WORKING PAPER

GOOD JOBS AT GOOD WAGES:
THE CHARACTERISTICS OF JOBS
CREATED BY LIFTING
LINE-OF-BUSINESS RESTRICTIONS
IN TELECOMMUNICATIONS
FOR BABY BELLS

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Overview

This study examines the impact on the U.S. labor market of the permanent elimination of the line-of-business (LOB) restrictions on the seven regional Bell operating companies. With the restrictions lifted, the "Baby Bells" could enter sectors of the market currently closed to them (e.g., cable TV, information services, telecommunications equipment), thus leading to more competition and lower costs. Building on an analysis by The WEFA Group (a major econometric forecasting firm) of the aggregate and industry employment impact of the elimination of LOB restrictions (WEFA, 1993), we estimate the characteristics of jobs that will be created and the likely demographic composition of the new employment. More specifically, we estimate the wages, benefits, and hours worked of the new jobs and the distribution of the jobs across wage levels, occupations, education levels, gender, race, and union coverage.

The WEFA Group projects that removing the LOB restrictions will create 3.6 million additional jobs -- above whatever job growth would have been expected to occur in the absence of the policy change -- by the year 2003. As noted in the WEFA report, these additional jobs are the result of "more competition in the telecommunications sector, enhanced information services, new telecommunications infrastructure, and new user interfaces..." (p. 59). Our analysis concerns the character of these net new jobs.

In general, the jobs created by the removal of the LOB restrictions are spread throughout the economy and the workforce. Compared to the current job structure, however, these new opportunities are weighted toward good jobs for blue-collar, non-college-educated males:[1] they offer higher-than-average wages and benefits and are associated with full-time work. They are also more likely to be union jobs and slightly favor blacks and Hispanics.

In this regard, the jobs created by the LOB policy change would help reverse the adverse wage and employment trends of the 1980s and early 1990s. Over the last two decades there has been a decline in the real value of hourly wages earned by non-college-educated workers, who represent roughly 75 percent of the workforce. For instance, a male worker earning the median wage saw his hourly rate fall 11.7 percent between 1979 and 1989 (Mishel and Bernstein, 1993a). Moreover, wage erosion continues in the current recovery: data up to the first half of 1993 show a 4.9 percent decline in the median male wage since 1989 (Mishel and Bernstein, 1993b). Since earnings represent the most important source of income for most families, these wage declines are directly linked to pervasive concerns about the "middle-class squeeze" and falling living standards. By helping to produce jobs with higher-than-average compensation for

non-college-educated persons, the lifting of LOB restrictions will counteract these adverse labor market trends. Specifically:

- The LOB-related jobs would partially reverse the economy-wide trend toward lower compensation. For instance, the average level of hourly wages and benefits of the new jobs is 6.9 percent above that of the average job in 1993; average weekly compensation is 8.7 percent higher.

- The higher compensation levels of the LOB-related jobs reflect an upward shift in the wage distribution. The share of workers earning poverty-level wages is substantially less (4.9 percentage points) than in the current job base, and the share of middle- and upper-middle-class jobs is substantially greater.

- The LOB-related jobs favor blue-collar occupations: the share of jobs for craft workers and other blue-collar workers will increase by 6.7 percentage points, while the share of sales and service jobs will fall by 7.9 percentage points.

- The policy leads to the creation of more jobs for those with high school degrees or less relative to current jobs. With the removal of the LOB restrictions, 51.5 percent, or 1.856 million, of the new jobs go to high school graduates or those with less than a high school degree.

- The 3.6 million jobs created by lifting the restrictions are more likely to be full-time, union jobs with a higher level of minority representation than the current job base offers.

We characterize the types of jobs that would be created both in the baseline and with an LOB policy shift according to the industries in which the jobs are located. We start with an extensive array of descriptive characteristics (i.e., wage level, percent part-time, etc.) of the employment in each industry in 1992. Using the WEFA analysis of the number of jobs created in each industry, with and without the LOB policy change, we estimate the types of jobs being created. For instance, if 100,000 jobs are created in an industry and 25 percent of the employment of that industry was part-time in 1992, then our analysis attributes that industry for a growth of 25,000 part-time and 75,000 full-time jobs. In our analysis, therefore, changes in the industry composition of employment determine changes in the characteristics of jobs. For more details see the Appendix.

The Number and Types of Jobs Created by Lifting LOB Restrictions

Table 1 presents the WEFA data on projected employment, both with and without the change in LOB restrictions.[2] These data show that the LOB policy change will increase

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Table 1
Employment Growth With and Without LOB Policy
(in Thousands)

Projected Employment Total Non-Agricultural Jobs* (000)	Non-Agricultural Employment			Percent Change		Average Annual Growth Rate
	1993	1998	2003	1993-98	1998-2003	1993-2003
b) With LOB Policy	109,942	123,911	135,723	12.7%	9.5%	2.1%
a) No Change in Policy	109,942	121,599	132,112	10.6	8.6	1.8
Effect of LOB Policy	0	2,312	3,611	2.1	0.9	0.3

*Includes government jobs, which are not included in other tables. See text for explanation.

Source: WEFA (1993)

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employment by 3.6 million by the 10th year. In the baseline year, 1993, there are 109.9 million non-agricultural jobs in the labor market. In the absence of the lifting of LOB restrictions, employment would grow by 10.6 percent by 1998 and by another 8.6 percent by 2003, generating an average annual employment growth rate of 1.8 percent.

If the restrictions are lifted, however, employment is expected to grow by 12.7 percent by 1998 and by another 9.5 percent by 2003. The accelerated job growth generated by the policy change adds 2.3 million jobs over the first five years and another 1.3 over the second five years, thus adding a net 3.6 million jobs by the end of the forecast period, for an annual growth rate of 2.1 percent.

Table 2 presents an overview of the characteristics of the forecasted jobs. The first three columns focus on the jobs that would have existed in the absence of any policy change. Clearly, the trend in the baseline labor market is toward lower compensation, a further deterioration of the wage distribution, and a general continuation of negative trends. Hours and compensation both fall in the baseline: hours by 0.2 and compensation by $0.07, or 0.5 percent (all dollars are 1992). Note also the downward shift in the wage distribution. The percentage of workers earning poverty-level wages (an hourly wage that would not lift a family of four headed by a full-time/full-year worker above poverty) grows by 0.3 percentage points, with a smaller share of the workforce earning above 200 percent of poverty.

