The labor force and unemployment: three generations of change

The influence of the baby-boom generation on the U.S. unemployment rate continues unabated today; the subsequent, smaller generation X'ers and echo boomers have had considerably less of an influence on the rate

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The post-World War II baby-boom generation—those born between 1946 and 1964—has had, and continues to have, a tremendous impact on the American labor market. The flow of these workers into the labor force also has affected long-term trends in the statistics used to gauge labor market conditions, particularly the unemployment rate. The groups following the baby boomers, popularly known as generation X (those born between 1965 and 1975) and the echo-boom generation (those born between 1976 and 2001), have not yet had the same kind of effect on labor market statistics.

This article examines the impact of all three of these generations on the unemployment rate. The first section starts things off by summarizing earlier work by Paul O. Flaim¹ on the influence of the original baby boom during the 1960s, 1970s, and 1980s. Then, employing Flaim's methodology, the next section assesses the influence of the baby boom, as well as the impact of the subsequent generations, during the 1990s. Finally, the article contrasts the demographic characteristics of the baby-boom generation with those of the rising young worker groups of today. The data presented throughout are annual averages from the monthly Current Population Survey (CPS).²

The baby boomers: three decades

Flaim explained the impact of the baby boomers on the Nation's unemployment rate by disaggre-

gating the labor force into 22 different age-andsex groupings³ and then calculating the change in the unemployment rate due to three causal factors: (1) that due exclusively to changes in the incidence of unemployment among the various age-and-sex groupings that make up the labor force-in other words, changes in the unemployment rate due to the cyclical and structural changes that take place in the economy; (2) that due exclusively to changes in the age-and-sex composition of the labor force-in other words, changes in the unemployment rate due to changes in the relative weights of the age-andsex groups; and (3) that due to the interaction between the preceding two components.⁴ Flaim's analysis demonstrated the following points:

> • By expanding the share of the labor force made up of young people (aged 16– 24) in the 1960s and 1970s, the entry of the baby boomers into the job market exerted *upward* pressure on the Nation's overall unemployment rate. The reason is that younger workers tend to have higher unemployment rates than does the rest of the workforce.

> • During the 1980s, when the youngest baby boomers had matured past age 24 and into groups with typically lower unemployment rates, increases in their share of the labor force (and the consequent shrinking of the youth population), in both absolute

Jessica R. Sincavage is an economist in the Commissioner's Development Program, Bureau of Labor Statistics, Washington, pc. Email: Sincavage. Jessica@bls.gov and relative terms, exerted *downward* pressure on the overall unemployment rate.

• No significant changes in the overall unemployment rate could be attributed to increased labor force participation among women between 1959 and 1989, because the unemployment rate for women aged 25 years and older generally is *lower* than the overall unemployment rate. In testing the hypothesis that the increasing labor force participation among women that began picking up speed during the mid-1960s might have had an effect on the overall unemployment rate, Flaim concentrated on women aged 25 and older because their labor force participation rate increased significantly, from 36.2 percent in 1959 to 56.0 percent in 1989.⁵

Looking ahead to the 1990s, Flaim projected continuing downward pressure on the unemployment rate, due to the aging of the baby boomers and the decreasing proportion of younger workers in the labor force. In addition, he suggested that there might be a decrease in the youth unemployment rate, relative to the unemployment rate for older workers, in the 1990s, because of the reduced competition for jobs among the shrinking youth population. In a caveat to this suggestion, Flaim cautioned that any improvements in the youth jobless rate could be undercut by the labor market's continuing trend toward more racial and ethnic diversity.⁶ These issues will be addressed later in the article.

The next section focuses on defining the three generational groups whose movement through the labor force caused changes in the unemployment rate throughout the 1980s and 1990s.

The baby boom

Chart 1 shows the annual number of births between 1940 and 2001.⁷ During the peak of the baby boom in 1957, the number reached 4.3 million; it remained close to that level until 1961. From 1946 to 1964, 75.8 million people were born in the United States.

The oldest baby boomers began entering the labor force in 1962. (See exhibit 1.) By 1969, baby boomers composed the entire 16- to 24-year-old population. Only by 1989 were all members of this generation above age 24 and no longer part of the youth population.

