

A powerful force driving the U.S. economy: You

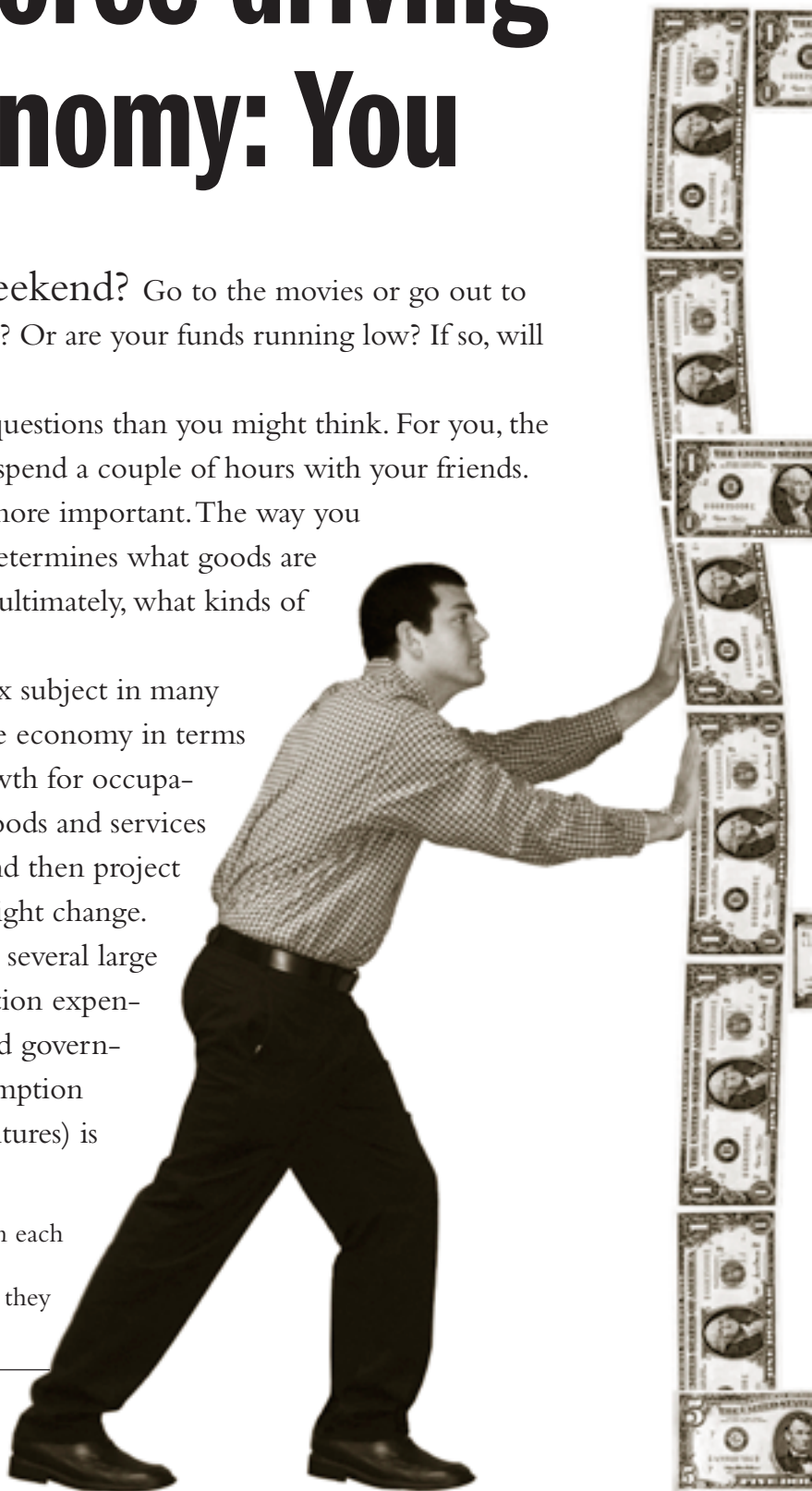
What do you want to do this weekend? Go to the movies or go out to dinner? Buy a new book or a new computer? Or are your funds running low? If so, will you watch TV or surf the 'Net?

More depends on how you answer these questions than you might think. For you, the answers might mean no more than a way to spend a couple of hours with your friends. But for the U.S. economy, no questions are more important. The way you spend your money—consumer spending—determines what goods are produced, what services are performed, and, ultimately, what kinds of jobs people do.

