

EPI BRIEFING PAPER

ECONOMIC POLICY INSTITUTE • SEPTEMBER 3, 2007 • BRIEFING PAPER #195

ECONOMY'S GAINS FAIL TO REACH MOST WORKERS' PAYCHECKS

BY JARED BERNSTEIN AND LAWRENCE MISHEL

Research assistance from James Lin

As of Labor Day 2007, the economic recovery that began in 2001 is six years old, and the economy has consistently expanded over this period. Productivity growth, though slower of late, has been particularly strong, and after a long, slow start, employment has been consistently growing, albeit slower than past recoveries.

But most American workers have not shared in the growth and prosperity they have been helping to create. Surely, one measure of the success of an economic growth period is how much of that growth finds its way into workers' paychecks. In a period of sharply rising inequality, however, this is no "slam dunk." In fact, as much of the data in this brief reveal, many workers' wages have been stagnant for a number of years, after adjusting for inflation, particularly those at the middle and lower end of the pay scale. For example, while productivity is up nearly 20% since 2000, the real median hourly wage is up 3% overall and 1% for men, with none of this growth occurring over the three-and-a-half years since 2003. At the top of the wage scale—at the 95th percentile—real wages are up 9%.

In recognition of Labor Day, this report examines the wage and employment trends in the 2000s and finds:

TABLE OF CONTENTS

Wage growth in the 2000s: a detailed look	2
Wage growth falls behind productivity growth	5
What explains the weak and unequal wage results?	8
Unemployment, employment, and wages	9
Future downward pressure on wage growth	11
Conclusion	12

www.epi.org

- **Real wages have been stagnant for many workers in the 2000s.** After rising quickly in the second half of the 1990s, most workers real wages have been stagnant in the 2000s, especially since 2003. This result holds for a wide variety of wage and compensation measurements, including those that add the value of fringe benefits.
- **The productivity/wage gap has grown.** The gap between productivity growth and workers wages, especially those of middle- and low-wage workers, is at a historically high level.
- **Wage growth has been unequal.** Wage growth in the 2000s followed a highly unequal pattern, and higher-wage workers gained the most ground.

- **Despite low unemployment, workers' bargaining power has diminished.** Though the unemployment rate has been low in historical terms, it does not capture the erosion of employment relative to the population caused by weak growth in (or withdrawal from) the labor force over the past few years. The bottom line is that many workers still lack the bargaining power to claim their fair share of the productivity growth they themselves are helping to create. This is partly due to weak job creation over the course of this recovery.
- **More downward pressure on wage growth is likely.** The recent slowing of productivity growth and rising unemployment are likely to place further pressure on most workers' real wages in the near to medium terms.

Wage growth in the 2000s: A detailed look

As shown in **Figure A**, the wage trends in the 2000s represent a pronounced downshift for middle- and low-wage workers relative to the late 1990s. The figure plots low, middle, and high wages, corresponding to the 10th, 50th (median), and 95th percentiles, with each series indexed to 100 in 1973.¹

While the real wages of low and middle earners were stagnant or falling for much of the period covered by the figure, they rose smartly in the latter 1990s, as the tight job market forced employers to bid wage offers up. Productivity also accelerated in the second half of the 1990s, and the persistently tight job market helped ensure that the benefits of growth were broadly shared.

However, these positive trends flattened in the recession of the early 2000s, and despite even further acceleration of productivity growth, real wages have remained relatively stagnant for many workers. As the figure demonstrates, the gap in wages between high-wage workers and both middle- and low-wage earners has grown significantly and now stands at a historical high.

