

Gig Economy Insurgency

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November 6, 2023

Abstract

Militant groups delegate operations to contingent, short-term, and freelance agents. Such informal and ad-hoc employment patterns have wide-reaching consequences, yet the academic literature lacks a systematic vocabulary and framework to analyze these practices. Using primary and secondary sources, I introduce a descriptive typology of informal employment patterns in militant groups, contributing to scholarship and practice by establishing a basis for a systematic comparison of variation in militant employment models, particularly highlighting how these practices can have far-reaching implications for conflict and post-conflict settings. Case studies of informal militant hiring practices in Afghanistan, Iraq, and Syria support the theory.

Abstract word count: 98 words

Manuscript word count: 11,867 words

Introduction

“...in Mansour, locals here were being hired to carry out terrorist operations for as little as fifty dollars a pop.” (Weiss and Hassan 2016, p. 63)

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Reporting on the American counterinsurgency in Iraq often highlighted a characteristic feature of the conflict: an underground economy for improvised explosive devices (IEDs).¹ Freelance creation and deployment of IEDs was so consequential for American forces that contemporary analysis used fluctuations in pricing as a success indicator for pacification efforts. Higher prices suggested a period of more successful counterinsurgency (Iyengar, Montan, and Hanson 2011; Berman, Shapiro, and Felter 2011; Bahney et al. 2013). Likewise, American military leaders and strategists described the creation of employment opportunities as a counterinsurgency objective, reasoning that jobs would reduce the labor force available to serve as “guns for hire” (Petraeus 2006, p. 9).

The Iraqi pattern of insurgents outsourcing violence via informal and short-term engagements is exceptional but not unique. For example, in 2020, reporters described Afghanistan, the remaining battleground of the American War on Terror, as “saturated” by small groups that “freelance” violence (Mashal et al. 2020).

These examples jointly highlight that militant groups can, and do, use the short-term and informal employment models of the so-called gig economy, whereby agents undertake work on behalf of an organization without formal membership in, or even a long-term relationship with, the contracting group. Informal contracting changes commanders’ toolkits of command and control; distort observers’ expectations of the size, sophistication, and coherence of conflict actors; and produce incentive structures that alter the dynamics and direction of a conflict. Yet, despite increasing focus on the organizational and human resources practices of militant groups, the academic literature lacks a systematic vocabulary and framework to analyze the influence of variations in hiring practices.

The dynamics and consequences of the informal and contract labor markets in conflict zones

¹Once introduced in 2003, improvised explosives quickly became the leading cause of casualties for security forces and civilians in Iraq. Efforts to harden security forces and reduce their vulnerability to IED attacks systematically changed how security forces prosecuted the counterinsurgency and, for a time, undermined efforts to reduce violence and resentment between American forces and Iraqi communities (Pirnie and O’Connell 2008). Moreover, the impulse to harden military targets against IED attacks caused the Department of Defense to procure and develop equipment that undermined their strategic goal of becoming a lighter and more agile force (Moulton 2009).

are likely to become ever more consequential as technology allows for easier and more secure delegation, coordination, and reputation-building among both agents and principals. Subcontracting spreads the risk and the expense of logistical infrastructure and thus has an obvious appeal to militant groups operating under the specter of repression. The industrial organization presented in this paper may become increasingly central to the operation and evolution of future conflicts, placing the Afghan, Iraqi, and Syrian cases analyzed in this paper at the forefront of 21st century conflict dynamics. In this way, the complexities of these conflicts may represent the future of militancy and substate violence.

This manuscript draws on primary and secondary sources to derive a typology of “gig economy” style engagements used by armed conflict actors. The goal of the manuscript is to provide scholars of conflict dynamics with a framework to quantify variations in militant hiring practices that can serve as a tool for deeper analysis of the downstream consequences of these forms of violence. The typology classifies engagement patterns according to the type of relationship between agent and principal and the format through which agents are compensated, before drawing out implications of these hiring practices for the broader conflict environment. Due to the difficulty of obtaining the micro-level data that would permit a causal argument, the manuscript empirically supports its conclusions and typology by presenting three contexts—Afghanistan, Iraq, and Syria—in which primary and secondary source records contain extensive documentation of both the existence and consequences of informal hiring arrangements. Although a convenience sample, these conflicts are sufficiently well-documented to allow triangulation of claims put forth in social-media derived sources.

This “gig economy” organization of insurgent engagement differs from mercenary, or Private Military and Security Companies (PMSC) operations in both the degree of flexibility and autonomy that the agents maintain and their local embeddedness. Indeed, one of the defining characteristics of PMSC operators is that their fighters can be, and are, deployed to fight in conflicts in which they have very little personal investment or local ties (Bara and Kreutz 2022; Percy 2007; Singer 2008). Although participation in the informal conflict economy

may prompt crossover into the world of PMSCs, by and large the informal militant economy described below draws on militant labor that is either deeply embedded in the local community, or, as in the case of foreign fighters, has specific ideological motivation for participation in the conflict.² This difference is particularly notable in post-conflict context: one of the most characteristic attributes of PMSCs is that their involvement in a given conflict can be rapidly decommissioned (Bara and Kreutz 2022). Conversely, the informal militant economy described below can contribute to long-running local instability through the generation of local combatant expertise as well as in creating cadres of locally-based fighters likely to be excluded from organization-based demobilization initiatives.

The literature on human resources and internal operations of militant groups has tended to operate according to a model of militant human resources in which (1) acting on behalf of an armed organization implies membership in the organization and (2) the contracting group has exclusive claim to the violent output of their agents. Scholarship on the industrial organization of rebellion has emphasized the tools of membership, including recruitment, compensation, monitoring, and socializing (Achvarina and Reich 2006; Arjona and Kalyvas 2012; Bloom 2017; Braithwaite and Ruiz 2018; Daly 2016; De Mesquita 2005; Doctor 2020; Eck 2014; Gates 2002; Hanson 2020; Hegghammer 2013b; Henshaw 2016; Hoover Green 2016; Jones 2017; Shapiro and Siegel 2012; Shapiro 2013; Weinstein 2005; Walter 2017; Wood and Thomas 2017); the downstream consequences of organizational design, management choices, endowments and alliances (Foster and Siegel 2019; Horowitz and Potter 2013; Mendelsohn 2015; Mironova 2019; Parkinson and Zaks 2018; Schram 2019; Staniland 2014; Worsnop 2017); and how fighters choose conflict zones and become enmeshed in a host organization (Bakke 2014; Hegghammer 2010; Hegghammer 2013a; Malet 2013; Mironova 2019). There is comparatively little analytical attention paid to the freelance and informal labor market. However, memoirs and reports indicate that fighters—and especially foreign

²Reports of Syrian militiamen recruited into transnational PMSCs serve as one example of such a crossover (Zakaria 2020)

fighters—do choose this route, despite the risks inherent in being either unaffiliated or aligned with a small band of militants who fight on a contingent basis (Abu Fulan al-Muhajir 2014; Abu Hamza al-Erhabi 2014; Another Muhaajir 2014; Dread Muslim 2015; Paraszczuk 2014b; Paraszczuk 2019b).

This manuscript also expands the literature on delegation and alliances during conflicts. The delegation literature closely observes state delegation to rebel organizations, but often overlooks that rebel organizations themselves often delegate within their own conflict (Bapat 2012; Berman and Lake 2019; Moghadam and Wyss 2020; Salehyan 2010; Salehyan, Gleditsch, and Cunningham 2011; Siqueira and Sandler 2010; Tamm 2016). Likewise, scholarship on militant alliances tends to prioritize strategic and political considerations rather than material terms (Bakke, Cunningham, and Seymour 2012; Bapat and Bond 2012; Christia 2012; Perkoski 2019). On the other hand, studies of insurgent and terror organizations turning to (and into) criminal networks emphasize the flow of skills and resources, but do not position the crossovers as part of larger trend of militant labor organization (Ahmad 2017; Asal, Milward, and Schoon 2015; Basra and Neumann 2016; Idler 2012; Hutchinson and O'malley 2007; Rosenthal 2008; Saab and Taylor 2009; Shortland 2019).

HR Typology: Staffers, Freelancers, Contractors, and Contingents

Militant groups can choose from a continuum of engagement types. At one extreme, they can maintain an exclusive claim on their fighters' time and activities. At the other, they can make no investment in the maintenance of a nebulous pool of potential fighters whom they try to motivate through inspirational media alone. Between these extremes lie an array of engagement styles that closely mirror the informal non-militant economy. Groups can contract for operations, work with various freelance units that form more or less coherent

brigades, and mobilize contingent fighters who extend the group’s reach and presence. Although groups can, and do, organize their human resources and staffing along a continuum, their dominant choices can have consequential second-order effects on the conflict’s evolution and conclusion.

