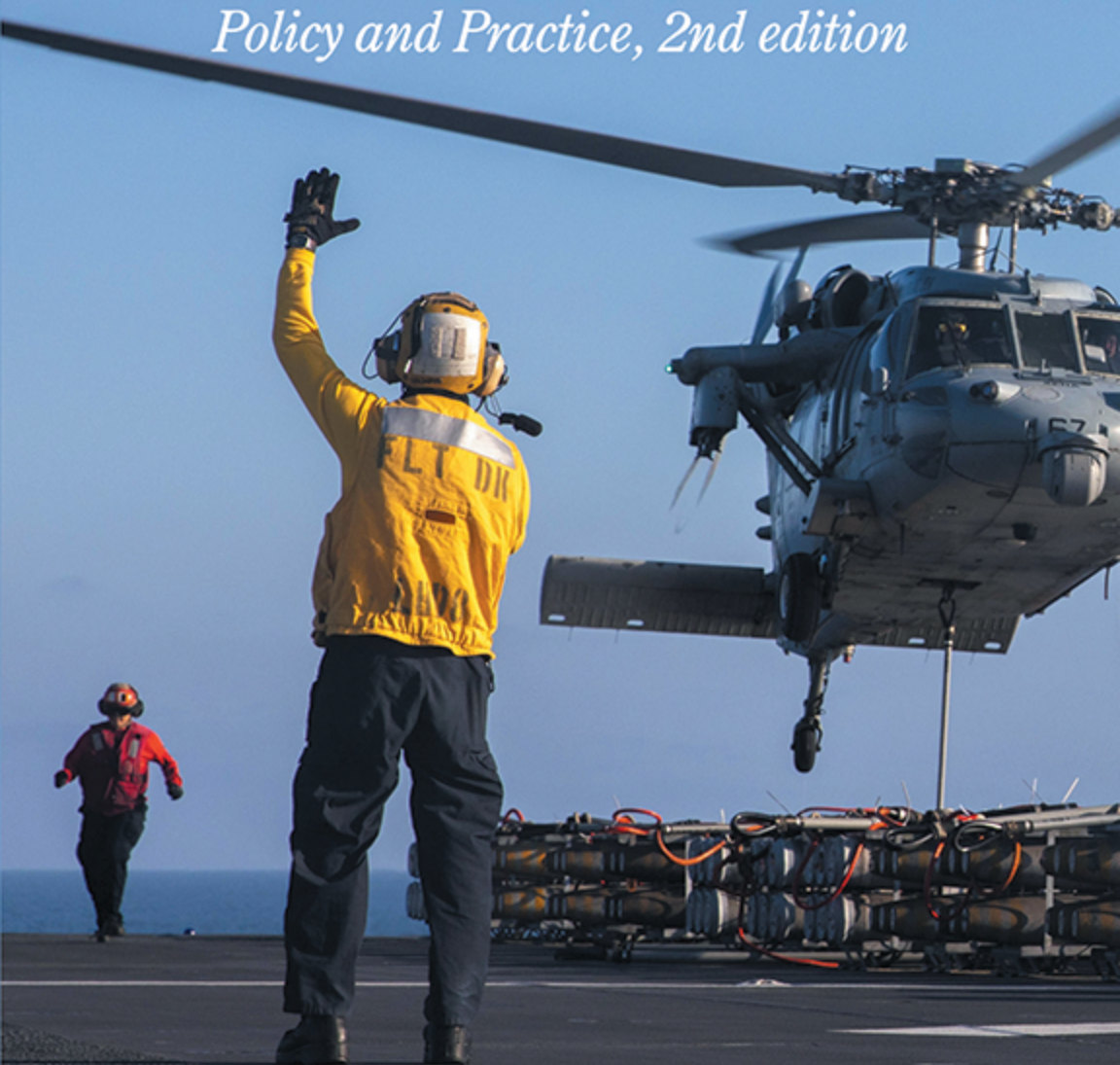# National Defense Budgeting and Financial Management

Policy and Practice, 2nd edition

Philip J. Candreva

Foreword by The Honorable Douglas A. Brook

National Defense Budgeting and Financial Management

This page intentionally left blank.

National Defense Budgeting and Financial Management

Policy and Practice, 2nd edition

Philip J. Candreva

Naval Postgraduate School
Duke University

≡IAP

PACIFIC OCEAN (July 10, 2023) Aviation Boatswain's Mate (Handling) 3rd Class Darien Haq signals to an MH-60S Sea Hawk helicopter from Helicopter Sea Combat Squadron (HSC) 21 during an ammunition offload aboard amphibious assault ship USS Makin Island (LHD 8), July 10, 2023, in the Pacific Ocean. Sea Hawk missions include anti-submarine warfare, anti-surface warfare, surveillance, communications relay, combat search and rescue, naval gunfire support and logistics support. Makin Island was underway conducting routine operations in the U.S. 3rd Fleet. (U.S. Navy photo 230710-N-PS818-1046 by Mass Communication Specialist 2nd Class Minh-Thy Chu)

Contents

PART **A**

Foundations for Defense Budgeting

PART **B**

Political and Policy Context for Defense Budgeting

PART **C**

Formulating the Defense Budget

PART **D**

Executing and Managing the Defense Budget

List of Tables

ix

List of Figures

xi

Foreword to the 2nd Edition

Six years have passed since publication of the first edition of this book. In that time, while many of the processes and players in national defense budgeting have seemingly remained the same, we have witnessed significant changes in the defense budget and policy environment. The end of congressional deficit reduction initiatives has ended the practice of matching budget increases between defense and non-defense spending with the result that increases in non-defense spending are predicted to outpace defense spending increases. Post-pandemic inflation, large annual deficits and increasing national debt have put downward pressures on defense budgets and buying power. A new security landscape centered on Ukraine, Russia and China is placing new demands on strategic, procurement and operational defense spending. And new national security strategies have sought to rebalance the use of the instruments of national security toward diplomatic, economic and soft power approaches to national security.

Thus, publication of a second edition that updates the processes and players, as needed, but which, more importantly, addresses this new defense environment is timely and informative. In this edition, you will find a more extensive discussion of the relationships between overall government spending, defense budgets and the broader society and economy. You will also find a more expansive discussion of defense budgeting as an element of overall national security spending. It has an insightful new chapter on the determinants of military spending and burden-sharing within alliances. It disaggregated the budget execution chapter into three separate chapters

with expanded coverage of fiscal law and intragovernmental transactions. At the same time, this edition updates study questions and exercises, and includes timely case studies and examples. The first edition has proven to be an enduring source of information and instruction, found on many desks from the Pentagon to academia. This edition will take its place with those who work, teach and study in defense and national security programs.

A word about the author. Phil Candreva is unrivaled as the preeminent defense budget scholar of our time. In recent years he has published additional papers on defense and budgetary topics, continued his teaching now having taught over 160 courses to over 3,700 students, and executive education seminars to over 1,500 senior military officers and DoD civilians. He continues to teach and research at the Naval Postgraduate School and has added a teaching affiliation in the Masters of National Security Policy program at Duke University. The depth and breadth of Phil's knowledge, plus his unique ability to communicate complex concepts clearly are reflected in this informative, instructive and understandable book.

—The Honorable Douglas A. Brook

Preface

Why This Subject Is Still Important

Since the publication of the first edition of this text, funding for national defense has risen 23% despite the end of combat operations in the Middle East. The focus now is on competition with China and Russia. A separate wartime budget is history. Combined across the entire national security enterprise, spending has topped $1 trillion per year and remains one of the largest functions (by dollar amount) of the federal government and it is the government's largest employer.

The task of national security has grown more complex, and so is the Department of Defense. There are new commands that deal with cyber threats, artificial intelligence, and a new military service was created, the Space Force.

Despite the changes in strategy and structure, the goal of this text remains the same as the first edition: improve the financial literacy of those involved in the resourcing of national security.

Structure of the Book

This book is organized into four parts. Part A is similar to the first edition and lays a theoretical and empirical foundation for the rest of the book's content. The first chapter takes the position that defense budgeting is a

specific instance of public budgeting, and public budgeting is a specific instance of public policy. In order to fully understand how the nation budgets for defense, Part A explores the various ways in which governments budget for anything.

Before providing a theoretical view of budgeting, the chapter presents models of the public policy process in general. Then moves on to describe the functions of budgets, public budgeting theories, and the systems of budgeting that governments might employ. It also describes the characteristics of effective public budgeting—standards against which defense budgeting can be compared.

The second chapter provides an empirical foundation for defense budgeting, with updated and expanded content compared to the first edition. It starts by looking at the structure of the overall federal budget, the size of government in relation to the overall economy, the mix of mandatory and discretionary spending, deficits and debt. It then moves into a more detailed look at the structure and historical trends of the defense budget and the broader national security enterprise. It concludes with some international comparisons.

