



***Wage and Salary Growth in the United States:  
Average Americans Made Steady Progress for Two Generations,  
Until the Last Decade***

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## **I. Introduction**

Americans are dissatisfied with their economy's recent performance, and understandably so. By most measures, unemployment remains high, growth is slow, and most households have seen their wages and incomes fall in recent years. These developments also have ignited a partisan debate over what policies are responsible. Many conservatives point to high taxes, outsized deficits and extensive regulation, which they attribute to President Obama. For many liberals, the true causes lie in how financial and other markets operate within the new global economic environment, and in the government's failure to invest more in education and training, basic research and infrastructure, which they pin on Republican presidents and Congresses.

This debate goes beyond questions of which party or president to blame for today's stalled incomes and unemployment. It involves identifying the very nature of the current economic distress. We focus here on the basic earnings of Americans, because no other measure captures more directly people's real economic conditions. We analyze the wage and salary gains Americans have experienced over time, tracing the earnings of age cohorts as they age, focusing on what has happened to people's earnings during the expansions of the last 30 years.

The record is clear: Average Americans achieved steadily rising earnings through the economic expansions of 1970s, 1980s and 1990s. In the Reagan expansion of 1983-1989, for example, the median earnings of Americans born in the early 1950s and those born a decade later increased an average of 3.2 percent per-year, as they aged. Similarly, in the Clinton expansion of 1992-2000, the earnings of working Americans born in 1950, 1960, and 1970 grew an average of 3.8 percent per-year, as they aged through the expansion. This pattern ended, however, with the expansion of 2002-2007, when the earnings of those born in 1950, 1960 and 1970 and working in those years increased on average by just 0.5 percent per-year. The financial meltdown of 2008-2009 and the deep recession and slow recovery which have followed did not create this problem but rather, as would be expected, exacerbated the new pattern. (Table 1, below)

These findings reflect fundamental economic changes that have proven to be even more consequential for the earnings of Americans than changes in economic policy from president to president. In June 2007, for example, NDN issued a report, [“The New Landscape of Globalization,”](#) where we argued that the impact of globalization on economic competition and the growing economic importance of information technologies were eroding job creation and constraining wage gains. I wrote at the time that these structural shifts, first, were changing the relationship between how fast the economy grows and how many jobs we create:

“The first evidence came in the 2001 recession, when job losses relative to the actual decline in economic growth were six times greater than in previous postwar

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recessions. It didn't stop there. Once the recovery took hold, it took four years to get back to prerecession job levels, compared to 18 months in the previous recovery. Five years into the current American expansion [January 2002-January 2007], job creation was still running at half the rate of the preceding expansion."<sup>2</sup>

We further noted that these structural shifts also were weakening the long-standing connection between the productivity gains of workers and growth in the wages they earn.

“Since 2001, labor productivity in the United States has grown, on average, by more than 3 percent a year. That's the best U.S. performance in decades. Yet, for the first time on record, the average real wages of American workers declined through five years of strong productivity growth. Even counting the value of employer-paid health insurance and pension contributions whose costs have gone up so much, the average American worker's total compensation has increased little despite the five years of strong productivity gains.”<sup>3</sup>

A thorough economic and technical analysis of these developments was presented in, *Futurecast: How Superpowers, Populations, and Globalization Will Change Your World by the Year 2020*, published in April 2008.<sup>4</sup>

While these analyses presaged the results presented here, this new analysis tracking Americans' earnings as they age yielded two other important and unanticipated findings. First, as expected, the difference between the earnings of working men and women born the same year, as they aged, has declined sharply from an average of 74 percent over the working lives of those born in 1950, to an average of 58 percent over the working lives of those born in 1960, and 48 percent over the working lives thus far of those born in 1970. Nevertheless, the earnings premium that benefits men remains very large, at 48 percent to 58 percent. (Table 2, below) That is about twice as great as the often-quoted difference between what men and women earn in the same positions. This large gap almost certainly reflects persistent differences in the jobs and professions that men and women follow, and the larger share of women who work only part-time. Women today remain substantially disadvantaged economically compared to men.

The other surprising and important finding is that the difference between the median earnings of working white Americans and working black Americans, again born the same year, as they aged, has consistently been much smaller than the difference between the median earnings of men and women over the same periods -- and remains so today. (Table 3, below) The earnings premium that benefits working whites, as compared to working blacks, as they have aged, has averaged between just 16 percent and 24 percent over the working lives of those cohorts born in 1950, 1960 and 1970. To be sure, since these results capture only the earnings of working people throughout their lives, they do not take account of differences in the employment rates of whites and blacks. Nevertheless, working blacks have been and remain less disadvantaged economically, compared to working whites, than is generally assumed.

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<sup>2</sup> Robert Shapiro, “The New Landscape of Globalization,” NDN, June 2007, <http://ndn.org/sites/default/files/paper/The-New-Landscape-of-Globalization.pdf>.

<sup>3</sup> *Ibid.*

<sup>4</sup> Robert Shapiro, *Futurecast: How Superpowers, Populations, and Globalization Will Change Your World*, St. Martins Press, April 2008.

## II. How to Accurately Measure the Economic Progress of Americans

To properly measure people's economic progress, we must account correctly for the passage of time. The most common way of measuring this progress, especially in political debates, compares median or mean income at different points in time. For example, the Census Bureau reports that the median family income, in constant 2009 dollars, was \$50,268 in 1973, \$52,223 in 1992 and \$59,683 in 2005. On such basis, various commentators have concluded that American families have made little economic progress in decades. Such measures are almost worthless, statistically and economically. They claim to show what happens to the median value of a sample over a period of time, when the sample itself has changed substantially over the same period. Using the above example, many of the income earners in 1973 had long passed on by 1992 or 2005. Moreover, as people age, their incomes or wages typically move from below a median to above it. Consequently, comparing median (or mean) values over a period of years cannot describe what happens to the wages or incomes of any group of individuals.

