Introduction

Written for an audience of students, general readers, and economists alike, this volume is a primer on the field of the economics of conflict and peace. It offers a reasonably comprehensive, systematic, and detailed overview – even if in broad strokes – of the field's orthodox and heterodox history of thought and current theories and evidence. We view this Element as a baseline account on which to build a future, separate and more fully developed, piece on the economics of peace, economic growth, and human development.

In terms of process, Brauer and Silwal conceptualized the volume. Anderton, Brauer, Coyne, Dunne, and Silwal contributed draft sections, and all authors then reviewed, critiqued, and constructively commented on each other's work. Anderton and Silwal wrestled the citations and references into shape, Brauer carried out the final editing for integration, cohesion, and flow, and Silwal led the overall effort to shepherd the volume through to production. Content-wise, Section 1, written by Anderton and Brauer and the only section in Part I, situates the field of conflict and peace economics within the discipline of economics. Part II is a synopsis of the fields' intellectual history. We start in Section 2 with Coyne's introduction to the Austrian school of economics and its perhaps surprising relevance for conflict and peace economics today. Marxian, post-Keynesian, and other heterodox economists' thoughts are reviewed in Section 3, written by Dunne. Arranged by subfield, Section 4, written by Silwal with contributions by Brauer, characterizes the development of the mostly neoclassical and neo-Keynesian post-Second World War literature. From history of thought, the Element moves in Part III to presentations of selected theory and evidence of the contemporary literature. Coyne illustrates in Section 5 how preparing for and engaging in war increases the scale and scope of government in overlooked, and politically and economically often uncomfortable and crucial, ways. In a similar vein, Dunne reviews the literature on the effects of military expenditure and the cost of war on economic development in Section 6, a literature stimulated although by no means dominated by heterodox views. Rounding out Part III, Anderton and Brauer summarize examples of neoclassical-based theories and empirical case studies in Section 7. Section 8, the only section in Part IV, and written in the main by Silwal, then turns to underexplored and altogether missing topics in conflict and peace economics research.

Altogether, the Element (a) *contextualizes* the field of conflict and peace economics, (b) *outlines* its history of thought, (c) *highlights* examples of current theoretical and empirical scholarship in the field, and (d) *maps* trajectories for further research.

Part I Context and Overview

1 Conflict and Peace in Economic Perspective

Nabad iyo caano, col iyo abaar. [Peace and milk, war and famine.]

– Somali proverb

This section situates the field of conflict and peace economics within the academic discipline of economics. We begin by contextualizing conflict and economics and present four ways to think about economies and economics in relation to conflict and peace. Next, we characterize subfields within the field and discuss the interdependencies between economics and conflict, concluding with a foray into the nature of the peace and security good. The discussion provides a rich tapestry interwoven with selected examples of conflict and peace economics (theory and evidence) throughout the Element.

1.1 The Ubiquity of Conflict

Conflict is ubiquitous. Economics enters the fray because conflict invariably affects decisions regarding resource allocation and trade within and between households, within and between firms, and within and between nations.[1] A prominent contributor to the field, Jack Hirshleifer, writes of conflict examples such as "back-biting maneuvers for advancement on the promotion ladder," of "family squabbles ranging from the trivial to the deadly serious," of rival firms finding "ways of sabotaging competing enterprises," of nations "at war or else at peace," of "a trade union [which] may call a strike or else sign a collective bargaining contract," and of "a lawsuit [that] may be settled or litigated in court" (Hirshleifer 2001, p. 45). Thus viewed, one might well say that *all of economics is conflict economics*. Conflict is about diverging interests. The success or failure of conflict resolution revolves around how best to negotiate this divergence, which, in turn, depends on how to understand parties' willingness and ability to negotiate and on the many factors that impinge on this willingness and ability. Haggling over the price of vegetables at the local farmer's market, for example, is conflictual. Buyers want to pay as lttle as possible; sellers want to receive as much as possible. Sometimes conflict is over the *distribution* of goods and services produced – for instance, a disagreement in a labor dispute about how much workers should be paid as opposed to a firm's financiers. At other times, it is the productive capacity itself, the

[1] This chapter is a further development of Brauer and Anderton (2020). Literature references may be found therein.

resources with which to produce in the first place (such as land and equipment), that is in contention. Who should own, occupy, and work land and agricultural implements? *Conflict settlement*, if it occurs, may be time-limited, lasting for a period before breaking down again. Settlement can be cooperative and *voluntary* (hagglers agree on a price or else they agree not to trade at all), or it can be noncooperative and *coerced* (the vegetables are stolen, for example, or the seller surreptitiously mismeasures their weight).