As you know, you can look at any complex subject in many different ways. The *OOQ* usually looks at the economy in terms of particular occupations. But to project growth for occupations, economists need to look at how the goods and services that people buy are related to occupations and then project how demand for those goods and services might change. One way to do this is to divide demand into several large categories. BLS uses four: Personal consumption expenditures, business investment, foreign trade, and government expenditures. Of these, personal consumption expenditures (often called consumer expenditures) is by far the largest category.

Besides determining how much money is spent in each of these categories, economists also determine what particular goods and services were purchased; that is, they

Neale Baxter, formerly of the *OOQ*, adapted this article from "Consumer spending: an engine for U.S. job growth" by Mitra Toossi, an economist in the Office of Occupational Statistics and Employment Projections, BLS, (202) 691-5721. The original article appeared in the November 2002 *Monthly Labor Review* and is available online at www.bls.gov/opub/mlr/2002/11/art2abs.htm.





Decisions you make when you buy something—



whether you are a student with a small allowance
or the latest winner of a big lottery—



are a major force in creating new jobs.



track where the money went. After they do that, economists can then determine which industries supplied those goods and services and what kinds of workers those industries employ. To project employment for occupations, economists must ask additional questions. They must ask how demand for these goods or services will change in the future—that is, where the money will go. Then, they must ask if there will be a change in the way in which goods and services are produced. The answers to these questions reveal the number of jobs consumer expenditures will create in different industries. Finally, analysis of the occupations in each industry enables economists to project how occupations will grow because of consumer expenditures. The accompanying box, “How does BLS determine these statistics?” explains the sources for the data and gives more information about how the occupational projections are made.