Here, we adopt a different approach. We use new Census Bureau data on annual earnings that allow us to trace people's income progress year-to-year as they age. The data cover the annual wage and salary earnings of all full-time and part-time workers, age 25 to 64, by age. For example, we begin with the cohort of 25 year-olds in 1975 – covering all living, working Americans born in 1950 -- and track the median earnings of this group at age 26 in 1976, age 27 in 1977, age 28 in 1978, and so on. We also track the economic progress of those born a decade later, tracking the median earnings of those who were 25-year old in 1985, age 26 in 1986, age 27 in 1987, and so on until they reach age 51 in 2011. We perform the same analysis using those who were 25 year-olds in 1995, tracking that cohort's median earnings at age 26 in 1996, age 27 in 1997, and so until they reach age 41 in 2011. For each age cohort, we also compare the earnings paths of men compared to women and of whites compared to blacks.

We track the earnings of each age cohort from age 25 until age 55. We exclude data on earnings from age 16 to 24 years old, because the share of those youth working changed significantly as progressively more Americans chose to attend college. We also exclude data on earnings after age 55. Those data produced a number of anomalous results, which may reflect differences over decades in the share of Americans retiring early or moving from full-time to part-time employment in their later work lives.

How rapidly people's earnings grow depends not only on the economy, but also on how old they are. In particular, most people's earnings increase most rapidly when they are relatively young; and as they age, their earnings grow at a slower rate. After tracking the earnings of the three age cohorts described above, we see clearly that the earnings of most Americans have not stagnated since the 1970s. Rather, most Americans saw their earnings increase by substantial amounts in the expansions of the 1970s, 1980, and 1990s. We also tracked the declines in most people's earnings during recessions, and we found that downturns cost most people between one-quarter and one-half of the earnings gains they had accumulated from the preceding expansion.

This pattern of steady earnings progress ended in the last decade. For the first time in recent history, most Americans experienced little growth in their earnings as they aged through the course of a six-year economic expansion. In addition, many Americans experienced usually large earnings losses in the recession of 2008-2009. In short, stagnating or falling earnings is a new problem for most Americans, not a continuing feature of the economy.

Table 1, below, shows the average annual growth rate of earnings for the three age cohorts in a succession of recent expansions. The Reagan expansion, for example, produced average earnings gains of 3.3 percent per-year, while the Clinton expansion produced wage and salary gains averaging 4.0 percent per-year. These average gains, however, fell to 0.5 percent per-year in the Bush expansion.

**Table 1. Average Annual Growth in Median Earnings during Economic Expansions, By Age Cohort, 1976-2007**

Age Cohort	Economic Expansions			
	1976-1979	1983-1989	1992-2000	2002-2007
<b>Born in 1950</b>	2.8%	1.8%	1.8%	-1.5%
<b>Born in 1960</b>	--	4.6%	3.1%	1.2%
<b>Born in 1970</b>	--	--	6.5%	1.7%
<b>Average of Cohorts</b>	<b>2.8%</b>	<b>3.2%</b>	<b>3.8%</b>	<b>0.5%</b>

This pattern of earnings growth, however, did not apply to the cohort of workers born in 1940. The data show that while they enjoyed strong earnings growth in their twenties and early thirties – gains of 5.8 percent per-year from 1965 to 1972 -- their earnings grew little or even contracted in the expansions of the 1970s, 1980s and 1990s. We believe these results are an exception to the larger pattern. The failure of this age cohort to make significant economic progress through those expansions may reflect concentrated losses of manufacturing jobs in the 1970s and 1980s, followed by difficulties in adapting successfully to the spread of information technologies across business in the 1990s.

The data also provide clear and surprising contrasts in the earnings histories of men compared to women, and whites compared to blacks. Table 2, below, shows that the wage and salary earnings of men has continues to significantly exceed those of women, even as the “earnings premium” benefitting men has fallen by more than half. For example, this premium for male workers age 30 declined from 135 percent in 1970 (when those born in 1940 turned 30 years old), to 98 percent in 1990 (when those born in 1950 turned 30), 53 percent in 2000 (for those born in 1960) and 45 percent in 2010 (for those born in 1970). When we consider the average earnings premium of men over all of the years for which we have data, that premium has declined from 111 percent for men and women born in 1940 and working from 1965 to 1995, to 74 percent for men and women born in 1950 and working from 1975 to 2005, 58 percent for the men and women born in 1960 and working thus far from 1985 to 2010, and 48 percent for men and women born in 1970 and working to date from 1995 to 2010.

Nevertheless, these premiums remain substantial. In 2005, men age 55 (born in 1950) earned 63 percent more than women age 60; similarly, men age 45 in that year (born in 1960) earned 60 percent more than women age 45, and men age 35 (born in 1970) earned 54 percent more than women the same age. These gaps, which far exceed estimates of the wage or salary differences between men and women in the same job, also reflect gender differences in jobs and professions as well as the larger share of women working part-time rather than fulltime.