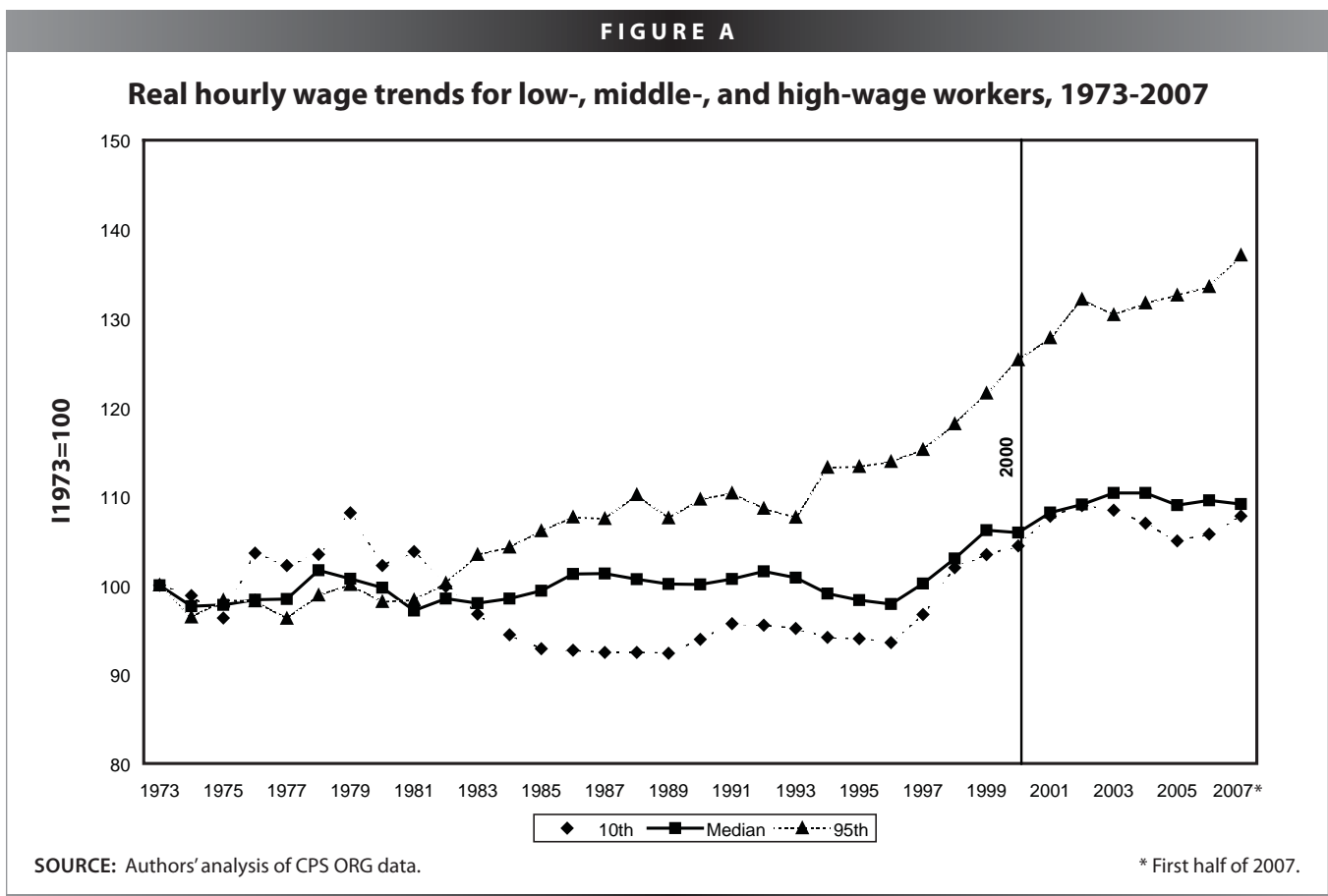


TABLE 1

Real wage changes, 2000-07*			
	2000-07	2000-03	2003-07
Median hourly wage	3.0%	4.2%	-1.1%
Men	1.1%	1.0%	0.1%
Women	4.7%	4.9%	-0.2%
Average hourly wage, high school	2.5%	3.3%	-0.8%
Average hourly wage, college	2.6%	2.2%	0.4%
Average hourly, production, non-supervisory (AHE)	3.3%	3.1%**	0.2%***
Average weekly, production, non-supervisory (AWE)	1.7%	1.1%**	0.6%***
Average compensation (ECI)	5.1%	5.0%**	0.1%***
Productivity	19.8%	14.1%**	5.0%***

Note: Due to an underlying survey change, ECI data begin in 2001q1. AHE and AWE are quarterly data adjusted by the CPI-RS. Productivity is for the nonfarm business sector.

SOURCE: Authors' analysis of CPS ORG and BLS data.

* Data for 2007 are for the first half of the year only.
 ** Quarterly data measured over 2000q1-03q4.
 *** Quarterly data measured over 2003q4-07q2.

As shown in **Table 1**, this same stagnation pattern in the 2000s shows up in a wide variety of wage series. These data track recent wage trends, as compared with productivity in the 2000s. While productivity increased by nearly 20% since 2000, the real median hourly wage rose by just 3%. Wages for middle and low-wage workers grew modestly in real terms over the course of the current expansion, but real gains have been far less impressive since 2003.

Real median wages were basically flat for men, up only 1.1% over six-and-a-half years, though the median female did considerably better, up almost 5.0%. Both high school and college workers gained about 2.5%, a finding explored in greater detail below. Yet the wages of all of these workers—the median worker and those with either high school or college degrees—have been flat or falling since 2003.

A different data source shows that the real hourly earnings of the roughly 80% of the workforce in non-managerial occupations rose 3.3% in the 2000s. Due to the weak performance of hours per week, however, weekly earnings grew about half that fast. Here again, real growth decelerated and disappeared after 2003, up only 0.2% since then.

Yet another measure of compensation, the Employment Cost Index (ECI), shows faster real growth over the period 2000-07, up 5.0%. Two factors account for the faster growth of the ECI. First, unlike median measures, this measure constitutes a broad average over all workers, and is thus boosted by high earners. Second, the ECI includes employer-provided benefits, which have increased faster than wages over this period. Since 2003, even with these factors in play, real average compensation has been flat.

This finding regarding benefit growth does not imply that the less impressive wage results, such as the male median, would be largely changed if benefits were included (**Table 2**). When we assign average benefits to the wage of the median male (a generous assignment since the median worker likely receives below-average fringe benefits), for example, we find

that instead of rising 1.1%, real compensation rises 4.0% over the full period, with all of the growth occurring before 2003. Since then, median compensation—wages plus benefits—has been stagnant for both men and women.

TABLE 2

Growth in real median compensation, by gender, 2000-07*			
	2000-07	2000-03	2003-07
All	5.9%	7.1%	-1.1%
Men	4.0%	3.8%	0.1%
Women	7.6%	7.8%	-0.2%

SOURCE: Authors' analysis of CPS ORG data.