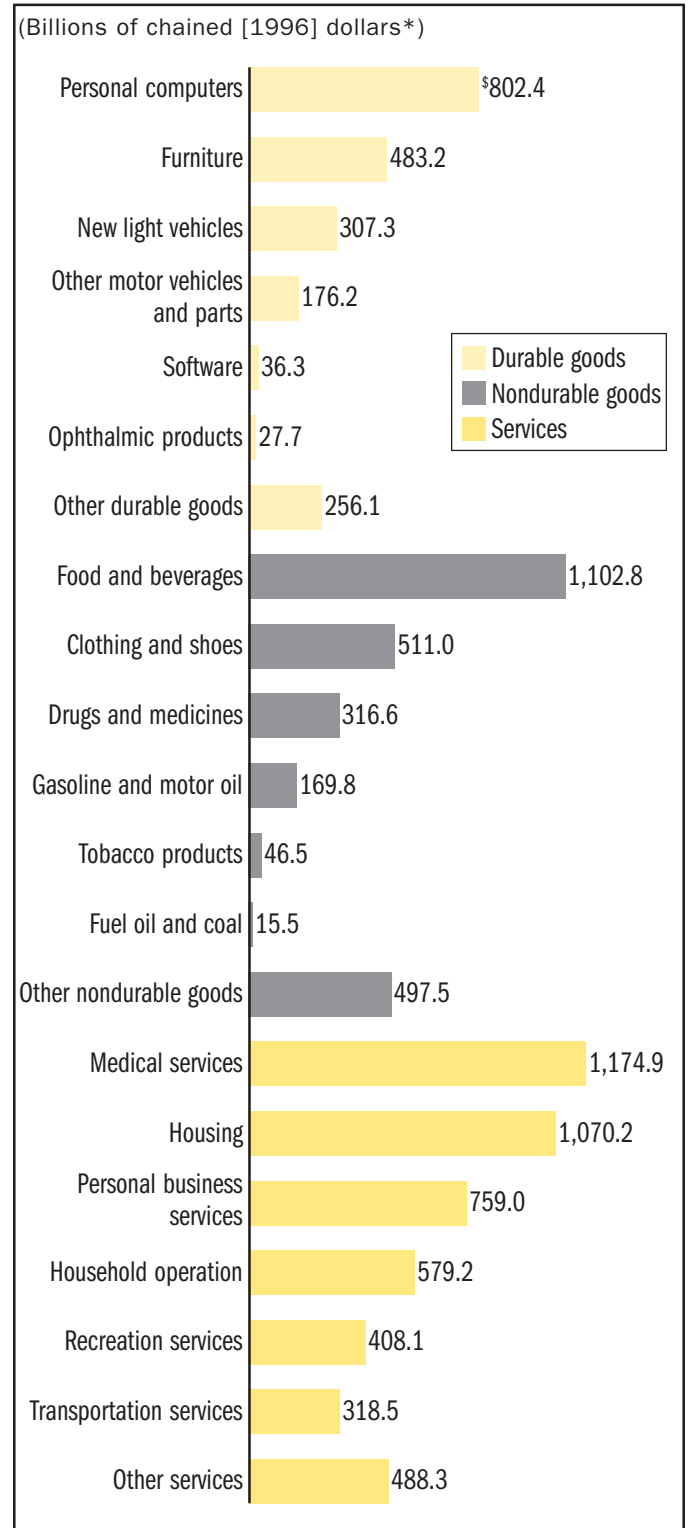
Where the money went

People buy goods and services. Goods include things that are expected to last a long time and things that are used up more quickly. SUVs, computers, and furniture are typical of the things that last a long time, called durable goods. Of the things used up more quickly—nondurable goods—the most obvious category, food and beverages, is also the largest.

The services category includes the money we spend to get the goods to us, such as for transportation, and expenses for running a household or any other task or assistance that consumers buy. Sometimes the service accounts for more money than the actual goods that people buy. For example, in 2000, we spent more than 3 times as much on medical services as we did on drugs and medicines. Chart 1 shows these and other personal consumption expenditures for 2000.

Overall, personal consumption expenditures grew, on average, about 3.4 percent a year in the 20 years before 2000. Some categories grew much more rapidly than others. By far the fastest growth was in personal computers; purchases of these increased more than 50 percent a year between 1990 and 2000. Software purchases also increased sharply, rising more than 40 percent each year in that decade. The greatest increase among nondurable products was in drugs and medicines, for which spending rose 5.7 percent a year. The services category as a whole grew only 3 percent annually over the previous decade, but payments for

CHART 1 Personal consumption expenditures, including imports, 2000



* “Chained” 1996 dollars refers to the chain-weighted method of measuring GDP growth. It involves making two calculations of growth, using the year itself and the preceding year as bases. Chain-weighted GDP growth for a given year is a geometric average of these two growth rates. Chain weighting enables analysts to examine the actual production of goods and services rather than their prices.

automobile leases were up 21.2 percent per year and those for telephone services rose 8.5 percent annually.

Where the money will go

Personal consumption expenditures are projected to increase 3.5 percent a year between 2000 and 2010, as shown in chart 2. Durable goods, with an annual average growth of 5 percent, are projected to be the fastest growing category, but the rate of growth will be somewhat slower than it has been. Spending for personal computers will account for much of this growth, although its rate of growth (22.1 percent) is considerably slower than the frenetic pace of the previous decade. Purchases of software should also continue to rise faster than the average for all categories, increasing 7.4 percent per year.

