

**Special Commentary**

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# Demographic Influences on U.S. Consumer Spending

## Executive Summary

Consumer spending has accounted for roughly two-thirds of U.S. GDP for most of the post-World War II era. However, the proportions that Americans have devoted to individual spending components have changed over time due, at least in part, to the nation's evolving demographic profile. The aging of the population has caused the proportion of consumer spending devoted to healthcare to rise while transportation's share has trended lower. Older individuals tend to spend relatively more on healthcare and less on transportation than their younger peers.

Looking to 2027, our analysis shows that the spending shares for *healthcare*, *education* and *food* will rise further, while *transportation*, *apparel* and *housing* will experience slippage in their respective spending shares. In short, businesses that cater to healthcare, education and food should outperform businesses that eschew those categories, everything else equal. On the other hand, transportation, apparel and housing likely will be relative losers.

*The evolving demographic profile of the U.S. has caused the proportions of spending components to change.*

## Consumption Shares Have Changed as the Population Has Aged

A stylized fact of the U.S. economy is that consumer spending accounts for the lion's share of GDP. The ratio of consumer spending to GDP has generally been stable between 65% and 68% over the past few decades. However, there is more variation over time in individual categories within overall consumer spending. For example, data from the U.S. Department of Labor's Consumer Expenditure Survey (CES), which disaggregates overall consumer expenditures into 14 broad categories, show that healthcare accounted for less than 5% of consumer out of pocket expenditures in 1987 (Figure 1). That ratio rose to more than 8% by 2017.<sup>1</sup> Meanwhile, transportation slipped from about 19% of consumer expenditures in 1987 to less than 16% 30 years later. The share of food expenditures is lower today than it was in the late 1980s, although it has made up some lost ground more recently.

Some of these changes in spending shares reflect changes in relative prices over time. For example, food prices have more or less doubled over the past 30 years while healthcare prices have nearly trebled. But demographics also play a significant role in the change in spending shares over the years. Data from the CES show that households headed by individuals between 25 and 34 years of age devoted 5.7% of their personal spending to healthcare in 2017, while spending on healthcare accounted for 12.2% of total spending for the 65-74 year old cohort (Figure 2). As the U.S. population has aged over time, the proportion of total consumer spending that is devoted to healthcare has naturally risen. As shown in Figure 3, individuals aged 55 years or older accounted for 21% of the American population in 1985, but that proportion rose to 27% by 2015. Looking forward, the United Nations projects that individuals aged 55 years and older will account for more than 30% of the American population in 2025.

<sup>1</sup> Healthcare accounts for 17% of the total personal consumption expenditures (PCE) component of the GDP accounts, which is significantly higher than the 8% share measured in the CES. The difference is definitional. The CES measures only those expenditures made directly by the consumer unit. Not only does PCE capture those expenditures, but it also counts spending made by third parties for the consumer unit, such as employer-paid health benefits. See "[Comparing expenditures from the Consumer Expenditure Survey with Personal Consumption Expenditures](#)" for additional details.



Figure 1

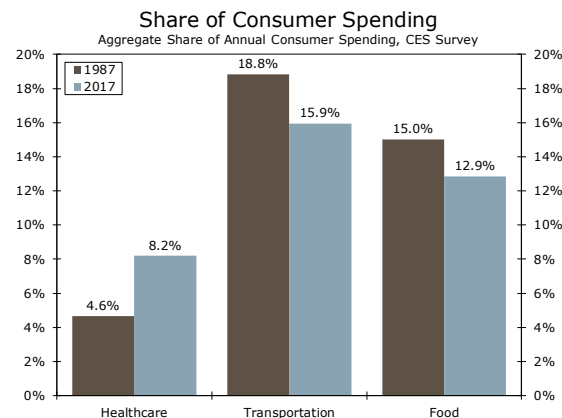
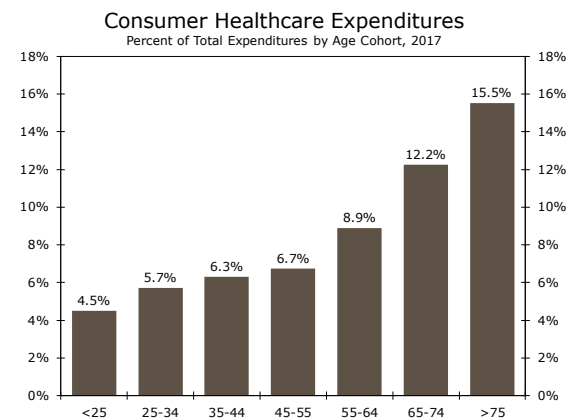


Figure 2



Source: U.S. Department of Labor and Wells Fargo Securities

These demographic changes have not only affected healthcare spending, but also the 13 other broad categories of consumer spending that are included in the CES. But can we say anything specific about how these broad spending categories may evolve in the future? If we can make a reasonable estimate of how these spending shares may change in coming years, then individuals and businesses may be able to use this information in strategic decision-making.