* Data for 2007 are for the first half of the year only.

Table 3 shows that wage growth over the 2000s was generally faster for higher wage workers, and that since 2003, middle- and low-wage workers have lost ground. Combining men and women, real wages are up about 3% at the lowest decile (the 10th percentile of the wage scale) and at the median (the 50th percentile), though all of this growth occurred before 2003. At the top of the scale, however, growth has been much stronger and steadier.

The real wage results for men and women at particular deciles is often quite different from the overall result for that decile, because unlike averages, a particular wage percentile is not a weighted average of the gender wages for that percentile. Due to sharp post-2003 losses, low-wage men (10th and 20th percentiles) are back where they started, and low-wage women have done only slightly better (see **Figure B**). The median male achieved only a slight gain: 1.1% over six-and-a-half years, while the median women's real wage is up 4.7%.

At the higher end of the wage scale, however, both men and women realized significant gains, with real hourly wages at the 95th percentile up about 9% for men and 12% for women. Note the "staircase" pattern of wage growth in the figure as we move up the wage scale, a pattern clearly associated with growing wage inequality between the top earners and everybody else.

Wages in the 2000s by education level

Men with some college or less (71% of the male workforce in 2006) have seen only small wage gains since 2000 (see **Table 4**). Interestingly, high-school dropouts experienced faster wage growth than those with higher attainment levels. The real wages of women with less than a high school education, for example, grew by just under 7%, more than three times that of more highly educated women. This result likely relates to strong demand for women workers in the low-wage side of the health care, restaurant, and hotel services sectors.² It also may reflect the fact that numerous states raised their minimum wage levels over these years, and low-wage women are often the beneficiaries of such increases.³

Despite the oft-cited strong demand for more highly educated workers, the wages of college-educated workers have not grown particularly quickly in the 2000s (**Figure D**). After rising in the first year of the decade, college workers' wages were relatively stagnant for the next five years, though men in this category got a jump in the first half of this

TABLE 3

Real hourly wages and growth, by deciles, 2000-07*

All	10%	20%	Median	80%	95%
2000	\$7.57	\$ 9.33	\$14.70	\$25.05	\$41.76
2003	7.87	9.51	15.32	26.01	43.45
2007	7.82	9.41	15.14	26.06	45.68
2000-07	3.2%	0.9%	3.0%	4.0%	9.4%
2003-07	-0.6%	-1.1%	-1.1%	0.2%	5.1%
Men	10%	20%	Median	80%	95%
2000	\$8.24	\$10.10	\$16.74	\$27.80	\$46.38
2003	8.39	10.37	16.91	28.67	48.89
2007	8.19	10.09	16.92	29.06	50.36
2000-07	-0.7%	-0.1%	1.1%	4.5%	8.6%
2003-07	-2.4%	-2.7%	0.1%	1.4%	3.0%
Women	10%	20%	Median	80%	95%
2000	\$7.20	\$ 8.57	\$13.05	\$21.71	\$35.05
2003	7.50	8.93	13.69	22.71	37.55
2007	7.34	8.75	13.66	23.61	9.18
2000-07	1.9%	2.2%	4.7%	8.7%	11.8%
2003-07	-2.1%	-1.9%	-0.2%	4.0%	4.4%

SOURCE: Authors' analysis of CPS ORG data.

* Note: Data for 2007 are for the first half of the year only.

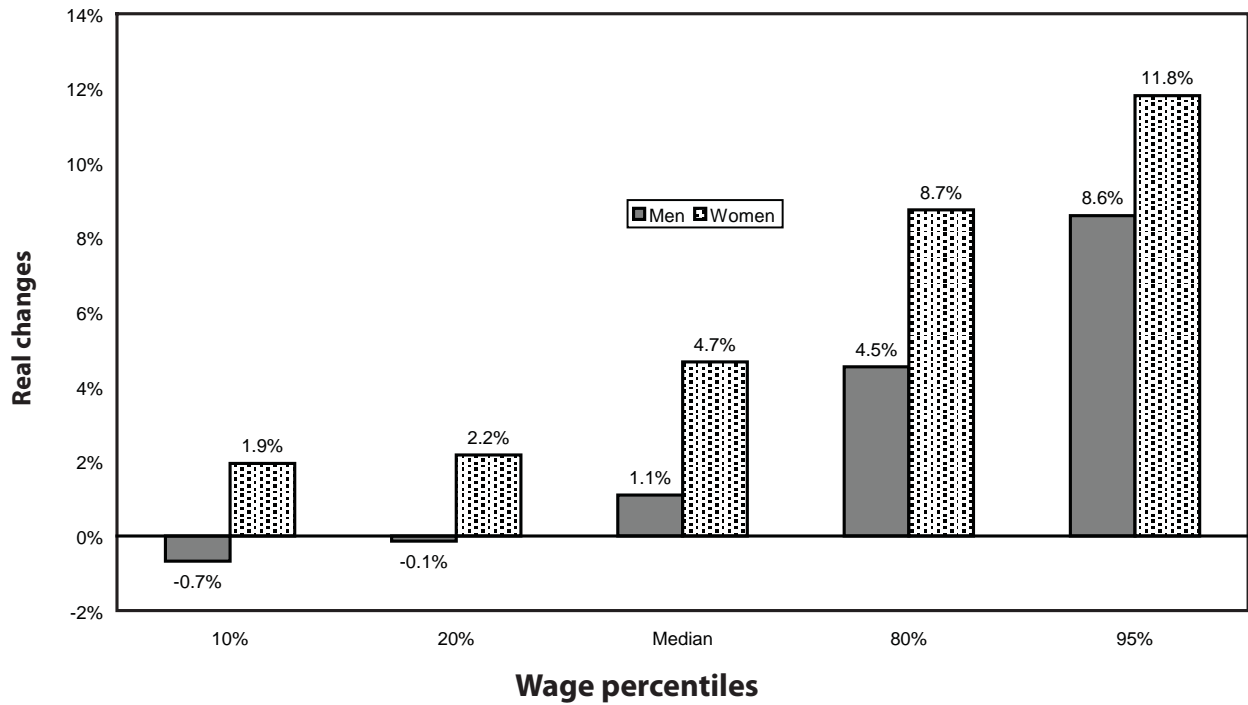
year.

