## Computer Ownership Continues to Rise

Data from the Bureau of Labor Statistics Consumer Expenditure Survey (CE) show that the percentage of U.S. households owning computers has risen steadily over this decade, and that, in 2007, approximately 3 of every 4 consumer units ${ }^{10}$ (CUs) owned a home computer, compared with less than half of all CUs in 2000. CE data also show that the average number of computers owned in 2007 was 1.09 computers per consumer unit. This article provides data on computer ownership for two groups: All consumer units (including computer owners and non-owners) and computer owners (CUs that report at least one computer owned). The percentage of computer

[^0]ownership and the average number of computers owned also are shown for CUs classified by age group, education level, race, and income quintile. Chart 3 shows the percentage of computer ownership for all consumer units from 2000 to 2007.

Data are derived from an inventory of durable goods that are collected during the first interview of the Interview Survey component of the CE. The questions are asked under Section 1C in the Computer Assisted Personal Interview (CAPI) instrument. Section 1C is used to create an inventory of household appliances, including major kitchen appliances, washers and dryers, televisions, and computers. During this portion of the interview, a field representative asks the respondent how many computers the CU owns. Any computers owned for business purposes are excluded from the inventory. Using this information, statistics calculating the percent of CUs that report owning a computer are generated annually after the most recent CE data are published.

Chart 3. Percent of computer ownership, all consumer units Consumer Expenditure Survey, 2000-07



Text table 7 shows the average number of computers owned for all consumer units and for those who own at least one computer from 2000 to 2007. As mentioned above, for all CUs (including owners and non-owners), the average in-
creased from 0.54 in 2000 to 1.09 in 2007. Among those CUs that own at least one computer, the average number of computers owned steadily increased from 1.25 in 2000 to 1.50 in 2007.

Text table 7: Average number of computers owned, all consumer units and computer owners, Consumer Expenditure Interview Survey, 2000-07


## Age

Looking at the data classified by the age of the reference person reveals that by 2007 all five of the youngest age groups ${ }^{11}$ had computer ownership rates of close to 80 percent. Chart 4 shows the percentage of computer ownership by age group for 2000 and 2007. In 2007, the 35 -to- 44 age group and the 45 -to54 age group had the highest percentage of computer ownership, with about 82 percent of each group owning at least one computer. The 75-years-and-older age group had the smallest computer ownership percentage in 2007, with 37.9 percent owning at least one computer. However, this age group nearly tripled the percent of computer owners over the time period 2000-07. The age group that had the highest percentage point increase from 2000 to 2007 was the 55-to-64 age group, with 45.4 percent owning at least one computer in 2000, compared

[^1]with 77.7 percent in 2007 , an increase of 32.3 percentage points. This was closely followed by the under- 25 age group, which increased its computer ownership from 45.4 percent, in 2000, to 77.2 percent in 2007-a 31.8- percentage-point increase. It will be interesting to see in coming years whether the 80-percent level for the age groups is a plateau at which point all CUs that want to own a computer own one, and if the older groups end up approaching that level.

Text table 8 provides the average number of computers owned by age group for 2000 and 2007. Among all consumer units (including non-owners), the 45-to-54 age group owned the most computers in 2007 with 1.30 computers per CU. The 75 -and-older age group owned an average of 0.45 computers, which was the lowest among all age groups. Among consumer units that owned at least one computer, the 45-to-54 age group also had the highest number of computers owned, with 1.61 computers per CU in 2007, followed closely by the 35 -to- 44 age group, which owned 1.58 computers per CU.

Chart 4. Percent of computer ownership, by age group, Consumer Expenditure Survey, 2000 and 2007


## Education

Analyzing the data by the education level ${ }^{12}$ of the reference person reveals that more education corresponds to an increasing likelihood of owning a computer. Chart 5 shows the percentage of computer ownership by education level for 2000 and 2007. Consumer units with reference persons having an advanced degree had the highest level of computer ownership rate in 2007, with 94.4 percent owning at least one computer. This was followed by CUs with reference persons with bachelor's degrees, who had a computer ownership rate
of 91.0 percent. The lowest computer ownership rate among education levels was for CUs with a reference person, who had less than a high school education. Just over 40 percent of this group reported owning a computer in 2007. Consumer units with reference person who had some college or associates degree had the highest percentage point increase from 2000 to 2007, rising from 55.7 percent in 2000 to 82.0 percent in 2007. This was followed closely by CUs with reference person, who were high school graduates, increasing from 37.7 percent in 2000, to 63.4 percent in 2007.

