

**A Manual on Macroeconomic Fundamentals for Conflict-Affected States**  
by Jurgen Brauer and J. Paul Dunne for the United States Institute of Peace\*  
Draft (v6) February 2010

**Table of Contents**

Overview .....	<u>1</u>
Purpose and scope of this manual .....	<u>1</u>
Chapter 1: Violence and economic development .....	<u>3</u>
1.1 The economic cost of violence: a first impression .....	<u>3</u>
1.2 Assets, income, and the bathtub theorem .....	<u>4</u>
1.3 The many facets of macroeconomic policy and politics .....	<u>7</u>
1.4 The violence and economic development nexus .....	<u>8</u>
1.5 Policy lessons and tips .....	<u>10</u>
1.6 Failure and success: two case studies .....	<u>11</u>
Chapter 2: The long-run goal: investment, productivity, and economic growth .....	<u>13</u>
2.1 Theories of economic growth .....	<u>13</u>
2.2 Measuring economic performance .....	<u>14</u>
2.3 The effect of violence on long-term economic growth .....	<u>15</u>
2.4 Institutions and policies .....	<u>18</u>
2.5 Policy lessons and tips .....	<u>20</u>
2.6 Failure and success: two case studies .....	<u>20</u>
Chapter 3: Dealing with turbulence: macroeconomic stabilization .....	<u>21</u>
3.1 A macroeconomic framework .....	<u>21</u>
3.2 Fiscal policy .....	<u>25</u>
3.3 Monetary policy .....	<u>28</u>
3.4 Institutions and policies .....	<u>30</u>
3.5 Policy lessons and tips .....	<u>31</u>
3.6 Failure and success: two case studies .....	<u>31</u>
Chapter 4: The global economy: international trade and finance .....	<u>34</u>
4.1 The balance of payments .....	<u>34</u>
4.2 Violence and international trade .....	<u>35</u>
4.3 Violence and international finance .....	<u>37</u>
4.4 Institutions and policies .....	<u>40</u>
4.5 Policy lessons and tips .....	<u>41</u>
4.6 Failure and success: two case studies .....	<u>42</u>
Chapter 5: Designing and promoting peace .....	<u>44</u>
5.1 The economics of design .....	<u>44</u>
5.2 The economics of designing peace .....	<u>45</u>
5.3 Third-party intervention .....	<u>48</u>
5.4 Institutions and policies .....	<u>49</u>
5.5 Policy lessons and tips .....	<u>51</u>
5.6 Failure and success: two case studies .....	<u>52</u>
Notes .....	<u>54</u>
References .....	<u>61</u>
Glossary .....	<u>64</u>

Appendices .....	<a href="#">65</a>
Appendix A: Examples of classifications of violence and armed actors .....	<a href="#">65</a>
Appendix B: The United Nations System organizational chart .....	<a href="#">66</a>
Appendix C: The cases .....	<a href="#">67</a>
Index .....	<a href="#">68</a>

## **A Manual on Macroeconomic Fundamentals for Conflict-Affected States**

by Jurgen Brauer and J. Paul Dunne for the United States Institute of Peace\*

Draft (v6) February 2010

“The economic problem of reconstruction is that of rebuilding the capital of society ... Reconstruction is merely a special case of economic progress. If we are to understand its problems thoroughly, we must examine what is meant by economic progress and try to discover how it comes about” (Kenneth E. Boulding, *The Economics of Peace*, 1945, pp. 4, 73).

**Overview:** Increasingly, peace agreements and economic development programs reference the centrality of sound economic policy and a stable macroeconomic framework in state-building efforts. But few practitioners have the background to know what this means and to understand the relationship between their areas of responsibility and the policies needed to attain macroeconomic stability. Even fewer feel able to contribute meaningfully to designing and implementing strategies to attain and maintain this fundamental end state. This manual aims to serve as an introductory guide to and reference document on macroeconomics. It is intended for noneconomists who may be involved in peace negotiations and would benefit from a clearer understanding of the underlying macroeconomic issues.

### **Purpose and scope of this manual**

Without economics there is neither war nor peace. Economics is entangled front, back, and center with violence as well as with its prevention or, at least, mitigation. Before war, economic grievances such as severe maldistribution of income or income-earning opportunities can give rise to political upheavals. During war, economics both provides and destroys resources. And after war, well-functioning production and exchange mechanisms need to be put back together again—or else relapse into war is likely.

As aggressors or as victims, even robustly performing economies can fall prey to armed violence. Japan and Germany and the eventually victorious powers in the Second World War (1939-1945) serve as but one set of examples. Economic aspects related to labor, capital, trade, and finance can motivate, drive, prolong, and terminate violence. This was as true of the U.S. American civil war (1861-1865) as of that in Mozambique (1976-1992). Interestingly, in the Mozambican peace agreements the very word “economic” appears solely in conjunction with the phrase “economic and social reintegration of demobilized soldiers.” No other reference to economics is made.<sup>1</sup> Yet economics is crucial, if only because one cannot fight nor live in peace without resources.

To prosecute war, warriors need to volunteer, be hired, or be conscripted and bullets need to be manufactured, bought, and sold. Withdraw the fuel of war, and the guns must fall silent. Economics can be among the causes that motivate armed violence in the first place, for instance over access to valuable natural resources. And when the guns do fall silent economics is important because postwar—when communities and livelihoods need to be rebuilt—economics co-determines the prospects for the success or failure of peace. It is widely acknowledged, for example, that the economic terms and execution of the post-World War I peace treaty helped lay the foundations upon which World War II was motivated and fought. In contrast, the post-World War II peace arrangements helped generate the economic “miracles” of both Germany and Japan. The same, we now know, is true of armed violence in much of the developing world in Africa, Asia, and Latin America: the design and execution of postwar economic policies help determine the success or failure of peace. Not merely preventing relapse into war, the proper design and implementation of economic policies can be among the primary instruments for preventing armed violence in the first place.

**PURPOSE OF THE MANUAL.** This is a practitioner’s manual on macroeconomic fundamentals as they touch on conflict-affected states. Nowadays, violent interpersonal and collective conflict primarily concerns emerging and developing economies and the manual therefore focuses on these even as it will bring to bear lessons learned from the cases of the now-advanced economies. As to economics, we indeed stick to fundamentals although economists sometimes are hard put to define, let alone agree, just what these are. The finance-driven world economic crisis of the late 2000s has illustrated, after all, that economic theories and policies are less firmly set than it was once thought they were.

In each of the manual’s five chapters, key concepts and relationships are explained in lay-person’s terms, important topics, issues, data, and metrics are presented, the roles and responsibilities of key institutions outlined, and policy lessons and tips for violence prevention, mediation, peace agreements, and post-violence management provided. Each chapter concludes with two illustrative case studies to highlight missteps as well as good practice. This organization—theory, practice, policy, cases—should assist different kinds of practitioners in different ways. For example, mediators and representatives of the bargaining sides will realize that peace negotiations must explicitly deal

with postwar/post-violence economics, lest they raise the danger the relapse into war on account of missing, or faulty, economics.

**SCOPE OF THE MANUAL.** This manual is no substitute for an economics textbook. There is no pretense at being comprehensive; instead we select some topics that are germane to the issue of violence, especially large-scale collective violence as in the cases of war and civil war. Chapter 1 provides illustrative information on **violence and economic performance**, discusses the purpose of economics and the many facets of economic policy and economic politics, and looks at some of the links between violence and (the lack of) economic development. Chapter 2 provides an overview of **economic growth** theory and policy. Policymakers sometimes fail to appreciate that growth is a means to an end—the betterment of life—not an end in itself.<sup>2</sup> The chapter discusses how economic performance may be measured, and what are some important economic institutions and their policies. Chapter 3 moves from long-term to short-term considerations or, in the jargon of the profession, to **macroeconomic stabilization** theory and policy. In practice this means fiscal and monetary policy, concerned for example with taxation and the setting of interest rates, and spill-over effects of these on other policy and development goals. Chapter 4 turns from “closed” to “open” economics, that is, a consideration of **international trade and finance** theory and policy. Chapter 5 concludes the manual, providing sets of general and specific rules of thumb that peace negotiators and economic policy- and decisionmakers should find useful. It brings the preceding chapters together and discusses them in regard to issues pertaining to **the design of peace**.

The manual concludes with endnotes, a list of references, a glossary, and various appendices.

Lesson 0.1: Without economics there is neither war nor peace.

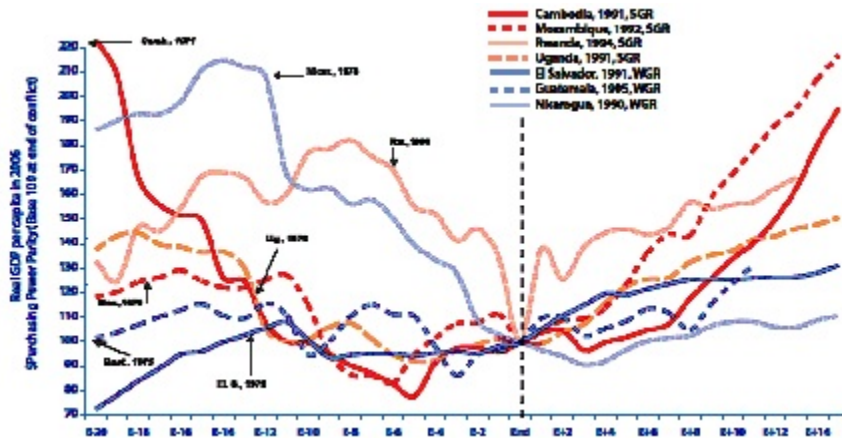
Lesson 0.2: The design and execution of postwar economic policies help determine the success or failure of peace.

Lesson 0.3: The proper design and implementation of economic policies can be among the primary instruments for preventing violence in the first place.

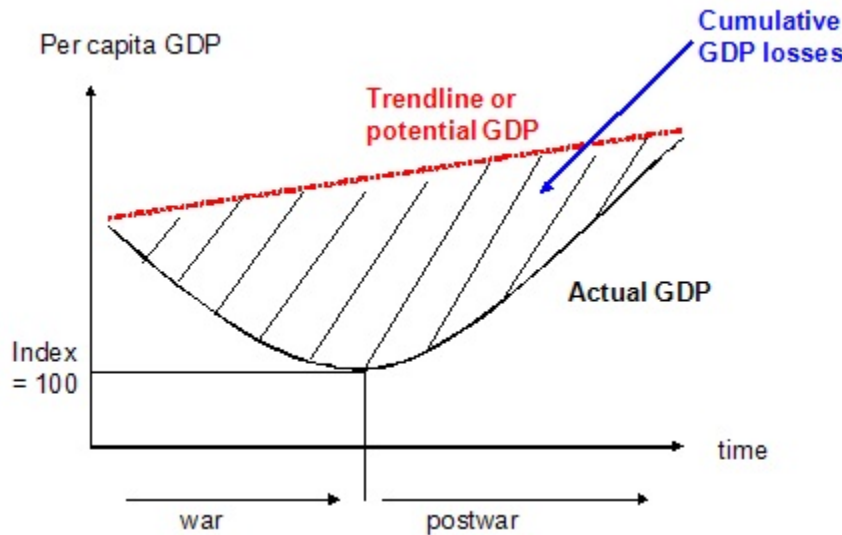
**Chapter 1: Violence and economic development**

*1.1 The economic cost of violence: a first impression*

The World Health Organization groups violence into the rubrics of **self-harm** (including suicide), **interpersonal violence** (e.g., violence between intimate partners and other forms of family violence, rape and sexual assault by strangers, violence committed in institutional settings such as schools, prisons, and work places), and **collective violence** (e.g., armed conflict between, among, and within states, violent political repression and genocide, violent acts of terror, and organized crime) and speaks of an ecology of violence that progresses from (1) individual to (2) personal relationship-related violence and on to (3) communal and large-scale, collective levels of violence (WHO, 2002).<sup>3</sup>



**Figure 1.1:** GDP per capita in selected countries, pre- and postconflict.  
*Note:* Arrows point to starting year of conflict, unless where conflict is ongoing over the entire period covered (Cambodia, Guatemala), in which case the arrow points to the first year of the series.  
*Source:* UNDP (2008, p. 111, Figure 4.2).



**Figure 1.2:** Cumulative per capita GDP losses.

The economics of health and crime are well-established fields of study. Other economists and quantitative political scientists concentrate on collective forms of violence such as intra- and interstate war. In 2008, the United Nations Development Programme’s Bureau for Crisis Prevention and Recovery (BCPR) released a study from which Figure 1.1 is taken. For a selection of seven states, data on pre- and postwar per capita value of economic production, called **gross domestic product** or GDP, adjusted for inflation and purchasing power differences, were collected. (For an explanation of these terms, see chapter 2.) For ease of comparison, for the year in which the respective wars ended GDP is set equal to an index of 100, indicated by the vertical dashed line in the figure.<sup>4</sup> Start dates of war are indicated with an arrow for each state. As may be seen, prior to the start of war, per capita GDP had grown in most of the cases. With the start of war, GDP collapsed. And with peace, GDP started to grow once more.

The three countries with blueish lines (El Salvador, Guatemala, and Nicaragua) have experienced weak postwar growth and hence are labeled as weak-growth recovery (WGR) states, whereas the others (Cambodia, Mozambique, Rwanda, Uganda), indicated with reddish lines, are

marked as strong-growth recovery (SGR) states. The UNDP study discusses why some states appear to recover more strongly than others. But even though both Mozambique and Rwanda, for example, appear to have done relatively well postwar, the macroeconomic policies underlying their economic recovery experiences were in fact rather different. Rwanda bounced back strongly right after 1994 but since then its growth has been modest. In contrast, Mozambique floundered for the initial postwar years before starting to grow strongly thereafter.

Note, in Figure 1.1, that Cambodia's per capita income index equaled about 220 at the start of the war and that, 35 years later, the country still had not recovered to its former per capita income levels. Nicaragua's high-point in per capita GDP came 14 years before the end of the war, and 14 years after the end of the war, its income-level still is only one-half of what it once was! For El Salvador, average income-levels have improved slightly, but the peace after the war ended was worse than the war itself—more people were killed in the 10 years after the war than during the 12-year war.<sup>5</sup>

The United Nations Development Programme (UNDP) report, from which Figure 1.1 is taken, summarizes recent studies on the economic cost of civil war. It reports that this cost lies somewhere between 1.7 and 3.3 percent of GDP per country per conflict year prior to 1990 and averaging 12.3 percent of GDP post-1990, that is, in the post-Cold War era (UNDP, 2008, p. 35). To show the cumulative effects of these losses, Figure 1.1 can be redrawn in stylized fashion—as in Figure 1.2—where the curved, solid black line represents the fall and rise of average per capita GDP during and after war and the dotted red line represents the potential GDP growth path had war not interfered. Consequently, the area in-between the black and red lines indicate the cumulative GDP losses. In light of the number of years covered—35-years in the case of the UNDP study—these losses are substantial (see section 1.4 for more detail).

There is no agreement among economists on how to compute the global cost of war, let alone the cost of all violence, war-related or not. What is required is a computation of **current cost**, **legacy cost**, and **spill-over cost** that is comprehensive and consistent.<sup>6</sup> The current cost is the direct and indirect cost of violence incurred in a given time period (say, a calendar year) and a given geographic space (say, within the borders of a region, country, or province); the legacy cost would include the cost of past violence that carries into the present (e.g., reduced productivity on account of permanent injury; continuous health care for the injured); and the spill-over cost would account for costs imposed on bystanders (e.g., refugees from state A that impose a cost on state B). A complete survey of the various estimates found in the literature does not exist. A partial survey of the economic cost of self-harm, interpersonal, and collective violence, including civil wars and terrorism, was carried out by Brauer and Tepper-Marlin (2009). They conservatively conclude that, if all violence had ceased, the 2007 value of world economic production, called **gross world product**—GWP, the sum of GDP across all states—could have been 8.7 percent larger than it actually was. They distinguish between **static effects** and **dynamic effects**. The former recognizes that cessation of violence makes, for instance, some security services superfluous, thus shifting expenditure to other goods and services. This replacement or substitution effect does not increase GDP; it merely reallocates spending from one sector of the economy to another: the economic pie does not grow. However, being more secure about one's person, family, and property liberates energies to undertake productive investment that, in turn, increases GDP, and it is this effect of nonviolence that—they suggest—would have amounted to an 8.7 percent gain in GWP in 2007.

Because violence is a continuous phenomenon, this cost of about 9 percent of GWP represents annually forfeited economic output. In contrast, the International Monetary Fund (IMF), an important global financial institution, estimates that the world economic crisis of 2009 amounted to a one-time world output loss of a mere 1.1 percent.<sup>7</sup> Granted, the world economic crisis would have been worse had it not been for extraordinary policy intervention worldwide. But that is just the point: the ongoing, annual **violence crisis** is a much more severe economic problem than is the occasional **economic crisis** and demands at least equally extraordinary policy attention and intervention.

### *1.2 Assets, income, and the bathtub theorem*

**PURPOSE OF ECONOMICS.** To survive and to reproduce into the next generation, all living matter must **produce**, **distribute**, and **consume**. The details vary by species but the economy of nature is real enough and biologists routinely apply economic thinking about (energetic) costs and (reproductive) benefits to the organisms they study. The human species is endowed with the seemingly singular capacity to design systems of production, distribution, and consumption that, in principle, permit **continual betterment of our condition of life**. These systems have individual and collective elements to them. Private property rights for instance generally are collectively procured and secured via tax revenue and expenditure on a suitable law and order apparatus. But among the signal achievements of the human economic system is the invention and pervasive extent of trade. Whereas among nonhumans it tends to be the *species* that

specializes, among humans it tends to be the *individual* within the species that specializes on acquiring a useful skill, the product of which is bartered against the specialized products of other individuals.

**THE THREE ECONOMIES.** Because of the importance of trade, the **exchange economy** has long been the focus of the economics profession. Any history of economic thought will discuss schools of thought such as mercantilists and physiocrats, and schools associated with the names of Adam Smith, David Ricardo, Karl Marx, and Friedrich Engels, and others whose works all are characterized, one way or another, by a discussion of aspects of exchange economics. To exchange means that an agreement must be made as to the ratio at which goods and services are exchanged—is it one or two apples for an orange? is it one or two hours of work for 15 dollars of money? This can create conflict because the exchange ratio implies that values are assigned to each good or service with consequences that affect distribution and consumption and hence material well-being. Much of the academic discipline of economics today is concerned with how to press more product (output) from a given set of resources (input) or, which comes to the same thing, how to achieve a given output with a minimum of inputs. Because trade is such an important component, economists study causes and consequences of impediments to trade and how to efficiently overcome them. As a rule, peaceful economies are also trading economies, and vice versa.<sup>8</sup> Inasmuch as war disrupts trade routes and destroys trade facilities such as roads and ports, restoring and promoting internal and external trade and the needed infrastructure will therefore be important for postwar recovery. We discuss some aspects of infrastructure rebuilding later on in this chapter.

A second kind of economy is the **grants economy**. Parents distribute to children, people make donations to charities, the government of one state makes aid available to that of another, and multilateral development banks provide loans at concessional interest rates. In all instances, a grant of economic resources is made without an immediate, if any, expectation of anything given in return.<sup>9</sup> No one has convincingly measured its size, but the formal and informal grants economy is probably huge. It is important to appreciate that grants *transfer* resources from one potential spender to another (e.g., from parents to children). The grants economy is therefore embedded within the exchange economy. Even though the general effectiveness of foreign aid has been questioned, there exists agreement in the scholarly literature that to aid conflict-affected states, sustained postwar grants are necessary and effective (UNDP, 2008). We address this topic in chapter 3 when discussing foreign-aid to conflict-affected states.

A third type of economy is the **appropriation economy**. This, too, is characterized by the absence of direct exchange. But whereas the exchange and grants economies are founded, respectively, on *voluntary mutual exchange* and on *voluntary unilateral giving*, the appropriation economy is based on *involuntary taking*, i.e., coercion. Taxation, for example, is a form of coercion as resources are taken under threat of punishment for nonpayment of taxes. But an indirect benefit is offered inasmuch as tax revenue is meant to be expended on public goods and services that benefit the taxpayer. In contrast, robbery at the point of a gun is pure appropriation. Exchange encourages production; threat discourages production. Brought to a point, one might say that exchange, grants, and appropriation economics are based, respectively, on self-love, love, and fear.<sup>10</sup> The economy of fear plays a crucial role prior to, during, and even after war and crime. The salience of appropriation economics lies in the need to establish a credible and enforceable **social contract** within, between, and among communities and societies.

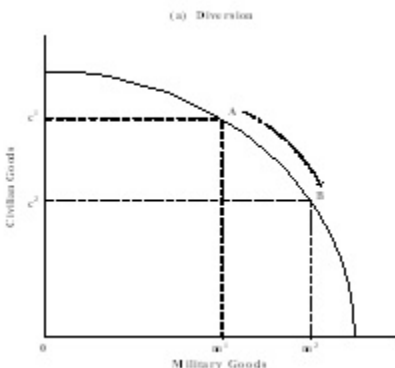


Figure 1.3a: Diversion.

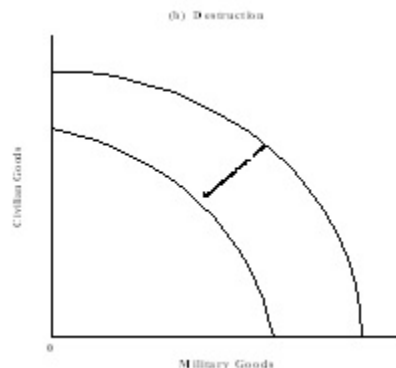


Figure 1.3b: Destruction.

**PRODUCTION POSSIBILITIES.**

We shall have occasion to return to grants and appropriation economics. For now we are in the realm of exchange economics. One useful visual representation of the productive capacity of an economy and its consumption possibilities is given by what economists call the **Production Possibilities Frontier**, or PPF for short. Simply put, all feasible production within an economy is grouped into one of two classes of products. For example, the two

classes might be civilian goods (“butter”) and military goods (“guns”). Thus, in Figure 1.3a, if all of society’s resources are used to produce only civilian goods and no military goods, then this is depicted along the vertical axis to the point

where the axis is met by the curved line, the PPF. Conversely, if only military goods are produced, then this is depicted along the horizontal axis to the point where that axis is met by the curved line. In reality, most societies will produce a combination of the two goods, such as at point *A* where some of society's resources are employed to produce civilian goods and the remainder is used to produce military goods.<sup>11</sup> Economists acknowledge that some production of security-related items (e.g., security fences and border guards) is necessary if only to prevent predation. Nonetheless, it is also recognized that this must come at the expense of civilian production: thus, the move from point *A* to point *B* in Figure 1.3a implies a reduction in the production of civilian goods as measured on the vertical axis. Typically, this would be the case during periods of heightened conflict or of war when military expenditure increases to shift resources toward the production of military goods and services.

The productive capacity of an economy is indicated in Figure 1.3 by the distance along the vertical or horizontal axis from the origin. The further along either axis the PPF intersects the respective axis, the more the economy is able to produce of either military or nonmilitary goods. Thus, if war does break out and assets are damaged (humans injured or killed and physical capital such as buildings, seaports, and equipment damaged or destroyed), the overall productive capacity of society shrinks so that the PPF is depicted in Figure 1.3b as shifting inward, back toward the point of origin, with the consequence that the highest production and consumption points attainable are smaller than before. This is a simple, intuitive, and effective illustration of why gross domestic product—measured as the annual monetary value of all production in an economy—declines in conflict-affected countries.

**THE BATHTUB THEOREM.** If consumption depends on production, then production in turn depends on the underlying **assets** that make production possible in the first place. One way of seeing this point comes from the **Bathtub Theorem**. It says that “the rate of accumulation is equal to the rate of production less the rate of consumption.”<sup>12</sup> Open a water faucet to fill a bathtub. The inflow of water represents “production;” the outflow through the drainpipe represents “consumption.” If production is greater than consumption, water will accumulate in the bathtub and that is the amount of “accumulation,” or **savings**. These savings are an asset (a **stock of value**, rather than a **flow of value**). In times of crisis, when production fails, one has to consume part of the stock, like slaughtering one's cattle or eating seeds needed for the next sowing season. It is self-evident that the consumption of one's (remaining) assets is not a viable postwar reconstruction strategy. The only reconstruction strategy that is viable is one that emphasizes rebuilding the stock of assets, that is, of production that exceeds consumption. In war, production for civilian use is reduced (a move from point *A* to point *B* in Figure 1.3a), so that society needs to draw on its savings to maintain consumption at the accustomed level.<sup>13</sup> Conversely, the task of postwar rebuilding lies in rebuilding the stock of assets. Somehow, the water faucet needs to be turned back on.

**ASSETS VERSUS INCOME.** As the name suggests, and as will be explained in chapter 2, gross domestic product is a measure of production and of the income this production generates. Income generation is obviously important for individuals, families, communities, local governments, and whole countries. It contributes to one's standard of living and quality of life. But production, and hence income, is always based on and derived from some underlying base of assets. A farmer cannot earn income unless the land is fertile and yields produce. A doctor can heal the better, the better supplied is her surgery. And a cabinet-maker needs tools to ply his trade. Assets—or capital—are an important cause of production and income; production and income are a consequence of assets. Assets refer to **physical capital** such as machinery, equipment, and physical structures or facilities that one may have available to work with. There is the **natural capital** of Earth, that is, raw materials that can go into production processes. (Some of these are renewable, others are nonrenewable.) Assets also include peoples's talents, ingenuity, skills, training, education, knowledge, and experience, often referred to as **human capital**: of two craftsmen, the one working with a handloom likely will be less productive and earn less income than the one working with a million-dollar carpet-weaving machine. The second worker may need a considerable amount of formal education, or human capital, to understand, operate, and maintain the machinery.

Some scholars have proposed the still controversial notion of **social capital** on which there is neither agreed definition nor measurement but which roughly refers to the economic value of the social networks humans build. Certainly, in addition to communal physical assets such as roads, waterways, air- and seaports, and telecommunications facilities, there are public services such as the bank notes that serve as money and law and order functions fulfilled by government that enhance productivity. Thus, they too represent a stock of achievements that, once destroyed, can be extremely difficult to rebuild and without which production and income-earning opportunities diminish. This also applies to intangible social capital such as trust between and among members of a community. Trust, once broken, can be impossible to rebuild and therefore lead to a complete stop in economic activity and trade.

The quantity and quality of these assets contributes to the productivity of the population and hence to their income.



Thus, Kenneth Boulding—a renowned economist in his time—argues that “[e]ssentially, the economic problem of reconstruction is that of rebuilding the capital of society.”<sup>14</sup> Of course, many poor communities have little to rebuild in the first place, so that the task lies as much in the building as in the rebuilding of the capital or asset base of society. Regrettably, although perhaps necessitated by the urgency of the situation, policymakers tend to give priority to income over asset building. A key observation here is that it is relatively easy to generate income by further depleting the remaining assets. Called **asset stripping**, recourse to this scheme must be avoided. For example, to generate income, a rural family may decide to slaughter their cattle to sell the meat, hide, and other useful parts. By depleting their assets, income is generated but this leaves the family poorer, not richer. If it is a matter of survival, this is understandable, but ultimately this is a strategy for death, not for economic progress.

### *1.3 The many facets of macroeconomic policy and politics*

**THE OBJECTIVES OF MACROECONOMICS.** Five major objectives of macroeconomic policy concern the achievement of (1) low price inflation of commodities and assets; (2) low unemployment of available resources, especially labor but also in regard to capital utilization; (3) smooth, rather than erratic, business cycles; (4) ecologically sustainable economic growth;<sup>15</sup> and (5) economic policy coordination across political jurisdictions. The last item is addressed in chapter 4, on international trade and finance. Item four was partly addressed in the foregoing paragraphs, the main point being that economic growth must be sustainable and cannot involve a continuous stripping of assets. Further details are discussed in chapter 2. Item three is addressed in chapter 3. It discusses some tools with which to moderate and smooth business cycles. Items one and two are self-evident objectives but measurement problems exist. Even in peacetime, many developing economies find it difficult enough to provide adequate data collection and statistical services to measure, for example, aspects of formal and informal labor markets (e.g., population growth, schooling rates, labor force participation, child labor, and so on), prices of daily necessities and of financial assets (e.g., from food and energy costs to land, property, and housing values), and movements of financial capital in and out of a country. Their interruption, or even destruction, in war requires postwar emphasis on well-directed and well-focused capacity rebuilding efforts. Economic theory usually simply assumes that institutions to provide the entire panoply of such measurements are fully functional. In practice, this is not the case and becomes an important element of postwar reconstruction.

**VARIETIES OF ECONOMIC PHILOSOPHIES AND POLICIES.** Almost anything can become an economic policy. One school of economics even holds that the best policy is to have only one policy, namely, to let the market work without any government interference at all. All that government should do is to set a minimum of clear, generally applicable laws and regulations—the ground rules—and enforce them. These might refer to property and contract law for example or to regulations regarding fair advertising and competition. Thus, markets should not be unfettered but they should be free, and market participants should be free to succeed, or to fail. Rather than government arbitrarily intervening in markets, and necessarily mixing vested political interests with economic ones, the discipline of the market would teach buyers and sellers to exercise the necessary care over their economic affairs. Indeed, it is not the presence of free markets, but their very absence—markets that have been fiddled with by politics—that can cause severe economic and follow-on social and political problems.

A **policy** is a set of rules, directions, or guidelines to be followed for a particular issue area. Ideally, policies are coordinated and coherent so that the many agencies charged with implementing policy work toward a common goal. In practice, policy is frequently not well coordinated, nor always well executed even if coordinated, and vested interests—domestic and foreign—seek to influence policy to push their own agendas.

**Economic growth policy** is discussed in chapter 2. It focuses primarily on asset growth, production, and subsequent income generation, less on distribution and consumption. Economic growth of, say, 4 percent per person per year might be judged as “good,” even if virtually all of the wealth and income gains accrue to just a few people in the country. In the end, however, growth policy will have to revolve around issues such as property rights, land reform, education policy, even business regulation, trade, and tax policy inasmuch as these bear on the degree to which they help or hinder to (re)build assets and generate income. International financial organizations (IFOs) or multilateral development banks (MLDBs) such as the International Monetary Fund (IMF) and the World Bank (WB) have often been seen to push a particular version of growth policy, for instance, to liberalize business regulations, open markets to global competition, and minimize government taxation and expenditure. Yet distributional issues cannot be divorced for long from growth issues. Broad-based **economic development policy**, rather than mere economic growth policy, will need to look at issues concerning urban versus rural development, health, education, and personal security, women, youth, the elderly, and

other vulnerable populations, and so on. Still, growth helps to finance the development objectives and therefore cannot be ignored.

Short-run deviations from long-run objectives are possible of course, if only because of unforeseen events such as natural catastrophes (e.g., earthquakes, floods, volcanic eruptions), or manmade ones (e.g., wars in neighboring states, criminalization of an economy), or sudden increases or decreases in world commodity prices that affect the value of exports and imports. Economic authorities have relatively few tools available to them to deal with these events. Among them are **fiscal policy** and **monetary policy** (chapter 3), that is, policies dealing with taxation, public expenditure, the setting of interest rates, and of the value of one's currency relative to those of one's global trading partners (chapter 4).