### Who Wins and Who Loses as the Population Ages?

We begin our analysis by following the methodology of the CES, which divides the population into seven age cohorts (under 25 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years, and 75 years and older).<sup>2</sup> We then use projections for the U.S. population in 2027, which is 10 years after the most recent CES in 2017. The United Nations projects that the overall American population will grow 7.2% between 2017 and 2027. Seniors (individuals 65 years and older) will make the biggest contributions to the overall population growth rate (Figure 4). The number of individuals between 45 years and 64 years old will decline in the next 10 years as the Baby Boomer generation completes the transition from middle age to senior citizen status.

Figure 3

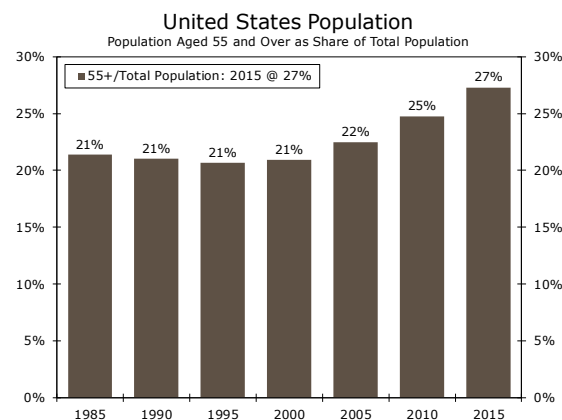
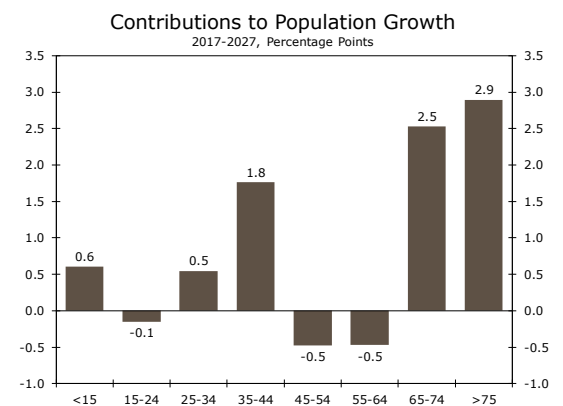


Figure 4



Source: United Nations and Wells Fargo Securities

*The UN projects the American population will grow 7.2% between 2017 and 2027*

<sup>2</sup> The under-25 year old cohort includes only individuals who head a household who are under 25 years old. Dependent children are included in their parents' cohort.

As shown in Figure 5, housing accounted for 33% of total expenditures in the 2017 CES, making it the single biggest spending category. Housing, transportation (15.9%), food (12.9%), personal insurance and pensions (11.3%) and healthcare (8.2%) together accounted for about 80% of consumer expenditures in 2017.

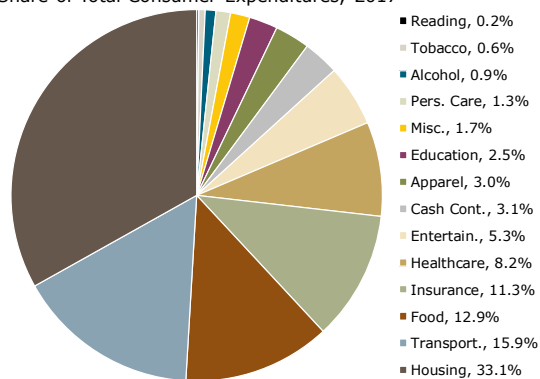
***At 33%, housing was the single biggest spending category in 2017.***

Using the methodology that is explained in more detail in the appendix, we project how spending shares for the 14 spending categories will change between 2017 and 2027. Our analysis finds that healthcare will be the biggest gainer in terms of spending shares over the next 10 years (Figure 6). That is, the proportion of total consumer expenditures represented by healthcare will rise to 10.4% in 2027 from 8.2% in 2017, an increase of 2.2 percentage points. Because older people spend relatively more on healthcare than their younger peers and because the population will be relatively older in 2027 than it was in 2017, this finding should come as little surprise.

