

# Management and Business and Financial Operations Occupations

## Accountants and Auditors

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### Significant Points

- Most jobs require at least a bachelor's degree in accounting or a related field.
- Jobseekers who obtain professional recognition through certification or licensure, a master's degree, proficiency in accounting and auditing computer software, or specialized expertise will have an advantage in the job market.
- Competition will remain keen for the most prestigious jobs in major accounting and business firms.

### Nature of the Work

Accountants and auditors help to ensure that the Nation's firms are run more efficiently, its public records kept more accurately, and its taxes paid properly and on time. They perform these vital functions by offering an increasingly wide array of business and accounting services to their clients. These services include public, management, and government accounting, as well as internal auditing. However, accountants and auditors are broadening the services they offer to include budget analysis, financial and investment planning, information technology consulting, and limited legal services. Beyond the fundamental tasks of the occupation—preparing, analyzing, and verifying financial documents in order to provide information to clients—many accountants now are required to possess a wide range of knowledge and skills.

Specific job duties vary widely among the four major fields of accounting. *Public accountants* perform a broad range of accounting, auditing, tax, and consulting activities for their clients, who may be corporations, governments, nonprofit organizations, or individuals. For example, some public accountants concentrate on tax matters, such as advising companies of the tax advantages and disadvantages of certain business decisions and preparing individual income tax returns. Others are consultants who offer advice in areas such as compensation or employee healthcare benefits, the design of accounting and data-processing systems, and the selection of controls to safeguard assets. Some specialize in forensic accounting—investigating and interpreting bankruptcies and other complex financial transactions. Still others audit clients' financial statements and report to investors and authorities that the statements have been correctly prepared and reported. Public accountants, many of whom are Certified Public Accountants (CPAs), generally have their own businesses or work for public accounting firms.

*Management accountants*—also called industrial, corporate, or private accountants—record and analyze the financial information of the companies for which they work. Other responsibilities include budgeting, performance evaluation, cost management, and asset management. Usually, management accountants are part of executive teams involved in strategic planning or new-product development. They analyze and interpret the financial information that corporate executives need to make sound business decisions.

They also prepare financial reports for non-management groups, including stockholders, creditors, regulatory agencies, and tax authorities. Within accounting departments, they may work in various areas including financial analysis, planning and budgeting, and cost accounting.

Many persons with an accounting background work in the public sector. *Government accountants and auditors* maintain and examine the records of government agencies and audit private businesses and individuals whose activities are subject to government regulations or taxation. Accountants employed by Federal, State, and local governments guarantee that revenues are received and expenditures are made in accordance with laws and regulations. Those who are employed by the Federal Government may work as Internal Revenue Service agents or in financial management, financial institution examination, or budget analysis and administration.

Internal auditing is an increasingly important area of accounting and auditing. *Internal auditors* verify the accuracy of their organization's records and check for mismanagement, waste, or fraud. Specifically, they examine and evaluate their firms' financial and information systems, management procedures, and internal controls to ensure that records are accurate and controls are adequate to protect against fraud and waste. They also review company operations—evaluating their efficiency, effectiveness, and compliance with corporate policies and procedures, laws, and government regulations. There are many types of highly specialized auditors, such as electronic data processing, environmental, engineering, legal, insurance premium, bank, and healthcare auditors. As computer systems make information more timely, internal auditors help managers to base their decisions on actual data, rather than personal observation. Internal auditors also may recommend controls for their organization's computer system to ensure the reliability of the system and the integrity of the data.

Computers are rapidly changing the nature of the work for most accountants and auditors. With the aid of special software packages, accountants summarize transactions in standard formats for financial records and organize data in special formats for financial



Accountants and auditors prepare, analyze, and verify financial information for individuals and businesses.

analysis. These accounting packages greatly reduce the amount of tedious manual work associated with data management and recordkeeping. Personal and laptop computers enable accountants and auditors to be more mobile and to use their clients' computer systems to extract information from large mainframe computers. As a result, a growing number of accountants and auditors have extensive computer skills and specialize in correcting problems with software or in developing software to meet unique data management and analytical needs. Accountants also are beginning to perform more technical duties, such as implementing, controlling, and auditing systems and networks, and developing technology plans and budgets.

