Development is big. It encompasses economic growth, but also social development through civil society, state-building (improving the capacity of the state to deliver services), and political institutions, including rule of law.¹ New Institutional Economics (NIE) has changed how development practitioners think about growth and development over the past 15 years.² NIE has shown that “how” people manage their relations through formal and informal institutions affects the efficiency and distribution of service delivery and the provision of public goods.

This chapter is written by development practitioners who work at the intersection of development and defense, and it is written from the perspective that institutions, including defense institutions, are vital means through which societies coordinate their social, political, and economic activity. The authors have seen places where this institutional reform has created real transformation that led to previously inconceivable peace, prosperity, and growth. More often, unfortunately, tragedies occurred where policymakers ignored institution building, or undertook it as purely a technocratic exercise with no appreciation of the underlying politics. The result was dismal failure. Consequently, the development community has much to learn about how to adapt local solutions, informed by these successes and the failures, as do those working on defense institution building (DIB).

The first section of this chapter introduces key concepts in NIE to the non-economist, including a definition of institutions and the relationship between institutions, public goods, and political economy. Next, it identifies four common mistakes or pitfalls seen in development practice: missing ownership, isomorphic mimicry, perplexing complexity, and unrealistic timeframes. It concludes with a review of recent uses of the Security Sector Public Expenditure Review (SSPER) in developing countries, which is one useful tool for engaging with the complex challenges of DIB to avoid the pitfalls above.

Institutions from the Development Economist Perspective

From an economist’s perspective, institutions are important because they are used to coordinate all social, economic, and political behavior. Institutions regulate scarce resource allocation through the ordering of private and public incentives, by following the “rules of the game” set by law through political systems.³ These laws can be enacted, but can also take
the form of norms and customs—the products of cultures and traditions. Institutions are not meaningful in a one-person economy, but if two or more people engage in production, exchange, and consumption, institutions are necessary to regulate how labor and the fruits of that labor are divided. Thus institutions are a purely social construct—they are only meaningful so long as those that would be regulated by them collectively understand and believe in them.

Institutions are vital to economic theory—for example, take property rights, a core assumption in any elementary economics textbook. Without property rights, the basic building blocks of savings and investment necessary for economic growth and capital accumulation are not possible. Likewise, human rights guarantee civil liberties that are necessary for social discourse (and the social process necessary to construct institutions). Other rights and norms guarantee access to education and health services, essential for human capital formation. Everything else held constant, it has been shown that improvements in institutions lead to improved economic growth.4

While such institutions often take the form of line ministries (ministry of health, education, etc.), it is important to remember that the institutions are bigger than just the buildings and their staff (typically referred to as the organization, a subcomponent of the institution). Alternatively, institutions have been characterized as the “software” of a system, whereas the people, buildings and material are “hardware.”5 Software is a useful analogy, as institutions also include the operating system of societies: the expectations that people have about how the institution works (capacity) and the respect they have for the ability of the institution to regulate behavior (authority), which is often related to how the institution was formed (legitimacy).6 Effective institutions are not always legitimate, and where more than one institutional structure is in place (e.g., in dual-justice systems where tribal/customary justice and state justice institutions are both functioning) they can compete for legitimacy and authority. Not all authoritative and effective institutions are legitimate—the institutions of slavery and dictatorship are examples. Legitimacy does not always derive from democratic processes—it has been shown that one-party systems can have legitimacy if society believes that anyone can compete for leadership positions through a transparent, meritocratic process.7 In many developing countries, legitimate institutions are not effective in terms of capacity (weak civil service) or have limited reach and authority. The governments of Afghanistan and Somalia, for example, while constituted through a relatively democratic process, have limited reach beyond Kabul and Mogadishu, respectively.

Institutions matter not just because they regulate and enforce, but because of the coordination that they encourage. While we often use metrics like court cases or crime rates to measure enforcement and regulation, the real impact of institutions on law enforcement is the “dogs that don’t bark”—i.e. the crimes that do not happen because would-be criminals respect the authority of the state or the norms and customs of lawfulness enough so that they “do the right thing,” resulting in societies that work better together. In many developed
countries, this coordination effect is taken for granted, while in many developing countries, the peaceful outcome is a result of traditional or customary laws and norms that prevail. Furthermore, the coordinating effect of institutions is compounded through a positive feedback loop whenever individuals “pay it forward,” refraining from self-serving behavior that would be at the expense of others or the public good because of laws, norms, or morals, thus reinforcing the norms and standards for others.

To recap, to an economist, institutions are the organizations (the hardware: people, buildings, and material) that enforce and regulate, as well as the individuals that interact with those organizations who have expectations about how they should perform (the software). The overall effectiveness of institutions can be measured on the three dimensions of capacity, legitimacy, and authority.

Institution building is therefore the process of improving capacity, legitimacy, and authority not just of the organization, but vis-à-vis the society in the state-society relationship. Recent comparative studies by development economists on the divergent paths of institution building have explored its failures in developing countries, four of which are frequent enough to be classified as common pitfalls:

- **Missing ownership**: Because they are social constructs, institutions can only be properly built by those that will use them: governments, policymakers, and the society. Where actors do not “own” the institution building process—because of lack of will, mandate, or capacity—it is not absorbed into practice and does not benefit from the positive feedback loop described above.
- **Isomorphic mimicry**: Often, to appease international donors and other external actors, governments will adopt the forms or structures of successful institutions in other countries, even where that form is not fit for function in the current environment. Isomorphic mimicry is the importation and application of “best practice” forms without adaptation to local context.
- **Perplexing complexity**: Any organization chart shows that government organizations are comprised of smaller systems of departments and units, embedded in larger systems of the nation-state and society that interact with the organization through social, economic, and political events. When the complex relationships between these systems are not integrated into the process of DIB, it is doomed to fail before it begins.
- **Unrealistic timeframes**: Institutions take decades to evolve and improve, even in the most developed countries, which have had the benefit of decades of peace. When policymakers have unrealistic expectations about the time necessary to build or reform institutions, they often set the institution up to fail, creating a negative feedback loop of unmet expectations that ultimately yields lower authority, capacity, and legitimacy.
Before examining the pitfalls of institution building, it is important to note that defense is a strange thing to the development economist. There is not really a production function for defense—it is difficult to say how much defense an individual tank or an assault rifle produces, because the answer often depends on the context. What are the threats and what are the capabilities of the adversary? What is the effectiveness of the person using the tank or the assault rifle? What other multipliers are in play? These unmeasureables are most evident in the modern world—even clear military victories are difficult to measure in terms of gains when occupying armies engage in protracted conflicts with remnants of an old adversary regime.