**Table 2. Median Earnings of Men and Women by Age Cohort, and Men’s Earnings Premium Compared to Women as They Age (\$ 2011)**

Year of Birth	Gender	Age 25	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Average, All Years
1940	Men	\$29,282	\$39,876	\$42,408	\$46,333	\$44,996	\$44,267	\$43,254	<b>\$42,888</b>
	Women	\$16,076	\$16,935	\$17,670	\$19,508	\$22,771	\$23,647	\$25,544	<b>\$20,335</b>
	Men’s Premium	82%	135%	140%	138%	98%	87%	69%	<b>111%</b>
1950	Men	\$33,045	\$39,017	\$41,747	\$46,254	\$48,522	\$50,675	\$48,361	<b>\$44,031</b>
	Women	\$21,204	\$19,752	\$22,771	\$25,224	\$27,727	\$31,672	\$29,585	<b>\$25,303</b>
	Men’s Premium	56%	98%	83%	83%	75%	60%	63%	<b>74%</b>
1960	Men	\$28,464	\$36,183	\$41,591	\$48,458	\$47,336	\$48,809	--	<b>\$42,482</b>
	Women	\$20,873	\$23,647	\$25,232	\$29,138	\$29,585	\$30,731	--	<b>\$26,816</b>
	Men’s Premium	36%	53%	65%	66%	60%	59%	--	<b>58%</b>
1970	Men	\$27,450	\$40,540	\$45,516	\$49,168	--	--	--	<b>\$41,814</b>
	Women	\$20,795	\$27,871	\$29,585	\$31,088	--	--	--	<b>\$28,170</b>
	Men’s Premium	32%	45%	54%	58%	--	--	--	<b>48%</b>

The earnings histories of working white Americans compared to working black Americans, as they age, also present several surprising results. First, in each age cohort, the median earnings of working black Americans as they aged were consistently higher than the median earnings of working women of the same age cohort, as they aged. (Table 2, above, and Table 3, below) Furthermore, the gap between the median wage and salary earnings of working whites and blacks – the “earnings premium” of whites -- has been consistently smaller than the gap between working men and women. For example, whites born in 1960 and working from 1985 to 2010 benefitted from an average earnings premium of 24 percent relative to blacks born the same year and working over the same period. By contrast, men also born in 1960 and working from 1985 to 2010 experienced an earnings premium of 58 percent relative to women born the same year and working over the same years. When we consider the average earnings premium of whites compared to blacks over all of the years for which we have data, the average earnings gap between whites and blacks born in 1950 over their working lives from 1975 to 2005 was 16 percent, compared to 74 percent for men compared to women also born in 1950 and working from 1975 to 2005. Similarly, the average earnings premium of whites born in 1960 and working thus far from 1985 to 2010 was 24 percent, compared to 58 percent for the men born in 1960 and also working thus far from 1985 to 2010.

Understanding the earnings premium of whites compared to blacks, however, will require additional data and analysis. To begin, there are a number of anomalous results. For example, in all four age cohorts analyzed here, the earnings premium of whites increased from age 25 to age 30 and then contracted from age 30 to age 35, and there is no consistent pattern for the premiums across cohorts from age 40 to age 50. In addition, the earnings premium fluctuated widely from age 30 to age 50 for those born in 1950, and turned negative at age 50 for those born in 1940. These results may reflect sampling issues, and certainly require further study.

**Table 3. Median Earnings of White and Black Working People by Age Cohort, and the Earnings Premium of Whites Compared to Blacks as They Age (2011 \$)**

Year of Birth	Race	Age 25	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Average, All Years
1940	Whites	\$27,367	\$33,630	\$32,843	\$33,110	\$34,260	\$31,529	\$36,126	<b>\$33,547</b>
	Blacks	\$20,767	\$24,732	\$27,874	\$25,064	\$23,412	\$33,106	\$33,273	<b>\$26,895</b>
	White's Premium	32%	36%	18%	32%	46%	-5%	9%	<b>25%</b>
1950	Whites	\$28,272	\$30,482	\$34,157	\$34,682	\$40,204	\$43,298	\$39,826	<b>\$36,256</b>
	Blacks	\$24,738	\$25,849	\$32,259	\$34,682	\$29,633	\$34,839	\$32,771	<b>\$31,372</b>
	Whites' Premium	14%	18%	6%	0%	36%	24%	22%	<b>16%</b>
1960	Whites	\$26,566	\$31,529	\$34,659	\$40,540	\$40,964	\$44,456	--	<b>\$36,815</b>
	Blacks	\$22,771	\$25,224	\$29,152	\$34,206	\$34,137	\$33,291	--	<b>\$29,762</b>
	Men's Premium	17%	25%	19%	19%	20%	34%	--	<b>24%</b>
1970	Men	\$26,341	\$38,007	\$40,964	\$43,022	--	--	--	<b>\$38,379</b>
	Women	\$22,182	\$31,672	\$36,413	\$35,852	--	--	--	<b>\$31,408</b>
	Men's Premium	19%	20%	12%	20%	--	--	--	<b>22%</b>

### III. The Earnings Record of Americans Since the 1960s

The basic history shows steady, healthy gains in wage and salary earnings through the expansions of the 1970s, 1980s and 1990s for working Americans born in 1950, 1960 and 1970, followed in the last decade by much smaller gains or actual losses in earnings. The exception to this pattern is those born in 1940, whose median income stagnated as they aged from 30 to 50. Again, all of the data are expressed in 2011 dollars.