Accountants also are increasingly assuming the role of a personal financial advisor. They not only provide clients with accounting and tax help, but also help them develop a personal budget, manage assets and investments, plan for retirement, and recognize and reduce exposure to risks. This role is a response to demands by clients for one trustworthy individual or firm to meet all of their financial needs. (See the *Handbook* statement on financial analysts and personal financial advisors.)

### Working Conditions

Most accountants and auditors work in a typical office setting. Self-employed accountants may be able to do part of their work at home. Accountants and auditors employed by public accounting firms and government agencies may travel frequently to perform audits at branches of their firm, clients' places of business, or government facilities.

Most accountants and auditors generally work a standard 40-hour week, but many work longer hours, particularly if they are self-employed and have numerous clients. Tax specialists often work long hours during the tax season.

### Employment

Accountants and auditors held about 976,000 jobs in 2000. They worked throughout private industry and government, but almost 1 out of 4 salaried accountants worked for accounting, auditing, and bookkeeping firms. Approximately 3 out of 25 accountants or auditors were self-employed.

Many accountants and auditors are unlicensed management accountants, internal auditors, or government accountants and auditors; however, a large number are licensed Certified Public Accountants. Most accountants and auditors work in urban areas, where public accounting firms and central or regional offices of businesses are concentrated.

Some individuals with backgrounds in accounting and auditing are full-time college and university faculty; others teach part time while working as self-employed accountants or as salaried accountants for private industry or government. (See the *Handbook* statement on teachers—postsecondary.)

### Training, Other Qualifications, and Advancement

Most accountant and internal auditor positions require at least a bachelor's degree in accounting or a related field. Beginning accounting and auditing positions in the Federal Government, for example, usually require four years of college (including 24 semester hours in accounting or auditing) or an equivalent combination of education and experience. Some employers prefer applicants with a master's degree in accounting or with a master's degree in business administration with a concentration in accounting.

Previous experience in accounting or auditing can help an applicant get a job. Many colleges offer students an opportunity to gain experience through summer or part-time internship programs conducted by public accounting or business firms. In addition,

practical knowledge of computers and their applications in accounting and internal auditing is a great asset for jobseekers in the accounting field.

Professional recognition through certification or licensure provides a distinct advantage in the job market. All CPAs must have a certificate, and any partners in their firm must have licenses issued by a State Board of Accountancy. The vast majority of States require CPA candidates to be college graduates, but a few States substitute a number of years of public accounting experience for a college degree. Based on recommendations made by the American Institute of Certified Public Accountants, 38 States currently require CPA candidates to complete 150 semester hours of college coursework—an additional 30 hours beyond the usual 4-year bachelor's degree. Most States have adopted similar legislation that will become effective in the future. Many schools have altered their curricula accordingly, and prospective accounting majors should carefully research accounting curricula and the requirements of any States in which they hope to become licensed.

All States use the four-part Uniform CPA Examination prepared by the American Institute of Certified Public Accountants (AICPA). The 2-day CPA examination is rigorous, and only about one-quarter of those who take it each year pass every part they attempt. Candidates are not required to pass all four parts at once, but most States require candidates to pass at least two parts for partial credit and to complete all four sections within a certain period. Most States also require applicants for a CPA certificate to have some accounting experience.