Wage growth falls behind productivity growth

These real values show wage growth relative to inflation, and thus inform us of how the buying power of workers hourly wages has evolved over the 2000s. But it is also important to compare these wage gains to productivity growth, which has been notably strong for much of the period (though productivity has slowed recently). This comparison asks the critical question: to what extent have workers living standards been lifted by the increase in the economy's ability to produce more goods and services per hour worked? Are working families fairly benefiting from the greater economic efficiencies

FIGURE B

Percent changes in real hourly wages, by percentile, 2000-07*

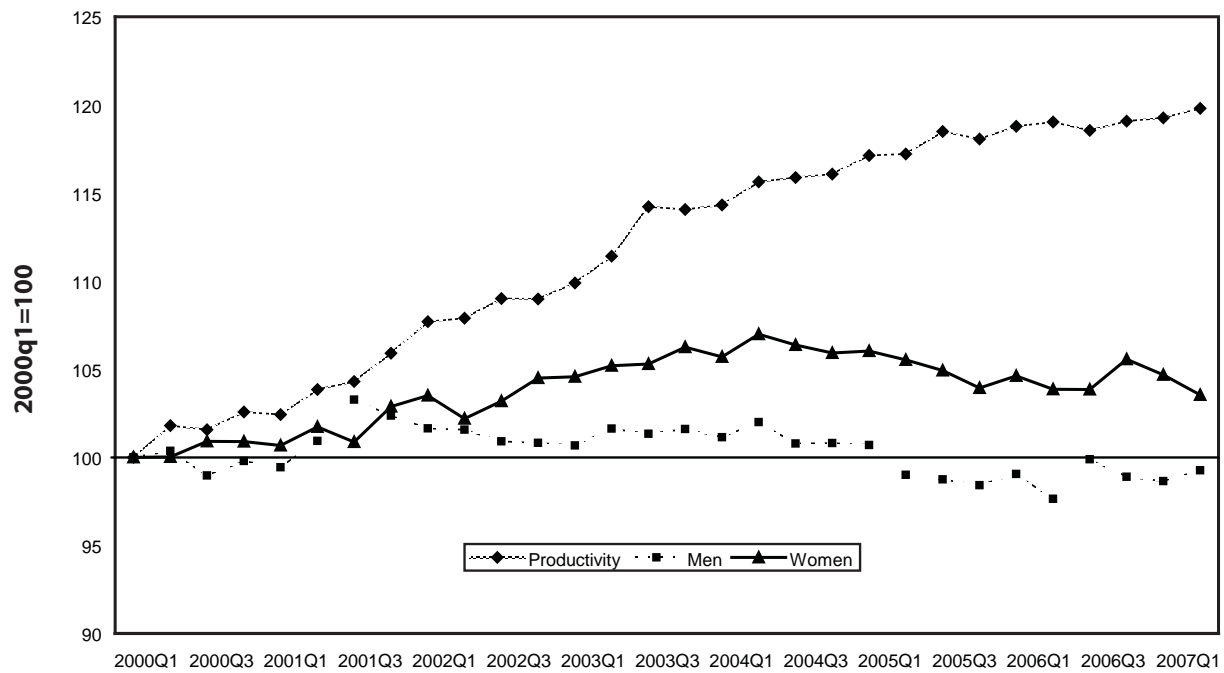


SOURCE: Authors' analysis of CPS ORG data.

* Data for 2007 are for the first half of the year only.

FIGURE C

Productivity and median weekly earnings growth, 2000q1-07q2



SOURCE: Authors' analysis of CPS ORG and BLS data.