Nor is defense readily consumed. As a good it is difficult to measure—citizens simply do not say “I enjoyed two units of defense today.” For these reasons, defense is often considered a non-productive activity—to an economist, it is instrumental in enforcement and regulation of how and by whom production is consumed, but it does not produce anything directly consumable.

However, this is a blind side for the economist—for anyone who has lived or worked in an insecure environment, security and peace are clearly public goods; they are vital to the functioning of the economy. When absent, there are serious impediments to growth and well-being. Furthermore, the fundamental Weberian notion of statehood—that its core defining attribute is its monopoly on the use of coercive force, implies a preeminence to defense institutions because these institutions directly affect the authority of the state’s ability to regulate and enforce all other state functions—in other words, defense institutions have a primacy among institutions. This chapter regards institutions as the public goods that must be built to coordinate social, political, and economic activity. Defense institutions are a special case of those public goods, unique in their primacy in the projection of government authority, which has implications for all other functions of the state. For reasons discussed further below, the chapter references security and defense interchangeably, though it acknowledges that actors in both fields will be offended by the conflation of the two.

The next four sections of this chapter discuss further each of the pitfalls above (missing ownership, isomorphic mimicry, perplexing complexity, and unrealistic timeframes) in detail, explaining what the pitfall is and the warning signs of such a pitfall, including special considerations for DIB. The last part of the chapter looks at tools for avoiding the pitfalls, with a special focus on the SSPER tool that might be useful to the DIB practitioner. This taxonomy of pitfalls and the tools proposed is by no means exhaustive, as DIB is far too complex for a 20-page “how-to manual.” Rather, the SSPER is provided as an example of one way to avoid these pitfalls, with practical cases of how it has been adapted to different contexts. The SSPER is not, however, a “silver bullet” or “one size fits all” instrument, and should not be interpreted as the recommendation of a “hammer” with all DIB activities being “nails.”
Missing Ownership

Often, well-intentioned international actors, bilateral donors, and the international community will project themselves into a state’s institutional reform or development process and say they are engaged in institution building. This is a mistake. Institutions are comprised of those that enforce the rules and those that are regulated by them. Thus, they can, by definition, only be built by those actors. Outside actors, no matter how integrated they are into the system, are “supporting” institution building. When the actors inside the system—those that will have to deliver and live with the results when the international actors have gone home—do not understand or own the process of institution building or reform, they will not integrate these reforms into behavior of the institution, and will not create the positive feedback loop of good performance and increased expectations from society. Often, external actors working in such an environment will observe that there just “is not traction” or “uptake” to reforms. Meetings will happen, agreements will be made, and then at the next meeting there will be no progress, because higher-level political leadership has not endorsed the decision. These are warning signs of missing ownership.

Missing ownership can come about through a number of channels. Senior policymakers and leaders may sacrifice institutional progress for personal gains. These practices are conveyed down through the ranks, who then sense that real reform is not possible. Political cycles (upcoming elections or current crises) or limited mandates may disempower policymakers who feel that progress cannot and should not be made until leadership questions are resolved. Policymakers may simply not understand what needs to be done or the value of reforms—the importance of experience cannot be stressed enough. If someone has never lived in a society with a professional, reformed, well-functioning defense institution, why would they expend the energy necessary to build one?

In economics, the provision of public goods through institution building is plagued by two pernicious problems: the credible commitment problem and the principal-agent problem. Both are related to ownership issues and have unique relevance for defense institutions.

The Credible Commitment Problem

A credible commitment problem exists when neither actor can make a promise that they do not have an incentive to break later—most famously captured by the “prisoner’s dilemma.” In defense policy, all of the elites or identity groups in a state might agree that they need a defense force that can protect the state from external threats. However, if any of the actors in power have access to such a defense force, they can use it to oppress others and secure their own power. All of these actors can say publicly that they support a strong defense force against external threats and intend to cooperate, but each has a private incentive to use the force for the benefit of their own network interests, and will defect from cooperation if given the chance. Since none can make sincere promises that they will use the force “fairly,” they cannot credibly commit to building such a public good.
This credible commitment problem is particularly prevalent in developing countries where there is a legacy of distrust between ethnic groups or among elites. Commitment problems are compounded in the building of defense institutions because of the aforementioned primacy of defense in the projection of state authority. This primacy escalates the costs of losing the prisoner’s dilemma game beyond just the defense institutions—the prize for power becomes all of the functions of the state, and none dare risk giving that to another. Furthermore, commitments are less credible in contexts where defense forces have historically been used to punish political opponents, or were previously used to gain power through coup or civil war.

For these reasons, it has been argued that the security dilemma in developing countries is fundamentally different from that of developed countries, because developing countries face more internal threats than developed countries.\textsuperscript{11} This is strongly supported by data on all wars since World War II, reported by the Uppsala Conflict Data Program (Figure 1). Ninety-two percent of all wars since 1945 have been internal (521 out of 567 wars). Today’s income level classifications show that high-income Organization for Economic Cooperation and Development (OECD) countries have fought 52 percent of their wars against internal threats, while low-income countries have fought 91 percent of their conflicts against internal threats. Trends in the last 20 years reinforce this—since 1995, only 4 percent (6 of 167) of those wars that have involved developing (low- or middle-income) countries have been interstate conflicts.\textsuperscript{12} Of course, threat assessments vary by country, but on average, the threats to security of the developing state (and the leadership of that state) are significantly higher from within than from outside the state.

Figure 1: All Wars (Minor and Major) Since 1945, Income Level of Actor and Adversary\textsuperscript{13}
The Principal-Agent Problem

The principal-agent problem is similar to the credible commitment problem, but relies on information asymmetry (i.e. hidden information that one actor, the agent, has about its own performance). In principal-agent problems, the principal hires the agent to perform a task, but finds monitoring either too expensive or impossible due to the nature of the task. In such a situation, the agent can deliver on the task, but often finds incentives to shirk—delivering less than what was promised or nothing at all. The issue with principal-agent problems is that the agent will always send positive signals to the principal, but the principal has no way to know whether these signals are true.