The AICPA also offers members with valid CPA certificates the option to receive the Accredited in Business Valuation (ABV), Certified Information Technology Professional (CITP), or Personal Financial Specialist (PFS) designations. The addition of these designations to the CPA distinguishes those accountants with a certain level of expertise in the nontraditional areas of business valuation, technology, or personal financial planning, in which accountants are practicing more frequently. The ABV designation requires a written exam, as well as completion of a minimum of 10 business valuation projects that demonstrate a candidate's experience and competence. The CITP requires payment of a fee, a written statement of intent, and the achievement of a set number of points awarded for business experience and education. Those who do not meet the required number of points may substitute a written exam. Candidates for the PFS designation also must achieve a certain level of points, based on experience and education, and must pass a written exam and submit references, as well.

Nearly all States require CPAs and other public accountants to complete a certain number of hours of continuing professional education before their licenses can be renewed. The professional associations representing accountants sponsor numerous courses, seminars, group study programs, and other forms of continuing education.

Accountants and auditors also can seek to obtain other forms of credentials from professional societies on a voluntary basis. Voluntary certification can attest to professional competence in a specialized field of accounting and auditing. It also can certify that a recognized level of professional competence has been achieved by accountants and auditors who acquired some skills on the job, without the formal education or public accounting work experience needed to meet the rigorous standards required to take the CPA examination.

The Institute of Management Accountants (IMA) confers the Certified Management Accountant (CMA) designation upon applicants who complete a bachelor's degree or attain a minimum score on specified graduate school entrance exams. Applicants also must pass a four-part examination, agree to meet continuing education

requirements, comply with standards of professional conduct, and have worked at least 2 years in management accounting. The CMA program is administered by the Institute of Certified Management Accountants, an affiliate of the IMA.

Graduates from accredited colleges and universities who have worked for 2 years as internal auditors and have passed a four-part examination may earn the Certified Internal Auditor (CIA) designation from the Institute of Internal Auditors. Similarly, the Information Systems Audit and Control Association confers the Certified Information Systems Auditor (CISA) designation upon candidates who pass an examination and have 5 years of experience in auditing electronic data-processing systems. Auditing or data-processing experience and a college education may be substituted for up to 2 years of work experience in this program. The Accreditation Council for Accountancy and Taxation, a satellite organization of the National Society of Public Accountants, confers three designations—Accredited in Accountancy (AA), Accredited Tax Advisor (ATA), and Accredited Tax Preparer (ATP). Candidates for the AA must pass an exam, while candidates for the ATA and ATP must complete the required coursework and pass an exam. Often, a practitioner will hold multiple licenses and designations. For instance, an internal auditor might be a CPA, CIA, and CISA.

The Association of Government Accountants grants the Certified Government Financial Manager (CGFM) designation for accountants, auditors, and other government financial personnel at the Federal, State, and local levels. Candidates must have a minimum of a bachelor's degree, 24 hours of study in financial management, and 2 years' experience in government, and must pass a series of three exams. The exams cover topics in governmental environment; governmental accounting, financial reporting, and budgeting; and financial management and control.

Persons planning a career in accounting should have an aptitude for mathematics and be able to analyze, compare, and interpret facts and figures quickly. They must be able to clearly communicate the results of their work to clients and managers. Accountants and auditors must be good at working with people, as well as with business systems and computers. Because millions of financial statement users rely on their services, accountants and auditors should have high standards of integrity.

Capable accountants and auditors may advance rapidly; those having inadequate academic preparation may be assigned routine jobs and find promotion difficult. Many graduates of junior colleges and business and correspondence schools, as well as bookkeepers and accounting clerks who meet the education and experience requirements set by their employers, can obtain junior accounting positions and advance to positions with more responsibilities by demonstrating their accounting skills on the job.

Beginning public accountants usually start by assisting with work for several clients. They may advance to positions with more responsibility in 1 or 2 years, and to senior positions within another few years. Those who excel may become supervisors, managers, or partners; open their own public accounting firms; or transfer to executive positions in management accounting or internal auditing in private firms.

Management accountants often start as cost accountants, junior internal auditors, or trainees for other accounting positions. As they rise through the organization, they may advance to accounting manager, chief cost accountant, budget director, or manager of internal auditing. Some become controllers, treasurers, financial vice presidents, chief financial officers, or corporation presidents. Many senior corporation executives have a background in accounting, internal auditing, or finance.