The new jobs created in the absence of the policy change also continue the trend toward part-time work (see Appendix for description of variables), as seen in the 0.8 point shift from full-time to part-time employment. In terms of education levels, employment growth favors college-educated workers relative to high school graduates and dropouts. The occupational shifts show an increase in jobs for professionals and technicians (white-collar jobs), as well as for low-paid service workers, at the expense of blue-collar workers, whose share of employment shrinks by 1.7 percentage points.

Columns 4 and 5 focus on the impact of lifting the LOB restrictions. Here we compare the characteristics of jobs economy-wide in 1993 with those of the 3.6 million jobs created by the new policy.[3] The contrast between the characteristics of the 1993 labor market and the jobs created by the LOB policy, as given in column 5, shows the consistent advantage of the 3.6 million policy-generated jobs over the jobs that now exist.

Regarding pay, Table 2 shows the average wage of the new jobs, $11.72, to be 6.1 percent ($0.68) higher than the economy-wide average wage in 1993, $11.04. Since benefits are

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also higher, total compensation is 6.9 percent ($0.90) greater. Given that average weekly hours in the new jobs are also higher (by six-tenths of an hour) than those of 1993 jobs, estimated average weekly compensation is about 8.7 percent higher for those workers gaining employment from the new policy.

The remaining rows in Table 2 show how jobs created by an LOB policy change counter the negative trends in the labor market. The LOB-related jobs shift upward toward higher wage jobs and significantly fewer low-wage (25.6 percent versus 30.5 percent) jobs. The new jobs also show a 3.5 percentage point shift toward full-time work, and favor those with high school degrees or less relative to the more highly educated.

The occupational distribution of the new jobs reveals a marked shift to blue-collar occupations. Craft workers and other blue-collar workers gain 6.7 percentage points in share relative to the baseline, while the share of sales and service jobs falls by 7.9 points. This shift stands in direct contrast to column 3, where the baseline labor force is seen shifting slightly toward low-wage service occupations and away from craft and other blue-collar jobs. In part, these diverging trends stem from the fact that, of the 3.6 million jobs created by the lifting of restrictions, 27 percent (977,000) are in manufacturing industries, while only about 17 percent of baseline jobs fall in that category. Finally, the net new jobs are seen to favor males and minorities and to be relatively concentrated in sectors with above average rates of unionization.

More Detailed Characteristics of LOB Jobs

This section expands on the data presented above by providing greater detail on the number and types of jobs created by lifting the LOB restrictions.

Table 3 -- average hours and compensation -- reveals that, relative to the baseline, the new jobs pay an average $0.68, or 6.1 percent, more than the baseline wage. Added to the $0.23 benefit premium associated with the new jobs, the full effect on compensation is a 6.9 percent pay advantage over the average baseline compensation (see also Figure A).

The remaining tables (4 through 10) show the number and the percent of jobs by characteristic in three periods: the first five years (1993-1998), the second five years (1998-2003) and over the full 10-year period. The number and percent of jobs by characteristic in the baseline year, economy-wide, are presented in each table to facilitate comparison between the characteristics of 3.6 million LOB policy-related jobs and employment in 1993. The effect of the lifting of the LOB restrictions is given as the "bottom line" in each table; it is the

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Table 2
Characteristics of Expected
Jobs and LOB Jobs

| Job Characteristic	1993	2003	Difference 1993-2003	LOB Jobs	Difference Between LOB Jobs and 1993 Jobs
Total Jobs (000)	91,049	110,837		3,609	
Hours and Compensation (1992 Dollars)					
Average Weekly Hours	39.0	38.8	-0.2	39.6	0.6
Average Wages	$11.04	$11.00	$-0.04	$11.72	$0.68
Average Benefits	$1.98	$1.94	$-0.04	$2.21	$0.23
Avg Total Compensation	$13.02	$12.95	$-0.07	$13.93	$0.90
Percent of Workforce Earning (1992 Dollars)[a]					
Below Poverty	30.5%	30.8%	0.3	25.6%	-4.8
To Below 125%	14.9	14.8	0.0	14.8	-0.1
To Below 200%	28.6	28.4	-0.2	29.9	1.4
To Below 300%	17.2	17.2	-0.1	19.5	2.2
Above 300%	8.8	8.8	-0.1	10.2	1.4
Total	100.0	100.0	0.0	100.0	0.0
Percent of Employment					
Part-time	17.4%	18.3%	0.8	13.9%	-3.5
Full-time	82.6	81.7	-0.8	86.1	3.5
Total	100.0	100.0	0.0	100.0	0.0
Percent of Employment by Education Level					
High School Dropout	12.6%	12.3%	-0.3	13.3%	0.7
High School Graduate	37.7	37.2	-0.5	38.2	0.5
Some College	21.4	21.6	0.1	20.4	-1.1
Associate Degree	7.4	7.6	0.3	7.4	0.1
College	15.5	15.6	0.2	15.6	0.1
Advanced Degree	5.4	5.7	0.2	5.2	-0.2
Total	100.0	100.0	0.0	100.0	0.0

Table 2 (cont.)
Characteristics of Expected
Jobs and LOB Jobs

Job Characteristic	1993	2003	Difference 1993-2003	LOB Jobs	Difference Between LOB Jobs and 1993 Jobs
Percent of Employment by Occupation					
Executive, Prof., Tech.	26.3%	27.4%	1.1	27.4%	1.0
Sales	14.0	13.7	-0.3	7.9	-6.1
Administrative & Clerical	16.7	16.8	0.0	17.0	0.2
Services	13.3	14.3	1.0	11.5	-1.8
Craft Workers	11.5	11.2	-0.3	15.9	4.4
Other Blue Collar	17.8	16.3	-1.4	20.1	2.3
Farmers	0.3	0.3	0.0	0.3	0.0
Total	100.0	100.0	0.0	100.0	0.0
Percent of Employment by Gender					
Male	53.0%	51.7%	-1.3	57.8%	4.8
Female	47.0	48.3	1.3	42.2	-4.8
Total	100.0	100.0	0.0	100.0	0.0
Percent of Employment by Race					
White	78.2%	78.2%	0.0	77.9%	-0.3
Black	10.1	10.2	0.0	10.3	0.2
Hispanic	8.3	8.2	-0.1	8.4	0.1
Other	3.4	3.4	0.0	3.3	-0.1
Total	100.0	100.0	0.0	100.0	0.0
Percent of Employment by Union					
Union	11.9%	11.5%	-0.4	14.0%	2.1
Nonunion	88.1	88.5	0.4	86.0	-2.1
Total	100.0	100.0	0.0	100.0	0.0

[a] Less than poverty (Low-$6.72), less than 125% ($6.73-8.41), less than 200% ($8.42-13.46), less than 300% ($13.47-20.19), greater than 300% ($20.20 and above)

Note: Totals may not add because of rounding.