Generation X

The people born during the years 1961–81 are commonly referred to as generation X. For the purpose of this article, the group is defined, more narrowly, as those born between 1965



and 1975, a period characterized by a sharp decline in the number of births. One reason the baby boomers had such a profound effect on the unemployment rate relative to the effect produced by generation X is because there is power in numbers. Generation X simply did not have a large enough presence in the labor force during the 1980s to offset the labor market impact of the baby boomers. Approximately 38 million people were born in the United States between 1965 and 1975, about half the number born during the baby-boom generation.

The echo-boom generation

Around 1976, when the oldest baby boomers reached their childbearing years, the Nation began to experience, once again, a rising trend in the annual number of births. This was the start of the period commonly known as the echo boom. (See chart 1 and exhibit 1.) At the height of the echo boom, in 1990, annual births reached 4.1 million. From 1976 to 2001, 98.8 million people were born in the United States.

The 1980s labor force and unemployment

The members of generation X began entering the labor force in the early 1980s. (See exhibit 1.) By 1989, those born to this generation were between the ages of 16 and 24 and composed 17.9 percent of the labor force. (See table 1.) The same year, the baby boomers, who had aged to 25 to 44 years old, made up 53.7 percent of the labor force. The high percentage of baby boomers in the labor force was due not only to their sizable numbers, but also to increased labor force participation within the group. As people age from youth into maturity, labor force participation typically increases. In 1989, for instance, 94.5 percent of men aged 25 to 44 years and 74.6 percent of women in the same age group were participating in the labor force. In 1969, when these men and women composed the 16- to 24-year-old age group, their labor force participation rates had been 68.8 percent and 50.4 percent, respectively. Another labor market characteristic of the 25- to 44-year-old age group is that its members typically experience a lower likelihood of unemployment than do younger people. The unemployment rate for the baby-boomer group was 4.5 percent in 1989, compared with 8.4 percent in 1969.8

Table 2 illustrates the effect of the baby-boom generation on the labor force, showing the change in the unemployment rate between 1979 and 1989, broken down into the previously mentioned three components of the total change: changes in the unemployment rate due to the cyclical and structural changes that take place in the economy; changes in the unemployment rate due to changes in the relative weights of the age-and-sex groups; and changes in the unemployment rate due to the interaction between the preceding two components. All other things held constant, the downward pressure

Exhibit 1. Time line of important labor force events, 1946–2001

- 1946 Start of the baby boom
 1962 Oldest boomers enter the labor force at age 16
 1964 Baby boom ends
 1965 First members of generation X are born
 1969 Baby boomers make up the entire youth labor force
 1975 Last members of generation X are born
 1976 Echo boom begins
 1979 Baby boomers continue to make up the entire youth labor force
 1981 Oldest members of generation X enter the labor force at age 16
 1989 Generation X makes up the entire youth labor force
 1992 Oldest echo boomers enter the labor force at age
- age 16 1999 Echo boomers make up the entire youth labor force
- 2001 Echo boom ends

exerted on the overall unemployment rate due to the changing age-and-sex composition of the labor force can be seen in column D; this component accounted for a highly significant portion, 0.47 of a percentage point, of the total 0.58-percentage-point difference in the overall unemployment rate between 1979 and 1989 (column B). The baby boomers exerted such downward pressure because their relatively low agespecific unemployment rate was coupled with their relatively large labor force representation: 53.7 percent of the total civilian labor force in 1989. The entry of generation X into the labor force did not appear to alter the downward trend of the overall unemployment rate throughout the 1980s because the age-specific unemployment rate of generation X'ers carried considerably less weight (the group accounted for just 17.9 percent of the labor force) than that of the baby boomers in calculations of the overall unemployment rate.9

The 1990s labor force and unemployment

The echo boomers began to enter the labor force in the early 1990s and, by 1999, composed the 16- to 24-year-old age group. (See exhibit 1.) Unlike the situation with the baby boomers, who exerted an upward pressure on the unemployment rate when they were those ages, there is no compelling statistical evidence that the echo-boom generation had the same effect. Column B of table 3 shows that, between 1989 and 1999, the unemployment rate fell 1.05 percentage points. The changing demographics of the labor force accounted for 0.24 of a percentage point of that decrease (column D), while

Table 1.