Chart 5. Percent of computer ownership, by education level, Consumer Expenditure Survey, 2000 and 2007


Text table 8 provides the average number of computers owned by education level for 2000 and 2007. Including nonowners, CUs whose reference person had an advanced degree owned the most computers on average in 2007, with 1.66 computers per CU. This was followed by CUs with reference persons who had a bachelor's degree with an average of 1.49

[^2]computers per CU. Consumer units whose reference person did not have a high school degree had the fewest number of computers owned, on average, with 0.50 computers per CU in 2007.

Looking at consumer units who owned at least one computer, those with reference persons who had an advanced degree also had the highest number of computers owned on average in 2007 with 1.77 computers. This was followed by CUs whose reference persons had bachelor's degrees, with an average of 1.65 computers owned per CU. The less-than-high-school-graduate group had the fewest number of computers owned, with 1.26 in 2007.

Text table 8. Average number of computers owned by all consumer units and by computer owners, classified by age education level, and race, Consumer Expenditure Interview Survey, 2000 and 2007

| Characteristic | All consumer units |  | Computer owners |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2007 | 2000 | 2007 |
| Age |  |  |  |  |
| Under 25...................... | 0.50 | 1.06 | 1.21 | 1.39 |
| 25-34 years.................. | 0.57 | 1.09 | 1.21 | 1.43 |
| 35-44 years.................. | 0.69 | 1.28 | 1.25 | 1.58 |
| 45-54 years.................. | 0.71 | 1.30 | 1.32 | 1.61 |
| 55-64 years.................. | 0.51 | 1.14 | 1.24 | 1.48 |
| 65-74 years.................. | 0.33 | 0.84 | 1.18 | 1.37 |
| 75 years and older....... | 0.14 | 0.45 | 1.12 | 1.22 |
| Education |  |  |  |  |
| Less than high school graduate | 0.16 | 0.50 | 1.11 | 1.26 |
| High school graduate.... | 0.39 | 0.82 | 1.15 | 1.31 |
| Some college or associates degree $\qquad$ | 0.62 | 1.19 | 1.23 | 1.46 |
| Bachelor's degree......... | 0.84 | 1.49 | 1.33 | 1.65 |
| Advanced degree.......... | 0.95 | 1.66 | 1.36 | 1.77 |
| Race |  |  |  |  |
| Asian.......................... | 0.72 | 1.46 | 1.30 | 1.75 |
| Black.......................... | 0.34 | 0.78 | 1.17 | 1.32 |
| White and All Other Races $\qquad$ | 0.56 | 1.12 | 1.25 | 1.50 |

## Race

Looking at the data classified by the race ${ }^{13}$ of the reference

[^3]person shows that Asians had the highest levels of ownership and that Blacks almost doubled their ownership rate from 2000 to 2007. Chart 6 shows the percentage of computer ownership by race for 2000 and 2007. Consumer units with reference persons who were Asian had the highest computer ownership rate in 2007, with 84.5 percent owning at least one computer, followed by CUs in the White and All Other Races group, which had a computer ownership rate of 75.4 percent. Consumer units with reference persons who were Black reported computer ownership of 59.8 percent in 2007, the lowest among the three racial groups. However, Blacks had the highest-percentage-point increase in computer ownership rates among the three racial groups from 2000 to 2007 , rising from 31.6 percent in 2000 to 59.8 percent in 2007. This was followed by CUs with reference persons who are White and All Other Races, whose computer ownership rate increased from 50.1 percent in 2000 to 75.4 percent in 2007.

Text table 8 provides the average number of computers owned by race for 2000 and 2007. Including non-owners, CUs whose reference person was Asian owned the most computers in 2007, with 1.46 computers per CU, followed by the White-and-All-Other-Races group, which owned 1.12 computers per CU, and the Black group, which owned 0.78 computers per CU.

