In this workbook, we emphasize budgeting skills and tools—and in general, we approach the budgeting process as a craft. As that choice of words suggests, after you have worked through the material in this book, you will be unlikely to think of governmental budgeting as an art form. Neither is budgeting simply an exercise of imagination, although a wide-ranging process of thinking can facilitate the development of options for consideration. Finally, contrary to the impression given by page after page of numbers, budgeting is not a scientific activity. The scientific method, based as it is on careful experimentation and step-by-step changes in single variables, is foreign to budgets, which must be created and managed in the messy world of politics and real-time regional or local economies.

But budgeting is more than making educated guesses. Practitioners try to be systematic, and the good ones learn from mistakes and try to correct assumptions found to be in error. Therefore, with these broad strokes in mind, we find it helpful to consider budgeting as a craft.

Consider a woodworker.1 To accomplish the tasks of woodworking well, the woodworker needs to be proficient with a set of tools and, when faced with a new project, willing to learn to use new tools. Our model woodworker needs to have some tolerance for repetition and must be willing to pay considerable attention to detail. A good woodworker needs to evidence a low tolerance for avoidable error and a sanguine attitude in the face of unavoidable error. Ideally, the woodworker should be appreciative of good design and concerned about reducing waste and the misuse of scarce resources, including time and materials. As a project nears its end, the woodworker needs to take extra care with the final finish and remember that thoughtful presentation of the final product is an expression of pride in one’s work.

In a small budget office, a budget professional may be called on to employ many different tools in the course of a budget season. This situation is similar to that of a woodworker who labors without helpers in a home workshop. In a bigger office, characteristic of a large city or state government, a budget examiner may focus tightly on a small set of agencies or programs or

1. This metaphor was first proposed in a short, elegant monograph by Edward A. Lehan (1981), and it is still evocative. By using the metaphor of a woodworker, Lehan invited us to pick our favorite craft activity and reflect on the analogies to the work done by career budget professionals.
even a single large program or tax. In such work, the budget professional may employ a more limited set of tools, as would a woodworker in a factory that makes only furniture. When a budget professional in a larger office moves on to a different assignment, however, that person is likely to be called upon to learn how to use a new set of tools that are applicable to the new portfolio of programs or revenue sources. In either case, adaptability—a willingness to learn to use a broad range of tools—is characteristic of the successful budget examiner.

In addition to specific skills, a capable budget professional must develop a useful set of work habits and attitudes. For example, during the course of analyzing a budget problem, the budget examiner may employ large data sets, sometimes drawn from different sources and often characterized by embedded errors or missing data. The obvious analogy is to the knots, warps, and other imperfections in the lumber a woodworker uses. The skilled budget analyst needs to work through the problems inherent in messy source data and do so with a passion for eliminating avoidable errors.

Some errors are simply unavoidable. A budget is a set of estimates about the behavior of programs or tax sources in the future, and some of those estimates will be wrong. For that reason, budgeting is, and will always be, an error-prone activity (Forsythe, 2004, pp. 6–7). But the budget professional is passionate about ferreting out avoidable errors. These are the errors produced by inaccurate inputting of data, incorrect calculations in spreadsheets, or even poor proofreading. In a strong budget office, considerable time and effort are devoted to catching and correcting such errors before they appear in final products.

Every woodworker needs to develop familiarity with the basic tools of the trade, and every budget professional needs to master the tools of this trade as well. For a professional budget examiner, the most important of these tools is the spreadsheet. Although budget examiners use databases regularly, the spreadsheet is the tool of choice for the majority of analytical tasks, and its flexibility and adaptability make it indispensable to the work of professional budgeting. As outlined in Chapter 2, which deals with organizing budget data, spreadsheet literacy includes but is not limited to an understanding of the mathematical functions of the spreadsheet. In much the same way as the woodworker must take care with the final finish of a piece of work, the budget examiner must smooth out the rough edges of a piece of analysis and polish it for presentation. He or she must keep in mind the product’s eventual consumers, who may include the head of the budget office, the chief executive and legislature of the government, and that small part of the mass media and the general public that writes and reads about government finance. Well-designed tables, comprehensible graphics, and, most of all, clear writing are the distinguishing marks of the well-finished product. In many circumstances, the budget professional will also personally present the analysis to higher-ups, so the ability to organize an oral presentation with findings and recommendations is an increasingly important skill as budget professionals rise higher in their organizations.