Where Part A provides a theoretical and empirical foundation, Part B provides a political and policy context for defense budgeting. Chapter 3 describes the federal budget process, the role of the treasury, and tax policy. Chapter 4 begins with an expanded discussion of the constitutional allocation of power over funding and defense. It describes how Congress is organized to do defense budgeting and incorporates some of the material from the old Chapter 5 concerning what is different about defense as a policy area. It concludes with an updated analysis of trends in congressional action on the budget.

Chapter 5 of this edition is entirely new. It summarizes research on determinants of military spending across the globe—the factors that cause any nation to increase or decrease its military spending. It then describes three theories of alliances and burden-sharing among nations within them.

Part C is about formulating the defense budget and is an updated and revised version of the same three chapters from the first edition. Chapter 6 describes the organization of the DoD and roles and responsibilities for budgeting and financial management. Chapter 7 is an updated and more streamlined description of the Planning, Programming, Budgeting, and Execution system. And Chapter 8 provides fresh examples of budget formulation using real budgets for operations and procurement, and expands its coverage of budget review.

Part D is heavily revised from the first edition and covers the subject of executing and managing the defense budget. The old chapter 9 was unwieldy and has been broken into three chapters. The new Chapter 9 provides more thorough coverage of federal fiscal law, illustrated with short case studies, and explains a technique for analyzing fiscal law scenarios. Chapter 10 breaks out the intragovernmental business section from the old budget execution chapter. It covers reimbursable and non-reimbursable transactions and the operation of the working capital funds. Chapter 11 covers budget execution, focusing on balancing fiduciary responsibilities with operational needs, allocation of funds, mid-year review, end of year close-out, and reprogramming.

Chapter 12 covers internal controls, accounting and auditing. The internal controls discussion is expanded from the first edition and the status of DoD's audit efforts are updated. The "Other topics" chapter that closed out the first edition was overhauled. Chapter 13 is now entitled, "Pulling it all together" and shows the interdependencies and overlap of the topics in the previous chapters. It includes revised sections on managing financially and the cyclical nature of defense budgets. It adds all new content in a section describing issues that cross branches of government: the tardiness of appropriations and budgets, congressional adjustments to the budget, and paying for war. The book ends with a two-part case study on the funding of the border wall during the Trump and Biden administrations. This detailed case study ties together many of the lessons from throughout the book and would make an excellent capstone discussion in a budget class.

As before, throughout the book, key terms are identified in **bold** type. The book closes with a thorough glossary of terms and list of acronyms.

How to Use This Book

As with the first edition, this text was written specifically to support the public policy and budgeting classes at the Naval Postgraduate School (NPS) in Monterey, California and other schools with national security programs. I have used this text in every one of the school's budgeting classes in multiple degree programs, plus professional development courses. I have also taught using every mode of delivery at the university: short courses, face-to-face resident, synchronous and asynchronous distributed learning. At the time of writing the book, that is about 160 courses to over 3,700 students, not including scores of executive education seminars. These chapters, questions, and exercises were "beta tested" with my students before being published here. I recommend the book be used as follows.

A survey course in defense budgeting would want to concentrate on chapters 2, 3, 5, 7, and 11. Depending on the audience, the instructor should augment with cases or contemporary examples that would resonate with the particular class.

The two-course budget sequence (policy and practice) in the school's master's programs would want to use the entire text across both classes. The policy course would focus on chapters 1–5, 7, 11, and 12. The class might end with seminar-type sessions on topics in Chapter 13. The practice class will dive more deeply into the applied portions of the book: chapters 6 and 8-11. The final case study in Chapter 13 is most appropriate at the end of the two course sequence. That implies that students would purchase the book to be used in more than one course and instructors should coordinate their syllabi accordingly.

Each chapter lists learning objectives that may be employed entirely or in part in a given course, depending on the course's and the program's intended learning outcomes.

The chapters also contain study questions and exercises. The more conceptual courses would employ the study questions that require application of theory or models, explanation of current events by applying the concepts and theories, predictions of behavior, or discussions arguing for or against a position. The more practical courses would employ the case studies on fiscal law, budget review exercises, working capital fund rate setting computational questions, and the like. The fiscal law exercises are based on actual Comptroller General decisions, with noncritical facts changed to masquerade them from students with strong search skills. The author is happy to share with other faculty the sources for those exercises. He is also glad to discuss the rationale behind study questions.

I have received many reports of former students retaining the first edition as a desktop reference later in their careers. As such, it should also have a broader appeal in the defense budget and financial management community. I believe it can also help raise a line manager's financial literacy.

Acknowledgments

I thank my academic colleagues past and present, those I worked alongside doing the business described in this text, those with whom I have consulted throughout the federal government, and—most especially—my students who asked me to share these thoughts in a single volume.

And I dedicate this text to the thousands of people doing the nation's work by defining requirements, allocating resources, writing and defending budgets, managing funds, and providing an accounting. I also dedicate this to those who govern and guide those performing that mission. These folks can be found both in and out of uniform throughout the U.S. Department of Defense, the broader national security enterprise, and on Capitol Hill. Thank you for your service.

This page intentionally left blank.

PART **A**

Foundations for Defense Budgeting

This page intentionally left blank.

1

A Theoretical and Conceptual Foundation for Defense Budgeting

This text takes the perspective that budgeting for defense is a specific instance of public budgeting in general and public budgeting is a form of public policy. So, we begin with a theoretical foundation of public policy and then look at public budgeting theories, systems, and techniques. There are many definitions of public policy depending on the purpose of the definition, but they tend to all have some common elements. For this text's purposes, **public policy is defined as the intentional actions (or inactions) of government and their effects**. A budget is an intentional action—a purposeful allocation of resources—that delivers benefits to society. This chapter begins with the definition of public policy and a model of the policy process. The Stages Model of the policy process is used because it is conceptually simple and neatly mirrors the design of the DoD's budgeting process. Following that, other models are briefly described.

After laying this public policy foundation, the chapter turns to the specific policy instrument which is this book's focus: the budget. This discussion

begins by looking at the political and managerial functions of a budget, theories of budgeting are presented, and that is followed by a discussion of systems and techniques of public budgeting. The chapter closes with a discussion of the characteristics of public budgeting when it is done well. The budgeting discussion is broad and generic and applies to any federal agency. The specific process used by the Defense Department is covered in the chapter on the Planning, Programming, Budgeting, and Execution (PPBE) system.

LEARNING OBJECTIVES

By the end of this chapter, and in conjunction with classroom activities, the student should:

- Be able to define public policy
- Be able to describe the Stages Model: defining each stage, discussing who is involved, factors that affect it, and its relationship to other stages
- Be able to recognize the stages of the model given a scenario
- Be able to describe a basic process for policy analysis and policy evaluation
- Be able to identify various tools of policy to address a social problem and recognize tools if given a scenario
- Understand the managerial and political functions of public budgets
- Be able to relate various public policy and public budgeting theories to explain processes or outcomes
- Understand different systems and techniques of budgeting, identify them in a scenario, and explain when to use one system over another
- Be able to relate the characteristics of effective public budgeting and identify in a scenario any practices that are effective and ineffective.

The Policy Process—The Stages Model

The chapter introduction defined public policy as the intentional actions of government and their effects. Ideally, those actions are deliberate and rational, and desired effects are positive. Much of what the government does is to address problems in society: schools exist to address the problem of ignorance, health programs address disease, police forces address crime, and income support programs address poverty. Public policy can be thought of as a process of choosing to act (or deliberately not act), based on an intention to improve the state of society. It could be depicted like Figure 1.1.
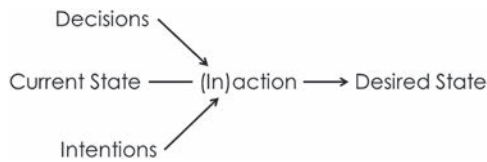
Figure 1.1   A graphical representation of public policy.
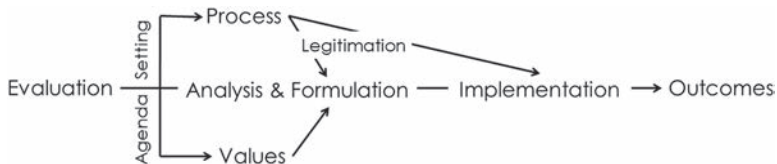
Figure 1.2   A general model of the policy process

That is merely a definition of policy. What is the policy *process*? If one were to take these elements and turn them into questions, one would have to deal with things like: "What is the current state? What is a legitimate process for initiating action? What actions should be taken? What are the desired effects and how do we know an action would achieve them? What values are reflected in my intentions? Why should I bother with this?" To answer those questions, one would need to evaluate the current state, discover a problem worth addressing, conceive of alternative courses of action, project the outcomes of those actions, design a means of implementation, and evaluate the outcomes. Thus, we might then transform the definition in Figure 1.1 into a process in Figure 1.2. This will be the starting point for our discussion of the Stages Model.

