Female Labor Force Participation Trends in the Core of the Washington, D.C. Metropolitan Area

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Executive Summary

This report presents 1990-2010 trends of female labor force participation rates and educational attainment in the core jurisdictions\(^1\) of the Washington, D.C. metropolitan area (WMA). This region includes the District of Columbia, Montgomery and Prince George’s Counties in Maryland, Arlington and Fairfax Counties in Virginia, and the independent city of Alexandria in Virginia.

The key findings of this research are:

- The WMA has been the leader in female labor force participation among the most populous metropolitan areas in the United States. However, the analysis of two decades between 1990 and 2010 revealed a downward trend in the participation of females in the WMA’s labor market.
- The activity of women contributed to increased total labor force participation in the District of Columbia and the four adjacent counties, but not in Alexandria.
- In all of the analyzed jurisdictions, the female labor force participation decreased between 1990 and 2000, and increased between 2000 and 2010.
- The District of Columbia had the lowest rate of female labor force participation among the examined jurisdictions. Concurrently, it experienced the second largest increase in both the share of women entering the labor market, and female residents with at least a Bachelor’s degree.
- Montgomery County has been the most stable, as its female labor force participation rate increased by only 0.4 percentage points. The share of female residents with at least a Bachelor’s degree increased by 11.9 percentage points, which was a moderate change in comparison to the other analyzed jurisdictions.
- Prince George’s County experienced high female labor force participation rates when compared to the other jurisdictions, but the rate decreased overall. This county had the highest share of females with only a high school diploma, and the lowest share of females with at least an undergraduate degree.
- Arlington County had both the highest level of females in the labor force, and the highest increase in the activity of females in the labor market. Moreover, it had the highest percentage

\(^1\) Core jurisdictions are also referred to as inner jurisdictions elsewhere in this report.
of women with at least a Bachelor’s degree and experienced the greatest boost in their share over time.

- Fairfax County experienced the steepest decline in female labor force participation. The share of female residents without a college degree decreased by 5.5 percentage points, while the percentage of women with a Bachelor’s degree or higher increased by 14.8 percentage points.
- Alexandria had one of the highest shares of females in labor force, but it experienced a decline in the rate overall. The trends in the female educational attainment were consistent with those in the other analyzed jurisdictions, with a moderate increase of females with a four-year college degree or higher, and a decrease in women with no more than a high school diploma.

The contributions of females to the WMA’s labor force are important to the local and regional economies. As such, the downward trend in the female labor force participation rate over the past two decades is troubling. Simultaneously, the increasing share of females with a Bachelor’s degree or higher in the region is encouraging because higher educational attainment is reflected in higher wages, better benefits, lower unemployment rates, and lower poverty. More research is necessary to better understand the local dynamics of female professional activity within the region and to determine if any steps should be taken to attract more women to join the labor force.

**Introduction**

The female labor force participation rate represents the share of the female population between the ages of 16 and 64 that is working or actively looking for employment. The importance of female activity in the labor force is reflected in the economic performance of regions. For example, a higher share of professionally active females, especially the high-skilled ones, provides additional productivity potential that can accelerate economic growth. An increased number of women in the labor market may encourage camaraderie between them, leading to shared encouragement to raise qualifications, climb the professional ladder, and release their entrepreneurial potential. For these and other reasons (e.g. social, equity or cultural), it is important to understand the women’s contributions to the labor force.

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3 Labor force does not include institutionalized or incarcerated people. Source: U.S. Census Bureau.
5 Ibid.
Female Labor Force Participation in Metropolitan Areas  
1990 to 2010

Between 1990 and 2010, the female labor force participation rate in the Washington, D.C. metropolitan area (WMA) was higher than those of the most populous metropolitan areas in the United States. However, the rate of participation of females in the labor force in the WMA steadily decreased from 1990 to 2010, shrinking by 3.8 percentage points. Over the same period, the share of females in the labor force escalated in the New York metropolitan area (+8.5%), and slightly increased in the Los Angeles (+0.4%) and Chicago (+0.5%) metro areas.

Despite the better performance of the other metropolitan areas over the two decades, the WMA remained the leader in the participation of females in the labor force (Figure 1). However, should the trend continue, female labor force participation rates in the other regions could surpass the WMA’s rate.

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6 As of 2010, the three most populous metropolitan areas in the U.S. were (in descending order): New York, Los Angeles and Chicago. Source: U.S. Census Bureau.
Among the core jurisdictions of the Washington, D.C. metropolitan area, Arlington County, Prince George’s County, and Alexandria had the highest levels of female participation in the labor force; the District of Columbia lagged behind the other jurisdictions.