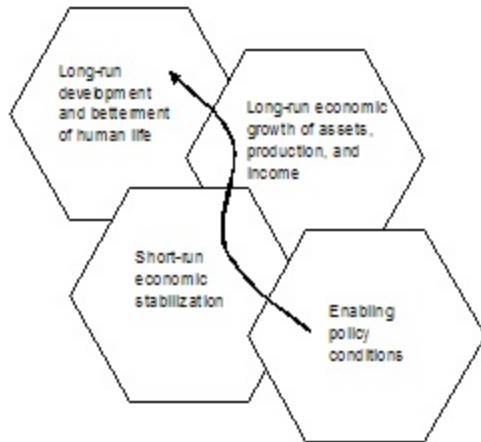


Figure 1.4: A macroeconomic framework.

**WHAT IS AN APPROPRIATE MACROECONOMIC FRAMEWORK?** The preceding paragraphs suggest that there can be disagreement over just what would constitute an appropriate macroeconomic framework to follow. Macroeconomics is a contested field, not only among academics, but among policymakers who jostle for power in order to implement their vision of how things economic should be handled. Recognizing the necessity to deal with problems as they emerge, macroeconomic stability involves a dual long-run objective, namely, *growth with development*. Growth without development is dangerous; development without growth is illusory. Figure 1.4 illustrates our view. Short-run economic stabilization may be viewed in an instrumental fashion: do what is necessary to do to prevent the economic ship from capsizing. But if one is constantly stabilizing, it is perhaps because one's long-run compass setting continuously directs one into the nearest economic storm. As to growth, it is important to appreciate that asset depletion to generate current income—for example, excessive reliance on mineral wealth exploitation—is not a recipe for long-run development success. It also makes one overly vulnerable to

commodity price fluctuations on the world market, requiring overly frequent short-run adjustments so that one will find it difficult to direct one's efforts toward the ultimate objective, the development and betterment of human life.

The foregoing suggests that both a set of **enabling policy conditions** as well as a set of criteria are needed by which to evaluate success or failure of policy conditions, economic stabilization, economic growth, and human development. Enabling conditions—frequently destroyed in war—refer for example to well-functioning, transparent policymaking and policy implementing institutions, to well-trained and accountable officials, and to a predictable regulatory framework. Because economics is not an end in itself but an instrument directed toward a purpose, these criteria ultimately will have to do with objectives such as secure lives, decent work, sufficiency of income, ecologically sustainable activity, even human rights. In design and implementation, macroeconomic policies need to be evaluated—indeed, audited—according to these larger goals.<sup>16</sup>

### 1.4 The violence and economic development nexus

Table 1.1: The Millennium Development Goals

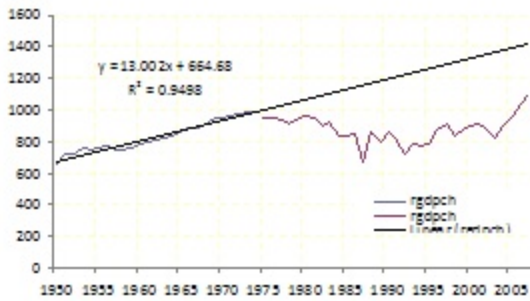
- 1: Eradicate extreme poverty and hunger
- 2: Achieve universal primary education
- 3: Promote gender equality and empower women
- 4: Reduce child mortality
- 5: Improve maternal health
- 6: Combat HIV/AIDS, malaria, and other diseases
- 7: Ensure environmental sustainability
- 8: Develop a Global Partnership for Development

Source: Extracted from UN (2009).

On 8 September 2000, the United Nations General Assembly (UNGA) adopted a resolution, called the United Nations Millennium Declaration.<sup>17</sup> A part of the resolution later coalesced into what is now widely known and referred to as the **Millennium Development Goals**, or MDGs. To be achieved by the year 2015, the goals listed in Table 1.1. Sadly, even though the Millennium Declaration resolution speaks clearly of peace, security, and disarmament, the MDGs themselves are uninformed about the impact of war and violence on poverty and the other MDG goals. They reflect an appalling lack of comprehension that so long as there is violence there will be no development.

Only in August 2009 did the UNGA recognize that underlying virtually every one of the eight MDGs lies the fundamental need to speak to violence:

“Although the linkage between armed violence and development is not explicit in the Millennium Development Goals, they offer entry-points for development agencies to consider. Objectives such as reducing poverty, ensuring maternal health and promoting education are all associated with effective armed violence prevention and reduction initiatives. *Nevertheless ... there is no Millennium Development Goal that specifically deals with conflict, violence and insecurity*” (UN General Assembly, 5 August 2009, item #33, p. 11, A/64/228; emphasis added).



**Figure 1.5:** Population-, inflation-, and purchasing power-adjusted GDP, Ethiopia, 1950-2007 (base year = 2005).

Source: Penn World Table, v6.3.

independence in 1993, but a border war with Ethiopia broke out in 1998 that was only nominally settled in 2000.

In Figure 1.5, we see the economic result of this history of violence. Over the 30-year period from 1975 to 2004, production per person completely stalled. Had Ethiopia continued to grow at its 1950-1974 rate—as indicated by the linear trend line in the figure—average production should have reached I\$1,400 in 2007 instead of the I\$1,110 actually achieved. The area between the trend line and the red GDP line denotes the size of the cumulated loss of production.



**Figure 1.6:** Population-, inflation-, and purchasing power-adjusted GDP, Nicaragua, 1950-2007 (base-year = 2005).

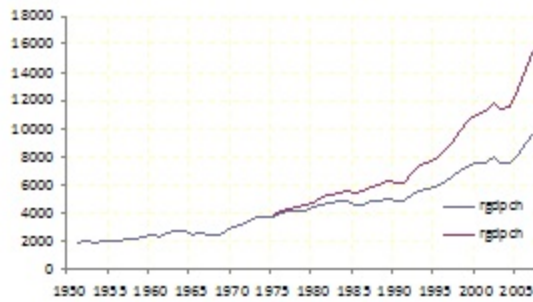
Source: Penn World Table, v6.3.

level of I\$2,174—whereas the trend line projection suggests that average production should have reached about I\$7,000 by 2007. In a word, in the nearly 60 years from 1950 to 2007, Nicaragua’s economy has not grown at all. The reason for the continued economic collapse even after the 1990 multiparty elections have to do with the lack of supportive political framework conditions (see chapter 5). For example, former president Arnaldo Alemán (1996-2001) was convicted of embezzlement, money laundering, and corruption and sentenced to a 20-year prison term—this by his presidential successor, Enrique Bolaños (2001-2006), of the same political party. Meanwhile, the former rebel leader, Daniel Ortega, was reelected to the country’s presidency in 2006.

For an illustration, consider the case of Ethiopia. Using gross domestic product data from the Penn World Tables project that are adjusted for inflation, population growth, and for purchasing power differences across countries, we note a steady rise in GDP from 1950 to 1974. Measuring in so-called international or purchasing power parity dollars (I\$), Ethiopia’s GDP was about I\$649 in 1950 and about I\$991 in 1974, an increase of about 53 percent over 25 years or 2.12 percent per person per year. In 1974, a violent revolution occurred; in 1977, a war was started with Somalia over the Ogaden region; in the early 1980s several massive famines occurred in part because of a brutally repressive political regime that pursued hurtful economic policies as well; in the early to mid-1990s, violently contested elections took place; long-running secessionist movements in Tigray and Eritrea resulted in more violence; Eritrea gained

The case of Nicaragua is more stunning still (Figure 1.6). Again measured in international dollars, it’s per capita production grew from I\$1,947 in 1950 to I\$4,701 in 1977, or about 5 percent per person per year, a significant achievement despite what was known and acknowledged to be a repressive political regime. A long-running rebel movement finally gained traction in 1978 and came to power in 1979, provoking an undeclared proxy war with the United States that involved harbor mining, arms smuggling, and the clandestine support of counter-revolutionaries by the U.S. administration against the express wishes of the U.S. Congress. An internal war continued until multiparty elections were held in Nicaragua in 1990, resulting in the electoral defeat of the revolutionary forces. Nonetheless, as evidenced in Figure 1.6, the economy completely collapsed, with the result that production per person in 2007 was only I\$2,176—almost equal to the 1951

We deal with the case of El Salvador and the outright post-civil war criminalization of its economy in one of the two case studies that conclude this chapter. But one more figure here will be useful to highlight the effects of *nonwar homicide* on an economy. This concerns the case of the Dominican Republic (Figure 1.7). Again, the base data on population-, inflation-, and purchasing power adjusted GDP are taken from the Penn World Tables (v6.3). The blue line in the figure shows steady production growth from I\$1,831 in 1951 (the datum for 1950 is unavailable) to I\$9,665 in 2007, or 7.5 percent production growth per person per year, an impressive achievement almost on par with India's and China's recent economic growth records!



**Figure 1.7:** Population-, inflation-, and purchasing power-adjusted GDP, Dominican Republic, 1951-2007 (base-year = 2005).

Source: Penn World Table, v6.3.

And yet, an aforementioned study by the United Nations Office on Drugs and Crime (UNODC, 2007) estimated that since 1975 growth could have been increased by an additional 1.7 percent per person each year if homicide rates in the Dominican Republic could have been halved from over 16 per 100,000 people to the rate of Costa Rica (about 8 per 100,000 people). Using this information, the red line in Figure 1.7 plots the hypothetical, GDP levels that the Dominican Republic might have achieved, with the result that by 2007 average production should have been on the order of I\$16,000 instead of the about I\$10,000 actually achieved.

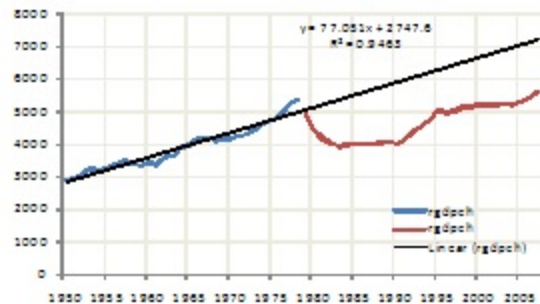
The World Bank concludes—rightly—that “violence is a major impediment to development.”<sup>18</sup> Violence prevention, or at least mitigation, and post-violence reconstruction of a stable social contract are necessary conditions upon which development goals can be built. To repeat an earlier point:

without peace there will be no development. By the same token, lack of development, or even the prospect or hope of development, is a prime cause that gives rise to violence. A proper macroeconomic framework and policy orientation will be one important ingredient in the policy mix needed to lower the incidence of violence.

### 1.5 Policy lessons and tips

- Lesson 1.1: The violence crisis is a much more severe economic problem than is the occasional economic crisis.
- Lesson 1.2: Avoid, prevent, or mitigate violent conflict. Heightened tensions and war always carry adverse economic consequences. Postwar reconstruction is far more expensive than is prevention.
- Lesson 1.3: (Re)build assets; do not deplete them. In postwar reconstruction, short-run necessity to address issues regarding income generation, distribution, and consumption should never detract from focusing on asset (re)building.
- Lesson 1.4: As a rule, peaceful economies are also trading economies, and vice versa. Restoring and promoting internal and external trade will therefore be important.
- Lesson 1.5: Even though the general effectiveness of foreign aid has been questioned, there is agreement that to aid conflict-affected states, sustained postwar grants are necessary and effective.
- Lesson 1.6: One cannot manage that which is not measured. Decide on a sequence in which data collection and data analysis services need to be reestablished.
- Lesson 1.7: One cannot manage without managers. Capacity-(re)building of institutions and personnel to design and implement proper economic policy is crucial.
- Lesson 1.8: Consider the elements of the macroeconomic framework—enabling policy conditions, short-run economic stabilization, long-run economic growth, and ultimate economic development and human betterment—broadly and holistically. Do not lose sight of the purpose that economics is to serve: growth without development is dangerous; development without growth is illusory.
- Lesson 1.9: Lack of development affects levels of all forms of violence (self-harm, interpersonal, and collective violence) and, vice versa, all forms of violence adversely affect development. An appropriate macroeconomic framework and policy orientation can help prevent, or at least mitigate, violence. Conversely, inappropriate (macro)economic policy can worsen violence.

## 1.6 Failure and success: two case studies

**Failure: El Salvador**

**Figure 1.8:** Population, inflation, and purchasing power adjusted GDP, El Salvador, 1950-2007 (base year = 2005).

Source: Raw data from Penn World Table, v6.3.

El Salvador fell into a prolonged civil war, lasting from 1979 to 1991. Tens of thousands of people died, many more fled. A rare occurrence, the population count in the country decreased (as it did in Cambodia during the worst excesses of the Khmer Rouge regime). But since the end of the war, violence and insecurity in El Salvador have not ceased. An initial spurt of recovery in terms of real GDP per capita (measured in purchasing power parity or international dollars, I\$) proved short-lived (see Figure 1.8). A World Bank Country Brief refers to homicide levels of 55 per 100,000 people in 2006, a gang culture that impedes the safety of schools, lowers property values, reduces social capital, makes travel on public transportation to places of employment unsafe, and projects an image of the country that undermines attempts to attract foreign direct investment.

A 2005 UNDP study (in Spanish, and not well known outside the country) concluded that the economic cost of violence and insecurity amounted to 11.5 percent of 2003 GDP. Costs include those imposed on the medical sector, absenteeism and productivity losses in the workplace, and legal costs. The losses are more than double what the state spends on the health and education sectors combined. From 1993 to 1997 homicide rates well exceeded 100 per 100,000 people and by the early 2000s dropped to a fairly consistent, but still extraordinarily high, ratio of 60 per 100,000. (The WHO considers a rate above 10/100,000 epidemic.) As elsewhere, homicidal violence primarily affects young males and differs by day of week and across regions within the country (with homicide rates ranging in 2003 from 10.4 to 54.2 per 100,000 across the country's 15 administrative regions). The correlation between homicide rates and homicides committed by firearm is very high—a finding that holds for other countries as well.

But ordinary homicide—premeditated or in sudden anger—is but one form of violence and, in 2003, accounted for only 7.2 percent of reported cases of crime against persons or property. For example, vehicular homicide in El Salvador is also among the very highest per 100,000 people in Latin America (and the world). And intrafamily and sexual violence levels are very high as well. All this suggests that constructive (or at least nondestructive) social behavior has broken down in the face of institutional and society-wide incapacities. A culture of impunity arises, and with it a culture of insecurity and consequent failure in the ability to be economically active or productive. In a 2001 survey of business obstacles in Latin America, for example, El Salvador received the most unfavorable scores on crime and organized crime (which were also the highest of all 11 obstacles countries could be ranked on). Various surveys of small and large businesses in the country suggest business closure or lack of investment on account of crime. Microenterprises were not as affected, suggesting displacement of formal economic activity into the informal sector. Thus, the cumulative effects of a culture of violence also reduce government tax revenue even as they increase public purse expenditure.

**Neither success nor failure yet: East Timor (Timor-Leste)**

Following the withdrawal of Portugal from its colonial holdings around the world, East Timor (Timor-Leste) declared its political independence in 1975. Within days, however, it was invaded by Indonesia. Over the next 25 years, tens of thousands of East Timorese died during a brutal Indonesian occupation. Following the East Asian financial crisis of 1997, which unseated the Suharto regime in Indonesia, a particularly atrocious spell of violence broke out in East Timor (Timor-Leste) in conjunction with the renewed push for independence. Following an initial intervention by Australia, a U.N. transitional administration governed the region from late 1999 to mid-2002, at which time full independence and admission to the United Nations was won. Apart from one recurrence of violent mass upheaval, in 2006, the country has been comparatively peaceful, albeit tense.

Economically, two extremes characterize East Timor. On the one hand, it concluded—although only by mid-2005—highly contentious negotiations with Australia over the sharing of certain offshore petroleum and natural gas deposits. (The negotiations were and are enwrapped with disputes over maritime boundaries involving Indonesia as well.)

In order to proceed with exploiting the submarine resources, the ultimate settlement of the maritime boundary issues have been set aside for the time being. On the other hand, the 1999 onset of the war resulted in extraordinary infrastructure destruction. This means that alongside the provision of basic services regarding health, education, and personal safety, the country's primary need lies with infrastructure reconstruction. Initially, oil and gas revenues far exceeded what could sensibly be expended. Following the Norwegian model, natural-resource rents are by law placed into a Petroleum Fund, invested abroad. Withdrawals must go to support the state budget, and the government faces the challenge to limit itself to sustainable fund withdrawals while building the physical and human capital infrastructure to (re)constitute private sector activity.

Following the 1999 violence and subsequent years of political uncertainty, roads also were overused and undermaintained to attend to damage caused by heavy-vehicle use and rainfall. By the late 2000s, access to all-weather roads was available to only about half of the rural population. Poverty and health indicators are correlated with lack of infrastructure in water, sanitation, immunization and health services, and to a large extent mediated through lack of or shortcomings in physical access (road connections). Bad roads or no roads also limit the extend of market activity, such as bringing produce to market. The geography of the country (mountainous, geological instability, heavy rain) makes the building and maintaining of roads challenging and expensive. Almost the entirety (!) of the country's road network needs repair or rebuilding.

With regard to transportation infrastructure, East Timor represents neither success nor failure—yet. It has a clearly identified need, and it is in the very fortunate position of having a ready, if volatile, source of revenue. The challenges lie in public revenue and expenditure management generally and with infrastructure planning, prioritization, and management specifically.

## Chapter 2: The long-run goal: investment, productivity, and economic growth

### 2.1 Theories of economic growth

Economic growth is welcome. On a per capita basis, the average person today is much better off than the average person was even just 100 years ago. The spatial distribution of that success, however, is unbalanced, with very large numbers of people in Latin America, Africa, Asia, and East-Central Europe in particular still being poor. Theories of economic growth have to explain not only growth over time but the spatial pattern of growth as well, both across and within countries. The theories should identify the underlying causes that generate growth, and it would be helpful if these causes proved to be **endogenous** rather than **exogenous**. Endogenous means that the causes are working from within the economic system and may be amenable to policy intervention; exogenous means that a cause has been identified but that it is beyond the ability of policymakers to manipulate. For example, new technology that increases labor productivity would be regarded as exogenous so long as the mechanism by which it comes about remains unclear. But if a mechanism were identified as having to do for instance with easy access to financial capital, secure property rights, and proper incentive systems that encourage inventors and business people to risk time and (borrowed) financial capital in exchange for keeping the profits that inventions might yield, then these identified factors might be endogenous to the economic system and potentially amenable to policy intervention.

To move beyond subsistence, a surplus—a “survival-plus” economy—needs to be generated and sustained that permits some people in society to take leave of working for mere survival and to devote the freed-up time to experiment, innovate, and implement. Growth theory propounded by economists in the 1700s and 1800s emphasized the formation and growth of capital, of efficiencies to be gained from specialization in production, and they demonstrated the growth advantages of unimpeded trade within and across political jurisdictions. Although its distributional aspects are sometimes questioned, to this day free trade remains an important doctrine in economics. In terms of capital, **classic growth theory** suggested that any surplus used for improvement of and increase in physical capital would bring some further surplus but that, in time, population growth would catch up and consume this surplus so that the population would revert to subsistence levels of existence. In this theory, sustained economic per capita growth was not possible.

With the advent of the industrial revolution and sustained economic growth in the United Kingdom, Western Europe, and North America, it became clear that this theory was inadequate. But it was not until the early to mid-1900s that new growth theories were formulated. Two in particular emphasized the role of technological change and of the role of entrepreneurs in fomenting such change. Joseph Schumpeter introduced the now famous phrase of **creative destruction**, meaning that in pursuit of profit opportunities, entrepreneurs in a competitive economy will try to bring to market innovative products and processes that on the one hand destroy competing lines of business but that, on the other hand, are so revolutionary as to move the entire economic system forward.<sup>19</sup> In the energy and transportation sectors for example, water-driven machines were replaced by fossil-fuel powered machines, later supplemented with the ability to transmit electricity generated from fossil fuel over long distances. Likewise, the horse and wagon replaced the hand-carrying of goods, and canals and barges, transoceanic shipping, railroads, highways and the automobile, and modern air travel all challenged and transformed prior forms of transportation.

Schumpeter’s story was plausible but it was also narrative and analytically intractable. Entrepreneurship, innovation, and investment are good and well but not amenable to direct policy intervention. In contrast, Robert Solow constructed a mathematical representation or model of a hypothetical economy in which labor, capital, output, growth, investment, technological change, and savings to finance investment are key variables. The mathematical exercise resulted in three predictions, namely, first, that an increasing amount of capital per worker (the **capital/labor ratio**) generates growth because more capital makes workers more productive; second, that countries with an initially small capital/labor ratio would grow faster than those with already large amounts of capital per worker because each additional unit of capital produces a higher return when starting from low levels than when starting from high levels; and third, that because of **diminishing returns** to ever more capital, economies will eventually reach a **steady state** where the simple addition of more capital generates no more additional growth. To overcome the steady state, the key idea is that an economy not only needs *more* capital (e.g., more of the same old typewriters) but *better* capital (e.g., computerized word processors rather than typewriters), that is, the continuous embedding of technological change in the machines and work processes available for humans to operate with. Importantly, the model is silent on just where this technological change comes from. Technological change is exogenous to the model.

Solow’s model also predicted that poor countries should converge onto the living standards of rich countries.

**Table 2.1: Adjusting GDP growth**

Year	Nominal GDP	Price level	Population	Real GDP	Real GDP per person
1	10,000.0	100.0	100.0	10,000.0	100.0
2	10,500.0	102.0	101.0	10,294.1	101.9
3	11,025.0	104.0	102.0	10,596.9	103.9
4	11,576.3	106.1	103.0	10,908.6	105.9
5	12,155.1	108.2	104.1	11,229.4	107.9

Note: All numbers are rounded to one decimal place.

Evidently, this has not happened and economic growth theory needed to take yet another turn to explain the real-world observations.<sup>20</sup> In the 1980s and 1990s, Paul Romer, Robert Lucas, and Robert Barro were among those formulating **endogenous growth theory**. In addition to creating mathematical representations where technological change comes about from within the model (endogenous), the definition of capital was expanded to include human capital. This is important because, unlike physical capital with its feature of diminishing returns, it is believed that human capital exhibits

**increasing returns**, meaning that each additional year of knowledge, education, skill, and experience will bring higher returns than does each prior year. The applied work focuses, in part, on systematically identifying the institutional conditions needed within states to allow innovation, education, and physical and human capital to flourish— aspects neglected by earlier theorists. Among these, free trade, a minimal regulatory system, sound money, good law and order—especially secure property rights— corruption-free government, and other factors are mentioned, that is, a panoply of good governance that together provide framework conditions that permit private parties to explore Schumpeterian opportunities to better their lives.

Evidently, violence disrupts trade and diverts economic resources into unproductive channels. Moreover, it destroys capital and the cultural and economic institutions necessary for good policymaking and implementation, necessary also for enhancing the endogenous factors of economic growth.

## 2.2 Measuring economic performance

Before pursuing the topic of growth-enhancing investment, violence, and economic growth, a few things need to be understood about measuring economic activity.

**MEASURING THE ECONOMY PROPERLY.** The most common measure of economic activity is gross domestic product, or GDP. It is measured as the money value of all final goods and services produced during a certain time period, usually one calendar year, times their market prices. Of course, much economic activity goes unmeasured, e.g., agricultural production for home-consumption or activity in illegal markets that for obvious reasons is neither reported nor taxed. Moreover, much activity is counted whose contribution to well-being may be questioned. For instance, a woman is raped or suffers domestic abuse and requires medical treatment. Because the treatment results in expenditure and income streams (a payment for medical service received by the attending medical personnel), it is counted as increasing GDP. It would have been better for GDP not to rise.<sup>21</sup> Much the same may be said about military and security-related expenditure that create income for personnel and for proprietors and shareholders of security-related companies but that, in the end, merely serve to protect ourselves from ourselves. GDP may rise, but no intrinsic contribution to well-being is made.<sup>22</sup>

All economic numbers must be adjusted for population growth and output price inflation. For example, assume that GDP amounts to USD10,000 in year 1 (see Table 2.1), and suppose that GDP grows by five percent from year 1 to year 2, that is, to USD10,500, and then by five percent again in each of the following years. The resulting numbers are referred to as **nominal GDP** in recognition that they are a mixture of quantities produced *and* the prices at which the quantities are valued. The **price level** in year 1 is 100 (think of this as an average price across all goods produced). Assume that prices grow by two percent each year relative to each prior year. Thus, the price level in year 2 is two percent higher than the price level in year 1, and that of year 5 is two percent higher than that of year 4. Finally, assume that population grows by one percent each year, for instance from 100 in year 1 to 101 in year 2.

To calculate inflation-adjusted or **real GDP**, divide any year's nominal GDP by the price level and multiply by 100. Apart from a small rounding error, in year 5 for instance we get  $(12,155.1/108.2)*100 = 11,229.4$ , so that the economy has grown by about 12.3 percent as the real GDP column indicates: 11,229 in year 5 is 12.3 percent larger than the



10,000 from which the economy started in year 1. (The word “real” means in terms of the monetary value of the *number of goods produced*, rather than in terms of their prices.)

But by year 5 the population also has grown, in this case by over 4 percent, so that a further adjustment is necessary. This is shown in the last column of Table 2.1. Divide 11,229.4 by 104.1 to get 107.9. Real GDP per person now equals 107.9, a 7.9 percent increase relative to year 1. (107.9 in year 5 is 7.91 percent larger than the 100 in year 1.) Not bad, but a far cry from the about 21.6 percent suggested by nominal GDP growth alone. (12,155.1 in year 1 is about 21.6 percent larger than the 10,000 in year 1.) Only the real GDP and the real GDP per capita numbers are comparable to each other, with the latter one being the preferred measure.

As indicated in chapter 1, when comparing countries using different currencies one more adjustment need be made. Suppose, for example, that the size of the German economy per person were a hypothetical EUR10,000 and that the size of the U.S. economy per person were an equally hypothetical USD10,000. Further suppose that the euro and dollar exchange on a one-for-one basis (EUR1.0/USD1.0). Thus, translated into U.S. dollars, the value of production per person in Germany would be USD10,000. But if the exchange rate changes, say to EUR1.1/USD1.0, then the size of the German economy—measured in U.S. dollars—would appear to be only EUR10,000/EUR1.1 = USD9,091, or about 10 percent smaller.<sup>23</sup> The problem lies not with a shrinking German economy, as may be mistakenly thought, but with a fluctuation in the market exchange rate between the two currencies. To bypass this and other problems with cross-country comparisons, researchers have developed a measure called **international dollars (I\$)**, or **purchasing power parity dollars (ppp-dollars)**. Thus, when making comparison *within* a country, GDP and other economic numbers should be adjusted for inflation and population changes, and when comparing *across* countries, all numbers should additionally be converted to international dollars as well.

Another problem—a big one—is that the monetary size, let alone the growth, of an economy is difficult to measure if a state is bereft of labor and institutional resources to properly do the counting of goods and services produced, and of their prices. Moreover, in some states the informal economy—genuine economic activity that is neither counted nor taxed—is very large. The United Nations Office on Drugs and Crime (UNODC) refers to figures reported by Prof. Friedrich Schneider (University of Linz, Austria) according to which the six Central American states (Costa Rica, Nicaragua, El Salvador, Honduras, Guatemala, and Panama) have shadow economies averaging about half again of reported GDP, and the International Labor Office (ILO) reports that the share of informal-sector employment in these countries is well above 50 percent of total employment. In Bosnia and Herzegovina, official employment stayed steady at 600,000 people between 1998 to 2005, while informal employment rose from about 200,000 to about 500,000. In addition, UNDP speaks of the rise of a “criminal peace economy.”<sup>24</sup> This would include, but not be limited to, illegal economic activity such as trade in narcotics, arms smuggling, human trafficking, or trade in endangered species. Measurement problems also bedevil other important variables such as investment and international trade and finance (see chapter 4).

### 2.3 The effect of violence on long-term economic growth

**Table 2.2: National income accounting**

- (1)  $C+I+G+(X-M) = Y$
- (2)  $Y = C+S+T$
- (3)  $C+I+G+(X-M) = C+S+T$
- (4)  $I+G+(X-M) = S+T$
- (5)  $I = S + (T-G) - (X-M)$
- (6)  $(I-S) = (T-G) - (X-M)$
- (7)  $(X-M) = (S-I) + (T-G)$

**NATIONAL INCOME ACCOUNTING.** Because one cannot earn what someone else has not expended, it must be true that when all of an economy’s expenditure is added up it must equal all of that economy’s income derived from production as well. Thus, equation (1) in Table 2.2 shows that the expenditures that result in income (Y) are made by private households on domestic consumption (C), by firms on domestic investment in equipment (I), and by government on various public services (G). In addition, when a country exports goods (X), it earns income from foreigners so that foreigners’ spending results in revenue streams that must be added to national income. Conversely, when households or firms import (M) goods from abroad, the resulting expenditure leads to income that accrues to the other countries and must therefore be subtracted from the home country as it does not add to domestic income.

Equation (2) captures the idea that domestic income (Y) can be used in only three ways: after paying taxes (T), the resulting after-tax or disposable income finances either consumption (C) or savings (S). Equations (1) and (2) are equal to each other because both are written in terms of national income, Y,

**Table 2.3: Hypothetical national income accounting numbers**

$$(5) \quad I = S + (T-G) - (X-M)$$

$$S1: 30 = 40 + (30-30) - (30-20)$$

$$S2: 30 = 30 + (30-30) - (30-30)$$

$$S3: 30 = 20 + (30-30) - (20-30)$$

$$(6) \quad (I-S) = (T-G) - (X-M)$$

$$S1: (30-30) = (30-30) - (30-30)$$

$$S2: (30-30) = (30-40) - (30-40)$$

$$S3: (30-30) = (30-20) - (30-20)$$

$$(7) \quad (X-M) = (S-I) + (T-G)$$

$$S1: (30-30) = (30-30) + (30-30)$$

$$S2: (30-30) = (30-40) + (30-20)$$

$$S3: (30-30) = (30-20) + (30-40)$$

derived from and expended on what has been produced. Thus, the next equation simply repeats the left-hand side of the first equation and the right-hand side of the second one. Because consumption (C) appears on both sides of equation (3), its effect cancels out in terms of national income accounting. We are left with equation (4) which, when rearranged in three different ways, forms the basis for three very important insights. To illustrate these insights, it will be useful to associate each of the variables with hypothetical numbers (see Table 2.3) and to insert them into equations (5), (6), and (7), respectively. For equation (5), the numbers assume that government expenditure (G) equals government tax collection (T) so that there is neither a government budget surplus ( $T > G$ ) nor a budget deficit ( $T < G$ ). Equation (5) then tells us how **private domestic investment (I)** is financed. There are three sources: **private domestic saving (S)**, **government sector saving (T-G)**, and **foreign sector saving (X-M)**. The first two, private and government saving [ $S+(T-G)$ ], are also known as **national saving**. Since the government sector shows neither a budget surplus nor a budget deficit, no government sector savings are generated that could be recycled toward investment, but neither does the government sector absorb savings from the private sector to finance a government

budget deficit.