But there is another factor that should push up the relative amount of healthcare spending over the next 10 years. That is, younger generations have generally been spending relatively more on healthcare than older generations at similar ages. For example, individuals who were 55-64 years old in 2017 devoted 8.9% of their total expenditures to healthcare. Ten years earlier, individuals who were 55-64 years old at that time devoted only 6.5% of their total spending to healthcare. As noted in the appendix, we assume that these differences in spending patterns will persist in the future.

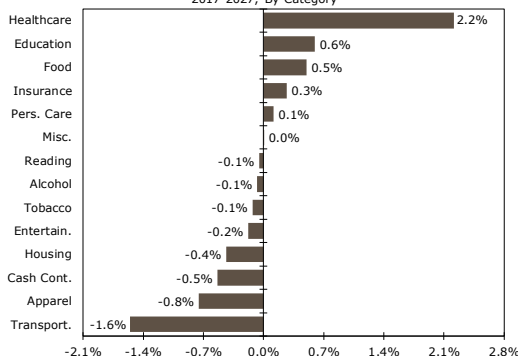
**Figure 5**

Share of Total Consumer Expenditures, 2017



**Figure 6**

Changes in Consumer Expenditures  
 2017-2027, By Category



***Younger generations have spent more on healthcare than older generations did at similar ages.***

**Source: U.S. Department of Labor and Wells Fargo Securities**

Personal spending on education is also a relative winner as its spending share climbs to 3.1% in 2027 from 2.5% in 2017, a gain of 0.6 percentage points. This relative increase in personal educational spending over the next 10 years is a continuation of a trend that has been in place for at least the past 40 years. Over that period, all age cohorts have generally spent a greater proportion on education than similar cohorts did 10 years earlier. The share of expenditures that is devoted to food rose to 13.4% in 2027 from 12.9% in 2017. The proportion of total expenditures that older Americans devote to food-away-from-home has risen over the past decade, which should help to lift food's overall share in the next decade as the population continues to age.

On the other side of the ledger, transportation is the biggest loser in terms of spending shares, falling to 14.4% in 2027 from 15.9% in 2017. This relative decline in transportation expenditures has been ongoing over the past few decades.<sup>3</sup> Part of the decline in the share of transportation expenditures reflects the increasing durability and higher fuel efficiency of new cars over time.<sup>4</sup> In addition, vehicle finance charges are relatively lower today than they were 30 years ago due to the

<sup>3</sup> Transportation accounted for 18.8% of total expenditures in 1987.

<sup>4</sup> According to the U.S. Department of Transportation, the average age of a vehicle in operation rose to 11.6 years in 2016 from 8.4 years in 1995.

According to the [2018 EPA Automotive Trends Report](#), fuel economy is up roughly 13% since 1987.

trend decline in interest rates over that period. But there are demographic factors at play as well that have helped pull down the spending share of transportation. Data from the CES show that younger people tend to devote a larger proportion of their expenditures to transportation than older individuals. Thus, the spending share on transportation has declined as the population has aged.

The share of total expenditures devoted to apparel slips by 0.8 percentage points by 2027, which also continues a trend that has been in place for the past 30 years. We also project that Americans will become less charitable over the next 10 years as their cash contributions will edge down to 2.6% in 2027 from 3.1% of total expenditures in 2017.<sup>5</sup> Housing is also a relative loser, although it will continue to represent the single largest spending component in total consumption expenditures.

### **Conclusion**

Consumer spending has represented roughly two-thirds of overall U.S. GDP over the past few decades, but the items on which Americans spend their money have shifted over time. For example, personal spending on healthcare has risen in importance. Older individuals tend to spend proportionately more on healthcare than younger individuals, and the American population has aged over time. On the other hand, the share of total expenditures that is accounted for by transportation has trended lower over the past three decades.

Using the UN's population projections, we project spending shares in 2027 for 14 broad categories of consumer spending. Our analysis shows that healthcare, education and food will be relative winners because their spending shares will be higher in 2027 than they were in 2017. In short, businesses that cater to these categories of consumer spending should outperform businesses that eschew those categories, everything else equal. On the other hand, transportation, apparel and housing will be relative losers.