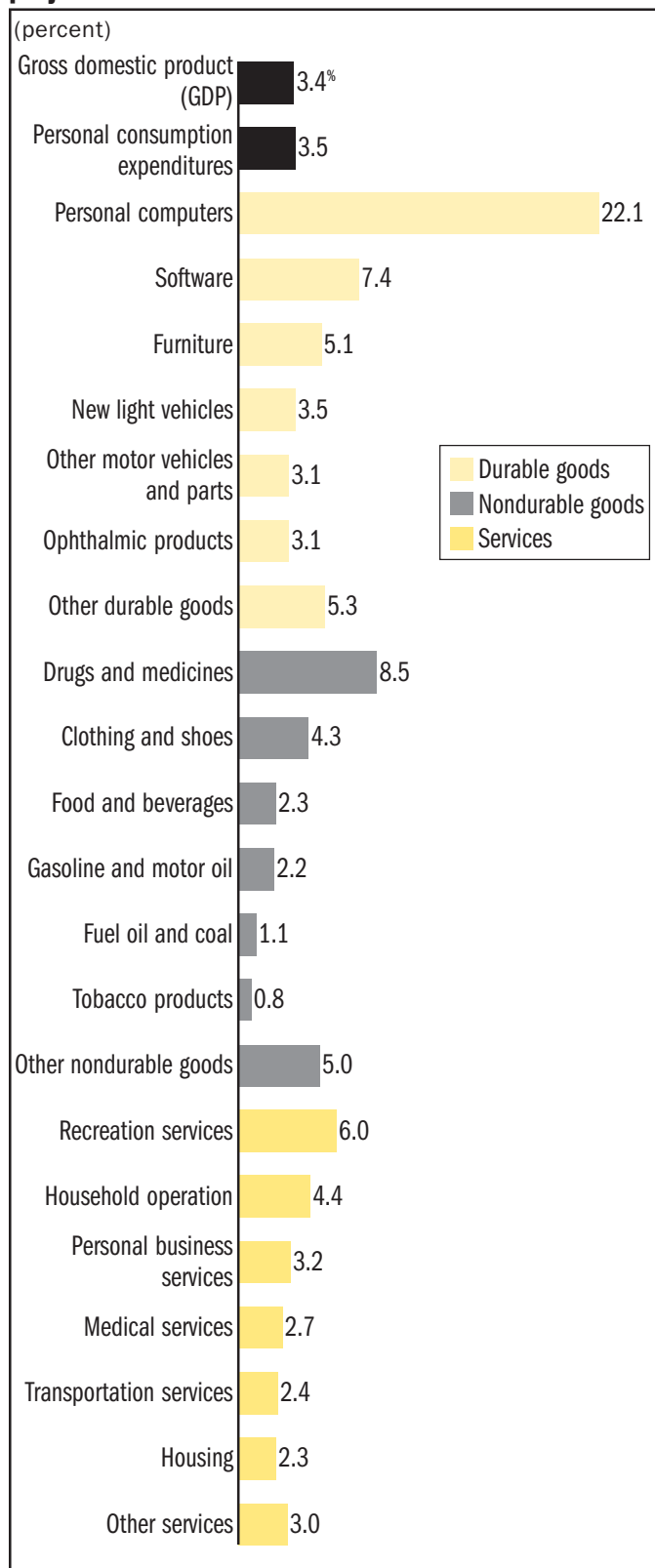
Spending for nondurable goods is expected to increase 3.6 percent a year, which is close to the average for all categories. But this is a change from the previous two decades, when expenditures for these items rose more slowly than the all-category average. Strong demand for drugs and medicines is expected to cause nondurable-goods expenditures to rise 8.5 percent annually, much faster than the average and faster than they rose in the previous 20 years. Purchases of drugs and medicines should go up, in large part, because of increases in the number of people in the age groups that use the most medicine.

Services are projected to grow slightly faster than they did during the past 10 years. But, at 3.1 percent per year, the growth rate still will be somewhat lower than the all-category average. In this category, average annual expenditures for telephone services and recreation services are projected to rise most rapidly, increasing 7.6 percent and 6.0 percent, respectively.

Jobs that consumer expenditures will create in different industries

As mentioned previously, one step in projecting changes in occupational employment is to project changes in industry employment. The industries are grouped in sectors that are similar to the categories used for the purchases, such as goods producing and service producing. This and the next section focus on domestic employment generated by consumer spending, so the data reflect only those goods and services produced in the United States.