Figure A
Average Wages and Compensation
Comparing LOB Jobs Total Employment
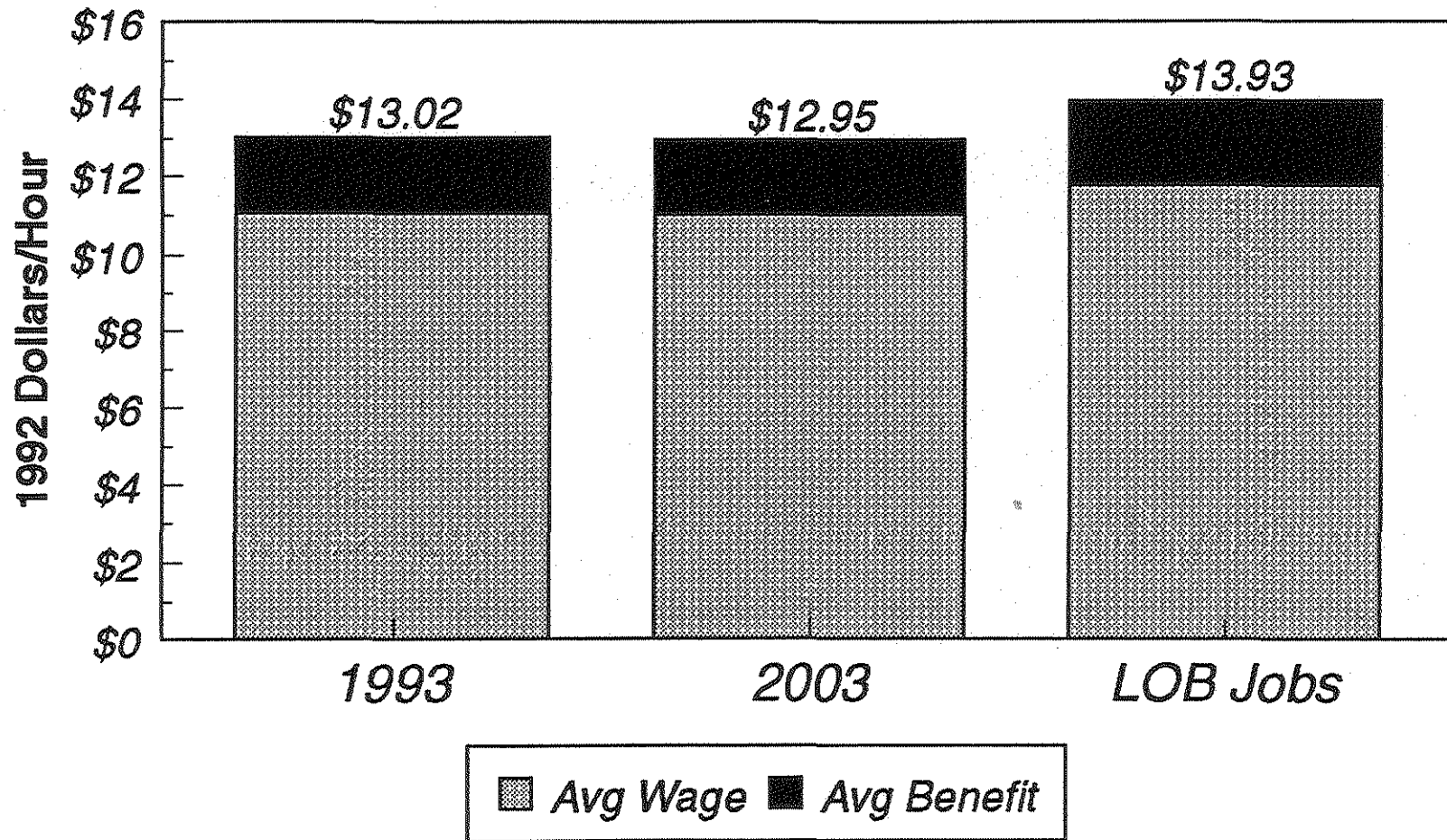
Source: EPI

Table 3
Hours and Compensation
(1992 Dollars)

	Average Hours	Average Wages	Benefits	Compensation
Economy-wide, 1993	39.0	$11.04	$1.98	$13.02
Number of LOB Created Jobs				
1st Five Years (1993-1998)	39.3	$11.38	$2.12	$13.50
2nd Five Years (1998-2003)	40.0	12.32	2.36	14.68
Full Ten Years (1993-2003)	39.6	11.72	2.21	13.93
Effect of Policy[a]	0.6	$0.68	$0.23	$0.91
Effect of Policy[a] *(in Percent)*	1.6%	6.1%	11.4%	6.9%

[a] The "effect of policy" is the difference between LOB jobs and economy-wide jobs.

Note: Totals may not add because of rounding.

percentage-point difference between the economy-wide shares that existed in 1993 and those of the 3.6 million policy-related jobs.

Table 4 and Figure B show the beneficial effect of the higher-than-average wages associated with the new jobs on the distribution of earnings. While 30.5 percent of the workforce was earning poverty-level wages in 1993, the share of such low-wage workers among the net new jobs is 4.8 percentage points less (25.6 percent). That is, only 926,000 of the LOB jobs created by 2003 would be low-wage jobs. If the new jobs had the same distribution as prevailed in 1993, roughly 1.1 million of the new jobs (30.5 percent of 3.6 million) would be low-wage jobs. The LOB policy would also shrink the group whose earnings are between 1.00 and 1.25 times the poverty wage. Overall, lifting the LOB restrictions serves to expand the number of jobs paying above $8.42 an hour, including nearly 1.1 million paying over $13.47 an hour (703,000 plus 368,000). This represents an upward shift in the wage distribution toward good-paying middle-class jobs.