Unemployment rate and composition of the labor force by age and sex, annual averages, selected years, 1959–2002

[Numbers in thousands]							
Sex and age	1959	1969	1979	1989	1999	2002	
Unemployment rate							
Total, 16 years and older	5.5	3.5	5.8	5.3	4.2	5.8	
Men:							
16 to 19 years	15.3	11.4	15.9	15.9	14.7	18.1	
20 to 24 years	8.7	5.1	8.7	8.8	7.7	10.2	
25 to 34 years	4.7	1.9	4.3	4.8	3.6	5.8	
35 to 44 years	3.7	1.5	2.9	3.7	2.8	4.5	
45 to 54 years	4.1	1.5	2.7	3.2	2.6	4.2	
55 to 64 years	4.5	1.8	2.7	3.5	2.7	4.3	
65 years and older	4.8	2.2	3.4	2.4	3.0	3.4	
Women:							
16 to 19 years	13.5	13.3	16.4	14.0	13.2	14.9	
20 to 24 years	8.1	6.3	9.6	8.3	7.2	9.1	
25 to 34 years	5.9	4.6	6.5	5.6	4.4	5.9	
35 to 44 years	5.1	3.4	4.6	3.9	3.3	4.6	
45 to 54 years	4.2	2.6	3.9	3.2	2.5	3.8	
55 to 64 years	4.1	2.2	3.2	2.8	2.6	3.5	
65 years and older	2.8	2.3	3.3	2.9	3.2	3.9	
Composition of the labor force							
Total, 16 years and older	68,369	80,734	104,962	123,869	139,368	144,863	
Percent	100.0	100.0	100.0	100.0	100.0	100.0	
Mon							
16 to 19 years	2.0	1.9	10	2.2	21	27	
20 to 21 years	5.0	4.0	8.1	5.5	5.1	5.1	
20 to 24 years	15 1	12.6	15.6	16.1	12.4	12.4	
25 to 44 years	15.0	12.0	11.0	12.4	14.6	12.1	
45 to 54 years	13.8	12.8	95	8.8	11.0	11.8	
55 to 64 years	0.3	8.7	6.9	5.5	5.4	60	
65 years and older	3.4	2.7	1.9	1.6	1.7	1.8	
Women:							
16 to 10 years	2.8	2.0	13	21	20	2.6	
20 to 24 years	2.0	5.0	4.5	5.1	2.5	2.0	
20 to 24 years	5.0	67	11.0	12.0	10.6	4.0	
35 to 44 years	76	73	7.8	11.3	12.6	11.8	
45 to 54 years	7.0	7.0	6.6	73	10.0	10.7	
55 to 64 years	4 2	5.0	4.5	4.1	4.5	5.2	
65 years and older	1.2	1.3	11	12	12	1.3	
	1.4	1.0		1.2		1.0	

about 0.67 of a percentage point of the decrease was due to falling age-and-sex-specific unemployment rates (column C). Clearly, any upward pressure on the overall unemployment rate that the entry of the echo boomers into the labor force might have had was outweighed by the continued downward pressure exerted by the maturing baby boomers. Throughout the 1990s, the baby boomers were in age groups typified by low unemployment rates, just as they had been in 1989. By 1999, they constituted the entire 35- to 54-year-old age group. Moreover, the baby boomers' share of the labor force (48 percent) was triple that of the echo boomers (16 percent) and a little more than double that of generation X (23 percent). (See table 1; each figure is arrived at by summing the men's and women's shares for that age group.) In addition, economic growth toward the end of the 1990s resulted in declines in the age-and-sex-specific unemployment rates.

Flaim had predicted a decline in the youth unemployment

rate relative to other age groups in the 1990s due to the continued shrinking of the youth population. Table 1, however, shows no evidence that that ever occurred. From 1989 to 1999, the proportion of the labor force made up of workers aged 16 to 24 years remained relatively constant, and the youth unemployment rate did not decrease more significantly than the unemployment rate of the other worker age groups. The only pronounced decrease in labor force representation during that period is seen among the 25- to 34-year-olds (members of generation X), who experienced decreases in unemployment similar to those registered by the rest of the age groups in the labor force.