The following section streamlines these options into an inductive typology of insurgent employment modes and highlights the effects that personnel structure has on the conflict environment. It highlights examples of recent conflicts that exhibit patterns typical of each of the four ideal types of engagement style.³

For clarity, I use the term “agent” to indicate the person, unit, or group that enters into a contract with another entity who is in a position to compensate the agent for services rendered. The hiring entity will typically be another militant group that has turned to agents to extend the capabilities that they maintain in-house. I describe these entities as “principals” to differentiate them from agents.

Contracts and Compensation

The typology of informal militant labor organization styles presented in Figure 1 is ordered by two primary attributes: (1) whether the relationship between the agent and principal is primarily relational or transactional, and (2) whether or not the agent is compensated speculatively.⁴ These dimensions were chosen both for the observability of their empirical traces in primary sources and for their association to contract style variations established

³Although the theoretical framework introduced here is general, the illustrative examples are largely from contemporary jihadi conflicts. These conflicts have been extensively documented by both participants and analysts, producing unusually accessible views into their conflict processes. However, jihadi insurgencies may differ systematically from other conflicts in ways that increase their receptivity to gig economy type organizational patterns. Notably, as Ahmad 2017 has documented in the context of militant-business connections, Islamist ideology may increase trust among conflict actors, thereby reducing the risk of shirking from both agents and the principals that hire them. If so, the adoption of informal hiring practices described below may be limited to contexts with a dominant ideological framework.

⁴This typology categorizes subcontracting behavior between agents and principals rather than the internal operations of militant groups. Organizations can undertake explicit contracts with other groups yet maintain a relational internal structure, and the inverse. Likewise, groups can make speculatively-compensated subcontracting agreements while also providing ongoing material support to their own members.

		Compensation	
		Ongoing or Project-based	Speculative
Contract Type	Relational	Staffers	Freelancers
	Transactional	Contractors	Contingents

Figure 1: Typology of insurgent employment types

in the economics literature (*e.g.* Baker, Gibbons, and Murphy 2002). The following section introduces a general description of four ideal-type engagement styles for a “gig economy insurgency,” along with illustrative vignettes that describe the operation of units that share traits of each of the identified archetypes. These descriptions and vignettes suggest ways in which engagement and compensation design have downstream effects on militant activities and incentives.

The first dimension addresses the degree of ambiguity in the contracting relationship. The top row of Figure 1 comprises relational contracts: unwritten (or otherwise unenforceable) agreements maintained by the shadow of the future rather than legal enforcement. Relational contracts dominate in social processes that operate according to a relatively small number of specified rules and a broader set of implicit behavioral norms and expectations about reputation and reciprocity (Baker, Gibbons, and Murphy 2002; Granovetter 1985; Levin 2003; Ostrom and Walker 2003). A deal to coordinate for a joint offensive is an example of an agreement based on a relational contract: the scope of possible activities is too large and complex to enumerate every possible contingency, so parties depend on norms and mutual agreements.

The bottom row of Figure 1 describes transactional contracts and agreements. These are arrangements in which the responsibilities of each party are carefully enumerated and articulated. A transactional contract rests on explicit identification of the components of the agreement and often has a more limited scope. They are typical of situations in which cooperation is not maintained by reputation or ongoing relationships (Baker, Gibbons, and Murphy 2002). In a conflict setting, transactional contracts would be expected to have

specific deliverables, such as weapons manufactured, training delivered, or operations completed.

The second dimension differentiates hiring patterns according to whether or not the agent's compensation is contingent upon a successful outcome of the specific activity being contracted. The first column of Figure 1 represents compensation that does not rely on specific outcomes. Instead, material support is tied to production and process, such as an ongoing salary or payment for joining a training camp. In the second column, producers are remunerated only after success. This is a speculative arrangement because the agent acts before learning whether they will be compensated. Speculative compensation for a militant subcontractor could take the form of post-battle access to spoils or post-conflict goodies and political appointments.⁵

Staffers

In the “staffer” model in the first quadrant of Figure 1, agents receive (or are promised) ongoing compensation and interact through relational contracts. This quadrant represents organizational model that dominates in the literature. Although many militant organizations maintain official codes of conduct that formalize expectations and obligations, the majority of day-to-day responsibilities arise from shared norms. Agents build shared expectations via institutions such as camps, barracks, active fronts, and repeated collaboration. In exchange for maintenance, leaders in this quadrant often expect to be able to dictate the comportment of their fighters inside and outside of battle, have a monopoly on the fighting time and violent output of their fighters (if not always the off-time) and generally expect that agents' time and effort will be dedicated to advancing the interests of the group. The attitude was captured by a militant who described a Afghan militant group with a staffer model of operations as having the perspective that: “If we sent you, you are ours; you represent us and should follow

⁵See Lidow 2016 on the managerial utility of speculative remuneration within militant groups.

our position, and you should work with our instructions” (Hamid and Farrall 2015, p. 127).

While command and control structures vary in the degree of centralization and formality, principals in this quadrant develop agents whom they select, train, socialize, and maintain to whatever extent they are able. Many groups that use the “staffer” model of engagement maintain specific infrastructure (such as camps or barracks) to house their fighters at a remove from other influences and in which they fill downtime with attempts at socialization (*e.g.* Green 2017). They often have detailed and formal internal processes, such as regular skills training and salary scales, as well as mechanisms for funds transfers (*e.g.* Lidow 2016). The Islamic State of Iraq and al-Sham (ISIS) at its most expansive is emblematic of a tightly-organized top-down organization. At their most organized, the group provided housing, training, and salaries. In return, ISIS expected their fighters to follow orders, adhere to daily schedules, and comply with internal transfers and leave policies (Mironova 2019; Weiss and Hassan 2016). The Provisional Irish Republican Army (PIRA) is another closely studied example of a militant group that relied on the staffer model of organization, developing and maintaining a vertically-integrated and specialized logistical infrastructure as well as systems of command and control that followed full and part-time fighters inside and outside of prisons (Dingley 2012; Horgan and Taylor 1997; Gill and Horgan 2013; White 2017).

As vignettes for the remaining quadrants indicate, many militants reject this exchange and participate in conflicts via more temporary, ad-hoc, and contractual arrangements.

Freelancers

Agents in the second quadrant of Figure 1—the “freelancers”—partner with principals based on relational contracts in which they are compensated speculatively, receiving the bulk of their funding after successes. Freelance agreements between principals and agents are likely to be generated through interpersonal connections because the combination of relational contract and speculative payment is risky for all parties. For a freelance-style contract to be

viable, the principal and agent must share not only objectives but also a mutual understanding of the tasks required for success. The principal and agent must maintain sufficient trust to overcome the temptation to shirk or renege during the alliance. As with non-militant freelancers, freelance insurgents are subject to considerable precarity. Operations may fail, not yield the expected riches, or the principal may simply decide not to pay up. Moreover, freelancers forgo the benefits of membership in a larger organization, such as shared equipment, training, and maintenance decoupled from recent military successes. As the vignettes suggest, the open-endedness of this practice lends itself to ad-hoc, short-term, recurring alliances, producing a fragmented militant landscape.

Principals seek out freelance units to augment their capabilities and resources. Because freelancers are paid speculatively, principals reduce their exposure to the risk of expanding their capabilities. Within the boundaries of their ideological preferences (and constrained by preferred or historical associations), they continuously negotiate when, where, and with whom they fight. Unlike mercenaries, freelancer groups featured in the cases and Appendix are often deeply committed to a specific social or political objective and frequently maintain long-standing relationships with preferred principals.

There are several pathways through which such freelance groups arise. They may have split from a larger group, been unable to negotiate their integration into an umbrella organization, be uninterested in committing to chains of command, or have decided that they are best served by striking out on their own. Militants have described their motivation for forgoing the stability and resources of an established organization. Common rationales include seeking distance from the reputation and activities of a dominant organization or not wanting to be accountable to a chain of command. An alleged foreign fighter in Syria referenced the first motivation, writing that affiliation with a large and formalized group such as the Nusra Front or ISIS would “...make you responsible for what the rest of the group does” (Abu Fulan al-Muhajir 2014). Participants in freelance units sometimes describe not wanting to be limited by the disciplinary processes or internal politics of larger and more established

groups. For example, in his memoir of the transnational jihadi movement during the 1990s, an American foreign fighter recounted quitting a well-organized and well-provisioned training camp in Chechnya run by the Saudi jihadi commander Samir Saleh Abdullah—better known as Ibn Khattab—in favor of joining a band of unaffiliated and unsupported fighters known as “wanderers.” The American depicted himself as bored by the pace of training and deployment and frustrated with the expectation that he follow orders (Collins 2003).