The distribution of employment by education level is given in Table 5 and shown in Figure C. The effect of the policy is to create more jobs for those with high school degrees or

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Figure B
Workers by Wage Level Relative to Poverty
Comparing LOB Jobs and Total Employment
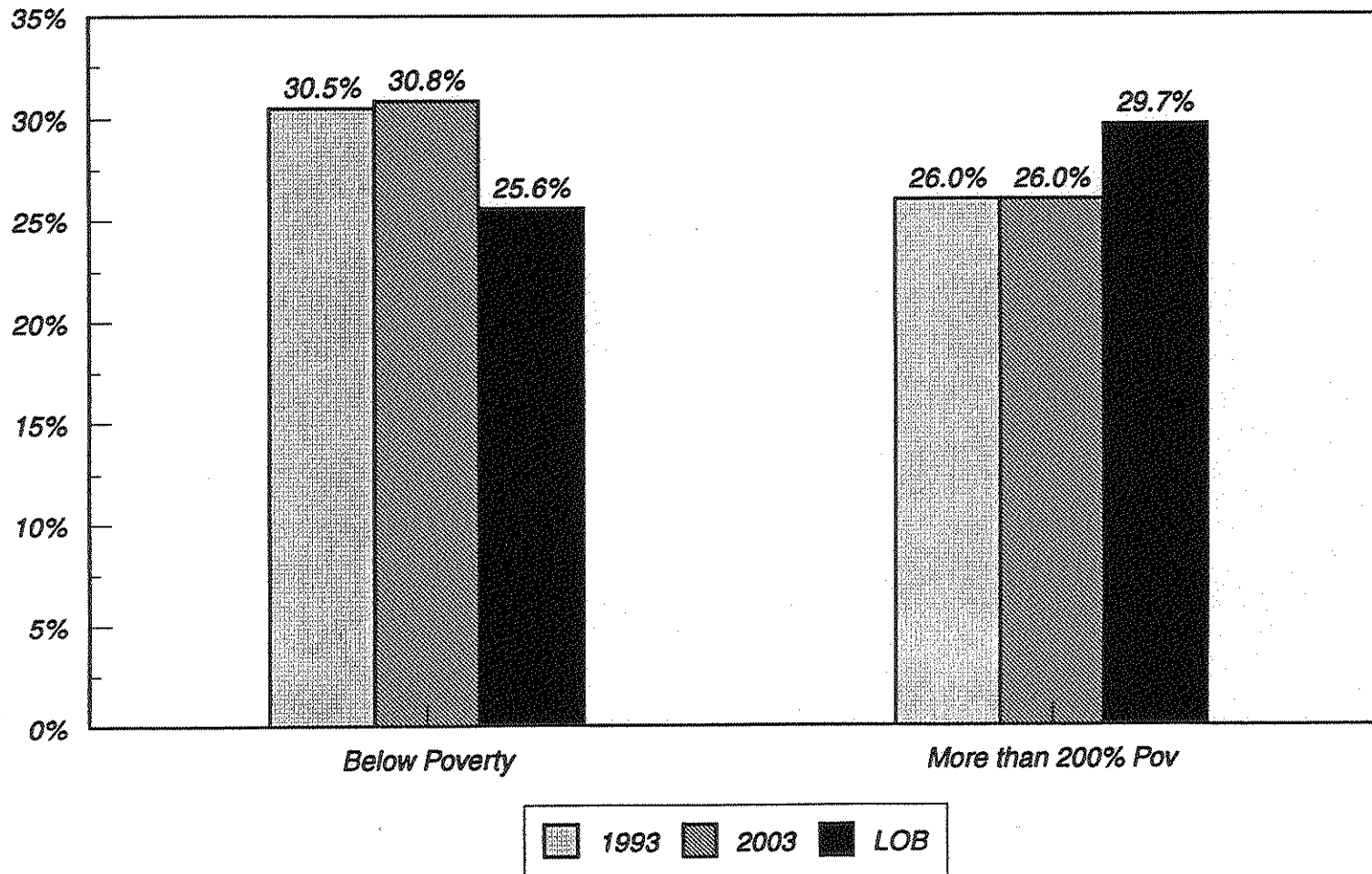
Source: EPI
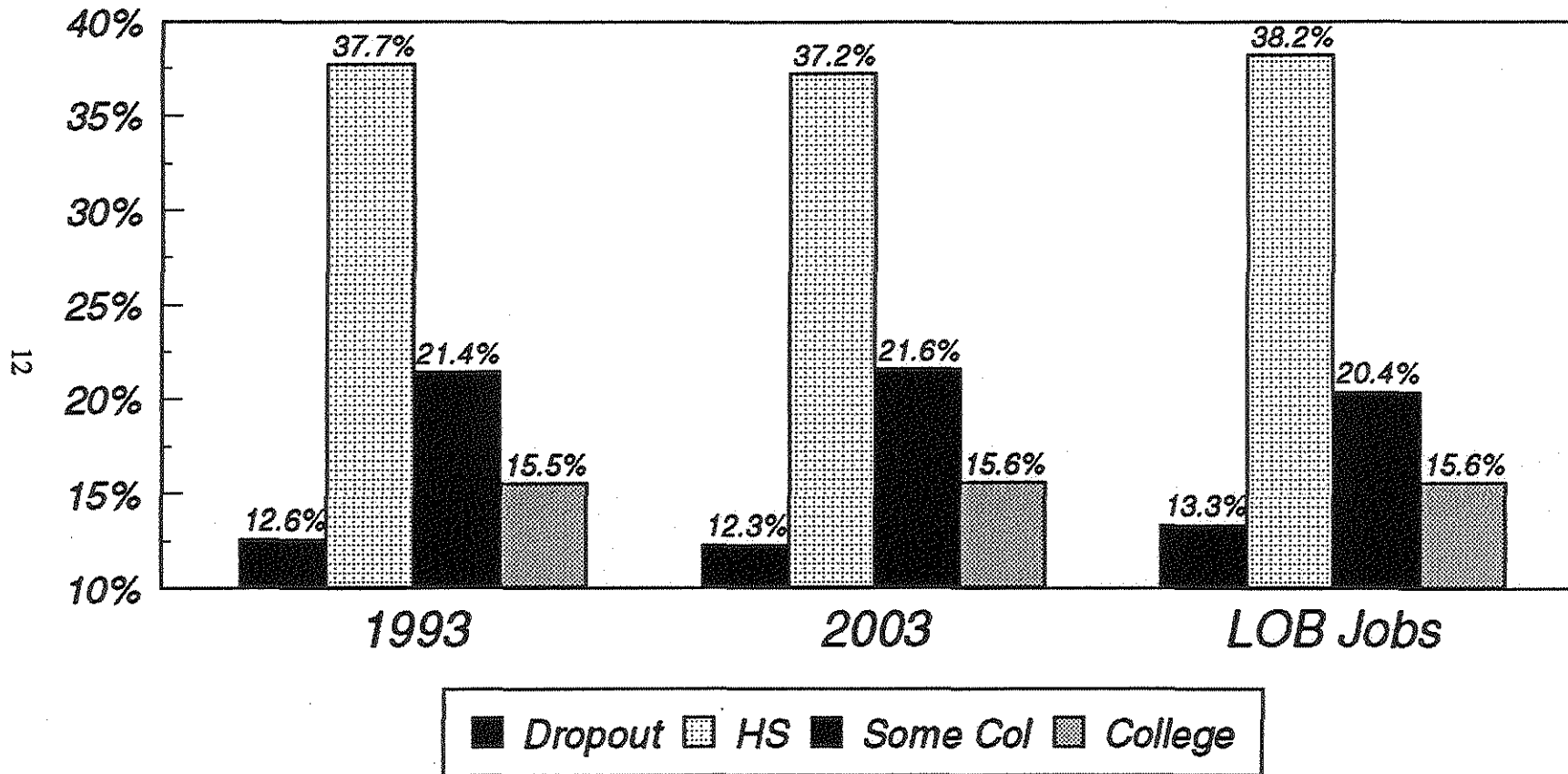
Table 4
Distribution of Employment by Wage Level
(in Thousands)

