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**WOMEN'S PARTICIPATION  
IN THE EGYPTIAN LABOR MARKET: 1998-2012**

**Rana Hendy**

**Working Paper No. 907**

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**Send correspondence to:**  
Rana Hendy  
Economic Research Forum  
[rhendy@erf.org.eg](mailto:rhendy@erf.org.eg)

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## Abstract

This paper examines the reasons for the persistently low participation of women in the Egyptian labor market over time and across the different economic sectors, using the Egypt Labor Market Panel Survey (ELMPS) 2012. This panel dataset allows for an examination of the period leading up to and including the revolution, as it covers three different points in time: 1998, 2006 and 2012. Despite the remarkable increase in women's educational attainment, which has become higher for women than their male counterparts, participation in the labor market remains relatively low. Confirming widespread opinion, the findings indicate that the January 25 Revolution has had a negative effect on women's status in the labor market. Labor force participation has decreased, and unemployment has increased. It is thus important to analyze the different determinants of low female labor force participation. These include factors related to the supply of female labor, relating to family circumstances such as marriage, fertility and time use, women's preferences and reservation wages; as well as the factors related to the demand side, such as the shrinking public sector and discrimination in the private sector.

**JEL Classification:** D13, J16, J22.

**Keywords:** Gender, Labor Force Participation, Egypt.

## ملخص

تتناول هذه الورقة الأسباب التي أدت إلى الانخفاض المستمر لمشاركة المرأة في سوق العمل المصري على مر الزمن وعبر القطاعات الاقتصادية المختلفة، وذلك باستخدام المسح التتبعي لسوق العمل في مصر لعام 2012 (ELMPS). بيانات هذا المسح تسمح بدراسة الفترة التي سبقت وبما في ذلك الثورة، حيث أنه يغطي ثلاث نقاط مختلفة في الوقت المناسب: 1998 و 2006 و 2012. وعلى الرغم من الزيادة الملحوظة في التحصيل التعليمي للمرأة، والتي أصبحت أعلى للنساء من نظرائهن من الرجال، ولكن لا تزال مشاركة المرأة في سوق العمل منخفضة نسبياً. تشير النتائج إلى أن ثورة 25 يناير كان لها تأثير سلبي على وضع المرأة في سوق العمل. انخفضت المشاركة في القوى العاملة، وارتفعت معدلات البطالة. بالتالي فمن المهم تحليل المحددات المختلفة لانخفاض مشاركة الإناث في القوى العاملة. وتشمل هذه العوامل المتعلقة بتوريد العمالة النسائية، والتي تتعلق بالظروف العائلية مثل الزواج والخصوبة واستخدام الوقت، وتفضيلات المرأة والدخل الاحتياطي. فضلاً عن العوامل المتعلقة بجانب الطلب، مثل تقلص القطاع العام والتمييز في القطاع الخاص.

## 1. Introduction

Recent years have brought to light the noticeable role of women in the political, social and economic events occurring in Egypt. Egyptian women have made important contributions to the Egyptian revolution. Women also continue to play a substantial role in the country's transition period. Yet women's economic participation remains relatively low. According to the World Economic Forum's Gender Gap Report for 2012, Egypt ranks 126<sup>th</sup> out of 135 countries on the gender gap index, and ranks 130<sup>th</sup> out of 135 in labor force participation. The female-to-male employment ratio at the time was 0.3, as female labor force participation at the time was 24% while it was 79% for males (World Economic Forum, 2012).

This topic is of pressing policy relevance, as gender gaps in employment have an increasing effect on economic growth between countries and regions (Klasen and Lamanna, 2009). A recent study covering Southern Mediterranean countries, including Egypt, finds that an increase of 5% in female labor force participation rates leads "to a cumulative 1.3% increase in GDP above the reference scenario" (from 2015 to 2030) (Tsani et al. 2012). It is thus important to understand whether or not the labor market dynamics of Egyptian women following the 2011 revolution have changed and to understand the reasons behind women's low labor force participation.

It has been argued that cultural factors play an important role in explaining the gendered labor outcomes in Egypt and the region. Low female labor force participation has been related to kin-ordered patriarchal family structures. The religious and cultural norms state that the role of men is clearly identified as the main breadwinners, while women are economically dependent on men (Barsoum et al., 2009). Meanwhile, Moghadam (2001) argues that oil and oil-related revenues during the oil boom of the 1970s reinforced this patriarchal gender contract, restricting the supply of women's labor. Assaad (2005), on the other hand, argues that labor force participation in the 1970s and 1980s was more bound by demand-side factors, as the demand structure for labor has changed. Female-dominated jobs became defeminized, while employment growth occurred in male-dominated activities, which have not been feminized.

Using the previous rounds of the Egypt Labor Market Survey (1988, 1998 and 2006), Assaad and El-Hamidi (2009) explain the declining labor force participation of women primarily by the contraction of public sector hiring. In the Nasser period, all high school diploma and higher education degree holders were promised state-sector jobs, irrespective of their gender. This increased female labor force participation. However, with the suspension of guaranteed state employment in the 1990s, many women awaited public sector employment between 1988 and 1998. Then, when it became clear that public sector work would not materialize, those women moved from being unemployed to discouraged workers and were thus counted as out of labor force (Assaad and El-Hamidi, 2009). Meanwhile, the share of private sector employment rose, but it did not match the decline in public sector employment, with most of the increase in the private sector being in informal employment. The study also showed that the sector of employment and women's marital status appear to be important factors in women's employment, as married women continued to work after marriage if they are employed in the public sector, while they quit at the time of marriage if they were employed in the private sector (Assaad and El-Hamidi, 2009).