TABLE 4

Real hourly wages, by education level, 2000-07*

	All				
	Less than high school	High school	Some college	College	Advanced degree
2000	\$10.98	\$14.77	\$16.79	\$25.79	\$32.61
2003	11.38	15.26	17.13	26.36	33.27
2007	11.40	15.14	17.08	26.46	33.49
2000-07	3.9%	2.5%	1.7%	2.6%	2.7%
2003-07	0.2%	-0.8%	-0.3%	0.4%	0.6%
Men					
2000	\$12.05	\$16.68	\$19.02	\$29.28	\$36.59
2003	12.42	16.95	19.15	29.96	37.47
2007	12.30	16.76	19.31	30.47	38.47
2000-07	2.0%	0.5%	1.5%	4.1%	5.2%
2003-07	-1.0%	-1.1%	0.8%	1.7%	2.7%
Women					
2000	\$ 9.25	\$12.67	\$14.70	\$22.14	\$27.92
2003	9.64	13.35	15.30	22.71	28.65
2007	9.88	13.19	15.04	22.47	28.43
2000-07	6.8%	4.1%	2.3%	1.5%	1.8%
2003-07	2.5%	-1.2%	-1.7%	-1.0%	-0.8%

SOURCE: Authors' analysis of CPS ORG data.

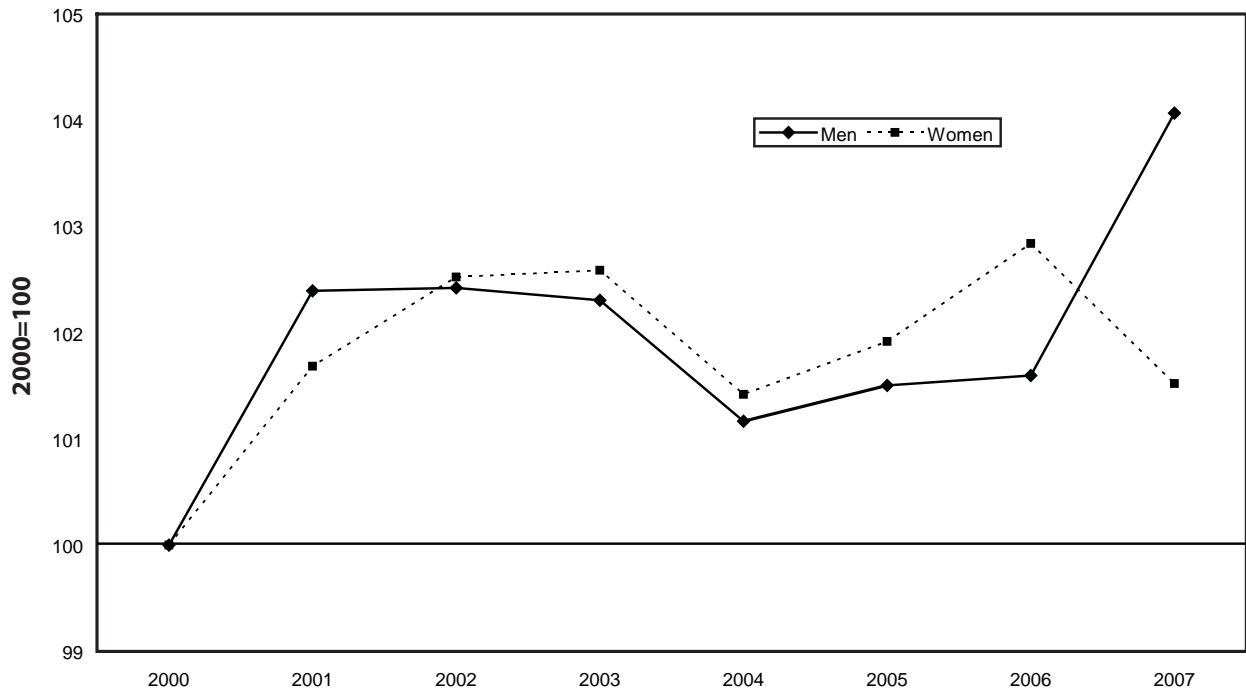
* Data for 2007 are for the first half of the year only.

that they themselves are helping to generate?

Figure C shows that working families have generally not shared in the productivity growth over this decade. The wage data here are from the same underlying source as the hourly data above, but they are quarterly data on real median weekly earnings of full-time workers, published by the Bureau of Labor Statistics (BLS).⁴ Productivity is up just under 20% over the

FIGURE D

Real hourly wage growth, college-educated workers, by gender, 2000-07*



SOURCE: Authors' analysis of CPS ORG data.

* Data for 2007 are for the first half of the year only.

period, while the real weekly earnings of the typical full-time male are down about 1.0% and those of women are up 3.5%.

What explains the weak and unequal wage results?

Changes in real compensation result from a broad set of factors, including:

- workers' bargaining power, which is closely related to the tightness of the job market and the strength of unions and other labor market institutions, including the minimum wage;
- changes in the rate of inflation;
- the cost of fringe benefits, including health care; and
- productivity growth.

Of these, especially in a productivity-rich recovery like this one, bargaining power is dominant, since it determines how the benefits of productivity growth will be distributed. In a labor market like the United States, where unions are unfortunately relatively scarce, the fit between labor supply and demand needs to be awfully tight—we need full employment conditions—if workers are to share broadly in the recovery. We discuss these issues more fully below.