For equation (5), Table 2.3 displays three scenarios (S1, S2, S3), each of which assumes that investment equals 30. Scenario 1 (S1) assumes that private sector saving equals 40. The excess of savings over investment must go somewhere. Because it does not finance a government deficit (since  $T=G$ , so that  $T-G=0$ ), the funds *must* be related to activity in the foreign sector, in particular to the excess of exports (funds flowing into the economy) over imports (funds flowing out). But the funds flowing into a country on account of exports are **foreign currency earnings**, and the only way to use them is to return them as investments in the countries from which the currencies are earned. Domestic investment will be unaffected. In scenario 2, part of the former saving of 40 is employed to finance higher import levels. Now, the government and the foreign sectors both are balanced, and private domestic investment is fully financed from private domestic saving. Finally, in scenario 3, the shortfall of private domestic saving of 20 to finance private domestic investment of 30 is made up by the foreign sector. Here the excess of imports over exports means that funds are leaving the country but the only place where foreigners who earn these funds can reinvest them is in the country from which they come. These will be private domestic investments, but the ownership of the assets bought belongs to foreigners. (Also see the balance of payments discussion in chapter 4.)

The three scenarios for equation (6) highlight another aspect of national income accounting. In S1, everything is balanced. But in S2, there is a government budget deficit ( $T < G = -10$ ). Since the private domestic saving and investment sector is in balance, the government budget deficit must be financed from abroad. In this case, the excess of imports over exports results in foreigners holding funds that they lend back to the government of the originating country. And in S3, the government budget surplus implies just the opposite, namely that there *must* be a trade surplus as well. Think of the three elements of the equation (private sector; government sector; foreign sector) as a three-sided balloon filled with air. When one squeezes the balloon at one end, and the second end is closed off, then the air *must* move to the third end.

Finally, examine the three scenarios regarding equation (7). In each, we assume that the foreign sector is balanced. In S1, this is because both the domestic sector and the government sector each are balanced as well. In S2, the government budget surplus of 10 now can be used to finance the excess of domestic investment over the availability of private sector saving. And in S3, a government budget deficit now absorbs a portion of private sector saving so that less is left over to finance private domestic investment.

Conflict-affected states generally suffer from three simultaneous problems. First, because of war and/or violence domestic production is falling so that tax revenue falls even as there is more need for government expenditure. This results in falling government budget surpluses or, more realistically, rising deficits ( $T < G$ ). Second, exports tend to fall off and reduced local production needs to be “made up” by imports. Thus, the foreign sector becomes imbalanced ( $X < M$ ). In terms of equation (5), we might have the following situations:

$$I = S + (T-G) - (X-M)$$

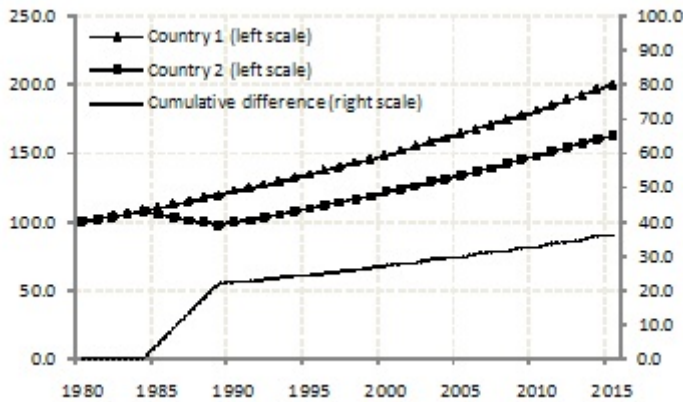


Figure 2.1: Diverging growth paths of war and nonwar economies.

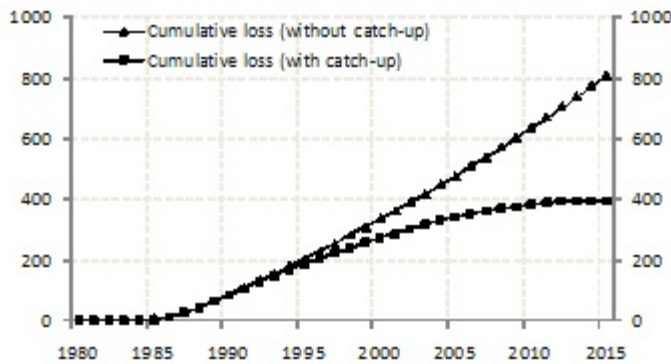


Figure 2.2: Cumulative war losses.

size, given a percentage growth rate. Thus, if the growth rate is 2 percent, an economy will double in about  $70/2=35$  years (the exact number of years is 36). Similarly, if an economy grows at 3 percent each year, then it will double in  $70/3$  or about 23 years, a saving of 12 years. Seemingly small differences in growth rates accumulate rapidly to substantial differences in average living standards. Some East Asian economies recently have grown by 8 percent per year, so that their economies can double in size in about 9 years' time.

The effect of compounding in conflict-affected states may be illustrated with Figures 2.1 and 2.2. In the first figure, each of two countries starts in 1980 at a GDP level of 100, and each then grows at 2 percent per year. But from 1985 to 1989, country 2 suffers a five-year long war with an annual 2 percent GDP decline, whereas country 1 continues to grow at 2 percent per year. From 1990 onward, both countries again grow at 2 percent annually. Using the scale on the right-hand side, the bottom line in Figure 2.1 shows that the diverging growth between the two countries in the five-year war period amounts to about 22 percentage points. But because of compounding, this is not a one-off effect limited to the war period. Instead, the difference keeps growing so that by the end of one generation—25 years postwar—country 1's GDP stands at 200, double its starting point, whereas country 2's GDP stands at only 163.7, a 36.3 point difference. (And note that using the Rule of 70, country 1's GDP should indeed have doubled over the entire period from 1980 to 2015, that is,  $70/2=35$  years.)

Figure 2.2 shows the cumulative GDP losses for country 2 relative to country 1. When both countries grow at 2 percent per year during their respective peace times, the five-year war interruption amounts, by 2015, to eight times the starting GDP (the cumulative loss is 809.1). For country 2 to catch up to country 1 within 25 years postwar, by 2015, it would have to grow at a rate of 2.8 percent per year, that is, 40 percent faster ( $2.8/2.0=0.4$  or 40 percent) than country 1. Still, Figure 2.2 shows that by the time country 2 does catch up, its cumulative GDP loss during the catchup time is very nearly four times the starting GDP. Either way, the annual and the cumulative losses are tremendous.<sup>25</sup>

$$S1: 30 = 30 + (30-40) - (20-30)$$

$$S2: 20 = 20 + (30-40) - (20-30)$$

$$S3: 10 = 10 + (30-40) - (20-30),$$

where in S1 the outflow of funds from excess imports is used by foreigners to finance the government budget deficit. But because there is war or other types of violence, private sector activity falls. Therefore incomes fall, and the remaining income must be used to finance household consumption, so that less is available for private sector saving to finance private sector investment—as in S2. Put differently, who wants to invest in an economy beset by war? If government instead of borrowing from abroad dips into private domestic sector savings—as in S3—then private domestic investment falls even more. This, then, amounts to the third problem conflict-affected states face: in addition to budget and trade deficits, private domestic investment is falling.

**COMPOUNDING AND THE RULE OF 70.** One important fact of growth pertains to its compounding effects. For example, one dollar invested at an annual interest rate of one percent per year will become  $\$1.01$  a year later. Analogously, an economy of the size of  $\$1.00$  that grows at one percent per year will have attained the size of  $\$1.01$  a year later. The **Rule of 70** is a handy guide that approximates how long it will take an economy to double in

**HOW COLLECTIVE VIOLENCE PERTURBS THE ECONOMIC SYSTEM.** In chapter 1, the importance of productivity-enhancing investment for long-term economic growth and well-being of the population was emphasized. Investment referred not only to private and public physical capital (roads, machinery, and the like) but also to human, cultural, and institutional capital such as levels of education, the degree of trust among citizens, and the extent of well-working property rights, contract enforcement, stable money, and so on. The preceding sections show how vulnerable is investment in war and highlighted the cumulative, long-term, effects of falling GDP as a result of falling investment as a result of violence.

But more than investment is at stake. Interpersonal and collective violence can perturb the economic system in a variety of mutually reinforcing ways. Starting with the **supply-side**, war often is associated with spikes in input prices. Needed raw materials may be harder to get; suppliers charge higher prices to obtain and to transport them; electricity and other public utility services may be disrupted and therefore disrupt other production as well; laborers and farm workers may be drafted into armies, become victims, or refugees, so that it is more difficult to find qualified, efficient workers. New investment to make agricultural or industrial production more efficient is not undertaken for fear that the investment will be destroyed in war; and maintenance on existing equipment may be deferred, leading to earlier breakdown of the machinery. On the whole, average production costs rise. Economic growth falls, employment falls, and unemployment rises. The size of the effect depends on the intensity, duration, and spatial reach of the violence.

On the **demand-side** of the economy, all of the five components of aggregate demand—which is what equation (1) captures—can be adversely affected. Demand for consumption falls as people individually try to save monetary resources in anticipation of becoming unemployed or in expectation of a long drawn-out war. Firms will be reluctant to invest when war may destroy the investment. Moreover, why invest when consumers are expected not to buy? Exports can falter as transportation routes, especially air- and seaports and border-crossing points are blocked. Imports cannot continue unabated, so that people need to seek recourse to higher-priced domestically produced goods, driving up the cost of living. And war affects government tax revenue which falls when economic activity falls or when economic activity shifts from the formal, taxed sector into the informal, untaxed one. Thus, the government spending component of aggregate demand also may fall. To compensate, government can try to borrow, increase its debt load, and inject spending, especially military-related spending, into the economy to prop it up. But replacement of private by public economic activity is not a viable long-run economic strategy. While individual people may do well out of war, entire economies do not. In a word, violence creates a vicious cycle that continually depresses the economy as illustrated by the numbers and simulations provided in chapter 1 and thus far in chapter 2.

## 2.4 Institutions and policies

**THREE SOCIETIES.** Any community consists of three societies. Commercial, civil, and political society (or economics, culture, and politics) form a three-legged stool. Overlaps notwithstanding, commercial society allocates resources via markets; civil society allocates resources via moral suasion; and political society allocates resources via power.<sup>26</sup> Most adults are engaged in all three societies simultaneously: they participate in economic life as producers and consumers; they are engaged in civic activities from neighborhood football clubs to membership in international nongovernmental organizations; and they participate one way or another in public life as well, if only as occasional voters.

A well-functioning society is also a well-balanced one. Shorten, or remove, any one leg of the stool, and the community will wobble, or falter. Commercial society running rampant without moral checks from civil society and regulatory checks from political society is just as much a recipe for disaster as politics that lets neither commerce nor civil society bloom. All three societies operate both in the domestic and in the transnational sphere (Figure 2.3). Local business has its counterpart in transnational business, local NGOs in increasingly prominent transnational NGOs, and the local public sector in international organizations such as the United Nations at the global level or the Association of Southeast Asian Nations, the European Union, the

	National	Transnational
<b>Civil society</b>	local NGOs; football clubs	global NGOs; religious org's
<b>Commercial society</b>	local business; business assoc.	TNCs; Intern'l Chamber of Com.
<b>Political society</b>	political parties; public sector	UN; IMF; ASEAN

Figure 2.3: Examples of institutions.

African Union, and the like at the continental levels.

Each of these actors has its own concerns and objectives, and each seeks to influence the others. As far as economics and economic growth are concerned, one may say that commercial society drives it, that political society provides framework conditions to direct and manage it, and that civil society checks on the quality of the economy, for instance through insistence on subjecting growth to environmental objectives or by demands for equitable growth.

More conventionally, institutions and policies are thought of only from the viewpoint of political society, national and transnational. Thus, at the national level, ministries of economics, finance, trade, labor, industry, education, and similar bodies are charged with the implementation of policies set by their political masters. At the transnational level, the most prominent are the United Nations and its specialized agencies. A sampling of those dealing with economic policy include the United Nations Development Programme (UNDP), the International Labor Office (ILO), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Industrial Development Organization (UNIDO), the World Trade Organization (WTO), and various Economic (and Economic and Social) Commissions for Africa, Europe, Latin America and the Caribbean, Asia and the Pacific, and Western Asia. (For the United Nations organizational chart, see Appendix B.)<sup>27</sup>

As far as national ministries are concerned, the primary message is that all of them—regardless of their specific subject-matter charge and expertise—must be directed to act in coordinated fashion toward the goal of rebuilding society's capital. In a manner of speaking, all of them are state investment agencies, investing in education, in infrastructure, in the productivity of the labor force, and so on. The commerce, labor, immigration, and finance ministries for instance might need to work jointly on repatriating physical, human, and financial capital that may have fled during war. Returning the diaspora home can be an important way of rekindling economic growth for all. Private charities should be welcomed inasmuch as their work fits into an overall conception of rebuilding, maintaining, and securing for example the health status and physical well-being of the population. States blessed with natural resource wealth need credible ways of putting aside a portion of the earnings to build endowments that return dividends over the long-term. Sometimes referred to as sovereign wealth funds, states such as Kuwait and Singapore (one natural-resource rich, the other not) have had such funds for many years.

**AID, REMITTANCES, FOREIGN DIRECT INVESTMENT, AND TRADE.** As a matter of empirical fact, it is useful to compare the size of certain financial flows to each other. Thus, official development assistance (ODA) reached about USD100 billion in 2006.<sup>28</sup> In contrast, workers' remittances back to their home countries amounted to USD300 billion in 2006.<sup>29</sup> Foreign direct investment reached over USD1,000 billion.<sup>30</sup> (And truly opening up global markets for free trade would probably make for even larger numbers.<sup>31</sup>) It follows that when conflict-affected states think about capital rebuilding the emphasis must not be put on foreign aid, but on reconstituting and sustaining private sector activity. While foreign aid can play an important postwar role, in the end it reflects—like military intervention—third-party state interests. As such foreign aid has been, certainly in the past, capricious, haphazard, and short-term from the point of view of the recipient states. It is only very recently that the academic community at least has argued that aid ought to be nonpolitical, predictable, and long-lasting, on the order of ten years postwar.

**THE ROLE OF INTERNATIONAL FINANCIAL INSTITUTIONS.** The phrase international financial institutions (IFIs) refers in the main to the International Monetary Fund (IMF) and the World Bank Group (WBG) at the global level but also to regional development banks, that is, the African Development Bank (AfDB), the Asian Development Bank (ABD), the Inter-American Development Bank (IADB), and the European Bank for Reconstruction and Development (EBRD). The IMF is primarily engaged with short-term lending in support of macroeconomic stabilization, whereas the others are engaged in long-term lending for physical infrastructure (re)building and social service provision.

Due to their financial heft, undoubtedly the most important U.N.-related agencies in regard to economic policy are the IMF and the WBG. The latter consists of the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the Center for Settlement of Investment Disputes (CSID). Importantly, the IMF and the WBG are autonomous organizations, each constituted by international treaty to which states accede when they choose to become members. On its web site, the IMF describes itself as "... an organization of 186 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world." In practice, three areas dominate the IMF's day-to-day work. First, economic surveillance monitors members' economic and financial developments and provides policy advice aimed at crisis prevention. Second, the IMF provides short-term lending to countries with balance of payments problems in support of policies aimed at correcting the underlying difficulties (see chapters 3 and 4). And third, it

provides technical assistance and training. The IBRD and IDA (the World Bank) describe their work as providing “... low-interest loans, interest-free credits, and grants to developing countries for a wide array of purposes that include investments in education, health, public administration, infrastructure, financial and private sector development, agriculture, and environmental and natural resource management.”<sup>32</sup>

Thus, the World Bank works in support of long-term asset (re)building and economic growth—after all, it was founded in 1944 and the name refers to reconstruction and development—whereas the IMF works in support of short-term economic stabilization. However, the crux of the matter lies in what these institutions do in day-to-day practice when a member state seeks assistance. Both institutions have been criticized for pushing inappropriate, even harmful, policy on member states in need. At one time, the World Bank for example indulged on financing a number of large dams for hydro power-generation. While energy and economic growth are related on a nearly one-to-one basis—more power, more growth—the construction of dams sometimes caused displacement of vulnerable populations from ancestral lands and led to environmental damage as well. Negotiating infrastructure loans with central government politicians and bureaucrats to generate electric power to be transmitted to far-away cities while leaving local populations uprooted, displaced, and unattended betrayed notions of economic development that rightly were criticized by civil society. From time to time, the World Bank therefore saw itself compelled to acknowledge errors and to change policy and practice. In the late 1990s, the Bank was, however, in the lead when it came to promote research on the economics of armed conflict and to translate findings into practical assistance.

### *2.5 Policy lessons and tips*

- Lesson 2.1: Economic growth is necessary and welcome. Always adjust economic growth measures for population growth, output price inflation, and purchasing power differences. Growth compounds quickly. Do not forgo even small growth differentials.
- Lesson 2.2: A generally agreed-upon theory of how to make growth happen does not exist. There is agreement that the state is to set investment-enhancing framework conditions, define intervention points, and provide for adequate institutional capacity to implement policy but otherwise leave the business of growth to the private sector.
- Lesson 2.3: No precise yardstick regarding a long-term economic growth rate to aim at exists. Prewar experiences, the remaining capital stock—and plans for rebuilding it—the record of similarly affected states, and those of neighboring states, may provide guidance as to a growth rate one can reasonably expect to obtain. Undershooting forfeits advances in living standards and overshooting can plunge a society (back) into war.
- Lesson 2.4: Violence affects both the supply- and the demand-side of an economy. Addressing only one side or, worse, only one aspect of one side, will be insufficient. The economic cost of violence is dramatically large and, over time, accumulates into very large numbers. Certainly one of the very best long-term investments a society can make is to reduce, prevent, and mitigate violence in all its forms.
- Lesson 2.5: A well-functioning society is also a well-balanced one. The function of economic growth cannot be handed to political society alone. Commercial and civil society are necessary to drive growth and to check on its quality. Transparency, openness, and accountability are important elements in this.
- Lesson 2.6: As institutions, both the World Bank and the IMF have sometimes been late to recognize and acknowledge case-specific circumstances that would have required deviation from their standard policy recommendations. It is now agreed that the pursuit of economic growth in the absence of poverty and violence reduction strategies can be self-defeating. It is also agreed that good governance (i.e., the avoidance of obvious economic mismanagement), especially capable policy planning, design, implementation, execution, and follow-through, are important prerequisites for growth.

### *2.6 Failure and success: two case studies*

Failure: Germany post-World War I

Success: Germany post-World War II [Northern Ireland?]

### Chapter 3: Dealing with turbulence: macroeconomic stabilization

“It is important for governments to encourage private investors to make investments that are irreversible and this is likely to require the rebuilding of civil society with concern for investment-sensitive reforms, such as control of inflation, proper valuation of the exchange rate, restraint in revenue collection, and the reestablishment of transport infrastructure” (Dunne, 2006, p. 40).

Chapters 1 and 2 dealt with the importance of investment and capital rebuilding. If there are no assets, there will be no income. If assets decline, incomes decline. If assets rise, so do the prospects of income. In a word, without a ship, one cannot sail.

Having a ship does not, however, guarantee trouble-free sailing. This chapter thus deals with macroeconomic turbulence, economic statecraft in the short-term. But in considering the short-term, one must bear in mind that the short- and long-term are connected. Continuing with the sailing metaphor, stabilization must aim at the proper port of destination and one must be willing to take necessary detours. Steering the boat into the nearest storm is not helpful. For example, adopting economic regulations and policies that fail to reassure private investors or threaten to dispossess them is like dismantling the ship on the way to the storm. Moreover, it is important to realize that the bigger the ship, the more comfortable and safe will be the journey. Sheer size—an ocean liner, rather than a dugout—provides intrinsic stability. Thus, asset building must continue.

Investment-sensitive reform must reassure not just investors, but in equal measure workers and society-at-large. Reform must be conflict-sensitive as well, in particular to the danger of violence renewal. It is no use—as scholarship and the main international financial institutions now agree—to grow the economy at the risk of recreating the conditions that gave rise to violence in the first place. Slow and steady is better than fast and risky. Thus, as important as economic growth is, overheating the economy and recreating social friction is not the proper prescription. Diverting some resources to build outriggers—peace-building investments, recreation of the social contract, and reconstruction of the framework conditions that undergird social stability—may at first be more important than enlarging the dugout. Thus, UNDP states the current consensus view as follows: “[M]acroeconomic policies must give priority to minimizing conflict risk, even as they promote growth. This may mean tolerating moderate inflation and budget deficits” (UNDP, 2008, p. xxiii).

The purpose of macroeconomic stabilization is to moderate erratic movements in the business cycle. Its main tools are fiscal and monetary policy. [The latter includes foreign-exchange rate policy (see chapter 4).] However, the purpose of fiscal and monetary policy is not macroeconomic stabilization! Instead, the purpose of fiscal policy pertains to the management of public finances, that is, to collect taxes and to disburse revenue. By setting and changing tax rates and disbursement objectives certain social and economic goals can be fulfilled such as income redistribution or, for that matter, macroeconomic stabilization. Likewise, the purpose of monetary policy is to maintain the internal and external purchasing power of a state’s currency but in setting monetary policy, rules, and regulations, again, other social and economic goals can be reached. Thus, macroeconomic stabilization is not the primary purpose of fiscal or monetary policy. Instead, stabilization is an add-on feature, and only a few states have the relative luxury to employ fiscal and monetary policy in this manner. In most states, and especially in conflict-affected ones, chaotic fiscal and monetary policy contribute to macroeconomic instability and themselves need to be stabilized in the first place, that is, regularized, made less capricious, and be handled in a more competent manner. Above all, this requires political credibility and technical capacity building.

Bearing the prior paragraphs in mind, the chapter begins with a presentation of a useful heuristic device, called the **aggregate demand/aggregate supply framework**, or the AD/AS model (section 3.1) The framework has the advantage that a single visual representation pulls together virtually all relevant demand- and supply-side variables, considers all actors (private and public), integrates domestic and foreign sectors, and simultaneously considers the short- and the long-term. Although economists do not agree on this framework as an explanatory device, they do agree on it as a heuristic device, the point of departure for agreement and disagreement, of refinements and extensions, and the model in contrast to which alternative representations of economies are constructed, and therefore the point of departure for policy debates and recommendations. It is a framework well worth studying. Sections 3.2 and 3.3 then consider elements of fiscal and monetary policy within the AD/AS framework. As before, sections 3.4, 3.5, and 3.6 deal with institutions and policies, policy lessons and tips, and two case studies.

#### *3.1 A macroeconomic framework*

Instead of experiencing a decline of 5 percent in GDP in one year and a rise of 6 percent the next year, all segments of society uniformly prefer that large swings in amplitude in the business cycle be avoided. For example, households like to possess some confidence that they will have continuous employment and continuous income rather than being employed one year and unemployed the next. Similarly, businesses prefer a stable economic environment and stable consumer incomes. This greatly facilitates planning and reduces risk, especially for large-scale, costly investments. Policymakers also prefer a stable economic environment because it provides surety about the likely size of public sector revenue inflows and expenditure outflows. In addition, a country’s trade partners prefer stability because when an economy plunges into recession it usually buys less from its overseas partners, hurting them in the process. Also, a country experiencing an up-and-down economy may be tempted to manipulate the value of its currency’s exchange rate and this, too, can hurt its trading partners. In a word, the good news is that everyone agrees on the goal of securing a stable macroeconomic environment. The disagreements are over the details, mechanics, and effective implementation and timing, not over the goal itself.

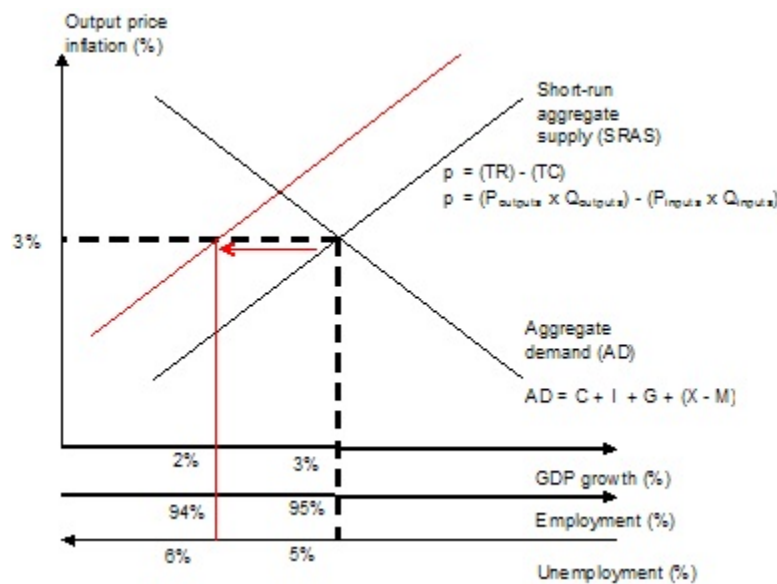


Figure 3.1: The short-run AD/AS framework.

THE SHORT-RUN AD/AS FRAMEWORK.

Figure 3.1 is a visual representation of an economy. It reflects not so much a particular theory as that it serves as an accounting framework and heuristic device that includes a large number of relevant variables in a single visual image, hence its pedagogical value. On the vertical axis, one denotes inflation (in percentage terms) of the goods and services an economy produces. On the first horizontal axis, economic growth is measured by GDP growth, also in percentage terms. GDP stands for gross domestic product—the monetary value of all production in a given state and time period, usually one year—and because somebody must be doing the producing, one can use a second horizontal axis to measure employment (as a percentage of the labor force). When the employment axis is run the other way, from right to left, one obtains a sense of the size

of unemployment (also measured as a percentage of the labor force).

The upward-sloping line in the figure is called the **short-run aggregate supply**, or SRAS. To see why this line is upward-sloping, consider, first, the black SRAS line and assume at the economy is operating at a point where output price inflation is 3 percent and GDP growth is 3 percent also (with an implied 95 percent employment rate and a 5 percent unemployment rate). Second, suppliers of goods and services are in business to earn profit ( $p$ ), that is, total revenue (TR) minus total cost (TC). TR, in turn, is the combination of the prices received times the units of output sold ( $P_{\text{output}} \times Q_{\text{output}}$ ). Likewise, TC is the combination of prices paid times the units of input needed, such as raw materials and labor ( $P_{\text{input}} \times Q_{\text{input}}$ ). Third, the argument now proceeds on the assumption—to be relaxed shortly—that the prices of *inputs* are constant (unchanged). If for some reason the *output* prices should increase, firms notice an extra profit opportunity because costs (with constant input prices) are by assumption not rising as fast as revenue (with rising output prices). A firm will therefore want to produce larger quantities of output. In a word, higher output prices (an upward-movement on the vertical axis) induce firms to produce more output (an outward-movement on the horizontal axis). In combination, these two movements make the supply-line upward-sloping.

If one makes the opposite assumption about prices, profits would be threatened. For example, if output prices rise by 3 percent and input prices rise by 5 percent, then production becomes more expensive, profits decline, and producers will want to produce less than before. This is visually represented in Figure 3.1 by a shift of the entire black SRAS line to the left (from the black to the red line). Because less is produced, one can read off the horizontal axes that GDP growth is now only 2 percent, employment falls from 95 percent to 94 percent, and unemployment correspondingly rises from



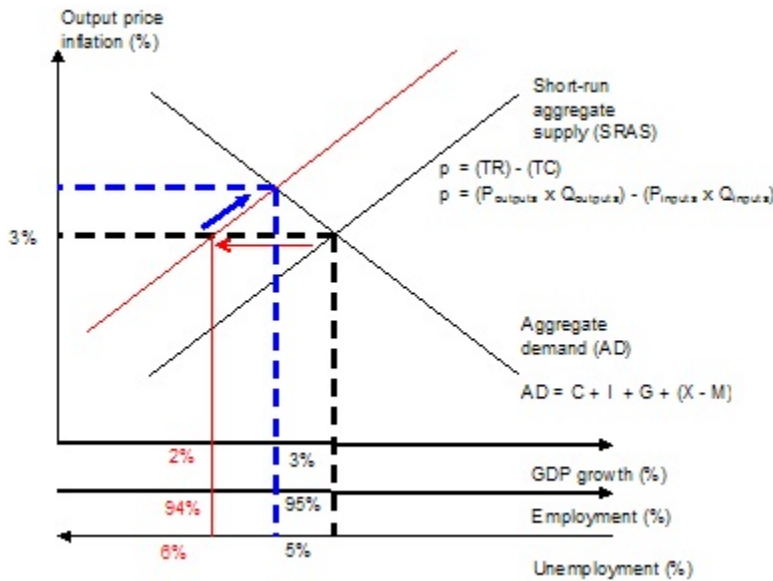


Figure 3.2: Feedback effect from the supply-side to the demand-side of an economy.

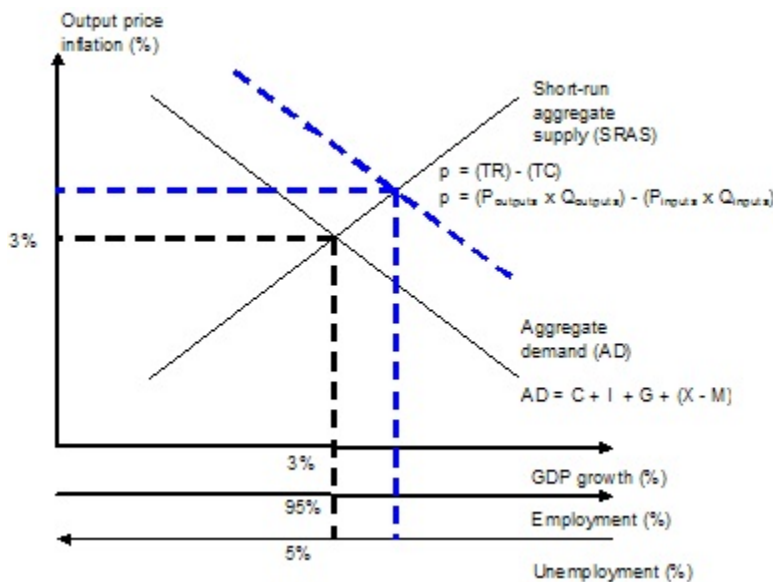


Figure 3.3: Aggregate demand shift. (The feedback effect on the supply-side is already reflected in the figure.)

which is the same equation as used in chapter 2 for national income accounting. C stands for consumption by private households, I for investment by firms, G for government spending at the federal, provincial, district, or municipal levels, and (X-M) for the net value of exports and imports. The value of exports is added because it represents demand from overseas for domestically produced goods. Similarly, the value of imports is subtracted because it reflects demand that is realized in another economy. The AD-line is downward-sloping because the lower is output price inflation, the higher is the incentive to make purchases at home, and vice versa.

If any component on the right-hand side of the AD equation rises in value then the left-hand side must rise in value also, thus reflecting more aggregate demand for goods and services. This is shown in Figure 3.3 by shifting the black AD-line outward toward the right along the GDP growth axis to become the blue AD-line. As a consequence of a larger

5 percent to 6 percent of the labor force. Input prices or production costs can rise for example on account of higher regulatory compliance costs, higher raw material costs, higher labor costs, or higher transportation costs. Of course, input prices can also fall, especially when improved technology lowers production costs per unit produced. In that case, the change in short-run aggregate supply would be represented by shifting the black SRAS line to the right instead of shifting it to the left.