It is important to study the effect of the 2011 revolution on female labor force participation. The Egyptian revolution has brought a slowdown in economic activity in Egypt. Following the world financial crisis in 2008, an added worker effect<sup>1</sup> has been observed among older Egyptian women, and those with low education. Meanwhile, younger women and those with

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<sup>1</sup>The added worker effect refers to an increase in the labor supply of married women when their husbands become unemployed.

secondary and higher education were discouraged and withdrew from the labor market (Roushdy and Gadallah, 2012).

Given these developments in the labor market, this paper aims to understand the reasons for the persistently low participation rates of women in the Egyptian labor market, using the latest Egypt Labor Market Panel Survey (ELMPS) 2012. Despite the remarkable increase in women's educational attainment (Elbadawy, 2014), participation in the labor market remains relatively low. Egypt also remains a traditional society, with a gendered allocation of time within the household: men specialize in market work, while most (if not all) of the family responsibilities remain female tasks. It is thus important to analyze how these determinants link with the low female labor force participation in Egypt. The paper analyzes the factors related to the supply side of the labor market, including family circumstances such as marriage, fertility and time use, women's preferences and reservation wages, as well as the factors related to the demand side, for instance the shrinking public sector and discrimination in the private sector.

In what follows, section 2 presents the methodology and definitions used in the present paper. Section 3 provides evidence on the status of women versus men in the Egyptian labor market and the evolution of these patterns over a decade. Section 4 discusses the linkages between the labor market on the one hand, and the household sphere on the other hand. Finally, Section 5 concludes and presents the policy implications of the paper.

## **2. Data and Methodology**

The data used in this paper comes from the three rounds (1998, 2006 and 2012) of the ELMPS, as well as the 1988 round of the labor force sample survey (LFSS). As discussed in Assaad and Krafft (2013), the labor force can be identified and defined in a variety of ways. Two definitions of the labor force are used in this paper, one based on a market definition of work and the other based on an extended definition. The market workforce consists of all individuals who are engaged in economic activity for the purposes of market exchange. The extended workforce adds anyone engaged solely in subsistence work. In Egypt, women are much more likely than men to be engaged solely in subsistence work. In making comparisons that include 1988, only the extended definition of work can be applied. Distinctions are also made in terms of who is considered unemployed, and therefore in the labor force. The standard definition of unemployment restricts the unemployed to those who are also searching. The standard (search required) definition is used throughout this paper. This paper primarily focuses on the market definition of work, and the period 1998-2012, as well as the working age (15-64-year-old) population.

## **3. Status of Women in the Egyptian Labor Market**

### ***3.1 Trends in labor force participation by gender***

Table 1 gives an overview of labor force participation in Egypt by gender and across urban/rural residence in the three rounds of the Egypt Labor Market Panel Survey and the 1988 special round of the Labor Force Sample Survey. In all rounds, and using the two definitions of employment, male labor force participation rates are around double of those of women. Using the market definition of economic activity and the standard definition of unemployment (requiring search), labor force participation for men is above 70% in the latest three rounds, while it did not surpass 30% for women. It is clear that the picture for male participation rates is not different using the market and extended definitions of employment. On the other hand, the extended definition of employment gives a higher participation rate for women, when compared to the market definition, especially for rural areas. The female labor force participation rate in rural areas is 39.0% in 2012 using the extended definition of employment, while it is only 21.1% using the market definition of employment.

By comparing urban and rural areas, we can see that urban women do more market activities, which explains their higher participation rates using the market definition. However, since subsistence activities are more likely to occur in rural areas, the participation levels of rural women using the extended definition are higher than those of urban women.

By focusing on the evolution of labor force participation over time, it is obvious that male labor force participation has increased over the whole period; while for women labor force participation has remained stagnant (or slightly increasing between 1998 and 2006), and has even decreased between 2006 and 2012 using both the market and extended definitions. Several factors may explain this falling female labor force participation. The first is the deterioration of the economic conditions, due to the economic crisis and the 2011 revolution, in Egypt in general and for Egyptian women in particular. Moreover, that the youth bulge is now marrying and the fact that women leave the labor force at marriage, especially in the private sector, contributes to this decrease in participation rates over time.

Figure 1 illustrates the evolution of the structure of the population in terms of its labor market status over time and by gender, using both the market and extended definitions of work. The major difference between the two definitions consists of the larger shares of females' inactivity in the market definition compared to the extended one. Other than that, the figures remain very similar across the different employment alternatives. As is clearly demonstrated in Figure 1, regardless of the labor force definition used, the large majority of Egyptian women aged 15-64 remain out of the labor force. Although female inactivity had decreased between 1998 and 2006 - according to the market definition of employment- the inactivity rate in 2012 has increased again to near the 1998 rate. Using the extended definition, in 2012 female inactivity was higher than in 1988-2006.