The relevance of the principal-agent problem to defense institution building is clear to anyone who has ever struggled to unpack the “black box” of security expenditures and performance. The people (principal) delegate the task of security to the ministries of defense, justice, and interior (agent) through government. For often legitimate and practical reasons, there is information asymmetry; the state cannot share everything it knows about threats, deployments, capabilities, expenditures, and incidents. However, the information asymmetry can be exploited, ranging from the relatively benign form of mediocrity and complacency (where policymakers lack the will or incentives for proper reform) to corruption and, in the extreme, abuse of power.

Ways to Avoid the Missing Ownership Pitfall, the Credible Commitment Problem, and the Principal-Agent Problem

Development practitioners have learned to assess the political economy of the context as a first step when supporting institution building to avoid the missing ownership pitfall. A careful assessment of the key actors and their relationships, power dynamics, mandates, incentives, and competing interests is vital, especially in DIB. This has been called a variety of things: political economy analysis, fragility assessment, risk and resilience assessment, institutional mapping (in the SSPER work below), and, informally, “thinking and working politically.”

Because of the credible commitment problem, international actors that want to support DIB in a developing country must carefully consider their own bias that comes from their development context. Is the intervention by the practitioner intended to stand up a force that, like the forces in high-income OECD countries, is prepared to wage an interstate war, or is it intended to build security of the state vis-à-vis internal threats? And, if the latter, what design issues should be considered with respect to organizational structure? Lastly, an ethical question arises once the credible commitment problem is invoked: if actors in the system cannot trust each other and the institutions of the state to contain the abuses of power by the defense sector, should the capacity and power of that sector be further improved through external support? One of the OECD’s Principles for Good International Engagement in Fragile States and Situations is “Do no harm”—this should also apply in DIB efforts.
Typically, the principal-agent problem is “solved” by reducing the information asymmetry between actors. In defense terms, this can involve improving transparency on expenditures and performance, including through civilian and parliamentary oversight. Restructuring and reorganization through DIB can help to solve mandate and hierarchy issues by reordering relationships and moving agents closer to principals for monitoring. For instance, in the Liberia example discussed below, the World Bank and United Nations recommended that the Ministry of Finance play a more active role in National Security Council deliberations so as to become party to decision-making and express opinions on matters of sustainability.

Isomorphic Mimicry

Development experts have been fooled many times over the past 60 years of development practice by organizations that look and feel like institutions, but do not act and deliver like other institutions of the same name. Ministries may have revered ministers and polished wooden desks, courts may have marble entries and proper statues of Lady Justice, militaries may parade and salute in crisp uniforms, yet the expected underlying functions of these institutions are not delivered. Isomorphic mimicry is the ability of an organization to sustain legitimacy through imitation of forms of other institutions, while lacking functionality.16

Very often, the reason that policymakers in developing countries employ isomorphic mimicry is because of the development actors themselves. The expectation biases from donors of their counterparts are tied to financing and other support, which encourages developing country counterparts to perpetuate the models. As a result, those receiving the money build form over function, propping up artificial constructs of ministries, organizations, and militaries that, like a Western stage set, look like the real thing, but are shallow replicas. Isomorphic mimicry has deleterious effects on development; not only does it disincentivize real reform and institution building, but it actually diverts energy into replicating the artificial forms—ministries expend scarce resources on building form, rather than on the organically grown institutions that might otherwise evolve.

For DIB in a developing country context, isomorphic mimicry could take multiple forms. Often, elites and stakeholders in developing countries are given titles and positions commensurate with their power or contacts as a form of patronage or power-sharing, but not with their experience or expertise. In such cases, they must be given respect due their title and influence, but may not be willing or capable of undertaking the reform that someone in their position should. Organization and force structures may be replicated following a regional, former colonial, or global power, a design of form without regard to the required function of the force. Liaisons and focal points are not assigned because they are the best suited or located to act as a counterpart, but because they are someone’s nephew. Weapon systems may be purchased and deployed because they mimic developed country capabilities (and are tied to a developed country’s support) without regard for the
functionality necessary in-country. The list goes on.

The problem of isomorphic mimicry has been a persistent one in the development industry. Because of observer bias, isomorphic mimicry can be very difficult to identify—many practitioners see what they want to see in their counterparts. Warning signs often come from independent observers or unbiased outcome variables: where there is a disconnect between the signals being sent by a ministry and its objectively verifiable indicators and metrics, there may be isomorphic mimicry. The case of Afghanistan discussed below is a good example: at the time of the SSPER undertaken by the World Bank in 2005, the Afghan government had established planning and coordinating security sector institutions, but they were not yet capable of providing leadership to a force of the size envisioned, for which projections had been done outside the limits of a realistic resource envelope.

Perplexing Complexity

The butterfly effect posits that a small change in an initial state (a butterfly flapping its wings) could have effects on much larger systems (a hurricane a world away). This is troubling to development actors, who think that the world functions as a linear, deterministic series of interactions between cause and effect, but liberating to those who accept that the world is a complex, interrelated, and often chaotic system of systems. To the former, all of the hard work of planning and design—the engineering of a solution—can be undone by the smallest unobservable variable. To the latter, getting development right is not about mechanical solutions, but rather about navigating and adapting to the ebbs and flows of progress evident in complex systems, best characterized by the sub-title of a recent report on the topic: *Plan for Sailboats, Not Trains.* Those who embrace this complexity have found “systems thinking” to be a useful frame for engaging with this chaos. There are a number of features of systems that are relevant to understanding complexity:

- **Systems are parts (actors and machines) that work together through processes and turn inputs (energy, material, and information) into outputs:** All systems produce some outputs, but they may not be the outputs one expects—a ministry of mines can excel at producing outputs in the form of off-shore bank accounts, but never produce any mining safety. Understanding the outputs of the system is a first step toward understanding the behavior of the system.

- **Systems are bounded, but boundaries are defined by observers:** For proper analysis, a system cannot be “everything”—we simply cannot comprehend such a system, so it must be bounded in some way. Acknowledging that the boundaries of a system can be user-defined gives the policymaker the freedom to adjust the conceptualization of the system to the level of analysis that is useful. If a reform cannot be undertaken at the ministry level, then the frame could be changed to the department or unit within the ministry where progress can be made.
- **Solutions are endogenous to the system:** Linked to the ownership issue, this is a pivotal lesson for international actors. Any solution that will improve performance of a system to produce the outputs desired will have to be internally consistent with the system. If a solution using the inputs and processes in the system would not be adopted by the actors, then another solution must be found within the system or the system must be redesigned or redefined.