**FEEDBACK EFFECT.** An economy never stands still. Any change anywhere in the system affects participants and leads them to change their behavior which, in turn, affects the system. Thus, in the case of initially constant output price inflation (at 3 percent) and rising input price inflation (Figure 3.1), the reduction in production on account of falling profit opportunities means that the existing demand for goods and services cannot be satisfied as well as before. Consequently, buyers compete for reduced supply and push output prices up a bit, which in turn stimulates supply a little bit as well (see the switch, in Figure 3.2, from the red to the blue situation). Thus, when the dynamics have worked themselves out, the economy ends up with output price inflation running at about 3.5 percent, and with GDP growth at about 2.5 percent, employment at 94.5 percent, and unemployment at 5.5 percent.

**AGGREGATE DEMAND.** If short-run supply is primarily a function of profit opportunities and the various revenue and cost factors that affect them, then **aggregate demand** consists of the summation of demand by various categories of buyers. In the figures aggregate demand (AD) is written as an equation, namely  $AD = C+I+G+(X-M)$ ,

amount of demand relative to available supplies, output prices will eventually rise as demanders compete for access to the supplies. This signals profit opportunities. More production will be forthcoming and therefore also more employment, and less unemployment, as indicated in the Figure.

**JUST TEN VARIABLES.** This macroeconomic framework involves just 10 variables: (1) output prices; (2) input prices; (3) quantities used and produced (inputs and outputs); (4) GDP; (5) employment; (6) unemployment; (7) consumption; (8) investment; (9) public sector expenditure; and (10) the net value of exports and imports. Astonishingly, absolutely anything that can possibly happen in the world will be reflected in one or more of these variables which then affect the economic system. For example, if a threat of war induces people to consume less and save more, this would lower consumption and therefore drag aggregate demand leftward along the GDP growth axis. The reduced demand implies less production, hence reduced growth, reduced employment, increased unemployment, but also a reduction in output price inflation as producers eventually lower prices to attract the remaining shoppers (or do not raise prices as much as otherwise they might). Reduced consumption of course means more savings. This means that excess supplies of loanable funds should drive down interest rates and, in turn, should encourage investment. But even at low interest rates, firms will hesitate to borrow if they, too, fear the onset of war. Government can make up for slacking aggregate demand by borrowing and stimulating the economy through war-related production but consumption generally falls much more quickly than government can react to pick up the slack, so that an economic slowdown or an outright economic recession is likely. (And of course, preparing for war is not the preferred way of stabilizing an economy.)

**MACROECONOMIC OBJECTIVES.** As a heuristic device the AD/AS framework serves as a simple, convenient, and handy tool to quickly inform one about causes, pressures, dynamics, and consequences in the macroeconomic system as a whole. And it possesses another very useful feature: in a single visual representation of the economy, it captures all five of the macroeconomic objectives (section 1.3). On the vertical axis, it captures information about the goal of low output price inflation; on the horizontal axis, it captures information about (sustainable) GDP and the long-term objective of GDP growth, as well as about employment and unemployment (which can be interpreted to reflect both labor and capital resources). The back-and-forth movement of the economic system along the horizontal axes captures information about business cycles and whether they are smooth or erratic. Even the need for global economic policy coordination across state jurisdictions is captured as imports from and export to other states' depend, in part, on economic conditions and policy in those states (see chapter 4).

**POSTCONFLICT RECOVERY AND RECONSTRUCTION (STABILIZATION AND GROWTH).** Economies possess an inherent constraint on the supply side below which the economy's productive capacity is underutilized and above which it is strained. That is to say that under normal circumstances, it is expected that an economy grows, net of output price inflation, say by 3 percent per year—its inherent long-term capacity for economic growth. Thus, when there is a demand failure that moves aggregate demand leftward or a supply shock that moves aggregate supply leftward so that the economy operates at only 2 percent growth per year, then in the absence of compensatory demand from the public sector, the extra unemployment of labor and capital resources this implies will eventually compel workers to accept lower wages (or lower wage increases), thus increasing profit opportunities and shifting aggregate supply back to its starting position. Growth of 3 percent per year is restored. Alternatively, if in the judgment of authorities the adjustment process during which unemployed resources lie idle takes too long, government can try to artificially stimulate the economy by increasing government expenditure. In terms of growth, employment, and unemployment, the economy would revert back to its normal long-run inherent capacity, but at the cost of an up-tick in output price inflation caused by the artificial stimulation of the economy. On the whole, an automatic, private sector supply-side correction is preferred over an artificial, public sector intervention. In violence-torn economies of course the private sector is hesitant to invest and understandably waits for the public sector (that is, society-at-large, through representative government at the local, regional, and national level) to act first. This creates a two-sided pressure: in periods of slack private economic activity, tax revenues are low while the call for public sector spending is high. Consequently, fiscal deficits and accumulated public sector debt are likely to increase. This is fine so long as borrowing from abroad is possible and not unduly onerous. Whether debt becomes onerous depends, in part, on the conduct of deficit spending, that is, whether it actually succeeds to bring the private sector fully back into the economy, in which case tax revenue grows and public expenditure needs decline in some degree so that the debt load can be carried and paid off in time (see section 3.2).

**LONG-RUN AND SHORT-RUN.** Economists are hard put to define the long-run growth capacity at which to aim an economy. Shall policymakers aim at annual economic growth of 2 or 3 or some other percentage? In practice, economists tend to use an average growth rate derived from the economy's record of past decades and they stipulate that average to be the economy's inherent annual growth limit at which to aim. For war-torn countries, especially those emerging from

decades of armed violence, this yardstick is evidently false. Depending on the remaining capital stock, the growth rebound may at first be very large before settling onto the inherent long-run growth potential of the country. From Figure 1.1 and others in chapter 1, it is apparent that both the experiences of economic collapse during war as well as the experience of growth after war exhibit a wide degree of variation.

Not having a yardstick does not make the idea of having a yardstick false. Rather, the problem is that without a goal of economic growth to aim at, policymakers may be too timid and be content with, say, 2 percent, when 3 percent can safely be achieved, or they may aim at 3 percent growth when the economy's inherent growth limit lies at only 2 percent. Danger lies on either side of the dividing line of the inherent but unknown long-term growth capacity: constantly overstimulating an economy in pursuit of an objective that it cannot deliver will, in time, cause pressures to build up—particularly inflationary pressures—that can altogether derail an economy and plunge society back into war; but an economy that grows slower than it safely could forgoes employment and output growth needed to finance the rebuilding of assets and that, too, threatens the stability of peace.

### 3.2 Fiscal policy

**PURPOSE.** Fiscal policy concerns how public sector revenue is raised and how that revenue is spent. Fiscal policy is not a crisis management tool. Instead, its primary function is to promote orderly development and society's well-being, that is, growth and continual betterment, usually through a two-pronged approach. One is to provide enabling environments or framework conditions that stimulate the private sector; the other is to provide economic security for those population segments that cannot manage on their own. Although sometimes necessary, to spend fiscal resources on macroeconomic stabilization is a costly distraction from its primary purposes.<sup>33</sup> The analogy to chapter 2 is straightforward: just as it is preferable to build, rather than strip, assets in order to derive income, it is preferable to avoid directing resources to emergencies if these can be prevented in the first place.

**REVENUE.** Governments can raise funds from many sources, from income and profit taxes levied on persons and businesses, to import and export taxes, to taxing tourists and taxing products such as cigarettes, to raising revenue from selling natural resource wealth directly such as petroleum export revenues (**natural resource rents**) or obtaining revenue from granting natural resource exploitation licenses to domestic and foreign firms. Governments also charge fees for public services, from driver's license and passport fees to entry fees at national parks. In addition, revenue can be raised at the national, provincial, and district or municipal levels. Moreover, governments can raise funds by issuing currency (**seignorage**), by depleting **foreign-exchange reserves**, and by borrowing domestically or abroad either through private sector financial institutions or from bi- or multilateral lenders. And governments can receive outright grants, for example in the form of development or military aid. The fiscal *policy* aspect enters by making all these revenue sources consistent, coherent, and viable, and to orchestrate their overall effect such that maximum economic advantages for the economy at large are secured. Many developing states rely for a major portion of their revenue on natural resource rents. This means that a particular sector of the economy carries a disproportional revenue burden, but often endowing it with disproportional political influence as well, while other sectors contribute proportionally less to the public purse. Similarly, public expenditure policy affects particular sectors, such as education, agriculture, or transportation infrastructure more than others so that macroeconomic goals are entwined with sectoral and regional goals.

**THE TAX SYSTEM.** Economists list five criteria to characterize a good tax system. First, low costs of administration and compliance, that is, *administrative simplicity*. Second, the system should be *flexible* to adapt quickly to changing economic and political circumstances. Third, the tax system should be *transparent* and amount to political *accountability* and responsibility. Fourth, it should be perceived as *generally fair* across income groups. And fifth, the tax system should *enhance economic efficiency*. An efficient tax system means that it should not distort economic efforts. For instance, excessive income tax rates lead to tax avoidance (people perform less taxable work) or tax evasion (not declaring income). Perception of excessive taxes on capital can lead to inefficiencies in the capital markets. By the same token, undertaxing undesirable economic activities, or even subsidizing them, encourages them to continue unabated. For instance, adverse environmental effects of automobile traffic can be mitigated by appropriate taxation. Likewise, outright subsidization of certain product categories like fuel—or food, for that matter—distorts the economic system. As mentioned, in the larger interest of the protection of vulnerable populations, of social peace, this might be politically necessary but at the danger of creating powerful political and economic vested interests on both the supply and demand sides.

As regards fairness, the tax system should display horizontal and vertical equity. **Horizontal equity** means that

persons who are equal in every respect should be treated equally in taxation as well. **Vertical equity** means that those capable of paying more taxes, should pay more. This leaves the political problem of determining the income brackets and the tax-rates for those brackets. Some economists argue that because income is the result of a person's contribution to society, it should not be taxed at all. Instead, consumption should be taxed through a sales or value-added tax. This has the beneficial side-effects of encouraging saving and of providing a pool of loanable funds for investment and future economic growth. This would also greatly simplify the tax system and reduce the administrative cost of tax collection and limit opportunities for corruption in the tax system. As mentioned, to protect certain populations from hardship, a state can elect to exempt some consumption categories from taxation, e.g., food and medicines.

These ideal-type specifications of course do not come about overnight. Especially in war-torn societies, rebuilding a well-functioning tax administration will take years. Some states therefore focus revenue-raising efforts on easily taxed "victims," such as the export sectors. Needless to say, the unequal burden of taxation induces tax evasion efforts and, with it, carries very real dangers of subverting the state apparatus through corruption. The practical difficulties of rebuilding and taping a broad, society-wide tax-base should not be underestimated. Dedicated, long-term training and capacity rebuilding grants may need to be offered of conflict-affected states.

**DEBT.** Many developing and emerging economies, especially those in postwar situations, find that resource needs far outstrip resource availability. The resulting budget deficits have led governments to artificially inflate the economy by printing overmuch money (section 3.3) and/or to take on an unsustainable domestic or external debt burdens. To be sure, if economic growth generates sufficient revenue to service the debt, it may be sustained indefinitely. (Just like private companies can carry perpetual debt, so can governments.) But unsustainable debt must be lowered.<sup>34</sup> This can be done in three ways. First, receive outright debt forgiveness (grants).<sup>35</sup> Second, increase public revenue and dedicate the extra resources to increase debt service (interest and payoff of debt principals). And third, decrease public expenditure and use the saved funds to service the debt. As mentioned at the outset of this chapter, there is now widespread agreement that public expenditure cuts must detract neither from sensible spending that enhances the framework conditions for growth nor from poverty alleviation. If debt is taken on it must be focused on uses with the highest long-term social return. The composition of public expenditure may be more important than its level.

In this regard, it is worth noting that few countries' public sector accounting systems measure annual deficits and accumulated debt properly. The conceptually correct way, for private households and businesses as for the public sector, is not to focus on revenue minus expenditure streams but on assets minus liabilities, that is, **net worth**. For example, when a debt-financed seaport is built, the liability the debt poses is balanced by the asset of the port. The port generates revenues on its own. In addition, by stimulating economic growth it also contributes to higher tax revenue. Thus, the debt can be serviced and paid off. In practice, however, most states' budgets include a debt service line item that is delinked from the underlying assets so that it is impossible to assess whether the assets repay their cost. In conflict-affected states, especially in war-torn states, assets such as seaports frequently suffer loss of business days and physical destruction so that the delay in debt repayment or the inability to repay the debt at all should be counted as part of the cost of war.

Fiscal policy as a tool of macroeconomic stabilization requires that government has the flexibility and wherewithal either to issue **discretionary spending** or to forgo tax revenue to leave more spending power in private sector hands. This would prop up an economy during recession.<sup>36</sup> In practice, developing nations, especially conflict-affected ones, rarely have discretionary funds at their disposal, nor the leisure to forgo tax revenue, hence the overwhelming need to draw on funds from global sources. In the past, these have added to unsustainable debt levels so that in recent years very-low interest rate loans, debt relief, debt forgiveness, and outright grants have become more prominent in the fiscal affairs of conflict-affected states. This suggests a *bifurcated approach* to fiscal policy: design, implement, and adhere to sound fiscal management practice for its own sake and top up the remaining need from overseas in a nonburdening manner with the long-run goal—perhaps over 10 or 20 years' time—of achieving sufficient economic growth from within to gradually crowd out and graduate from overseas assistance.

**PUBLIC EXPENDITURE POLICY AND MANAGEMENT.** Public expenditure policy needs to achieve three goals: (1) overall fiscal discipline, (2) constant reevaluation of spending priorities within the revenue constraint, and (3) operational efficiency.

"The interdependence of [these] three levels is one of the most powerful findings of both practice and theory. The pursuit of aggregate fiscal discipline is often done in such a way as to undermine both level 2 and 3 performance—arbitrarily reordering priorities and devastating service delivery and operational performance more generally. Similarly, a lack of discipline and budgetary realism in making strategic policy choices leads to a

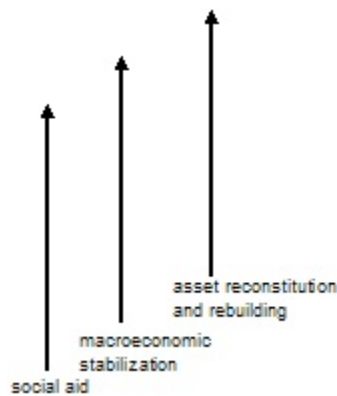


Figure 3.4: Postwar aid.

mismatch between policies and resources, resulting in inadequate funding for operations. More positively, fiscal stability creates an environment that encourages sound level 2 and 3 performance. In turn, sound performance at these levels feeds back into fiscal stability.”<sup>37</sup>

The World Bank lists a range of criteria for budget and financial management. Being general principles, they apply to conflict-affected states as to any other state. They are *comprehensiveness and decisionmaking discipline* so that for instance not only current but also capital expenditures are properly budgeted; *flexibility* that avoids making implementation overly tight and strategy overly loose; *legitimacy* so that those with power to change policy during implementation had the opportunity to participate in policy formulation; *predictability* of the short-, medium-, and long-term time paths of expenditure flows; *contestability, honesty, and information*, so that accurate and timely information can be used in politically and technically unbiased ways to contribute to expenditure review and evaluation and potential policy changes;

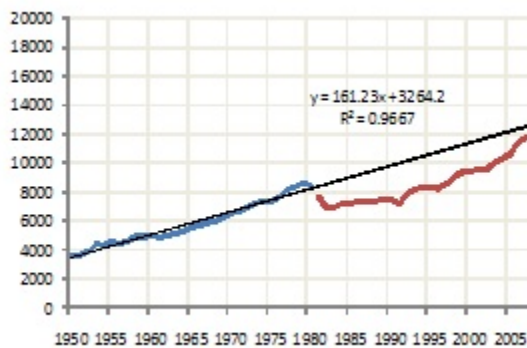
and *transparency* for decisionmakers and the public and *accountability* by decisionmakers, decision implementors, and users of public funds.<sup>38</sup>

**FOREIGN AID.** A consensus has developed that advises against peak amounts of aid being delivered immediately after the end of war when the absorptive capacity of the postwar state is still limited. Instead, capacity-rebuilding needs to be offered and aid needs to peak perhaps 3 to 5 years postwar when the institutional capacity to absorb aid has been rebuilt. For instance, IMF authors of a book on the Democratic Republic of the Congo (DRC) say that “we found that too often international aid to postconflict countries seems to taper off shortly after a peace agreement is reached, whereas, in fact, appropriate and prolonged aid is needed to consolidate peace and avoid a reemergence of conflict.”<sup>39</sup> As regards aid sequencing, immediate support for social recovery turns out to be more important and effective than support for reconstruction and stabilization. The reason is that neglect of addressing pressing social priorities can lead to resentment that restarts war. As mentioned, the *ultimate aim* must be reconstitution and rebuilding of assets. The *intermediate aim* must be stabilization but the *immediate aim* must simply be to assist damaged populations—and fiscal policy and fiscal aid must accommodate this sequencing and balancing. In practice, this will involve parallel and somewhat overlapping tracks of aid (see Figure 3.4).

A 2002 paper finds that “while both humanitarian and reconstruction aid are welfare-enhancing, humanitarian aid reduces long-run capital accumulation and growth. Reconstruction aid, on the other hand, may increase the long-run capital stock and, if carefully designed, avoid the pitfalls of the Dutch disease”.<sup>40</sup> This, too, suggests that aid needs to be purposeful and delivered in stages. Reconstruction aid includes aid for intangibles, especially institution-building, reestablishment of the legal and regulatory system and judicial and supervisory agencies, the tax system and tax administration, and rebuilding of regional trade links. In addition to humanitarian and reconstruction aid, general government budget support aid may be necessary on a continuous basis as well to rebuild, strengthen, and support ongoing government policy and administrative work. Further, the IMF’s work on the DRC in the early 2000s provides an interesting case of a clear recognition of the connections between economics and politics and that aid design (circumstances, objectives, size, time profile, and composition) must take these connections into account:

“Three main phases—stabilization, reconstruction, and development—were defined and later included in the country’s poverty reduction strategy. The stabilization phase sought to remove the most severe distortions and break the vicious cycle of hyperinflation and declining value of the currency. Priority had to be given to paying the wages of civil servants and the military on time to defuse social tension and rebuild confidence in the public administration. In parallel, with the help of the World Bank, the administrative capacity of key ministries, including the finance ministry and the central bank, had to be buttressed. Replacing lost administrative capacity is a lengthy process because many civil servants were killed during the war. It takes time to train replacements, which underscores the importance of prolonging foreign aid. At the same time, the foundations of a level playing field for the private sector were put in place.”<sup>41</sup>

The latter included sequencing of aid to restructure high-impact economic sectors, in the case of the DRC mining, forestry, and transportation. Thus, how aid is timed, sequenced, and spent is sometimes as important as the issue of



**Figure 3.5:** Population-, inflation-, and purchasing power-adjusted GDP, Costa Rica, 1950-2007 (base year = 2005).

Source: Penn World Table, v6.3.

2007 per capita production still had not reached its projected level. Thus, like its warring neighbors, Costa Rica suffered at least a 30-year economic penalty even though it has not been at war itself.

The research literature has shown that the knock-on or spillover effects can be greater in neighboring countries than in the war-host state. The reasons for this are many-fold and involve for instance the need to deal with sometimes millions of refugees, interruption of trade routes and markets, environmental stresses, lost tourist revenues, and higher security expenses in connection with securing border regions and safeguard refugee encampments, all of which carry fiscal consequences.

### 3.3 Monetary policy

**Monetary policy** deals with the internal and external value of a state's currency (that is, inflation and the currency's foreign exchange value), the determination of interest rates, and the regulation and supervision of a country's banking system. The primary institution is the central bank, and its primary tool consists of influencing the amount of money (the **money supply**) available in the economy to carry out economic transactions. Although the two are like Siamese twins that cannot easily be separated, in this section we deal primarily (but briefly) with some domestic aspects of monetary policy and address (more extensively) foreign-exchange related issues, such as exchange-rate mechanisms and regimes, currency valuation, and other matters in chapter 4.

**MONETARY POLICY MECHANICS.** To appreciate some of the pitfalls of monetary policy in postwar situations, it helps first to understand the textbook purposes and mechanics of monetary policy. They work as follows. Assume that a commercial bank has made a loan to a private firm. The firm gets the funds and the bank gets a signed contract in which the firm promises to repay the loan. This contract, or note, can be sold to the central bank (with the firm now owing the funds to the central bank), and the central bank pays the commercial bank for the note by printing money. The commercial bank can take these new funds and loan them out to yet another customer. By buying notes from commercial banks, the central bank thereby injects additional funds into the economy. Likewise, governments can finance budget deficits by borrowing via the domestic financial markets, that is, via commercial banks. The central bank can purchase these notes, again injecting additional funds into the economy. (In practice, central banks tend to purchase government debt, not commercial debt.) The more debt the central bank purchases, the more potential funds are available to commercial banks to loan out. Since commercial banks are for-profit enterprises, a large supply of loanable funds leads them to compete for borrowing customers by lowering the interest rate on loans. So long as the demand for currency (**money demand**) needed to carry out daily economic transactions is steady, the central bank's injection of money supply will lead to lower interest rates and provide an incentive to private households and commercial enterprises to borrow more money. Of course, the point of borrowing is to spend the borrowed funds—and thus economic activity and employment is stimulated via the aggregate demand side of an economy. Importantly, if the funds are borrowed by firms to finance investment to increase their productivity and to expand their businesses, then the supply-side of an economy is also affected. The combined effect is that employment and economic growth increase (more demand) while inflation

creating absorptive capacity per se.

**SPILLOVERS.** Another finding of recent research—dramatic enough to have led to almost immediate aid policy changes—is that wars create spillover effects that can adversely affect neighboring states to such a degree that they, too, need fiscal assistance, as much as do war-host states.<sup>42</sup> An example may be seen in Figure 3.5. It shows, in blue color, real population-, inflation-, and purchasing power adjusted GDP per capita from 1950-1980 for Costa Rica, as well as a linear projection to 2007.<sup>43</sup> In red, the actual record for 1981-2007 is shown. A lost decade of the 1980s—when Costa Rica's neighbors, El Salvador, Guatemala, Honduras, and Nicaragua, were embroiled in civil war—starkly manifests itself in the gap between the projected and the actual outcome. After the peace agreements of the early 1990s, brokered by Costa Rica's president Oscar Arias, the country's former growth resumed (in accelerated fashion). Still, based on the 1950 to 1980 data, by

is held in check through growth in productivity-enhancing (cost-lowering) physical investment.

Evidently, this mechanism requires a well-functioning private financial market and a nearly flawless interface between and among public policy formulation, policy implementation, and a smooth and well-predictable private sector response. In postwar economies, frequently all three of these are lacking and much of the initial financing of development and growth objectives will have to come from official overseas sources.

**THE LONG- AND SHORT-TERM, AGAIN.** It is important to understand that monetary policy may stimulate and support economic growth in the short-term but that monetary policy is absolutely no substitute for an independent long-term growth policy. To see this, we need to introduce—as in chapter 3—an accounting equation. It is

$$(1) P \times Q \equiv M \times V,$$

where, on the left-hand side, P stands for the price level in an economy and Y stands for inflation-adjusted, or real GDP.<sup>44</sup> Together, they amount to an economy’s nominal GDP (see section 2.2). On the right-hand side, M stands for the money supply and V for **velocity**, or the turnover-rate of money. Rounding liberally for convenience, in 2008 the nominal GDP—the value of goods and services produced—in the United States was approximately USD14 trillion. But the amount of money (cash, and funds available in checking and saving accounts, and the like) to purchase these goods and services was only USD7 trillion. It follows that every dollars must have been used twice. That makes sense because when a person uses his or her paycheck money to purchases groceries, the store deposits the funds and reissues them via paychecks to its employees who, in turn, conduct purchases of their own. Thus, every available dollar is used several times over. It turns out that while the turnover-rate of money (V) has values that differ from country to country, within a country it is relatively stable from year to year. For practical purposes, V may be considered constant (let us write this as V\*).

Given V\*, equation (1) can now be rewritten in two informative ways where in each case a second variable also is assumed constant. Each equation is followed by a made-up numerical example and a *change* in the example.

(2) $P^* \equiv (M \times V^*) / Q$	Example: $1^* \equiv (5 \times 2^*) / 10$	Change: $1^* \equiv (10 \times 2^*) / 20$
(3) $Q^* \equiv (M \times V^*) / P$	Example: $10^* \equiv (5 \times 2^*) / 1$	Change: $10^* \equiv (10 \times 2^*) / 2$

Thus, in equation (2), if an economy’s price level were to remain stable (P\*, that is, no inflation), and if the amount of money (M) were to double from 5 to 10, then it *must* be true that real GDP (Q) also doubles (from Q=10 to Q=20). This is to say that in the very short-term, before suppliers notice that there is more “money chasing goods,” an extra injection of money into the economy can stimulate GDP. But it was said earlier that an economy’s inherent long-term capacity for growth is limited so that in the long-term GDP (or annual GDP growth) is constant, as in equation (3). Thus, with Q\* and V\*, it *must* be true that a doubling of money (from M=5 to M=10) results in a doubling of the price level (from P=1 to P=2). In other words, printing and injecting money into the economy will, over time, not lead to more production but to more inflation. Just like a lubricant alone does not make an engine run, money alone does not make an economy grow.<sup>45</sup> This is the reason why policymakers like to keep money creation under tight control. (See the case study on Zimbabwe in section 3.6.) In the long-term, it is productive capacity, not fiscal nor monetary policies, that improves peoples’ lives. This buttresses, once more, the need to conduct stabilization policy firmly within the objectives of long-term growth policy.

**DYSFUNCTIONALITIES.** The collapse of money and, with it, of monetary policy in violence economies is easily shown by the number of states in which citizens have adopted alternative currencies during and after war. Timor L’este (East Timor) uses the U.S. dollar as its official currency. So does El Salvador. After 2003, Iraq used euros and dollars, before eventually reissuing a new dinar. Issuing a new currency after violence is popular: the German Reichsmark became the Deutsche Mark after World War II. Both Argentina and Brazil reissued and reissued their currencies under various names around the times of their respective military dictatorships and the years thereafter as both tried to recreate stable, credible currencies and financial markets. Kosovo used the Deutsche Mark before switching (with Germany) to the euro. The euro also is used by Montenegro and other follow-on states to the former Yugoslavia, regardless of whether or not these states acceded to the European Union. Zimbabweans use a whole slew of substitute currencies, including the Botswana pula, the British pound, the euro, the U.S. dollar, and the South African rand—anything but the Zimbabwean dollar. The main reason for currency substitution is that war and inflation tend to go together, debasing the store-of-value function of money. In Zimbabwe, by the third quarter of 2008, inflation was running at an annual rate of over 500 billion percent.<sup>46</sup>

(For details, see the first case study in section 3.6.) The country's private financial sector collapsed. In essence, a parallel "public" monetary system, privately managed, has emerged. Neither a functioning bank-to-customer nor a functioning bank-to-bank (interbank) market exists. In a word, violence can undermine the policy assumptions that underlie ordinary monetary purposes and mechanics.

In criminalized economies, including but not only those such as Afghanistan or Colombia that are associated with the trade in illegal narcotics, very large sums of money travel through informal channels, circumventing formal private financial institutions and staying outside the reach of public policy influence.

**RECONSTITUTION AND COORDINATION.** Whereas postwar fiscal policy might require rebuilding of the physical and administrative apparatus of state ministries and provincial offices, including capacity building of trained personnel, the institutional rebuilding of monetary policy needs a smaller staff and physical facilities. The issues monetary policymakers need to deal with are, however, extremely important and involve, among others, the following: rebuilding the central bank; regaining domestic credibility; reestablishing the internal and external banking and payment systems; rebuilding systems for bank supervision; restarting the provision of credit, especially of access to loans by micro-businesses and small- and medium-sized enterprises (SMEs); reining in the high inflation that ordinarily accompanies periods of violent conflict; and dealing with the consequent currency depreciation on foreign-exchange markets. Unlike normally functioning advanced economies, where fiscal and monetary policy are judiciously kept apart to provide for independent policy judgment and policy implementation, in postwar emerging and developing economies, monetary policy should be closely coordinated with fiscal policy and follow politically set objectives of employment and growth and only later on transition into an independent role. Thus, monetary policy might initially be more forgiving in its goal of reducing inflation so as to support employment and growth objectives and aim at a phased-in reduction of inflation over an agreed-upon, but credible, time frame.<sup>47</sup>

### *3.4 Institutions and policies*

Many domestic institutions and their purposes and policies have already been mentioned (e.g., the central bank; tax administration). Thus this short section focuses on two important international institutions, the IMF and World Bank (with additional comments in chapter 4). Following the first worldwide oil-price shock in 1973/4, many developing and emerging economies suffered from two problems: internally, drastic economic mismanagement and, externally, a difficult foreign trade, foreign debt, and foreign-exchange rate environment. The IMF provides short-term balance of payment-related financial assistance on condition that economic policy in the recipient state change in particular ways. This conditionality—required, in part, to ensure that states can repay funds borrowed from other member states—has been subject to much criticism. In brief, from the mid-1970s to the mid-1980s, the IMF loaned funds on concessional terms to particularly needy, low-income member states. This was handled through a lending facility known as the Trust Fund. This fund was replaced in March 1986 by a Structural Adjustment Facility (SAF), followed by an Enhanced Structural Adjustment Facility (ESAF) in December 1987. In September 1996, the ESAF was made a permanent, rather than temporary, lending instrument, and in November 1999, ESAF, in turn, was replaced by the IMF's Poverty Reduction and Growth Facility (PRGF).

Short-term macroeconomic stabilization can be associated with great economic pain. In the past, Structural Adjustment Programs, or SAPs, were usually carried out via central government budget cuts and raising tax or other revenue, with the aim of reducing budget deficits, and thus the need for borrowing or money printing, that is, inflation. SAPs included demands to properly value the local currency on the foreign exchange market and to improve macroeconomic policies so that private investors felt confident to again sink money into a country. The criticism that these measures may reduce economic growth and increase poverty may be simultaneously correct (at a short time-scale) and incorrect (at a longer time-scale over which the IMF tends to evaluate success or failure). While refuting wholesale, undifferentiated criticism, the IMF has from time to time acknowledged adverse effects of its mandated policies. By the late 1990s, one consequence of this acknowledgment was that central governments not only leave social expenditure on education and health care untouched but in fact increase such spending. In some cases, this clause was written into the conditionality agreement. Even so, in specific cases the poor still suffered, and the IMF next agreed to work more closely with the World Bank and civil society to better protect particularly vulnerable populations, in a word to integrate short-term adjustment policies more deliberately with the goal of doing no harm to the most vulnerable populations, hence the introduction of the Poverty Reduction and Growth Facility (PRGF).

The PRGF, in turn, is scheduled to be replaced with an Extended Credit Facility (ECF), a new lending window that



“will be in line with the objectives of a country’s own poverty reduction strategy.”<sup>48</sup> Thus, the evolution of IMF programs has gone through three stages, from imposing IMF conditions on poor states that had little choice but to accept them, to lending conditions that reflected World Bank and civil society concerns especially in regard to poverty reduction to, in future, conditions being led by the affected countries’ own views. In this, the IMF nonetheless puts emphasis on (1) widespread public participation and “ownership” of poverty reduction strategies in the affected states, (2) is flexible about how states achieve poverty reduction and growth objectives so long as macroeconomic stability is not threatened, and (3) highlights good governance (public resource management, transparency, and accountability).