War and peace, threat and defense, conflict and settlement, struggle and appeasement, production and predation, appropriation and exchange, defection and cooperation, selfishness and selflessness all point to contrasting ends of a spectrum so that if all of economics is conflict economics, then one might equally well say that *all of economics is peace economics*! For an economy even to subsist, some minimal amount of peace must be present. In the wake of the Second World War, another giant of the field, Kenneth Boulding, put it this way: “Essentially, the economic problem of reconstruction is that of rebuilding the capital of society” (Boulding 1945). Without capital, including human capital (our talent, education, skill, ingenuity, entrepreneurship, and “sweat equity”), economies can be neither constructed nor reconstructed. Although not sufficient, *peace is necessary for prosperity*, and the incorporation of conflict into economic models is an essential part of the economics discipline. Economics must study why conflict happens, how it is carried out, and what can be done to resolve, mitigate, and prevent it.

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1.2 Thinking Economically about Conflict and Peace

1.2.1 The Four Economies

Figure 1 depicts four ways to think about economies. Box 1 of the figure refers to the *exchange economy*, which best functions in a free, private, and competitive environment. That is, exchange (trade) should be voluntary; government intrusion, save for basic rule-setting, should be absent; and buyers and sellers should be able to switch trade partners with only minimal, if any, restriction. A second economy is the *grants economy*

	Voluntary (Peace and security)	**Involuntary (conflict, violence, and insecurity)**
One-way	**2. Grants economy** (One-sided voluntary giving of resources)	**3. Appropriation economy** (One-sided violent or nonviolent coercive taking of resources)
Two-way	**1. Exchange economy** (Two-sided voluntary and mutually beneficial exchange)	**4. Mutual threat economy** (Mutually harmful reciprocal threats and violence, such as war)

Figure 1 The four economies
Source: Adapted from Brauer and Anderton (2020, p. 444).

(Box 2 of the figure). It refers to the one-sided, self-denying, and voluntary giving away of resources (Boulding, Pfaff, and Horvath 1972). Parents give allowances to their children, people fund their favorite charities, and nation-states provide foreign aid to ease humanitarian emergencies. The third and fourth types of economies are the *appropriation economy* and the *mutual threat economy* (Boxes 3 and 4 in the figure), characterized by the threatened or actual violent appropriation of someone else's resources.

If Boxes 3 and 4 of Figure 1 reflect conflict economics, then Boxes 1 and 2 reflect peace economics. The dashed borders separating the boxes indicate that they are not mutually exclusive. The high likelihood of the one-sided taking of resources, for example, makes households, firms, and nation-states invest in defense and security. Such investment often is made through the exchange economy – for example, by purchasing an alarm system for one's home. Moreover, such investments can incentivize voluntary over involuntary transactions (better to trade than to steal), thus helping institutionalize the evolution of societies toward voluntary economic processes.

Most economics textbooks – even at the graduate level of study – focus to excess on the exchange economy, wholly ignoring a vast swath of economic reality. In the United States, the government's Bureau of Labor Statistics, for example, has recorded the size of nonprofit organizations' labor force at 12.5 million people in 2017 – that is, more than 8 percent of the country's total level of employment.[2]

[2] See www.bls.gov/bdm/nonprofits/nonprofits.htm.

1.2.2 Conflict Economics: Definition and Subfields

Within the economics profession, the fields of the *economics of crime* and *law and economics* are well-established, as is *defense economics*, but until recently it seemingly has not been well recognized that they all can be subsumed under the umbrella of *conflict economics*, which we take as the overarching name of the field. We define conflict economics as applying economic concepts, tools, and methods to the study of (1) the threat or actuality of conflict and any associated diminution or appropriation of income or assets; (2) conflict resolution, mitigation, and prevention; and (3) norm and institution building toward stable, irreversible peace. Most research in the field focuses on the first of this definition's three aspects, comparatively neglecting the others. This is not due to economists' general aversion to pronouncements on what *should* be done regarding the difficulties encountered when studying how conflicts are in fact resolved and how peace is actually achieved.[3]

> Conflict economics applies economic concepts, tools, and methods to the study of (1) the threat or actuality of conflict and any associated diminution or appropriation of income or assets; (2) conflict resolution, mitigation, and prevention; and (3) norm and institution building toward stable, irreversible peace. As such, the field broadly covers causes, conduct, and consequences of conflict.