Non-baby-boomer generations

The characteristics of today's younger workers differ from those of their baby-boomer counterparts in several ways that

		Changes in rate relative to 1979—					
Year	Unemployment rate (A)	Total (B)	Due exclusively to changes in age-and-sex- specific unemployment rates (C)	Due exclusively to changes in age-and-sex- specific labor force weights (D)	Due to interactio (B – (C+D)		
	5.85	0.00	0.00	0.00	0.00		
	7 14	1 29	1.33	- 05	01		
	7.61	1.20	1.87	- 10	- 01		
	9.69	3.84	4.05	- 16	- 05		
	9.61	3.76	4 03	- 21	- 05		
	7.52	1.67	1 94	- 26	- 01		
	7.02	1.35	1.68	- 30	- 03		
	6 99	1 14	1 50	- 33	_ 02		
	6 10	.14	73	33	02		
	5.51	_ 34	05	37 - 41	01		
	5.01	04 _ 59	_ 1/	47	.02		
Because of rounding, sums of individ Changes in the unemployn	dual items may not equal tot ment rate, decompose	als. d into causa	al factors, 1989–20	02			
Because of rounding, sums of individ Changes in the unemployn	dual items may not equal tot	^{als.}	al factors, 1989–20 Changes in rate re	02 lative to 1989—			
 Because of rounding, sums of individ Changes in the unemployn Year 	dual items may not equal tot ment rate, decompose Unemployment rate (A)	als. d into causa Total (B)	Al factors, 1989–20 Changes in rate rel Due exclusively to changes in age- and sex- specific unemployment rates (C)	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D)	Due to Interaction (B – (C+D))		
 Because of rounding, sums of individ Changes in the unemployn Year 	Unemployment (A)	als. d into causa Total (B)	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C)	02 Due exclusively to changes in age-and-sex- specific labor force weights (D)	Due to Interaction (B – (C+D))		
 Because of rounding, sums of individ Changes in the unemployn Year 	Unemployment (A) Unemployment (A) Unemployment (A)	als. d into causa Total (B) 0.00 33	Al factors, 1989–20 Changes in rate rel Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 53	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 - 03	Due to Interaction (B – (C+D))		
Because of rounding, sums of individ Changes in the unemployn Year	Unemployment rate (A) 	als. d into causa Total (B) 0.00 .33 1.56	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09	Due to Interaction (B - (C+D)) 0.00 18 - 20		
Because of rounding, sums of individ Changes in the unemployn Year	Unemployment rate (A) Unemployment rate (A)	als. d into causa Total (B) 0.00 .33 1.56 2 23	al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59	02 Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 - 14	Due to Interaction (B – (C+D)) 0.00 –.18 –.20 –.22		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot ment rate, decompose Unemployment rate (A) 5.27 5.60 6.83 7.50 6.92	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02	02 Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16	Due to Interaction (B – (C+D)) 0.00 –.18 –.20 –.22 –.21		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot nent rate, decompose Unemployment rate (A) 5.27 5.60 6.83 7.50 6.92 610	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 83	Al factors, 1989–20 Changes in rate re Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18	Due to Interaction (B – (C+D)) 0.00 18 20 21 21 19		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot ment rate, decompose Unemployment rate (A) 5.27 5.60 6.83 7.50 6.92 6.10 5.60	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 .83 33	Al factors, 1989–20 Changes in rate rel Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20 69	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19	Due to Interaction (B - (C+D)) 0.00 18 20 22 21 19 18		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot nent rate, decompose Unemployment rate (A) 5.27 5.60 6.83 7.50 6.92 6.10 5.60 5.40	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 .83 .33 13	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20 .69 55	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19 22	Due to Interaction (B - (C+D)) 0.00 18 20 22 21 19 18 20 22 21 19 18 20		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot ment rate, decompose Unemployment rate (A)	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 .83 .33 .13 .13 .13	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20 .69 .55 00	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19 22 24	Due to Interaction (B – (C+D)) 0.00 –.18 –.20 –.22 –.21 –.19 –.18 –.20 –.18		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot nent rate, decompose Unemployment rate (A)	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 2.23 1.65 .83 .33 .13 33 33 75	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20 .69 .55 .09 .26	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19 22 24 22	Due to Interaction (B – (C+D)) 0.00 18 20 22 21 19 18 20 18 20 18 20 18		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot ment rate, decompose Unemployment rate (A)	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 .83 .33 1.3 33 76 1.05	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20 .69 .55 .09 36 67	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19 22 24 23 24	Due to Interaction (B – (C+D)) 0.00 18 20 22 21 19 18 20 18 20 18 20 18 17 14		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot nent rate, decompose Unemployment rate (A) 5.27 5.60 6.83 7.50 6.92 6.10 5.40 4.94 4.51 4.22 3.99	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 .83 .33 .13 .33 .76 -1.05 -1.28	Al factors, 1989–20 Changes in rate rei Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 .53 1.85 2.59 2.02 1.20 .69 .55 .09 36 67 88	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19 22 24 23 24 27	Due to Interaction (B - (C+D)) 0.00 18 20 22 21 19 18 20 18 17 14 12		
Because of rounding, sums of individ Changes in the unemployn Year	Jual items may not equal tot nent rate, decompose Unemployment rate (A)	als. d into causa Total (B) 0.00 .33 1.56 2.23 1.65 .83 .33 .13 33 .76 -1.05 -1.28 54	Al factors, 1989–20 Changes in rate rel Due exclusively to changes in age- and sex- specific unemployment rates (C) 0.00 53 1.85 2.59 2.02 1.20 .69 .55 .09 36 67 88 06	02 ative to 1989— Due exclusively to changes in age-and-sex- specific labor force weights (D) 0.00 03 09 14 16 18 19 22 24 23 24 27 32	Due to Interaction (B - (C+D)) 0.00 18 20 22 21 19 18 20 18 19 18 20 18 17 14 12 16		