In general, public accountants, management accountants, and internal auditors have much occupational mobility. Practitioners

often shift into management accounting or internal auditing from public accounting, or between internal auditing and management accounting. However, it is less common for accountants and auditors to move from either management accounting or internal auditing into public accounting.

### Job Outlook

Accountants and auditors who have earned professional recognition through certification or licensure should have the best job prospects. For example, Certified Public Accountants should continue to enjoy a wide range of job opportunities, especially as more States require candidates to have 150 hours of college coursework, making it more difficult to obtain this certification. Similarly, Certified Management Accountants should be in demand as their management advice is increasingly sought. Applicants with a master's degree in accounting, or a master's degree in business administration with a concentration in accounting, also will have an advantage in the job market.

Proficiency in accounting and auditing computer software, or expertise in specialized areas such as international business, specific industries, or current legislation, also may be helpful in landing certain accounting and auditing jobs. In addition, employers increasingly seek applicants with strong interpersonal and communication skills. Because many accountants work on teams with others from different backgrounds, they must be able to communicate accounting and financial information clearly and concisely. Regardless of one's qualifications, however, competition will remain keen for the most prestigious jobs in major accounting and business firms.

Employment of accountants and auditors is expected to grow about as fast as the average for all occupations through the year 2010. In addition to openings resulting from growth, the need to replace accountants and auditors who retire or transfer to other occupations will produce numerous job openings annually in this large occupation.

As the economy grows, the number of business establishments will increase, requiring more accountants and auditors to set up books, prepare taxes, and provide management advice. As these businesses grow, the volume and complexity of information developed by accountants and auditors regarding costs, expenditures, and taxes will increase as well. More-complex requirements for accountants and auditors also arise from changes in legislation related to taxes, financial reporting standards, business investments, mergers, and other financial matters. The growth of international business also has led to more demand for accounting expertise and services related to international trade and accounting rules, as well as to international mergers and acquisitions. These trends should create more jobs for accountants and auditors.

The changing role of accountants and auditors also will spur job growth. In response to market demand, these financial specialists will offer more financial management and consulting services as they take on a greater advisory role and develop more sophisticated and flexible accounting systems. By focusing on analyzing operations, rather than simply providing financial data, accountants will help to boost demand for their services. Also, internal auditors will increasingly be needed to discover and eliminate waste and fraud.

However, these trends will be offset somewhat by a decrease in the demand for traditional services and by the growing use of accounting software. Accountants will spend less time performing audits, due to potential liability and relatively low profits, and will shift away from tax preparation, due to the increasing popularity of tax preparation firms and software. As computer programs continue to simplify some accounting-related tasks, clerical staff will increasingly handle many routine calculations.

### Earnings

In 2000, the median annual earnings of accountants and auditors were \$43,500. The middle half of the occupation earned between \$34,290 and \$56,190. The top 10 percent of accountants and auditors earned more than \$73,770, and the bottom 10 percent earned less than \$28,190. In 2000, median annual earnings in the industries employing the largest numbers of accountants and auditors were:

Computer and data processing services .....	\$47,110
Accounting, auditing, and bookkeeping .....	45,890
Federal government .....	44,380
Local government .....	41,240
State government .....	40,780

According to a salary survey conducted by the National Association of Colleges and Employers, bachelor's degree candidates in accounting received starting offers averaging \$39,397 a year in 2001; master's degree candidates in accounting were initially offered \$43,272.

According to a 2001 salary survey conducted by Robert Half International, a staffing services firm specializing in accounting and finance, accountants and auditors with up to 1 year of experience earned between \$29,250 and \$40,250. Those with 1 to 3 years of experience earned between \$33,500 and \$47,750. Senior accountants and auditors earned between \$39,250 and \$59,500; managers earned between \$46,750 and \$76,750; and directors of accounting and auditing earned between \$60,500 and \$106,500 a year. The variation in salaries reflects differences in size of firm, location, level of education, and professional credentials.