Among those who study *violent, politically motivated conflict*, in particular, the terms *conflict*, *defense*, *security*, *military*, *war*, and *peace economics* tend to be used interchangeably, but there is some order among them. To threaten appropriation, credible force must be available to carry out or defend against the threat. This implies funding the necessary labor and equipment, such as soldiers and weapons. *Military economics* focuses on the opportunity cost of this funding (that is, what else these resources could have bought). While prominent by the 1980s, military economics arose much earlier in the Austrian school of economics and in class struggle–oriented, Marxian-inspired works on capitalism and imperialism,

[3] Exceptions notwithstanding, economics is a descriptive rather than a normative science. It studies *what is* rather than what one wishes *should be* the case. At least two caveats emerge: If free, voluntary, noncoerced trade *is* mutually beneficial (descriptive), then governments *should not* inhibit or restrict trade (normative). This is an example of an implicit *norm of economic efficiency* that the discipline's preeminent neoclassical approach upholds – a norm not all people will want to agree to. Other theoretical approaches feature their own implicit norms. The other caveat is this: if norms contribute to what society *is* at the present moment (for example, a norm that relegates women to intra-household work), then economics must of course study these norms as part of its descriptive effort to understand and explain that which is. Studying norms is not necessarily at odds with economics.

extending, for example, into dependency theory in the field of development economics (see Sections 2 and 3). Today, however, this subfield often is presented in neoclassical, post-Keynesian, and neo-Keynesian terms and tends to focus more narrowly on the economy-wide opportunity cost of military expenditure or on government budgetary trade-offs between military and other types of spending (see Section 6). The subfield has evolved in this way partly as an outward-looking response, beyond the defense sector, to what had been the generally inward-looking *defense economics* of the 1960s. Initially covering topics such as defense budget management, manpower recruitment, defense procurement, nuclear threat postures, and free-riding behavior in defense alliances such as the North Atlantic Treaty Organization (NATO), the subfield of defense economics has since broadened to include topics such as arms production and trade, arms trade offset deals and dual-use technology, arms rivalries and arms control, and disarmament and peacekeeping (Section 4).

Distinctly discernable but not quite as prominent is the field's extension into public sector *security economics* more generally, especially since September 11, 2001 (henceforth referred to as 9/11). Security economics is concerned with intelligence services, espionage and cybersecurity, homeland security (including terrorism, counterterrorism, and defense against criminal syndicates), and the security of public infrastructure, utilities, and other assets. It thus blends into the *economics of crime*. The private sector, likewise, faces numerous security concerns and often addresses them through the exchange economy with the acquisition of goods such as perimeter fences, security cameras, and the employment of large numbers of security guards at schools, workplaces, and entertainment venues. Much of this reflects households' and firms' attempts to address risk. Security economics blends into the *economics of insurance* and might expand to include risks related to bioeconomics such as natural disasters, climate change threats, and pandemics. In time, conflict economics may become broader than even Hirshleifer (2001) anticipated: it might come to cover the whole of human safety and security, public and private.

War economics emerged with the growing anticipation of what became the First World War and dealt with the conduct and consequences of state-on-state warfare in Europe, as well as the subsequent postwar resource reconversion and economic reconstruction.[4] Much of the debate dealt with frictions in international trade and finance resulting from countries' mercantilist policy postures. As such, war economics also studied the causes of war, and this international context influenced topics studied by the Austrian school and Marxian

4 See Anderton and Anderton (1997), Anderton (2003), Coulomb (2004), and Brauer (2017) for coverage of notable early economists such as Edgeworth, Keynes, Pigou, Robbins, Veblen, Wicksell, and others.

economics, indeed by Adam Smith himself. A *conflict economics* narrower than Hirshleifer's conception began when economists and quantitative political scientists joined to study an explosion of intrastate wars observed since the mid- to late 1970s. The concern here lay with the possibility of the de-development of postcolonial developing economies due to large-scale, widespread, and persistent violence. In focusing on the causes, conduct, and consequences of intrastate war, it somewhat neglected peace itself, and this is where *peace economics* enters. More explicitly interested in conflict resolution, mitigation, and prevention than any of the other subfields, peace economics ultimately asks questions about the existence and stability of the social contracts between and among populations and, as such, is tied to bargaining theory (as exemplified in Thomas Schelling's 1960 work *The Strategy of Conflict*), to aspects of political economy and constitutional law, and to the economics of such law, as well as to broader norm and institution building for peace (see Section 8).