may affect the former group's impact on the labor force and the unemployment rate now and in the future. Among the relevant characteristics affecting both groups are school enrollment patterns, race and Hispanic origin, and women's labor force participation.

School enrollment and labor force participation. Table 4 shows the percentage of the total population aged 16 to 24 years enrolled in school for selected years between 1969 and 2002.¹⁰ In 1969 and 1979, when the baby boomers composed the entire youth population, their school enrollment rates were 46.6 percent and 42.1 percent, respectively. Note that the figure

for 1969 may be overstated somewhat: a large proportion (55.2 percent) of men aged 16 to 24 years were enrolled in school that year—a proportion which may reflect the choice of school enrollment as a way to avoid being drafted into the military during the Vietnam War.¹¹

Even with the high percentage of young men enrolled in school in the late 1960s, the population composed of generation X and the echo boom in later years had higher school enrollment rates than the baby boomers had. For example, in 1989, when the baby boomers had aged past 24 years old and generation X alone composed the youth labor force, the youth school enrollment rate was 47.5 percent. Then, as

Table 4.

School enrollment and labor force participation rates of persons 16 to 24 years, by age and sex, October of selected years

	Both sexes			Men			Women		
Year	Total, 16–24 years	16–19 years	20–24 years	Total, 16–24 years	16–19 years	20–24 years	Total, 16–24 years	16–19 years	20–24 years
Percent of population enrolled in school									
October:									
1969	46.6	71.1	23.0	55.2	76.9	32.0	39.1	65.4	15.9
1979	42.1	61.1	21.7	44.2	69.1	23.3	40.1	65.2	20.1
1989	47.5	73.6	27.0	48.3	74.4	27.0	46.8	72.8	27.1
1999	53.8	77.2	32.8	53.9	77.3	32.1	53.6	77.1	33.4
2002	54.6	79.0	34.4	53.2	78.1	32.2	56.0	80.1	36.6
Labor force participation rate									
October:									
1969	58.1	48.0	67.8	66.2	52.0	81.3	51.0	44.0	57.1
1979	67.4	55.4	77.1	73.0	57.7	85.7	62.0	53.1	69.0
1989	67.2	53.9	77.6	71.4	55.7	84.3	63.0	52.1	71.3
1999	64.3	50.0	77.1	67.3	51.5	81.8	61.4	48.5	72.6
2002	62.0	45.6	75.4	64.1	45.4	79.5	59.9	45.8	71.3

the echo boomers began entering the 16- to 24-year-old age group, the number continued to increase significantly, reaching 54.6 percent in 2002. (See table 4.)