The presence of freelance brigades may make a conflict more conducive to takeover by a single shared ideology because contracting between floating brigades is intensely relational. With significant opportunities to shirk, both sides must overcome the temptation to hold back their effort and allow other combatants to absorb the brunt of any casualties. Shared ideology can create interactions that build trust and personal relationships that can reduce the expectation of shirking and serve as a shorthand for trustworthiness (Ahmad 2017).

Contractors

The third quadrant constitutes agents who are engaged in a transactional relationship and are remunerated via ongoing or piece-rate payments. The combination of an explicitly defined relationship and payment upfront implies that engagements in this quadrant take the form of concrete deliverables. Militants in this quadrant are engaged based on an explicit expectation of their contribution, such as the production of explosives or the provision of advanced training. Descriptions of militants that fit the “contractor” pattern suggest that the sector tends to encompass technical specialists engaged by multiple principals. By serving more than one group or faction on their side, contractors can have downstream effects by elevating and standardizing the technical underpinnings of a conflict. Thus, the activity of contractor-type agents may rapidly magnify the impact of technologically-challenging or difficult tactics. Contractor-type agents are also well-positioned to internationalize strategic and technological developments.

Contractor specialists can have important effects on the conflict environment. When independent workshops produce a complicated and risky product, finances, connections, reputation, and desire are the limiting factors on access, not having in-house access to the technical skills. Likewise, independent military trainers can disseminate sophisticated tactical skills widely within and across conflicts. However, scalability also has advantages for counterinsurgents: removing a contractor can limit the capabilities of many groups.

When contracting for specialized skills is widespread, the risk of disruption increases in specialization; the more highly skilled an agent is, the more the group benefits from economies of scale and access that an informal labor market provides. At the same time, with a few contractors servicing multiple principals, the entire network is vulnerable to disruption. Indeed, this characteristic vulnerability was central to the American counterinsurgency effort to find and disrupt IED workshops (Hashim 2011). However, the intractability of IEDs in the region underscores the utility of such a decentralized system.

The creation and assembly of improvised explosive devices demonstrates the effects of contractor-style labor markets. In Iraq, the cell-like organization of independent explosives manufacturers became one of the signatures of the conflict, rapidly raising the overall technical sophistication of the insurgency (Grant 2013; Wilson 2007; Hashim 2011; Weiss and Hassan 2016). The rise of contracted militancy even generated one of the most emblematic genres of insurgent media: IED makers would record and distribute videos of their operations to advertise their technical proficiency and announce their availability for hire. These videos would then circulate and be remixed into motivational videos for the insurgency. As well, because insurgents could contract out production and delivery, they did not need to maintain specialized logistics networks and internal capabilities. The contractor IED model worked so well that it was eventually replicated in a market for sniper operations (Grant 2009). The consequences continue to be felt regionally: mines hidden in private and public areas throughout former ISIS territories were designed using techniques standardized by IED manufacturers active in the Iraq IED marketplace. These mines are particularly long-lasting and

difficult to find and remove (Anfinson and Al-Dayel 2020; Wilson 2007).

Independent trainers are another notable example of contractor-style engagements. Independent training camps have been recorded in two deeply factionalized, deeply internationalized, conflicts: Afghanistan in the 1980s and the Syrian Civil War.⁶ In both cases, the appeal of these independent camps was that fighters could obtain basic and specialized training without incurring obligations to a particular group or leader. Leaders send their forces to gain additional specialization or recruit already-trained fighters.

For example, the Khaldan and Sadda camps in Afghanistan explicitly served this purpose during the late 1980s. In his memoir of the Afghan jihad, Mustafa Hamid noted the role of independent camps in preparing fighters. He recalled a jihadi commander, “Abu Harith,” who was reported to only accept potential fighters “who had already trained, usually at Sadda and then later at Khaldan when Sadda closed, because these were the only places where independent training outside of an organisation was conducted” (Hamid and Farrall 2015, p. 130). As a high-profile independent camp serving the mixing pot of dissident Arab jihadis in Afghanistan in the 1980s, the Khaldan camp also reflects the magnifying effect that independent contractors and trainers can have. Khaldan trained aspiring militants from around the world, many of whom subsequently returned and used their training to instigate local conflicts (Hamid and Farrall 2015; Hamming 2019).

Contingents

The fourth quadrant of Figure 1 comprises militants who are paid speculatively for specifically-delineated operations. These agents operate in a “contingent” model: they receive payment for specific actions commissioned by a principal. Unlike the “contractors,” agents in this quadrant are paid after completing their operation(s). The post-hoc compensation structure means that the agent needs to demonstrate responsibility and a successful outcome. This

⁶Although the sources of financing are obscure in both contexts, camp administrators are reported to have augmented funds from local contracts with donations from international supporters.

quadrant is thus conducive to straightforward operations with specific and unambiguous outcomes. The contingent quadrant is a broad category: militant groups engage in a wide range of piece-rate payment for activities carried out by community members who are broadly supportive of the principal but not otherwise affiliated with it. These militants are akin to temporary workers dispatched for specific tasks and then paid upon their completion. However, instead of delivering groceries or takeout, contingent militants set off explosives, fire rockets, assassinate targets, and relay information to the principal. These activities share a transactional format. The desired actions can be clearly specified, and the agent can furnish proof of authorship and success.

The contingent quadrant encompasses a range of principal groups extending their capabilities by paying for both combatant and non-combatant operations. Principals can use contingent fighters to cultivate the impression of greater reach and ubiquity than they actually maintain. For example, during the American occupation of Iraq, insurgents employed large numbers of contingent fighters to extend their military reach while also shielding their own leaders from counterinsurgency operations (Oppel 2004). Likewise, in 2013, local Taliban leaders in Kandahar Province delegated IED emplacement to underemployed youth, who would earn commissions for planting explosives. One observer of the Taliban in Afghanistan described contingent dynamics, writing:

Locals in Panjwai claim the Taliban have also turned to subcontracting, so far a trademark of the coalition side of the war. The insurgents supply the explosives, they say, but unemployed youth plant them for cash. If they blow up an Afghan police vehicle, they get anything between 10,000 and 20,000 Pakistani rupees (\$100-\$200). If they blow up a coalition vehicle, the reward is as high as 100,000 Pakistani rupees (Mashal 2013).

Militant groups can develop and retain capacity to compel in areas outside their direct control by delegating to contingent militants. This use of contingent personnel is demonstrated

by the Shabaab al-Mujahideen. Even at the nadir of their territorial control, the Somali militant group was able to gather intelligence and maintain an operational reach into government strongholds because “cooks, soldiers, car mechanics, cleaners, civil servants, and street children can all be the eyes and ears of Al Shabaab [...] some work on a ‘pay as you go’ basis, passing on information, throwing a grenade or planting an explosive device in exchange for a small sum” (Harper 2019, p. 19).

Contingent subcontracting by militant groups can even become a tool of great power conflicts: in 2020, reports emerged that Russia had provided the financial backing for the Afghan Taliban to pay bounties for the assassination of prominent targets, including ones targeting American and British soldiers (Mashal et al. 2020).

Informal Militant Hiring in Practice: Afghanistan, Iraq, and Syria

The following section traces the operation and impact of informal militant hiring practices in three conflict venues: during the operation of the Afghan Taliban before the August 2020 American withdrawal from Afghanistan, among the Sunni Iraqi insurgency during the American occupation of Iraq from 2003-2011, and among Sunni Syrian militant groups during the early years of the Syrian Civil War, which began in 2011. The sections trace documentation of each of the forms of militant outsourcing identified above, emphasizing how the operation influenced the trajectory of conflict dynamics.

Research Design and Limitations

The following cases illustrate the central theoretical assertion of this manuscript, namely that the four categories of militant outsourcing presented above represent an important conflict pathway with the potential for lasting, but underexplored, repercussions in both conflict and post-conflict settings. These cases are ideographic, in that they describe militant

subcontracting in a series of positive cases and identify probable consequences of these hiring practices during the conflict and post-conflict processes (Levy 2008).

To provide an overall assessment of the presence of militant subcontracting of violence during civil conflict, the Appendix presents details of possible alternative cases identified via a search of public scholarly journals, news reporting, and practitioner databases. Using a conservative series of search terms, the selection process identified more than two dozen potential cases from January 2000 through January 2023.

An ideal comprehensive research design would permit the selection of cases with and without delegation, to control for possible confounders. However, ideal research designs are often unattainable in the context of the micro-dynamics of human resource management by sub-state violent actors. First, as the previous sections have argued, the militant subcontracting is important but has been largely overlooked. In the absence of accessible data documenting all forms of employment in a given conflict, researchers are left relying on what observers and militants themselves have documented. We can expect this to underreport the true prevalence of militant outsourcing and to overrepresent conflicts with a high degree of international interest, press access, and social media engagement. Indeed, two of the three cases outlined below—the Iraq Insurgency and the Syrian Civil War—are exactly the type of conflict that we would expect to be over-represented. Secondly, the American Military involvement in Afghanistan and Iraq heighten the geopolitical importance, interest, and accessibility of information about the dynamics of these conflicts. However, the specific contexts of these conflicts—notably Islamist-affiliated counterinsurgencies—reduce the ability to pose general conclusions about the prevalence and consequences of militant outsourcing across all conflicts and contexts. For these reasons, additional research is needed to establish the scope conditions and consequences of militant outsourcing generally.