- **Systems are dynamic and complex:** While actors within a system may seek equilibrium, it is important to remember that systems hardly ever reach equilibrium. This is an important lesson to economists who use “equilibrium models” in complex settings—while there may be a pull toward an equilibrium solution, it is unlikely that a society in the process of transformation will actually find equilibrium. Indeed, it is hard to give an example in the modern world of a society or system in equilibrium.

- **Systems can seem unpredictable, but often follow an internal logic:** Growth in a system may be cyclical, chaotic, or exponential—it is difficult to tell in the middle of a pattern whether it is a pattern. Consider the sequence of numbers 1, 2, 4, 7…; what is the next number? There are reasonable mathematical rules that suggest it is 12, 13, or 14, but it could just as easily be 3, 5, 6, 8 or 9 if the sequence is the order of billiard balls sunk in a game of 9 ball. It is often our incomplete knowledge of the system and our cultural bias that makes a system seem unpredictable or chaotic and our knowledge of context that makes a pattern recognizable.

Linked to the concept of systems thinking is the concept of “wicked problems.” A wicked problem is so complex that the problem itself is not well understood. Solutions may not be known until a solution is tried, and they are often “one-shot” solutions. There is no stopping-rule—one can cycle through alternative solutions for a variety of preference reasons, and none of them may be absolutely preferable.19

To some, the complexity of systems and the challenge of wicked problems is daunting. Such concepts are too amorphous and complicated to ever solve through linear programming and planning. However, as Dwight D. Eisenhower sagely advised, “Plans are useless, but planning is indispensable.”20 The purpose of planning is not to come up with a single, executable plan that works; it is to create the institution of common purpose that comes from consensus building, mapping of a complex problem, and jointly building the skills necessary for problem-solving, including trust between actors.

Examples of dialogue mapping and joint problem-solving are evident in many disciplines; perhaps one of the most established comes from the defense sector: wargaming. Wargaming involves playing out a scenario to test strengths, weaknesses, and resilience of a system in response to various outcomes, and identifying likely scenarios and possible responses. Likewise, in development, recent innovations include problem-driven, iterative adaptation, which encourages multiple feedback loops so that actors engaged in problem-
solving will adapt their projects to local conditions, building on successes and learning from failures in real-time, rather than designing “fire and forget” projects that cannot change course mid-delivery. Acknowledging this complexity through mapping exercises and workshopping of problems is a way to build joint understanding of the path dependency of problems, the context, and the available solutions internal to the system.

Unrealistic Timeframes

Institution building takes time. Recent analysis comparing country experiences for institutional reform suggests that it takes 15 to 25 years to improve institutions a single standard deviation—that is, not moving Haiti or Somalia to the level of Denmark or Canada in terms of institutional quality, but rather moving them to something that is “good enough” to deliver basic government services—for example, a level of services like in Ghana or Thailand. These results hold across the board, on multiple measures and indexes of institutional quality, including “moving the military out of politics” and “reducing corruption” for the ten fastest countries on each indicator, suggesting that a generation for reform is a good, but perhaps still unrealistic, target.

A generation for reform is a difficult truth to reconcile to international assistance initiatives in any sphere. Most development actors have rotations of three to five years in a country, before they are promoted and move on to the next country and challenge. Humanitarian and security actors often have shorter deployments. Among practitioners and policymakers, it is rare to find someone with more than five years of field experience in a country. Of course, nationals in developing countries can have years of experience, but they can also be diaspora or have studied abroad, and may be equally disconnected from the political context of the country. Overlaying the timeframe for deployments and for true reform means that the support initiatives a practitioner invests in today may not come to fruition until four or five of his or her replacements have cycled through their office. Each of those counterparts will have to learn the local and political context, avoid supporting isomorphic mimicry, and learn to appreciate and adapt to the complexity of the challenge.

One tool for developing consensus on institution building is a joint initiative (a review, a workshop, contingency planning, etc.). A special case is the Security Sector Public Expenditure Review discussed at length in the remainder of this chapter. The SSPER is not included here as a “silver bullet” to solve all DIB problems; rather, it is an example of how complex systems can be bounded and defined through a joint consultative exercise so that common understandings of the problem set can be developed and joint ways forward for iterative, adaptive solutions can be identified.

Security Sector Public Expenditure Reviews as a Tool for Defense Institution Building

A Public Expenditure Review (PER) is an analytical instrument that examines government
resource allocation within and among sectors, assessing the equity, efficiency, and effectiveness of those allocations in the context of a country’s macroeconomic framework and sectoral priorities.\textsuperscript{24} In addition, a PER identifies the reforms needed in budget processes and administration to improve the efficiency of public spending. Public financial management (PFM) studies can be executed independently or together with a PER, and assess the quality of budget execution (e.g., apportionment of resources within institutions or risks to financial management systems).\textsuperscript{25}

Over the past decade, SSPERs have become the de facto accepted terminology for PER studies, which encompass the constituent elements of the defense, justice, and security sectors. They explore the political economy of security institutions and its impact on the allocation of resources, the link between the budget cycle and security policy, and some of the more detailed aspects of public financial management. It is important to remember that statistics and metrics, including budgets and other measures of state performance are, themselves, institutions—they are public goods that provide the basis for informed debate and the formation of sound policy. As activities that create a common understanding of the rules of the game, they are instruments that can help integrate defense institution building within the broader framework of good governance and financial sustainability. Since SSPERs mix qualitative with quantitative analysis, their approach is driven by evidence and context rather than norms and best practices.

Acknowledging that there is no one model for security institutions, the first report of the United Nations Secretary-General on security sector reform defines the “security sector” as a broad term used to describe the structures, institutions, and personnel responsible for the management, provision, and oversight of security in a country. The security sector thus includes defense, law enforcement, corrections, intelligence services, and institutions responsible for border management, customs, and civil emergencies. Elements of the judicial sector responsible for the adjudication of cases of alleged criminal conduct and misuse of force are in many instances also included. Furthermore, the sector encompasses actors that play a role in managing and overseeing the design and implementation of security, such as ministries, legislative bodies, and civil society. Other nonstate actors that could be considered as part of the security sector include customary or informal authorities and private security services.\textsuperscript{26}

In and of itself, the SSPER is not a panacea to avoid missing ownership, isomorphic mimicry, complexity, and unrealistic timeframes. Yet by assessing spending patterns and the political economy of institutions, it can help policymakers understand how these “systems of systems” function, who makes the decisions, and what kind of security sector a country envisions; and get a sense of how much money and time is required to build sustainable defense institutions.