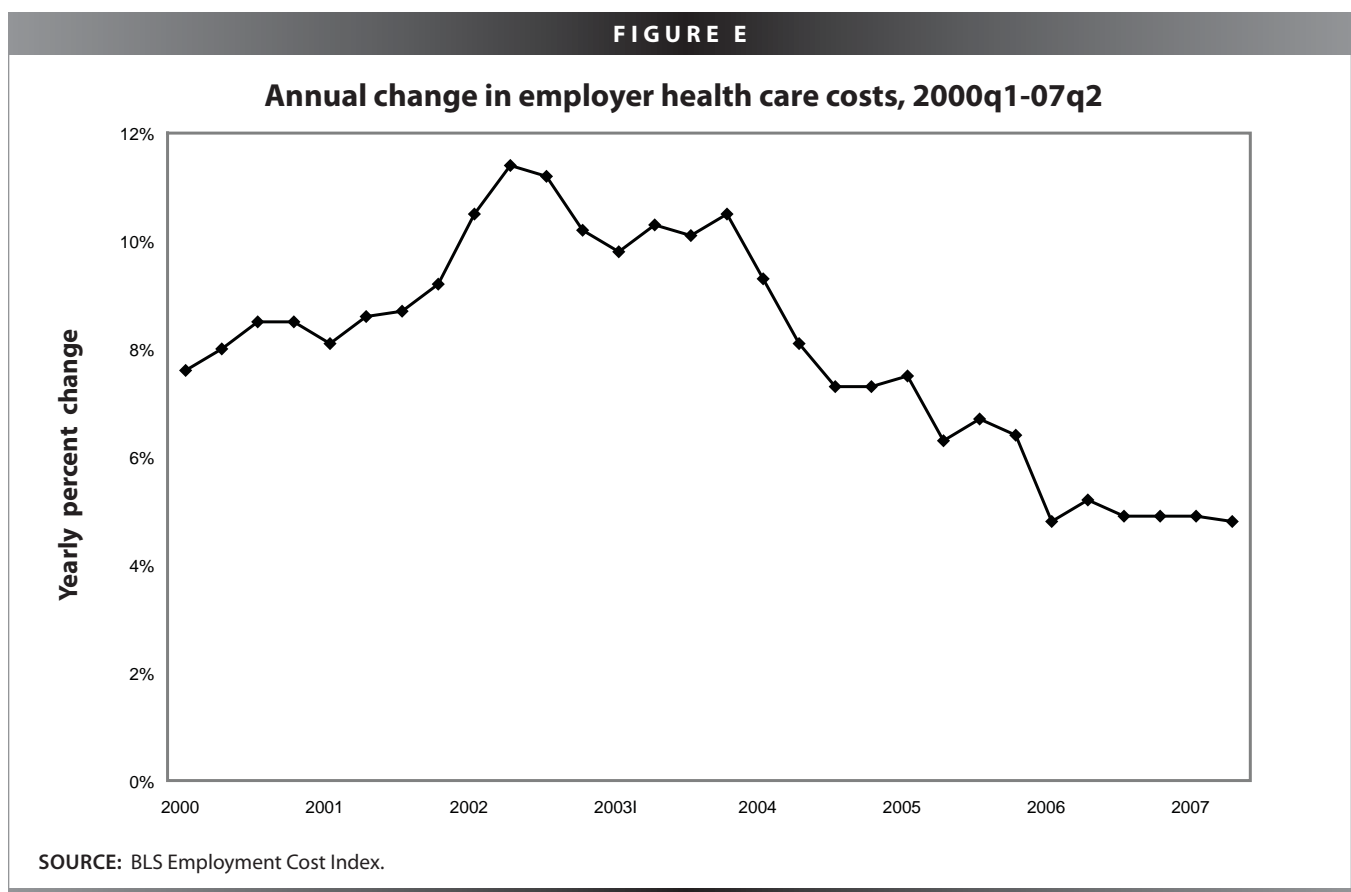
Inflation played a role in the 2000-07 results, especially in the deceleration of real wages from the first part of the 2000s, when many series were rising in real terms, to the post-2003 period, when even average compensation was flat. The main culprit here, along with diminished bargaining power, was faster inflation. Due largely to energy costs, inflation grew 3 percentage points faster in the post-2003 period compared to the 2000-03 period.

Analysts often cite the rising cost of fringe benefits, particularly health care, as another explanation for the weak wage results in the 2000s. The intuition here is that employers will substitute benefit payments for wages, and when this

occurs, looking exclusively at wages tells only part of the story.

It is true that there is some tradeoff between wages and benefits, but evidence suggests that benefits do not account for recent wage stagnation. First, only about half the workforce is offered and participates in health or retirement plans through their employer.⁵ Other work, such as Mishel et al. (2006), shows a fairly steep gradient to benefit receipt as you move up the wage scale: higher-wage workers are more likely to receive benefits than lower-wage workers, so we're less likely to see wage/benefit trade-offs among those in the bottom half of the wage scale. Yet, as shown in Figure B, their wages grew the least, the opposite of what the benefit trade-off explanation would predict.

Finally, according to ECI data, fringe benefits in general and health care in particular grew considerably less quickly as the 2000s progressed.⁶ **Figure E** shows that while employers' health costs, for example, were growing in the early 2000s, their rate of growth decelerated considerably, from over 10% per year in the early part of the decade to less than 5% most recently. Yet, real wage trends show the opposite pattern, rising more quickly from 2000 to 2002 than thereafter. Clearly, such a trend argues against a benefit explanation of poor wage growth: while real wages were flattening or



falling in the post-2003 period, benefit costs were not accelerating, they were slowing.

Unemployment, employment, and wages

Unemployment and employment rates: What are they?