Subcontracting by the Afghan Taliban

Gig-economy style subcontracting has shaped civil conflict in Afghanistan by facilitating the Taliban’s expansion into new fronts and allowing them to extend their reach even in strongholds. As the Taliban regrouped and reorganized after 2001, they used subcontracted violence to destabilize target provinces and create an opportunity for the Taliban to launch intimidation campaigns and recruitment drives (Giustozzi 2019; Savage et al. 2020). A former member of the provincial council, drawing on his knowledge and family connections, characterized the marketplace for freelance fighting units as constituting piece rate organizational structures. Speaking to *The New York Times*, the former council member noted: “They [the Taliban] agree with these criminals that they won’t have [a] monthly salary, but they will get paid for the work they do when the Taliban need them” (Savage et al. 2020).

Delegating to officially-independent agents permits groups to distance themselves from contentious, controversial, or inconvenient facets of their operations. The Taliban’s relationship with foreign fighters in Afghanistan is a case in point. During negotiations, the Taliban has claimed not to have any foreign fighters in their ranks, a sticking point for reaching a settlement agreement with the United States. Despite these claims, reporters have verified the presence of foreigners in Afghanistan fighting alongside the Taliban but remaining officially autonomous (Ali 2018; Marty 2020). Although the inconsistency may be dissimulation, hosting foreign militants alongside, but technically separate from, their official hierarchy has allowed the Afghan Taliban to benefit from the personnel while also satisfying internal and external pressure to avoid the baggage of foreign fighters.

The Afghan Taliban case illustrates how combining formally-affiliated fighters with contingent militants-for-hire, occasional freelance foreign brigades, and even independent bounty hunters can help an insurgent group expand their influence and increase their ability to respond to strategic developments. Moreover, the case shows that subcontracting and informal

hiring processes are not exclusive to fragmented multiparty conflicts.⁷ The dominant non-state military in Afghanistan, the Afghan Taliban has used extensive networks of contingent, freelance, and part-time fighters to increase resilience and flexibility (Mashal 2020; Mashal et al. 2020; McKiernan 2008; Linschoten 2016).⁸

After being driven from Kabul in 2001, the group regrouped as a polycentric insurgency with both parallel and competing command and control structures and has sought to broaden their social and political constituency from their traditional Pashtun strongholds (Giustozzi 2019). In rebuilding ground-level control, the Taliban focused on recruiting fighters and commanders from non-Pashtun communities.⁹ In effect, the Taliban delegated recruitment decisions and day-to-day operational control to local commanders who were subject to fiscal oversight (Ali 2017; Giustozzi 2019; Jackson and Amiri 2019; Mashal 2020; Stenersen 2010). This decentralized structure is conducive to local commanders turning to freelance brigades and contingent fighters because these forces require fewer financial outlays to sustain and are well-positioned to take advantage of a need for sporadic operations. Indeed, subcontracted fighters are often associated with local commanders (Mashal et al. 2020; Mashal 2020). For example, in the northern provinces, regional commanders extend their capabilities by engaging “small pockets of opportunistic Uzbek commanders, who were loyal to no particular group, until and as long as sustainable financial resources were channeled into their pockets...[they] label themselves as fighters of the insurgency in order to access financial

⁷This section uses both the precise “Afghan Taliban” and colloquial “Taliban” to refer to the Afghanistan-based Islamic political and insurgent movement.

⁸In over two and a half decades of war, the group has systematically eliminated rivals for local and national governance. For example, between their emergence in 1994 and 2001, the Afghan Taliban fought the Tajik-led Northern Alliance for position as the dominant rebel movement in Afghanistan. More recently, the group has conflicted with the Islamic State’s regional branch, the Islamic State of Khorasan. Historically, the Taliban has tolerated armed criminal networks and small ideologically similar groups that claim to have no interest in governing Afghanistan, periodically using both types of actors to extend their capabilities. The trajectory of the Islamic Movement of Uzbekistan (IMU) illustrates the extent and limits of the Afghan Taliban’s tolerance: the Central Asian militant group remained active in Afghanistan for years, heavily involved in the drug trade and sometimes allying with the Taliban. However, in 2015, the IMU switched allegiance from al-Qaeda and the Taliban to the Islamic State. In response, the Taliban eradicated all but a small fraction of the IMU’s fighters, who subsequently re-aligned with the Taliban.

⁹See, for example, Ali 2017 on the Taliban’s post-2001 expansion in Tajik-dominant areas that historically supported the Northern Alliance.

resources” (Ali 2017).

Contractors

Reports from Afghanistan describe how the Afghan Taliban’s improvised explosive device infrastructure relies on a combination of in-house and contracted labor. In explaining the motivation for targeting the IED-creation infrastructure, a spokesperson for the NATO-led ISAF mission in Afghanistan described the hybrid in-house and external structure of IED manufacturing:

Some, but not all, personnel in the [IED] networks are aligned with the insurgency. There are financiers who pay for materials...smugglers, many of whom are part of broader criminal syndicates, who ferry bomb materials over the border; planners who pick targets and locations to deploy IEDs; and builders who turn the raw materials into bombs to carry out the planners’ goals. Below them are low-level insurgents and hired help who carry out the more dangerous tasks of emplacing and triggering IEDs, often for small amounts of money or under coercion by higher-level insurgents (Millham 2011).

Freelancers

The Taliban is reported to form ad-hoc alliances with other violent groups. In particular, the Taliban periodically fights alongside otherwise self-organized units of foreign—often Central Asian— fighters.¹⁰

For example, Central Asian militants have recounted their experiences fighting alongside the Taliban, referencing the details of their arrangements. Speaking to the Kavkaz Center, an alleged military leader with the Islamic Jihad Union (IJU) reported in 2014 that the group sometimes worked in conjunction with the Taliban and are remunerated when they do so. The militant described a relationship very close to the freelance typology, with the IJU

¹⁰Conversely, the Pakistani and Punjabi Taliban tend to form ad-hoc and subcontracted relationships with militant and criminal groups operating in their regions, and are even available to be hired out as freelance militants (Abbas 2009).

generally financially and operationally separate but periodically collaborating for specific operations. Notably, unlike what one would expect from a patron-client relationship with a significant power differential, the militant claimed that the IJU maintained sufficient autonomy to reject Taliban requests for personnel and were compensated for the appliances, with the militant adding: “When we plan for a joint operation sometimes the Emirate provides us with ammunition, shelter and food” (Ali 2018).

Contingent

The Afghan Taliban’s use of contingent fighters underscores the degree to which these fighters complicate peace-building. On the one hand, there are fewer Taliban fighters, reducing the post-conflict reintegration challenge. On the other hand, existing research has focused on post-conflict assimilation of full- and part-time fighters; the dynamics surrounding freelancers may be different. In particular, if post-conflict development projects may overlook this population of fighters, they may find it tempting to transfer their experience into criminal networks. The case also highlights how the gig economy insurgency framework can augment analysis of the Afghan Taliban’s delegation and outsourcing strategies.

The detailed, although anecdotal and non-systematic, reporting of how the Taliban has subcontracted violence to a freelance, contingent, and contractor labor force underscores a drawback of these practices. Subcontracting violence produces a trail of middlemen and financial flows that can illuminate the group’s coordination and logistics. Yet, the core advantage of hiring outsiders remains: the group itself is largely insulated from the communications revelations.

For three of the four models of employment, hiring groups are able to take advantage of the “on-demand” nature of gig-economy employment. As with many on-demand employers, this allows the group to be able to quickly scale up their capacity without needing to maintain and train personnel at the upper limit of their operations. Thus as with non-violent employers, militant groups can benefit from flexible labor. Commissioned operations and speculative

payment arrangements particularly appeal to local commanders who must retain the capacity for violence while also being mindful of their financial oversight. When commanders only pay for successes, they avoid the ongoing expense of maintaining forces.

Iraq: Contingents and Contractors

The Sunni insurgency in Iraq is another conflict in which informal hiring practices contributed to signature dynamics of the conflict. Between 2003 and 2011, one of the most distinctive features was the operation of a marketplace to commission improvised explosive devices. This had the effect of democratizing explosives skills throughout the insurgency: with independent explosives workshops and freelance expert emplacements, militant access to potent tools became dependent on cash and contacts, rather than in-house skills.