Wage Distribution[a]	Below Poverty	To Below 125%	To Below 200%	To Below 300%	Above 300%	Total
Economy-wide, 1993	27,760	13,546	26,003	15,700	8,044	91,052
Number of LOB Created Jobs (000)						
1st Five Years (1993-1998)	652	340	672	429	220	2,313
2nd Five Years (1998-2003)	274	193	407	274	148	1,296
Full Ten Years (1993-2003)	926	534	1,079	703	368	3,609
Percent Distribution of Jobs Economy-wide						
1993	30.5%	14.9%	28.6%	17.2%	8.8%	100.0%
Percent Distribution of LOB Created Jobs						
1st Five Years (1993-1998)	28.2%	14.7%	29.1%	18.5%	9.5%	100.0
2nd Five Years (1998-2003)	21.1	14.9	31.4	21.2	11.4	100.0
Full Ten Years (1993-2003)	25.6	14.8	29.9	19.5	10.2	100.0
Effect of Policy[b]	-4.8	-0.1	1.4	2.2	1.4	0.0

[a] Wage cutoffs are equivalent in 1992 dollars to: low-$6.72, $6.73-$8.41, $8.42-$13.46, $13.47-$20.19, and $20.20 and above.
[b] The "effect of policy" is the percentage point difference between LOB jobs and economy-wide jobs.

Note: Totals may not add because of rounding.

Figure C
Employment by Education Level
Comparing LOB Jobs and Total Employment

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Source: EPI

Table 5
Distribution of Employment by Education Level
(in Thousands)

Education	Dropout	High School	Some College	Assoc.	Advance College	Degree	Sum
Economy-wide, 1993	11,435	34,351	19,527	6,712	14,073	4,954	91,051
Number of LOB Created Jobs							
1st Five Yrs (1993-1998)	310	890	479	167	348	119	2,313
2nd Five Yrs (1998-2003)	168	488	256	102	214	69	1,296
Full Ten Yrs (1993-2003)	478	1,378	735	268	561	188	3,609
Percent Distribution of Jobs Economy-wide							
1993	12.6%	37.7%	21.4%	7.4%	15.5%	5.4%	100.0%
Percent Distribution of LOB Created Jobs							
1st Five Yrs (1993-1998)	13.4%	38.5%	20.7%	7.2%	15.0%	5.2%	100.0%
2nd Five Yrs (1998-2003)	13.0	37.6	19.8	7.8	16.5	5.3	100.0
Full Ten Yrs (1993-2003)	13.3	38.2	20.4	7.4	15.6	5.2	100.0
Effect of Policy*	0.7	0.5	-1.1	0.1	0.1	-0.2	0.0

*The "effect of policy" is the percentage point difference between LOB jobs and economy-wide jobs.

Note: Totals may not add because of rounding.

less relative to the baseline period. Of the new jobs, 51.5 percent (1.856 million) go to high school graduates and those with less than a high school degree. There is a relative shrinkage of opportunities for workers with some college (but no degree) and workers with advanced degrees. This pattern of job creation -- better-than-average paying jobs for those with high school educations or less -- stands in direct contrast to actual job creation in the current and recent labor markets. In fact, the average hourly wage for high school graduates fell by 9.9 percent between 1979 and 1989 and continues to fall over the current business cycle. Since more highly educated persons have experienced wage growth or a less-steep decline, high school/college pay differentials have grown over the 1980s and early 1990s. Table 5 shows that this trend would be partially mitigated by the LOB policy change.

The occupational distribution of the new jobs shows that the direct and indirect effects of the policy lead to a substantial increase in the share of skilled, blue-collar jobs (Table 6), again bucking the current trend. The share of craft workers (mechanics, construction workers, metal workers) grew the most: 4.4 percentage points relative to the baseline, resulting in an additional 574,000 workers. Similarly, the share of other blue-collar workers grew by 2.3 points, driven by an increase in machine operators. The major losers in terms of occupational shares were salespersons and service workers outside of protective services (including food preparers, cleaning services, and personal service workers).