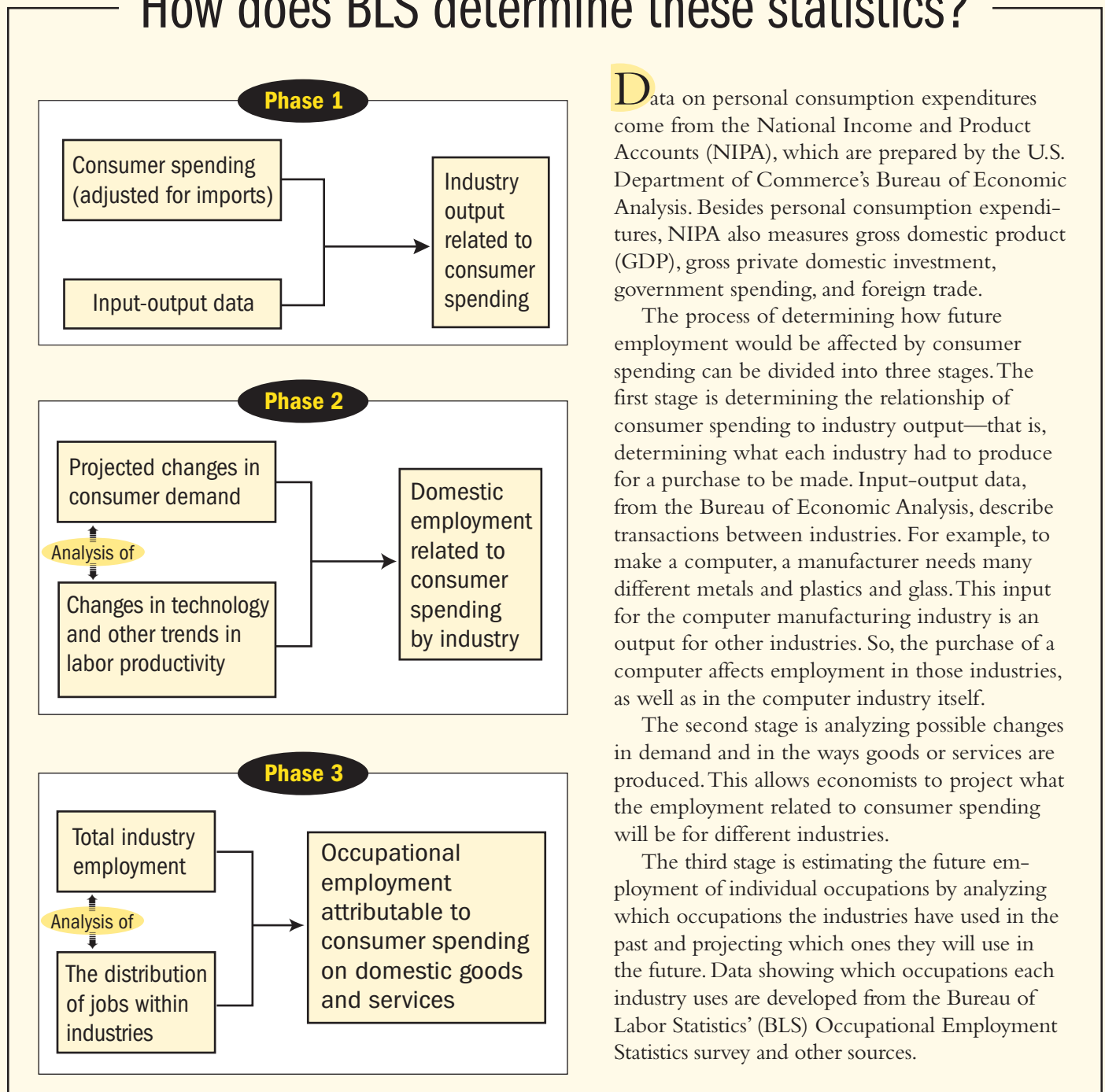
CHART 2 Average annual growth in personal consumption expenditures, including imports, projected 2000-10



Generally, consumer expenditures grow at a faster rate than employment. For example, consumer spending on goods and services produced in the United States increased about 3.3 percent per year between 1990 and 2000, but

the employment generated from this spending grew at 1.8 percent annually. From 2000 to 2010, BLS projects that consumer spending on domestically produced goods will rise even faster than it did in the previous decade, about

How does BLS determine these statistics?



Data on personal consumption expenditures come from the National Income and Product Accounts (NIPA), which are prepared by the U.S. Department of Commerce's Bureau of Economic Analysis. Besides personal consumption expenditures, NIPA also measures gross domestic product (GDP), gross private domestic investment, government spending, and foreign trade.

The process of determining how future employment would be affected by consumer spending can be divided into three stages. The first stage is determining the relationship of consumer spending to industry output—that is, determining what each industry had to produce for a purchase to be made. Input-output data, from the Bureau of Economic Analysis, describe transactions between industries. For example, to make a computer, a manufacturer needs many different metals and plastics and glass. This input for the computer manufacturing industry is an output for other industries. So, the purchase of a computer affects employment in those industries, as well as in the computer industry itself.

The second stage is analyzing possible changes in demand and in the ways goods or services are produced. This allows economists to project what the employment related to consumer spending will be for different industries.

The third stage is estimating the future employment of individual occupations by analyzing which occupations the industries have used in the past and projecting which ones they will use in the future. Data showing which occupations each industry uses are developed from the Bureau of Labor Statistics' (BLS) Occupational Employment Statistics survey and other sources.

3.6 percent per year. But employment resulting from this growth is expected to rise less quickly—1.3 percent a year—because of increases in productivity.

In the goods-producing sector, consumer expenditures are expected to increase an average of 5.2 percent a year between 2000 and 2010, while employment is expected to decrease an average of 4 percent a year. In fact, employment in many goods-producing industries will decline despite an increase in expenditures for their products. One exception is the construction industry, in which employment is expected to grow slightly.

Compared with the goods-producing industries, the service-producing industries are projected to have, on average, slower growth in expenditures (3.2 percent a year) but a greater employment increase (1.5 percent a year). Employment is higher in this sector because productivity cannot increase quickly; workers are needed to provide face-to-face services that consumers buy. In several industries in the services-producing sector, such as hospitals, education, and retail trade, consumer expenditures generate almost all of the employment currently and will account for all of the growth in those industries in the future.