Introduction to the Stages Model and its Limitations

Developed in the 1970s and 1980s, the Stages Model is a useful framework for understanding the policy process. It breaks the process down into five types, or stages, of activity (Jones, 1970; Anderson, 1975; Brewer and deLeon, 1983). The five stages are:

- *Agenda setting*—A particular problem in the society is identified, is amenable to government action, and captures the attention of policymakers
- *Formulation*—Problem analysis and the development of the mechanisms for solving those societal problems

- *Legitimation*—the policy is accepted as legal and authoritative, typically through a formal process by a branch of government or a democratic process.
- *Implementation*—the actions of government that put a policy into effect, understanding that what is implemented may not be what was intended
- *Evaluation*—assessing the state of society and the efficacy of existing policies

Each of the stages is described more fully in the rest of this section. The student is cautioned that the model has some limitations. First, by itself, the model does not describe causation. It merely categorizes activities that occur. Second, it can easily be construed as suggesting the policy process occurs in a particular sequence. The policy process is more complex than a simple linear set of steps, and multiple stages can be active simultaneously. Third, it tends to work best at describing formal policies, such as law-making or budgeting, and does not capture well the subtlety of other forms of policymaking. Fourth, it does not explicitly acknowledge the significant role of conflict within each stage.

Every stage requires that decisions be made, and those decisions are inherently political ones. In this text, the term "political process" means a group decision-making process where the members of the group represent varied, competing, and conflicting interests. The student should note that political processes occur inside organizations as well as outside. For example, when the Navy builds its budget the aviators and submariners represent competing interests, and the negotiation of relative allocations becomes a political decision. Thus, the term is not confined to Executive-Legislature or Democratic-Republican notions of "politics," although those are special cases of our more generic use of the term.

Finally, it should be noted that very few policies are new, and most policies are evolved forms of existing policies. For most policy areas, the policy process is never-ending so there is no clear starting point. These cautions and limitations are discussed in more detail in Sabatier (1999) and Peters (2013).

Agenda Setting

The dictionary provides three basic definitions of the word "agenda." First, it is a list of things in a particular order, such as a meeting agenda. Second, it refers to the various matters someone needs to deal with; "what's on your agenda for today?" Third, it is a personal viewpoint or bias that acts as a motivator. In short, it is a filter that identifies and highlights what

is important and worthwhile to pay attention to, and what is not. It organizes the attention of a person or a group. The agenda-setting stage of the policy process serves a similar function. **Agenda setting is the stage in the policy process whereby a particular problem in society is identified, deemed amenable to government action, and it captures the attention of policymakers.** This definition has three elements. Let us begin with problem identification.

Labeling and Problem Identification

It is important to note that problems do not arrive on the desks of policymakers fully defined and understood. The identification of problems is a critical part of the agenda setting process because one formulation may be viewed as important, and another may be filtered out of the policy process. Take the immigration subject, for example. The immigration problem in the United States can be defined as a national security problem, a law-and-order problem, an economic problem, a human rights problem, a foreign relations problem, a family stability problem, a political problem, or a cultural problem. Some of those are amenable to government action, and some will resonate with a given policymaker, but not others.

Labeling and identifying the nature of the social problem also constrain the policy options, which may affect whether it gets on the agenda in the first place. Take the immigration example from the previous paragraph: for some definitions, a border wall makes sense, for others it is nonsensical. Similarly, defining a terrorist as an enemy combatant means that rules of war are appropriate, and military tribunals would hear the cases. The legal rights of an enemy combatant are quite different from the legal rights the same terrorist would have if the actions were instead labeled criminal. In that case, the terrorist would fall within the Justice Department rules, civilian court rights and procedures of due process would apply, and they would not need to be kept in a special facility at Guantanamo Bay.

Most policy areas are replete with labels that cast issues in different light:

- Equal opportunity, affirmative action, or diversity programs
- Tax reform or income redistribution
- The illness of drug addiction or the illegality of drug use

Not only do we as individuals see issues according to our own biases and agendas, shifting social norms shape the perceptions of issues in society. In the last few decades, public discourse over LGBTQ people shifted from the language of moral conduct to the language of equal rights resulting in changing policies over things like military service and marriage.

Amenable to Government Action

The second part of the definition of agenda-setting is the notion that the societal problem—however it is labeled and defined—is deemed amenable to government action. Because public policy is about the actions of government, to get on the agenda the problem must be one that properly falls within the portfolio of things that government does. Problems that do not have an effective private sector means of resolution are more likely to end up on the public agenda. These are typically situations that involve the core functions of government: crimes and civil legal matters, national defense, matters related to government lands, border security, foreign relations, and matters related to government funds.

Private actions can end up on the public agenda where there are externalities. The field of economics defines externalities as costs (or benefits) that accrue to those who cannot feasibly be compensated (or charged) for them. Examples of positive externalities are R&D efforts that create modern technologies that are easily exploited by those who did not bear the R&D cost. An example of a negative externality is air pollution created by a factory that blows across a large geographical area. Societies often look to the government to correct these situations by doing things like providing patent and trademark protection to the technology developer or limiting emissions and fining the owners of the polluting factory.

The government also is engaged when the issue involves public goods—those things that are difficult to exclude someone from consuming and if they do consume it, they do not deny others the use of it. (Economists use the terms, excludability and rivalry.) For example, a fireworks display is visible in the sky for miles around so it would be impossible to exclude someone in the area from viewing it. And the fact that Person A views the fireworks does not deny Person B the ability to view it (Cowan, 2008). Because of these two conditions, such services are less likely to be provided by the private sector because there is little profit opportunity. Society tends to look to the government to provide these goods. Other examples include things like public parks, streetlights, and national defense. Some goods are widely considered public but can be provided adequately by the private sector, such as fire protection, water, and roads.

Captures the Attention

Several other factors affect whether an issue gets on the policy agenda. The first is the size and scope of the problem. In August 2005, Hurricane Katrina killed over 1800 people, left 700 missing, and caused over $100 billion in damage. Five states suffered the bulk of the damage. The mere projection of the effects of the storm put the recovery on national

policymakers' agendas days before it made landfall. Yet hundreds of other people die every year in scores of smaller, isolated storms that do not result in a federal government response. Many terrorist attacks occurred around the globe during the 1990s, but were not taken very seriously, until the attacks on U.S. soil in September 2001. In the summer of 2015, the media were abuzz about a lion that was shot in Zimbabwe by an American hunter. About six hundred lions are killed each year with little notice, but this one made the news because it was named Cecil and was a favorite among tourists. How severe, how many, and to whom—these factors make a difference in capturing the attention of the public and policymakers.

A "focusing event" also helps capture attention. That event may be dramatic like a hurricane or slain animal, but it may also be more mundane, such as a report issued by a government agency or the findings of an audit.

Things also get on the agenda because they spillover from other policies, such as unintended consequences. The killing of Cecil the lion focused Americans' attention on trophy hunting. Yet trophy hunting had been a policy issue in Africa for years. To reduce the ill effects of the activity, such as poaching, Botswana banned the practice in 2013. The population of lions, elephants, and other former game animals had since grown and the animals had been intruding on small villages to eat crops and livestock, causing economic harm. When these animals were hunted, the villagers saw them as something worth protecting as they could earn money by leading hunting trips. Now that they are protected by the government, they are instead viewed as nuisances by the locals. The policy of protecting the animals from trophy hunters may have backfired as residents started killing them instead. The spillover effect of economic hardship on villagers became a new agenda item (Onishi, 2015).

Like spillover effects, problems are more likely to land on the policy agenda if they can be linked to symbols or ideals: truth, justice, freedom, and equality, for example. The issue of whether police should be outfitted with body cameras to record their encounters with the public stuck to the agenda because of the links to truth and justice. Earlier it was noted that same-sex marriage was relabeled as a question of equality—that reframing of the issue and link to an important American ideal was partially responsible for greater public acceptance and a greater willingness by policymakers to address it.

To this point, we have defined agenda-setting, discussed the importance of labeling and problem identification, and discussed factors that affect whether a problem is placed on the agenda. But who does the agenda-setting? Three mechanisms are commonly observed and usually more

than one is operating at a time as proponents work to have their issues addressed. The first is the bureaucratic or **state-centric mechanism**. Here, government officials take on the problem without being pressured by outside groups. Because so few social problems are new, there are existing government agencies already working on them. The government employees see firsthand which programs are working and which are not. They see the problem evolve over time and the surrounding circumstances. Government employees will propose new policies and that often happens in the annual budget process.