Gender and race distributions are presented in Tables 7 and 8. The policy-generated jobs distinctly favor males over females, a result consonant with the industrial and occupational mix of these jobs, which are in predominantly male sectors. A particularly interesting result is the racial distribution (Table 8), which shows blacks and Hispanics benefiting relative to whites. Given the often-cited wage and employment problems currently experienced by these workers, this result is welcome.

Finally, Tables 9 and 10 further demonstrate the relatively high quality of the jobs generated by an LOB policy shift. Table 9 shows that of the 3.6 million jobs created, 3.1 million are full-time (more than 35 hours per week). Thus, 86.1 percent of the LOB jobs, versus 82.6 percent of the baseline jobs, are full-time (see Figure D and Figure E). Table 10 presents evidence that the LOB jobs lead to a shift toward more unionized sectors of the labor market. Slightly more than half a million of the net new jobs are likely to be covered by collective bargaining agreements. In other words, 14.0 percent of the new jobs are projected to be union jobs, compared to the economy-wide union density of 11.9 percent in 1993.

Table 6
Distribution of Employment by Occupation
(in Thousands)

Occupations	Executive, Professional, Technical	Sales	Admin & Clerical	Services	Craft Workers	Other Blue-Collar	Farmers	Total
Economy-wide, 1993	23,971	12,760	15,239	12,131	10,452	16,184	309	91,046
Number of LOB Created Jobs								
1st Five Yrs (1993-1998)	606	239	372	284	340	465	7	2,313
2nd Five Yrs (1998-2003)	382	46	240	131	234	259	4	1,296
Full Ten Yrs (1993-2003)	988	286	612	415	574	724	11	3,609
Percent Distribution of Jobs Economy-wide								
1993	26.3%	14.0%	16.7%	13.3%	11.5%	17.8%	0.3%	100.0%
Percent Distribution of LOB Created Jobs								
1st Five Yrs (1993-1998)	26.2%	10.4%	16.1%	12.3%	14.7%	20.1%	0.3%	100.0%
2nd Five Yrs (1998-2003)	29.5	3.6	18.5	10.1	18.0	20.0	0.3	100.0
Full Ten Yrs (1993-2003)	27.4	7.9	17.0	11.5	15.9	20.1	0.3	100.0
Effect of Policy*	1.0	-6.1	0.2	-1.8	4.4	2.3	0.0	0.0

*The "effect of policy" is the percentage point difference between LOB jobs and economy-wide jobs.

Note: Totals may not add because of rounding.

Table 7
Distribution of Employment by Gender
(in Thousands)

	Male	Female	Sum
Economy-wide, 1993	48,258	42,791	91,049
Number of LOB Created Jobs			
1st Five Years (1993-1998)	1,316	997	2,313
2nd Five Years (1998-2003)	770	526	1,296
Full Ten Years (1993-2003)	2,086	1,523	3,609
Percent Distribution of Jobs Economy-wide, 1993	53.0%	47.0%	100.0%
Percent Distribution of LOB Created Jobs			
1st Five Years (1993-1998)	56.9%	43.1%	100.0%
2nd Five Years (1998-2003)	59.4	40.6	100.0
Full Ten Years (1993-2003)	57.8	42.2	100.0
Effect of Policy[a]	4.8	-4.8	0.0

Table 8
Distribution of Employment by Race/Ethnicity
(in Thousands)

	White	Black	Hispanic	Other	Sum
Economy-wide, 1993	71,176	9,227	7,563	3,082	91,048
Number of LOB Created Jobs					
1st Five Years (1993-1998)	1,803	237	196	77	2,313
2nd Five Years (1998-2003)	1,008	137	109	42	1,296
Full Ten Years (1993-2003)	2,811	373	305	120	3,609
Percent Dist. of Jobs Economy-wide					
1993	78.2%	10.1%	8.3%	3.4%	100.0%
Percent Distribution of LOB Created Jobs					
1st Five Years (1993-1998)	78.0%	10.2%	8.5%	3.3%	100.0%
2nd Five Years (1998-2003)	77.8	10.5	8.4	3.3	100.0
Full Ten Years (1993-2003)	77.9	10.3	8.4	3.3	100.0
Effect of Policy[a]	-0.3	0.2	0.1	-0.1	0.0

[a] The "effect of policy" is the percentage point difference between LOB jobs and economy-wide jobs.

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Table 9
**Distribution of Employment by Part-Time, Full-Time**
(in Thousands)

	Part-Time	Full-Time	Sum
Economy-wide, 1993	15,862	75,187	91,049
Number of LOB Created Jobs			
1st Five Years (1993-1998)	354	1,959	2,313
2nd Five Years (1998-2003)	149	1,147	1,296
Full Ten Years (1993-2003)	503	3,106	3,609
Percent Distribution of Jobs Economy-wide, 1993	17.4%	82.6%	100.0%
Percent Distribution of LOB Created Jobs			
1st Five Years (1993-1998)	15.3%	84.7%	100.0%
2nd Five Years (1998-2003)	11.5	88.5	100.0
Full Ten Years (1993-2003)	13.9	86.1	100.0
Effect of Policy[a]	-3.5	3.5	0.0

Table 10
Distribution of Employment by Union Representation
(in Thousands)

	Union	Nonunion	Sum
Economy-wide, 1993	10,807	80,242	91,049
Number of LOB Created Jobs			
1st Five Years (1993-1998)	316	1,997	2,313
2nd Five Years (1998-2003)	188	1,108	1,296
Full Ten Years (1993-2003)	504	3,105	3,609
Percent Distribution of Jobs Economy-wide 1993	11.9%	88.1%	100.0%
Percent Distribution of LOB Created Jobs			
1st Five Years (1993-1998)	13.7%	86.3%	100.0%
2nd Five Years (1998-2003)	14.5	85.5	100.0
Full Ten Years (1993-2003)	14.0	86.0	100.0
Effect of Policy[a]	2.1	-2.1	0.0

[a] The "effect of policy" is the percentage point difference between LOB jobs and economy-wide jobs.