Although this discussion has been focused on professionals in an operating budget office, other offices and organizations value and employ people who possess the same habits and skills as those possessed by budget professionals. In many jurisdictions, budget professionals work in offices that monitor and review the budgets presented by the executive branch:

- State legislative analysts’ offices, many of which are modeled on the California state office in operation since 1941
- Finance, ways and means, and budget committees in legislatures and city councils
- Budget analysis shops serving controllers and treasurers in states and large cities
- Nonprofit budget watchdogs at every level of government
In all of these settings, the skills required to understand and critique budgets and to present findings and the budget itself to elected officials are similar to the skills of successful budget examiners.

Professionals with these skills and habits are also in demand in a few locations in the private sector, most notably in the credit-rating agencies. Working for Moody’s, Standard & Poor’s, and Fitch, analysts review the finances of state and local governments and their related entities and help investors decide whether to lend money to these bodies. Of necessity, the analysts in these agencies spend much more time analyzing debt than do most other budget professionals, but the ability of a government to repay its creditors rests in large part on its budget management capability. The skills and habits of work and mind outlined above are central to the work of these professionals.

As suggested earlier, the technical skills outlined in this book can be learned by studying and solving simple and eventually complex problems in the classroom and the workplace. Good judgment and the habits of craftsmanship can be learned only through work and experience, ideally under the tutelage of a seasoned professional. Both technical skill and commitment to the craft of budgeting are essential to the development of a competent budget professional.

However, when we turn to the financial plans that help us summarize and understand complex governmental budgets by showing us how governments will use their resources over time, we find that our woodworking analogy has outlived its usefulness. Instead, it now may be helpful to consider the skills and habits of sailors, especially those skills required before the widespread use of global positioning systems (GPS) and other precision navigational equipment. In less technologically sophisticated times, ships’ captains set a course, used assumptions about wind and currents to estimate the length of time it would take to reach key points, and then set out on their journeys. Crew members checked and logged the ship’s speed several times a day, and they used celestial navigation on each clear day to check their ship’s position. Wind and currents were never exactly as assumed in advance, so course adjustments were made as the journey progressed. Lengthy delays might mean shortages of resources such as food or freshwater, so additional course changes might be necessary to replenish supplies.

Again, the analogies to budgeting seem striking. Long-term financial plans are based on estimates about revenues, prices, and other key factors, many of which will prove incorrect. So plans are monitored and adjustments made, usually each quarter. Sometimes major changes in resource levels necessitate more serious actions. The clearer the assumptions and the more carefully prepared the plan, the sooner deviations can be identified and analyzed. Clarity, adaptability, and willingness to use available tools and technology—all these are habits of mind and action that are essential in the long-term management of budgets. The task is neither art nor science, and it is certainly not guesswork. The skills required to lay out a financial plan with care, to monitor it carefully as it is implemented, and to adjust to new data and realities are akin to the skills of the masters and commanders who managed through care, craft, and some good luck to get themselves, their crews, and their ships safely to their destinations. Budget professionals who want to reflect more deeply on this analogy might dip into the novels of Patrick O’Brien.2

This introduction has aimed to evoke both the pleasures and the frustrations of budgeting. The work is difficult enough to be challenging, but it can be mastered by hardworking people who invest time and effort. Skill with tools is rewarded and can be learned, but judgment is critical to success at higher levels of budgeting organizations. From time to time, the product of a

2. The full set of those novels by Patrick O’Brian was published by W. W. Norton in 2004 as The Complete Aubrey/Maturin Novels.
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budget analyst’s effort has finish and sometimes even elegance. At the same time, budgeting requires considerable effort, and sometimes that effort seems routine or repetitive. At the end of the process, decisions and recommendations by budget offices shape the allocation of resources in their organizations, and the impact of budget professionals can be considerable. For patient and diligent people who care about the missions of governments and nonprofit organizations, budgeting can be a challenging and satisfying career. We hope this book contributes to their training and work.

References