1.2.3 Interdependencies between Conflict and Economics

Figure 2 indicates some ways in which economics and violent conflict are related. Box 1 highlights that prior to acting, decision makers first have to *decide* on an action – to decide literally means "to cut away." What is cut away is a set of alternatives. To decide is to exercise *choice*. Economists' choice theoretic models thus can be applied to choices for war or peace, choices about whether to intervene in a conflict, and even the choice to engage in mass atrocities such as genocide (see Section 7). As shown in the sub-box, making such choices involves both the rational weighing of costs and benefits and nonrational elements, the latter gleaned from the intersections of psychology, sociology, and anthropology with economics.

> Conflict is a choice. Economists' choice-theoretic models can thus be applied to allegedly noneconomic contexts.

Box 2 states that economic conditions can affect aspects such as the onset risk, duration, seriousness, termination, and recurrence of violent conflict. Conversely, economic conditions can affect the likelihood that *non*violent approaches are pursued, along with whether or not fragile peace can be reinforced and moved toward stable peace. Box 3 states that conflict affects economic outcomes. The "5 Ds" in the sub-box stand, first, for *disruption* – for example, war's disruption of education, trade, and economic growth. The second D, for *diversion*, refers to the shifting of resources from civilian-oriented investment toward supporting a war economy. Next are the costs

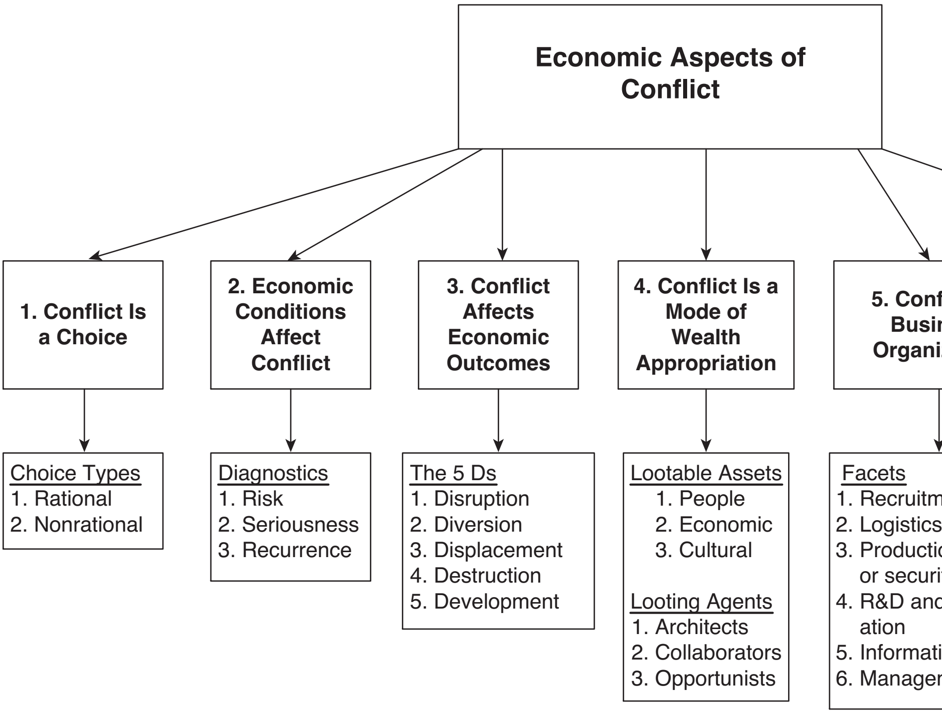

Figure 2 Interdependences between economics and conflic

Source: Adapted from Anderton and Brauer (2016a, p. 6).

associated with *displacement* of people (refugees) and of capital (capital flight) or, worse, their *destruction* (including of our natural environment; i.e., ecological resources), followed, lastly, by postwar (re)*development difficulties*, all themes variously taken up in the following sections. Not shown but implied are the at times substantial investment costs of conflict intervention and peacekeeping, of peacebuilding and conflict resolution (conflict settlement), of subsequent disarmament and demobilization, and of the general peace and security benefits of peace promotion.