The labor market for improvised explosive devices in American-occupied Iraq combined elements of the “contractor” and “contingent” hiring models. After 2003, IEDs were widely used by the Sunni insurgency, causing widespread and demoralizing damage to both occupation forces and Iraqi civilians. As the conflict progressed, the United States invested enormous resources in countering IEDs, with mixed successes. In parallel with attempts to generate a technological solution, observers documented the distinctive labor market that generated so many IED operations and attacks. Reporting from embedded journalists indicated a distinctive marketplace, with specialized IED workshops operating independently of militant groups. In order to establish themselves and their credentials for effective bomb making, IED makers recorded operations, which were disseminated on insurgent and jihadi websites. These videos documented the cell’s technical sophistication and proficiency, and advertised their availability to be hired to produce more IED operations. Commissioned IED attacks reportedly ranged from \$300-\$1,000 USD per attack (Grant 2013; Wilson 2007; Hashim 2011; Weiss and Hassan 2016).

IED manufacturing cells also subcontracted to emplacements and triggermen. As with the IED

workshops, emplacements and triggermen tended not to have any specific organizational affiliation, but were hired for the specific operation. The emplacements—the most difficult to replicate technical position—placed the IED in a specific location at a designated time. The second agent in the team, the triggerman, waited for a target and detonated the IED. In the mid-aughts, the rate for an IED operation was reported to be about \$50 USD, going up to about \$200 USD as American counterinsurgency efforts to disrupt the IED marketplace made the operations more dangerous (Grant 2013).

The effect of these independent IED makers was to disseminate insurgent access to sophisticated explosives constructed with knowledge that was not believed to be widespread in Iraq at the start of the American occupation (Grant 2013). Because insurgents could contract out production and delivery, they did not need to maintain specialized IED storage and logistics networks, nor did they need to develop internal capabilities. Indeed, the contractor IED model worked so well that it was eventually replicated in a market for sniper operations. As with the marketplace for IED operations, advances in communication technology empowered the marketplace, with mobile phone videos used to advertise services that could be commissioned for \$5,000 USD (Grant 2009).

The standardization of knowledge and technical sophistication had long-running consequences. For example, years after the end of the American occupation in Iraq and after the locus of regional conflict had shifted from Iraq to Syria and then to the Iraqi-Syrian border, ISIS weaponized the regional reserves of specialized IED crafting knowledge to heavily mine their retreat. Mines hidden in private and public areas throughout former ISIS territories were designed to be particularly long-lasting and difficult to find and remove, using techniques standardized by IED manufacturers active in the Iraq IED marketplace (Anfinson and Al-Dayel 2020; Wilson 2007).

Syrian Civil War: Freelancers

The Syrian Civil War case traces how freelance brigades can allow principals to rapidly respond to the needs of different offensives and battles by assembling cadres of freelancers who have desired assets. However, it also suggests that reliance on delegation and speculative compensation can change incentives, pushing both agents and principals to seek lootable spoils with which to compensate freelancers. The case traces how the proliferation of freelance brigades contributed to turbulence at the start of the conflict, and was met by a gradual consolidation of the staffer model of labor organization.

The early fragmentation and rise of freelance militancy in Syria suggests that freelance brigades are likely to be more common when there is external funding, and particularly when the funding is allocated on a peer-to-peer level. For example, the initial years of the Syrian Civil War were characterized by an extreme level of independent brigades forming ad-hoc alliances as well as widespread decentralization of funding. Because the Free Syrian Army (FSA) was unable to consolidate centralized control of funding and supplies, mid-level battalion and squad commanders became responsible for their logistics and frequently struck out on their own (*e.g.* Abdul-Ahad 2013). Social media allowed brigade commanders to directly solicit and receive funding, often by creating promotional videos. From the brigade commander perspective, this was appealing because by operating independently, they could keep control of spoils and generate funding for salaries and supplies through the videos. Eventually, as described by Abdul-Ahad 2013 and others, jihadi supporters became one of the dominant sources of funds, accelerating a jihadi takeover of the Sunni insurgency.

The freelancer incentive to choose engagements based on potential spoils rather than strategic value was memorably recorded in a 2013 dispatch from Syria that depicted a resistance that had already fragmented into networks of “itinerant fighting groups” that coordinated on a per-battle arrangement and sustained their members with a combination of outside financing and post-battle loot (Abdul-Ahad 2013). In one vignette from the dispatch, a freelancer

group abandoned their hillside post outside of Aleppo for richer “work:”

“In the cramped living room of a run-down flat near the Aleppo frontline, two Syrian rebels sat opposite each other. The one on the left was stout, broad-shouldered, with a neat beard that looked as though it had been outlined in sharp pencil around his throat and cheeks. His shirt and trousers were immaculately pressed and he wore brand-new military webbing – the expensive Turkish kind, not the Syrian knock-off. The rebel sitting opposite him was younger, gaunt and tired-looking. His hands were filthy and his trousers caked in mud and diesel...‘I am taking my cousins away from the front,’ the stout man finally said. ‘Why?’ the young rebel whined,‘[...]Did we do anything wrong? Didn’t we feed them properly? Didn’t they get their daily rations? Whatever ammunition we get we divide equally: tell me what we did wrong.’

‘No, no, nothing wrong – but you seem not to have any work here.’ ‘But this is an important defensive position,’ the young rebel pleaded. ‘All of Aleppo depends on this hill. If you go, two frontline posts will be left empty. They’ll be able to skirt around us.’ ‘I’m sure you’ll take care of it. Allah bless your men, they’re very good.’ ‘Where will you go?’ ‘A very good man, a seeker of good deeds – he is from our town but he lives in the Gulf – told me he would fund my new battalion. He says he will pay for our ammunition and we get to keep all the spoils of the fighting. We just have to supply him with videos’”(Abdul-Ahad 2013).

As the war continued, freelancer-style human resourcing picked up. Memoirs from purported fighters illuminated the dynamics of freelance militancy. Contemporary sources described so-called “independent” brigades who entered temporary fighting alliances in exchange for the promise of material reward after successful operations. These freelance alliances could be extremely informal and were reportedly held together by relationships and reputations

among and between the fighters. For example, one Chechen fighter characterized fighting alongside, but not with, the Jabhat al-Nusra militant group as “helping out” (Paraszczuk 2014a).¹¹

Beginning in 2011 as an Arab Spring-inspired uprising to overthrow the regime of Bashar al-Assad, the war progressed as a grinding, multi-sided, and internationalized civil war defined by foreign involvement and a complex and often-fratricidal resistance.

Members of armed groups that follow the freelancer pattern describe receiving maintenance from their groups, although even their own promotional material suggests that these resources are intermittent. Moreover, the discussions of freelancer engagements featured in this section draw from informal recruitment texts in which militants have a clear incentive to downplay any material hardship.

A second account described similar motivations, including desire for autonomy from command oversight, intention to stay out of factional infighting, and an oblique reference to the Islamic State’s reputation for expending the lives of their fighters for little strategic gain, writing: “one is [...] safer when he’s independent. wherever the oppressed calls for help we go and we keep away from the infighting...be with Allah and his prophet pbuh [peace be upon him] and follow the scholars and matters of akhira [the afterlife] One has to be careful...we are in a jamaa [group, unit] of Muslims alhamdulillah [praise be to God]. no tasob [glorification] for groups” (Dread Muslim 2015).

Writing under the name “Abu Fulan al-Muhajir,” a Twitter user claiming to be a foreign fighter in Syria recounted his experiences in a so-called “independent” freelance brigade.¹²

¹¹Readers might be concerned that there is a strategic incentive for fighters to downplay their affiliation with certain groups based on whether the group has been designated as a terror group. In this case, a Chechen fighter writing in Russian would be most likely to be worried about future interactions with Russian security forces, who might not be expected to draw subtle distinctions around which Sunni resistance groups in Syria are jihadi, jihadi-adjacent, or merely Islamist.

¹²In 2014, “Abu Fulan al-Muhajir” was one of the most high-profile of the foreign fighters active on social media. He shared updates of his experiences in Syria and dispensed advice for potential fighters through Twitter, Ask.fm, Reddit, and Wordpress. He was frequently featured in media coverage of the influx and activities of foreign fighters in the Syrian conflict.