Typically, youths who are enrolled in school are less likely to be in the labor force than those who are not enrolled in school. Table 4 shows the overall youth labor force participation rate for selected years, as well as the labor force participation rates for age-and-sex subsets of the youth population during the same years. In every age-and-sex subset of the youth population, except for women aged 20 to 24 years, the labor force participation rate was lower in 2002 than it had been in 1979, when the baby boomers composed the entire youth labor force. This pattern is consistent with that of enrollment rates.

The fact that the youth groups which followed the baby boomers were less likely to be in the labor force than their predecessors probably helped diminish these groups' impacts on the unemployment rate through the 1980s and 1990s. In the future, when these younger groups are in their prime working years, ages 35 to 54, the school enrollment patterns they experienced, and continue to experience, could affect trends in the overall unemployment rate. For instance, statistics show that the more schooling a demographic group receives, the lower is its incidence of unemployment.¹²

Race and Hispanic origin. The racial and ethnic composition of the combined generation X and echo-boomer population differs somewhat from that of the baby-boomer population. In 1999, about 13 percent of the population 16 to 34 years was black and almost 14 percent was Hispanic. Among the 35-to 54-year-old population (the baby boomers), the proportions

were smaller: about 11 percent was black and approximately 9 percent was Hispanic.

The impact the higher proportions of blacks and Hispanics may have on labor force participation and unemployment rates in the future is not clear. However, historically, blacks and Hispanics are less likely to be in the labor force, and more likely to be unemployed, than whites.¹³

Women. Labor force participation rates among women aged 16 to 34 years have increased since 1979, when the baby boomers were those ages. In 1979, the participation rate of women 16 to 34 years was about 63 percent; by 1999, it was 70 percent. As shown in the following tabulation, this overall difference conceals some important details:

	Percent		
	1979	1999	
Total, 16 to 34 years	63.2	70.1	
16 to 19 years	54.2	51.0	
20 to 24 years	69.0	73.3	
25 to 34 years	63.9	76.4	

Perhaps reflecting rising school enrollment, the labor force participation rate of teenage women was actually slightly lower in 1999 than in 1979. Women aged 20 to 24 years experienced a small increase in their labor force participation during those same years. The most dramatic difference is seen in the participation rate for women aged 25 to 34 years, a rate that was almost 13 percentage points higher in 1999 than it had been in 1979.

In 1999, the labor force participation rate of men aged 25 to 34 years was 93.3 percent. Although their female counter-

parts have never experienced this level of labor force participation, the gap between the two sexes has decreased substantially as the labor force participation of women of the same ages increased steadily from 1979 to 1999, while that for men edged down.

Flaim found that the increased labor force participation of women between the years 1959 and 1989 did not cause an increase in the unemployment rate, due to the fact that unemployment rates for women 25 years and older were consistently lower than the overall unemployment rate. In 1999, the unemployment rate for women in that age group (3.3 percent) continued to remain below the overall rate (4.2 percent) as the proportion of the labor force those women represented continued to rise (from 36.7 percent in 1989 to 38.9 percent in 1999; see table 1).

FORTY YEARS AFTER THEY FIRST BEGAN ENTERING THE LABOR FORCE, the baby boomers continue to influence the Nation's unemployment rate. The smaller, subsequent generations have not been able to influence the rate as dramatically as the baby boomers have. The demographic characteristics of the current youth population differ from those of the baby boomers. Increased overall school enrollment and changes in the racial and ethnic composition of the population are defining characteristics of today's younger generations. In addition, the labor force participation rate of women continues to rise. In the future, these characteristics will play a role in determining how the members of generation X and the echo-boomer generation will affect the Nation's labor force and unemployment rate as the baby boomers age and leave the working-age population.

Notes

¹ See Paul O. Flaim, "Population changes, the baby boom, and the unemployment rate," *Monthly Labor Review*, August 1990, pp. 3–10.

² The cPs is a monthly sample survey of about 60,000 households that provides information on demographic characteristics of the labor force and the employment status of the civilian, noninstitutionalized population aged 16 years and older.

³ The civilian labor force was first divided by sex and then, for each of the two sexes, was divided into 11 age groupings: 16-19 years, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, and 65 and older.