Economists recognize a strong relationship between employers' demand for workers and real wage trends. When the job market is tight (i.e., when job seekers closely match the number of available jobs), wage pressure tends to be greater than when job seekers outnumber available jobs.

Yet, while the overall unemployment rate has been relatively low in the 2000s—though less so for several populations, such as minorities who rarely see low unemployment—this clearly has not translated into strong wage gains

for most workers. What is holding down wage pressure and why is it disconnected from a seemingly tight job market?

A closer examination of some other key indicators of labor market tightness—employment rates and job creation—help explain the disconnection. One reason for the current low rate is that workers who have left the labor force and are not actively seeking jobs are not counted as unemployed, i.e., the unemployment rate only counts those workers who are looking for work. This can be seen in the smaller share of the population that is employed now—the employment rate—relative to earlier years, which seems to be a more representative indicator of true labor market conditions than the unemployment rate.

Table 5 shows that the overall unemployment rate was 4.2% when the recovery began and was only slightly higher (4.5%) in the most recent quarter. In fact, unemployment has hovered around the mid-fours for the past year. African American unemployment rates are much higher—more than twice that of whites—but the trend there, too, has been the same: up only 0.3 percentage points for both groups.

Employment rates, however, remain a lot lower than they were at the end of the last cycle, down 1.2 percentage points overall, and more than that for men and African Americans. By this measure, labor markets are not as tight as they were prior to the last downturn. Moreover, since only those looking for work are counted as unemployed, the fact that the lower *employment* rate is not showing up as higher *unemployment* suggests that many of these potential workers are not looking for work.

TABLE 5

Unemployment rate and employment-population ratio, 2001q1-2007q2

	Unemployment rate			Employment-to-population rate		
	2001q1	2007q2	Change	2001q1	2007q2	Change
All	4.2%	4.5%	0.3	64.3%	63.1%	-1.2
Male	4.3%	4.6%	0.3	71.6%	69.9%	-1.7
Female	4.2%	4.4%	0.2	57.6%	56.6%	-1.0
White	3.7%	4.0%	0.3	64.9%	63.7%	-1.2
African American	8.1%	8.4%	0.3	60.5%	58.4%	-2.1
Hispanic	6.0%	5.6%	-0.4	65.9%	64.7%	-1.2

SOURCE: BLS.

Job growth and loss

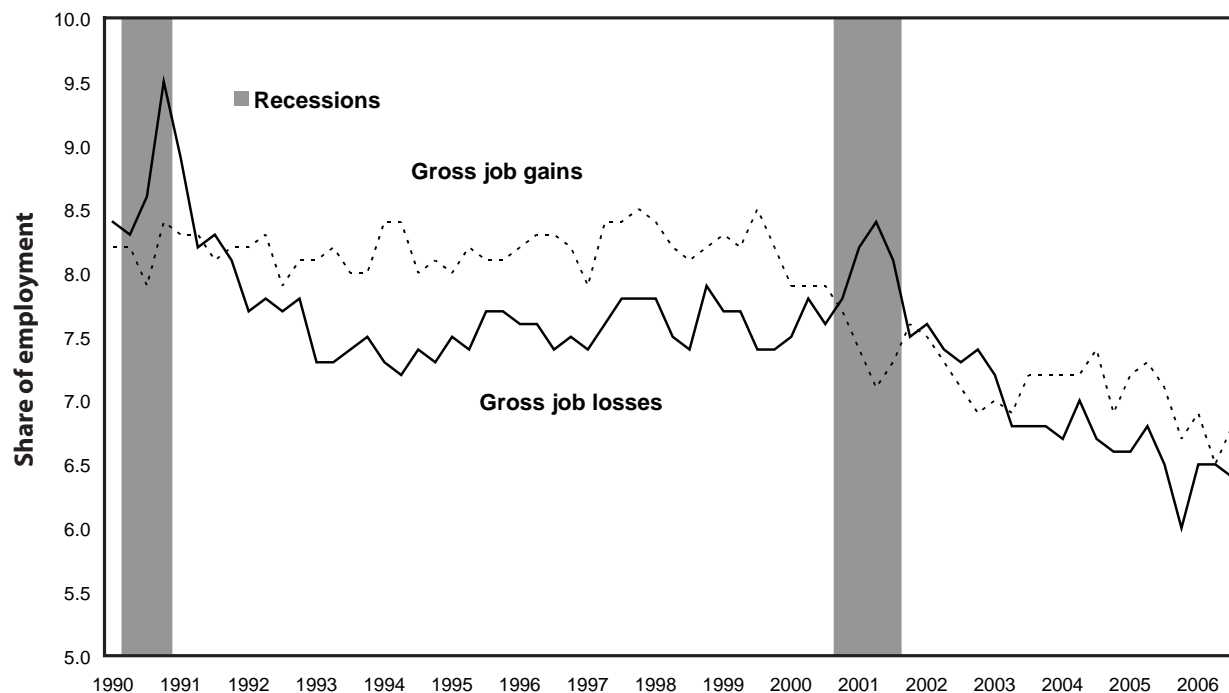
Another factor holding down wage pressures is the fact that job growth itself has been notoriously weak in this recovery. The nation’s payrolls grew 5.5% in this recovery, compared with 11.3% over the same period in the last recovery, and 17.1% for all recoveries that have lasted at least this long.⁷