Using the market definition of work, while the percentage in unemployment (for information specifically on the unemployment rate, see Assaad and Krafft, 2013) has been increasing for women, between 2006 (4.9%) and 2012 (5.5%), the percentage in unemployment has decreased for men between the same dates moving from 3.9% in 2006 to 3.4% in 2012.

### ***3.2 The evolution of the structure of employment***

The changes in the political and the economic environment have affected the employment structure of both sexes and its trend over time. Considering six possible employment possibilities, this section observes the evolution of each of these possibilities over the years of the survey. The employment activities incorporate the different economic sectors and the formality status of the job. The first possibility is government employment, which includes all individuals who work in the government. The second possible activity represents all public enterprises' employees. Next is the private sector employment: either formal or informal. We define formality for private sector employees as having either a legal work contract or social insurance connected to their job. Another employment possibility includes all employers and self-employed. The sixth alternative includes all unpaid workers.

Figure 2 illustrates the structure of employment in the different employment possibilities using the market definition of work. Government employment is the most frequent employment type with a share of 52% of women in 1998, 35% in 2006 and 49% in 2012. This figure clearly shows that women prefer to avoid private sector jobs, which is expected as a result of the nature of these jobs (long working hours, fewer benefits, and larger shares of male employees in the work place among other reasons).

Meanwhile, men are concentrated in the private informal sector with a share of 28% in 1998, 28% in 2006 and 37% in 2012. This large increase in informality in 2012 is offset by the decreasing trend of males' employment in the public sector and in non-wage work.

In Figure 3, an analysis by urban versus rural areas using the market definition of employment shows that between 1998-2012 overall government and public enterprise employment slightly decreased for both urban and rural females. Relatively larger decreases occurred for men. In addition, private informal employment has increased for men between 1998 and 2012 in all areas. However, over 2006-2012, females' informality was near constant in rural areas with a share of 9%, but decreased from 14% to 10% of employment for urban females. In both areas, there was a slight increase in formal private wage work for females.

#### **4. Linkages between the Labor Market and the Household Sphere**

##### ***4.1 Marriage and labor force participation of women***

Marriage is one of the main causes for the low participation of women in the Arab countries. This results from cultural and religious factors that make women the principal and, in most cases, the only household member in charge of all household responsibilities, including children. If we turn our attention to working women only, it has been previously shown in a study by Assaad and Hendy (2013) that marriage affects women differently, based on whether they are public or private employees.

Figure 4 illustrates the employment status separately for ever married (currently married, divorced/separated, or widowed) and never married women over 1998, 2006 and 2012 using the market definition of employment. Figure 4 shows that for all years larger shares of employment and smaller shares of unemployment are observed for ever-married compared to never-married women. For instance, 16% of ever-married women are employed in 1998 compared to only 13% of never-married women on the same date. At the same time, 3% of the ever-married women are unemployed compared to a share of 11% of never-married women. The two groups have witnessed an increase in employment and a decrease in the percentage unemployed between 1998 and 2006. Employment rates for the ever-married population went up to reach 25% and the employment rate had become 16% for the never-married population in 2006. Then, these rates dramatically decreased again between 2006 and 2012, to return to the levels of 1998. Although the share in the labor force was larger in 1998 for never-married women than for the ever-married group, these figures have reversed in 2006 and 2012. For instance, in 2012 the share of women in the labor force is 24% for the ever-married group, compared to only 20% for the never-married group. To understand the results of Figure 4, we move to a more in depth analysis of the employment structure and its evolution over the three rounds of the ELMPS survey and how it differs between ever-married and never-married women (see Figure 5.)

As is clearly shown in Figure 5, ever-married women are more likely to work in the public sector, while never-married women tend to work more in the private sector. This is likely to be an artifact of the age distribution (see Assaad and Krafft, 2013) (i.e. older, married women and got the public sector guarantee). An additional explanation may be the increasing household responsibilities that come with marriage, as well as the benefits that women receive in the public sector, such as maternity leave. It can also be related to labor demand factors, such as the discrimination that women may face in the private sector. This discrimination is also related to women's household responsibilities that come with marriage. Government employment is shrinking over time for both groups, in line with the end of the guaranteed jobs that the government used to offer to secondary and university graduates. Comparing 1998 with 2012 (since there were a large number of additional unpaid family workers in 2006, see Assaad and Krafft (2013) for a discussion), the share of employed women working in the government sector has gone down over time for both ever-married and never-married females. Around 57% of ever-married employed females in 1998 were government workers. This share dropped to 52% in 2012. Similar trends are observed for the never-married females' group, a share of 38% worked in the government in 1998, this share was only 32% in 2012.



Turning our attention to the private sector, Figure 6 also shows that never-married women have larger shares in the private sector than their ever-married counterparts, with a share of 12% of never-married having private formal wage work in 1998. The same share is only 3% for ever-married women in 1998. Private formal wage employment had continuously increased between 1998 and 2012 for never-married women, up from 12% to 25%. In contrast, forever-married women, the share of employment that is formal private wage work has risen only slightly from 3% to 4%. Trends of private informal wage employment are clearly different from their formal counterparts, with decreasing shares between 1998 and 2012 for never-married females, but rising shares forever married females. However, employed ever-married females' shares of private wage employment remain far below those of their never-married counterparts in 2012. While 25% of never-married females are in formal private wage work and 23% in informal private wage work, just 4% of ever-married females are in formal private wage work and 8% in informal private wage work. Essentially, ever-married females are much more likely to work in the public sector, and slightly more likely to work as unpaid family workers (19% of ever-married workers versus 14% of never married), but much less likely to work in the private sector than never-married females. Figure 6 explores the dynamics behind these patterns.

