

## Social Scientists and Related Occupations

### Economists and Market and Survey Researchers

(O\*NET 19-3011.00, 19-3021.00, 19-3022.00)

#### Significant Points

- Demand for qualified market and survey researchers should be strong.
- Candidates who hold an advanced degree will have the best employment prospects and advancement opportunities.

#### Nature of the Work

**Economists.** Economists study how society distributes scarce resources such as land, labor, raw materials, and machinery to produce goods and services. They conduct research, collect and analyze data, monitor economic trends, and develop forecasts. They research issues such as energy costs, inflation, interest rates, imports, or employment levels.

Most economists are concerned with practical applications of economic policy. They use their understanding of economic relationships to advise businesses and other organizations, including insurance companies, banks, securities firms, industry and trade associations, labor unions, and government agencies. Economists use mathematical models to help predict answers to questions such as the nature and length of business cycles, the effects of a specific rate of inflation on the economy, or the effects of tax legislation on unemployment levels.

Economists devise methods and procedures for obtaining the data they need. For example, sampling techniques may be used to conduct a survey, and various mathematical modeling techniques may be used to develop forecasts. Preparing reports, including tables and charts, on research results is an important part of an economist's job. Presenting economic and statistical concepts in a clear and meaningful way is particularly important for economists whose research is directed toward making policies for an organization.

Economists who work for government agencies may assess economic conditions in the United States or abroad, in order to estimate the economic effects of specific changes in legislation or public policy. They may study areas such as how the dollar's fluctuation against foreign currencies affects import and export levels. The majority of government economists work in the area of agriculture, labor, or quantitative analysis; however, economists work in almost every area of government. For example, economists in the U.S. Department of Commerce study production, distribution, and consumption of commodities produced overseas, while economists employed with the U.S. Bureau of Labor Statistics analyze data on the domestic economy such as prices, wages, employment, productivity, and safety and health. An economist working in State or local government might analyze data on the growth of school-aged populations, prison growth, and employment and unemployment rates, in order to project future spending needs.

**Market Research Analysts.** Market, or marketing, research analysts are concerned with the potential sales of a product or service. They analyze statistical data on past sales to predict future sales. They gather data on competitors and analyze prices, sales, and methods of marketing and distribution. Like economists, market research

analysts devise methods and procedures for obtaining the data they need. They often design telephone, personal, or mail interview surveys to assess consumer preferences. Trained interviewers, under the market research analyst's direction, usually conduct the surveys.

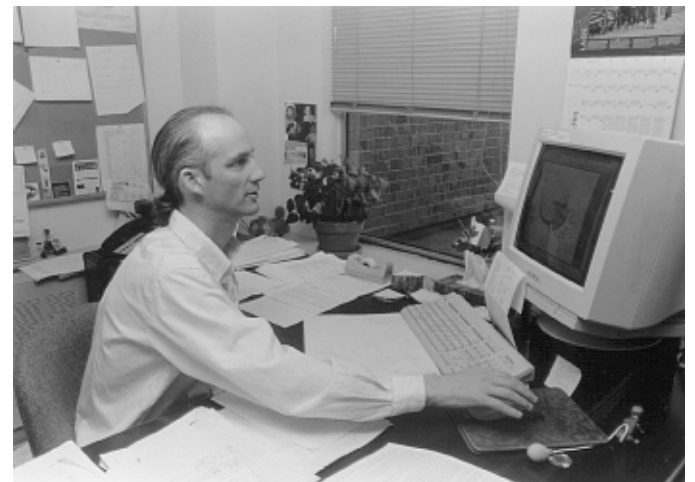
After compiling the data, market research analysts evaluate it and make recommendations to their client or employer based upon their findings. They provide a company's management with information needed to make decisions on the promotion, distribution, design, and pricing of products or services. The information may also be used to determine the advisability of adding new lines of merchandise, opening new branches, or otherwise diversifying the company's operations. Analysts may conduct opinion research to determine public attitudes on various issues, which may help political or business leaders and others assess public support for their electoral prospects or advertising policies.

**Survey Researchers.** Survey researchers design and conduct surveys. They use surveys to collect information that is used for research, making fiscal or policy decisions, and measuring policy effectiveness, for example. As with market research analysts, survey researchers may use a variety of mediums to conduct surveys, such as the Internet, personal or telephone interviews, or mail questionnaires. They also may supervise interviewers who conduct surveys in person or over the telephone.

Survey researchers design surveys in many different formats, depending upon the scope of research and method of collection. Interview surveys, for example, are common because they can increase survey participation rates. Survey researchers may consult with economists, statisticians, market research analysts, or other data users in order to design surveys. They also may present survey results to clients.

#### Working Conditions

Economists and market and survey researchers have structured work schedules. They often work alone, writing reports, preparing statistical charts, and using computers, but they also may be an integral part of a research team. Most work under pressure of deadlines and tight schedules, which may require overtime. Their routine



*Preparing reports, including tables and charts, on research results is an important part of the job for economists and market and survey researchers.*

may be interrupted by special requests for data, as well as by the need to attend meetings or conferences. Frequent travel may be necessary.