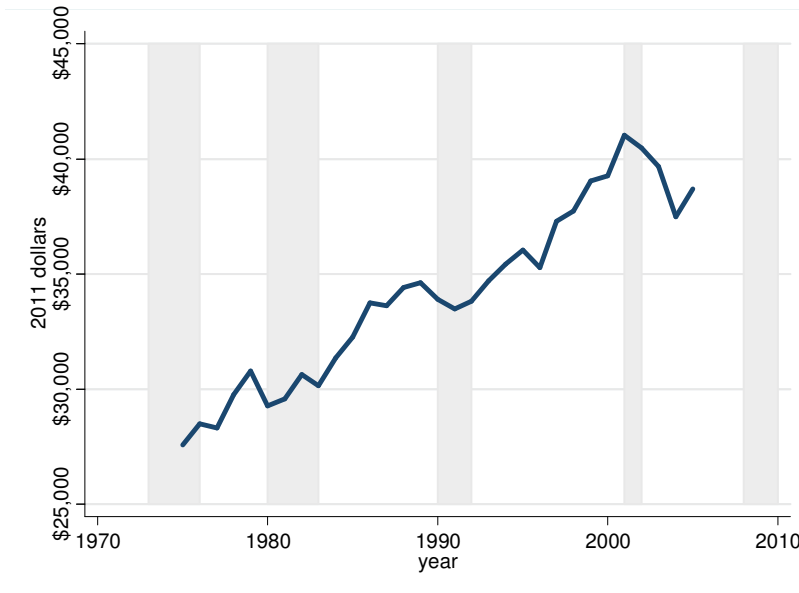
**Table 4. Median Earnings of Working Americans by Age Cohort, as They Age (2011 \$)**

Year of Birth	Age 25	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Average, All Years
1940	\$25,837	\$31,629	\$31,696	\$31,031	\$33,439	\$31,529	\$34,659	<b>\$32,110</b>
1950	\$27,565	\$29,263	\$32,259	\$33,894	\$36,045	\$39,273	\$38,688	<b>\$34,124</b>
1960	\$24,827	\$29,953	\$32,649	\$38,007	\$38,461	\$38,925	--	<b>\$34,353</b>
1970	\$24,954	\$34,206	\$37,551	\$38,925	--	--	--	<b>\$35,126</b>

#### *The Earnings Record of Americans Born in 1950, from 1975 to 2005*

We start with the American boomers born in 1950. The record and pattern of their earnings are clear. They made substantial wage and salary gains in their twenties, in the second half of the 1970s; then they made significant additional progress in their thirties, through the Reagan expansion of the 1980s; and then they made even more progress in the 1990s Clinton expansion. This pattern of steady gains through every expansion reversed in the Bush expansion of 2002-2007, through most of which their median salary and wages fell.

**Figure 1: Growth of Median Wage and Salary Earnings, U.S. Workers Born in 1950, 1975-2005<sup>5</sup>**



At age 25 in 1975, the median wage and salary income of this group was \$27,565. By the end of that expansion, in 1979, this group’s median earnings reached \$30,785, a 12 percent increase in four years. Their earnings then stagnated in the recessions of 1980 and 1981-1982, leaving them with virtually the same earnings in 1982 at age 32 as they had at age 29 in 1979. Their earnings picked up again in 1984; and by the end of the Reagan expansion in 1989, the median earnings of these now 39-year olds had increased another 13 percent, to \$34,619. This group lost ground in the 1990-1991 recession. By the end of the Clinton expansion in 2000, their median earnings at age 50 reached \$39,273, another 17 percent gain over nine years. At this point, however, the pattern changes: This group lost ground not only in the 2001 recession, but also the first years of the 2002-2007 expansion: In 2005, four years into the expansion, this group now age 55 had median earnings of \$38,688, still 1.5 percent below the 2000 level.

*Wage and Salary Growth, Men Compared to Women Born in 1950*

The earnings histories of men and women born in 1950 show more variations. One striking feature, noted earlier, is the consistently, much higher earnings of the men of this generation than the women: At age 25 in 1975, the median earnings of men was \$33,045, 56 percent more than women the same age earned that year at \$21,204. By age 57 in 2007, the year before the financial meltdown, the median earnings of the men at \$45,301 was still 40 percent higher than the median earnings of women at \$32,358. Moreover, the patterns of earnings of men and women of this age are very different. All of the progress made by this age group in their late-twenties was made by the men, whose median wage and salary income increased 22 percent from 1975 to 1979. The earnings of women of the same age actually fell from 1975 to 1979. The Reagan expansion of 1983-1989, however, pushed up the median earnings of both men and women by about 12 percent. By 1989, median earnings of 39-year old men were \$46,158 compared to \$24,728 for 39-year old women, a wider gap than when they began.

<sup>5</sup> Minnesota Population Center, IPUMS, Current Population Survey, U.S. Census Bureau.



Since 1990, the women in this age group made greater income progress than the men. The median salary and wage income of these women continued to rise even in the 1990-1991 recession, while the incomes of the men fell. Then, the Clinton expansion of the 1990s saw the median wage or salary income of men age 50 in 2000 reach \$50,675, a 15 percent gain over nine years. Women made greater progress: Their median earnings at age 50 in 2000 reached \$31,672, a 21 percent increase over the same nine years. Finally, the earnings of men born in 1950 declined in the 2001 recession and then throughout the subsequent expansion, from \$50,675 in 2000 to \$49,059 in 2002, and then to \$45,301 by 2007. In contrast, the median wage or salary income of the women in this group increased to \$33,566 in 2001, fell to \$31,888 in 2002 and then rose very modestly to \$32,357 in 2007.