He described the relationship-based and speculative nature of a freelancer brigade writing in an interactive Q&A platform in 2014. When asked if his group was part of ISIS, he claimed to be “with an independent group. we aren’t part of isis [sic] but we work with most groups here.” In a followup question, a questioner asked “if you are with an unrelated group, how do you [sic] coordinate battles? Sounds unorganized.” In the answer, “Abu Fulan” indicated that his brigade leveraged their relationships with other fighting groups, first underscoring that being “independent” did not imply being “unrelated” from other fighting units, and that his unit maintained connections with many other fighting groups. He added: “we are not unrelated. we maybe the most relations to other groups [sic]. we fight alongside most groups, but we are independent.” In another answer, “Abu Fulan” described the salary structure of an independent brigade. Asked “brother, do the Mujahideen get some sort of pay as in wages, or money comes in via Ghaneemah [spoils]?”¹³. In response, “Abu Fulan” described the operation of different compensation structures in different groups and brigades, but that his own unit followed a speculative financing model: “[we receive] No wages. Some fsa fighters get wages...but alhamdulillah [Praise be to God] we got nothing at all and don’t want anything. What we get as ghaneema etc is from Allah.” He made a similar point in response to second question asking about salaries and wages. Asked, “Do you get paid at all? How do you buy what you need?” Abu Fulan claimed that the fighters in his groups “don’t get paid. our food etc is paid from baytul mal [centralized coffers]. occasionally we get ghaneema too.” In his online page, Abu Fulan also reported that in addition to seized spoils, the resources of his group were augmented by donations from “Muslims all over the world” (Abu Fulan al-Muhajir 2014).

¹³The quote has been lightly edited to fix formatting issues. The original quote is available upon request.

Downstream Consequences and Conclusion

Subcontracting violence to the informal labor market produces many benefits for militant groups. As in many labor markets, ad-hoc and short-term hiring arrangements increase operational flexibility and allow principals to better manage their slack. Freelancer, contractor, and contingent employment models serve as a force multiplier. The informal labor market allows militant groups to minimize the risk of investing in skills and personnel that become obsolete or unusable. As well, it allows groups to benefit from rare skills, such as high-end explosives design.

At the same time, the cases suggest several drawbacks. Counterintuitively, conflicts with extensive militant subcontracting suggest that the flexibility and fluidity of militant group contractors produce incentive structures that diminish the influence of principals. The following section highlights two implications, focusing on control and incentives for principals to under-resource.

The cases suggest that freelancer-heavy conflicts are less susceptible to disruption because the battlefield is less consolidated, but maintaining ad-hoc freelancer coalitions presents a non-trivial challenge. Accounts from heavily freelanced conflicts portray militant leaders desperately scrambling to negotiate and re-negotiate the agreements that assemble the personnel they need for operations (see Abdul-Ahad 2013; Heller 2016; Paraszczuk 2019a for vivid descriptions of this dynamic). The resulting fluidity and fragmentation undermine insurgent coherence and effectiveness (O'Bagy 2013; Levinson 2012).

One consequence of a robust freelancer militant labor market may be a weakening of principals' ability to channel the conflict in unpopular but strategically important directions. This dynamic was alluded to in messaging from independent jihadi brigades in the Syrian Civil War. One consistent theme highlighted by recruiters was that joining the independent groups allowed prospective fighters to avoid unpopular campaigns initiated by the major groups. Independent units could be particularly appealing during periods of infighting among larger

factions. In these periods, jihadi groups looking to attract foreign fighters would emphasize their independence and promise not to participate in fratricidal violence. This dynamic suggests that reclaiming the ability to direct strategy rather than remain subject to the preferences of the local freelance labor market may partially explain the Sunni insurgency's recurring consolidation efforts in 2018, 2019, and 2020 (Ajjoub 2020; Heller 2017; Lister 2017; Lister 2020).

A compensation structure based on loot has a distorting effect on conflicts. The promise and consequence of conflict subcontracting is that commanders can augment their capacity by promising access to future spoils. However, the funding model incentivizes both the agent and the principal to undermine their battlefield effectiveness. When deciding between campaigns, the agent's incentive is to choose based on the potential for loot rather than on the strategic value of the operations. This incentive was memorably recorded by Abdul-Ahad 2013's description of the collapsing defense around Aleppo, with brigades abandoning important but meager fronts for sites with richer loot potential.

Likewise, the principal is incentivized to underresource by seeking out too few agents so that they have fewer groups to share with at the end. However, under-resourcing makes operations more dangerous for the principal's forces, which seeds resentment about poor leadership that can tear a group apart. The start of the Syrian conflict featured principals and agents acting according to these incentives (*e.g.* Baylouny and Mullins 2018). For example, disillusioned Chechen fighters in Syria cited the under-staffing of specialized contractors and freelancers as evidence of the poor leadership skills of their then-commander. According to one, an independent faction of the FSA offered tanks for an attack against a regime airbase in exchange for access to spoils after the offensive. The fighter accused the commander of rejecting the FSA so that he would not have to share the loot, thereby ensuring that he would lose many more of his own fighters than necessary (Paraszczuk 2014b). According to the interview, negotiating the use of personnel and equipment in exchange for a cut of spoils was considered a straightforward, even commonsense, way to temporarily augment capacity.

Finally, delegating to contingent fighters diminishes a principal's ability to screen and control their agents, which can lead to an escalation of violence and concurrent reduction in strategic focus. Research consistently shows that selection and screening of personnel are key determinants for whether militant leaders will attain their strategic and political goals (Forney 2015; Hegghammer 2013b; Hoover Green 2016; Weinstein 2005). Additionally, degrading command and control structures can increase violence as militant fighters often want more violence than do their principals (Abrahms and Potter 2015; Byman and Kreps 2010; Heger, Jung, and Wong 2012; Rigterink 2020). Fragmentation of control may also make it more challenging to end the conflict because rebel leaders speak for fewer conflict actors. In this case, delegation and subcontracting may increase the number of veto players who extend the conflict (Cunningham 2006; Findley and Rudloff 2012). Forgoing control means fewer opportunities for principals to direct the trajectory of the conflict.

In theory, delegation should generate levers of influence, as the potential for repeated interactions should encourage agents to demonstrate reliability and faithfulness to the principal. Similarly, a displeased principal should simply blacklist the agent from future contracts (Salehyan 2010; Siqueira and Sandler 2010). However, vignettes—particularly from the Iraq case—suggest that groups often engage contingent agents by identifying general categories of operations, such as IED emplacements, that they would like to commission, leaving the details up to agents. When principals leave tactical details to the discretion of agents and other rank-and-file fighters, the agents are likely to conduct operations to advance their own interests (Balcells 2017; Kalyvas 2006). These interests may or may not align with the principal's own agenda and preferences for the direction of a conflict. Similarly, delegation economizes group outlay by reducing the need to maintain forces levels. However, maintaining forces is another vector through which militant groups can exert control over the conflict's trajectory. When they subcontract operations out and engage in speculative alliances, principals cede their ability to shape combatants' downtime and attention.

This manuscript has argued that delegation of conflict activities via informal "gig economy"

hiring practices is an underappreciated feature of many conflict zones. This manuscript developed an inductive typology of styles of temporary and subcontracted conflict employment styles evident in a number of well-studied contemporary insurgencies. The manuscript suggested characteristic downstream outcomes to incentive structures and relational dynamics of conflict actors that should be linked to the four underlying categories identified by the typology. We hope that the introduction of a typology of informal militant labor market practices will encourage scholars to collect systematic comparative data that allow for comparisons according to the downstream incentives produced by different combinations of relational and compensation dimensions. Collecting additional data can help to clarify the environment and frequency of each type of engagement and to further explore the association between informal militant engagement and conflict dynamics, duration, and outcomes.

References

- Abbas, Hassan (2009). “Defining the Punjabi Taliban Network”. In: *TC Sentinel* 2.4, pp. 1–4.
- Abdul-Ahad, Ghaith (2013). “How to start a battalion (in five easy lessons)”. In: *London Review of Books* 35.4, pp. 13–14.
- Abrahms, Max and Philip BK Potter (2015). “Explaining terrorism: Leadership deficits and militant group tactics”. In: *International Organization* 69.2, pp. 311–342.
- Abu Fulan al-Muhajir (2014). “Abu Fulan al-Muhajir @Fulan2weet”. In: *Archived on April 3, 2014 from ask.fm/Fulan2weet*.
- Abu Hamza al-Erhabi (2014). “Abu Hamza al-Erhabi @Anonymousenok”. In: *Archived on March 27, 2014 from twitter.com/anonymousenok*.
- Achvarina, Vera and Simon F Reich (2006). “No place to hide: Refugees, displaced persons, and the recruitment of child soldiers”. In: *International Security* 31.1, pp. 127–164.
- Ahmad, Aisha (2017). *Jihad & Co.: black markets and Islamist power*. Oxford University Press.
- Ajjoub, Orwa (2020). “HTS and al-Qaeda in Syria: Reconciling the irreconcilable”. In: *Middle East Institute*.
- Ali, Obaid (2017). “Non-Pashtun Taleban of the North (4): A case study from Jawzjan”. In: – (2018). “New Confusion About ISKP: A case study from Sar-e Pul”. In:
- Anfinson, Aaron and Nadia Al-Dayel (2020). “Landmines and Improvised Explosive Devices: The Lingering Terror of the Islamic State”. In: *Studies in Conflict & Terrorism*, pp. 1–21.
- Another Muhaajir (2014). “Another @AnotherMuhaajir123”. In: *Archived May 2014 from ask.fm/anothermuhaajir123*.
- Arjona, Ana M and Stathis N Kalyvas (2012). “Recruitment into armed groups in Colombia: A survey of demobilized fighters”. In: *Understanding collective political violence*. Springer, pp. 143–171.