According to the World Bank’s \textit{Securing Development: Public Finance and the Security Sector}, an SSPER typically contains the following elements:
- **Institutional mapping**: What is the relationship between expenditure policy analysis of the security sector and the broader development strategy, governance, and public financial management reforms? What is the sector management structure, and who are the key players? How are they linked to the budget cycle? What are the security sector functions, and how are these organized? Are there alternative operational arrangements, and what are their implications for the structure of security expenditure?

- **Financial management systems**: How can national authorities integrate security sector functions into expenditure planning, budget formulation, budget execution, accounting, and reporting? How can the security sector set up effective systems for personnel expenditures, procurement, and asset management?

- **Financial oversight**: Principles of accountability and transparency are as important in the security sector as they are in other sectors. The SSPER reviews how national authorities address these principles and identifies alternative institutional arrangements, focusing on the roles of the legislature, audit authority, and civil society. Transparency opens the “black box” of security expenditures, reducing information asymmetry and helping to solve the principle-agent problem.

- **Performance, effectiveness, and cost drivers**: What are some key performance measures? Good metrics can be the basis for mutual accountability frameworks, which create the foundation for credible commitments. What are the cost drivers in developing-country contexts, taking into account differing policy objectives and organizational arrangements?

- **Post-conflict issues**: What are the expenditure implications of security sector reform and disarmament, demobilization, and reintegration programs? How can these actions improve confidence and trust between former adversaries?

While crunching numbers is a big part of this exercise, the SSPER’s inherent value is to shed light on the political economy of the sector and its consequences for development. By increasing transparency and creating a common forum for review of expenditures, it is an instrument by which both the government and civilians can gain knowledge of how defense, policing, and criminal justice institutions function, which then makes it possible to subject these institutions to the same standards of effectiveness, efficiency, and accountability as other elements of the public sector. This is the fundamental process of iterative trust-building necessary for commitments to become credible. This simultaneous process is depicted in *Figure 2*, which shows a stylized version of a regular budget process and the corresponding steps in the security sector. Ideally, the PER helps fortify the link between these two cycles.
Notwithstanding special considerations, like secret budgets for special operations or classified information, treating the defense sector as a subset of the public sector is important because the national budget provides the financial basis for the delivery of government functions and the implementation of public policies. By balancing competing objectives, it allows the government to strategically allocate scarce public resources to achieve the greatest public good. Given the size of its spending, integrating the defense sector into the national budget is essential for meeting the four overriding goals of macro-fiscal policy:

- **Macroeconomic and fiscal stability**, which involves maintaining control of a country’s overall fiscal position. Excessive spending on the military relative to productive sectors can threaten a country’s macro-fiscal equilibrium, a situation which can also take place when the bulk of spending is off-budget. Analyzing the macro-fiscal implications of security spending helps avoid the problem of unrealistic timeframes by showing how economic growth affects the resource envelope for defense institutions over a certain time-period.

- **Allocative efficiency**, which involves balancing competing demands and allocating scarce public resources where they will have the greatest benefit (as well as assessing whether allocations match government sectoral policy priorities). Spending on defense, policing, and courts must conform to a well-defined strategy that links resources to ends and ways aimed to mitigate threats to national peace and security, and lay the foundations for economic
stability. Part of this process involves developing a joint understanding among all stakeholders about how complexity affects resource allocation.

- **Operational efficiency**, which involves achieving outputs and outcomes that are economical, efficient, and effective to get the most out of all funds expended.
- **Fiscal transparency and accountability**, which involves providing open and transparent access to financial decisions and data so that government officials can be held accountable for their actions. In this way, transparency reduces information asymmetry and reduces the impact of the principal-agent problem. This applies to most defense spending, even though governments usually retain some parts of their spending composition as secret.

Four Case Studies: El Salvador, Afghanistan, Liberia, and Niger

**El Salvador: Navigating Complex Institutions**

The study of security and justice spending carried out by the World Bank in El Salvador in 2012 reflects these points. It also shows that once complete, PERs can serve as instruments for building consensus on security sector objectives between different stakeholders in society. In 2008, costs of violence associated with gangs were equivalent to approximately 11 percent of gross domestic product (GDP), almost triple the resources needed to ensure universal coverage of basic social services (education, health, nutrition, housing, water and sanitation, and electricity) for the entire population. Using metrics from the World Health Organization (WHO), the World Bank estimated in 2010 that the value of a measure known as “disability-adjusted life years lost” reached nearly 2 percent of GDP (approximately $271 million), higher than any other country in the region.

In this context, the PER was the first comprehensive assessment of the security sector’s resource allocation, efficiency, and effectiveness. The analysis divided the security and justice institutions according to the main tasks they fulfill, and sought to evaluate the allocation of inputs (resources), outputs (specific services), and outcomes (citizen security). In El Salvador, several state institutions that are located under different branches of government execute five main security tasks: crime and violence prevention; police patrolling; crime investigation and formal indictment; presentation to court and judicial resolution; and sentencing, supervision, imprisonment, and rehabilitation (see Figure 3).

The study found there was little to no coordination and complementarity among the several institutions that make up the citizen security sector. They were all vulnerable to corruption. In many instances, abuses had been connected with corruption or extortion cases, particularly with individual police force members. Vulnerability to corruption, under-paid and under-qualified personnel, and lack of monitoring techniques to measure performance meant that institutions in prevention, police, courts, and prisons were unable to fulfill their service-provision function.
These conclusions were developed through a data collection effort across government institutions, academia, and civil society in order to elicit reliable statistics that were previously missing. This process identified performance metrics that allow an institutional efficiency assessment in addition to the sector-wide results indicators. The PER was prepared in consultation with the key stakeholders and institutions that comprise its core audience, thus expediting data collection. Working groups were established with support from the Ministry of Finance and the Ministry of Justice and Security, which appointed focal points. The specific steps undertaken to perform the PER are summarized below and illustrated in Figure 4.