Looking at CUs that owned at least one computer, CUs whose reference persons were Asian had the most number of computers owned in 2007, with 1.75 computers per CU. This was followed by CUs with reference persons of White and All Other Races, with 1.50 computers and Black CUs, with 1.32 computers.

## Chart 6. Percent of computer ownership, by race, Consumer Expenditure Survey 2000 and 2007



## Income quintile

Examining the data classified by income quintile ${ }^{14}$ shows that the likelihood of owning a computer increased with income level and that, in 2007, almost all upper quintile CUs reported owning a computer. Chart 7 shows the percentage of computer ownership by income quintile for 2004 and 2007. Note that 2004 is used as the base year for these income comparisons. That was the first year that incomes were imputed in the CE, therefore, income comparisons to prior years are not strictly comparable. Consumer units with incomes in the highest in-

[^4]come quintile had the highest computer ownership, in 2007, with 98.8 percent owning at least one computer, followed by CUs in the next highest quintile that had a computer ownership rate of 87.3 percent. Consumer units in the lowest income quintile had a computer ownership rate of 49.0 percent in 2007 , the lowest percentage among all income quintiles. Consumer units in the second lowest income quintile had the highest percentage point increase in the computer ownership rate among all income quintiles from 2004 to 2007, rising from 51.6 percent in 2004 to 60.9 percent in 2007. This was followed closely by CUs in the lowest income quintile, where the computer ownership rate increased from 39.9 percent in 2004 to 49.0 percent in 2007.


Text table 9 provides the average number of computers owned by income quintile for 2004 and 2007. For all CUs (including non-owners), those in the highest income quintile owned the most computers in 2007, with 1.80 computers per CU, followed by CUs in the fourth quintile with 1.27 computers per CU. Consumer units in the lowest income quintile had the fewest number of computers owned in 2007, with 0.62 computers per CU.

Looking at CUs that owned at least one computer, those in the highest income quintile had the most number of computers owned in 2007, with 1.89 computers per CU, followed by CUs in the fourth quintile with 1.47 computers per CU. Consumer units in the second income quintile had the fewest number of computers owned, with 1.26 computers per CU in 2007.

Text table 9. Average number of computers owned by all consumer units and by computer owners, classified by income quintile, Consumer Expenditure Interview Survey, 2004 and 2007

| Income | All consumer <br> units |  | Computer owners |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2004 | 2007 | 2004 | 2007 |
| Lowest 20 percent ..... | 0.46 | 0.62 | 1.17 | 1.27 |
| Second 20 percent ..... | 0.60 | 0.76 | 1.18 | 1.26 |
| Third 20 percent ......... | 0.84 | 1.01 | 1.24 | 1.35 |
| Fourth 20 percent ....... | 1.13 | 1.27 | 1.36 | 1.47 |
| Highest 20 percent ...... | 1.51 | 1.80 | 1.65 | 1.89 |


[^0]:    ${ }^{10} \mathrm{~A}$ consumer unit is defined as members of a household related by blood, marriage, adoption, or other legal arrangement; a single person living alone or sharing a household with others but who is financially independent; or two or more persons living together who share responsibility for at least 2 out of 3 major types of expenses-food, housing, and other expenses. For the purposes of this article, the terms consumer unit and household are used interchangeably.

[^1]:    ${ }^{11}$ Age group is determined by the age of the reference person, who is the first person mentioned by the respondent when asked to "start with the name of the person or one of the persons who owns or rents the home."

[^2]:    ${ }^{12}$ Education level is defined as the number of years of formal education of the reference person, on the basis of the highest grade completed. If enrolled at time of the interview, the interviewer records the grade currently attended. Persons not reporting the extent of their education are classified under no school or not reported.

[^3]:    ${ }^{13}$ Race of the reference person of the consumer unit. Families are included in three racial groups: Black or African-American; Asian; and White and All Other Races. The "All Other Races" group comprises such races as Native Americans, Alaskan Natives, Pacific Islanders, and those reporting more than one race.

[^4]:    ${ }^{14}$ For each time period represented in the tables, complete income reporters are ranked in ascending order, according to the level of total before-tax income reported by the consumer unit. The ranking is then divided into five equal groups. Incomplete income reporters are not ranked and are shown separately.