In Figure 6, we follow all women who got married between 1992 and 2012. We observe the impact of marriage on the employment status from five years before to five years after marriage. It is clear that marriage represents an important changing point in the lives of women in general and in their employment transitions in particular. Government work represents the most common employer for working women before marriage takes place, and government work continues to increase and remain high after marriage. When marriage takes place, women are half as likely to work in the informal private sector as they were the year prior to marriage. There is also a decrease in formal private wage work. This result confirms the above discussion about government being a suitable sector for married women. As expected, inactivity increases with marriage. Entrepreneurship (employers and self-employed) and unpaid family work also seem to slightly rise at marriage.

#### ***4.2 Time use of women***

In this section, we analyze the time use of Egyptian women. As illustrated in Table 2, the domestic work burdens of married women are substantial, and do not decrease if they are engaged in market work. We consider as domestic work any agriculture for household consumption, shopping, maintenance, cooking, laundry, cleaning, collecting water, firewood, shopping, care for sick or elderly, or care for children, while not doing something else. Unfortunately, while the same types of questions were asked in 2012, a number of activities were aggregated together for domestic work, and this is likely partially responsible for declining hours of domestic work over time. We therefore focus on comparisons at the same point in time, but across marital statuses and employment status.

In 2012, ever-married women who were employed had 29.3 hours of domestic work, almost the same amount of domestic work as ever-married and not employed females (29.6 hours). On top of this, ever-married women who were employed worked 36.9 hours in the market, for a total of 65.9 hours of work in 2012. Hours of market work for both ever-married and never-married females have decreased only slightly over time.

A key contrast is between the domestic work burdens of never-married and ever-married females. In 2012, never-married not employed females engaged in 10.9 hours of domestic work, while ever married not employed females undertook almost three times as much - 29.3 hours. Looking at the 2006 data (which is likely to be more accurate on domestic work), domestic work is a full time job for women, between 43-45 hours, with higher hours for ever-married and employed women.

In Table 3, household work is desegregated into two main activities: housework and carework (child and elderly care). Not surprisingly, ever-married women tend to spend larger shares of their time on care activities than never-married women. Also, ever-married women spend longer hours on housework activities than their never-married counterparts. While ever-married women who work spend slightly more time on housework, they spend slightly less time on carework.

Figure 7 shows the time spent on both domestic work and market work by educational level, employment status, and marital status. For never-married females, the least and most educated tend to work longer hours on domestic activities. In contrast, for ever-married females, the higher the level of education, the longer the hours spent on domestic activities. Turning our attention to market work, among all never-married females who are employed, employed females who are illiterate or with an intermediate education spend the longest number of hours in market work. For the ever-married group, the number of hours spent in the labor market is lowest for employed illiterate women, highest for less than intermediate educated women, and middling for those with intermediate or higher education.

#### ***4.3 Employment and women's status***

In this section, we try to understand how employment can affect women's status or empowerment. The ELMPS data has some variables that could serve as proxies for women's status. One of these is whether the woman has access or not to household money. A positive answer reflects a larger degree of empowerment within the household. Table 4 shows the relationship between this proxy for women's empowerment and women's employment status. Employed women seem to have substantially more access to household money, which then reflects the larger bargaining power compared to their not employed counterparts. This result does not change with the marital status, although generally never married women have less access to household money. However, it could be that, rather than causing greater empowerment, access to household money and engaging employment are driven by household attitudes towards women's empowerment, including the ability of women to work.