Figure D
Percent of Full-time Employment
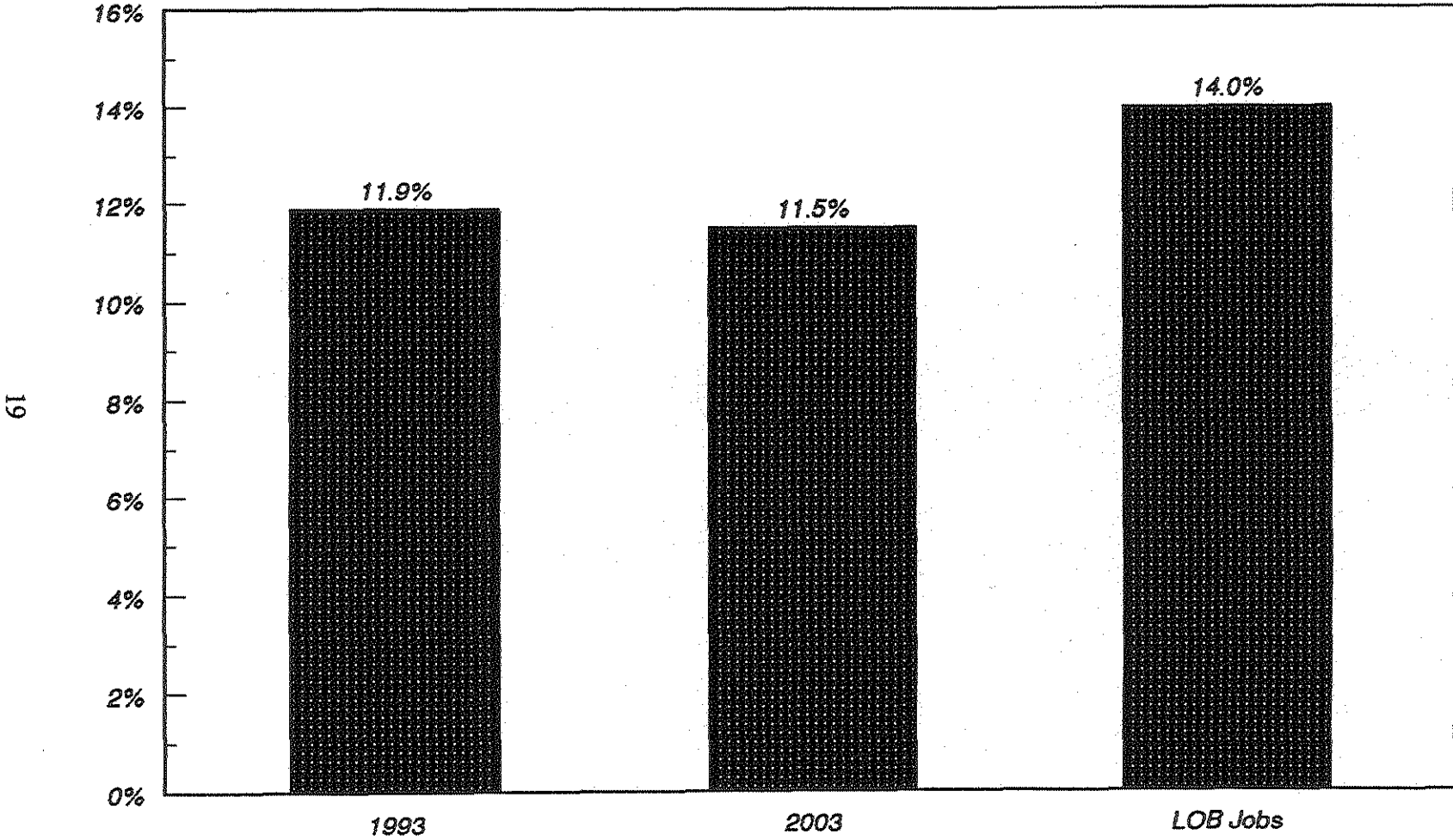### Comparing LOB Jobs and Total Employment
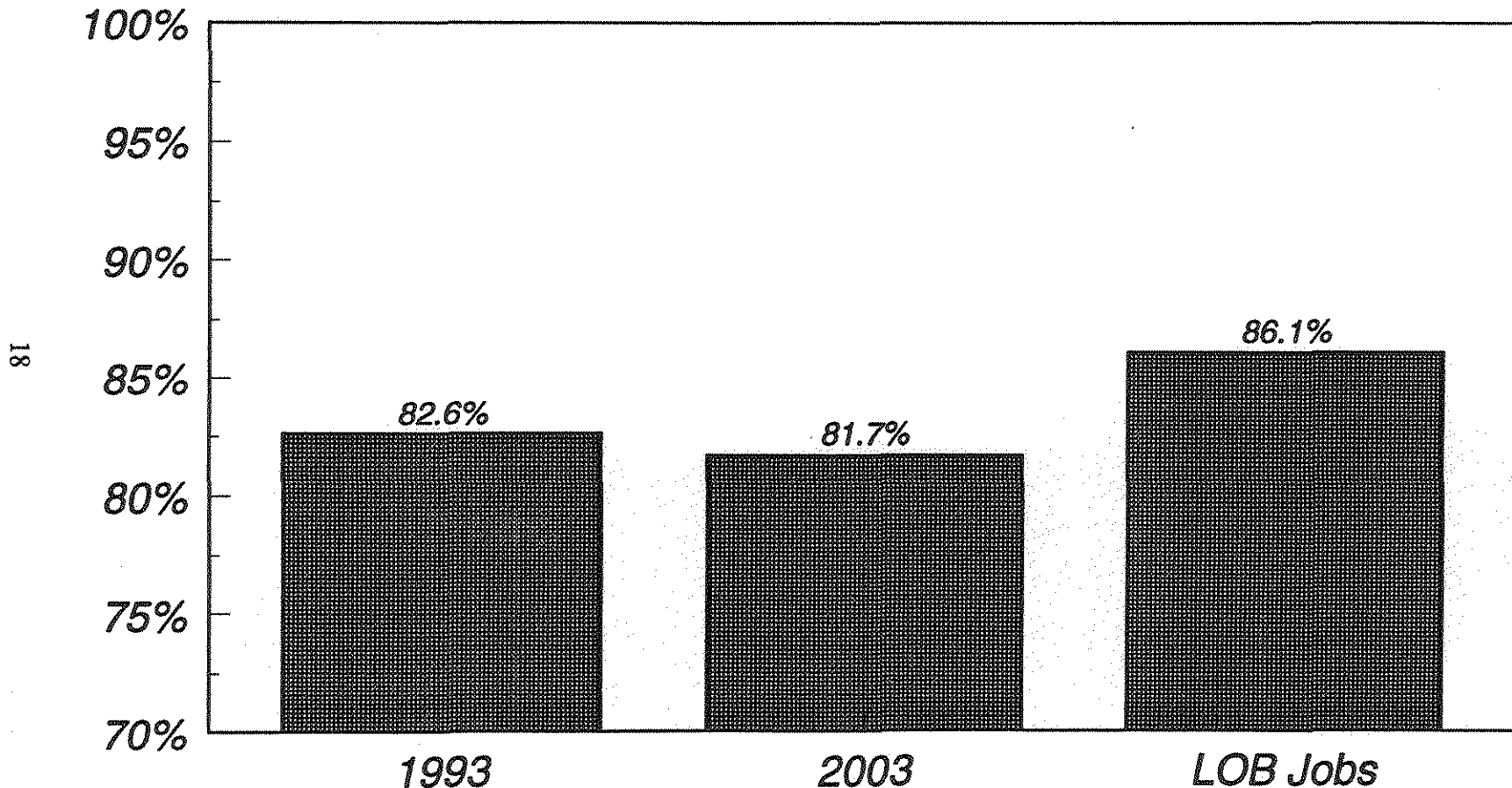
Note: Part-time jobs are less than 35 hours per week.

