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**The Changing Labor Force and Sectoral
Structure of the Washington D.C. Metropolitan
Economy**

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Introduction

The Washington Metropolitan Areaⁱ underwent an accelerated structural change during the Great Recession. This structural change has been reflected in changing labor force participation rates among different age cohorts, changes in gender based employment trends, and a shift in job growth from the region's public to its private sectors. These changes may alter future growth patterns in the Washington Metropolitan Area as the mix of workforce – both among age cohorts and sector of employment – affect labor income and the sensitivity of the regional economy to business cycles.

Highlights from the Report

- **The age cohort representing the largest share of the labor force in the Washington Metropolitan Area is getting younger.** Prior to 2009 the largest share of workers in the Washington Metropolitan Area was between the ages of 35 to 44 years. After 2009 and continuing into the recovery, this share has shifted to the younger age cohort of 25 to 34 year olds in which the number of workers increased by 11.0 percent from 2009 to 2011.ⁱⁱ
- **Labor force participation has grown more slowly for those age 60 years and older between in the Washington Metropolitan Area as compared to the U.S.** The Washington Metropolitan Area has historically had a higher labor force participation rate for older workers than nationally. However, between 2007 and 2011 the labor force participation rate for persons 60 years and older in the Washington Metropolitan Area grew by 2.0 percentage points while that in the U.S. increased by 2.4 percentage points.ⁱⁱⁱ
- **Sectoral projections for the Washington Metropolitan Area indicate that by 2016 nearly half of all regional employment will be concentrated in the three sectors of Professional and Business Services, Education and Health Services, and Trade, Transportation and Utilities.** The Federal Government, which during the recession added the most jobs in the Washington Metropolitan Area, is expected to decline in its regional share of employment from 12.8 percent in 2011 to 11.0 percent in 2016. During this same period, the Professional and Business Services and the Education and Health Services sectors will increase their share of regional employment to 25.3 percent and 12.4 percent, respectively.

Labor Force Participation

In 2011, the total labor force participation rate in the Washington Metropolitan Area was 71.4 percent, exceeding that of the U.S. by 7.9 percentage points. This difference is reflected in all age cohorts. As shown in Table 1, the differences between labor force participation rates by age cohort for the Washington Metropolitan Area and the U.S. are wider amongst older workers than with the younger workers. The Washington Metropolitan Area has historically had a higher labor force participation rate for older workers than nationally. However, the composition of the workforce by age both locally and nationally changed over the recession with shifts in employment across the economy's major sectors.

Table 1
Labor Force Participation Rates by Age Cohort
for the Washington Metropolitan Area and the United States for 2011
(percent)

Age Group	20-24	25-34	35-44	45-54	55-59	60+	Total
WMSA	73.0	86.5	85.3	86.2	79.8	38.1	71.4
US	71.7	81.2	82.1	80.2	72.4	27.7	63.6
Difference (percentage points)	1.3	5.3	3.2	6.0	7.4	10.4	7.8

*WMSA refers to the Washington DC. Metropolitan Statistical Area

Source: Compiled from ACS 1-year estimates for 2011

Labor Force by Age

At the beginning of the recent recession, in 2007, the total labor force participation rate in the Washington Metropolitan Area was 71.3 percent and it exceeded that of the U.S. by 6.9 percentage points. The largest difference in labor force participation rates between the Washington Metropolitan Area and the U.S. was for workers 60 years and over, at 10.7 percentage points. The smallest difference was for workers between 20 and 24 years of age at 1.1 percentage points. However, as shown in Table 2, between 2007 and 2011 the differential representing the gap in labor force participation rates between the Washington Metropolitan Area and the U.S. widened across all age cohorts except for workers of 60 years of age or older, where it narrowed by 0.33 percentage points. The recession slowed the growth of labor force participation for older workers in the Washington Metropolitan Area relative to the U.S. For all other age cohorts labor force participation rates increased faster in the Washington Metropolitan Area relative to the nation.