### **5. Conclusion**

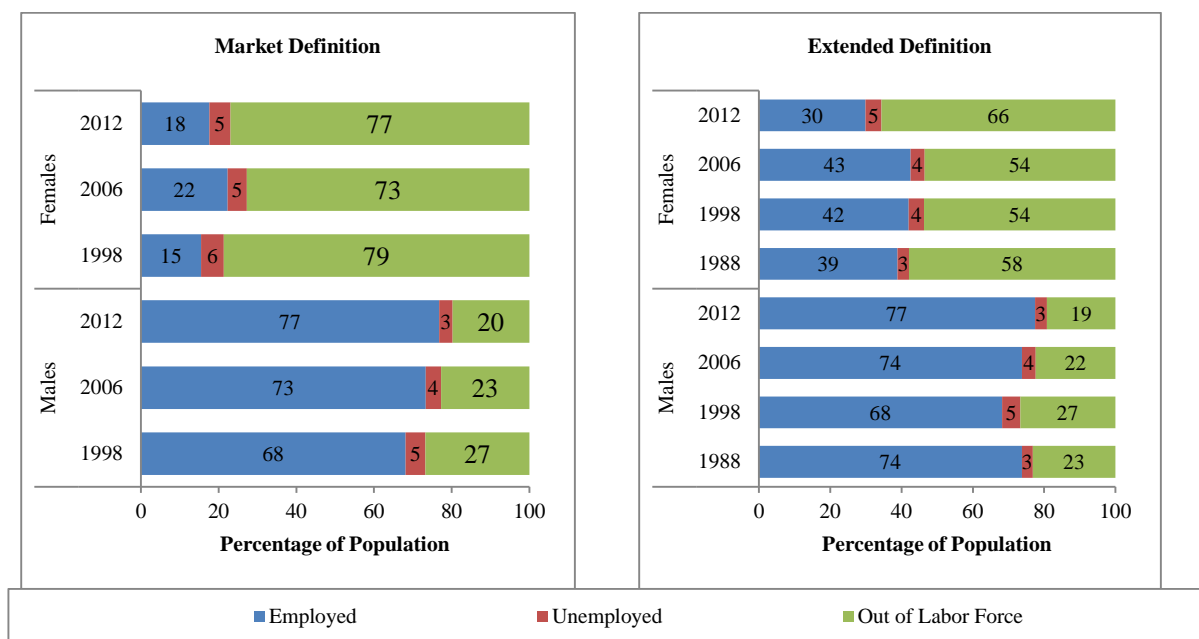
This paper discussed the reasons for the persistently low participation of women in the Egyptian labor market over time and across the different economic sectors, using the ELMPS. This data allows for comparisons between pre- and post-revolution as it covers three different points in time: 1998, 2006 and 2012. Assessing labor force participation trends since 1988 to 2012, it is clear that Egyptian women's labor force participation decreased over time. Through studying the time allocation of women within the home sector, it is also apparent that the work burden of women rises substantially at marriage, and remains high for married women regardless of their employment status. The results also show that marriage, with the childbearing and the household responsibilities that accompany it, explains in part low female labor force participation. The structure of female employment shows that women still find public sector jobs more attractive. However, with the decline in public sector hiring, women tend to prefer inactivity rather than private sector jobs, especially for educated women.

These results should be of importance to policymakers and non-governmental organizations, especially when designing family policies, as Egypt needs many regulatory reforms in order to increase female labor force participation rates. Policies that support women's access to productive employment are considered necessary, taking into full consideration the family burden that falls on women. Females, especially the educated and married among them, need more part-time and work from home opportunities in the private sector to enable the reconciliation between professional and family responsibilities. They also need support with family responsibilities, as a more equitable division of labor within families could contribute to higher participation rates for women.

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**Figure 1: Structure of the Labor Market by Gender and Definition, Ages 15-64, 1988-2012, (Percentage)**



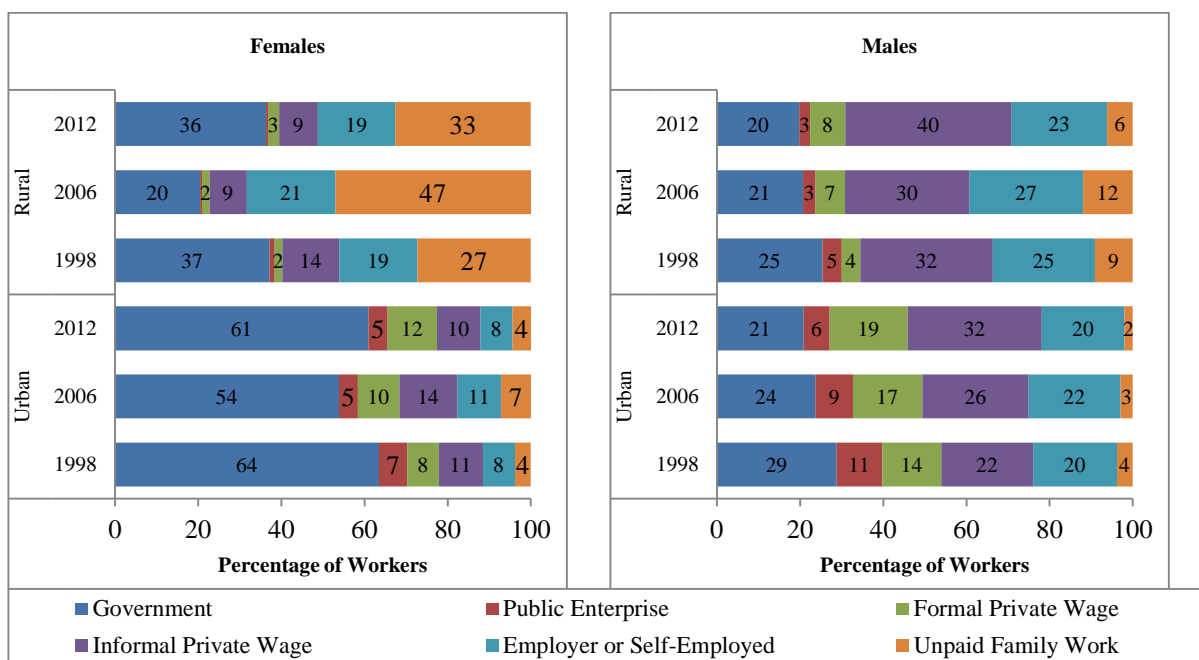
Note: Using the standard (search required) definition of unemployment.  
 Source: Constructed by the author using the ELMPs of 1998, 2006 and 2012.