Second, is the **pluralist mechanism**. Here, the government is pressured by outside forces to address a problem. These problems are usually raised by special interest groups who are passionate about the issue. At other times, it is more of a grassroots effort and the idea permeates society and is broadly covered by the media. Here, it is the idea that matters, and the government is pressured by groups who have specialized knowledge of the problem. Coalitions of charitable groups that work with the homeless are an example of those who might put poverty issues on the agenda, but a group like the National Rifle Association would have no input. Conversely, the NRA will advocate for changes to gun control laws, but those interested in rescuing abandoned animals would be silent.

The third mechanism is the **elitist approach**. Not all voices in society are equal and some voices carry more weight than others. Certain celebrities (e.g., Bono, Gary Sinise, or Greta Thunberg) take on causes and because of their celebrity can get exposure that others cannot. Business leaders (Warren Buffet), former government officials (ex-Cabinet members), and the wealthy (Koch brothers, Elon Musk) also can get access to policymakers and get media attention to their ideas. They can pressure the government in ways that special interest groups or ordinary citizens cannot.

Of the three mechanisms, the bureaucratic one originates inside government; the other two originate outside and put pressure on government. The elitist and bureaucratic are noteworthy for who puts the idea on the agenda: the speaker is more important than the message. In the pluralist approach, the message is more important than the speaker.

Finally, the policy agenda includes issues under active consideration. There are many issues that are always in the background: national security, poverty, jobs and the economy, the environment, education, and so on. But policymakers have limited time and attention and only a subset of those issues will be active at one time in the institutions of government.

Policy Analysis & Policy Formulation

Whereas agenda setting is about defining problems in society that are worthy of attention, policy **formulation is about problem analysis and designing solutions to those problems**. Two factors that influence the selection of a policy are the policymakers' knowledge about the problem and knowledge about alternative policies. Thus, before solutions can be crafted, it is often necessary to conduct policy analysis to understand the problem and its potential. Given a simple problem (there is a pothole in the road), the policy formulations are clear (patch the hole or repave the road), but where problems are more complex, they are more difficult and demand more analysis.

Take immigration, for example. If the problem is defined as an economic problem, it suggests one set of policies, but if it is defined as a national security or law-and-order problem vastly different sets of policies become appropriate. It is often necessary to begin with policy analysis that looks at the problem through multiple lenses and provides information about the efficacy, efficiency, and viability of alternative courses of action. So, we begin the discussion there.

What is Policy Analysis?

While a student can earn a degree in policy analysis, we will only skim the surface here. But it is worth discussing because many military officers and government civilians will do policy analysis during their careers. First, what is policy analysis? The policy part implies something about governmental action and the intentions that motivate it. The analysis part implies rationality and methodological rigor. So, it can be defined as *applying social science to societal problems to better understand both the problem and the potential actions to address the problem, often culminating in some advice to policymakers* (Heineman, et. al., 1997, p.5). The following discussion will cover the two main types of analysis, the typical steps in the analysis, some common analytical techniques, and a few issues analysts and users of analysis should be aware of.

Types of Analysis

The two main types are analysis for understanding and analysis for decision-making. Analysis for understanding seeks to understand the problem and the efficacy of extant policies in addressing it. It is usually done periodically and not driven by a decision deadline. It is focused more on the available data than conclusions derived from the data. It is often widely circulated rather than tailored to a limited audience. It typically features multiple opinions or viewpoints rather than a consensus or "most likely" view.

Analysis for understanding is not focused on policy alternatives, whereas analysis for decision-making directly addresses the implications of policy alternatives. Most analysis for understanding occurs in the Evaluation Stage of the Stages Model.

Analysis for decision-making—or what we will refer to as policy analysis during the Formulation Stage—seeks to understand the alternative courses of action to address a problem. This type of analysis is done as needed and typically has a deadline. It features conclusions, predictions, and recommendations. It is typically authored for a limited audience and may not even be publicly shared because it is "pre-decisional." The two types of analysis are summarized in Table 1.1.

Process

The process of policy analysis[1] typically begins with a definition of the social problem to be addressed. This may have been determined in the agenda setting phase and assigned to an analyst by a policy maker or the analyst may need to perform more than one analysis if the problem could be conceived in different ways. Assuming a clear definition of the problem, the analyst also needs evaluative criteria which will be applied to alternative policy formulations. Often, such criteria include things like efficiency and effectiveness, but they could also include other public sector aims such as stimulating growth, protecting rights, reducing inequality, ensuring competition in a marketplace, public safety, expanding or contracting a client base, and the list goes on. Again, depending on the circumstances, the policy analyst may be given these criteria by a tasking official, or they may need to determine them themselves.

The analyst then needs to gather data about the problem and courses of action. The data should include baseline information about the evaluative criteria and evidence to support conclusions about alternative courses of action. This means the analyst must have evidence of causal relationships between government action and changing states of society. This is often a point of contention with policy analysis because understanding is

TABLE 1.1 Types of Policy Analysis	
Analysis for Understanding	**Analysis for Decision-Making**
Focused on data analysis	Focused on conclusions
Periodic	Time-driven
May be widely circulated	Limited audience
Open to multiple opinions or viewpoints	Reflects consensus or "most likely" viewpoints
Not focused on policy alternatives	Addresses implications of policy alternatives

frequently lacking or not universally accepted. For example, consider the factors that correlate with crime rates in a community: joblessness, education levels, poverty, police presence, population density, homeownership rates, gang influence, percentage of dual-parent households, and more. The analyst needs to consider which are relevant to the task, which can be logically justified, and for which data are available.

Tools of Policy

Next, the analyst will construct alternative courses of action—alternative policy proposals—that may be considered to address the problem. Here it is useful to discuss the various tools available to the government.[2] One of the most common is the government's law-making ability. Legislatures can enact laws and certain executive agencies can issue regulations that may have positive effects (creating rights or enabling action), or they may have negative effects (creating burdens or proscribing action). Included here is the full spectrum of writing laws and regulations, enforcement, and adjudication of disputes.

Second, government can provide services directly to society, such as education, national defense, administration of justice, and managing recreation areas. Often government will provide the service when the market is thought to have failed in some way: standards need to be consistently enforced, state authority is involved, there are significant externalities, or the service is desirable but not commercially viable.

BOX 1.1   TOOLS OF PUBLIC POLICY

- **Laws and Regulations**—May create rights and enable action, or they may create burdens and proscribe action
- **Services**—delivered to citizens directly or through agents
- **Money**
  - Allocations of expenditures to fund agencies, as direct transfer, as grants to subordinate governments
  - Collections of revenue through taxes and fees, and policy-oriented exceptions
  - Other uses of funding such as credit, insurance, or guarantees
- **Moral suasion**—attempts to change behavior through exhortation rather than coercion.
- **Devolve authority to a subordinate level of government**
- **Bureaucratic and political reforms**—designed to improve government effectiveness or public confidence in government.

The third tool is money, which can take several forms. One form is the allocation of funds to various uses, whether that is to run a government agency (the defense budget), is a grant to a subordinate government for a particular purpose (Medicaid funding to states), or as a direct individual transfer (Social Security or unemployment insurance). The next form is how the funds are collected: taxes and fees. And it is important to note that much public policy is conducted through exceptions to the general rules for collection: tax deductions, credits, deferrals, and special rates. For example, home ownership and charity are promoted through tax deductions, retirement savings is promoted through tax deferrals, and investment in business is promoted through a special tax rate for capital gains. Lastly, government may use money in other forms, such as loan guarantees, issuing credit, and providing insurance.

A fourth tool of public policy is moral suasion, also known as the "bully pulpit." It is the use of exhortation or appeal to morality to influence behavior. Examples range from the temperance and civil rights movements to asking citizens to conserve water during a drought.

Fifth, a superior government may delegate or devolve action to a subordinate government. A question facing the policy analyst is whether the policy should be retained at the policymaker's level of government or devolved to a subordinate government. The U.S. Constitution creates a limited federal government, and most police power exists at the state and local level. The result is that many policies vary from state to state and even city to city: minimum wages, insurance regulations, fire protection, public school financing, sales taxes, and the list goes on.

Finally, governments may reform internal practices with the goal of improving the efficiency or effectiveness of governmental processes or to increase public confidence in the institutions of government. Examples include congressional earmark reform, the CFO Act, and civil service reforms. Figure 1.3, taken from the World Bank's *Public Expenditure Handbook* (1998), illustrates the diverse options a policymaker has in choosing a tool.