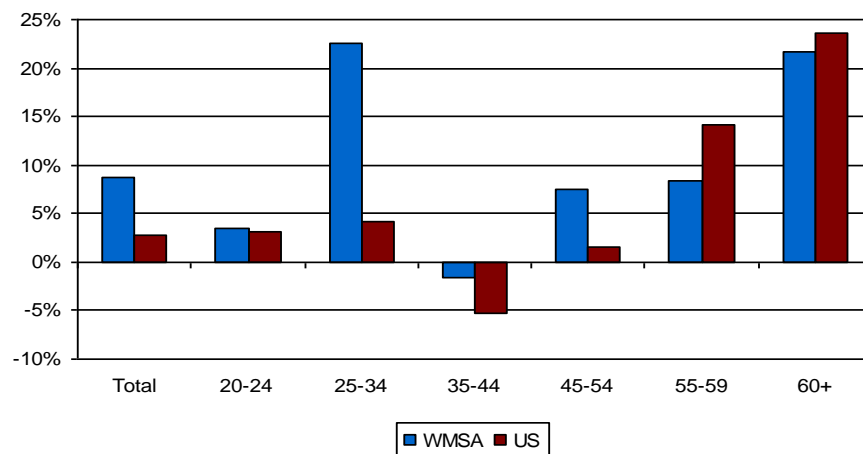
Table 2
Difference in Labor Force Participation Rates by Age Cohort
Between the Washington Metropolitan Area and the United States for 2007 and 2011
(percent)

Age Group	20-24	25-34	35-44	45-54	55-59	60+	Total
2007 Difference	1.1	4.9	3.2	5.1	6.7	10.7	6.9
2011 Difference	1.3	5.4	3.2	6.0	7.4	10.4	7.9
Differential (percentage points)	0.2	0.5	0.0	0.9	0.7	-0.3	1.0

Source: Compiled from ACS 1-year estimates for 2007 and 2011

Figure 1 below illustrates the percent change in workforce by age cohort in the Washington Metropolitan Area and in the U.S. From 2007 to 2011, the number of workers between 25 and 34 years of age in the Washington Metropolitan Area increased by 22.5 percent, as compared to 4.2 percent in U.S. At the same time, payroll jobs (the number of full-time and part-time employees) for this age cohort increased by 19.6 percent in the Washington Metropolitan Area and declined by 0.6 percent nationally over this period. This pattern reflects the immigration of large numbers of younger college-educated workers attracted by the Washington Metropolitan Area's relatively strong economy during the recession.

Figure 1
Change in Workforce by Age Cohort
in the Washington Metropolitan Area and the United States 2007-2011
(percent change)



*WMSA refers to the Washington D.C. Metropolitan Statistical Area

Source: Compiled from ACS 1-year estimates for 2007 and 2011

Figure 1 also identifies that workers between 35 to 44 years of age were most negatively affected by the recession. The number of workers in this for this age cohort declined 1.7 percent in the Washington Metropolitan Area and 5.3 percent nationally from 2007 to 2011. This pattern corresponds to the largest

decrease in payroll jobs as compared to all other age cohorts: 4.1 percent in the Washington Metropolitan Area and 8.8 percent nationally from 2007 to 2011.

Labor Force by Gender

The Washington Metropolitan Area has historically maintained higher labor force participation among women as compared to the nation. As shown in Table 3 below, in 2011 labor force participation across all age cohorts for male and female workers was higher in the Washington Metropolitan Area than nationally. Furthermore, female labor force participation in the Washington Metropolitan Area was 8.1 percentage points higher than that of the U.S. This is a greater difference when compared to the difference in male labor force participation between the Washington Metropolitan Area and the U.S. which was 7.8 percentage points. This unique ratio of higher labor force participation among women in the Washington Metropolitan Area reduced the region’s economic losses in the early part of the recession, when jobs were lost that were disproportionately held by men.