**Figure 2: Employment Structure by Gender, Market Definition, Currently Employed Population, Ages 15-64, 1998-2012 (Percentage)**



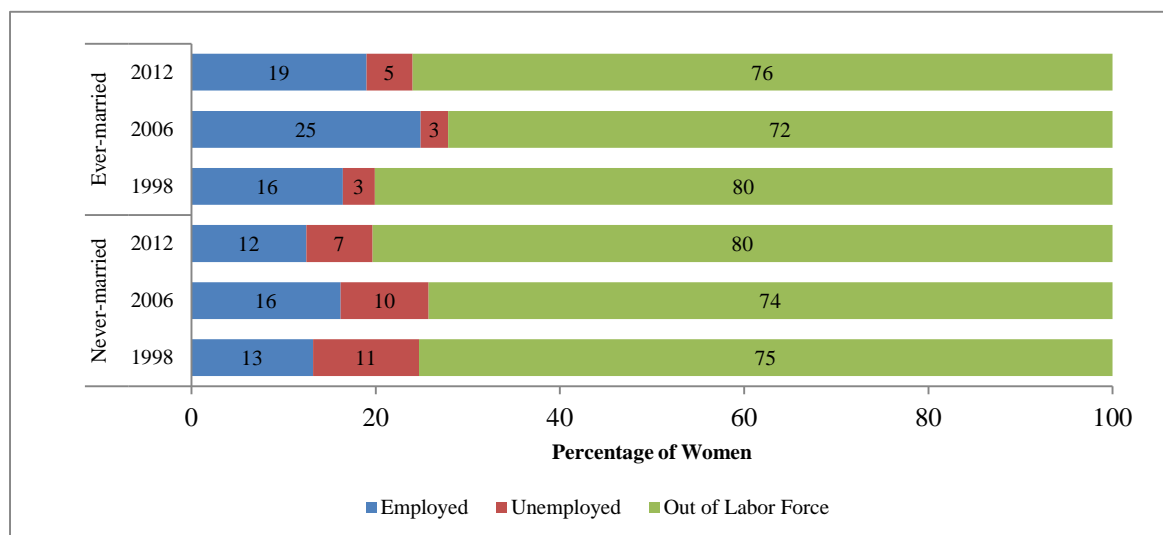
Source: Constructed by the author using the ELMPs of 1998, 2006 and 2012.

**Figure 3: Employment Structure by Gender and Urban/Rural Location, Market Definition, Currently Employed Population, Ages 15-64, 1998-2012(Percentage)**



Source: Constructed by the author using the ELMPS of 1998, 2006 and 2012.

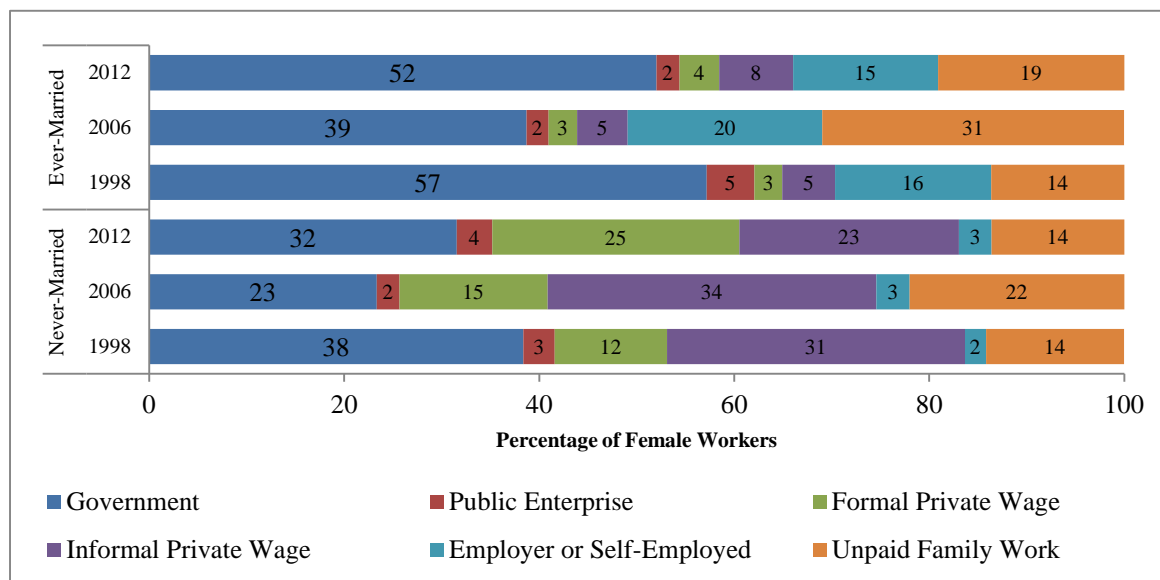
**Figure 4: Women’s Labor Market Status by Marital Status, Market Definition, Currently Employed Population, Ages 15-64, 1998-2012 (Percentage)**



Note: Using the standard (search required) definition of unemployment.