⁴ The interaction term was arrived at by subtracting, from the total change in the unemployment rate, (1) the part stemming from changes in the age-and-sex-specific rates, with the weight of the age-and-sex-specific components of the labor force held constant, and (2) the part stemming from changes in the weights of the age-and-sex components of the labor force, with the age-and-sex jobless rates held constant. The interaction term tends to indicate how changes in the size of each age-and-sex group influence that group's unemployment rate. For instance, if the number of teenagers in the labor force grows very quickly, there will be more teenagers competing for the same number of jobs, which will tend to cause upward pressure on the teenage unemployment rate.

⁵ Most of the increase in labor force participation among women aged 25 and older during the years 1959 to 1989 can be attributed to women aged 25 to 54. Women aged 25 to 34 increased their labor force participation rate from 35.3 percent in 1959 to 73.5 percent in 1989. Women aged 35 to 44 experienced a slightly smaller, but still dramatic, increase in their labor force participation rate during those years, from 43.4 percent in 1959 to 76.0 percent in 1989. Similarly, 70.5 percent of women aged 45 to 54 participated in the labor force in 1989, compared with only 49.0 percent in 1959.

⁶ In Flaim's projections for the 1990s, he also mentioned the difficulty inherent in estimating the composition of the working population 10 years ahead due to the uncertainty of future immigration and emigration patterns. Upon examination of the employment data for those years, it appears that there was a larger increase in the percentage of foreign-born individuals in the U.S. labor force of 25- to 34year-olds than in other age groups in the population between 1989 and 1999. This increase helped stabilize the population level in the 25- to 34-year-old age group. Without the increase in foreign-born individuals, the population of 25- to 34-year-olds would have decreased as the baby boomers left the group and entered the 35- to 44-year old age group. The effect the baby boomers' aging had on the unemployment rate is not clear. People aged 35 to 44 years typically have lower unemployment rates compared with people aged 25 to 34 years. The baby boomers' exit from the 25- to 34-year-old age group would have helped to lower the unemployment rate. However, foreign-born persons typically have higher unemployment rates than native-born individuals have, so a relatively large increase in the number of foreignborn individuals aged 25 to 34 years could have worked in the opposite direction, exerting upward pressure on the unemployment rate.

⁷ Annual birthrates are as reported by the Centers for Disease Control and Prevention's National Center for Health Statistics, on the Internet at **http://www.cdc.gov/nchs/**. The following papers were accessed:

Vital Statistics of the United States, 1999, vol. I, Natality, table
 1-1.
 National Vital Statistics Report Aug 4, 2003, vol. 51, no. 12.

• National Vital Statistics Report, Aug. 4, 2003, vol. 51, no. 12, table 1, p. 13.

⁸ The unemployment rates for the baby-boomer group in 1989 (now aged 25 to 44 years) were calculated with the disaggregated ageand-sex-specific unemployment rates and labor force levels listed in table 1. The difference in the unemployment rate for the group between 1969 and 1989 also reflects differences in economic conditions peculiar to each year. A comparison between the unemployment rate for 25- to 44-year-olds in 1969 (2.5 percent) and that in 1989 (4.5 percent) helps to illustrate these economic differences.

⁹ The weight placed on the age-and-sex-specific unemployment rates in calculating the overall rate is the percentage of the entire labor force that the particular group represents.

¹⁰ The labor force participation rates and school enrollment rates presented are for the month of October in each of the years shown. To discount any effects of school enrollment during the summer months of the year, annual averages were not used.

¹¹ The period from 1965 to 1969 was marked by increased use of the involuntary draft. During those years, 1,421,256 men were called to military service through the draft—a figure considerably greater than the 518,899 men called between the years of 1960 and 1964 and the 306,998 men between the years 1970 and 1973, the year the draft ended. During the Vietnam War period, a man was granted a "student deferment if he could show that he [was] a full-time student making satisfactory progress towards a degree." (See Selective Service System

website, on the Internet at http://www.sss.gov.

 12 See *Employment and Earnings* (Bureau of Labor Statistics, June 2003), table A–17, p. 43.

¹³ After the youth population was disaggregated into black and nonblack youths, an analysis using the methodology described in this

article showed that the increased proportion of blacks in the labor force from 1979 to 1999 contributed to a 0.2-percent increase in the youth unemployment rate over the period. After the youth population was disaggregated into Hispanic and non-Hispanic youths, the same analysis was conducted. The result also was a 0.2-percent increase in the youth unemployment rate between 1979 and 1999, due to the increased number of Hispanic youths in the labor force.

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