In terms of structure, the PER discussed the national context, including a brief historical, political, and economic review of the country in order to better understand the security and justice sector. The report analyzed the composition, typology, and geographical distribution of crime (primarily homicides and extortions), pointing out the main drivers of crime and violence. After the selection of performance indicators, El Salvador’s University Public Opinion Institute reviewed the formal sector institutional arrangements, relevant legal architecture, and statistical information from police reports, crime statistics, court records, public surveys, expert surveys, legislative reviews, and narrative reports in order to harmonize the different data sets and obtain the baseline information to sustain the indicators developed by the PER.
The process-oriented approach informed the dissemination of findings. One key finding was that government spending was unevenly distributed across the five segments in the security and justice services chain. Police patrolling was the primary destination of security spending. In 2011, almost 45 percent of security spending was dedicated to this purpose. While police patrolling activities received most of the resources, the training and formation of professionals and contributions from the armed forces to vigilance activities also affected spending in this segment. Judicial process and resolutions were the second largest destination of resources. The segment composed of the judicial body and the national council of justice received approximately one-third of the spending in the sector. The investigation segment, composed of the investigation segment of the police, the attorney general, and the medical forensic institute, was third, receiving approximately 15 percent. Finally, imprisonment, rehabilitation, and prevention combined received less than 10 percent of total spending in the sector.

On the basis of the PER findings and working group recommendations, each group elicited a matrix of specific steps and results to improve interagency coordination in the security and justice sector. The results matrices enabled both the government and the World Bank to subscribe to a plan of action whereby objectives were clearly articulated, short- and long-term actions were agreed upon, and roles and responsibilities of each institution formulated. Step 5 in Figure 4 illustrates this approach by showing how government reforms were linked to the original PER conclusions. The results matrices were aggregated into a consensus-based National Citizen Security Action Plan, which was submitted to the government for consideration.

This study is an example of how future defense institution building efforts can translate computing power into convening power to elicit a consensus on citizen security goals. Yet it also shows that national authorities decide on whether these goals are pursued, and that this is tremendously difficult in countries where there is only partial control over...
the means of violence. Hence while the findings of security sector PERs can be used to generate national ownership, political realities ultimately dictate if the SSPER’s analytical effort and recommendations translate into tangible outcomes. For instance, El Salvador currently displays a staggering 103 intentional homicides per 100,000 people, making it the most violent country in the world.\(^3\)\(^9\) This is a product of complex factors, including the disintegration of the 2012 truce between drug cartels and the government’s decision to resort to repressive tactics. The El Salvador case is thus a reminder of both the promise of a new approach aimed at deciphering the complexity of institutions, fostering national ownership, and attempting to elicit realistic timelines, while acknowledging the limitations of DIB.

**Afghanistan: Missing Ownership in Security Sector Planning**

The security sector PER undertaken by the World Bank in Afghanistan in late 2005 aimed to achieve five goals: first, to gain as complete an understanding as possible of the current level and structure of security expenditures, recent trends, and likely future expenditure requirements based on current plans; second, to describe the institutional framework for the security sector and ascertain the extent to which it embeds or is conducive to sound public financial management; third, to assess the strategic coherence and the fiscal sustainability of security sector expenditures; fourth, to assess the extent to which coherent strategies for the security sector guide public expenditure allocations; and finally, to review processes for determining funding levels, expenditure allocations, budget execution, and post-execution functions, and assess the extent to which they follow sound PFM principles.\(^4\)\(^0\)

The findings were astonishing. Afghan security spending (not including counternarcotics) exceeded domestic revenues by over 500 percent, running at some $1.3 billion per year, or just 23 percent of GDP, and just over three-quarters financed by donors. The main driver of security sector expenditures was the Afghan National Army, which absorbed funds on the order of $800 million per year during 2003/04 and 2005/06, after a start-up phase in 2002/03. The growth of police expenditures was equally striking, as they were projected to quintuple to nearly $600 million (budgeted) in 2005/06.\(^4\)\(^1\)

The PER revealed the unsustainability of the security sector and the need to bring military and police costs under control. Moreover, it showed that the ownership of national authorities at that time was limited, as there was no agreement among key Afghan stakeholders on the country’s broad national security goals. Instead, international security partners dominated planning in the sector, making it susceptible to isomorphic mimicry. Although the Afghan government had established planning and coordinating institutions, they were not yet capable of providing leadership. The government at that time could not reach an agreement on setting fiscal objectives. For example, it had a three-year rolling budget that included large parts of the security sector, but budgeting was largely mechanical and not linked to resource availability or long-term planning.

To a very large extent, security sector policies and spending patterns in Afghanistan had not been determined by the capacity of national resources to finance them. Targets for
military, police, and judiciary reform were set outside of a medium-term fiscal framework, and targets for counter-narcotics efforts were not linked to the budgeting process. According to the SSPER, “the lack of long-term planning and related costing thus runs the risk of undermining the fiscal sustainability of the current security structure and effective allocation of budgetary resources, on the one hand, and the ability of the security services to maximize the security they will be able to provide, on the other hand.”

These findings were relevant even a decade later. According to a World Bank country report from 2014, wages and salaries accounted for some three-quarters of the operating budget. In 2010/11, the security wage bill alone represented about two-thirds of operations and 7 percent of GDP. In 2010, the government’s contribution to security salaries stood at 3 percent of GDP. Indeed, security spending (mostly salaries) dominated the Afghan core budget. In 2010/11, nearly 40 percent of core on-budget spending (operating and development) was allocated to security. This share was projected to grow as the Afghan National Security Forces would reach their target level of 352,000 troops by November 2012. With such high security spending and a likely decline in external financing, a real risk existed that priority development, operations, and maintenance, as well as service delivery expenditure would be increasingly crowded out. About one-third of the 2010/11 budget was allocated to education (15 percent), infrastructure (14 percent), and health (4 percent).

The Afghan case suggests several lessons. First, the degree of ownership can be identified early on through policy dialogue, based on political economy analysis and institutional mapping. Second, targets for the size of the security sector apparatus should be set within the reality of the capacity of national resources to finance them. To this end, assisting host-country readiness to build the capacity to absorb external resources would be essential for future defense institution building efforts. Third, trade-offs matter: with limited sources, national governments will have to make difficult choices between security and development spending. Yet the two are inter-linked.