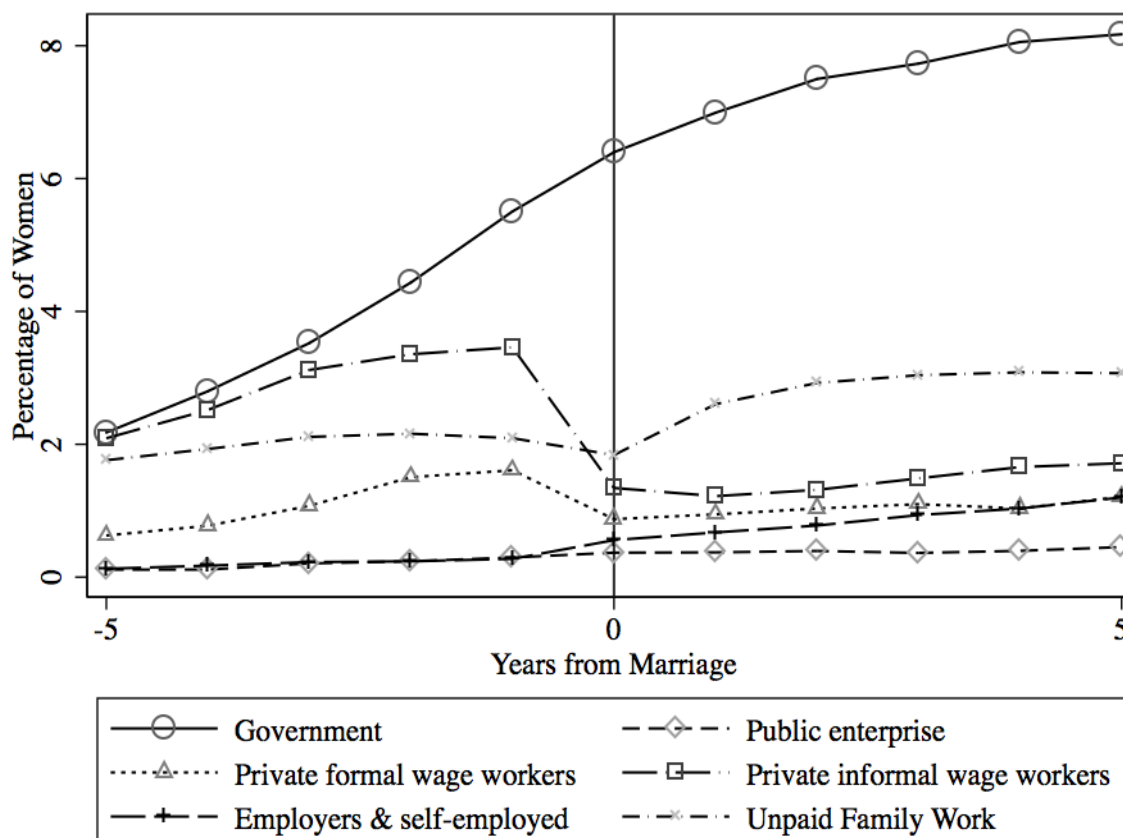
Source: Constructed by the author using the ELMPS of 1998, 2006 and 2012.

**Figure 5: Women’s Employment by Sector and Marital Status, Market Definition, Currently Employed Population, Ages 15-64, 1998-2012 (Percentage)**



Source: Constructed by the author using the ELMPS of 1998, 2006 and 2012.

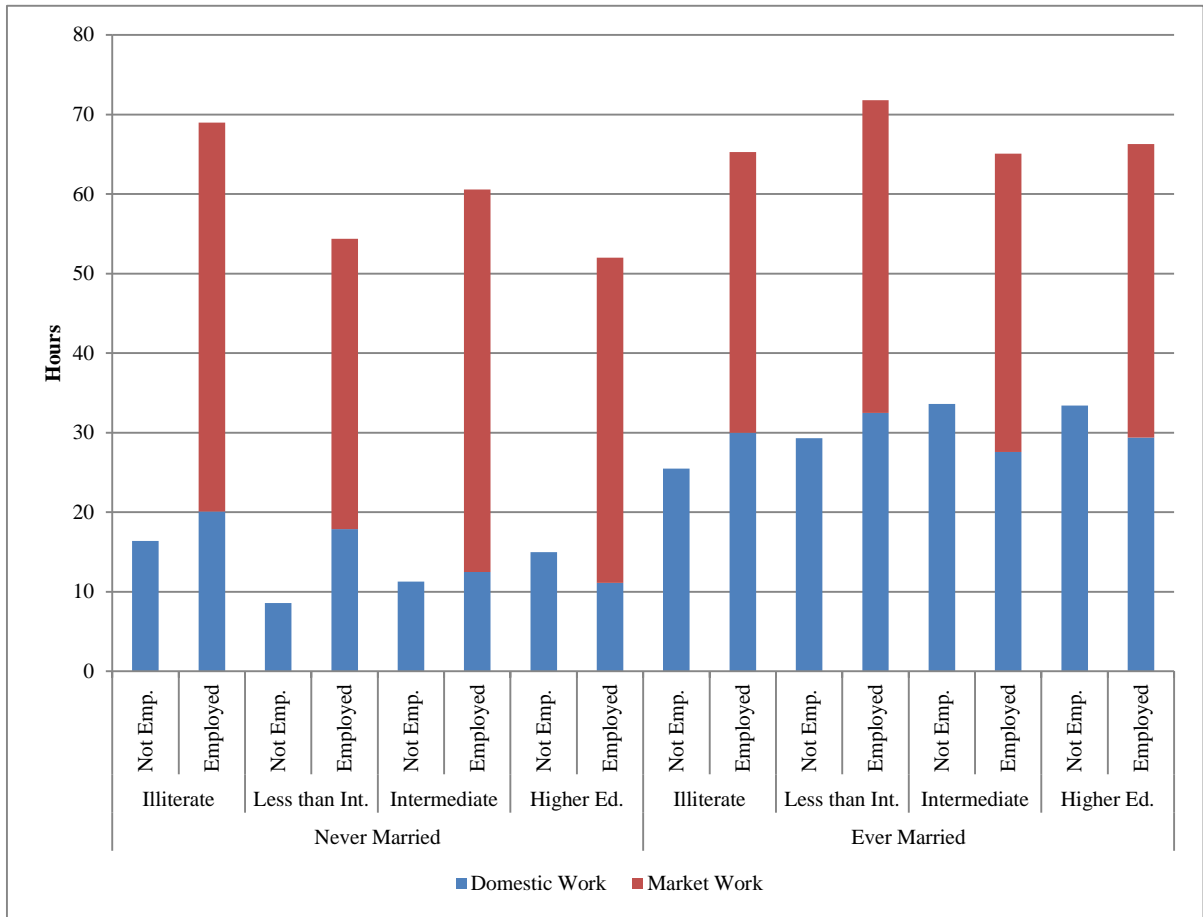
**Figure 6: Employment and the Transition to Marriage, Market Definition, Women Married between 1992 and 2012 (Percentage)**