The student should note that these tools are rarely used in isolation and that a combination is typically employed. Consider the safety of the nation's highways. State-level Departments of Motor Vehicles exist to license drivers, motor vehicle codes regulate driving patterns, those codes are enforced by the police, transportation departments maintain roads, public service announcements warn about drunk driving, the automobile insurance industry is regulated by insurance commissioners, laws regulate safety standards for the manufacture of automobiles, and more. Note that these tools are used at distinct levels of government: federal, state, county, and local.
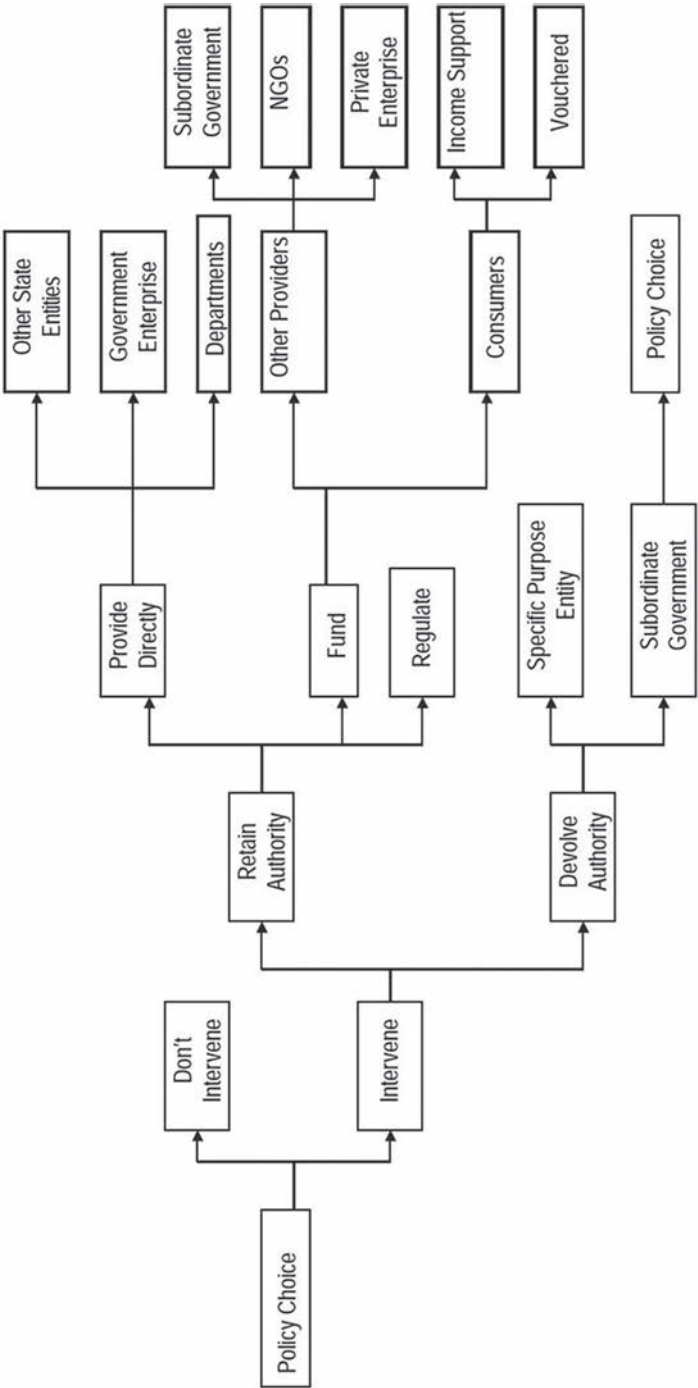
Figure 1.3   Tools of policy partial decision tree (World Bank, 1998).

The final "tool" of policy is the deliberate choice to do nothing. There are times when the government chooses not to intervene. It could be that a remedy to the social problem is available in the private sector and there is no need for government involvement. There may be a constitutional prohibition against government involvement. There may be insufficient knowledge of the problem and proposed policies such that no course of action is deemed appropriate. Or there may be political gridlock preventing the government from acting. As this is being written in 2023, the Federal Reserve Board is deliberately choosing not to change its approach to managing interest rates because they believe the economy is growing at a sufficient, but not too rapid, pace.

Types of Policy Change

When a policy area makes it onto the agenda and goes through the policy formulation phase, there are three broad types of actions that can result. The policy could deliberately remain unchanged. Often, this is an unlikely outcome because it got on the agenda because "someone should do something" and doing nothing may not be politically viable, even if the analysis says *maintaining the existing policy* is the best course of action. A second, and unlikely, course of action is *terminating the existing policy* without replacement. Ronald Reagan is said to have once quipped, "There is nothing so permanent as a temporary government program." Termination does not often happen because doing something is typically preferred to doing nothing. It is the rare government policy that is so bad that it cannot be improved and must only be killed. By far, the most likely scenario is *modifying the current policy*, hopefully by improving it. Modification can take different forms: a total or partial replacement (Affordable Care Act), consolidation of programs (Department of Homeland Security), or disaggregation of them (using logistics support contracts in lieu of government depots).

Who Formulates Policy

While this section has implied the policy analyst produces the policy alternatives, such is not always the case. Yes, the public bureaucracy often proposes new policies because they are the ones closest to the problem and they have the experience to know what has (not) worked in the past. Other sources of policy proposals are think tanks and interest groups that focus on particular issue areas. Academics propose ideas through their research and consultation with governments. Shadow governments—not a nefarious cabal, but rather those former and aspirant government officials with pertinent experience—will draft white papers and appear on news shows advancing ideas. Legislators also propose solutions to public problems.

Projection and Evaluation of Outcomes

Once the set of alternatives is identified, the analyst needs to project the outcomes of each policy and apply the evaluative criteria. The evaluation should contain *both an economic and an ethical analysis.* First, there are numerous tools to project outcomes and examine the economic effects, such as cost-benefit analysis, cost-effectiveness analysis, decision trees, simulations, models, game theory, and Delphi techniques. It is beyond the scope of this text to discuss how to do these analyses—hopefully, they are part of the rest of your curriculum.

The ethical analysis should address the non-economic aspects of the proposed policies. Ethical considerations include the policies' impacts on such matters as the preservation of health and life, promoting individual autonomy, encouraging truthfulness and transparency, respecting civil rights, or promoting fairness, equity, and justice (Peters, 2013, p. 467). Examples of ethical analysis include considering the value of human life when redesigning a highway interchange or approving a new drug, the constitutionality of civil asset forfeiture when the person is not charged with a crime, aerial application of pesticides on farms adjacent to schools, zoning and licensing restrictions on economic activity, and predictive policing.

Reporting the Results

A critical step of the policy formulation and analysis phase is communicating the results of that policy to the policymakers. It is critical that the analyst translate the work in a way that is useful and credible to the user. That means the analyst should devote some attention to the needs of the user. Typically, the analyst will want complete data on a narrowly defined issue applying their expert knowledge and they will want to be thorough. The policymaker, however, is content with "good enough," has only general knowledge, wanted the analysis yesterday, and is concerned about broad implications of the policy, beyond that which the analyst studied.

To be well-received, the report from the analyst should be authoritative and persuasive. That requires high-quality evidence supporting cohesive logical arguments that support the policy recommendations. The report should be written with the reader's needs in mind and recommendations should be appropriately specific and actionable by the reader. Finally, the report should be presented well: clearly written, understandable by an educated generalist, visually appealing, and with a tightly written executive summary.

Policy Legitimation

One of the aspects of public policy that is different from management in the for-profit sector is that government power is fractured and shared. No one in government has full authority to hire and fire, raise capital, move into and out of lines of business, nor has complete discretion over whom they do business with. For government to act, those actions must be officially sanctioned. And those sanctions are subject to review or modification by others.

As a country based on democratic principles, government actions must be accepted by the populace as something that the government is permitted to do. Mechanisms exist to challenge illegitimate policies. A clarification is important. The term "legitimate" here means that the government action has been approved through the accepted framework of rules; that is, it is lawful. It is an objective term—*whether the government had the authority to act and if the proper process was followed.* It should not be confused with the notion of legitimate as a subjective term based on morality or ethics—e.g., I disagree with it because of my religious, ethical, moral, or political leanings.

A public policy can be made legitimate by any of the branches of government, depending on the situation. The *legislature* can legitimate a policy by passing a law. Such laws may create a right to do something or be entitled to something, or it may create a burden by taxing, regulating, or prohibiting actions, or it may create an administrative agency that is empowered to issue its own regulations. The legislature is also charged with overseeing the executive branch to ensure the laws are effectively carried out. Unless struck down as unconstitutional, a law is considered legitimate, but the process used by the legislature could call that into question. For example: laws that are hurried through a vote without opportunity for debate or amendments, filibustering that effectively requires a super-majority, logrolling, or pork barreling.[3]

The *executive* branch can legitimate a policy by issuing a regulation or through an executive order. Congress creates specialized agencies with delegated powers to make rules, such as the Food & Drug Administration, Federal Communications Commission, or Environmental Protection Agency. This is considered beneficial because subject matter experts make the rules instead of politicians, but the risk is that the rules are made in a non-majoritarian process (i.e., they have not been voted on by representatives of the population). A risk to legitimacy occurs when an agency is "captured" by special interests and puts the needs of that interest group above the public's, a problem that can impact regulatory agencies the most. Another

risk is when the agency oversteps its authority. An example of that occurred in 2021 when the Centers for Disease Control (CDC) extended eviction moratoriums for those who were in arrears on their rent. While the CDC has power to take housing actions to prevent the spread of disease, such as ordering fumigation, reaching as far as rental policy was deemed illegitimate by the Supreme Court (*Alabama Association of Realtors v. Department of Health and Human Services, 141 S. Ct. 2485*).