#### *Wage and Salary Growth, Whites Compared to Blacks Born in 1950*

There are also significant variations in the data based on race. Again, one striking feature is that the gap between the earnings of white and blacks born in 1950, as they aged, has been consistently much less than the gap between men and women. At age 25 in 1975, the median wage or salary income of whites was \$28,272, 14 percent more than median earnings of \$24,738 by blacks of the same age. Whites and blacks in their twenties in the latter-1970s also made comparable progress. The earnings of these whites increased 14 percent by 1979, to \$32,149, and then declined modestly in the recessions of 1980s and 1981-82. The earnings of blacks of the same age increased by 9 percent, from 1975 to 1979. The Reagan expansion of 1983-1989 then produced different results depending on race. From 1982 to 1989, the median earnings of whites born in 1950 grew 14 percent, to \$36,267 at age 39, while the median earnings of blacks of the same age increased much faster, by 20 percent, to reach \$32,970 at age 39 in 1989.

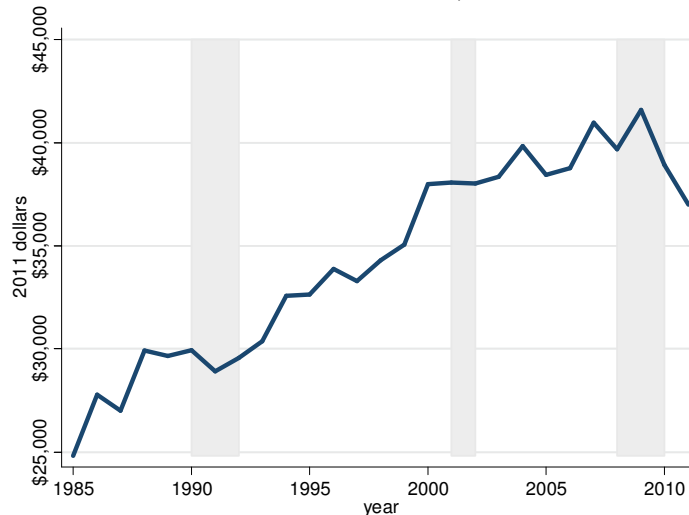
In the Clinton expansion, both races again made strong gains in earnings, and again with blacks gaining more than whites. Whites born in 1950 saw their median earnings increase 20 percent from 1992 to 2000, reaching \$43,298 as 50-year olds in 2000. Blacks born the same year experienced even larger gains: Their median earnings increased 35 percent to \$34,839 as 50-year olds in 2000. Finally, from 2000 to 2005, the median wage and salary income of both races aging from 50 to 55 years old fell. At age 55 in 2005, whites had median earnings of \$39,826, an 8 percent decline from 2000, while blacks had median wage and salary income of \$32,771 or 6 percent less than in 2000. While the gap between men and women age 55 in 2005 was 63 percent, the gap between whites and blacks age 55 in 2005 was less than 22 percent.

#### *The Earnings History of Americans Born in 1960, from 1985 to 2010*

The earnings history of Americans born in 1960 is similar to those born a decade older. At age 25 in 1985, their median wage and salary income was \$24,827, and the second half of the Reagan expansion brought strong gains: By 1989, the median income of this group, then age 29, had increased nearly 20 percent in four years to \$29,673. These gains reflect not only the general income progress of that expansion but also the fact that most people's largest percentage gains in earnings occur in their twenties and thirties. This group, like their older brothers and sisters, lost ground in the 1990-1991 recession. The Clinton expansion, however, brought even greater progress: By 2000, the median earnings of this group, at age 35, reached \$38,007, a 31.5 percent gain over nine years. This earning progress, however, slowed sharply in the last decade. By the end of the 2002-2007 expansion, this age-groups' median wage and salary income was

\$40,986 at age 47, up less than 8 percent in seven years. By 2010, after the 2008-2009 recession, the median earnings of these 50-year-olds had fallen 5 percent in three years, to \$38,925.

**Figure 2: Growth of Median Wage and Salary Earnings, U.S. Workers Born in 1960, 1985-2010<sup>6</sup>**



*Wage and Salary Growth, Men compared to Women Born in 1960*

The patterns for men and women born in 1960 resemble those seen for the two genders born a decade earlier, although the gap between the earnings and men and women starts out smaller. Men age 25 in 1985 earned \$28,464, 36 percent more than the median earnings of \$20,873 for women of the same age. Like those a decade older, the men in this age cohort saw much larger gains in earnings in the Reagan expansion than the women. The median wage and salary income of these men in 1989, now age 29, rose 27 percent over four years, to \$36,267. Women of the same age saw their median wages or salary rise by only 3 percent from 1985 to 1989. After modest income losses in the 1990-1991 recession, the Clinton expansion produced very strong gains for both the men and the in this age group. At age 40 in 2000, the median earnings of the men reached \$48,458, up 36 percent in nine years. Over the same period, the median income of women of the same age rose from \$22,822 to \$29,138, an increase of 28 percent. Once again, this progress slowed sharply in the Bush expansion. From 2002 to 2007, men aging from 42 to 47 saw their median earnings rise by only 5 percent to \$51,722, while the median earnings of women of the same age increased 7 percent, to \$32,357. Both men and women of this age also suffered in the 2008-2009 recession: By 2010, men age 50 had lost about 6 percent of their median earnings, which fell to \$48,809; and women age 50 lost about 5 percent of their median earnings, down to \$30,731. As a result, the gap between the median earnings of men and women of this age actually widened over time, to nearly 60 percent.

*Wage and Salary Growth, Whites compared to Blacks Born in 1960*

The earnings patterns for whites and blacks born in 1960 are similar to those for men and women born that year -- although the gaps are both smaller but widen more over time. Whites age 25 in 1985 earned \$26,566, just 7 percent more than the \$22,771 median earnings of blacks.