Note: Inactive women not shown.

Source: Constructed by the author using the ELMPS of 2012.

**Figure 7: Females' Hours per Week Spent on Market Work and Domestic Work, by Marital Status, Employment, and Educational Level, Age 15-64, 2012**



Source: Constructed by the author using the ELMPS of 2012.

**Table 1: Labor Force Participation Rates by Gender and Urban/Rural Location, Ages 15-64, 1988-2012, (Percentage)**

	1988		1998		2006		2012	
	Males	Females	Males	Females	Males	Females	Males	Females
Rural Market			74.7	17.8	78.7	26.7	81.2	21.1
Urban Market			71.5	25.7	75.4	27.9	78.9	25.6
<b>Total Market</b>			<b>73.2</b>	<b>21.4</b>	<b>77.2</b>	<b>27.3</b>	<b>80.2</b>	<b>23.1</b>
Rural Extended	79.0	54.7	74.8	56.9	79.4	57.3	82.1	39.0
Urban Extended	74.5	28.4	71.5	33.3	75.4	33.0	79.1	28.7
<b>Total Extended</b>	<b>76.8</b>	<b>42.1</b>	<b>73.3</b>	<b>46.3</b>	<b>77.7</b>	<b>46.4</b>	<b>80.8</b>	<b>34.4</b>

Note: Using the standard (search required) definition of unemployment.

Source: Constructed by the author using the 1988 Labor Force Survey (LFS) and the ELMPS of 1998, 2006 and 2012.

**Table 2: Females' Hours per Week Spent on Market Work and Domestic Work, Age 15-64 by Marital Status and Employment Status, 2006-2012**

	Employed				Not Employed			
	Never Married		Ever Married		Never Married		Ever Married	
	2006	2012	2006	2012	2006	2012	2006	2012
Hours of market work	44.2	42.7	37.4	36.9	n.a.	n.a.	n.a.	n.a.
Hours of domestic work	20.1	13.1	45.4	29.3	17.8	10.9	42.8	29.6
Total hours of work	64.3	55.5	82.8	65.9	17.8	10.9	42.8	29.6
N (Observations)	550	396	2,067	2,233	2,781	2,872	6,542	9,633

Source: Constructed by the author using the ELMPS of 2006 and 2012.

**Table 3: Females' Hours per Week Spent on Housework and Carework, Age 15-64 by Marital Status and Employment Status, 2006-2012**

	Employed				Not Employed			
	Never Married		Ever Married		Never Married		Ever Married	
	2006	2012	2006	2012	2006	2012	2006	2012
Hours of housework	19.3	12.3	38.0	23.9	16.8	10.3	32.9	22.9
Hours of carework	0.9	0.8	7.4	5.4	1.0	0.6	9.9	6.7
Total hours of domestic work	20.1	13.1	45.4	29.3	17.8	10.9	42.8	29.6
N (Observations)	550	396	2,067	2,233	2,781	2,872	6,542	9,633

Source: Constructed by the author using the ELMPS of 2006 and 2012.

**Table 4: Percentage of Females with Access to Household Money by Marital Status and Employment Status, Market definition, Ages 15-64, 2012**

	Never married	Ever married	Total
Not employed	4.3	57.1	42.6
Employed	8.1	71.4	59.4
Total	4.7	59.8	45.5

Note: There are 2,834 never-married not employed females, 385 never-married employed females, 7,597 ever married not employed females and 1,729 ever married employed females in the sample for this table.

Source: Constructed by the author using the ELMPS of 2012.