Source: EPI

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Figure E
Percent of Workers in Union Jobs
Comparing LOB Jobs and Total Employment

Source: EPI

Summary

The jobs created by lifting the LOB restrictions are of a quality reminiscent of an earlier era of job creation. In contrast to the jobs we would expect to be created in the absence of policy changes, these jobs pay higher-than-average wages and provide a larger share of blue-collar jobs for high-school-educated workers than would otherwise be the case. The 3.6 million jobs resulting from the LOB policy reverse the trend (at the margins, of course) of falling wages and job opportunities for non-college-educated workers (especially males), the dominant group in the labor force. Although the net jobs created by the policy are a small percentage of total jobs in the labor market, these are the very types of jobs that middle-class Americans have traditionally depended upon to improve their standards of living.

Appendix

In this appendix we present the methodology used to generate the data in Tables 2-10 in the main text.

The basis for the analysis was WEFA's sectoral employment projections presented in Tables 5-7 of their final report (pp. 69-74), with employment projected in 33 sectors (excluding government; see endnote 2). In order to estimate the quality and characteristics of the new jobs, we needed a micro data set with extensive information on employment by sector. The Outgoing Rotation Group (ORG) of the Current Population Survey provides an excellent data source, as it has both relevant variables and a large number of observations.[4] For this analysis, we used the 1992 ORG, the most recent full-year file. Our sample included wage and salary, private sector, non-agricultural, non-self-employed workers. The unweighted "N" was 137,991; weighted, this represents 81.7 million workers.

In essence, our approach was to take the characteristics inherent in the current industrial composition of employment and measure how those characteristics would be distributed in the forecasted industrial composition. Thus, we are implicitly assuming the distribution of characteristics of persons by industry in the future workforce to be unchanged. If the workforce in 2003 comprises fewer dropouts than the 1992 workforce, the education table would be likely to show a smaller share of the new jobs going to dropouts. The same could be said for other demographic variables. Also, if the sectoral distribution of wages should change (e.g., if the wages of sales workers rose relative to blue-collar workers), the findings regarding compensation would also shift (following the above example, negatively), since the 1992 wage distribution generated the findings for the later years. It should be noted, however, that these characteristics change very slowly in the labor market, rendering the assumption of static distribution quite reasonable.

Once we linked the industrial sectors in the WEFA tables to those in the ORG, we generated matrices of industry by characteristic, such as the percent of females and males in the various industrial sectors. We then multiplied the matrix of WEFA's employment numbers for the jobs resulting from the policy by the matrix of characteristic shares from the ORG. The resulting matrix gave us the numbers of workers by characteristic, given the distribution of workers in the WEFA projections. The one exception to this was our computations of hours and compensation, which are weighted averages (with the weights being the average wages and hours by industry). The vector of benefits by industry was taken from the 1990 National Income and Product Account data on compensation by industry and wages and salary by industry (NIPA tables 6.2C and 6.3C). The ratios of these values were used as weights in the matrix of average wages and hours to arrive at total compensation.

Certain variables in the study needed to be constructed. For example, "race" was defined as follows: "whites" and "blacks" do not include Hispanics, i.e., any Hispanic is exclusively in the Hispanic category, regardless of race. The wage distribution was standardized by using multiples of the hourly wage necessary to lift a family of four out of poverty with full-time/full-year work. A part-time job was considered to be one in which the respondent reported less than 35 hours at work in the week prior to the survey. Unionized workers were either union members or covered by a union contract.

Bibliography

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Endnotes

1. This does not mean that none of the net jobs go to college-educated workers or to females, but rather that the effect of the policy is to create more jobs for males than females (for example) relative to the baseline.

2. The WEFA model generated data on non-agricultural employment, including employment in the public sector. However, despite uninterrupted economic growth over the 10-year period, the sectoral analysis shows virtually no job growth in the government sector. Since our focus was primarily on the characteristics of the net new jobs, we omitted the public sector from our analysis.

3. It should be stressed that columns 1 and 2 in Table 2 refer to different populations than column 4. The first two columns refer to the entire labor force; e.g., 17.4% of the 1993 labor force worked part-time. The fourth column refers to only the new jobs created by the LOB policy change, *not to the total 2003 workforce;* e.g., 13.9% of the 3.6 million LOB jobs created by 2003 were part-time. Therefore, the final column gives the difference between the baseline labor market and that segment of the 2003 labor market representing the policy-related jobs.

4. See Mishel and Bernstein (1993a, 479-481) for a full description of the EPI extract of the ORG file.