Table 3
Labor Force Participation Rates by Gender and Age Cohort
for the Washington Metropolitan Area and the United States for 2011
(percent)

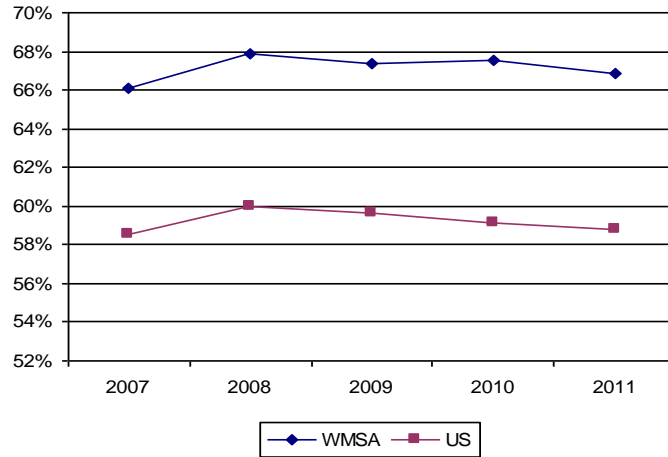
Age Group		20-24	25-34	35-44	45-54	55-59	60+	Total
Female	WMSA	72.5	83.0	79.2	82.2	75.0	32.0	66.9
	US	71.3	76.6	76.2	75.7	68.1	23.3	58.8
	Difference	1.2	6.4	3.0	6.5	6.9	8.7	8.1
Male	WMSA	73.4	90.2	91.7	90.5	85.2	45.7	76.3
	US	72.1	85.7	88.0	84.9	77.1	33.3	68.6
	Difference	1.3	4.5	3.7	5.6	8.1	12.4	7.7

*WMSA refers to the Washington DC. Metropolitan Statistical Area

Source: Compiled from ACS 1-year estimates for 2011

As shown in Figure 2 below, female labor force participation in the Washington Metropolitan Area and the U.S. increased at the heights of the recession from 2007 to 2008, but has since declined slightly as the recovery continues. This pattern reflects a counter-cyclical trend in female labor force participation during the recessionary period in both the regional and the national economy. As the Washington Metropolitan Area has maintained a larger proportion of jobs employing women than the U.S., this trend also identifies an advantage for the region’s economy.

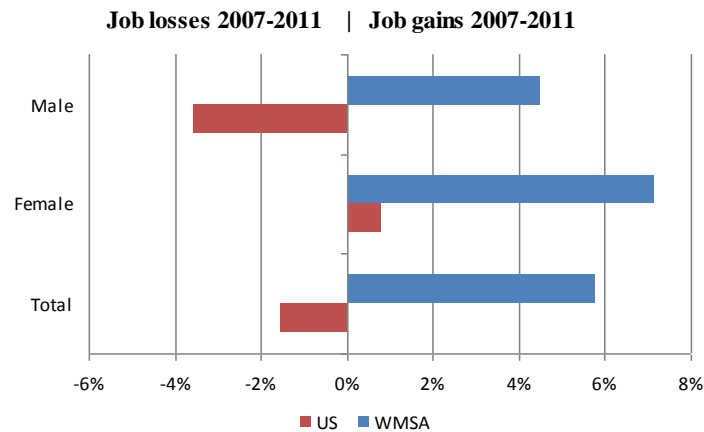
Figure 2
Female Labor Force Participation Rates
in the Washington Metropolitan Area and the United States 2007-2011
(percent)



*WMSA refers to the Washington D.C. Metropolitan Statistical Area
 Source: Compiled from ACS 1-year estimates for 2007 through 2011

This regional advantage is further evidenced in the net change in payroll jobs in the metropolitan area and the national economy. From 2007 to 2011, payroll jobs employing women increased by 97,000 jobs in the Washington Metropolitan Area and by 530,000 jobs in the U.S. Over this same period jobs employing men increased by only 66,000 jobs in the metropolitan area and declined by 3.6 million jobs nationally. The net effect, as illustrated in Figure 3, resulted in the Washington Metropolitan Area adding a net of 163,000 jobs from 2007 to 2011, while the U.S. economy lost a net of 2.2 million jobs over the same period.