The trends in the share of females in the labor force were similar in each inner jurisdiction. The four counties, Alexandria and the District of Columbia all experienced declines in female labor force participation between 1990 and 2000, but the participation rates increased between 2000 and 2010 (Figure 2). Over the two decades, Arlington County’s female labor force increased the most, by 3.6 percentage points, while Fairfax County experienced the steepest decline among all the jurisdictions, by 3.9 percentage points.

Females played an important role in the total labor force participation between 1990 and 2010 period. As shown in Table 1, changes to female participation rates were more positive than for the overall rates.

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In this analysis, the core (also called inner) jurisdictions of the Washington, D.C. metropolitan area include the District of Columbia, Montgomery and Prince George’s Counties in Maryland, Arlington and Fairfax Counties and Alexandria city in Virginia.
in all core jurisdictions. In Arlington County and in the District of Columbia both total and female labor force participation rates increased, but the female share grew faster than the total. In Prince George’s and Fairfax Counties both total and female labor force participation rates decreased, but at a slower rate than the total labor force. In Montgomery County, female labor force participation increased, while the total labor force decreased. The only exception was Alexandria, where female labor force participation declined more than the total labor force.

### Table 1


<table>
<thead>
<tr>
<th>Jurisdiction Comparison</th>
<th>District of Columbia</th>
<th>Montgomery</th>
<th>Prince George’s</th>
<th>Arlington</th>
<th>Fairfax</th>
<th>Alexandria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Total</td>
<td>Female</td>
<td>Total</td>
<td>Female</td>
<td>Total</td>
<td>Female</td>
</tr>
<tr>
<td>1990</td>
<td>62.1</td>
<td>66.3</td>
<td>67.5</td>
<td>73.0</td>
<td>77.6</td>
<td>70.8</td>
</tr>
<tr>
<td>2000</td>
<td>60.2</td>
<td>63.6</td>
<td>64.4</td>
<td>68.3</td>
<td>70.8</td>
<td>69.3</td>
</tr>
<tr>
<td>2010</td>
<td>63.6</td>
<td>66.8</td>
<td>67.9</td>
<td>71.2</td>
<td>73.8</td>
<td>74.4</td>
</tr>
<tr>
<td>1990-2010 change % points</td>
<td>1.5</td>
<td>0.5</td>
<td>0.4</td>
<td>-1.8</td>
<td>-3.8</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

**Female Educational Attainment in the Core of the Washington, D.C. Metropolitan Area 1990 to 2010**

Female educational attainment improved over the 1990-2010 period in the core of the Washington, D.C. metropolitan area. There was a steady upward trend in female college graduates in all inner jurisdictions. At the same time, there was a consistent downward trend in the percentage of females whose highest level of educational attainment was a high school diploma. It is likely that this trend is a result of females continuing their education, but it could also result from females dropping out of high school before graduating.

Between 1990 and 2010, the greatest change in the share of women with at least a four-year college degree was recorded in Arlington County, where the rate increased by 20.4 percentage points. The District of Columbia had the second highest rise in the percentage of females with an under-graduate degree or higher (+18.0%), followed by Fairfax County (+14.8%), Montgomery County (+11.8%),

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8 Female college graduates refer to females with a Bachelor’s Degree (also termed as an under-graduate degree or a four-year college degree elsewhere in this report) or higher.

9 Female high school graduates refer to females with a high school diploma or equivalency as the highest level of their education. Source: U.S. Census Bureau
Alexandria (+11.6%), and Prince’s George’s County (+7.0%). During the 20 years, among all the core jurisdictions, Arlington County experienced the largest change in the percentage of females with no more than a high school diploma, with a decline of 8.3 percentage points (Table 2).