### *3.5 Policy lessons and tips*

- Lesson 3.1: In considering the short-term, one must bear in mind that the short- and long-term are connected; that the long-term provides the primary policy objective; that the short-term is the handmaiden of the long-term.
- Lesson 3.2: There does exist a useful heuristic device—the AD/AS framework—with which some causes and consequences of changes in aggregate demand, aggregate supply, and economic policy can be traced, at least to an approximation.
- Lesson 3.3: Everyone agrees on the goal of securing a stable macroeconomic environment. The disagreements are over the detail, mechanics, and sequencing, not over the goal itself.
- Lesson 3.4: The purpose of fiscal and monetary policy is not crisis management. To prevent macroeconomic instability in the first place is better than to use costly fiscal and monetary resources for stabilization. Economically inappropriate macroeconomic policy can be as damaging as war.
- Lesson 3.5: A good tax system is simple, flexible, transparent, fair, and enhances economic efficiency. A good expenditure system is disciplined, operationally efficient, and routinely reevaluates spending priorities within the revenue constraint.
- Lesson 3.6: Postwar aid should be offered over the long-term (up to 10 years), not short-term (1 or 2 years).
- Lesson 3.7: The ultimate aim must be the reconstitution and rebuilding of assets. The intermediate aim must be macroeconomic stabilization. The immediate aim must be to assist hurting populations. Policy must accommodate this sequencing, overlapping, and balancing of aid.
- Lesson 3.8: Neighbors of war-affected countries may also need help.
- Lesson 3.9: Money accommodates economic growth; it does not, by itself, make an economy grow.
- Lesson 3.10: Violence can create devastating dysfunctionalities regarding the formulation and conduct of fiscal and monetary policy. If these are not addressed, it is unlikely that conflict-affected societies can be reconstituted into functioning entities.
- Lesson 3.11: Albeit sometimes slowly, international financial institutions do learn. However, not all conflict-affected states are atypical in all respects. In seeking and providing policy advice and technical support, both sides should be pragmatic; neither side should be dogmatic.

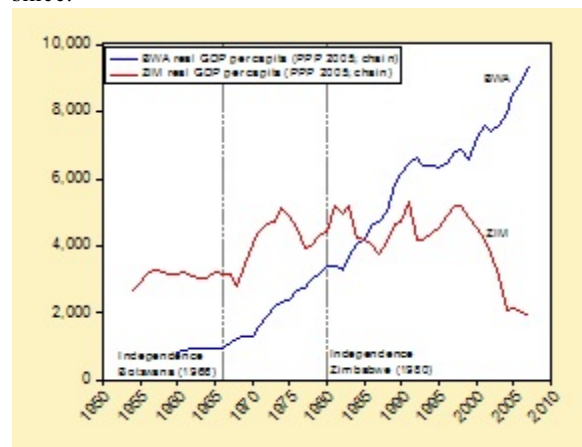
### *3.6 Failure and success: two case studies*

#### **Failure: Zimbabwe**

Figure 3.6 compares population-, inflation-, and purchasing-power adjusted average economic output of Botswana and Zimbabwe. Abbreviated BWA and ZIM, respectively, Botswana became an independent state in 1966, and Zimbabwe followed in 1980. Except for a rough patch in the early to mid-1990s—when South Africa abandoned apartheid—the figure shows Botswana’s average economic output per person growing by a factor of 11.2, from I\$839 in 1960 to I\$9,404 in 2007. For Zimbabwe, average economic output per person has fallen by 30 percent, from I\$2,673 in 1960 to I\$1,894 in 2007.

In terms of annual economic growth rates, Zimbabwe achieved the remarkable feat of negative growth in nine of the past ten years! By late 2008, inflation was said to be running at over 500 quintillion percent. Even for economists that is a big number, a quintillion being a one followed by 18 zeroes. (Numbers run from million to billion to trillion to quadrillion to quintillion.) In January 2009, the central bank introduced a Z\$100 trillion banknote. With independence in 1980, Robert Mugabe took power, repressed white and rival black opponents alike, engaged in murderous campaigns, and got himself involved in the DR Congo’s bloody war (1998-2002). For Zimbabwe, it has been a downhill ride ever

since.



**Figure 3.6:** Population-, inflation-, and purchasing power-adjusted GDP, Botswana and Zimbabwe (base year = 2005).

Source: Raw data from Penn World Table, v6.3.

as are the country's foreign exchange reserves (to cover import needs). In fact, Botswana's is nearly as well off, on average, as is Chile in South America, and the World Bank considers it an upper-middle income country. Unemployment and poverty rates, however, are high, as is inequality of income distribution.

In contrast, Zimbabwe is an utterly collapsed state. Virtually no one does business in Zimbabwean dollars anymore; the economy—or what is left of it—is run by recourse to substitute currencies, especially the South African rand (ZAR) and the U.S. dollar (USD). For all practical purposes, private banking has ceased, government debt is sky-high, foreign exchange reserves are near zero. There is no functioning protection of private property rights, the rule of law is absent, and no one invests in the country. Two-thirds of its people are in poverty, nearly half the population is undernourished, infant mortality is rising, as is maternal mortality upon giving birth. Total government revenue collapsed from USD942 million in 2005 to an estimated USD133 million in 2008, about what some Wall Street bankers still made in 2008 as well.

The reasons for the difference in economic performance are easy to discern: Zimbabwe does not have a functioning political system; Botswana does. Even if, as until recently in Japan, one party tends to win all the national elections, they are nonetheless freely contested. When they come, the post-Mugabe years could also be disastrous of course but perhaps the example of Botswana will inspire the desire to imitate. After all, Zimbabwe is equally well-endowed with natural resource wealth.



**Figure 3.7:** Population-, inflation-, and purchasing power-adjusted GDP, Chile, 1951-2007 (base year = 2005).

Source: Raw data from Penn World Table, v6.3.

As for other southern African countries, the prevalence of HIV/AIDS in Zimbabwe is high. Average life expectancy has plummeted all across the region and both Botswana's and Zimbabwe's figures are now under 40 years of age (although Botswana's life expectancy *at birth* is nearing 60 years of age again). But in addition, Zimbabweans have fled in droves; not only the white farmers that once made Zimbabwe the breadbasket of the region, but blacks are leaving by the tens of thousands as well, often to Botswana.

Botswana's economy is based on minerals—diamonds of course, but also copper, nickel, and before long platinum. Exports account for half of GDP (non-diamond exports for 20 percentage points, diamonds for 30 percentage points). Encouragingly, non-mineral GDP growth is higher than that of mineral-based GDP growth so that the economy is diversifying. Inflation, in the five to ten percent range over the past few years, is relatively modest. The government's fiscal position (government income, expenditure, and debt) is admired throughout the world, and the banking system is considered sound. Private investment in the economy is high,

### Success: Chile

From 1973 to 1990, Chile went through a period of military dictatorship. As may be seen in Figure 3.7, per capita GDP, adjusted for inflation and measured in international dollars (I\$) grew throughout the 1950s and 1960s, stalled in the early 1970s and continued to plummet in performance during the early years of the Pinochet dictatorship. A period of renewed growth was followed by another collapse in the early-1980s. Thereafter, a period of sustained, rapid growth ensued that, by now, has led Chile to be the most well-off country in South America. It is the sub-continent's only member of OECD.

In terms of fiscal and monetary policy, Chile is widely regarded as a success case. It follows sound—and consistent—macroeconomic policies with transparency, predictability, and

credibility. In some regards, Chile is a world leader in economic policy innovation. Begun during the dictatorship, these policies have been continued through several democratically elected administrations. With few exceptions, state enterprises have been privatized, by far the largest exception being CODELCO, the copper mining giant. The retirement or pension plan fund has been privatized, and international trade has been fostered through numerous free trade agreements. Chile has seen recurrent government budget surpluses that, for example, permitted the country to respond to the 2008/9 world economic crisis which had badly affected its export-dependent economy with a domestic stimulus program that will not unduly burden the country's medium-term position. In fact, since 2001 Chile has adhered to an explicit "structural fiscal rule," codified into law in 2006, that *requires* the government to run a small annual budget surplus over the business cycle. In this way, surpluses are accumulated during times of an expanding economy, to be used to prop up falling domestic demand during contraction, as in 2009.

Foreign direct investment is high, albeit focused on the extractive and utilities fields and often in the form of acquisitions of existing assets rather than the financing of new capital formation. Despite continuous, rapid growth, population-wide educational achievements are lacking, and income inequality and poverty rates still are high. The country will need to manage a transition to a more broad-based and inclusive social and economic policy framework.

As regards monetary policy, the central bank is independent, the currency floats freely on the world market, and interest policy is handled flexibly in light of economy-wide needs. There are no restrictions on foreign investors bringing funds in or repatriating profits. Consumer inflation is targeting at around 3 percent and generally held there (apart from exceptional periods, such as the 2008/9 crisis). All in all, Chile has made good policy choices, combined with consistent implementation.

**Chapter 4: The global economy: international trade and finance**

Section 4.1 deals with the accounting mechanics of recording the value of trade and financial flows. Other sections deal with some of the relevant international trade and finance institutions, policies, and issues (4.2 to 4.5). Section 4.6 concludes the chapter with two case studies.

*4.1 The balance of payments*

Ordinarily divided into two parts—the **current account** and the **financial and capital account**—the **balance of payments** (BoP) is an accounting framework that states use to track the monetary value of the import and export of goods and services as well as to track the corresponding financial flows. In essence, the BoP is a giant checkbook recording debit and credit entries for outgoing and incoming payments. It is best to learn about the mechanics by looking at an example. Thus Table 4.1 reports BoP data for El Salvador for 2005. It is important to bear in mind that because it is the payments balance for *El Salvador*, all monetary entries are in terms of its currency. But as noted in chapter 3, El Salvador happens to have adopted the U.S. dollar as its own currency. Thus, the BoP entries are in U.S. dollars.

**Table 4.1: Balance of Payments, El Salvador, 2005 (USD millions)**

<i>Item</i>	<i>Credit/exports USD-inflow (+) USD-demand</i>	<i>Debit/imports USD-outflow (-) USD-supply</i>	<i>Balance</i>
<b>1. Current account</b>			<b>-893</b>
1.1 Merchandise	+3,429	-6,534	
1.2 Services (net)		- 82	
1.3 Income (net)		- 571	
1.4 Unilateral transfers (net)	+2,865		
<b>2. Financial and capital account</b>			<b>+947</b>
2.1 Capital transfers (net)	+ 94		
2.2 Public sector (net)	+ 329		
2.3 Private sector (net)	+ 470		
2.4 Change in net reserves (- = increase)	+ 59		
2.5 Other		- 5	
<b>3. Statistical discrepancy</b>		- 54	<b>- 54</b>
<b>4. Balance [should be zero]</b>	<b>+7,246</b>	<b>-7,246</b>	<b>± 0</b>

*Source:* Adapted from IMF (2009b); adjusted for rounding errors.

The merchandise entry in line 1.1 in Table 4.1 records the dollar value of the inflow and outflow of tangible, physical goods into and out of El Salvador. When exports leave the country, corresponding payments flow into the country. Thus, foreign purchasers of El Salvadorean goods first have to demand dollars on the foreign exchange market and the dollars thus acquired then flow into El Salvador. This is treated as a credit item in its “checkbook,” hence the plus sign. Conversely, when El Salvador imports machine tools from Germany, dollars flow out of El Salvador to the foreign exchange markets to be converted into euros to pay the suppliers. Thus, the BoP treats this as a debit entry, with a minus sign (dollar outflow) attached. As may be seen in Table 4.1, for 2005 there was a USD3 billion net outflow related to merchandise trade.

Trade in intangible items is referred to as services and are recorded in line 1.2. For example, the dollar value of insurance and transportation services bought abroad by Salvadorean firms is recorded here. Likewise, services for tourists (who bring *in* dollars) would be recorded in this line item. In 2005, the net effect of service trade amounted to minus USD82 million, the payments for which are dollar outflows (negative sign in the BoP). Firms and people in El Salvador also make short-term overseas loans (of less than one year maturity) and take up such loans. The interest received (+ sign) or paid (- sign) is recorded as income (line 1.3). For 2005, the net effect was -USD571 million. The positive and negative entries for unilateral transfers also are netted out already. These resulted in a net inflow of dollars of USD2,865 million in 2005 (about 17 percent of GDP that year), mostly from Salvadoreans who work abroad and sent money back home to their families. Since the transaction takes place without a direct counter-transaction, the term unilateral (one-sided) transfer is used.

When all the pluses and minuses in the current account are summed up, the net result for 2005 was an outflow of dollars of USD894 million—as seen in the last numerical column of the Table—or about USD3.4 million per working day.

Foreign recipients must recycle this overhang of dollars in some way. Some quantity of dollars is used for the illegal trade, of narcotics for example, and dollars are also employed to conduct trade in the world energy markets but for the

German producer selling machine tools to El Salvador there really are only two options. The first option is to keep the earned dollars and invest them in El Salvador, for example to build up a local distribution network, so that the outflow and inflow of dollars, even though separately recorded, cancels out. The second option is to sell the earned dollars (for euros) to whoever wants to buy them. The potential buyers include commercial and central banks. Thus, the ownership of the dollars is transferred from one party to another. But it does not make much sense for a commercial or a central bank just to buy dollars and hold them. The purpose is to invest them, and the only sensible place to invest them is in or via the financial markets where the funds come from and where they can earn interest. In the end, therefore, the money the machine tool producer earns flows back to El Salvador (albeit with a change in ownership).<sup>49</sup>

The financial and capital account records the net flow-back of dollars via private and official channels. In 2005, this amounted to USD947 million. Relative to the current account, the discrepancy in line 3 is USD54 million—often called errors and omissions—so that in line 4 all the various plus and minus signs sum to zero. By definition, *the balance of payments must always sum to zero*. (In spite of media and political usage to the contrary, there is no such thing as a balance of payments surplus or deficit. There can be a current account surplus or deficit, and these must be balanced by corresponding, canceling flows in the financial and capital account.) Economists are not worried about the existence of a statistical discrepancy so long as it is (1) sometimes positive and sometimes negative over the years (suggesting random fluctuations) and (2) small relative to the sum total of currency inflows and outflows. For 2005, in El Salvador the sum of inflows and outflows amounted to about USD14,500 million, so that the error of USD54 million is very small indeed.

As to some of the specific items in the finance and capital account (line 2), the public sector entry for example largely reflects foreign aid inflows (grants). The private sector entry reflects inflows of dollars when foreign companies buy up companies in El Salvador (in the commercial banking sector for example). The change in net reserves refers to foreign exchange holdings of the central bank. When it *sells* dollars to acquire, say, euros, dollars flow *out* (minus sign) but the central bank's holdings of euros *increase*. Thus—counter-intuitive but entirely logical within the BoP framework—an increase in holdings of foreign currency is reflected with a minus sign. Conversely, a decrease of foreign currency holdings is reflected with a plus sign, as was the case in 2005.

As regards war, civil war, and crime, balance of payments effects can show up in a variety of accounts and sub-accounts. Needless to say, with porous borders and cash, much legal and illegal activity will simply not be captured in the accounting at all. The importance of remittances and foreign aid, both important consequences of the country's 1979-1991 civil war, was already hinted at. We take up some of the violence-related issues pertaining to trade and finance as reflected in the BoP in the next two sections.

#### 4.2 *Violence and international trade*

**THE BENEFITS OF TRADE.** No one doubts the importance of trade *within* countries. For example, crossing political borders when trade takes place between the states of New York and California in the United States raises no economic problem at all. Likewise, the existence of *nation-state* political borders between the United States and Canada and between the United States and Mexico raises no economic problems. So long as trade is voluntary, it is mutually beneficial. (If it were not mutually beneficial, people would not trade voluntarily.) Although its benefits are not necessarily shared equally between trading parties, and although some economic actors may select from a larger range of trading options than other economic agents, it is nonetheless true that from the bazaars of Asia to the village markets of Africa and the roadside stalls of Latin America, people intuitively understand the benefits of trade. Trade—local and long-distance—is as old as humanity. To enhance their own productivity, most people use their labor power to specialize in only one or at most a very few economic activities in which they produce a surplus, to be traded against the surpluses that others produce. Today, virtually no one is entirely self-sufficient anymore. Both for those who have attained a modern, high standard of living, as well as for those who aspire to it, incessant, extensive, and dense trade is a universal necessity.

**DETERMINANTS OF TRADE.** Prior to the invention of modern national borders—an invention barely 200 years old; modern European borders for example were made firm not even 150 years ago and, with the development of the European Union, are already breaking down again—the borders that mattered were primarily geographical, not political. What mattered were benefits and costs, in particular production, communication, and transportation costs. Geography bestows production cost advantages and disadvantages with regard to the distribution of natural resources and of land-, freshwater-, and sea-dependent production possibilities (e.g., agronomy, aquiculture, raw material extraction, oceanic fishing, and sea-based raw materials). Put simply, it is unwise to try to produce tropical fruit north of the Arctic Circle or grow lettuce in the Sahel. In addition, geography helps determine transportation costs. It is no surprise that immediate

neighbors trade at higher volumes with each other than they do with more distant partners, where distance includes considerations of topography (mountainous regions being more costly to leave and reach than flat terrain). Globalization is about spatial reach, and thus primarily a function of communication and transportation costs (along with rule of law to enforce property and contracts).

Emerging and developing economies still rely on trade in raw materials and agricultural products and increasingly also on remittances from migrant workers (e.g., Filipino nurses, Bangladeshi oil-field workers, or Mexican farmhands). As a rule, too, conflict-affected states will need to rebuild and develop their infrastructure capacity, especially roads and sea- and airports, to facilitate internal and external trade, and revamp their institutional capacity to knowledgeable, effectively, and efficiently reintegrate into the world trading system and deal with a host of issues, including tariffs and customs, special economic zones, overmuch dependency on sectors such as mining, and terms of trade.

Statistics from the World Trade Organization (WTO) reveal two important facts. One is that international merchandise trade is dominated by neighborhood effects (intra-regional trade) and this, in turn, is highly correlated to transport infrastructure. The other is that world trade in manufactured items has grown much faster than trade in fuels and mining products which, in turn, have grown slightly faster than trade in agricultural products.<sup>50</sup> Both these facts speak against infrastructure-poor, skill-poor, landlocked, conflict-affected states. Transportation services, especially tourism, have also grown hugely. And tourism, itself, is one of the largest industries in the world. For obvious reasons, dangerous locations attract little such trade even if the infrastructure is in place to host overseas visitors. Thus, transportation and safety go together, and it is probably no accident that terror organizations for example strike tourist-related targets so frequently (e.g., New York, London, Madrid, Bali, Egypt).

**A NATURAL RESOURCE “CURSE”?** In a 2008 report, the African Development Bank (AfDB) distinguished between (1) risk factors that may predispose a community or state to experience large-scale violence and (2) triggers that may release latent violence. The risk factors are the presence of natural resources; low income; low economic growth; ethnic antagonisms; neighborhood effects and external instigation of armed conflict; geography and large populations; a youth bulge, especially proportionally very large numbers of men between 15 to 29 years of age; political repression and corruption; competition for scarce resources; inequality; religious extremism; flawed or incomplete transition to democracy; high military expenditure and large armies; diasporas; colonialism and superpower rivalries; and the existence of previous conflicts.<sup>51</sup> Triggers include the attainment of political independence or statehood, regime change, and military coups; elections; neighboring conflicts; and other dramatic events. By themselves, none of these guarantee the outbreak of violence of course. For instance, Botswana is blessed with the presence of natural resource-wealth without having experienced large-scale violence in spite of achieving statehood, holding contested elections, and having large, violence-prone neighbors (Namibia, South Africa, and Zimbabwe). Instead, the risk factors and triggers are extracted from comparative, cross-country statistical work but with the now firm (and always firm) understanding that the local historical context and the quality of policy- and decisionmaking matters.

Nonetheless, in specific cases, the availability of high-value, stationary natural resources has encouraged capture, especially when, for example with the end of the Cold War, external financing for contesting parties dried up. As pointed out in chapter 1, the relevant equation is simple: no money, no war. When external financing fails (e.g., state sponsorship, diaspora financing), internal sources need to be accessed. This includes illegal harvesting of tropical timbers, diamond and other mining, or illicitly raising and selling crops with narcotic properties. Crime networks that trade in banned substances (e.g., chlorofluorocarbons) or endangered species, that engage in arms smuggling, money laundering, and human trafficking are probably very large in monetary terms. While in traditional state-on-state war, armed violence has disrupted trade and the benefits of trade,<sup>52</sup> in the post-Cold War era, consumers in advanced economies are complicit in violence in so far as the financing of organized crime and collective violence depends on global distribution and consumption networks and trade opportunities.<sup>53</sup> Efforts by global nongovernmental organizations to create voluntary regulatory frameworks, most famously the instigation by the London-based group Global Witness of what became the Kimberley Process Certification Scheme (KPCS), to impede the trade in conflict goods themselves are liable to be taken hostage to vested interests. Thus, it has been argued that KPCS has evolved into a producer and distributor cartel where violence-prone states such as India, Indonesia, Israel, and Zimbabwe were and are members in good standing, while a reformed, post-Charles Taylor Liberia for many years was not.<sup>54</sup>

**TRADE IMPEDIMENTS.** Establishing, or reestablishing, welfare-enhancing legitimate trade is important. Constructing, reconstructing, and upgrading trade-related physical infrastructure, streamlining border- and customs procedures, reducing or eliminating im/export taxes, pursuing trade opportunities especially with immediate neighbors to generate regional trade multiplier effects is crucial for economic growth within and across political jurisdictions. But global trade

is biased against economically developing states. As mentioned previously, compared to official development assistance (ODA) of about USD100 billion in 2006,<sup>55</sup> global workers' remittances of USD300 billion in 2006<sup>56</sup> and foreign direct investments of over USD1,000 billion<sup>57</sup> are very large. Truly opening global markets probably would have an even larger impact. Dollar values of trade distortion policies are extremely complex to compute. But for a sample of 22 advanced economies, for 1998 to 2002, the value of trade distorting subsidies alone was estimated at 1.5 percent of their GDPs. Agricultural producer support estimates (PSEs) amounted to USD280 billion in 2004 for the OECD countries—three times the value of ODA—and estimates for the average level of United States' agricultural subsidies between 1995 and 2001 run between USD14 billion to USD66 billion. EU-15 agricultural subsidies run into the tens of billions of euros as well.<sup>58</sup> If these were eliminated, the benefits would not accrue solely to developing states—let alone solely to postwar developing states—but a substantial portion would benefit them. In a word, the value of trade impediments is much higher than the value of aid made available to postwar states. The blame for the substantial risk of war-renewal on account of lack of economic growth (between 25 and 50 percent) thus lies in part with the protectionist policies of advanced economies.<sup>59</sup> Inasmuch as peace negotiations among conflicting parties in emerging and developing states frequently involve participation by advanced economies, raising the issue of negotiating unrestrained access to global markets may be helpful.

#### *4.3 Violence and international finance*

As for the previous sections, this section begins with some of the mechanics of international finance before moving to dysfunctionalities and problems related to conflict-affected states.

**EXCHANGE RATES.** Like food and drink, household goods, and other ordinary items, most currencies can be bought and sold on markets. The main economic purpose of trading currency is to facilitate the exchange of trade and services across currency boundaries. For example, a French tourist traveling to South Africa will need to supply euros in exchange for rand, the South African currency. Thus, the supply of euros (EUR) increases; simultaneously, so does the demand for rand (ZAR). If the original exchange rate was ZAR12/EUR1 (or, taking the inverse, EUR0.083/ZAR1), then the extra supply of euros drives down its price so that its value drops. Now South Africans have to pay, say, only ZAR10/EUR1.0. Conversely, Europeans have to pay more euros per rand: EUR0.1/ZAR1.0. From South Africa's view, the consequence of the extra French tourist is that European goods become cheaper (one euro worth of European products now costs South Africa only 10 rand, instead of 12). Relative to each other, the euro **depreciates** in value as the rand **appreciates**. The complementary effect is that South African products become more expensive for Europeans, so that South African firms have a harder time selling products for export.<sup>60</sup>

In terms of the macroeconomic framework introduced in chapter 3, an appreciating currency diminishes exports (X) and encourages imports (M), so that the net effect of (X-M) results in a smaller trade surplus (or a larger trade deficit) which, in turn, leads to declining aggregate demand and therefore to reduced economic growth and declining employment. Of course, one needs to keep in mind that the extra French tourist stimulates the local economy through demand for local accommodation, food, transportation, and so on. In essence, currency appreciation or depreciation fosters a restructuring of the domestic economy, a tradeoff in other words between and among economic sectors that stand to gain or to lose from currency fluctuations.

As a rule, most countries, however, favor a strong or high-value, appreciating currency. The reasons for this are at least two-fold. First, if South Africa can access European goods for ZAR10/EUR1 then that is obviously cheaper than to pay ZAR12 per euro's worth of European product. Cheaper imports evidently benefit South African consumers and importers of intermediate goods needed for production of goods and services and this tends to put a lid on consumer and producer price inflation. But cheaper imports potentially also threaten domestic producers' markets. The second reason why a high-value or appreciating currency can be desirable is because it will then compel domestic producers to become more efficient to defend (or regain) their domestic market despite import threats. A government that artificially cheapens its currency in effect subsidizes local producers, giving them the message that production efficiencies are not desired. To deal with short-term exigencies this may be politically (and even economically) acceptable, but not as a long- or even medium-term strategy. After all, economic growth—an important message of chapters 1, 2, and 3—depends on growing investment and growing productivity. To undermine this process is self-defeating.

**EXCHANGE RATE REGIMES.** The currency appreciation/depreciation mechanism just described requires that two currency regions maintain a **flexible exchange rate regime** toward each other whereby a currency's value is determined primarily by the market rather than by monetary authorities. These authorities—the central bank but sometimes the

ministry of finance or another government agency—can participate in the selling and buying of currencies and thus influence the market but this tends to be done to deal only with unusually large movements in currency values. Currency market intervention can also be done on a routine basis—called a **managed float**—in order to transition a particular currency from one exchange rate position to another more smoothly than the private market might do. In the extreme, governments can appear as buyers or sellers of their own currency with such regularity that in effect a **fixed exchange rate regime** results (at least within a narrow, desired band).<sup>61</sup> This amounts to an implicit price control and, despite notable exceptions—e.g., Denmark and Venezuela—is primarily used by fairly small island economies.

In the popular press, the impression is often given that flexible exchange rates are, somehow, “good,” and fixed exchange rates are “bad.” This can be true, but so can the opposite: a flexible exchange rate regime can promote instability, just as a fixed exchange rate regime can fulfill macroeconomic stabilization functions. Much depends on the specific circumstances of the case. For example, if the government of a war-torn or postwar state (or any state, for that matter) decides to peg its currency to the euro or another widely traded, stable currency (e.g., Kosovo, Timor L’este, El Salvador) it hands monetary policy to the country whose currency it adopts. For example, if a large amount of aid denominated in euros is made available, it would be exchanged at a fixed rate and spent domestically. Adopting a foreign currency as one’s own or stipulating a fixed-exchange rate thus amounts to the same thing: for all practical purposes, a **currency union** is created. The domestic currency cannot appreciate and neither undermine export prospects nor artificially cheapen imports. A credible fixed exchange rate policy provides a guarantee to foreign investors that private monies put into the country can be extracted again at an *a priori* known rate. Nonetheless, exchange rates that fail to keep pace with the changing conditions of the underlying economies themselves can become a source of macroeconomic instability. For example, after World War II, a system of fixed exchange rates was agreed among the world’s major economies, and while successful for the period of reconstruction, the system collapsed spectacularly in 1971. Europe and Japan had recovered from the war and had rebuilt their economies. As their productivity improved—and as productivity improved at different rates within Europe—more competitive product pricing on the world market became possible. Adherence to a fixed exchange rate system under these conditions became unduly burdensome. It was like saying that an hour’s worth of work must always be exchanged for the same hourly compensation, regardless of the worker’s productivity.

**COLONIAL-ERA CURRENCY UNIONS.** The currencies of 12 states of the former French colonial empire in Central and West Africa are still tied to France (through the Central African CFA franc, XAF, and the West African CFA franc, XOF), which were fixed to the former French franc and now are fixed to the euro.<sup>62</sup> Created in 1945, post-World War II, the CFA has been devalued repeatedly, either relative to the French franc, or with the French franc against other currencies. Nonetheless, it has been argued that on the whole the CFA value was set so high as to subsidize European imports for African urban elites and penalize agro-export dependent farmers who lost market share and employment and income opportunities when importers switched to have their needs supplied from farmers elsewhere in the world. It is unrealistic to believe, for example, that Côte d’Ivoire or Cameroon—major cacao producers—can effectively compete with Ghana or Nigeria (or Brazil or Indonesia, for that matter, to round out the list of the world’s top-six producers) when their exchange rates cannot adjust. In effect, the CFA countries should produce and sell *more* cacao but an artificially high CFA value induces importers to demand and purchase more from non-CFA countries. Thus, production structures are distorted all around the world.<sup>63</sup> The connection to lack of employment and economic growth—and therefore to the lack of peace—becomes evident.

**FOREIGN CAPITAL FLOWS.** Among other things, a flexible exchange rate regime implies that large amounts of foreign aid, including wages and salaries of aid workers, and remittances of migrants’ overseas earnings increases the demand for the local currency, leading to its appreciation and making it more difficult for a conflict-affected state to export products to earn the foreign exchange required to purchase needed imports, even as it makes it cheaper to import products that compete with local production and hence with local employment and economic growth. The consequent slack in domestic aggregate demand reduces price pressures and tends to hold inflation down, an important, welcome side-effect. But as the primary need is to rebuild productive economic activity, governments often resort to debt-financed government projects. The combined effect can be the crowding out of private by publicly-financed economic activity, large government budget deficits, and balance of payment difficulties. Fear of such an unsustainable economic strategy was the very reason for the IMF’s erstwhile harsh, mandated policies of bringing government finances under control—through spending cuts—even if this damaged the achievement of domestic social objectives, production, employment, and growth. This sort of painful structural adjustment can encourage eventual foreign direct investment (FDI) but if this takes too long to take effect, the social pain can lead to resumption of violent conflict. It is worth



observing that in the immediate postwar period, the likelihood of large private capital inflows is low at any rate, as potential investors wait to see how policy and the economic environment develop. What inflows there are will most likely be speculative money that can increase the exchange rate but create little productive capacity. Longer-term investment prospects are influenced by making profitable investments, which is influenced by the probabilities of social and political peace. For the IMF to drive an overly harsh bargain to compel macroeconomic stability at the risk of relapse into armed conflict will not attract investors. As mentioned (section 2.3), the IMF recognized this point by the late 1990s and now is more discriminating in its policy recommendations and the design of its aid packages.

**CHOOSING A REGIME.** No one exchange rate regime is always appropriate; the choice of regime must be based on observant pragmatism, not on dogmatic adherence to a rule. In practice, different conflict-affected states have chosen different avenues, from dollarization (i.e., the adoption of another state's currency), to dual-currency systems, to flexible rates, to interventionist managed floats. The presence or absence of currency black markets usually is a good indicator of whether undue policy is followed. Likewise, large speculative currency flows—betting for or against a particular currency—can indicate that policy adjustments may be needed.