Figure 3
Change in Payroll Jobs
in the Washington Metropolitan Area and the United States 2007-2011
(percent change)

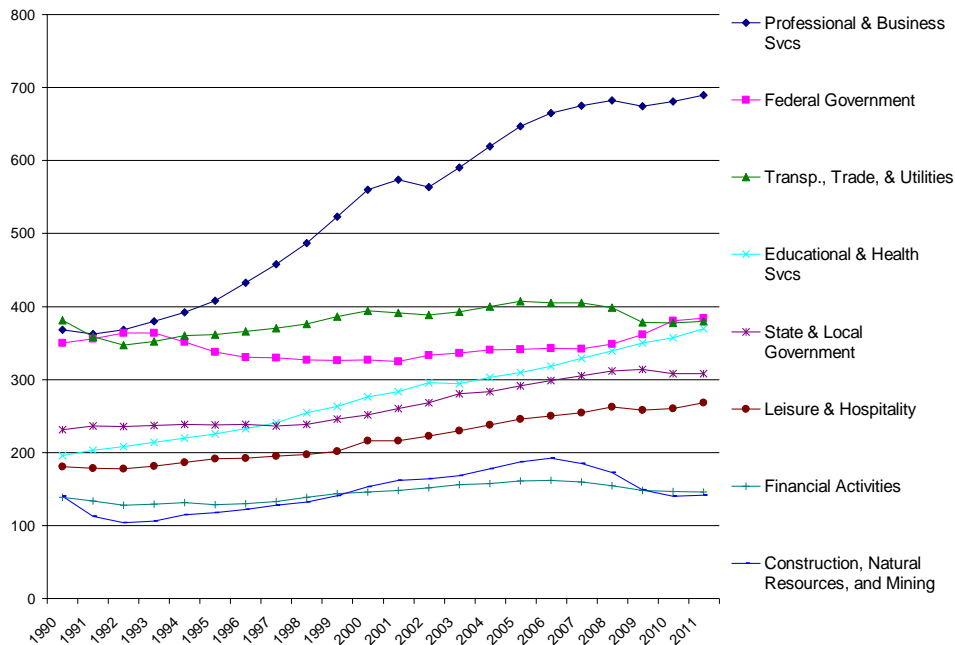


*WMSA refers to the Washington D.C. Metropolitan Statistical Area
 Source: Compiled from ACS 1-year estimates for 2007 through 2011.

The Washington Metropolitan Area Sectoral Mix

The Washington Metropolitan Area has a high concentration of employment in the services sectors, including Government. As of 2011 the four sectors of Professional and Business Services; Government; Transportation, Trade and Utilities; and the Education and Health Services sectors accounted for 71.0 percent of total nonfarm employment in the Washington Metropolitan Area. Of these four sectors, only the Transportation, Trade and Utilities sector declined in total employment from 2007 to 2011, losing 25,700 jobs. The Professional and Business Services sector and Government added a net of 14,153 and 45,187 jobs respectively to the Washington Metropolitan Area's economy over this same period. The Education and Health Services sector was the only sector to consistently add jobs through each year of the recession and into the recovery contributing 40,515 jobs to the Washington Metropolitan Area's economy from 2007 to 2011.