Box 4 acknowledges that conflict can be a mode of wealth acquisition, and the sub-box suggests that examples of lootable assets include people (e.g., human trafficking, child soldiers), economic assets (land, minerals), and cultural assets (a people-group's social bonds, artifacts, history, language, and very existence). Standard, exchange economy–oriented textbooks wrongly assume that production, trade, and wealth accumulation are wholly peaceful activities; in contrast, conflict economics recognizes, models, and integrates appropriation possibilities into the standard models. Recognizing conflict as a mode of wealth acquisition directly leads to Box 5, which emphasizes that war or other forms of conflict involve a variety of organizational or business-related practices. The listed items suggest that fields such as industrial organization and management science may have much to offer to conflict economics to offer more insight into how (threatened) violence is planned and carried out or how those working on peace promotion can improve upon their countervailing efforts.

Finally, Box 6 points to the societal underpinnings of an economy. Those seeking violence often undermine key facets of their own and rivals' economies, while peacebuilders typically work to sustain or rebuild them. That "man doth not live by bread only" (Deuteronomy 8:3) was known to ancient peoples, and economists likewise long ago acknowledged economies' reliance on broader political and cultural contexts. For example, in his *Political Economy* text, published in 1850, Nassau W. Senior repeatedly states that "security . . . is the most important of all services" that government can supply.[5]

1.2.4 The Nature of the Peace and Security Good

Standard economics characterizes national defense as a pure *public good*. Once provided, it is not feasible to exclude, for instance, nontaxpayers from whatever security services national defense offers (defense is a nonexcludable service, it is said). Additionally, national defense benefits multitudes of people at the same

[5] An online copy of Nassau's 1854 third edition is available at www.econlib.org/library/Senior/snP.html.

time (it is nonrivalous). In practice, however, the nature of peace and security goods is more varied than that. For example, a private security company may be hired to safeguard shipments sent by a relief organization to assist in humanitarian emergencies. Here, security is a *private good* (rival and excludable). A defense alliance such as NATO is a *club good* (all paid-up members benefit in a nonrival manner and nonpayers are excluded). And, in some cases, ostensibly widely available protection is in fact restricted to a limited number of beneficiaries, a *common resource-pool good*. For example, an aircraft's emergency exit doors cover all passengers (nonexcludable), but competition (rivalry) is fierce when the need for their use arises. With limited exceptions (e.g., Todd Sandler and colleagues), conflict economics as a whole tends to discuss defense, security, and peace as unitary pure public goods when it is more likely that their economic nature morphs across space, time, and circumstances.

We additionally highlight an observation made by Sandler (1999). In the peace and security context, standard theory fails to acknowledge two important assumptions – namely, that national defense, for example, is provided (1) only for the current generation and (2) only over a well-defined national territory. If decision makers were less myopic and also accounted for *future* generations of residents (a transgenerational good), then the sum of benefits would be larger, warranting a larger expense. Similarly, decision makers can ignore future generations but instead consider residents in allied territories (a transboundary good). Relative to myopic awareness, the larger benefit to be gained justifies a larger cost to be borne. Finally, one can consider the benefit across all territories and across all future generations. This benefit is larger still, justifying considerable security costs to be carried. We call this enlightened policy stance *the Buddha rule*. What Sandler highlights, moreover, is that a solution to a current-day transboundary problem may pose a future transgenerational one. More broadly, intragenerational dispute settlement may stoke conflict a generation later as, for instance, Keynes warned in his *The Economic Consequences of the Peace* (1919) would happen if Germany were held to what he strenuously argued were the Treaty of Versailles' onerous provisions. Sadly, his warning was not heeded.

Having set out the context of conflict and peace economics within the economics discipline as a whole, the next three sections provide a brief intellectual history of the subfield.

Part II A Short History of Thought

2 The Austrian School: Insights on the War Economy

Following an introduction to the Austrian school of economics, this section presents insights from core contributions of subsequent generations of Austrian