**VIOLENCE AND GLOBAL FINANCIAL MARKETS.** Beyond these general mechanics and considerations, there are two specific causal connections between violence and exchange rate movements. One causal link goes from exchange rate fluctuations to violence; the other goes in the opposition direction. Perhaps the best-known case is that of the 1997 East Asian financial crisis where vast speculative currency movements destabilized entire economies, especially in Indonesia, Malaysia, the Philippines, Thailand, and South Korea. In short, suppose that the exchange rate of the Thai baht (THB) to the U.S. dollar (USD) is THB10/USD1 and also that currency speculators expect that the rate will change to THB20/USD1. A dollar bought by selling ten baht can thus be sold again for twenty baht—if the speculative expectation comes true. Of course, if very many speculators start selling baht to snap up dollars cheaply, then the very act of concerted baht-selling drives it down in value. The expectation becomes a self-fulfilling prophecy, and the baht collapses. (If the expectations turn out to be wrong, it is the speculators who lose money. There is a real business risk involved.) The problem lies not so much in currency depreciation or appreciation per se, but in the rapidity of the changes. Thus, a speculative attack that drives the baht down in value increases for example the cost of needed imports. While the depreciation should correspondingly make tourist visits and exports cheaper, economies do not adjust that quickly to reallocate labor and production resources on the turn of a dime. To deal with the extraordinary harm that can be done by the divergence between the physical economy and the financial economy, governments sometimes try to countermand currency movements. In the case of the Thai baht for instance this meant to meet the speculative selling of baht by *buying* them—with dollars from the central bank's foreign currency holdings. But this meant that these holdings—needed to pay for imports—were being depleted. When the coffers are depleted, the **currency defense** has to be abandoned and the currency and, with it, the domestic economy collapses.

One question is then why speculators attack a currency in the first place. Why do they form expectations about a currency, one way or another? In the case of Thailand the view developed that the country had taken on too much real-estate related, U.S. dollar-denominated debt. At the time, the actual exchange was a fixed rate of THB25/USD1. In the belief that this fixed rate could not be maintained, speculators sold baht and bought dollars. The speculators were correct: the Thai government did not—could not—defend its currency indefinitely as it ran down its nearly USD50 billion dollar reserves. The currency was floated and eventually dropped to less than half its pre-crisis value, to THB56/USD1. (It has recovered since.) The IMF poured in billions of dollars in loans to the Thai government, putting “real money on the table” to play against the speculators which then left the currency alone because, in principle, the IMF pockets are very deep and the stakes can be raised. Speculators are not in business to lose money. But the damage was done. With the collapse of its dollar-pegged currency in July 1997, a vast financial and economic collapse followed, unleashing political tensions—and here is the connection of the potential for violence—that have not subsided to this day. The Thai government collapsed, a new constitution—although long in preparation—was introduced in October 1997, but then abrogated during a military coup in 2006.

In Malaysia, a vast economic crisis ensued within days of the Thai currency crisis. This resulted in a nasty political struggle over economic policy differences between Malaysia's ruler and its finance minister, a struggle also not settled to this day. While massive violence fortunately did not occur in the case of Thailand, nor in the case of Malaysia, the related currency collapse in Indonesia was directly associated with the end of the Suharto regime in 1998 and the beginning of the violent secession of Timor L'este (East Timor) in 1999 and the atrocious civil war that followed there and elsewhere, for example, in Aceh.

The opposite causation—from violence and war to currency collapse—has already been noted on several occasions,

for example, in Zimbabwe but also in Germany following the failure to reconstitute its economy post-World War I. Even for the less spectacularly catastrophic cases of the post-WW II U.S. wars in Korea, Vietnam, the Persian Gulf, and Iraq and Afghanistan, the value of its currency—and with it, the economic effects via foreign trade on the domestic economy—appears to suffer regularly with the onset and conduct of war.<sup>64</sup> Financial historians point to the development of the domestic and global bond market as intricately linked to the need to finance war.<sup>65</sup> To finance war-related spending, governments can cut nonwar spending or print money, which is inflationary. Neither option is attractive and, in quick-thinking democracies at least, voters will not like either of these routes of action. Alternatively, governments can sell war bonds, borrowing money domestically. Voters gamble, in essence betting their savings that their government will win the war and eventually be able to repay the borrowed funds with interest. War bonds are financial votes of confidence, or lack thereof. But governments can also raise bond money from abroad. In the case of the United States and its wars in Afghanistan and Iraq in the 2000s, this money largely—and ironically—comes from China. The mechanism is that the United States is running a very large trade deficit with China, and the dollars that China thus earns are plowed back into the U.S. financial markets from which the U.S. government borrows to plug its gaping federal government budget deficit. Much of China's dollar reserves are held in **sovereign wealth funds** (SWFs). If China were to decide to sell off its massive dollar-holdings, the U.S. currency would be equally massively devalued. This danger is countered only by China's self-interested desire not to undermine the value of these holdings. Like private business speculators, there is no reason why it would want to lose money. But even an orderly unloading of dollars, a shift by China into currency holdings other than U.S. dollars, would still put downward pressure on the dollar—and upward pressure on the currencies into which China would substitute.

#### *4.4 Institutions and policies*

A brief overview of IMF and World Bank policy history was provided in chapter 3; aid policy was addressed in chapter 3 as well. Here, the focus is placed on a sampling of global trade and finance institutions, public and private (formal and informal), and their relation to conflict potential or conflict resolution. Formed in 1995 and headquartered in Geneva, Switzerland, the World Trade Organization (WTO) is an international organization composed of member states that have signed and ratified various legally binding agreements regarding their conduct in the international trade of goods and services and the protection of intellectual property rights. The WTO administers extant trade agreements, serves as a forum for trade negotiations, operates a well-used dispute settlement mechanism (over 300 cases in its first 10 years of existence), reviews members' trade policies, and provides technical assistance and support to emerging and developing economies. By mid-July 2008, 153 states were members; about 30 more were negotiating accession. On its web site, the WTO makes explicit reference to negotiation and peaceful dispute resolution to reduce the risk of "military conflict."<sup>66</sup>

To promote trade while extricating themselves from their own overly complex laws, rules, and regulations, many states have set up special economic zones (SEZs), or export processing or free trade zones (EPZs; FTZs). These amount to economic experiments and are location or product or industry specific. Forms of governance range from fully public to fully private and any mix in-between. Shenzhen, in China, and Subic Bay, in the Philippines, are prominent examples. Many countries have multiple such zones, India in particular. Inasmuch as the establishment of an SEZ requires the acquisition of special physical sites and the construction of appropriate transportation and other infrastructure, conflict, including violent conflict, with local communities can emerge. A recent prominent case involved Tata Motors of India which had planned to locate a production facility for its Nano automobile in the Singur SEZ. Disputes over land acquisition, population displacement, fair land compensation, and other issues led Tata to abandon the project in late 2008 and to locate elsewhere in India.

A very different kind of institution is for example the Extractive Industries Transparency Initiative (EITI), an attempt to bring transparency and accountability to the billions of dollars generated in the global trade of raw materials extracted from Earth. This stemmed, in part, from a publish-what-you-pay campaign that sought to compel companies to publish the sums paid to states for natural resource extraction (natural resource rents) so that government usage of these funds could be tracked and corruption and fund mismanagement be reduced. This has led to related follow-on efforts, for instance the development of a Natural Resource Charter—"a set of economic principles for governments and societies on how to use the opportunities created by natural resources effectively for development"—which involves Ernesto Zedillo, former president of Mexico and now an economics professor at Yale University, Michael Spence, an economics Nobel laureate and professor at Stanford University, and Paul Collier, an economist at Oxford University and former Director of Development Research at the World Bank.

On the financial side, the Bank for International Settlement (BIS), headquartered in Basel, Switzerland, serves as a bank for central banks. Formed in 1930, it describes itself as “the world’s oldest international financial organisation.” Its original function was to collect, administer, and distribute reparation payments imposed on Germany with the Treaty of Versailles following World War I. Since then, BIS has evolved into a statistics gathering, research, and policy deliberation, advice, and coordination venue for central bankers. Nonetheless, because severe disarray in global financial markets can lead to political and military conflict, and vice versa, BIS’s work is never very far from considerations of the link or links between violence and economy. A search of the BIS web site for keywords such as war, crime, and violence yields many references to research papers and, even more so, to policy speeches. A 2007 BIS working paper shows the drastic, permanent economic dislocation caused by financial crises, wars, and civil wars.<sup>67</sup> Its authors find that the failure of emerging and developing economies to catch up with (or to converge to) advanced economies can be wholly explained by the frequency and severity of such crises. The policy implication clearly relates to crisis prevention or, at least, avoidance.

In the wake of the finance-induced global economic crisis of 2009, researchers and policymakers seek to reform the global financial architecture—in part, in conjunction with the BIS—and, with it, to broaden global macroeconomic and financial policy coordination. In the mid-1970s, at the invitation of the then-president of France, an informal gathering of the leaders of France, Germany, Italy, Japan, the United Kingdom, and the United States, soon joined by Canada, evolved into an annual G7 economic policy coordination meeting. Later this was joined by Russia, the EU, and representatives of international financial institutions. But in September 2009, at the Pittsburgh meeting, this was opened up to the G20, a group that includes Brazil, China, India, Indonesia, Mexico, South Africa, and others. It had become clear enough that the economic heft of the G7 had shrunk in relative terms and that policy coordination required talk among an expanded set of participants.

Because billions of people still have no access to banking services, informal financial networks are in fact extensive (e.g., *hawala*). Because they are informal, they can and have been abused to move illicitly gained funds or funds intended for illicit purposes. The Financial Action Task Force (FATF), established as one outcome of the 1989 G7 meeting, is an intergovernmental body, headquartered in Paris, “whose purpose is the development and promotion of national and international policies to combat money laundering and terrorist financing.” It has produced nearly 50 “recommendations” that effectively serve as performance standards for its over 30 state members. Among other work, FATF published in April 2009 an anti-money laundering (AML) and counter-terrorist financing (CTF) Evaluations and Assessments Handbook for Countries and Assessors. Assessment teams visit members and evaluate and assess compliance with the FATF standards. The resulting reports are publicly available on the FATF web site.

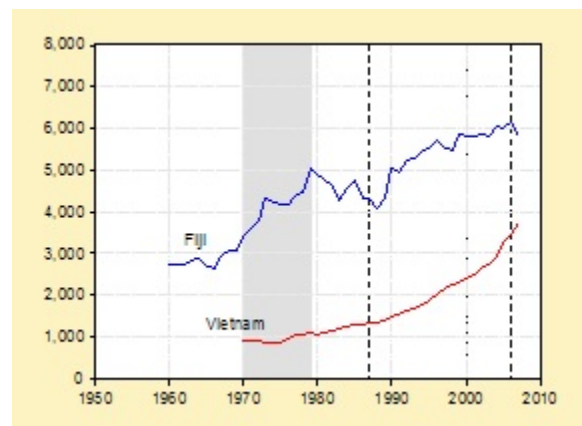
Although FATF deals in part with informal and illegal money flows, many of its recommendations pertain to local, national, and supranational laws, rules, and effective enforcement regarding commercial banking, and certainly the very large global financial firms have directly and indirectly participated and cooperated in the formulation of FATF’s work. In regard to global trade and financial flows, however, one of the challenges concerns how to deal with *Fortune 500*-type, truly globe-spanning giant corporations that each employ hundreds of thousands and even millions of people in virtually every state on Earth and the sum of whose intra-firm activity accounts for a large fraction of global trade and financial flows. Complicity in, or at least insensitivity to, human rights abuses is both alleged and sometimes documented, both for wholly private corporations as well as for state-run companies (e.g., Chinese companies in Africa). But on the whole, companies and their suppliers, employees, and customers are victims of violence much more than they are perpetrators. They much prefer to deal with single, universal standards, rather than with a multiplicity of standard setters, standards, and costly audits. Indeed, businesses speak of audit fatigue as they try to comply with numerous mandatory and voluntary standards, some local, some national, some global, issued by different agencies and authorities. In this regard, the International Accounting Standards Board (IASB), in London, for example issues International Financial Reporting Standard (IFRS). The objective of the body is to create global standards, globally followed and globally enforced. Yet much of the business world is approaching the topics of peace and security solely from a risk- and liability management perspective, rather than from a more engaged and forward-looking violence prevention and avoidance perspective. Thus, the documented risk of civil war relapse for instance should encourage both peace negotiators and the major corporations or councils of corporations such as a national Chambers of Commerce to talk with each other before any peace deal is signed.

#### 4.5 Policy lessons and tips

- Lesson 4.1: The effects of war, civil war, and crime do affect a country's balance of payments, the value of its currency, and its trade position, and therefore inflation, employment, and economic growth.
- Lesson 4.2: Voluntary trade is mutually beneficial. This is as true within borders as across borders.
- Lesson 4.3: Statistics from the World Trade Organization reveal two important facts. One is that international merchandise trade is dominated by neighborhood effects (intra-regional trade) and this, in turn, is highly correlated to transport infrastructure. The other is that world trade in manufactured items has grown much faster than trade in fuels and mining products which, in turn, have grown slightly faster than trade in agricultural products. Both facts speak against infrastructure-poor, skill-poor, landlocked, conflict-affected states. Hence, shortcomings in these areas need to be rectified quickly.
- Lesson 4.4: There is no natural resource curse per se. Nonetheless, failure to diversify can create undue, fragile natural resource dependency and can also serve as a focal point of violent conflict to finance war.
- Lesson 4.5: Foreign aid is small relative to workers' remittances and foreign direct investment. Freeing global trade from protectionism would release far more "aid" to conflict-affected states than does official development assistance.
- Lesson 4.6: There is no one right foreign exchange regime. But proper currency management is important to guard against black currency markets or speculative currency attacks that can plunge states into episodes of severe violence. Conversely, war adversely affects currency values and economic performance.
- Lesson 4.7: The connections between violence and currencies, and currencies and violence are surprisingly deep—from colonial-era currency unions to currency speculation and war bonds—and can carry both decades-long lasting economic decline and bondage as well as explode with a suddenness and rapidity against which there is virtually no defense other than foresight and preventive anticipation.
- Lesson 4.8: Very many public, private, and public-private global organizations exist in the field of international trade and finance. With the exception of the IMF and the World Bank, they have not, on the whole, directly engaged with the topic of interpersonal and collective violence. They should be.

#### 4.6 Failure and success: two case studies

##### Failure: Fiji



**Figure 4.1:** Population-, inflation-, and purchasing power-adjusted GDP (base year = 2005); Fiji 1960-2007; Vietnam: 1970-2007.

Source: Raw data from Penn World Table v6.3.

For nearly one hundred years, from 1874 until 1970, the United Kingdom was Fiji's colonial overlord. To work Fijian sugar fields, Britain moved contract labor from another one of their colonies, India, to Fiji. (By the early 2000s, over 40 percent of the population was of Indian descent.) This planted the seeds of post-independence ethnic-based strife on the islands. Two coups in 1987 unseated recently elected ethnic-Indian dominated governments. Subsequently, tens of thousands of Fijians of Indian heritage emigrated, leaving the economy short of skilled labor resources, adversely affecting labor productivity. The political uncertainties resulting from the 1987 coups were not settled until 1997. During this time period military expenditure absorbed at times well over ten percent of the annual government budget. Then, in 2000, another coup occurred, which resulted in international economic and political penalties, including the erection of trade barriers for this export-dependent state. Exchange-rate (and price) controls further discouraged trade and foreign direct investment as well. In 2005, unrest arose again, resulting in yet another coup d'état in 2006. Today,

uncertainties remain with regard to land-tenure and other issues and the political situation is ultimately unresolved. (The coups periods are indicated with the three dashed vertical lines in Figure 1.)

Fiji's economy is natural-resource based, mostly tourism, fisheries, forest products, commercial agriculture—especially the export-dependent sugar cane sector—and some mining, notably of gold deposits. The economy declined for about 10 years prior to the 1987 coups and is generally subject to sharp swings in performance

(see Figure 1). Declining sugar prices, despite subsidies offered by the European Union, drastic fluctuations in tourist revenues even when that sector is shored up with periodic currency devaluations aimed at the Australian and New Zealand tourist markets, low and declining foreign direct investment, and continuous skilled labor emigration due to the political stand-offs are the main factors explaining Fiji's uninspiring economic performance in the 2000s. Neither the fiscal nor monetary policy stance of the current government is sustainable. Annual budget deficits and cumulative debt are very high and a much needed structural reform and diversification of the economy has not happened. Debasement of the currency to attract tourists and foster relatively low value-added exports instead of seeking currency stability and investment in human and public and private physical capital to increase productivity has proved to be an inappropriate and inadequate economic strategy.

### **Success: Vietnam**

Vietnam, in contrast, has been much more economically stable and successful. The second Indochina war ended in 1976. However, Vietnam invaded Cambodia in 1978 and was itself briefly invaded by China in 1979, so that the war periods (indicated by the shaded area in the Figure) did not end until that year. War of course had lasted for over a century, going back to the 1860s to 1880s, when the country became a French plantation colony. Independence struggles, World Wars I and II, and two follow-on wars lasted until 1976. By then, millions of people were injured or dead or, as for Fiji, had left the country which led to a further depletion of skilled labor resources.

By 1980, when Vietnam's wars had ended, political, economic, and cultural reunification proved difficult and led to few economic advances. Fiji's per capita GDP (I\$5,000) was about five times as large as Vietnam's (I\$1,000). But by 2007, the I\$4,000 gap had been cut in half to about I\$2,000. In 1986, Vietnam's leadership—as in China beforehand—approved the introduction of a socialist-oriented version of free market economics. Importantly, not only did structural reform per se take place, but it took place in the context of economic diversification across agriculture, industry, and services, making the country less vulnerable to shocks in any one sector. The end of the Cold War and subsequent boom in globalization added its own, fortunate impetus. Coffee cultivation and exports grew, as did the production and export of cashews, rice, black pepper, and other agricultural products. Even so, foreign direct investment in low-skill manufacturing as well as in high-skill, high-technology fields has proved very attractive, sustained, and successful, so that the share of agriculture in GDP has declined and that of industry has increased. Rural labor resources migrate to urban centers where industrial development has been able to absorb them, at least in economic terms. More recently, offshore oil exploration has commenced. Thus, even though heavily dependent on international trade and finance, Vietnam has done much better in this regard than has Fiji.

Importantly, the 1997 East Asian financial crisis that devastated Indonesia, Thailand, and other states in the region had little effect on Vietnam's economy. Undoubtedly, as with the pre-democratic regimes in Hong Kong, Singapore, South Korea, and Taiwan in the 1970s, political stability combined with an economic opening-up is a key factor explaining the attraction of private business interests to Vietnam. Interestingly, across a range of global rankings, such as competitiveness, human development, ease of doing business, economic freedom, perception of corruption, and other indices, Vietnam does not rank high. This suggests that its economy is riding along a narrow channel of politically facilitated trade opportunities that may not take an independent and sustainable hold. For example, by late 2007, about 40 percent of GDP was generated through state-owned enterprises (SOEs). While Vietnam's leaders have done an admirable job of controlled economic growth aimed at securing economic and social stability, as we have advised in this Manual, a potential downside is that of inadvertently maneuvering into an economic corner where policy flexibility is restricted to a set of unpalatable options.

## Chapter 5: Designing and promoting peace

“The end of war does not necessarily imply economic security, and there are risks. First, problems of micro insecurity, with armed inhabitants desensitized to violence ... Second, macro insecurity, the considerable risk that war will be resumed ... A third type of risk is the fiscal shocks resulting from the war to peace transition.” (Dunne, 2006, p. 40).

“... of conflicts that have ended since 1989, those that ended in peace agreements have a considerably lower rate of [war] recurrence (14 percent) than the overall rate of 47 percent. Conflicts that ended in outright victory for one side had a recurrence rate of 45 percent, and all of those with an ambiguous ending recurred. This is consistent with other findings which show that peace accords supported by the United Nations and generous development assistance produce better outcomes than military victories alone” (UNDP, 2008, p. 17).

The estimates vary but war recurrence—or war after war—is common. On the order of one-fifth to one-half of all concluded recent civil wars restart within a few years’ time. Recidivism is high. Risk factors for war recurrence that need to be addressed in the design of peace include “low per capita income, weak economic growth, the presence of socioeconomic horizontal inequalities and abundant high-value natural resources ... [even more so] in the presence of high unemployment, especially among youth.” For example, **horizontal inequality**—inequality among culturally distinct groups rather than within them—depends on “how inclusive the post-conflict political system is; whether or not conflict itself has remedied such inequalities, as in the case of successful ethno-regional secession; whether or not previously excluded or marginalized groups or regions have gained more equitable economic and political standing from peace agreements and their implementation; whether prior injustices associated with real and perceived discrimination against an aggrieved group are satisfactorily addressed; [and] how the dynamics of inter-group relations are affected by the conditions of post-conflict peacebuilding and development.” Peace treaties therefore should do more than pay homage to the free market and make reference to a sound, stable, public sector-enabled macroeconomic framework. These things themselves need to be placed within a higher-order level of principles of institutional or treaty design, as addressed in sections 5.1 and 5.2. Third-party intervention via diplomatic, military, or foreign aid channels is not always for the better: third-parties have vested interests. How these interests are related to the higher-level design principles is briefly discussed in section 5.3. As for the other chapters, the remaining three sections—5.4, 5.5, and 5.6—conclude the chapter with brief considerations on institutions and policies, policy lessons and tips, and two brief case studies.<sup>68</sup>

### 5.1 *The economics of design*

Some fields of economics deal with societal institutions, their design, and their mechanics.<sup>69</sup> These have been employed for example to design revenue-maximizing auctions by which a government allocates portions of the electromagnetic spectrum for use to competing cell phone and radio and TV-broadcast companies. Another example comes from thinking about the design of default options. For instance, in the U.S. American retirement system most employees whose companies offer retirement contribution benefits (defined contributions) have to opt into the retirement contribution benefit plan. If they do, a portion of their bi-weekly or monthly income is placed into tax-advantaged stock, bond, real-estate, or other funds of their choosing, as is an additional amount provided by the employer. If a specific employee does not opt in, the paycheck is not reduced either. Neither does the employer contribute. As it turns out, under the *opt in* requirement a surprisingly large percentage of employees fail to do so. As a consequence, they forgo the steady accumulation of retirement savings, they forgo tax advantages, and they forgo contributions from their employers as well. If, however, the design is changed so that employees must *opt out*, most employees again fail to do so. Simple inertia or default options appear to explain people’s choice behavior: if they are not already in the retirement plan, they do not do anything to join; conversely, if they are in the plan, they do nothing to leave it.<sup>70</sup>

In a similar way, one challenge of peace economics is to understand both peace failures and peace successes from a design or structural perspective—what in the field of industrial organization is referred to as the *structure, behavior, performance* triplet (or rules, strategies, and outcomes)—and to invent new mechanisms by which to arrive at the desired outcome of stable peace within and between societies. Structure refers to the incentive system that produces choice behavior in such a way that the system as a whole moves toward the desired outcome. For the retirement example, a simple switch from opt-in to opt-out contract provisions changes choices (in this case through default behavior) and gets

the desired outcome of more people saving for their retirement years.

Put this way, it becomes clear just why people, firms, parties, or vested interests in general jostle either to massage the rules or to sidestep them altogether, and why influence-seeking, lobbying, bribery, and corruption (**rent-seeking**) are so widespread. There is a powerfully compelling logic in the chain which, read backward, says that epiphenomena or social outcomes are generated by aggregations of individual behaviors and that these, in turn, stem from the ground rules. To understand that which is or to design that which is to be (peace, for instance), one must turn to the crux of the matter and literally create or modify the rules under which choices are made. The difficulty lies not in understanding behavior per se—natural and legal persons respond to incentives—but in understanding which rules and which combination of rules lead to which behavioral responses by large numbers of interacting, self-interested parties and with which ultimate outcomes. The difficulty lies in complexity, especially of social systems where experimentation is difficult or impossible to carry out.

It may be argued that the history of humankind itself amounts to a set of giant natural experiments, that certain lessons have been learned from politically, culturally, and economically successful societies emerging from these natural experiments, and that these lessons amalgamate today into cries for democracy, the rule of law, and free markets economics.<sup>71</sup> Even so, these are outcomes, and the quality of these outcomes varies across societies. The question is what are the structural differences that, in one case, produce high quality, long-lasting, and stable peace and, in the other case, do not?<sup>72</sup> In a way, what we are searching for is a kind of market regulation, a setting-down of mutually agreed, enforceable rules by which society lives, a reconstruction of a social contract.

## 5.2 *The economics of designing peace*

From systems control theory, three requirements are known. There must be agreement on goals, there must be ways to measure goal compliance or deviation, and there must exist a correction mechanism, resulting in another triplet: goals, feedback, enforcement. It is also known that such a system can fail in various ways (e.g., there is no agreement on goals, or there are no timely measurements, or resources are insufficient to undertake corrective action). Further, it is known what types of institutions are necessary to prevent system failure (namely, those that foster goal agreement, those that provide measurement, etc.) The problem lies in how to construct these institutions in the first place so that they fulfill their intended function. In principle, private markets provide these institutions but it turns out that peacemaking and peacekeeping are subject to severe market failure so that one needs to think about the construction of collective institutions to deliver peace services. Evidently, these too can fail.

However, a number of rules of thumb-like design principles that should be followed in building such institutions are available.<sup>73</sup> If followed, they should explain the successful making and keeping of peace. Conversely, their violation or absence should explain the continuance or recurrence of war. The principles should be viewed as a mutually reinforcing package. Applying selected principles will diminish the prospects for peace.

**THE PRINCIPLE OF CHANGING PAYOFFS.** To induce people toward cooperate action, one must minimize incentives to defect and maximize incentives to cooperate. A number of wars have been unnecessarily prolonged because the incentives to defect from peace negotiations were large. For example, in Angola, UNITA's ability to mine and sell raw diamonds created cash flow. Similarly, the Angolan government's ability to extract and sell crude oil kept it well-financed. Both sides were flush with money and had no financial reason to settle. (This is in contrast to the Mozambican case where both sides settled when they *did* run out of money.<sup>74</sup>) One way to change the payoffs would have been to contribute (or deny) superior military intelligence and arms to one side, thus changing the balance of force. Assuming a benevolent intervener, this kind of third-party intervention would have changed the structure of the conflict so that side A would have been forced to offer negotiation. If side B then did not reciprocate in a fair-minded fashion, the intervener could have withdrawn to reimpose the cost of fighting on both parties.<sup>75</sup> (In practice the third-party will not always be neutral; see section 5.3.)

**THE PRINCIPLE OF CREATING VESTED INTERESTS AND LEADERSHIP.** If two players themselves are unable to change the relevant payoffs, an external force (a leader) may need to intervene. A **leader** is an external actor able to organize changes in the payoff structure and/or the rules of the game. But the intervention of a potential leader needs to be rewarded with its own positive payoffs, for why else should a leader intervene?<sup>76</sup> This can be illustrated with the case of Rwanda in 1994 where little was done until after several hundred thousands people had been killed. There was no sufficient vested interest to prevent the budding crisis—the war had been going on since 1990. A contrary example is that of Haiti in the early 1990s. When large numbers of refugee arrived on Florida's shores, the U.S. government was

prompted to intervene because it had a vested interest in keeping people out of the United States. Similarly, in the Balkan wars of the 1990s, the initial vested interest was to contain the slaughter within the Balkans. It was only when large numbers of refugees did spill into the richer, western European nations, and when there was a danger of the conflicts spreading throughout the neighborhood, that the EU—and ultimately NATO—intervened. Therefore, one way to foster peace is to deliberately engineer or trigger preventive rather than curative vested interests.

**THE PRINCIPLE OF GRADUATED RECIPROCITY AND CLARITY.** Research has shown that a strategy called **tit-for-tat** can be a highly successful and stable. It works as follows. Suppose there are two players, A and B. In the first interaction with B, A will cooperate. Thereafter, A will always do what B did in the prior round of play. If B cooperates, so will A in the next round. If B defects, so will A in the next round. For example, if party B to a conflict makes a concession, so will A. If party B fails to make a follow-on concession, neither will A. One advantage of this strategy is its unmistakable clarity and automaticity. This builds reputation effects and, consequently, credible commitments to cooperate, but also credible threats to defect. There is no second-guessing about what A will do conditional on what B has done. Moreover, the tit-for-tat strategy holds no grudge and forgives a past defection (non-cooperation) by B: party A readily resumes cooperation once party B cooperates again. Although tit-for-tat is a forgiving strategy, if B misunderstands or mistrusts A, there can be set in motion a series of rounds of mutual defection. Therefore, scholars recommend that A assume a graduated response strategy and show limited provocability. This means that if B defects, so will A but by something less than full defection. For example, if B fails to make a follow-on concession, A offers only a minor follow-on concession. But if B continues to defect, then A will gradually move toward full defection also. Thus B loses all the benefits to be had from cooperation.

**THE PRINCIPLE OF REPEATED, SMALL STEPS.** Breaking a problem into smaller parcels allows parties to interact with one another repeatedly. Instead of a single, big peace negotiation, one may have to have many little ones. This increases the frequency of meetings and lengthens the duration of the overall interaction. If any one small round can be driven to a cooperative outcome, both sides risk losing gains already obtained and risk forfeiting future gains to be had if they fail to continue to cooperate in subsequent rounds. The more the parties can be brought to see the ultimate goal by taking small steps instead of giant leaps, the more likely it is that they will succeed. Contrast the lack of progress in the all-or-nothing approach to the Israeli-Arab conflict with the formation and gradual expansion of what eventually became the European Union. An intervener would need to be able convince or compel conflicting parties to engage in small talks.

**THE PRINCIPLE OF COMMON VALUE-FORMATION.** In a 1978 book of essays, Thomas Schelling reports on a game he played with his children. Take a checker board, populate it with a random but thorough mix of black-colored and white-colored play pieces, and leave a few squares empty so that the pieces can be moved. Then stipulate a rule, for example that pieces like to be surrounded by some minimum percentage of same-colored pieces. That is, each piece has a preference for *some* neighborhood mixing, just not to the extent that the neighborhood becomes nearly homogenous with opposite-colored pieces. The percentage degree of unacceptable opposite-color homogeneity is determined by the rule. Then let the pieces move to meet this condition. For each of a number of varying homogeneity-degrees, Schelling found that after a series of moves to meet the rule, distinctly black and white neighborhoods develop. What appears to be *forced segregation* may be the outcome of *voluntary aggregation*. Like and like attract each other but then also opposes the two resulting groups.

If one can change the pieces' preferences, say so that each piece thinks of itself as gray-colored, then *any* degree of mixing is perfectly acceptable and any moves that do take place do so for reasons other than color (or identity). The lesson is that one needs to find and foster that which binds conflicting parties rather than that which divides them.<sup>77</sup> Formation of common preferences produce voluntary aggregations of like-minded actors who thus are more likely to cooperate for mutual benefit. This applies to individuals, groups, and states, and can account for the proclamations of former enemies who during negotiations learn that they share values such as leadership, political savvy, and care for their respective citizens, and end up with personal respect for each other. This principle also explains why culturally similar nations tend to cooperate well, disagreements notwithstanding. Similarities in political and economic systems, religious beliefs, language, and cultural heritage do not guarantee but tend to forge reliable bonds across nation-states to form clusters of cooperative behavior. Large group size (large numbers of conflicting parties) by itself will not necessarily make collective action on common value-formation impossible; neither will small group size always promote it. Examples of attempts at common value-formation are, in Europe, the Organization for Security and Cooperation in Europe (OSCE) and, in Asia, ASEAN.