The *judiciary* can legitimate a policy through the holdings of the courts. The basic task of a court is to apply the law to a unique set of facts. If a new statute is challenged on constitutional grounds, the courts can legitimate it by upholding the constitutionality of the law. When a law is struck down, the court will explain what was deficient, thereby signaling a remedy in the form of a revised law. A risk to legitimacy is found in the fact that the court is also a body of unelected officials whose rulings are often the final word. Occasionally, the courts are also charged with "legislating from the bench" when they create rights or obligations that did not previously exist.

Usually, legitimation by a branch of government is not a controversial thing—it is routine business. But other times, it is central to the policy process. Take the Affordable Care Act, for example. It was first legitimated through the law, but it did not take long for the program's critics to challenge it in court. So, while it was being implemented (next stage of the model), it was still operating in the legitimation stage while the court cases were heard. Meanwhile, the Congress held several votes to overturn or modify the law—also evidence the policy was still in the legitimation stage, or simultaneously back in the formulation stage.

Government need not be the actor to legitimate a policy. The people can do it through *democratic processes*. An **initiative** is a process where a group of voters can propose a statute or constitutional amendment and compel a vote on its adoption. A **referendum** is similar, but the legislature proposes the issue for a popular vote rather than legislate it directly. In both cases, the popular vote is the mechanism of legitimation.

It is important to note the checks and balances in this system. The legislature can pass a constitutionally valid law, but the executive can veto it. An executive can issue a regulation and the legislature can pass a subsequent law to render it moot. And the courts can strike down laws and regulations that are unconstitutional or beyond the authority of the regulator. California voters have seen initiatives (Proposition 22 in 2000 and Proposition 8 in 2008) struck down by courts because they violated the US Constitution.

Policy Implementation

Assuming for a moment that an issue is placed on the agenda with perfect clarity and knowledge, an ideal policy is formulated considering perfect knowledge and clear objectives, and that policy is unanimously legitimated, there still exists the hurdle of implementation. The implementation phase can result in a policy in practice that differs from the ideal policy design. How can that happen? There may be factors that result in a difference in perspective or agreement between the policy designers, those who legitimated the policy, and those charged with implementing it. Consider, for example, a policy on unemployment compensation, a veteran's disability, or the education plan for a child with a learning disability. In each situation, a low-level government employee—a frontline worker—is charged with evaluating an application for a benefit and deciding whether that benefit should be provided, and to what extent. Just as policymakers have limited abilities, attention spans, biases, and beliefs, so do the frontline workers. They might interpret rules inconsistently, weigh factors differently, be stressed by budget shortfalls, redirected by upper management initiatives, be unaware of a recent change in rules, or be worried about their next performance appraisal. In the end, what is decided at the front desk in the individual case may not be consistent with what the legislature or executive branch official intended.

Several years ago, I took my son to his high school orientation. In the gymnasium, there was a series of tables to get a library card, join the yearbook staff or other clubs, pay fees, show proof of immunizations, fill out emergency data cards, and others. One mandatory stop along the way was to fill out the form to apply for the federal program that subsidizes school lunches for those below a certain income level. I refused to fill out the form because I was certain I did not qualify. They said I was required to, and after arguing for a few minutes I called over the principal to inquire why. It was explained to me that the school gets full funding for a qualified student, but partial funding for those who apply but are denied. The school, to maximize its revenue from the program, insisted every parent apply regardless of their income. Here we had a local decision maker placing a local goal above the intent of a national policy—thereby creating a problem in implementing the federal school lunch program by diverting resources from their intended recipients.

Factors that affect the nature and scope of implementation are numerous but can be categorized into four main groups: information flows, decision rights, timing, and adaptability. Regarding *information flows*, the legislation or regulation itself may "plant the seed of its own destruction" (Peters,

2013, p.128). The political compromise needed to pass the policy may have rendered it impossible to understand or implement. A vaguely worded law or regulation is often easier to legitimate, but there is less certainty of the effect in implementation. When the Supreme Court mandated school de-segregation in *Brown v. Board of Education of Topeka (74 S. Ct. 686)*, it was to be done "with all deliberate speed"—those who disagreed with the deci-sion deliberated for over a decade before acting. Other such phrases that hinder effective implementation include maximum feasible participation, the public interest, unfair competition, executive privilege, and national security exemption.

Ironically, the clearer the regulation the less likely it is to pass as ob-jections to it are easier to formulate. A military example of this was the National Security Personnel System, a pay-for-performance personnel sys-tem approved in 2005 and implemented in 2006. It was the first major civil service reform approved by Congress without knowing the details of the design. Once it was designed and implemented, the critics came forward and very quickly put the issue back on the agenda. It was repealed in 2009 (Brook & King, 2011).

It is possible a policy is not clearly communicated down the hierarchy. Any organization with multiple layers will need to craft implementing in-structions at each layer. The quality of the ultimate implementation is a function of the clarity with which each prior layer understood and com-municated the intent and put processes in place to ensure the intent was carried out. The direction down the chain of command is just as important as the evaluation and reporting up the chain. If either distorts the message, the intended goals of the program may not be achieved.

If the information flows do not add enough risk, the *allocation of decision rights* adds even more. The further down the chain of command a decision resides, the greater the number of decision makers and the harder it is for senior leaders to monitor to ensure consistency of implementation. The amount of variation among those decisions will be high. Subordinates who do not agree with the policy directive could undermine its effectiveness. Some may unintentionally or deliberately shift the goals of the policy to ac-commodate more local interests, such as my son's high school.

In some contexts, the implementer may find a regulatory environment with so many rules that some of them contradict. In these cases, the front-line manager will need to decide which will be followed and which will not. An Army War College study in 2015 found that Army officers were in-creasingly comfortable lying about whether they complied with regulations

because so many conflicted and they felt obliged to report compliance with them all (Wong & Gerras, 2015).

Another factor affecting implementation is the *time horizon*. Many of the problems the government takes responsibility for are enduring: education, poverty, pollution, crime, and security. Solutions to problems in these areas may take several years or a generation or more. But the typical policymaker is incumbent in a position for only a couple of years. The average tenure of a political appointee is just over two years (Marcum, et al., 2001; GAO, 1994). Senior military officers frequently stay in their jobs no longer. Such policymakers, while motivated to solve entrenched problems, have a short-term bias, and seek policies that provide immediate results. With frequent turnover, a policy area may experience a series of short-term programs that are not well coordinated and are likely to have diminished effects on the root causes of the problem. And not only are policymakers impatient, but so are the public and the media who pressure them to act with immediate, but not sustainable, results.

Unfortunately, the short-term focus tends to shift problems, rather than solve them. A program of urban renewal usually does not solve the problem of homeless people who previously squatted in the blighted area. They simply moved to another part of town. When state governments shut down institutions for the mentally ill, the patients ended up on the streets where they foreseeably committed crimes. Today's prisons are overcrowded with former mental patients who are being punished rather than treated. When the installations command cut back on janitorial support for tenant commands due to budget cuts, the tenant commands picked up the cleaning bill, and the costs were merely shifted, not saved.

Related to the issue of time is the *adaptability* of the organizations that need to implement the policy. Citizens of a nation or community look for their government to be stable and consistent. The strengths of a bureaucracy are those well-defined rules, structures, and procedures that citizens, businesses, and other governmental agencies rely upon. But that strength is a weakness when the agency needs to respond quickly. In some cases, a problem comes and goes before the agency responsible can act. Other times the environment is so dynamic that the stable processes cannot keep up. For many years after the 9/11 attack, the Defense Department used two budget processes: one for the base budget and one for the cost of war. The war was changing too quickly for the budget process to handle, and an additional process was created.

The agency may also be set in its ways and resistant to changing programs and policies, especially if they view them as short-term, politically

motivated, or ineffectual. The senior career civil servants can simply drag their feet and wait for the political appointee or the general officer to leave. With large organizations, an initiative in one part, however enthusiastically embraced by the career employees, may be stifled as the program is staffed throughout the rest of the organization. The program advocates will typically need support from other parts of the organization who may not be supportive, are limited in their capacity, feel threatened by the attention of others, challenged by interpersonal conflicts, and more.