More than three-fourths of the projected consumer-spending related job growth in the service sector is concentrated in three subgroups: Business services, health services, and social services. The business services sector includes services such as computer and data processing, personnel supply, advertising, services to buildings, and miscellaneous equipment rental and leasing. Although many of these services are not purchased by consumers directly, they are used to make many of the products individuals buy. Demand for cars, for example, triggers employment in advertising firms, temporary staffing agencies, and numerous other related services. The health services sector, which has more direct connection to consumers, includes hospitals, offices of health practitioners, and healthcare services. Social services include daycare and residential care. Increased demand for childcare services is expected to fuel some of the increase for these services, while increases in the number of older people will contribute to growth in both social services and health services.

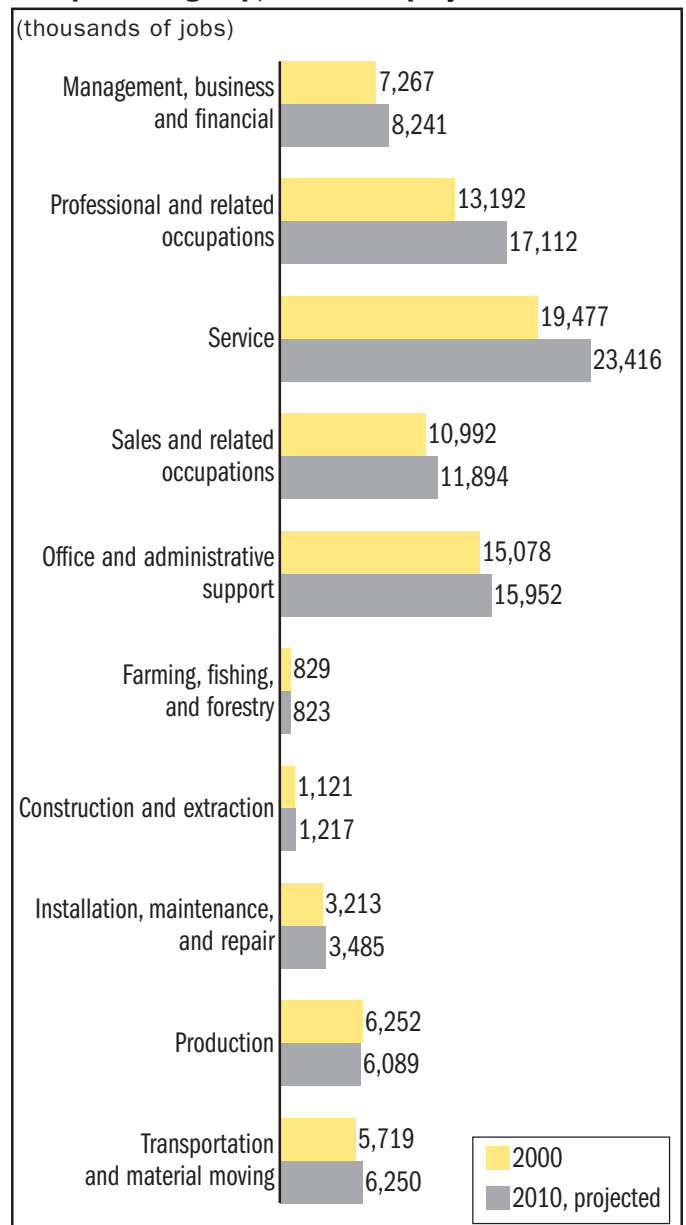
How occupations will grow

Overall, about 61 percent of all jobs in 2010 are expected to be the result of consumer expenditures. Consumer

spending creates jobs in all occupations to some extent, whereas other components of GDP, such as investment, have a more restricted effect on occupations.