**THE PRINCIPLE OF AUTHENTIC AUTHORITY.** Those affected by **collective action**—negotiating a peace agreement involves multiple people, and is therefore a collective rather private action—must have a voice in shaping the decision.



This raises issues of authentic representation that vests authority in peace negotiators—and this form of representation may or may not be western-style democracy—and includes items such as people’s right to organize and assemble, to address and solve their own problems, and to search for and find indigenous solutions to what may be unique problems.<sup>78</sup> In the absence of voice (authentic representation), peace may not be stable. Disaffected groups may continue to fight if they believe that their concerns have not been heard, let alone addressed. To prevent disaffection and violent conflict, majorities may need to grant minimum rights to others such as freedom to exercise one’s religion. Because of its focus on representation, this principle allows for continuous self-transformation of institutions as old problems dissipate and new problems arise that the affected communities need to address. All voices need to be heard, and satisfactory solutions can be surprisingly varied.<sup>79</sup>

**THE PRINCIPLE OF SUBSIDIARITY.** Global institutions can be inimical to achieving desired outcomes.<sup>80</sup> The principle of subsidiarity addresses this point. Subsidiarity means that problems be addressed at the minimum level necessary, and that higher-level, external involvement not be the automatic first-response to a lower-level problem. Kick solutions “up,” not “down.” Many conflicts are best resolved at the local level without involving an outside intervener. In case of internal dissension, one would expect that the nation-state would have a vested interest in its own continued coherence and viability as the nation-state. For example, in the case of the conflagration that followed the introduction of Islamic law in some Nigerian provinces one can argue that Nigeria as a nation-state has the obligation to intervene in the provinces before the conflict grows out of hand and leads to civil war. Only if and as a conflict in one province affects a community beyond that province, should the next-larger level of the overall community become involved.

**THE PRINCIPLE OF CONFLICT RESOLUTION MECHANISMS.** Peacemaking and peacekeeping rest on agreements, but disagreements over the agreements frequently arise and can lead to war-resumption. To keep disagreements from escalating, the parties must have recourse to conflict resolution mechanisms such as mediation, arbitration, and a system of courts. The absence of such mechanisms leads to weak peacekeeping and increases the likelihood of failure. Any peace treaty would need to provide for speedy, low-cost access to dispute resolution venues. External interveners can help to provide such mechanisms. One example is given by the legally binding treaty documents that make up the World Trade Organization (see chapter 4). Explicit mention is made of its dispute-resolution mechanism as providing a forum to air and settle differences when otherwise they might have resulted in recourse to harmful measures. The continuing exclusion of Turkey from the EU and its institutions serve as a counter-example. Tensions between Greece and Turkey thus have one less avenue of redress, moreover one that could be handled with the principles of common-value formation if Turkey were to be an EU member.

**THE PRINCIPLE OF INFORMATION AND MONITORING.** Information reduces uncertainty, can help create shared values; it leads to better forecasts of expected benefits and costs and therefore of behavioral choices. By the same token, misinformation can create uncertainty, false certainty, division of values, and worse forecasts. Indeed, players may have a vested interest in creating misinformation. The news industry can be of assistance to peacemaking and peacekeeping, and maintenance of a diverse, free press is of great importance. **Monitoring** refers to the ability to collect, process, and verify information. It is the ability to effectively monitor the actions of the other player. This requires funds and skills. For example, on occasion, advanced, industrialized countries have shared results of their satellite monitoring with other states. Such government monitoring is excludable. In contrast, commercial satellite networks could monitor and publicize troop and equipment movements. It is in the commercial companies’ own interest to create a pricing structure that is *inclusive*, so that relevant information can easily be bought and sold. This would encourage negotiation, given that wars are more difficult to win when information about the sides’ strengths and movements is readily available. The objection that this would help entrench repressive governments or help guerilla movements overthrow legitimate governments does not hold when this principle is combined with other principles such as those of creating vested interests, authentic authority, and accountability.

**THE PRINCIPLE OF ACCOUNTABILITY.** Information has the advantage of naming individuals responsible for war actions and war crimes. Today, it is virtually impossible for leaders to remain anonymous in making war. With that comes accountability before world opinion. But mere knowledge of who did what is not sufficient. Accountability implies enforcement. A permanent International Criminal Court is better than the uncertainty involved in whether or not the U.N. might create a special tribunal as violent conflicts erupt. A court involves the principles of information, reciprocity, and clarity: any future war-maker knows ahead of time that he can be called to account for his actions.

Accountability has another aspect to it, one that links it to the authentic authority principle. One way to frustrate peace negotiations and to prolong violence or war is to send junior officials (or to frequently change the negotiators) who are not authorized to make credible, binding commitments. There must be insistence on continuity in representation

precisely so that a small set of persons can be held accountable even for their actions in negotiations.

**THE PRINCIPLE OF SELF-POLICING ENFORCEMENT.** There are two types of enforcement, **external policing** and **self-policing**. External policing suffers from various problems. For example, U.N. peacekeeping forces are financed on a mission-by-mission basis and are often too late and too feeble to effectively intervene in conflicts as one U.N. member waits on another member to commit troops or funds to the mission at hand. For these reasons, a self-policing enforcement is preferable. Self-policing is linked to the monitoring and reciprocity principles. If monitoring shows that player B defects, a self-policing agreement may induce player A to also defect and thereby withhold future gains from B. In this regard, it is generally more efficient and effective to supply parties with the ability to monitor each other than to rely on external monitoring. Exceptions occur when economies of scale (the nesting principle) make it worthwhile to outsource at least part of the monitoring function.

**THE PRINCIPLE OF NESTING.** Economies of scale, of learning, and of scope may favor the nesting of institutions which foster coordination and complementarities. The current U.N. system serves as an example of economies of scope as a large variety of specialized functions are (generally loosely) organized under the auspices of a joint umbrella organization. Peace negotiations are unlikely to show economies of scale—each case is different—but peacekeeping likely would (common equipment, basing, lift capacity, emergency supply depots, etc., all are fixed costs). This suggests the development of a standing global peacekeeping force utilizing, for example, private military companies that already protect humanitarian aid workers. This might be combined with an automaticity principle that requires automatic action—which may be an external intervention—when pre-specified trigger points are reached. For example, the constitution of the African Union (AU) mandates that a non-democratic replacement of government of any of its member states results in automatic membership suspension, and this mandate has in fact been applied.<sup>81</sup>

\* \* \* \* \*

Rather than guaranteeing peace success, this list of twelve design principles helps prevent peace failure. No order of priority has been proposed or found yet; indeed, the order of priority may be case specific. Several of the principles apply to macroeconomics in conflict-affected states. For example, a fiscal policy that rewards constructive participation in societal rebuilding rather than withholds benefits changes the payoffs for society's members and also links to the common value-formation principle; long-term rather than short-term aid creates external vested interests in successful peace outcomes; separating functions of policy setting, fiscal disbursement, and service delivery goes with the principle of subsidiarity (devolution of decisionmaking to the local level) and that of self-policing enforcement (through service customers' ability to complain to the disbursement agency which can then select an alternative supplier). It is important for peace negotiators and aides to recognize that not only is the mere presence of references to (macro)economics in peace treaties important but that these references themselves obey a higher-order set of principles based on economics. As the UNDP (2008) study points out, some states experience relatively strong economic growth after the end of war, but others do not. Much of the difference has to do with the quality of the decisionmaking and decision-implementing institutions and much of this, in turn, has to do with whether the design of these institutions coheres with the higher-order principles outlined here.

### *5.3 Third-party intervention*<sup>82</sup>

Third-party intervention (e.g., via diplomatic, military, or foreign aid channels) is no straightforward thing. The ongoing wars in Afghanistan and Iraq (since 2001 and 2003, respectively) show that intervention, even if well-intentioned, can make life worse for conflict-affected populations. Diplomatic involvement in the peace process can be vital. In some cases military support is necessary just to bring the parties to the negotiating table and keep them there. In Sierra Leone, the involvement of British armed forces was important in forcing rebel leaders to negotiate. As discussed, aid can also be important, as may aid conditionality.<sup>83</sup>

Third parties are never just benevolent, however. They have interests and will bring these interest to bear: Cuba intervened in Angola; the United States in Vietnam. They may be more supportive of one side than the other, may push their own agenda in the negotiations, and may tie aid to their own interests. Forced negotiation can legitimize the ruling positions of those who may have started armed conflict in the first place and marginalize civil society.<sup>84</sup> The quantitative academic literature on third-party intervention—theoretical and empirical—is only now beginning to flourish. A useful distinction is that between **unilateral third-party intervention** and **multilateral third-party intervention**.

A key insight here is that multilateral intervention requires solving its *own* collective action problem. The likelihood is that only minimum levels of intervention will be agreed, perhaps too weak to assist the parties (and populations) in conflict. In contrast, unilateral intervention does not require collective decisionmaking.<sup>85</sup> What, then, are its determinants? One author suggests eight relevant factors. First, there must be *information* that something is amiss, and there are two aspects to this: ignorance and apathy. Without information (ignorance) about a neighbor in conflict, non-conflict neighbors cannot do anything at all, and any humanitarian instinct that might exist cannot be activated. But even with information, nothing might be done on account of incapacity (or apathy). Second, bothersome (i.e., costly) *noise* that spills over to non-conflict neighbors is a form of information. For example, refugees moving from one state to another impose costs on the recipient state (Afghans in Pakistan, for instance). The more noise, the more one might expect neighbors to be willing to intervene in some fashion to help stop the refugee flow (as Pakistan does, at least in the Afghan-Pakistani border regions). Third, one would expect that the less the *distance*, the more informed and caring the neighbors are. Conversely, the more distant, the less informed or caring they are. Fourth, distance is mediated when *relations* exist. Colonial ties or immigrant groups whose national origin lies in conflict countries will make the former colonial power or the immigrant-host country more receptive to aid the conflict country (e.g., France regularly intervenes in its now sovereign former West and Central African colonies). Fifth, the more the *din* from several neighbors, the more one is distracted from any one of them and the less one is inclined or able to come to the assistance of any one of them. Sixth, what would motivate one to come to a neighbor's aid also depends on the *noise at home*. The more in number or intensity are the domestic problems, the less one is willing or able to come to one's neighbor's rescue. Seventh, there is economic and strategic *self-interest* such as the protection of trade routes or of obtaining international stature (e.g., being seen as engaging in peacekeeping actions). And eighth, for a small number of countries, a motivation for intervention appears to be the *opportunity* for military (peacekeeping) training in real-time conditions.

Note that items like humanitarian good will are not among the determining factors; neither is cost. Peacekeeping tends to be done for rather more hard-edged reasons. Take Canada as an example. It first burst onto the peacekeeping scene in 1956, but it was to help the splintering NATO alliance that had been undermined when Washington told Paris and London to get out of the Suez region. Likewise, in 1960, when Belgium threatened to pull out of NATO over the unrest in Congo, Canada sent peacekeepers to that troubled African nation. The peacekeeping in Cyprus, to which Canada contributed, was related to keeping NATO members Greece and Turkey at bay.<sup>86</sup> As to the cost of peacekeeping, despite protestations to the contrary, it is trivial—at least in relation to the cost of maintaining standing, national armies.

If nothing else, this list can serve as a rapid assessment checklist to evaluate the likelihood of whether third-party state/s will or will not intervene to help create and guarantee the stability of peace, and to gauge the sincerity, and therefore desirability, of accepting or not accepting offers of help.

#### 5.4 Institutions and policies

In section 2.4, we suggested that any community consists of three societies; that commercial, civil, and political society (or economics, culture, and politics) form a three-legged stool. Commercial society allocates resources via markets; civil society allocates resources via moral suasion; and political society allocates resources via power. The 3-legged stool, we wrote, should be well-balanced. This applies to peacemaking and peacekeeping as well. The peacekeeping-related apparatus of political society includes institutions such as the United Nations (U.N.), the Organization for Security and Cooperation in Europe (OSCE), NATO, ASEAN, and ECOWAS and SADC (in western and south-central Africa) and other institutions hiding behind other acronyms as well. The European and African Unions—respectively, the EU and the AU—likewise are animals of political society: there are agreements among equal sovereigns to constrain each other from doing overmuch harm.

Policies of these supranational institutions are constrained by the charters or founding articles members agree to. The primary purpose of the United Nations as an international body is to prevent war from breaking out *between* states. Even so, the United Nations in particular is constrained by the veto powers of the five permanent members of its Security Council. As for *internal* armed conflict, U.N. action is mostly post-violence as there are no standing peacekeeping forces and each mission is debated on a case-by-case basis and, if approved, time-limited in nature. Forces and funds for each mission need to be separately found. Headquartered in Vienna, the OSCE ([www.osce.org](http://www.osce.org)) is a regional security organization under Article VIII of the U.N. Charter, with 56 member states (as of December 2009). It works on early warning, conflict prevention, crisis management, and postconflict rehabilitation. It is organized at the heads of state level, convened for occasional summits, but hosts an annual meeting of foreign ministers. It comprises over 3,000 staff

members and has 19 field offices, mostly in Southeast and Central Europe and Central Asia. A weekly Forum for Security Cooperation is held, a talking shop for issues pertaining to arms control and confidence- and security-building measures.

SADC is the Southern African Development Community ([www.sadc.int](http://www.sadc.int)) and has 15 members, as does ECOWAS, the Economic Community of West African States ([www.ecowas.int](http://www.ecowas.int)). Ostensibly economic development organizations organized at the political level—in contrast say to the African Development Bank which is a regional development finance body—SADC and ECOWAS both have peace and security-related functions and organs. For instance, SADC, whose origins go back to 1980 and is headquartered in Gaborone, Botswana, has an Organ on Politics, Defence and Security that comprises Political and Diplomatic Affairs; Defence; Security; and a Regional Peacekeeping Training Center. ECOWAS, with roots going back to 1975, has a peace and security function as well, and is institutionally run through a Commission, a Community Parliament, a Court of Justice, and an investment and development bank.

In Asia, ASEAN is the primary regional body of interest ([www.aseansec.org](http://www.aseansec.org)). Headquartered in Jakarta, Indonesia, it now has ten members and sees itself as a political security, economic, and cultural development organization. Formed by five members in 1967 in Bangkok, Thailand, it has recently been reorganized and is based on a new Charter, entered into force on 15 December 2008. The new charter provides for the first time legal status and an institutional framework for ASEAN and its work. A related organization is the ASEAN Regional Forum ([www.aseanregionalforum.org](http://www.aseanregionalforum.org)) which includes regional, non-ASEAN states. Its two-fold purpose is “to foster constructive dialogue and consultation on political and security issues of common interest and concern; and to make significant contributions to efforts towards confidence-building and preventive diplomacy in the Asia-Pacific region” (quoted from the web site).

Note that all these organizations recognize that economics, politics (peace and security), and culture are related and linked. But as inter-state organizations they usually do not and cannot do much about civil strife *within* member states. This limitation does not apply to civil society organizations such as the International Committee of the Red Cross (ICRC) and numerous other nongovernmental organizations such as International Alert, International Business Leaders Forum, Global Witness, or Amnesty International or even to individual negotiators such as Martti Ahtisaari (Nobel Peace Prize laureate, 2008). Nonetheless, the ICRC for instance has struggled to shift its orientation from the “old” to the “new” wars and threats (Kaldor, 2006). Founded by a businessman in the 1850s, it was astonishingly successful to convene states to agree what became the Geneva Conventions. These laid down rules to guide behavior in inter-state war, for example, rules regarding the treatment of the wounded and of prisoners of war. But as security threats and wars shifted toward civil war, terrorism, nacro- and human trafficking, the Geneva Conventions do not apply. Into the breach sprang groups such as Médecins Sans Frontières, or MSF (Nobel Peace Prize recipient, 1999). While their humanitarian emergency assistance functions are far removed from economics, it is in part the economics that makes their existence necessary. Global Witness has played an important whistle-blower function when, in the 1990s, it single-handedly created the topic of conflict diamonds. By sullyng producers’, distributors’, and retailers’ carefully cultivated image of diamonds and romantic bliss with a counter-image of having “blood on your hands (or finger),” it put pressure on the entire supply chain such that all parties involved—companies, states, and NGOs—eventually agreed to the Kimberley Process Certification Scheme (KPSC), a voluntary organization that certifies the supposedly conflict-free origin of diamonds consumers can purchase.

In terms of the principles of success and failure outlined in section 5.2, the existence of Global Witness points to the principles of information, monitoring, and accountability and, in lesser degree, to that of self-policing enforcement.<sup>87</sup> In contrast, MSF’s work does not appear to related to any of the principles. Its existence—important as it is on its own terms—does not drive conflicting parties toward peace, nor does it increase the chances for peace being stable once reached. The ICRC started out, in a way, as an agency that helped states foster common values (on how to fight) and functions mainly in terms of the information, monitoring, and accountability principles although, like Global Witness, it is a form of media-driven accountability in the court of world opinion, that is, a moral accountability rather than one with consequential bite for war-criminals. At present, only sovereign states can provide that, for example, through the U.N.’s International Criminal Court in The Hague. The political society organizations also are the ones that far more often are able to address the principles of changing payoffs, of creating vested interests and leadership, of graduated reciprocity and clarity, of fostering and engaging in repeated, small steps, and so on. But they often do so only after civil society organizations have put an issue or misdeed on the table in the first place. It bears repeating that there is no necessary order of priority or magnitude of importance between and among these principles. They form a package. All are important; the more of these principles are explicitly recognized in the negotiation and design of peace agreements, the higher the likely probability of stable peace—and vice versa.

As for commercial society, the stakes and incentives are very different. Businesses like revenue and dislike cost.

Unfortunately for them, the cost of complying with rules and regulations across some 200 political entities, and tens of thousands of political entities at subnational and supranational levels is very costly. So is the cost of war, civil war, and crime as suppliers, employees, customers, and markets suffer. Whereas in the past, business and war were associated with terms such as merchants of death, increasingly global companies recognize that their self-interest lies in fostering peace, not war. For example, PepsiCo's CEO Indra Nooyi has been outspoken in this regard: the absence of peace is not a useful business proposition. No markets, no money.

As business and economic globalization continues to be driven by reductions in transport and communications costs, it is likely that business leaders will take an increasing interest in peace and security, if only to protect and grow markets. Thus, peace negotiators should not overlook the constructive role that consultation with business leaders whose businesses operate or might operate in postwar zones. In this regard, it is of interest that the International Organization for Standardization ([www.iso.org](http://www.iso.org))—whose motto is “International Standards for Business, Government and Society”—is increasingly involved in standard-setting outside of the narrow technical product specification arena in which it started (e.g., ISO film speed standards). For example, ISO9000 sets quality management standards, ISO14000 sets environmental management standards, and security standards in regard to biometrics, cyber security, and societal security in cases of industrial accidents, and similar security issues pertaining to company operations are in active discussion. It is not inconceivable that, some years into the future, a family of standards may emerge on company behavior in regard to human rights, complicity issues, relations to security forces, and the like that, for now, are restricted to the political and civil society legs of the 3-legged stool. One remarkable thing about ISO is that it is a commercial society organization. It consists of standards-setting national institutes but these, in turn, in many states are private-sector organizations. Standardization lowers costs, improves product and service quality, and thereby attracts customers that provide revenue. As local, national, and global companies are hurt by violence, ISO may well develop an ISO Security Standard—say, ISO50000—that specifies how companies engage in and deal with public policy issues such as peace and (in)security. In terms of our principles, that of creating vested (commercial) interests beyond the nation-state toward a boundary-free world would apply, as would that of common value-formation (among global business leaders who are becoming ever more divorced from the quaintness of nationality and national identity), and that of creating conflict resolution mechanisms. The International Chamber of Commerce—not a Chamber of Chambers, but an organization of global corporations—for instance sports its own conflict mediation, arbitration, and court system whose rulings are accepted as binding by many nation-state judicial systems. Thus, the global commercial sector sometimes can and does transcend state boundaries as if it, itself, were a sovereign, rule-setting and rule-enforcing player.

We conclude by quoting the leaders of three world standards organizations—the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO), and the International Telecommunication Union (ITU)—on the occasion of the year 2000 World Standards Day:

“Without agreement, there can be no peace. And without peace, there can be no lasting prosperity. International Standards are an essential tool in mankind's continuing efforts to achieve more of both.”<sup>88</sup>

That the commercial sector has largely been left out of considerations in peace negotiations is a mistake. Fortunately, it is one that can easily be rectified.

### *5.5 Policy lessons and tips*

- Lesson 5.1: We do not have principles of peace that guarantee success. But we have some general principles that, if not followed, might spell failure. They are: the principle of changing payoffs; the principle of creating vested interests and leadership; the principle of graduated reciprocity and clarity; the principle of engaging in repeated small steps; the principle of value-formation; the principle of authentic authority; the principle of subsidiarity; the principle of conflict resolution mechanisms; the principle of information and monitoring; the principle of accountability; the principle of self-policing enforcement; and the principle of nesting.
- Lesson 5.2: Likely factors determining unilateral third-party intervention include information, noise, distance, relations, din, noise at home, self-interest, and opportunity. This can serve as a rapid assessment list to gauge the sincerity, and desirability, of accepting or not accepting offers of help.
- Lesson 5.3: Political, civil, and commercial society all need to be engaged in peacemaking and peacekeeping. To

restrict peace treaty negotiations to political players alone without consultation with civil and commercial is short-sighted and addresses only the short-term immediacy of silencing guns rather than the long-term necessity of rebuilding social foundations for civic and commercial (re)engagement.

### 5.6 Failure and success: two case studies

#### Failure: Nepal



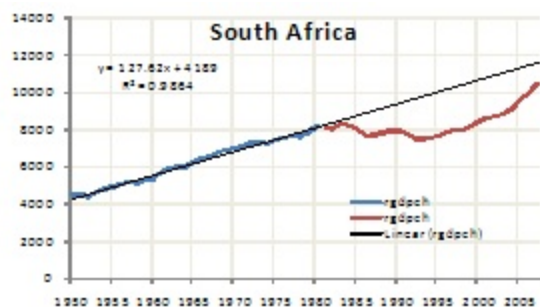
**Figure 5.1:** Population-, inflation-, and purchasing power-adjusted GDP, Nepal, 1960-2007 (base year = 2005).

Source: Raw data from Penn World Table, v6.3.

A stalemate had developed between the Maoist forces and government troops. Also, the king’s moves inspired broad opposition. Parliamentary leaders fled to India, formed a seven-party alliance (SPA), and signed a 12-point understanding with the Maoist party whereby all agreed to unseat the king and form a democracy with contested elections in which all could compete for votes. Reinstated in 2006, parliament voted to abolish the monarchy. This obtained in May 2008, after an election the prior month resulted in the Maoists obtained the largest number of seats in a Constituent Assembly. Under Maoist leadership, the assembly voted to end monarchy and declare the country a federal republic. The Maoists formed the new government. This new government, however, was toppled in May 2009 and a Marxist-Leninist party took power. It is evident that the initial political transition and peace negotiations were insufficiently inclusive and left various interests disaffected enough to restart violence.

Economically, the country’s real per capita growth rate in production was a mere 0.3 percent between 1960 and 1980. Thereafter, Figure 5.1 shows a marked change in the slope but still amounts to an annual average of only 1.9 percent, with a decline to only 1.1 percent starting in 2001. The economy is propped up in large part by hundreds of thousands of Nepalis working abroad and remitting funds back home and also by Nepal’s foreign-exchange earnings for U.N. peacekeeping services.

Nepal has a convoluted post-World War II history, entangled in part with China’s incorporation of Tibet and India’s consequent reaction to counteract this by seeking influence in and through Nepal. King Mahendra (r. 1955-1972) abandoned an incipient experiment with multiparty democracy in 1959. The data series in Figure 5.1 starts in 1960. King Bihendra (r. 1972-2001) was compelled in 1989 to agree to constitutional changes that led to the seating of a multiparty parliament in 1991. In 1996, a Maoist insurgency movement began a ten-year period of armed violence, attempting to replace the royal parliamentary system with a socialist republic. Following the murder of Bihendra, apparently stemming from an intra-family squabble, King Gyanendra inherited the throne (r. 2001-2006). In 2005, he dismissed government and parliament, took executive power, and declared rule under martial law. But by this time, a



**Figure 5.2:** Population-, inflation-, and purchasing power-adjusted GDP, South Africa, 1950-2007 (base year = 2005).

Source: Raw data from Penn World Table, v6.3.

#### Success: South Africa

South Africa’s regime of racial segregation and discrimination collapsed with the end of the Cold War. By April 1994, a wholesale political change—mostly peaceful—had taken place in the country. The African National Congress (ANC) won the elections that year and Nelson Mandela became the country’s President.

As may be seen in Figure 5.2, from 1950 to 1980, South Africa experienced steady economic growth along a linear trend line. Undoubtedly, the trend line would have had a steeper slope if the country’s nonwhite population had not been suppressed and excluded from accumulating human capital and contribute productively to the economy. Following the Soweto uprising and 1976 and the murder of Steve Biko, an anti-apartheid

activist, in 1977, black South African labor unions became more active and restive, and the international political community sharpened economic sanctions on South Africa. By 1980, GDP growth stalled. For the remainder of the apartheid years, inflation-adjusted per capita GDP saw no advancement at all.

The domestic business community played an important, and ill-recognized and under-reported, role in the political transition. According to International Alert, a global nongovernmental organization, already in 1985 a delegation of business and media representatives met with ANC leaders in Zambia. This meeting, and follow-ups, had a dual effect. White business acknowledged the ANC's political legitimacy long, long before white politics did, and it also introduced the ANC—which had embraced a “socialist” economy ideology—to “capitalist,” free-market economics. A bargain was struck which both parties adhered to: business pushed for political change, and in time the ANC reciprocated with pursuing economic policies that, while aimed at improving the lot of the poor, nonetheless recognized that private business interests can generate employment, income, and tax revenue. Figure 5.2 shows that following the 1994 transition, the country is moving back toward the growth trend line it left in 1994.

## Notes

\* Jurgen Brauer is Professor of Economics at the James M. Hull School of Business, Augusta State University, Augusta, GA, USA. This manual was researched and written while he held visiting professorships at the economics departments of Chulalongkorn University, Bangkok, Thailand, and at the Universidad del Rosario, Bogotá, Colombia. J. Paul Dunne is Professor of Economics at the Bristol Business School, University of the West of England, Bristol, UK. His contribution to this manual was made, in part, during visiting professorships at the economics department of Chulalongkorn University, Bangkok, Thailand, the Faculty of Business Administration, Economics, and Political Science at the British University in Egypt, Cairo, and the economics department, University of Cape Town, South Africa. The United States Institute of Peace (USIP) is a congressionally chartered organization located in Washington, D.C. The views expressed here do not necessarily reflect those of USIP or of its staff. The research was facilitated by Economists for Peace and Security ([www.epsusa.org](http://www.epsusa.org)).

1. See [http://www.usip.org/files/file/resources/collections/peace\\_agreements/mozambique\\_1991-92.pdf](http://www.usip.org/files/file/resources/collections/peace_agreements/mozambique_1991-92.pdf) [accessed 20 July 2009]. A 2006 “World Bank/UNDP-commissioned survey found that provisions related to macroeconomic policies, financial, business, investment and labour-regulatory frameworks and regional wealth allocation increased significantly between the periods 1990-1998 and 1999-2006, as have references to social welfare, education, health, and employment policy” (UNDP, 2008, p. 8).

2. Stiglitz, Sen, and Fitoussi (2009).

3. On different classifications of violence, see Appendix A.

4. The war periods are: Cambodia, 1970-1991; El Salvador, 1979-1991; Guatemala, 1965-1995; Nicaragua, 1978-1990; Mozambique, 1976-1992; Rwanda, 1990-1994; Uganda, 1979-1991.

5. Stohl, Schroeder, Smith (2007, p. 56).

6. For a review of selected literature and scientific issues and criteria to be used in computing the cost of violence, see Bozzoli, Brück, and Sottas (forthcoming) and DIW (2008).

7. IMF (2009, p. 4).

8. See, e.g., Polacheck (2007) and literature cited there.

9. This needs to be qualified somewhat. Parents, for instance, might expect to be supported in their old age by their children so that an intergenerational “trade” might be said to take place over time. And, at least in the past and present and probably so in the future, states rendering assistance might expect some reciprocal “trade” from recipient states for example in the form of certain voting behaviors in international organizations. Political pronouncements notwithstanding, third-party state aid should not be presumed to be made selflessly. Instead, it is safer to assume that third parties have their own interests at stake.

10. Self-love: “It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. Nobody but a beggar chuses to depend chiefly upon the benevolence of his fellow-citizens” [Smith (1776), book I, chapter 2, paragraph I.2.2]. In contrast, Kenneth Boulding (1973) writes about the economics of love and fear. He speaks of three systems: the exchange system, the threat system, and the integrative system. Reactions to threats can take the forms of submission, defiance, counter-threats, fight, or integration of the threatener with the threatened as when, for example, commonalities between them are established that supersede the threat. To him, grants are one-way transfers whether made out of love or out of fear. In contrast, we view grants as one-way “positive” transfers and appropriation as one-way “negative” transfers.



11. The figures are taken from Anderson and Carter (2009, p. 22). The tradeoff can also be drawn for instance as that between (tangible) goods on one axis and (intangible) services on the other. Given limited resources of time, capital, and labor, the more one produces of one type, the more one must give up the opportunity to produce the other type. Just how one groups all goods and services into two classes—to be represented by the vertical and horizontal axes, respectively—depends on the purpose of the analysis. In our case, we are interested in singling out military or violence goods and services from nonmilitary (civilian, or nonviolence) goods and services.

12. Boulding (1945, p. v).

13. To say that war is “good” for an economy is like saying that cigarette addiction is “good” for the addicted person. Smoking may make one momentarily feel good, but over time it destroys the underlying asset, the smoker. By analogy, people in the United States in World War II sacrificed leisure for work and production of consumption items was sacrificed for production of war items. That this activity led to higher levels of gross domestic product is not equivalent to saying that this improved livelihoods and the average standard of living or quality of life.

14. Boulding (1945, p. 4).

15. E.F. Schumacher in his classic 1973 book *Small is Beautiful* speaks of sufficiency or Buddhist economics, the notion that life-satisfaction may well be had from pleasures requiring immaterial inputs rather than material consumption. (Also see Stiglitz, Sen, and Fitoussi, 2009.) In a similar vein, Kenneth Boulding (1981) is a forerunner of ecological economics which views Earth as a closed physical system in which material production absorbs limited natural resources (input) and converts them into waste streams (output). In this view, the part of GDP that measures the monetary value of material production and consumption is nothing more than throughput. To continuously increase material throughput requires a continuous increase in material inputs and consequently a continuous increase in material waste streams, something that in a closed system is a physical impossibility. It follows that economic growth as measured by increases in GDP must be made consistent with raw material use and disposal so that the integrity of the physical system of Earth as a whole can be maintained. In a word, economic growth must be conflict-sensitive in terms of human systems but also resource-sensitive in terms of ecological systems.

16. On macroeconomics and human rights, see, e.g., Balakrishnan, Elson, Patel (2009).

17. UN A/Res/55/2 of 18 September 2000. Or see <http://www.un.org/millennium/declaration/ares552e.pdf> [accessed 1 January 2010].