Afghanistan’s formal economy depends on U.S. bases and contracts, and after the 2014 withdrawal of U.S. troops, unemployment reached 40 percent—a figure donors drastically underestimated, with little funding set aside for an emergency jobs program. U.S. spending in Afghanistan went from about $100 billion in 2012 to half of that in 2015.

Liberia: Costing and Timing a Security Transition

The World Bank and the United Nations undertook a similar joint effort in Liberia in 2012, in order to assess the cost of gradually transitioning from a peacekeeping force—the United Nations Mission to Liberia (UNMIL)—to an indigenous force. According to Liberia’s 2008 National Security Strategy, the main threats to peace and security were internal: poor rule of law and poverty; large numbers of deactivated ex-servicemen (17,000) and ex-combatants (103,019 demobilized and an estimated 9,000 who did not benefit from reintegration programs); illegally-held arms; land and property disputes; and ethnic tensions. The threat assessment that accompanied the SSPER further emphasized
the tendency of minor incidents to escalate into large-scale violent confrontations beyond the response capability of the national police. Moreover, high crime, an inadequate justice system, youth alienation, and land disputes remained serious conflict triggers. The main challenge was thus one of public order, hence given the prevalence of internal security threats and the military’s external-security remit, reforming the Liberian National Police and the border police was more critical than reforming the Armed Forces of Liberia in the short run.

The PER found that despite a good National Security Strategy and sector-specific reform strategies, reform of Liberia’s security sector was undermined by weak institutional coordination, oversight, and financial sustainability. While the national security strategy underscored the need for an accountable and democratic security architecture, reform of the sector had focused on developing operational effectiveness. Mechanisms for accountability and coordination were weak, and civilian oversight was largely ineffective.

The study—undertaken prior to the 2014 Ebola outbreak—estimated the total cost of providing security services during 2012-19 at $712 million. This figure comprised the following spending categories:

- The cost of maintaining the ongoing security services already provided by the Liberian security agencies. Assessed at $546 million, it was projected to increase at the same rate as the average inflation rate of 4 percent per year. This price included personnel costs (salaries, allowances, pensions) and non-wage recurrent costs, which support the operation and maintenance of equipment and infrastructure (fuel, repair maintenance, office supplies, etc.).
- The transition cost related to the handover of security functions from UNMIL was estimated at $157 million, including personnel and fixed costs, and assuming a gradual UNMIL drawdown over seven years.
- The recurrent outlays for the proposed regional justice and security hubs planned under the Justice and Security Joint Program (financed by bilateral partners and the UN Peacebuilding Fund).

To set the priorities for the security sector and avoid unrealistic timeframes, the SSPER proposed the use of the Medium-Term Expenditure Framework (MTEF) that the government introduced in 2012. The MTEF is a mechanism for allocating limited resources, requiring a top-down resource ceiling for a sector set (typically by the Ministry of Finance) and a bottom-up medium-term cost estimate from the sector ministry or agency in question. The rationale for adopting an MTEF was that while a budget is adopted annually, policy objectives and delivering national projects cannot be achieved in a single year. On this basis, the study estimated that a financing gap of $86 million would emerge between 2012 and 2019, given the total estimated resource ceiling of $626 million and the estimated cost of $712 million.
To address this financing gap, the study recommended that the Ministry of Finance and Economic Planning become a more active partner in the National Security Council, as UNMIL transition was just as much a financial issue as a security one. A proactive role in priority setting and involvement in the MTEF process could ensure that the security budget discussed at the National Budget Committee was informed by the National Security Council’s decisions. Moreover, the apparent high cost of the security transition forced the government to identify a package of core security functions and services that could be obtained in line with a limited budget. Reform efforts encompassed both institutional and human resource management, reflecting challenges in recruiting and retaining security personnel.  

The Liberian case shows the benefits of an integrative approach to defense institution building which determines needs on the basis of evidence rather than abstract best practices. Liberia needed an effective police first and foremost, rather than a large military, hence the efforts to estimate the financing gap for the Liberian National Police took precedence over other security institutions. Secondly, the PER gives an example of how coordination between finance and security agencies can be institutionalized. An instrument, the MTEF, was specially designed for the financing and planning needs of the country during a transition period.

**Niger: Sustainable Spending and Regional Security**

Whereas the PERs in Afghanistan and Liberia were conducted within the remit of sustained international security efforts, a similar study was performed in Niger in 2012 against the backdrop of a regional security crisis. At that time, Niger faced multiple external security threats, including the war in Libya, ongoing political tensions in Nigeria, and a deteriorating crisis in Mali. Moreover, the country’s large territory, uneven distribution of population, poverty, and high degree of political instability added domestic risk factors manifested in increased terrorist threats, kidnappings, and the trafficking of drugs and other contraband.

In light of these challenges, the PER had a dual goal: to inform the government and other stakeholders of the nature of public spending on and public sector management of the security sector; and to help enhance governance of the security sector to ensure greater macroeconomic stability and safeguard economic and social resources for Niger’s development.

The study found that the turbulent security environment had led to an increase in the number of supplementary budgets. Thus, the allocations to the security sector increased significantly between the initial budget law and the final supplementary budget, by as much as 70 percent in 2010 and 2012. In 2013, the final supplementary budget allocated to the security sector was 40 percent above the initial amount. In addition to high personnel expenditures representing on average one-third of the voted security budget, the economic composition of the security budget changed significantly on the capital expenditure side, which accounted for 55 percent in 2012, the largest item of expenditure. The PER then combined macroeconomic forecasting with security analysis to elicit four scenarios
comparing variables such as government revenues and projected spending on security; in two scenarios, the spending was deemed unsustainable.