For occupations, the classification system used differs from that used for industries. The occupational system groups all occupations into 10 categories based on job duties. Chart 3 shows the 2000 consumer-related employment in these occupational groups and the projected

CHART 3 Consumer-related employment by major occupational group, 2000 and projected 2010



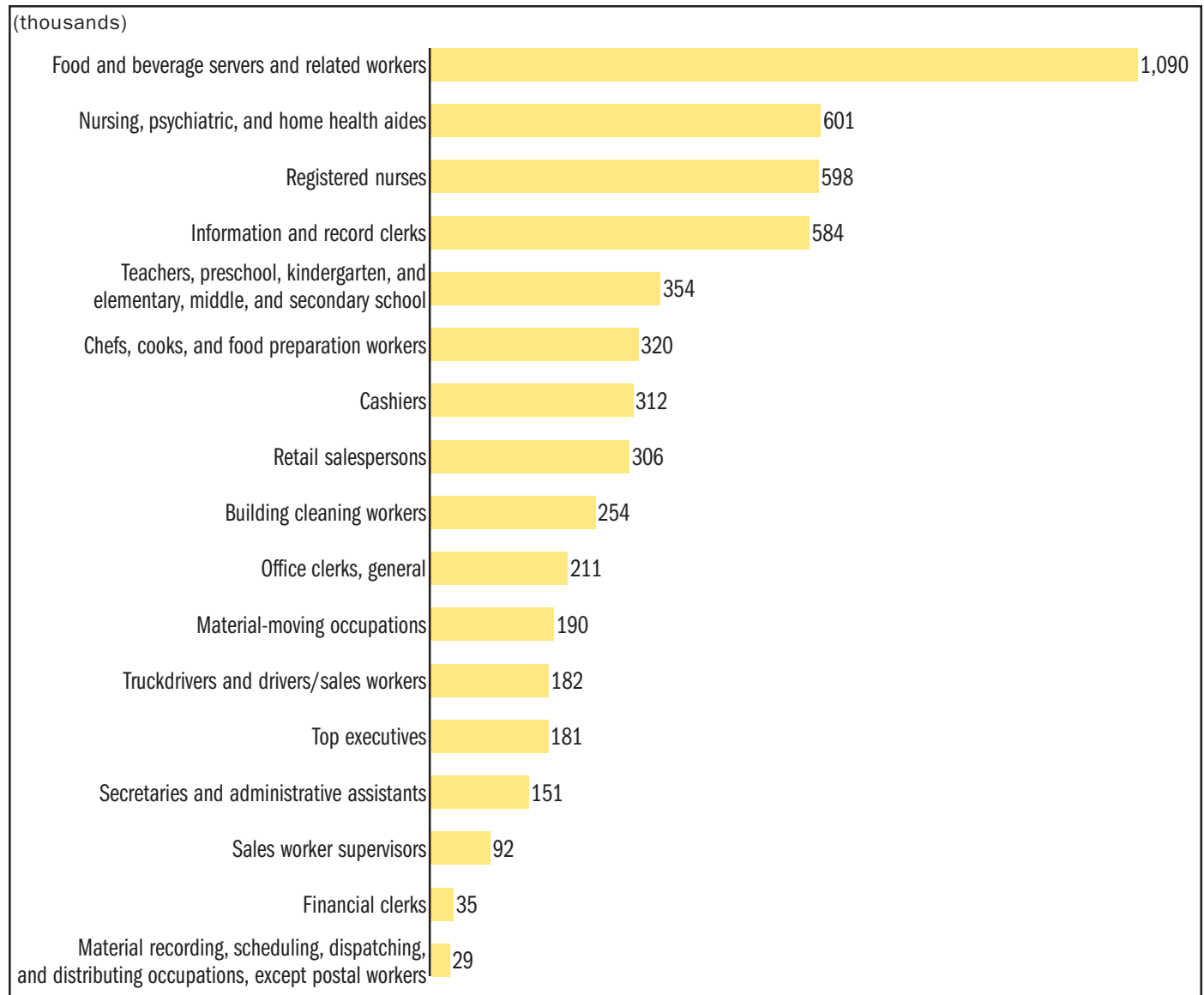
consumer-related employment for 2010.

Between 2000 and 2010, just two major occupational groups—professional and related occupations and service occupations—are projected to account for almost 70 percent of the new jobs due to consumer-related employment. Although these are already the largest occupational groups, with slightly more than 39 percent of all consumer-related employment, they are projected to account for almost 43 percent of all consumer-related jobs by 2010. While all occupations will have an average

annual rate of change in employment related to consumption expenditure of 1.3 percent, as previously noted, professional and related occupations will have an average increase of 2.6 percent a year, and service occupations are projected to average 1.9-percent annual growth. No other group will grow as fast as the average, and some will actually decline in size because of gains in productivity and despite increased consumer spending because of gains in productivity.