In the Federal Government, the starting annual salary for junior accountants and auditors was \$21,947 in 2001. Candidates who had a superior academic record might start at \$27,185, while applicants with a master's degree or 2 years of professional experience usually began at \$33,254. Beginning salaries were slightly higher in selected areas where the prevailing local pay level was higher. Accountants employed by the Federal Government in nonsupervisory, supervisory, and managerial positions averaged \$64,770 a year in 2001; auditors averaged \$67,180.

### Related Occupations

Accountants and auditors design internal control systems and analyze financial data. Others for whom training in accounting is invaluable include budget analysts; cost estimators; loan officers; financial analysts and personal financial advisors; tax examiners, collectors, and revenue agents; bill and account collectors; and bookkeeping, accounting, and auditing clerks. Recently, accountants increasingly have taken on the role of management analyst.

### Sources of Additional Information

Information about careers in certified public accounting and CPA standards and examinations may be obtained from:

► American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York, NY 10036. Internet: <http://www.aicpa.org>

Information on CPA licensure requirements by State may be obtained from:

► National Association of State Boards of Accountancy, 150 Fourth Ave. North, Suite 700, Nashville, TN 37219-2417. Internet: <http://www.nasba.org>

Information on careers in management accounting and the CMA designation may be obtained from:

► Institute of Management Accountants, 10 Paragon Dr., Montvale, NJ 07645-1760. Internet: <http://www.imanet.org>

Information on the Accredited in Accountancy, Accredited Business Accountant, Accredited Tax Advisor, or Accredited Tax Preparer designations may be obtained from:

► Accreditation Council for Accountancy and Taxation, 1010 North Fairfax St., Alexandria, VA 22314. Internet: <http://www.acatcredentials.org>

Information on careers in internal auditing and the CIA designation may be obtained from:

► The Institute of Internal Auditors, 249 Maitland Ave., Altamonte Springs, FL 32701-4201. Internet: <http://www.theiia.org>

Information on careers in information systems auditing and the CISA designation may be obtained from:

► The Information Systems Audit and Control Association, 3701 Algonquin Rd., Suite 1010, Rolling Meadows, IL 60008. Internet: <http://www.isaca.org>

Information on careers in government accounting and on the CGFM designation may be obtained from:

► Association of Government Accountants, 2208 Mount Vernon Ave., Alexandria, VA 22301. Internet: <http://www.agacgfm.org>

Information on obtaining an accounting position 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>.

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## Administrative Services Managers

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### Significant Points

- Administrative services managers work in private industry and government and have varied responsibilities, experience, earnings, and education.
- Competition should remain keen due to the substantial supply of competent, experienced workers seeking managerial jobs; however, demand should be strong for facility managers and for administrative services managers in management consulting.

### Nature of the Work

Administrative services managers perform a broad range of duties in virtually every sector of the economy. They coordinate and direct support services to organizations as diverse as insurance companies, computer manufacturers, and government offices. These workers manage the many services that allow organizations to operate efficiently, such as secretarial and reception, administration, payroll, conference planning and travel, information and data processing, mail, materials scheduling and distribution, printing and reproduction, records management, telecommunications management, security, parking, and personal property procurement, supply, and disposal.

Specific duties for these managers vary by degree of responsibility and authority. First-line administrative services managers directly supervise a staff that performs various support services. Mid-level managers, on the other hand, develop departmental plans, set goals and deadlines, implement procedures to improve productivity and customer service, and define the responsibilities of supervisory-level managers. Some mid-level administrative services managers oversee first-line supervisors from various departments, including the clerical staff. Mid-level managers also may be involved in the hiring and dismissal of employees, but they generally have no role in the formulation of personnel policy. Some of these managers advance to upper level positions, such as vice president