***Healthcare, education and food will account for larger shares of total spending in 2027.***

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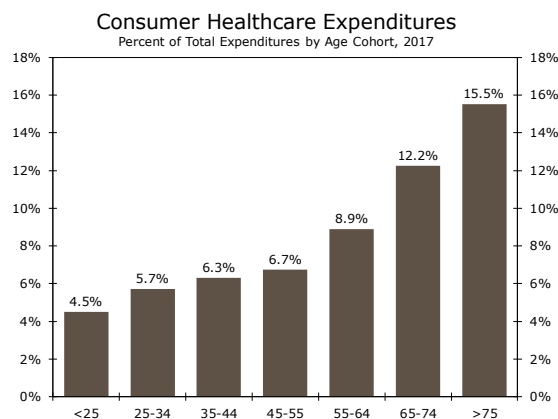
<sup>5</sup> Cash contributions includes cash contributed to persons or organizations outside the consumer unit, including alimony and child support payments; care of students away from home; and contributions to religious, educational, charitable or political organizations.

## Appendix

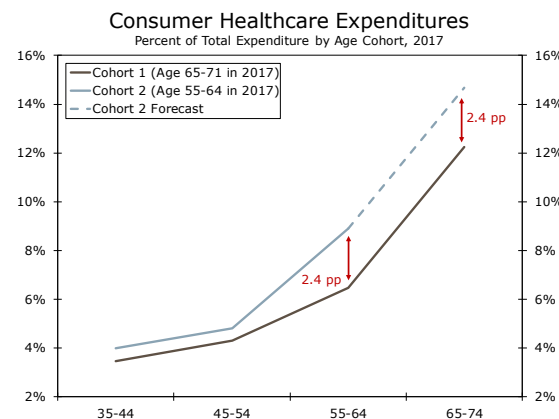
The Consumer Expenditure Survey, which is compiled by the U.S. Department of Labor on an annual basis, provides data on 14 major spending categories for seven age cohorts. To project how much a specific cohort will spend on a specific category in 2027, we follow a two-step process. First, we assume that a specific cohort will spend the same proportion on a specific category in 2027 as the next oldest cohort spent in 2017. We provide an example of the first step in Figure A1.

Healthcare accounted for 8.9% of overall consumer expenditures for the 55-64 year-old cohort and 12.2% for the 65-74 year-old cohort in 2017. Individuals who were 55-64 years of age in 2017 will have moved entirely into the 65-74 year-old cohort in 2027. The UN projects that the 65-74 year-old cohort will account for 13.1% of the U.S. population in 2027, up from 11.1% in 2017. So in the first step of our calculations we assume that 13.1% of the population (the 65-74 year-old cohort) will devote 12.2% of their expenditures (the share of healthcare spending for the 65-74 year-old cohort in 2017) to healthcare in 2027. We make similar calculations for each of the seven cohorts in 2027 for each of the 14 spending categories.

**Figure A1**



**Figure A2**



**Source: U.S. Department of Labor and Wells Fargo Securities**

But we also recognize that individual cohorts do not necessarily need to follow in lockstep the spending patterns of the cohorts who preceded them. Consider the example of healthcare spending that is shown in Figure A2. Individuals in Cohort 1, who were 65-74 years of age in 2017, were 35-44 years old in 1987. In that year, healthcare accounted for 3.4% of Cohort 1's total expenditure. By 2017, when individuals in Cohort 1 reached 65-74 years of age, healthcare had risen to 12.2% of total expenditures.

But Cohort 2 (individuals who were 55-64 years old in 2017) has always spent a higher proportion on healthcare than Cohort 1 at similar stages in their lives. When individuals in Cohort 2 were 35 to 44 years of age in 1997, healthcare accounted for 4.0% of their expenditures, which was 0.6 percentage points higher than Cohort 1's healthcare expenditures when those individuals were of similar age. By the time Cohort 2 reached 55 to 64 years of age in 2017, their healthcare expenditures were 2.4 percentage points higher than Cohort 1 when those individuals were of similar age in 2007. Looking to 2027, we assume that this difference in spending on healthcare between the two cohorts will be maintained. In other words, we look for Cohort 2, who will be 65 to 74 years of age in 2027 to devote 14.6% of their expenditures (12.2% plus 2.4%) to healthcare in 2027, up from the 12.2% that Cohort 1 spent in 2017. We make similar adjustments to all the other spending categories for all the other cohorts.

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