Figure 4
Employment by Sector in the Washington Metropolitan Area 1990-2011
(in thousands of jobs)



*WMSA refers to the Washington D.C. Metropolitan Statistical Area
 Source: Compiled from HIS Global Insight June 2012 Forecasts

Figure 4 above shows the sectoral trends in employment for the Washington Metropolitan Area from 1990 to 2011. These trends highlight the dominant role of the Professional and Business Services sector as the largest and fastest growing regional employment sector since 1991, and the Education and Health Services sector to have the steadiest annual growth in employment over the same period. The trend lines also identify the largest job declines during the recession in the Construction, Natural Resources and Mining, and the Transportation, Trade and Utilities sectors. From 2008 to 2009, the year of most jobs losses in the region during the Great Recession, the Construction, Natural Resources, and Mining sector lost 23,700 jobs, and the Transportation, Trade, and Utilities sector lost 20,400 jobs. Together these two sectors accounted for 58.1 percent of all jobs lost in the year of 2008 – 2009, and 52.6 percent of all jobs lost from 2007 to 2011 in the Washington Metropolitan Area.

Table 4
Labor Force Participation Rates by Industry
for the Washington Metropolitan Area and the United States for 2011
(percent)

Sector	2007	2009	2011	2016*
Professional & Business Services	22.6	22.8	23.0	25.3
Government	21.6	22.9	23.1	21.0
Transp, Trade, & Utilities	13.5	12.8	12.7	12.2
Education & Health Services	11.0	11.8	12.3	12.4
All Others	31.3	29.7	29.0	29.2

*WMSA refers to the Washington DC. Metropolitan Statistical Area

Source: Compiled from ACS 1-year estimates for 2011

The Professional and Business Services sector is the largest employer in the region. As of 2011, it accounted for 23 percent of all employment in the Washington Metropolitan Area. This sector lost 7,800 jobs in 2008-2009, but added 15,000 jobs from 2009 to 2011. With continued growth expected, the Professional and Business Services sector will account for 25.3 percent of regional employment by 2016 in the Washington Metropolitan Area. Employment in the Federal Government has proven to be counter-cyclical to private sector employment through the recession and into the recovery, as can be seen in Figure 4 above. The sector added 42,100 jobs to the regional economy, the most of any sector from 2007 to 2011. However, Federal employment has been slowly declining since mid-2010 with losses of 8,700 jobs or a 2.3 percent decline in employment into 2012.

As of 2011, the Education and Health Services sector was the fourth largest sector in the Washington Metropolitan Area. This sector has demonstrated the steadiest growth rate in regional employment from 2007 to 2011 as compared to all other sectors. The Education and Health Services sector averaged 3.1 percent increase in employment each year, or a 12.3 percent increase from 2007 to 2011, which was the largest percent increase in employment of all the sectors over this period, and the sector added 40,500 jobs to the Washington Metropolitan Area's economy. This sector is estimated to become the third largest regional sector by 2016, surpassing the Transportation, Trade and Utilities sector. As of 2016, 58.6 percent of employment in the Washington Metropolitan Area economy will be concentrated

in the three service sectors of Professional and Business Services, Government, and Education and Health Services sectors.

Conclusion

Through the Great Recession and into the recovery, the Washington Metropolitan Area has maintained higher labor force participation across all age cohorts as compared to the U.S. The regional labor force also has a higher proportion of women workers than the national. These characteristics combined with a unique sectoral mix that favors employment in the service sectors helped the Washington Metropolitan Economy weather the Great Recession better than the U.S., and better than most major metropolitan areas in the nation. However, the recession generated shifts in the Washington Metropolitan Area labor force that have changed the underlying structure of the economy. Most significantly, the largest share of the region's workforce is getting younger; the labor force participation among women has started declining somewhat into the recovery; and most employment growth is anticipated in the service sectors.

ⁱ Washington Metropolitan Area is defined consistent with the Washington D.C. Metropolitan Statistical Area corresponding with the most recent definition by the Office of Management Budget and includes 22 counties and cities in Washington D.C., Maryland, Virginia, and West Virginia.

ⁱⁱ All data presented in this report is compiled from the American Community Survey Series 1-Year Estimates B23001, 2007-2011 and the IHS Global Insight June 2012 Forecasts.