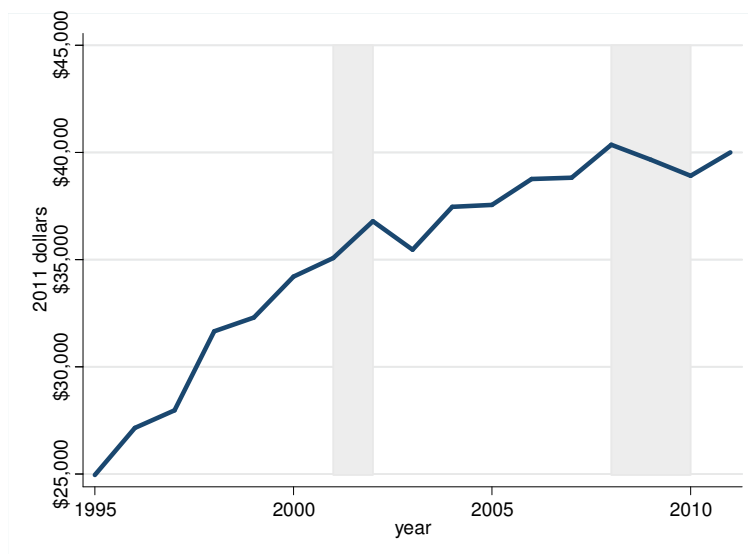
<sup>6</sup> Minnesota Population Center, IPUMS, Current Population Survey, U.S. Census Bureau..

Both races made gains in the second-half of the Reagan expansion, although whites made much greater progress than blacks. The median wage and salary income of these whites rose to \$32,970 by age 29 in 1989, gains of 24 percent over four years; blacks of the same age saw their median earnings increase only 7 percent from 1985 to 1989. After modest income losses in the 1990-1991 downturn, working Americans of both races and born in 1960 made very large gains in the Clinton expansion. At age 40 in 2000, the median earnings of whites reached \$40,540, up 31 percent from 1992. Over the same period, the median income of the blacks born in 1960 rose from \$25,126 to \$34,205, an increase of 36 percent. Once again, however, the earnings progress of both races slowed sharply in the Bush expansion. From 2002 to 2007, whites then aging from 42 to 47 years old saw their median earnings rise just 7 percent to \$43,143, while the median earnings of blacks of the same age increased a mere 3 percent to \$34,515. Whites of this age, however, held their own through the 2008-2009 recession: At age 50 in 2010, they had gained 3 percent in median earnings, which rose to \$44,455, compared to 2007. Blacks of the same age, however, gave back about 4 percent of their median earnings, falling to \$33,291 in 2010. By age 50, therefore, the earnings gap between whites and blacks had widened to 34 percent.

***The Earnings History of Americans Born in 1970, from 1995 to 2010***

The earnings histories of those born in 1970 are more brief, but similar to the earnings histories of older cohorts. At age 25 in 1995, their median wage and salary income was \$24,954; by the end of the Clinton expansion five years later, at age 30 in 2000, their median earnings had increased 37 percent to \$34,206. By contrast, their gains slowed sharply in the Bush expansion of 2002-2007. From 2002 to 2007, this group’s median wage and salary income at age 37 had reached \$38,829, up just 5.5 percent over the expansion’s five years. However, this group did weather the deep 2008-2009 recession: In 2010, at age 40, their median income was \$38,925 or roughly the same as in 2007.

**Figure 3: Growth of Median Wage and Salary Income, U.S. Workers Born in 1970, 1995-2010<sup>7</sup>**



<sup>7</sup> Minnesota Population Center, IPUMS, Current Population Survey, U.S. Census Bureau..

### *Wage and Salary Growth, Men compared to Women Born in 1970*

One surprising finding in the earnings history of those born in 1970 is that the gap between the median earnings of men and women is not only initially large, but has widened over time. At age 25 in 1995, the males of this age cohort had median wage or salary income of \$27,450, 32 percent more than the \$20,795 median for women the same age. Over the rest of the Clinton expansion, both genders made substantial gains in earnings, but the men's gains were larger. By 2000, the median earnings of the men, now age 30, had increased a remarkable 48 percent in five years, reaching \$40,540. The earnings of women age 30 in 2000 also increased sharply by a more "modest" 34 percent, to \$27,871. The earnings of both men women born in 1970 did grow throughout the 2002-2007 Bush expansion but, like their older brothers and sisters, at considerably slower rates. In 2007, the median earnings of men then age 37 reached \$48,536, a 13 percent gain since 2002; and women of the same age saw their earnings increase by 11 percent, to \$31,281. Finally, the men if this age group made small gains even from 2007 to 2010, when their median earnings reached \$49,168 at age 40; but women of the same age experienced small losses to \$31,088 the same year. By age 40, the gap between the median wage or salary earnings of men and women born in 1970 had widened from 58 percent, compared to the 32 percent gap at age 25 in 1995.