Policy Evaluation

The Stages Model is often depicted as a circle or pentagon with the Evaluation stage feeding into Agenda Setting. *Evaluation is about studying the state of society and the efficacy of existing policies.* When the status quo is considered unacceptable or existing policies are deemed ineffective, that is often enough to put the issue back on the agenda.

It is important to distinguish evaluation from policy analysis. Evaluation is looking backward to see if policies have worked or not; to see whether they have had their intended effect. Evaluation studies the current state. It is analysis for understanding. Conversely, policy analysis looks forward, forecasting the effects of proposed policies, and is part of the policy formulation process. It is analysis for decision-making. Evaluation is retrospective; policy analysis is prospective.

But like policy analysis, evaluation is both a political process as well as an analytical one. It is political in that someone must determine the values and objectives of society to evaluate whether they are being satisfied. Those are subjective choices about what is important and valuable to examine. For example, police incidents in Ferguson, Minneapolis, Baltimore, and Louisville, coupled with several killings, including a mass killing in a church in Charleston, made policymakers question the state of race relations in America.

The analytical part, like in policy analysis, is the application of social science to societal problems by rigorously collecting and evaluating data to form conclusions about the situation, and the effectiveness of existing policies. So, in our example, think tanks, interest groups, and government agencies set out to analyze police behavior and crime rates in different neighborhoods. They analyzed the attitudes of diverse groups regarding race relations. Others studied economic opportunities in minority neighborhoods, income and health disparities among various groups, and other factors that might shed light on the issue. In a policy area as complex as

race relations, it is no surprise that there were a lot of studies done that measured a variety of things across different segments of the population.

A critical feature of policy evaluation is the design of that evaluation. Typically, the one directing the evaluation chooses the societal goal to be evaluated, the measures to adopt, and the portion of the population to target. The evaluator's direction may differ from the policymaker's original intent. For example, if evaluating the effectiveness of a law, Congress may direct the Government Accountability Office (GAO) to perform a program audit to see if the intent of the law was achieved. But if an executive branch agency did not fully agree with the law, and shifted the goal during implementation, they might have an Inspector General (IG) investigate whether the substituted goal was achieved. The two studies, while about the same thing, might evaluate two different policies. Users of policy evaluation need to carefully consider the source and design of the evaluation before acting.

The two critical design features are *measurement* and *targeting*. With respect to measurement, the evaluator has some choices to make. First, what level or activity is being evaluated? If one takes a process view of a program or organization, inputs are consumed in activities that produce outputs that affect outcomes. If we were evaluating your academic degree program, the inputs are time, salaries, information technology, books, and faculty labor. The activities are classroom sessions, examinations, student studying and homework, and instructor feedback. Outputs are courses completed and credits earned. Outcomes are students who are better informed, more critical thinkers, more productive workers, more effective managers. Any of those things and the relationships among them—inputs, activities, outputs, and outcomes—could be evaluated.

Another measurement issue is related to the goals of the evaluation. If the evaluator is measuring the efficiency of the education process, they might look to see if the least number of inputs were consumed per unit of output. If the goal is effectiveness, they would look at whether the outputs correlate with outcomes. If the goal is fairness, they might look at the consistency of grading across homework submissions. If the goal is student satisfaction, they might survey students to gather feedback.

The second critical design feature of the evaluation is targeting. While the goal is a question of policy ends, the target is the means to the ends. Let us assume the task is to evaluate the effectiveness of programs that combat poverty. Which programs, or groups, should be evaluated? There are programs that address children, others that address the elderly, different programs exist in urban settings than rural ones, programs may differ between men and women or between singles and families, and veterans have access

to programs others do not. Most policies are designed to address only a subset of a problem, so it is important that evaluations make that same distinction. And it is also important that policymakers do not use an evaluation of one target group and attribute it improperly to another.

Now is a suitable time to also point out that most policy disputes occur at the margin of a target population. For example, if "poor" is defined as an income below $20,000 per year, the policy debate will not only be about whether helping the poor is good or bad but why the line is drawn at $20,000 instead of $18,000 or $22,000.

What makes evaluation difficult? In short, the answer is the same as the things that make policy analysis difficult: the time span between intervention and effect, the wide variety of causal factors for any social condition, policies that are constantly evolving so it is hard to isolate effects, and the differences between policy intent and policy implementation.

Other Models

The introduction to this chapter noted that emphasis will be placed on the Stages Model due to its resemblance to the defense budget process. The student should realize that there are other theories of public policy.[4] Some are more robust, some are applicable to particular circumstances, all can explain a subset of policymaking phenomena, and none can explain them all. What follows are brief sketches of some of those theories and the interested student should seek out the major works in the field if they are interested in learning more.

Incrementalism—first developed in the 1950s by Charles Lindblom in response to claims that the policy process was rational and value-maximizing. Incrementalism acknowledges that because of the large set of actors involved in policymaking, any individual's effects are offset by the effects of the other actors, resulting in only incremental change. Because of limitations of knowledge and time, only a limited set of alternative policies are considered, and the plurality of actors muddies the evaluative criteria such that means and ends are often considered together, rather than the fully rational model that says policies are chosen to meet well-defined ends (Hayes, 2015).

Bounded Rationality—developed in the 1950s and 1960s by Herb Simon based on observational studies and the psychology of decision makings, the theory advances the notion that decision-makers are limited in time, cognitive ability, information, and attention span so they cannot make fully rational and optimal decisions. Their rationality is necessarily bounded by these limits, and decision-makers tend to identify and optimize

subgoals. For example, a playground that is jointly managed by a city school and city public works department is conceived as a social facility by the school administrator and a physical facility by the public works director. Thus, they are likely to disagree on playground policies. In this environment, the decision makers must search for a solution and tend to settle on one that satisfices (it is "good enough" in that it meets a threshold level of acceptability to both since optimality is impossible) (Simon, 1997).

Punctuated Equilibrium—borrows from evolutionary biology to study the evolution of policy change. The theory suggests that social systems exist in a state of stasis which is episodically interrupted by a large change. The stasis is explained by incrementalism, but incrementalism cannot explain radical policy changes (e.g., The New Deal or the civil rights movement). This theory suggests that there are episodes where public opinion or the ruling party in government changes quickly and aligns interests so that they support rather than offset one another, leading to a sudden change (Baumgartner & Jones, 1993).

Advocacy Coalition Framework—developed in the late 1980s and 1990s, this policymaking framework explains policy change when there is goal disagreement and technical disputes among multiple actors representing different levels of government and external stakeholders. Policy participants will ally with others to form coalitions to influence policy formulation. It assumes there are stable parameters in which policymaking occurs, influential external events relevant to the issue, and a policy subsystem in which the actors engage to make policy (Sabatier and Jenkins-Smith, 1993).

Institutionalism—Beginning with Selznick in the 1950s and continuing into the neoinstitutionalism in the 1970s and 1980s (Scott and Meyer, Zucker, DiMaggio & Powell, and Ostrom), this body of work considers the sociological importance of organizations and institutions. Organizations have both formal and informal rules (norms) that determine which behaviors are appropriate. Actors have varying preferences and goals, but are acculturated and learn to behave in ways expected of them, given the subgroups they belong to and the expectations of the roles they serve in. Policies are not created by individual choice but result from the interactions of the actors within these social scripts (Miner 2006: Chapter 20).

Garbage Can Theory—Developed in studies of organizational decision-making under extreme uncertainty, this theory suggests that decisions are not hierarchically organized, but result from the interaction of streams of problems, solutions, participants, and opportunities (Cohen, March, & Olsen, 1972). The theory applies to organizations that have problematic preferences, unclear technology, and frequent turnover of personnel. The

theory suggests that the interplay of the four streams is not deliberate or standardized. Solutions may precede problems (think of the personal computer's impact on organizations) and problems may have no solutions. Opportunities can be created or imposed; decisions may be serendipitous or demanded by external considerations. The overall pattern of organizational decisions appears random and occurs at those moments when solutions and problems meet with the attention of participants. The theory seems to hold best in high-tech situations (e.g., Silicon Valley) or specialized industries (e.g., movie production). This theory describes both outcome and process.

Public Budgeting

Having defined public policy and examined the policy process, we now shift our attention to a specific tool of policy: the budget. In this section, we will look at the functions of a budget—what does it do? We will look at budgeting theories and the student should note that budget theories are just limited applications of public policy theories. We will examine the various systems of budgeting and techniques used within those systems. Finally, we will end this section by describing the characteristics of public budgeting when it is done well.