### Employment

Economists and market and survey researchers held about 134,000 jobs in 2000. Private industry provided about 9 out of 10 jobs for salaried workers, particularly economic and marketing research firms, management consulting firms, banks, securities and commodities brokers, and computer and data processing companies. A wide range of government agencies provided the remaining jobs, primarily for economists. The U.S. Departments of Labor, Agriculture, and Commerce are the largest Federal employers of economists. A number of economists and market and survey researchers combine a full-time job in government, academia, or business with part-time or consulting work in another setting.

Employment of economists and market and survey researchers is concentrated in large cities. Some work abroad for companies with major international operations, for U.S. Government agencies, and for international organizations like the World Bank and the United Nations.

Besides the jobs described above, many economists and market and survey researchers held faculty positions in colleges and universities. Economics and marketing faculties have flexible work schedules, and may divide their time among teaching, research, consulting, and administration. (See the statement on teachers—postsecondary elsewhere in the *Handbook*.)

### Training, Other Qualifications, and Advancement

Graduate education is required for many private sector economist and market and survey research jobs, and for advancement to more responsible positions. Economics includes many specialties at the graduate level, such as advanced economic theory, econometrics, international economics, and labor economics. Students should select graduate schools strong in specialties in which they are interested. Undergraduate economics majors can choose from a variety of courses, ranging from microeconomics, macroeconomics, and econometrics, to more philosophical courses, such as the history of economic thought.

In the Federal Government, candidates for entry-level economist positions must have a bachelor's degree with a minimum of 21 semester hours of economics and 3 hours of statistics, accounting, or calculus.

Market and survey researchers may earn advanced degrees in economics, business administration, marketing, statistics, or some closely related discipline. Some schools help graduate students find internships or part-time employment in government agencies, economic consulting firms, financial institutions, or marketing research firms prior to graduation.

In addition to courses in business, marketing, and consumer behavior, marketing majors should take other liberal arts and social science courses, including economics, psychology, English, and sociology. Because of the importance of quantitative skills to economists and market and survey researchers, courses in mathematics, statistics, econometrics, sampling theory and survey design, and computer science are extremely helpful.

Whether working in government, industry, research organizations, marketing, or consulting firms, economists and market and survey researchers with bachelor degrees usually qualify for most entry-level positions as a research assistant, administrative or management trainee, marketing interviewer, or any of a number of professional sales jobs. A master's degree usually is required to qualify for more responsible research and administrative positions. Many businesses, research and consulting firms, and government

agencies seek individuals who have strong computer and quantitative skills and can perform complex research. A Ph.D. is necessary for top economist or marketing positions in many organizations. Many corporation and government executives have a strong background in economics or marketing.

A master's degree is usually the minimum requirement for a job as an instructor in junior and community colleges. In most colleges and universities, however, a Ph.D. is necessary for appointment as an instructor. A Ph.D. and extensive publications in academic journals are required for a professorship, tenure, and promotion.

Aspiring economists and market and survey researchers should gain experience gathering and analyzing data, conducting interviews or surveys, and writing reports on their findings while in college. This experience can prove invaluable later in obtaining a full-time position in the field, since much of their work, in the beginning, may center on these duties. With experience, economists and market and survey researchers eventually are assigned their own research projects.

Those considering careers as economists or market and survey researchers should be able to pay attention to details because much time is spent on precise data analysis. Patience and persistence are necessary qualities since economists and market and survey researchers must spend long hours on independent study and problem solving. At the same time, they must work well with others, especially market and survey researchers, who often oversee interviews for a wide variety of individuals. Economists and market and survey researchers must be able to present their findings, both orally and in writing, in a clear, concise manner.

### Job Outlook

Employment of economists and market and survey researchers is expected to grow faster than the average for all occupations through 2010. Many job openings are likely to result from the need to replace experienced workers who transfer to other occupations, retire, or leave the labor force for other reasons. Employment growth of economists is expected to be as fast as average over the projection period, while growth for market research analysts and survey researchers is expected to be faster than average.

Opportunities for economists should be best in private industry, especially in research, testing, and consulting firms, as more companies contract out for economic research services. The growing complexity of the global economy, competition, and increased reliance on quantitative methods for analyzing the current value of future funds, business trends, sales, and purchasing should spur demand for economists. The growing need for economic analyses in virtually every industry should result in additional jobs for economists. Employment of economists in the Federal Government should decline more slowly than other occupations in the Federal workforce. Slow employment growth is expected among economists in State and local government.

Candidates who meet State certification requirements may become high school economics teachers. The demand for secondary school economics teachers is expected to grow, as economics becomes an increasingly important and popular course. (See the statement on teachers—preschool, kindergarten, elementary, middle, and secondary elsewhere in the *Handbook*.)

Demand for qualified market research analysts should be healthy because of an increasingly competitive economy. Marketing research provides organizations valuable feedback from purchasers, allowing companies to evaluate consumer satisfaction and more effectively plan for the future. As companies seek to expand their market and consumers become better informed, the need for marketing professionals will increase.