The report, while aimed at Niger’s security sector writ large, had a number of findings that are applicable to DIB efforts, particularly for DIB planners and practitioners on the ground. For instance, it noted that increasing resources without strengthening planning and prioritization could strain the management capacities and in turn the efficiency of defense forces, as well as the overall sustainability of public expenditures. The efficiency of the security sector could be strengthened by enhanced budget transparency, internal control, and greater capacity in administration, financial management, and procurement. Recommendations included:  

- The preparation of a security sector strategy covering all security forces
- The translation of this strategy into a multiyear budgetary framework, including procurement planning
- The establishment of a results monitoring mechanism
- An analysis of the impact of this strategy on fiscal and debt sustainability
- A more specific budget classification that would allow improved transparency and a more comprehensive monitoring of sector expenditures
- A more systematic classification of expenditures according to their economic nature that would also facilitate the monitoring of their execution
- A more comprehensive integration of systems and an increase in the payment of salaries via banks that would strengthen the control of personnel expenditures

Mali: Sustainable Spending and Domestic Security

The turning point in the Sahelian security crisis that prompted Niger to boost defense spending occurred in Mali in 2012, when armed and trained ethnic Tuaregs returned to the country after taking part in the Libyan civil war. Claiming long-standing economic and social grievances, they formed the National Movement for the Liberation of Azawad and won victories over government forces in Northern Mali in January 2012. This sparked a coup d’état in Bamako, conflict between rebel factions, and interventions by the Economic Community of West African States and the French government.

The crisis also entailed major economic repercussions in the country, introducing new risks to medium-term macroeconomic stability. Mali’s economy had grown steadily in the preceding decade, with roughly 5 percent growth between 2005 and 2010. In 2011, however, growth fell to 2.7 percent because of a decline in agricultural output linked to unfavorable rainfall conditions. Then in 2012, real GDP contracted by 1.5 percent relative to a growth projection of 5.6 percent when the budget law was prepared, leading to an estimated decrease in government revenues by as much as 30 percent.  

According to the PER undertaken by the World Bank at the request of the government in 2013, Mali increased its security sector budget allocations between 2011 and 2012 by 37 percent in absolute value, while their proportional weight in the general budget virtually
doubled.58 These allocations show an execution rate of close to 100 percent, well above the rate for the general government budget (83 percent in 2010). Economic forecasts showed that this effort could be sustained, but, depending on the scenarios, external budget support would likely be necessary to limit the budget deficit and avoid a crowding-out effect on other expenditures.59

Moreover, the study found that both budget preparation and the reporting on budget execution lacked transparency. For example, soldiers were fully paid in cash and the military units distributed their salaries. Standard operational expenditures passed through a special “imprest” account, the initial purpose of which was to provide urgent support to military operations and not be used for other categories of expenditures until its spending ceiling was reached. Government contracts were usually entered into by direct agreement, even eschewing the use of the special dispensations set forth in the code for defense contracts. This choice introduced risks in terms of the transparency and performance of government control in the sector.60

As with Niger, the Mali case highlights two important lessons. First, challenges to DIB originate in complex regional dynamics, which must be understood in order to assess the criteria for increasing military spending. Second, the public finance dimension may not be the most exciting part for a security and defense practitioner, but issues of budget execution, payroll and transparency lie at the heart of DIB sustainability. As such, an interdisciplinary approach that relies on the dialogue between finance and security professionals might chart a more realistic course for future defense institution building efforts.

Conclusion

The development community has (slowly) learned about institution building over the past 50 years. It has come to realize that for human development, the rules of the game—how people divide the pie—are as important as the size of the pie reflected by economic growth. International actors should take the time to understand the local political context, and work closely with counterparts that own, desire, and have the capacity to elicit real change. They should also stay the course over long periods of reform. Yet this is very much an ideal scenario. More often than not, external actors have promoted “quick fix” technocratic solutions that are neither fit for purpose, nor for the complex political realities on the ground. They have tried to push them through quickly, regardless of local ownership, and have seen failures in the form of setbacks, corruption, and abuses.

Four well-known pitfalls and their warning signs were discussed in this chapter: missing ownership, isomorphic mimicry, perplexing complexity, and unrealistic timeframes. These pitfalls are not mutually exclusive. Lack of ownership can be a result of perplexing complexity, and isomorphic mimicry can lead to unrealistic timeframes and “premature load bearing” where systems are tested before they are ready (for example, rushed elections or security forces stood up before training is completed).61 When isomorphic mimicry leads to a vicious circle of poor performance and lowered expectations
from the institution, a capability or fragility trap can develop.\textsuperscript{62} In development, successful practitioners appreciate this complexity; they do not believe that their plan is foolproof or that it is the only one, and they are prepared to adapt to new information and changing circumstances. These practitioners conduct many consultations for two reasons: to learn as much as they can about a system, and to build consensus with actors in the system about solutions that will work.

Developed by the World Bank, public expenditure reviews of security institutions are a relatively new tool in a sector that was previously “off-limits” to most economists, auditors, and planners. SSPERs integrate security and public finance expertise, and can be a useful exercise for creating a common understanding of the stakeholders, budgetary constraints, and priorities. They can help anchor politically sensitive discussions relating to defense and policing in a numerate context where sustainability issues are addressed early on. Institutional mapping makes it possible to identify complex stakeholder dynamics and the degree of national ownership. Macro-economic and public finance analysis help address questions of resource allocation and identify a realistic timeline for reform. Like any tool, SSPERs are not foolproof. Even if well done, their recommendations can effect change only if national policymakers are willing and able to implement them.

Notes

8 For examples, see Lant Pritchett, Michael Woolcock, and Matt Andrews, “Capability Traps? The Mechanisms of Persistent Implementation Failure,” \textit{Center for Global Development Working Paper} No. 234, 2010; on state-
building, see Levy and Fukuyama, op. cit.
9 Ayoob, op. cit., 23.
11 Ayoob, op. cit., 21-42.
16 Pritchett, Woolcock, and Andrews, op. cit.
22 Dimova and Savoia, op. cit.
27 Harborne, Dorotinsky, and Bisca, op. cit.
29 World Bank internal Public Financial Management training materials.
30 Ibid.
32 Ibid., 21.
33 Ibid., 19. The World Health Organization uses the “disability-adjusted life years lost” (DALYs) measure to quantify the effects of threats to health, including violence. It is also possible to translate DALYs lost into dollar terms by multiplying DALYs by the value of each year lost.
34 Ibid., 23.
35 Ibid.
36 Ibid.
37 Ibid., 15.
38 Ibid., 16.
41 Ibid., 42.
42 Ibid., 34.
43 Ibid., 37.
47 Ibid.
48 Ibid.
49 Ibid., 24.
51 Liberia Public Expenditure Review Note: Meeting the Challenges of the UNMIL Security Transition, op. cit., 25.
52 Ibid., 25-30.
54 Ibid.
55 Ibid.
56 Ibid.
58 Ibid.
59 Ibid.
60 Ibid.
62 Ibid.