Functions of Public Budgets

One might say that a budget is merely a tool for managing an organization's revenues and expenditures; a deliberate plan for categorizing or managing those flows in a purposeful way. That is certainly true, and it reflects the definition from the Navy Budget Guidance Manual (see Box 1.2). But in the public sector, a budget serves many other functions. It is obvious to say that for a government to do anything, it needs financial resources, and, to obtain those resources, they need to be budgeted. But budgeting

---

BOX 1.2   DEFINITION OF A BUDGET

A budget is defined as a document that expresses in financial terms the plan for accomplishing an organization's objectives for a specified period of time. It is an instrument of planning, performance measurement, decision-making, and management control, as well as a statement of priorities. Such a definition is descriptive of the Department of the Navy (DON) budget.

—Page 1, Chapter 1, Part 1 of the *Navy Budget Guidance Manual*

goes much further than the pragmatic and managerial purpose stated in the Navy manual.

A classic text in public budgeting notes that a budget is a prediction of proposed expenditures for objects and purposes, and as such, forms a link "between financial resources and human behavior to accomplish policy objectives" (Wildavsky & Caiden, 2001, p. 1). They go on to say that a budget is a "series of goals with price tags attached." For the executive, it is the principal set of policy proposals drafted and supported each year. It is no accident the President's State of the Union Address is delivered about two weeks before the budget is submitted: agenda setting coupled with policy formulation.

The budget is a set of expectations and aspirations. Budgets are inherently optimistic as all chief executives believe their budgets are crafted to deliver a better tomorrow. Federal budgets invariably predict a growing and vibrant economy, which is not always going to be the case, so there is inherent risk in the budget. Individual programs may be optimistically budgeted to portray confidence, and because a lower price is more politically viable.

But while being expressions of hopeful change, at the agency level they are tools of coordination and control. Many program managers have had spending requests denied because, "it was not in your budget." Plans made in the budget formulation phase often become dictates and constraints in execution.

Wildavsky and Caiden also refer to the budget as a form of contract that defines social and legal relationships and commitments where sanctions may be invoked for breach of that contract (2001, p. 2). For example, if the Navy says they can build a submarine for $2 billion, Congress appropriates the $2 billion, but the Navy returns two years later hat-in-hand to ask for $300 million more to finish the job, they can expect scrutiny and ire from the lawmakers. Contracts are mutual agreements, so when a program office justifies a price of $5 million to complete a project and is given $4.5 million with an expression of "good luck," they, too, feel as if a deal has been broken.

To stakeholders, the budget represents a call to action. Proposals to sustain and grow programs and policies are defended by their supporters while critics attempt to undo them. Proposals to cut programs are reviled by the program supporters. Clients of declining programs seek alternative means of support. The budget "attempts to allocate scarce financial resources through political processes in order to realize disparate visions of the good life" (2001, p. 6). Thus, the budget represents a set of conflicting commitments.

The budget is a precedent. Something that is funded previously is highly likely to be funded again. But at the same time, a budget is a mirror.

Examining the changes in a given budget over the prior year's budget reflects evolving priorities, changed circumstances, and shifts in the centers of power.

Defense budgets may be tools of foreign policy. What is contained in the budget, and sometimes what is not, signals to allies and adversaries a country's intentions and capabilities. And sometimes that signal is intentionally distorted as military spending may be hidden in civilian accounts or simply not reported for security reasons. Or the budget might imply a capability exists that does not.

A budget is a tool for influencing the economy: choices about how much spending and in what segments of the economy, financial support for various groups, stimulus packages, or—in the event of an overheated economy—policies to stem growth.

Finally, the budget is a political tool. Each side of the aisle will use the budget, and the budget process, to benefit themselves and to harm the other side. Standoffs over debt ceilings, filibustering continuing resolutions, consolidating unpopular with popular programs in omnibus appropriations, and politicizing the reconciliation process have become commonplace.

Because a budget performs all these functions, it cannot simply be a plan for an agency.

Public Budgeting Theories

Since the budget is an allocation of money and the allocation of money is a tool of public policy, then budgeting is just a special case of policy making. Thus, the theories of policymaking addressed earlier could be adapted to describe just budgeting. What follows here is the adaptation of some of those theories to the task of budgeting, plus a few other theories that have developed specifically around the budget.

All discussions of budget theory begin with V.O. Key's classic observation that the basic budgeting problem is, "on what basis shall it be decided to allocate x dollars to activity A instead of activity B?" (1940, p. 1137). Key suggests that while this looks like a rudimentary applied economics question, or a matter of rational decision-making, it is really a political question (1940, p. 1143):

> The doctrine of marginal utility, developed most finely in the analysis of the market economy, has a ring of unreality when applied to public expenditures. The most advantageous utilization of public funds resolves itself into a matter of value preferences between ends lacking a common denominator. As such, the question is a problem in political philosophy.

In search of an answer to Key's fundamental question, scholars have drawn from the theoretical foundations of many disciplines: organizational behavior, economics, political science, decision science, sociology, and behavioral finance to name a few. As Bartle (2001) notes, "there is no single theory, there are several." This section outlines a few of the more significant theories to have captured the attention of economists, political scientists, and public administration scholars. Each, the reader will note, has an element of truth, and can explain certain phenomena in certain circumstances, but none are robust enough to constitute an overarching theory of public budgeting. Given the stakes involved and the nature of humans, it is likely that none ever will.

The Theory of Public Finance

Musgrave's Theory of Public Finance is rooted in macroeconomic theory and describes three interrelated functions of public budgeting: adjusting the allocation of resources, adjusting the distribution of income and wealth, and securing economic stabilization (Musgrave, 1959). First, the allocative function of budgeting seeks to correct market inefficiencies (monopolies, excess rents, social costs, and public goods) through the allocation of goods and services to achieve "social wants." The determination of social wants occurs through political, not economic processes. The provision of goods and services to satisfy social wants comes from general revenue but may or may not be supplied directly by the government. The design of both expenditures and taxes are tools of the allocative function. Second, whereas the allocative function seeks to move the nation's resources from the satisfaction of private wants to public wants, the distribution function seeks to correct market inefficiencies or achieve social aims in the distribution of income and wealth from one individual to another. Political processes design redistribution. The tools of redistribution—taxes, transfer payments, and the provision of goods and services—will overlap the allocative function and may even undermine allocation goals. Finally, the stabilization function seeks to ensure full resource utilization (e.g., high employment) and stable prices (low inflation). This can be done by restricting or expanding economic activity which can be affected through taxation, lending, money supply, and transfers. Once again, the budgetary functions overlap. Actions in one dimension have effects in the others. The challenge is simultaneously meeting all three objectives as optimally as possible. Musgrave suggests a normative theory of budgeting (how it should be done) more than a descriptive one (how it is really done).

Incrementalism

Associated with the work of Aaron Wildavsky, incrementalism suggests that the "largest determining factor of this year's budget is last year's"

(Wildavsky & Caiden, 2001, p. 47). Incrementalists argue that budgets do not result from a comprehensive rational economic process, but rather from the consideration of a narrow set of increases and decreases that are "in play" at a given moment. Incrementalism suggests that most of the budget is fixed from year to year because of factors such as established ideas on perceived fairness, core requirements, historical precedent, and sunk costs from previous decisions. Other incremental adjustments are the function of changes in the level of activity and changes in prices. Only the portion of the budget on the margin is available for reallocation at any time. Further, incremental decisions result from a simple, repetitive, and fragmented process, and some will undermine earlier decisions, narrowing the amount of change. Wildavsky's theories are rooted in political science and describe the process of budgeting as well as the outcome of budgets.

Muddling Through and Bounded Rationalities

Associated with the work of Charles Lindblom (1959) and Herbert Simon (1997), the idea of bounded rationality arose from behavioral observation. People simply do not act as fully rational decision-makers: subjects who seek to maximize expected utility in the presence of perfect knowledge of preferences, utilities, beliefs, probabilities, and payoffs. The *rational-comprehensive* method (as you should learn in an economics or decision science class) follows the basic path of clarifying values and objectives prior to considering means, performing a comprehensive means-ends analysis, and selecting a "good" policy because it is the one with means that are most appropriate to the desired ends. Lindblom asserts that while the comprehensive-rational decision-making model is ideal, actual decision-making takes the form of *successive limited comparisons.* That is, goals and analyses are intertwined so means and ends are not distinct; therefore, a comprehensive means-ends analysis is inappropriate or even impossible.[5] Analysis is constrained rather than comprehensive; therefore, some outcomes, policies, and values are neglected in the search for an acceptable policy. A "good" policy is frequently defined as one that analysts and policymakers come to agree to implement; without them necessarily agreeing it is most appropriate to the objective (Lindblom, 1959, p. 81).

Similarly, Simon (1997) argues against the "economic man" in favor of "administrative man." According to Simon, people are only boundedly rational: they pursue self-interests but often do not know what those are; they are aware of multiple possibilities but limit their search; they do not analyze comprehensively due to limitations of data, attention span, time, and cognitive abilities; and emotions and norms of behavior impact decision-making. People tend to stop searching for the perfect solution once they