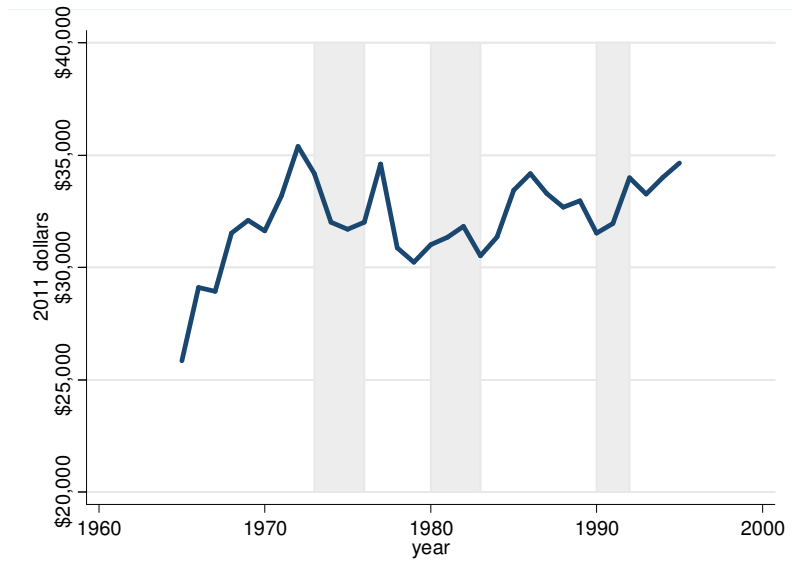
### *Wage and Salary Growth, Whites compared to Blacks Born in 1970*

The earnings histories of whites and blacks born in 1970 track each other more closely than the pattern seen for men and women born in that year. At age 25 in 1995, the whites of this cohort had a median wage or salary income of \$26,341, 19 percent higher than median earnings of \$22,182 for blacks of the same age. Once again, younger workers of both races achieved remarkable gains in the second half of the Clinton expansion. From 1995 to 2000, whites aging from 25 years old to 30 saw their median earnings jump 44 percent in five years to \$38,007. In similar fashion, the median earnings of blacks the same age increased 43 percent, rising to \$31,672 in 2000. And once again, workers of both races in their thirties in the Bush years saw much smaller earnings gains. Whites of this age group gained 3 percent during the down years of 2000 to 2002 and then another 10 percent from 2002 to 2007. By 2007, whites now age 37 had median earnings of \$43,143. Blacks of the same age gained even more from 2000 to 2002, 8 percent, and then increased their median earnings another 10 percent in the Bush expansion, reaching \$37,750 in 2007. Finally, the median earnings of whites born in 1970 remained flat from 2007 to 2010, while blacks born the same year lost 5 percent of their median earnings over the same years. By 2010, whites born in 1970 had median earnings of \$43,022 at age 40, 20 percent more than the \$35,852 median earnings of blacks the same age, or nearly the same earnings gap as in 1995.

### ***The Anomaly: The Earnings History of Americans Born in 1940, from 1965 to 2005***

Over this period, the earnings history of older Americans presents an anomaly: Americans born in 1940 saw large gains in earnings in their twenties, in the 1960s, but this progress slowed sharply in the 1970s and 1980s.

**Figure 4: Growth of Median Wage and Salary Income, U.S. Workers Born in 1940, 1965-1995<sup>8</sup>**



At age 25 in 1965, their median wage and salary income was \$25,837. Seven years later, at the end of that expansion in 1972, their median earnings at age 32 had increased 37 percent to \$35,398. The rest of the 1970s, however, produced much less progress. The 1974-1975 recession depressed the median income of this group by more than 10 percent to \$31,696. Moreover, some modest progress which they achieved in the late 1970s was wiped out by the recessions of 1980 and 1981-82. By 1982, these now 42-year olds earned on average \$31,820, 10 percent less than they earned at age 32 a decade earlier. Moreover, the Reagan expansion did not lift their earnings nearly as much as it did for younger cohorts. At age 49 in 1989, the median wage or salary income of this group had risen only to \$32,970, a gain of 4 percent over seven years. The recession of 1990-91 then brought down their earnings another 3 percent. Only in their fifties, in the early Clinton expansion of 1992 to 1995, did they see their earnings increase again at a healthy rate: In 1995 at age 55, their median wage and salary income was \$34,659 or 8.5 percent higher than four years earlier.

*Wage and Salary Growth, Men compared to Women Born in 1940*

The earnings histories of Americans born in 1940, as with most other age groups, provide striking differences based on gender. In this case, men claimed all of the early progress, while women claimed all of the later gains. At age 25 in 1965, men born in 1940 had a median wage or salary income of \$29,281, fully 82 percent more than the median earnings of \$16,076 for women of the same age. Over the remaining seven years of the Johnson-Nixon expansion, the earnings of the men jumped 52 percent to \$44,560 in 1972, while women also aging from 25 to 32 saw their earnings rise by less than 1 percent, to \$16,219. The next expansion, from 1975 to 1979, brought good news for both genders: The median earnings of both men and women born in 1940 grew 7 percent to 8 percent in those four years. Gender-based differences reemerged in the Reagan years, but with opposite effects: From 1982 to 1989, the median earnings of women

<sup>8</sup> Minnesota Population Center, IPUMS, Current Population Survey, U.S. Census Bureau.

increased 30 percent as they aged from 42 to 49, rising from \$19,092 to \$24,728. However, the men of the same age saw their median earnings fall by 4 percent during the Reagan expansion, declining to \$42,779 in 1989. These data reflect, in part, the loss of hundreds of thousands of manufacturing jobs, held mainly by men in their forties and fifties. Finally, near the end of their working lives, neither men nor women born in 1940 experienced significant gains in the Clinton expansion. The median earnings of men age 55 in 1995 and the median earnings of women the same age were both nearly the same as each gender's median earnings four years earlier, in 1991.

#### *Wage and Salary Growth, Whites compared to Blacks Born in 1940*

Finally, race also affected the pattern of income gains and setbacks for Americans born in 1940. Whites of this age did well in the 1960s, but not as well as blacks the same age; whites then did badly in the 1970s, but not as badly as blacks the same age. Finally, blacks of this age cohort also did better than whites in both the Reagan and Clinton expansions, but worse in the intervening recession.