- Asal, Victor, H Brinton Milward, and Eric W Schoon (2015). “When terrorists go bad: Analyzing terrorist organizations’ involvement in drug smuggling”. In: *International Studies Quarterly* 59.1, pp. 112–123.
- Bahney, Benjamin W et al. (2013). “Insurgent compensation: Evidence from Iraq”. In: *American Economic Review* 103.3, pp. 518–22.
- Baker, George, Robert Gibbons, and Kevin J Murphy (2002). “Relational Contracts and the Theory of the Firm”. In: *The Quarterly Journal of Economics* 117.1, pp. 39–84.
- Bakke, Kristin M (2014). “Help wanted? The mixed record of foreign fighters in domestic insurgencies”. In: *International Security* 38.4, pp. 150–187.
- Bakke, Kristin M, Kathleen Gallagher Cunningham, and Lee JM Seymour (2012). “A plague of initials: Fragmentation, cohesion, and infighting in civil wars”. In: *Perspectives on Politics* 10.2, pp. 265–283.
- Balcells, Laia (2017). *Rivalry and Revenge*. Cambridge University Press.
- Bapat, Navin A (2012). “Understanding state sponsorship of militant groups”. In: *British Journal of Political Science* 42.1, pp. 1–29.
- Bapat, Navin A and Kanisha D Bond (2012). “Alliances between militant groups”. In: *British Journal of Political Science* 42.4, pp. 793–824.
- Bara, Corinne and Joakim Kreutz (2022). “To Buy a War but Sell the Peace? Mercenaries and Post-Civil War Stability”. In: *Security Studies* 31.3, pp. 417–445.
- Basra, Rajan and Peter R Neumann (2016). “Criminal pasts, terrorist futures: European jihadists and the new crime-terror nexus”. In: *Perspectives on Terrorism* 10.6, pp. 25–40.
- Baylouny, Anne Marie and Creighton A Mullins (2018). “Cash is king: financial sponsorship and changing priorities in the Syrian civil war”. In: *Studies in Conflict & Terrorism* 41.12, pp. 990–1010.
- Berman, Eli and David A Lake (2019). *Proxy wars: suppressing violence through local agents*. Cornell University Press.

- Berman, Eli, Jacob N Shapiro, and Joseph H Felter (2011). “Can hearts and minds be bought? The economics of counterinsurgency in Iraq”. In: *Journal of Political Economy* 119.4, pp. 766–819.
- Bloom, Mia (2017). “Constructing expertise: Terrorist recruitment and “talent spotting” in the PIRA, Al Qaeda, and ISIS”. In: *Studies in Conflict & Terrorism* 40.7, pp. 603–623.
- Braithwaite, Alex and Luna B Ruiz (2018). “Female combatants, forced recruitment, and civil conflict outcomes”. In: *Research & Politics* 5.2, p. 2053168018770559.
- Byman, Daniel and Sarah E Kreps (2010). “Agents of Destruction? Applying Principal-Agent Analysis to State-Sponsored Terrorism”. In: *International Studies Perspectives* 11.1, pp. 1–18.
- Christia, Fotinni (2012). *Alliance formation in civil wars*. Cambridge University Press.
- Collins, Aukai (2003). *My jihad*. Pocket Books.
- Cunningham, David E (2006). “Veto players and civil war duration”. In: *American Journal of Political Science* 50.4, pp. 875–892.
- Daly, Sarah Zukerman (2016). *Organized violence after civil war: The geography of recruitment in Latin America*. Cambridge University Press.
- De Mesquita, Ethan Bueno (2005). “The quality of terror”. In: *American Journal of Political Science* 49.3, pp. 515–530.
- Dingley, James (2012). *The IRA: The Irish Republican Army*. ABC-CLIO.
- Doctor, Austin C (2020). “A Motion of No Confidence: Leadership and Rebel Fragmentation”. In: *Journal of Global Security Studies* 5.4, pp. 598–616.
- Dread Muslim (2015). “dread @tubnit1”. In: *Archived on February 15, 2015 from ask.fm/tubnit1*.
- Eck, Kristine (2014). “Coercion in rebel recruitment”. In: *Security Studies* 23.2, pp. 364–398.
- Findley, Michael and Peter Rudloff (2012). “Combatant fragmentation and the dynamics of civil wars”. In: *British Journal of Political Science*, pp. 879–901.

- Forney, Jonathan Filip (2015). “Who Can We Trust with a Gun? Information Networks and Adverse Selection in Militia Recruitment”. In: *Journal of Conflict Resolution* 59.5, pp. 824–849.
- Foster, Margaret J and David A Siegel (2019). “Pink Slips from the Underground: Changes in Terror Leadership”. In: *International Studies Quarterly* 63.2, pp. 231–243.
- Gates, Scott (2002). “Recruitment and allegiance: The microfoundations of rebellion”. In: *Journal of Conflict resolution* 46.1, pp. 111–130.
- Gill, Paul and John Horgan (2013). “Who were the volunteers? The shifting sociological and operational profile of 1240 provisional Irish Republican Army members”. In: *Terrorism and political Violence* 25.3, pp. 435–456.
- Giustozzi, Antonio (2019). *The Taliban at War: 2001-2018*. Oxford University Press.
- Granovetter, Mark (1985). “Economic action and social structure: The problem of embeddedness”. In: *American journal of sociology* 91.3, pp. 481–510.
- Grant, Greg (2009). “Bombers’ Bazaar”. In: *Foreign Policy*.
- (2013). “Anatomy of an IED”. In: *Army Times*.
- Green, Amelia Hoover (2017). “Armed group institutions and combatant socialization: Evidence from El Salvador”. In: *Journal of Peace Research* 54.5, pp. 687–700.
- Hamid, Mustafa and Leah Farrall (2015). *The Arabs at War in Afghanistan*. Oxford University Press.
- Hamming, Tore Refslund (2019). “Polemical and Fratricidal Jihadists: A Historical Examination of Debates, Contestation and Infighting within the Sunni Jihadi Movement”. In: *London: The International Centre for the Study of Radicalisation and Political Violence (ICSR)*. [Google Scholar].
- Hanson, Kolby (2020). “Good Times and Bad Apples: Rebel Recruitment in Crackdown and Truce”. In: *American Journal of Political Science*.
- Harper, Mary (2019). *Everything You Have Told Me Is True: Living in the Shadow of Al Shabaab*. Hurst & Company.

- Hashim, Ahmed S (2011). *Insurgency and Counter-insurgency in Iraq*. Cornell University Press.
- Heger, Lindsay, Danielle Jung, and Wendy H Wong (2012). “Organizing for resistance: How group structure impacts the character of violence”. In: *Terrorism and Political Violence* 24.5, pp. 743–768.
- Hegghammer, Thomas (2010). “The rise of Muslim foreign fighters: Islam and the globalization of Jihad”. In: *International Security* 35.3, pp. 53–94.
- (2013a). “Should I stay or should I go? Explaining variation in Western jihadists’ choice between domestic and foreign fighting”. In: *American Political Science Review* 107.1, pp. 1–15.
- (2013b). “The recruiter’s dilemma signalling and rebel recruitment tactics”. In: *Journal of Peace Research* 50.1, pp. 3–16.
- Heller, Sam (2016). “Keeping the lights on in rebel Idlib”. In: *The Century Foundation* 29.
- (2017). “The strategic logic of Hayat Tahrir al-Sham”. In: *Perspectives on terrorism* 11.6, pp. 139–152.
- Henshaw, Alexis Leanna (2016). *Why Women Rebel: Understanding Women’s Participation in Armed Rebel Groups*. Taylor & Francis.
- Hoover Green, Amelia (2016). “The Commander’s Dilemma: Creating and Controlling Armed Group Violence”. In: *Journal of Peace Research* 53.5, pp. 619–632.
- Horgan, John and Max Taylor (1997). “The provisional Irish Republican army: Command and functional structure”. In: *Terrorism and Political Violence* 9.3, pp. 1–32.
- Horowitz, Michael C and Philip BK Potter (2013). “Allying to kill terrorist intergroup cooperation and the consequences for lethality”. In: *Journal of Conflict Resolution*, pp. 199–225.
- Hutchinson, Steven and Pat O’malley (2007). “A crime–terror nexus? Thinking on some of the links between terrorism and criminality”. In: *Studies in Conflict Terrorism* 30.12, pp. 1095–1107.