18. “Making Societies more Resilient to Violence: A Conceptual Framework for the Conflict, Crime and Violence Agenda.” Undated. World Bank, Social Development Department, Conflict, Crime & Violence. Washington, DC: World Bank. [http://siteresources.worldbank.org/EXTCPR/Resources/CCV\\_Framework\\_Note.pdf](http://siteresources.worldbank.org/EXTCPR/Resources/CCV_Framework_Note.pdf) [accessed 1 January 2010].

19. Schumpeter (1942).

20. An important paper by Cerra and Saxena (2007), however, shows that developing economies do converge on developed economies so long as they can avoid “wars, [financial] crises, and other negative shocks ... [that] lead to absolute divergence and lower long-run growth ... The output costs of political and financial crises are permanent on average, and long-term growth is negatively linked to volatility” (quoted from the abstract). Nonetheless, even if the failure of convergence can be linked to repetitive, severe crises, it still would be useful to identify the endogenous drivers of positive economic growth.

21. On the mismeasure of GDP and the measurement of well-being, see for example, Stiglitz, Sen, and Fitoussi (2009).

22. Imagine a society consisting of four people, a farmer, a thief, a policeman, and a soldier. In this economy, the farmer feeds all four people. If the thief converted and became a farmer as well, the policeman’s services would become unnecessary and he (or she), too, could start farming. And if there were no longer any need for external security, the

soldier also could farm. GDP might remain the same—because the expenditure and income streams still involve but four people—but clearly everyone would eat better.

23. To see that this is correct, multiply USD9,091 times EUR1.1 per U.S. dollar. The (rounded) result is USD10,000.

24. UNODC (2007, pp. 83-84); UNDP (2008, pp. 77-78).

25. To reverse the cumulative losses, country 2 would have to continue to grow each year 40 percent faster than country 1 until the year 2034, nearly 50 years after its five-year war period began.

26. See Brauer and Haywood (2009). An overlap might occur for instance in commercial diplomacy, i.e., joint trade missions by diplomats and business people.

27. Regional non-U.N. bodies related to economic policy include, e.g., the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IADB), the Asian Development Bank (ADB), and the African Development Bank (AfDB).

28. For the 22 OECD-DAC members (Development Assistance Committee members of the Organization for Economic Cooperation and Development). See <http://www.oecd.org/dataoecd/21/10/40108245.pdf> [accessed 9 October 2009].

29. UNDP (2008, p. 86).

30. See <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=5037&lang=1> [accessed 9 October 2009].

31. For details, see section 4.2.

32. See [www.imf.org](http://www.imf.org) and [www.worldbank.org](http://www.worldbank.org), respectively [accessed 21 August 2009].

33. For example, the many hundreds of billions of dollars spent by governments to rein in the world economic crisis of 2009 amount to tax obligations for future taxpayers. Early recognition, intervention, and prevention would have been cheaper for the taxpayers and for the affected populations.

34. No agreement exists in the economics literature on what is or is not a “sustainable” debt burden. In principle—if not in practice—if 99 percent of a government’s budget go to finance interest payments on debt that is fine so long as the remaining 1 percent fully suffices to serve society’s other public sector needs.

35. The main international financial institutions, the OECD, the G20, and bi-lateral donors all have either programmatic or one-time debt-relief facilities. Many global institutions have special borrowing facilities for postwar states.

36. Alternatively, government can raise tax rates or cut spending to throttle the economy when it is growing too fast but a fast-growing economy, so long as output price inflation is kept in check, can hardly be viewed as a problem.

37. World Bank (1998, p. 3).

38. See <http://siteresources.worldbank.org/INTPEAM/Resources/pem98.pdf> [accessed 25 August 2009]. The World Bank has many useful public finance management handbooks and manuals available online.

39. “Democratic Republic of the Congo: Lessons from the Ashes of Conflict.” *IMF Survey* [7 March 2005], 34(4), pp. 60-62; quote from p. 61.

40. Demekas, McHugh, and Kosma (2002, p. 1). The “Dutch disease” refers to the influx of large amounts of foreign aid that can lead to the appreciation of the local currency and make the aid recipient country’s exports uncompetitively expensive on foreign markets (see chapter 4).

41. “Democratic Republic of the Congo: Lessons from the Ashes of Conflict.” *IMF Survey* [7 March 2005], 34(4), pp. 60-62; quote from pp. 61-62.

42. See, e.g., Murdoch and Sandler (2002); Saleyhan and Gleditsch (2006); and literature cited there.

43. Statistically speaking, an upward-bending polynomial projection fits the data better, so that the text understates the case for aid for Costa Rica.

44. In the equation, the symbol “ $\equiv$ ” means “identically equal,” that is, something that must be true by definition.

45. There is one other option:  $(4) M^* \equiv (P \times Q) / V^*$  | Example:  $5^* \equiv (1 \times 10^*) / 2$  | Change:  $5^* \equiv (2 \times 5^*) / 2$ . Here, money and velocity are assumed unchanged ( $M^*$ ;  $V^*$ ) so that a doubling in prices must come at the expense of a halving of production (or vice versa).

46. IMF (2009a).

47. Del Castillo (2008, p. 281); UNDP (2008, p. xxiii).

48. See <http://www.imf.org/external/np/exr/facts/prgf.htm>, an IMF July 2009 factsheet [accessed 23 August 2009].

49. For the case of a dollarized economy like El Salvador, the U.S. dollars can likewise flow into the United States. We abstract from that possibility here.

50. WTO (2007, pp. 2-3).

51. The UNDP’s list is somewhat shorter: “... risk factors include low per capita income, weak economic growth, the presence of socioeconomic horizontal inequalities and abundant high-value natural resources. These risk factors are even more acute in the presence of high unemployment, especially among youth” (UNDP, 2008, p. 17).

52. See Anderton and Carter (2009) on the cost of trade-interruption in war; see Polacheck (2007) on the peace-and-trade hypothesis and evidence.

53. Cooper (2006).

54. Cooper (2010). On non-diamond jewelry, especially gold, see Tepper-Marlin (2006).

55. For the 22 OECD-DAC members (Development Assistance Committee members of the Organization for Economic Cooperation and Development). See <http://www.oecd.org/dataoecd/21/10/40108245.pdf> [accessed 9 October 2009].

56. UNDP (2008, p. 86).

57. See <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=5037&lang=1> [accessed 9 October 2009].

58. 1.5 percent: WTO (2006, p. 113, Table 7); PSEs: p. 123; United States: p. 128, Table 11; EU-15: p. 131, Table 12.

59. Probability of war-renewal: UNDP (2008, p. 16).

60. Currency appreciation that starves a state of export opportunities is often referred to as a **Dutch disease** effect.

61. Alternatively, the exchange rate can be set by law. This amounts to an explicit price control and encourages the development of a black market in which currency is privately traded, albeit illegally.

62. Over the years, a number of other states have joined, left, or rejoined the CFA currency areas. As of 2009, in addition to the former French colonies—Cameroon, the Central African Republic, Chad, the Republic of the Congo, and Gabon in Central Africa and Benin, Burkina Faso, Côte d’Ivoire, Mali, Niger, Senegal, and Togo in West Africa—the CFA is also used by the former Portuguese colony of Guinea-Bissau (Central CFA) and the former Spanish colony of Equatorial Guinea (West CFA). Although the exchange value is fixed, the Central and West African CFA’s are not mutually recognized.

63. Despite the availability of ample case material, the relation between currency, explicit or implicit (through fixed exchange rates) currency unions, and violence is not well-investigated in the economics literature. The post-World War II Bretton Woods system created a system of fixed exchange rates. The political, cultural, and economic development of today’s European Union is strongly tied to currency regimes, including the creation of the euro. Under apartheid, the southern African customs union also included a currency union in which states such as Lesotho and Swaziland handed control over monetary policy and over export and import regimes to South Africa.

64. On the value of the U.S. dollar and U.S. wars through history, see Warburton (2009).

65. See, e.g., Ferguson (2008).

66. “The result [of WTO’s existence] is ... a more prosperous, peaceful and accountable economic world. Virtually all decisions in the WTO are taken by consensus among all member countries and they are ratified by members’ parliaments. Trade friction is channelled into the WTO’s dispute settlement process where the focus is on interpreting agreements and commitments, and how to ensure that countries’ trade policies conform with them. That way, the risk of disputes spilling over into political or military conflict is reduced. By lowering trade barriers, the WTO’s system also breaks down other barriers between peoples and nations.” See [http://www.wto.org/english/thewto\\_e/whatis\\_e/inbrief\\_e/inbr00\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr00_e.htm) [accessed 5 December 2009].

67. Cerra and Saxena (2007).

68. The two quotes in this passage are from UNDP (2008, pp. 17, 20).

69. Recent Nobel Prize awards in economics have recognized this, e.g., to Schelling in 2005, Hurwicz, Maskin, and Myerson in 2007, and to Ostrom and Williamson in 2009.

70. McFadden (2006); also see Thaler and Sunstein (2008).

71. See, e.g., Binmore (2005) on the evolution of fairness norms, moral codes, and notions of justice.

72. There is no presumption that a unique and uniform structure exists. That would be to deny the diversity of cultures. More likely, multiple kinds of structures (solutions) can result in satisfactory outcomes.

73. This section is based on Brauer (2004; 2006), based, in turn, on Alexrod (1984), Ostrom (1990), Sandler (1997), and others.

74. “With the relative lack of easily extractable natural assets in Mozambique (compared to say Angola or Liberia) the end of war was endogenously determined. Neither the government nor RENAMO were able to sustain the fighting financially and the drought of 1991-93 finally forced a settlement” Brück (2006, p. 31).

75. A real-world example: “In October 1996, one year after the Dayton peace negotiations, Carl Bildt, the international community's high representative in Bosnia, faced a crisis. Momcilo Krajisnik, a close associate of indicted war criminal Radovan Karadzic, had just been elected to Bosnia's three-person collective presidency, but in a gesture of continuing Bosnian Serb defiance toward Dayton's goal of a united Bosnia, he now refused to attend the presidential swearing-in ceremony in Sarajevo. His refusal threatened to undermine the fragile new Bosnian state from its inception. Bildt responded by dispatching his senior deputy for economic reconstruction to the Bosnian Serb headquarters in Pale, accompanied by the resident representatives of the World Bank, the European Bank for Reconstruction and Development, and the European Union, and President Clinton's special envoy for reconstruction. Together they delivered a stern warning: not one penny of reconstruction aid would flow to the Serb Republic if Krajisnik failed to appear. Four days later, Krajisnik was in Sarajevo for the ceremony.” (Quoted from Boyce and Pastor, 1998, p. 1.)

76. Only very recently has the literature formally recognized that third-party intervention need not be with the intention of creating peace. For recent literature, see the reviews by Chang, Sanders, and Walia and by Potter and Scott in *The Economics of Peace and Security Journal*, vol. 5, no. 1 (2010).

77. Schelling (1978). In the essay, he backs this up mathematically. Also see many of Amartya Sen's works, e.g., 2006.

78. Representation requires recognition that those who become part of the negotiation team are chosen by a process that itself is a collective action. We cannot simply assume that party A and party B are unitary actors. Instead, we must often assume that within-party interests play out as well which may make it impossible for the official party A and party B negotiators to actually negotiate anything at all. See, e.g., Anderton and Carter (2009) and literature cited there.

79. Hirschman (1970); Ostrom (1990).

80. Sandler (1999, pp. 38-40).

81. The idea of automaticity was proposed by Brauer (2000), esp. pp. 313-314.

82. This section is based on Brauer (2006), especially pp. 19-20.

83. Boyce (2003).

84. Kaldor (2006).

85. That is, other than *within* the state of the unilateral intervener. But in the case of the United States, and most other sovereign states, decisionmaking is effectively delegated to the head of state. Thus, Mr. Bush for instance, by avoiding calling his presidential decisions a war, could send armed forces to Afghanistan and Iraq without a formal war vote in U.S. Congress that otherwise would have been required by the U.S. constitution.

86. Historian D. Morton (2003, p. 17) comments: “Peacekeeping might be idealistic, but it also fitted Cold War needs.”

87. For a critique of KPCS, see Cooper (2010).

88. See <http://www.iso.org/iso/pressrelease.htm?refid=Ref780> [accessed 23 December 2009].

## References

- [AfDB] African Development Bank. 2008. *Africa Development Report 2008/2009: Conflict Resolution, Peace, and Reconstruction in Africa*. Oxford: Oxford University Press.
- Anderson, C.H. and J.R. Carter. 2009. *Principles of Conflict Economics: A Primer for Social Scientists*. New York: Cambridge University Press.
- Axelrod, R. 1984. *The Evolution of Cooperation*. New York: Basic Books.
- Balakrishnan, Radhika, Diane Elson, and Raj Patel. 2009. *Rethinking Macro Economic Strategies from a Human Rights Perspective*. Available at <http://www.networkideas.org/featart/mar2009/MES2.pdf> [accessed 16 July 2009].
- Binmore, K. 2005. *Natural Justice*. New York: Oxford University Press.
- Boulding, K.E. 1945. *The Economics of Peace*. New York: Prentice-Hall.
- Boulding, K.E. 1973. *The Economics of Love and Fear: A Preface to Grants Economics*. Belmont, CA: Wadsworth.
- Boulding, K.E. 1981. *Ecological Economics*. Beverly Hills, CA: Sage Publications, 1981.
- Boyce, J. 2002. *Investing in Peace: Aid and Conditionality after Civil Wars*. London: Routledge.
- Boyce, J. 2003. "Aid, Conditionality, and War Economies." Working Paper No. 70. Political Economy Research Institute. Amherst, MA: University of Massachusetts.
- Boyce, J. and M. O'Donnell. 2007. *Peace and the Public Purse: Economic Policies for Postwar Statebuilding*. Boulder, CO: Lynne Rienner.
- Boyce, J. and M. Pastor, Jr. 1998. "Aid for Peace: Can International Financial Institutions Help Prevent Conflict?" Political Economy Research Institute. Amherst, MA: University of Massachusetts. [Also published in *World Policy Journal*, vol. 15, no. 2 (1998), pp. 42-49.]
- Brauer, J. 2000. "Regional Peace as an International Public Good: Collective Action in Southern Africa," pp. 299-319 in J. Brauer and K. Hartley, eds. *The Economics of Regional Security: NATO, the Mediterranean, and Southern Africa*. Amsterdam: Harwood Academic Publishers.
- Brauer, J. 2004. "Developing Peacemaking Institutions: An Economist's Approach," pp. 137-153 in Geoff Harris, ed. *Achieving Security in Sub-Saharan Africa: Cost-effective Alternatives to the Military*. Pretoria, South Africa: Institute for Security Studies.
- Brauer, J. 2006. "Theory and Practice of Intervention." *The Economics of Peace and Security Journal*. Vol. 1, No. 2, pp. 17-23.
- Brauer, J. and R. Haywood. 2009. "Nonstate Sovereign Entrepreneurs, Nonterritorial Sovereign Organizations, and Inclusive Governance Networks: Application to Violent Social Conflict?" Keynote address, United Nations University's World Institute for Development Economics Research (UNU-WIDER) Project Workshop on Entrepreneurship and Conflict. International Conflict Research Institute (INCORE), University of Ulster, Londonderry, Northern Ireland, 20-21 March 2009.
- Brauer, J. and J. Tepper-Marlin. 2009. "Defining Peace Industries and Calculating the Potential Size of a Peace Gross World Product by Country and by Economic Sector." Report for the Institute of Economics and Peace. Sydney, Australia. See <http://www.economicsandpeace.org>.
- Bozzoli, C., T. Brück, S. Sottas. Forthcoming. "A Survey of the Global Economic Costs of Conflict." *Defense and Peace Economics*.
- Brück, T. 2006. "War and Reconstruction in Northern Mozambique." *The Economics of Peace and Security Journal*. Vol. 1, No. 1, pp. 30-39.
- Cerra, V. and S.C. Saxena. 2007. "Growth Dynamics: The Myth of Economic Recovery." Working Paper No. 226. Basel: Bank for International Settlements.
- Cooper, N. 2006. "Peaceful Warriors and Warring Peacemakers." *The Economics of Peace and Security Journal*. Vol. 1, No. 1, pp. 20-24.
- Cooper, N. 2010. "On Forgetful Goldfish and Failed Mnemonics: Transforming Political Economies of Conflict using Voluntarism, Regulation, and Supervision." *The Economics of Peace and Security Journal*. Vol. 5, No. 1 (forthcoming).
- Del Castillo, G. 2008. *Rebuilding War-Torn States: The Challenge of Post-Conflict Economic Reconstruction*. Oxford: Oxford University Press [excerpts available on google scholar].
- Demekas, D.G., J. McHugh, and T. Kosma. 2002. "The Economics of Post Conflict Aid." IMF Working Paper WP/02/198. Washington, D.C.: International Monetary Fund.
- [DIW] Bozzoli, C., T. Brück, T. Drautzburg, S. Sottas. 2008. "Economic Costs of Mass Violent Conflict: Final Report

- for the Small Arms Survey, Geneva, Switzerland.” DIW Berlin: Politikberatung Kompakt #42. Berlin: Deutsches Institut für Wirtschaftsforschung (DIW).
- Dunne, J.P. 2006. “After the Slaughter: Reconstructing Mozambique and Rwanda.” *The Economics of Peace and Security Journal*. Vol. 1, No. 2, pp. 39-46.
- Dunne, J.P. and G. Mhone. 2003. “Africa’s Crises: Recent Analysis of Armed Conflicts and Natural Disasters in Africa.” Working Paper No. 5. InFocus Programme on Crisis Response and Reconstruction. Recovery and Reconstruction Department. Geneva: International Labour Office.
- Ferguson, Niall. 2008. *The Ascent of Money: A Financial History of the World*. New York: Penguin Books.
- [GD] Geneva Declaration on Armed Violence and Development. 2009. *Global Burden of Armed Violence*. Geneva: Geneva Declaration Secretariat.
- Harris, G., ed. 1999. *Recovery from Armed Conflict in Developing Countries*. London: Routledge.
- Hirschman, A.O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- [IMF] International Monetary Fund. 2009. *World Economic Outlook*. October. Washington, D.C.: IMF.
- [IMF] International Monetary Fund. 2009a. “IMF Country Report No. 09/139” [Zimbabwe]. Washington, D.C.: IMF.
- [IMF] International Monetary Fund. 2009b. “IMF Country Report No. 08/101” [El Salvador]. Washington, D.C.: IMF.
- Kaldor, M. 2006. *New and Old Wars*. 2nd edition. Cambridge: Polity.
- Morton, D. 2003. *Understanding Canadian Defence*. Toronto: Penguin Canada and McGill Institute.
- McFadden, D. 2006. “Free Markets and Fettered Consumers.” Presidential Address. American Economic Association. Boston, MA, 7 January 2006. Available at <http://elsa.berkeley.edu/~mcfadden/> [accessed 22 December 2009].
- Murdoch, J. and T. Sandler. 2002. “Civil Wars and Economic Growth: A Regional Comparison.” *Defence and Peace Economics*. Vol. 13, No. 6, pp. 451-464.
- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Polachek, S.W. 2007. “How Trade Affects International Transactions.” *The Economics of Peace and Security Journal*, 2(2):60-68.
- Saleyhan, I. and K.S. Gleditsch. 2006. “Refugees and the Spread of Civil War.” *International Organization* 60:335-366.
- Sandler, T. 1997. *Global Challenges: An Approach to Environmental, Political, and Economic Problems*. Cambridge: Cambridge University Press.
- Sandler, T. 1999. “Intergenerational Public Goods: Strategies, Efficiency, and Institutions,” pp. 20-50 in I. Kaul, I. Grunberg, and M.A. Stern, eds. *Global Public Goods: International Cooperation in the 21st Century*. New York: Oxford University Press.
- Schelling, T. 1978. *Micromotives and Macrobehavior*. New York: Norton.
- Schumacher, E.F. 1973. *Small is Beautiful: Economics as if People Mattered*. New York: Harper & Row.
- Schumpeter, J. 1942. *Capitalism, Socialism and Democracy*. New York/London: Harper & Brothers.
- Sen, A. 2006. *Identity and Violence: The Illusion of Destiny*. New York: Norton.
- Smith, A. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Chicago, IL: The University of Chicago Press. Also available at <http://www.econlib.org/library/classics.html> [accessed 12 August 2009].
- Stiglitz, S., A. Sen, and J.-P. Fitoussi. 2009. *Report by the Commission on the Measurement of Economic Performance and Social Progress*. See [www.stiglitz-sen-fitoussi.fr](http://www.stiglitz-sen-fitoussi.fr) [accessed 18 September 2009].
- Stohl, R.J., M. Schroeder, and D. Smith. 2007. *The Small Arms Trade: A Beginner’s Guide*. Oxford: Oneworld.
- Tepper-Marlin, J. 2006. “The ‘No Dirty-Gold’ Campaign: What Economists can Learn from and Contribute to Corporate Campaigns.” *The Economics of Peace and Security Journal*, 1(2):58-64.
- Thaler, R.H. and C.R. Sunstein. 2008. *Nudge: improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press.
- [UN] United Nations. 2009. *The Millennium Development Goals Report 2009*. New York: United Nations.
- [UNDP] United Nations Development Programme. 2008. *Post-Conflict Economic Recovery: Enabling Local Ingenuity*. UNDP Bureau for Crisis Prevention and Recovery. New York: UNDP.
- [UNODC] United Nations Office of Drugs and Crime. 2007. *Crime, Violence, and Development: Trends, Costs, and Policy Options in the Caribbean*. Report No. 37820 (March 2007). A Joint Report by the United Nations Office on Drugs and Crime and the Latin America and the Caribbean Region of the World Bank. New York: UNODC.
- Warburton, C.E.S. 2009. “War and Exchange Rate Valuation.” *The Economics of Peace and Security Journal*. Vol. 4,

No. 1, pp. 62-69.

World Bank. 1998. *Public Expenditure Management Handbook*. World Bank: Washington, D.C. Available at <http://siteresources.worldbank.org/INTPEAM/Resources/pem98.pdf> [accessed 25 August 2009].

[WHO] World Health Organization. 2002. *World Report on Violence and Health*. Edited by E.G. Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, and R. Lozano. Geneva : WHO.

[WTO] World Trade Organization. 2006. *World Trade Report 2006*. Geneva: WTO.

[WTO] World Trade Organization. 2007. *International Trade Statistics 2007*. Geneva: WTO.

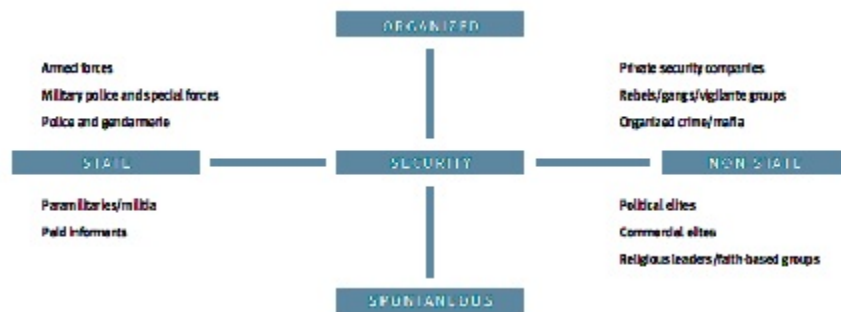


## **Glossary**

[to be done, possibly by USIP rather than by Brauer/Dunne]

## Appendices

### Appendix A: Examples of classifications of violence and armed actors



**Figure A.1: A typology of armed groups and related actors.**

Source: GD (2008, p. 127, Figure 7.1).

The World Health Organization (WHO, 2002) groups violence into the rubrics of *self-harm* (including suicide), *interpersonal violence* (e.g., violence between intimate partners and other forms of family violence, rape and sexual assault by strangers, violence committed in institutional settings such as schools, prisons, and work places), and *collective violence* (e.g., armed conflict within and between states, violent political repression and genocide, violent acts of terror, and

organized crime) and speaks of an ecology of violence that progresses from individual to personal relationship-related violence, and on to communal and broad collective levels of violence.

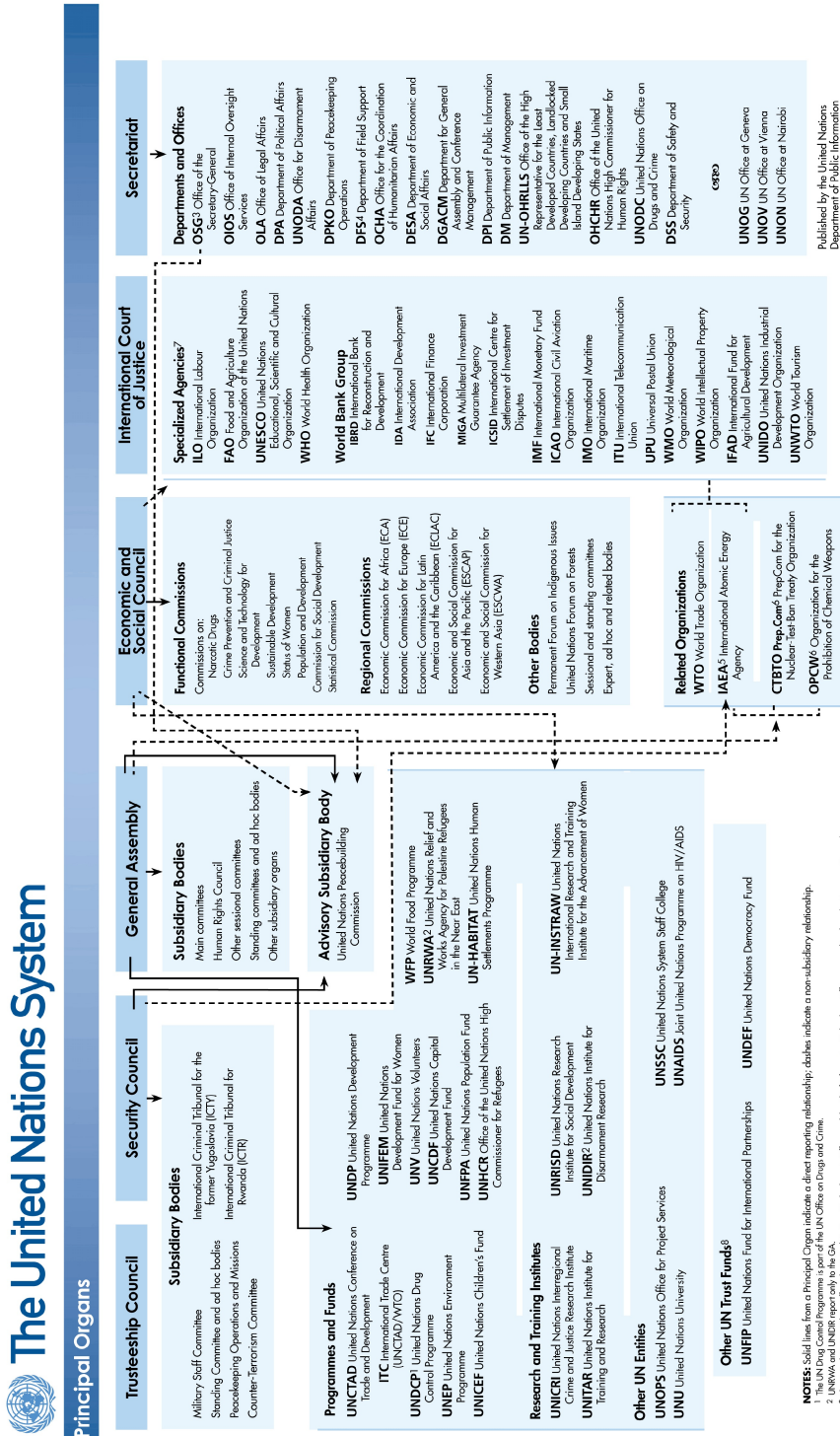
The Geneva Declaration on Armed Violence and Development (GD, for short) notes that violence comes in many forms. Violence against women for instance includes intimate partner violence, sexual violence, honor killing, dowry-related violence, acid attacks, female infanticide and sex-selective abortions (GD, 2008). Organized crime, armed gangs as well as extrajudicial killings, and “disappearances” are forms of violence associated with crime and the miscarriage of justice by officers of law and order institutions. Politically-motivated violence includes mob-violence, lynchings, rebellions, insurrections, and civil war.

Another typology lists the following forms of violence (with violence indicators in parentheses) [Chaudhary and Suhrke (2008) as cited in GD (2008, p. 65)]:

- ▶ *Political violence* (assassinations, bomb attacks, kidnappings, torture, genocide, mass displacements, riots);
- ▶ *Routine state violence* (violent law enforcement activities, encounter killings, social cleansing operations, routine torture);
- ▶ *Economic and crime-related violence* (armed robbery, extortions, kidnappings for ransom, control of markets through violence);
- ▶ *Community and informal justice and policing* (lynching, vigilante action, mob justice); and
- ▶ *Postwar displacements and disputes* (clashes over land, revenge killings, small-scale “ethnic cleansing”).

Finally, a typology of armed actors rather than of the violence they may engage (see Figure A.1), is based on a forthcoming paper by Muggah and Jüttersonke. It overlays types of armed actors on a vertical grid of organized versus spontaneous violence with a horizontal grid of state versus nonstate actors.

**Appendix B: The United Nations System organizational chart**  
 [http://www.un.org/aboutun/chart\_en.pdf; accessed 19 July 2009]



**Appendix C: The cases**

The ten illustrative mini-cases that accompany the five chapters are structured such that we (1) cover both historical and contemporary cases; (2) war, civil war (grievance-based and greed-based); and postwar criminalization of an economy; and (3) cover all geographic regions: Europe, Africa, the Americas, and Asia and the South Pacific. Of course, not every failure is a failure in every respect, and not every success is a success in every respect. Many countries can easily be placed in either category, depending on what aspect one wishes to emphasize. For example, Timor-Leste (East Timor) saw a massively violent upheaval in the late 1990s and early 2000s. Political independence came in 2002 and violence recurred in 2006. After protracted negotiations, the country now enjoys high revenue flows from offshore oil- and gas-deposits but it suffers from utterly inadequate infrastructure, especially roads to connect markets, and very high poverty rates. As regards Nepal, its first peace agreement was flawed (the aspect we highlight) but the second attempt rectified the shortcomings. South Africa saw a peaceful transition from apartheid but its current violence rates are among the very highest in the world.

**Chapter distribution of the cases**

- Ch 1 Violence and economic development*
  - F: El Salvador
  - S: Timor-Leste
- Ch 2 The long-run goal: economic growth*
  - F: Germany post-WW I
  - S: Germany post-WW II [Northern Ireland?]
- Ch 3 Dealing with turbulence: macroeconomic stabilization*
  - F: Zimbabwe
  - S: Chile
- Ch 4 The global economy: international trade and finance*
  - F: Fiji
  - S: Vietnam
- Ch 5 Designing and promoting peace*
  - F: Nepal
  - S: South Africa

**Geographic distribution of the cases**

<i>Continent</i>	<i>Failure</i>	<i>Success</i>
Africa	Zimbabwe	South Africa
Asia	Nepal	Vietnam
Americas	El Salvador	Chile
Europe	Germany I	Germany II
Asia-Pacific	Fiji	Timor-Leste

## **Index**

[to be done by USIP or publisher?]