Whites age 25 in 1965 had median wage and salary incomes of \$27,367, compared to blacks the same age with median earnings of \$20,767, a gap of 32 percent. Over the next seven years, however, the earnings of the whites increased 32 percent to \$36,205 in 1972 at age 32, while blacks the same age saw their earnings rise by a spectacular 46 percent to \$30,301 in 1972. The earnings of both whites and blacks born in 1940 fell by 8 percent to 9 percent from 1972 to 1975. Then, however, whites in this age cohort saw their median earnings stagnate through the 1975-1979 expansion while blacks of the same age lost 13 percent of their median earnings. Whites age 40 in 1980 then lost another 2 percent of their median earnings in the 1981-1982 recession, while blacks of the same age made back some of their losses from the preceding years.

With the 1983-1989 expansion, the median earnings of blacks then in their forties increased 20 percent while white workers of the same age gained just 3 percent. As a result, the median earnings of whites and blacks age 49 in 1989 were nearly the same, at \$32,970 and \$30,497 respectively. The gap widened again in the years of slow growth and recession from 1989 to 1992, when the median earnings of whites in their early fifties gained 8 percent while blacks of the same age lost 3 percent. Finally, the early Clinton expansion from 1993 to 1995 saw blacks of this age group gain another 13 percent in median earnings, while whites of the same age gained only another 2 percent. Thus, by 1995, white workers age 55 had median earning of \$36,126, less than 9 percent more than the \$33,272 median earnings of black workers the same age.

#### **IV. Conclusions**

Our analysis of the earnings progress and setbacks American have experienced over the last forty years confounds some favorite assumptions of both liberals and conservatives. Through the economic expansions of the 1970s, 1980s and 1990s, most working Americans achieved steady and strong increases in earnings, refuting a common liberal complaint that average Americans have stagnated economically for two generations. Similarly, the data refute the conservative claim that average earnings will falter when taxes and federal spending increase. The strongest gains in median earnings of the entire period occurred in the 1990s, after taxes and public investment spending both went up; while the weakest earnings growth occurred in the 2002-2007 expansion, after taxes were reduced and public investments were cut back.

By tracing people's earnings as they age, we establish that the median earnings of working Americans grew 2.8 percent per-year in the 1976-1979 expansion, followed by gains of 3.2 percent per-year in the 1983-1989 expansion, and then followed again by increases of 3.8 percent per-year in the 1992-2000 expansion. This pattern ended a decade ago: In the 2002-2007 expansion, gains in people's median earnings as they aged fell to 0.5 percent per year. This new development took hold of American earnings before the financial meltdown of 2008-2009, before the deep recession which followed and the large stimulus that arrested it, and before the slow recovery which began in late-2009. The challenge for policymakers is to identify both the elements of policy which contributed to the steady gains of earlier decades, and the changes in conditions and policy which contributed to the disappointing earnings performance of the last decade.

For example, numerous economic studies have found that strong public investment in education, infrastructure and basic research contributed materially to the productivity and income gains seen in the 1970s, 980s and 1990s. Those decades of steady gains for average Americans also track the period in which foreign trade grew rapidly, in both absolute terms and as a share of the economy. It is also notable that marginal income tax rates, at least at the levels seen in recent decades, did not appear materially affect how much average earnings rose or fell.

Finally, these earnings data suggest that while much of the gap between the earnings of whites and blacks of the same age has closed in recent decades, stark differences remain between the median earnings of men and women of the same age. Further analysis is needed to unravel the forces driving these results, including gender-based differences in career choices, career paths, and in people's decisions to work full-time or only part-time.

### *About the Author*

**Robert J. Shapiro** is the chair of the NDN Globalization Initiative and the chairman of Sonecon, LLC, a private firm that advises U.S. and foreign businesses, governments and non-profit organizations. Dr. Shapiro and Sonecon have advised, among others, President Bill Clinton, Vice President Albert Gore, Jr., British Prime Ministers Tony Blair and Gordon Brown, and U.S. Senators Hillary Clinton and Barack Obama. Sonecon also has advised private firms including AT&T, Amgen, Gilead Sciences, Google, MCI, Inc., Nordstjernan of Sweden, and Fujitsu of Japan; and non-profit organizations including the U.S. Chamber of Commerce, and the American Petroleum Institute. Dr Shapiro is also an advisor to the International Monetary Fund, a Senior Fellow of the Georgetown University McDonough School of Business, and chair of the U.S. Climate Task Force. From 1997 to 2001, he was Under Secretary of Commerce for Economic Affairs: In that post, he oversaw the Census Bureau and the Bureau of Economic Analysis, and directed economic policy for the U.S. Commerce Department. Prior to that, Dr. Shapiro was co-founder and Vice President of the Progressive Policy Institute. Dr. Shapiro also served as the principal economic advisor to Bill Clinton in his 1991-1992 presidential campaign and as a senior economic advisor to Albert Gore, Jr. and John Kerry in their presidential efforts. In 2008, he advised the campaign and transition of Barack Obama. Prior to co-founding PPI, Dr. Shapiro was Legislative Director and Economic Counsel to Senator Daniel Patrick Moynihan. He has been a Fellow of Harvard University, the Brookings Institution, and the National Bureau of Economic Research. He holds a Ph.D. and M.A. from Harvard University, a M.Sc. from the London School of Economics and Political Science, and an A.B. from the University of Chicago.