- Idler, Annette (2012). “Exploring agreements of convenience made among violent non-state actors”. In: *Perspectives on Terrorism* 6.4/5, pp. 63–84.
- Iyengar, Radha, Jonathan Monten, and Matthew Hanson (2011). *Building peace: The impact of aid on the labor market for insurgents*. Tech. rep. National Bureau of Economic Research.
- Jackson, Ashley and Rahmatullah Amiri (2019). *Insurgent bureaucracy: how the Taliban makes policy*. United States Institute of Peace.
- Jones, Seth G (2017). *Waging insurgent warfare: Lessons from the Vietcong to the Islamic state*. Oxford University Press.
- Kalyvas, Stathis N (2006). *The logic of violence in civil war*. Cambridge University Press.
- Levin, Jonathan (2003). “Relational incentive contracts”. In: *American Economic Review* 93.3, pp. 835–857.
- Levinson, Charles (2012). “Leadership rifts hobble Syrian rebels”. In: *Wall Street Journal*, September 10.
- Levy, Jack S (2008). “Case studies: Types, designs, and logics of inference”. In: *Conflict management and peace science* 25.1, pp. 1–18.
- Lidow, Nicholai Hart (2016). *Violent Order: Understanding Rebel Governance Through Liberia’s Civil War*. Cambridge University Press.
- Linschoten, Alex Strick van (2016). “Mullah Wars: the Afghan Taliban between village and state, 1979-2001”. PhD thesis. King’s College London.
- Lister, Charles (2017). “Al-Qaida’s complex balancing act in Syria”. In: *Perspectives on terrorism* 11.6, pp. 122–129.
- (2020). “Is Idlib set for internal strife?” In: *Middle East Institute*.
- Malet, David (2013). *Foreign fighters: Transnational identity in civil conflicts*. Oxford University Press.
- Marty, Franz J. (2020). “The Taliban Say They Have No Foreign Fighters. Is That True?” In: *The Diplomat*.

- Mashal, Mujib (2013). “Afghanistan’s IED Complex: Inside the Taliban Bombmaking Industry”. In: *Time Magazine* 25.2.
- (2020). “How the Taliban Outlasted a Superpower: Tenacity and Carnage”. In: *The New York Times*.
- (2020). “How the Taliban Outlasted a Superpower: Tenacity and Carnage”. In: *The New York Times*.
- Mashal, Mujib et al. (2020). “Afghan Contractor Handed Out Russian Cash to Kill Americans, Officials Say”. In: *The New York Times*.
- McKiernan, David (2008). *Transcript: General David McKiernan Speaks at Council’s Commanders Series*. URL: <https://www.atlanticcouncil.org/commentary/transcript/transcript-general-david-mckiernan-speaks-at-councils-commanders-series/>.
- Mendelsohn, Barak (2015). *The al-Qaeda Franchise: the Expansion of al-Qaeda and its Consequences*. Oxford University Press.
- Millham, Matthew (2011). “Attacking IED networks”. In: *ISAF HQ Public Affairs Office*.
- Mironova, Vera (2019). *From Freedom Fighters to Jihadists: Human Resources of Non-State Armed Groups*. Oxford University Press.
- Moghadam, Assaf and Michel Wyss (2020). “The Political Power of Proxies: Why Nonstate Actors Use Local Surrogates”. In: *International Security* 44.4, pp. 119–157.
- Moulton, John (2009). “Rethinking IED strategies: from Iraq to Afghanistan”. In: *Military Review* 89.4, p. 26.
- O’Bagy, Elizabeth (2013). *The Free Syrian Army*. Ed. by Middle East Security Report. Vol. 3. Institute for the Study of War.
- Oppel, Richard A. (2004). “In Northern Iraq, the Insurgency Has Two Faces, Secular and Jihad, but a Common Goal”. In: *The New York Times*.
- Ostrom, Elinor and James Walker (2003). *Trust and reciprocity: Interdisciplinary lessons for experimental research*. Russell Sage Foundation.

- Paraszczyk, Joanna (2014a). “Chechen Fighter in Jabhat al-Nusra Describes His First Battle with Islamic Front in Aleppo”. In: *From Chechnya to Syria*.
- (2014b). “Translation of Statement by Khalid Shishani Regarding Umar Shishani”. In: *From Chechnya to Syria*.
- (2019a). “Exclusive: Interview with Ali Shshani, the new Commander of Malhama Tactical”. In: *Chechensinsyria.com*.
- (2019b). “Exclusive: Interview with Syrian War Veteran Khalid Shishani”. In: *From Chechnya to Syria*.
- Parkinson, Sarah E and Sherry Zaks (2018). “Militant and rebel organization (s)”. In: *Comparative Politics* 50.2, pp. 271–293.
- Percy, Sarah (2007). *Mercenaries: The history of a norm in international relations*. Oxford University Press on Demand.
- Perkoski, Evan (2019). “Internal Politics and the Fragmentation of Armed Groups”. In: *International Studies Quarterly* 63.4, pp. 876–889.
- Petraeus, David H (2006). *Learning counterinsurgency: Observations from soldiering in Iraq*. Tech. rep. Fort Leavenworth.
- Pirnie, Bruce and Edward O’Connell (2008). *Counterinsurgency in Iraq (2003-2006)*. Vol. 2. Rand Corporation.
- Rigterink, Anouk S (2020). “The wane of command: evidence on drone strikes and control within terrorist organizations.” In: *American political science review*.
- Rosenthal, Justine A (2008). “For-profit terrorism: The rise of armed entrepreneurs”. In: *Studies in Conflict & Terrorism* 31.6, pp. 481–498.
- Saab, Bilal Y and Alexandra W Taylor (2009). “Criminality and armed groups: A comparative study of FARC and paramilitary groups in Colombia”. In: *Studies in Conflict & Terrorism* 32.6, pp. 455–475.
- Salehyan, Idean (2010). “The delegation of war to rebel organizations”. In: *Journal of Conflict Resolution* 54.3, pp. 493–515.

- Salehyan, Idean, Kristian Skrede Gleditsch, and David E Cunningham (2011). "Explaining external support for insurgent groups". In: *International Organization*, pp. 709–744.
- Savage, Charlie et al. (2020). "Suspicious of Russian Bounties Were Bolstered by Data on Financial Transfers". In: *The New York Times*.
- Schram, Peter (2019). "Managing Insurgency". In: *Journal of Conflict Resolution*, p. 0022002719832963.
- Shapiro, Jacob N (2013). *The Terrorist's Dilemma: Managing Violent Covert Organizations*. Princeton University Press.
- Shapiro, Jacob N and David A Siegel (2012). "Moral hazard, discipline, and the management of terrorist organizations". In: *World Politics* 64.01, pp. 39–78.
- Shortland, Anja (2019). *Kidnap: Inside the ransom business*. Oxford University Press.
- Singer, Peter Warren (2008). *Corporate warriors: The rise of the privatized military industry*. Cornell University Press.
- Siqueira, Kevin and Todd Sandler (2010). "Terrorist networks, support, and delegation". In: *Public Choice* 142.1-2, pp. 237–253.
- Staniland, Paul (2014). *Networks of Rebellion: Explaining Insurgent Cohesion and Collapse*. Cornell University Press.
- Stenersen, Anne (2010). "The Taliban insurgency in Afghanistan-organization, leadership and worldview". In:
- Tamm, Henning (2016). "Rebel leaders, internal rivals, and external resources: How state sponsors affect insurgent cohesion". In: *International Studies Quarterly* 60.4, pp. 599–610.
- Walter, Barbara F (2017). "The extremist's advantage in civil wars". In: *International Security* 42.2, pp. 7–39.
- Weinstein, Jeremy M (2005). "Resources and the information problem in rebel recruitment". In: *Journal of Conflict Resolution* 49.4, pp. 598–624.
- Weiss, Michael and Hassan Hassan (2016). *ISIS: Inside the Army of Terror*. Simon and Schuster.

- White, Robert (2017). *Out of the Ashes: An oral history of the Provisional Irish republican Movement*. Merrion Press.
- Wilson, Clay (2007). “Improvised Explosive Devices (IEDs) in Iraq and Afghanistan: Effects and Countermeasures”. In: *CRS Report for Congress*.
- Wood, Reed M and Jakana L Thomas (2017). “Women on the frontline: Rebel group ideology and women’s participation in violent rebellion”. In: *Journal of Peace Research* 54.1, pp. 31–46.
- Worsnop, Alec (2017). “Who Can Keep the Peace? Insurgent Organizational Control of Collective Violence”. In: *Security Studies* 26.3, pp. 482–516.
- Zakaria, Kareem Fahim and Zakaria (2020). “These Syrian militiamen were foes in their civil war. Now they are battling each other in Libya.” In: *Washington Post*.