Some economic observers, often those with political motivations, count job growth not according to the business cycle (as is usual practice among economists), but starting when employment began to expand, in the summer of 2003.⁸ But even by these cherry-picked standards, this recovery has lagged the last one in terms of net job growth (10.4% in the 1990s vs. 6.4% in this one).⁹

It is instructive to examine the rise in employment in terms of ‘gross flows’, that is, the rate at which new jobs are

FIGURE F

Rates of gross job gains and gross job losses



SOURCE: BLS.

created and the rate at which jobs disappear. In particular, gross job growth—the number or share of jobs created—reveals an underappreciated weakness in the current recovery. As shown in **Figure F**, jobs created as a share of total jobs have been lower on average in this recovery relative to the prior one (these data only begin in the 1990s). In fact, the average job creation rate for 2006—6.7%—is the lowest annual rate on record going back to 1990.

Job loss rates have fallen, too, and the gap between them and net job creation has been positive, as noted above. But the relative low level of job creation further suggests a less-tight job market than a 4.5% unemployment rate would indicate.

Future downward pressure on wage growth

The slowdown in productivity growth is an important development on the wage front. As stressed in a research that analyzes the much more positive wage trends of the latter 1990s, the combination of faster productivity growth and full employment are necessary conditions for broad-based wage growth (e.g., Bernstein and Baker 2003). Full employment job markets force employers to bid wages up to get and keep the workforce they need, and faster productivity growth enables them to do so without cutting profit margins or raising prices.

In the 1990s analysis, we stressed the “4/2 solution,” the need for both low unemployment in the 4% range, and relative fast productivity growth, in the 2% range. These conditions have not been present over much of the 2000s. Unemployment, though measured in the mid-fours, would be higher if we considered the missing labor force, and productivity has decelerated from an average over 3% per year though the first half of 2004 to an average 1.5% since.

The causes of this slowdown, and whether it will persist, are of course critical questions, though their answers are as yet unknown. What we do know is that broad-based wage gains have been much harder to achieve even when productivity growth was strong and will likely be even more difficult to achieve if the lower productivity regime of the

last few years continues.

Conclusion

Most workers have relatively little to show in terms of real wage and income gains over this recovery. The real wage of the typical male worker, for example, is up only 1% since 2000 and not at all since 2003. Even a broader measure like real average compensation has risen less than 1% per year and has barely budged since 2003. As of 2006, the median income of working-age families (those headed by someone less than 65) was down -4.2% in real terms over the cycle, a loss of -\$2,375 (2006 dollars). Poverty, at 12.3%, remains 1.0 percentage point above its 2000 trough. Though productivity growth has slowed somewhat in recent years, this business cycle has been reasonably rich in terms of efficiency gains, and these gains have generated considerable wealth. The problem is, of course, the narrow extent to which the gains have been shared. Inequality data bear this out, showing the classic “staircase” pattern to wage growth, as higher-wage workers saw greater gains.

We would expect tight labor markets to counter these developments, to push employers to bid wages up, but this has not occurred. The evidence we provide shows one reason for this is that the job market is not as tight as the relatively low unemployment rate would suggest. Employment rates remain well below their peak levels, and job growth has been uniquely weak in this recovery.

When examined closely, the wage findings tell an important story about who has and who lacks the bargaining power to benefit from today’s economy. Economic elites talk up the economy, with bullish references to GDP, productivity, and job growth. But just whose economy are they talking about?

Clearly, policy makers need to focus much more attention on real wage trends, inequality, and the productivity/wage gap. A central goal of economic policy must be to reconnect the living standards of the workers embodied in the tables and charts to the growth in the overall economy (see www.sharedprosperity.org). That will not occur simply because we wish it to, nor will it arise automatically from faster overall growth. It will be the result of deliberate policies to build institutions and mechanisms that enable working persons to claim their fair share of the growth they themselves are helping to create.

Endnotes

1. We begin this data series in 1973 because that is when the data needed to construct the series becomes available. The data are from the Current Population Survey, and our methodology is elaborated in Mishel et al. 2006, Appendix B.
2. BLS establishment data show that, while overall job growth is up about 6% since 2000, job growth for women is up 18% in hotels and restaurants and 22% in health care.
3. See: http://www.epinet.org/content.cfm/issuebriefs_ib133.
4. These data are seasonally adjusted by EPI.
5. See <http://www.bls.gov/ncs/ebs/sp/ebsm0004.pdf>, Table 2.
6. See <http://www.bls.gov/ncs/ect/sp/echealth.pdf> for data on changes in employer benefit costs.
7. The average includes the recoveries that began in February 1961, November 1982, and March 1991.
8. The White House Web site, for e.g., stresses the addition of over 8 million jobs since August 2003. <http://www.whitehouse.gov/infocus/economy/>.
9. This calculation uses August 2003-July 2007 for the current recovery, and the same period (recovery months 21-68) in the 1990s recovery.

References

Bernstein, Jared and Dean Baker. 2003. *The Benefits of Full Employment: When Markets Work for People*. Washington, D.C.: Economic Policy Institute.

Mishel, Lawrence, Jared Bernstein, and Sylvia Allegretto. 2006. *The State of Working America 2006/2007*. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press.