Opportunities for market research analysts with graduate degrees should be good in a wide range of employment settings, particularly in marketing research firms, as companies find it more profitable to contract out for marketing research services rather than support their own marketing department. Other organizations, including financial services organizations, healthcare institutions, advertising firms, manufacturing firms producing consumer goods, and insurance companies may offer job opportunities for market research analysts.

Opportunities for survey researchers should be strong as the demand for market and opinion research increase. Employment opportunities will be especially favorable in commercial market and opinion research as an increasingly competitive economy requires businesses to more effectively and efficiently allocate advertising funds.

An advanced degree coupled with a strong background in economic theory, mathematics, statistics, and econometrics provides the basis for acquiring any specialty within the economics and market and survey research field. Those skilled in quantitative techniques and their application to economic modeling and forecasting, coupled with good communications skills, should have the best job opportunities.

Bachelor's degree holders may face competition for the limited number of positions for which they qualify. They will qualify for a number of other positions, however, where they can take advantage of their economic knowledge in conducting research, developing surveys, or analyzing data. Many graduates with bachelor's degrees will find good jobs in industry and business as management or sales trainees, or administrative assistants. Bachelor's degree holders with good quantitative skills and a strong background in mathematics, statistics, survey design, and computer science also may be hired by private firms as research assistants or interviewers.

Ph.D. degree holders in economics and marketing should have good opportunities in most areas such as industry and consulting firms. However, Ph.D. holders are likely to face keen competition for tenured teaching positions in colleges and universities.

### Earnings

Median annual earnings of economists were \$64,830 in 2000. The middle 50 percent earned between \$47,370 and \$87,890. The lowest 10 percent earned less than \$35,690, and the highest 10 percent earned more than \$114,580.

The Federal Government recognizes education and experience in certifying applicants for entry-level positions. The entrance salary for economists having a bachelor's degree was about \$21,900 a year in 2001; however, those with superior academic records could begin at \$27,200. Those having a master's degree could qualify for positions at an annual salary of \$33,300. Those with a Ph.D. could begin at \$40,200, while some individuals with experience and an advanced degree could start at \$48,200. Starting salaries were slightly higher in selected areas where the prevailing local pay was higher. The average annual salary for economists employed by the Federal Government was \$74,090 a year in 2001.

Median annual earnings of market research analysts in 2000 were \$51,190. The middle 50 percent earned between \$37,030 and \$71,660. The lowest 10 percent earned less than \$27,570, and the highest 10 percent earned more than \$96,360. Median annual earnings in the industries employing the largest numbers of market research analysts in 2000 were as follows:

|   |          |
|---|----------|
| Computer and data processing services ..... | \$61,320 |
| Management and public relations .....       | 44,580   |
| Research and testing services .....         | 43,660   |

Median annual earnings of survey researchers in 2000 were \$26,200. The middle 50 percent earned between \$17,330 and \$47,820. The lowest 10 percent earned less than \$15,050, and the highest 10 percent earned more than \$71,790. Median annual earnings of survey researchers in 2000 were \$52,470 in computer and data processing services and \$18,780 in research and testing services.

### Related Occupations

Economists are concerned with understanding and interpreting financial matters, among other subjects. Other jobs in this area include actuaries; budget analysts; financial analysts and personal financial advisors; financial managers; insurance underwriters; loan counselors and officers; and purchasing managers, buyers, and purchasing agents.

Market research analysts do research to find out how well the market receives products or services. This may include planning, implementation, and analysis of surveys to determine people's needs and preferences. Other jobs using these skills include psychologists, sociologists, and urban and regional planners.

### Sources of Additional Information

For information on careers in business economics, contact:

► National Association for Business Economics, 1233 20th St. NW., Suite 505, Washington, DC 20036. Internet: <http://www.nabe.com>

For information about careers and salaries in market and survey research, contact:

► Marketing Research Association, 1344 Silas Deane Hwy., Suite 306, Rocky Hill, CT 06067-0230. Internet: <http://www.mra-net.org>

► Council of American Survey Research Organizations, 3 Upper Devon, Port Jefferson, NY 11777. Internet: <http://www.casro.org>

Information on obtaining a position as an economist with the Federal Government is available from the Office of Personnel Management (OPM) through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; Federal Relay Service: (800) 877-8339. The first number is not tollfree, and charges may result. Information also is available from the OPM Internet site:

<http://www.usajobs.opm.gov>.

## Psychologists

(O\*NET 19-3031.01, 19-3031.02, 19-3031.03, 19-3032.00)

### Significant Points

- More than 4 out of 10 psychologists are self-employed, about 6 times the average for professional workers.
- A doctoral degree usually is required for employment as a licensed clinical or counseling psychologist.
- Opportunities for employment in psychology for those with only a bachelor's degree are extremely limited.

### Nature of the Work

Psychologists study the human mind and human behavior. Research psychologists investigate the physical, cognitive, emotional, or social aspects of human behavior. Psychologists in applied fields provide mental health care in hospitals, clinics, schools, or private settings.

Like other social scientists, psychologists formulate hypotheses and collect data to test their validity. Research methods vary depending on the topic under study. Psychologists sometimes gather information through controlled laboratory experiments or by administering