Although they aren't projected to grow as fast as jobs

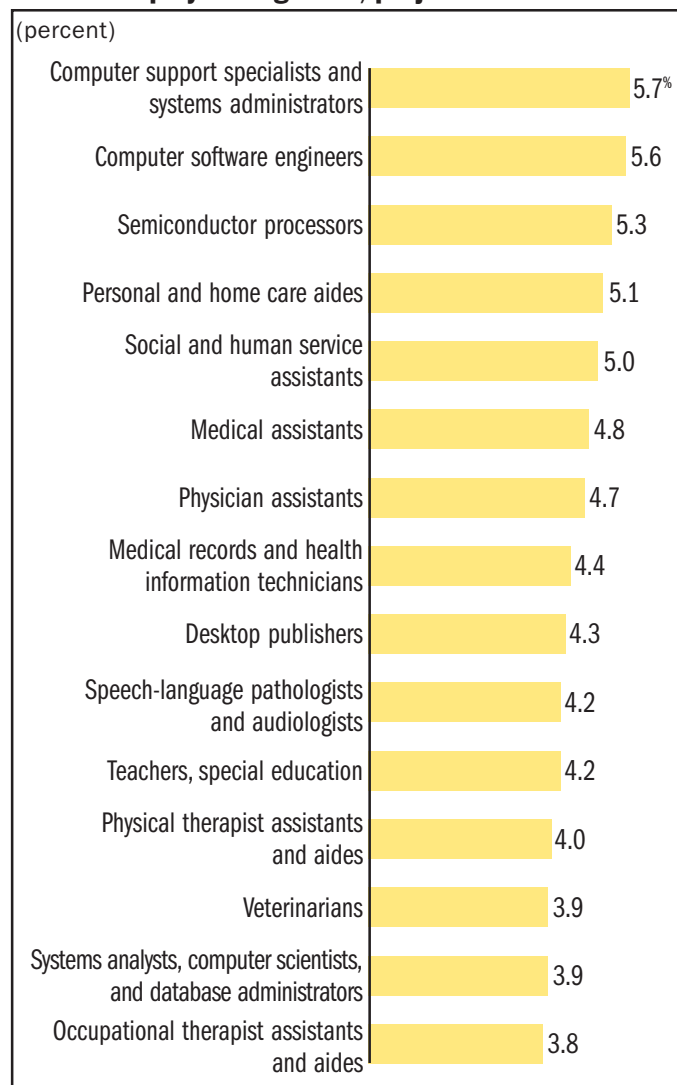
CHART 4 New jobs in occupations with the largest consumer-related employment in 2000, by number of new jobs projected in 2000-10



in professional and related occupations, sales and service jobs will continue to be created by consumer spending. In 2010, almost 80 percent of all jobs in service and 78 percent of jobs in sales will be due to consumer spending, according to projections.

The major occupational groups include almost 350 detailed occupations for which BLS projects employment. People usually want to know which of these occupations will grow fastest and which will add the most new jobs. Charts 4 and 5 show which occupations have the most job growth related to consumer spending.

CHART 5 Occupations with fastest consumer-related employment growth, projected 2000-10



Mirroring the increased spending on computers, the three occupations with the fastest projected consumer-related growth are all computer related: Computer support specialist and systems administrator, computer software engineer, and semiconductor processor, an occupation with relatively few workers. Growth in these occupations reflects continued expansion of computer use by consumers. Consumer demand for health care will lead to fast growth for several medical occupations, including medical assistants, physician assistants, medical records and health information technicians, speech-language pathologists and audiologists, and occupational therapist assistants and aides.

Consumer demand is expected to create even more opportunities in occupations with large employment numbers. Two examples are food and beverage server and nursing, psychiatric, and home health aide. Because of consumer demand, these occupations are projected to add over 300,000 more new jobs than will all the fast-growing occupations listed in chart 5 combined. The occupations adding the most jobs come from many different fields, including medicine, education, and administrative support. They also represent a broad spectrum of training and education requirements. Some of these positions, such as food and beverage server and building cleaning workers, are available to people with neither job experience nor special training; others, such as teacher and registered nurse, require at least 4 years of education after high school.

It's not just a purchase, it's a job

Consumer spending is the major driving force for the economy. Whenever you buy something or use a service, you create demand that eventually leads to job growth in particular occupations. Put all the decisions people make together, and we end up with a robust, varied economy that not only can satisfy many different wants and needs but also offers a wide range of occupations for people in the labor force.

No matter what you and the millions of other Americans decide to do this weekend, the economy will be watching. And as you and other people switch from one kind of purchase to another, the economy will change, creating growth in some occupations and making others less important.

By the way, whether you go to the movies or not, enjoy your weekend.