<table>
<thead>
<tr>
<th>County</th>
<th>District of Columbia</th>
<th>Montgomery</th>
<th>Prince George’s</th>
<th>Arlington</th>
<th>Fairfax</th>
<th>Alexandria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Level</td>
<td>HS  Bach+</td>
<td>HS  Bach+</td>
<td>HS  Bach+</td>
<td>HS  Bach+</td>
<td>HS  Bach+</td>
<td>HS  Bach+</td>
</tr>
<tr>
<td>1990</td>
<td>22.6 30.9</td>
<td>19.9 43.1</td>
<td>30.9 23.1</td>
<td>17.6 46.9</td>
<td>20.8 40.7</td>
<td>17.4 42.8</td>
</tr>
<tr>
<td>2000</td>
<td>21.7 36.8</td>
<td>16.2 50.6</td>
<td>27.1 26.8</td>
<td>13.3 56.9</td>
<td>16.0 49.5</td>
<td>13.9 51.5</td>
</tr>
<tr>
<td>2010</td>
<td>20.6 48.9</td>
<td>14.8 54.9</td>
<td>27.2 30.1</td>
<td>9.3 67.3</td>
<td>15.3 55.5</td>
<td>12.9 54.4</td>
</tr>
<tr>
<td>1990-2010 change (% points)</td>
<td>-2.0 18.0</td>
<td>-5.1 11.8</td>
<td>-3.7 7.0</td>
<td>-8.3 20.4</td>
<td>-5.5 14.8</td>
<td>-4.5 11.6</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
Notes: HS refers to the percentage of female high school graduates
Bach+ refers to the percentage of females with Bachelor’s degree or higher

Figure 3
Female High School Graduates with High School Diploma as Highest Level of Educational Attainment as a Share of Total Female Population (age 25 and over) by Jurisdiction: 1990, 2000, 2010

Source: U.S. Census Bureau
Conclusion

The 1990-2010 trends show that while the share of females in the labor force in WMA is declining, it is not doing so in all of its inner jurisdictions. The District of Columbia, Montgomery County, and Arlington County have all experienced increased female labor force participation rates during this period. Moreover, the data show that educational attainment among women is improving, as the share of women with at least a Bachelor’s degree has increased in all of the region’s core jurisdictions. If the Washington, D.C. metropolitan region is to retain its outstanding position in terms of female labor force participation it is important to know what drives women to participate in the labor market.

To better understand the local dynamics in the female labor force and to identify appropriate practices and policies, the following issues should be researched:

- **Additional jurisdictions:** this analysis showed that the trends in female labor force participation differ among the WMA inner jurisdictions while the trends in educational attainment are systematic. Research of the outer jurisdictions included in the WMA will contribute to the conclusions.
- **Demographic profile:** further research should investigate female demographics, such as age, race, marital status and family composition, fertility and child bearing, wages, and occupational structure. These characteristics can suggest if the changes in female labor force shifts are caused by structural or cyclical changes.
• College enrollment and disability benefits: these were two common directions taken by those leaving the labor force during the economic crisis.\(^{10}\) It is important to identify the trends for these factors in the WMA and individual jurisdictions. Should there be more college enrollees, it could be expected that they will return to the labor force after graduating; hence additional steps to encourage them would not be necessary. If the share of females collecting disability benefits increased, though, the outlook for the future of the labor force would be less optimistic, as such beneficiaries are unlikely to rejoin the labor force.\(^{11}\)

• Lifestyles: it has been found that creative class and young professionals are increasingly clustering in dense, lively, pedestrian-friendly urban centers.\(^{12}\) The District of Columbia and Arlington County have these characteristics and both experienced growth in female labor force participation, and gained the highest shares of educated female residents. Conversely, urban Alexandria lost females in the labor force. Primarily suburban Prince George’s and Fairfax Counties also lost females in the labor force. It would be beneficial to pursue research in this area to find out if there is an association between female labor force participation and walkable environment. This would provide the jurisdictions with information if it is valid to invest in smart growth practices to attract high-skilled women to reside in their regions and to alleviate lower-income females to commute to work.

• Best practices: jurisdictions wanting higher female labor force participation can adapt strategies targeted at female activation in the labor market. To activate the lower-skilled women, there are practices such as on-the-job training and apprenticeship to match women with high school diploma with “middle” jobs or non-traditional jobs not requiring a college degree.\(^{13}\) Mothers, no matter the marital status, would benefit from adjustments in the workplace, such as flexible hours, parental leave, or child care in the workplace.\(^{14}\) Aspiring female entrepreneurs could benefit from support and mentoring programs, such as online forums and groups, and

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\(^{11}\) Ibid.


\(^{14}\) Ibid.


\(^{14}\) Ibid.

networking events. More attention is required to develop and evaluate such programs and incentives.

It cannot be determined with certainty what drives the female labor force dynamics. However, further research would help to understand it better and to identify suitable policies and practices. Superimposing the demographic and social characteristics and analyzing them in the context of changing lifestyles would provide deeper comprehension of the factors that affect female labor force participation in the region.

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