**Figure 1: Proportion of women in the economically active population**

**Sources:** Statistical returns of the population censuses. Left panel: raw data. Right panel: data net of male and female farm owners.