Journal of Economics and Behavioral Studies (ISSN: 2220-6140)
Vol. 17, No. 4, pp. 35-48, 2025

Property Rights and Entrepreneurship in the Context of Conflict: Evidence from Amuda, Northeast Syria

*Musallam Abedtalas[1], Rohat Zada[2], Khorshid Elika[3], Giwan Hamo[3], Abdulhaleem Sulaiman[3], Mohamad Ahmad[4]
[1]German Institute of Development and Sustainability, Germany
[2]Department of Accounting, College of Economy and International Relations, Catholic University in Erbil, Kurdistan Region, Iraq
[3]Mesopotamia Network for Sustainable Development, Germany
[4]Paris-Panthéon-Assas University, France
Email: *abedtalasmus@gmail.com, rohat.zada@cue.edu.krd, xorsidelika@hotmail.com, jojoamo2011@hotmail.com, bilind83@live.com, mhd.ahmad76@gmail.com
Corresponding Author: Musallam Abedtalas

Abstract: This article examines how changes in property rights protection, resulting from the collapse of formal institutions during the Syrian conflict, have influenced entrepreneurial activity. The study draws on qualitative research conducted in 2021 and is based on semi-structured interviews with 46 entrepreneurs in the town of Amuda in northeast Syria, complemented by secondary data from local institutions and media sources. The findings reveal a distinctive pattern of entrepreneurship in a conflict-affected context. Following the Syrian regime's loss of control over much of the region after 2012—previously characterized as a highly predatory state—and the emergence of a weak Autonomous Administration with limited institutional capacity, informal institutions assumed an increasingly important role in regulating economic activity. In this environment, informal social mechanisms, alongside the disruption of traditional supply chains, contributed to improved perceptions of property rights protection. As a result, Amuda witnessed the emergence of a new wave of predominantly productive and non-conflict-related entrepreneurship, rather than entrepreneurship driven solely by necessity or war-related opportunities. These findings challenge the prevailing consensus in the literature that entrepreneurship in conflict settings is primarily necessity-based. Instead, the study highlights the importance of context-specific institutional configurations and calls for a reassessment of dominant assumptions within conflict economics and entrepreneurship research.

Keywords: *Northeastern Syria, Amuda, Institutions, Property Rights, Conflict, Entrepreneurship*

1. Introduction

Traditionally, research on entrepreneurship has concentrated on the characteristics and resources of business owners, as well as their emotional, cognitive and behavioral responses (Eijdenberg et al., 2019; Welter, 2011). However, given increasing awareness of the importance of context, as noted by Ireland et al. (2001), it is inadequate for a comprehensive analysis of entrepreneurship. Studies that adopt an institutional perspective focus on their incentivizing or disincentivizing impact on entrepreneurship (Baumol, 1996). Brück et al., (2016) also highlight that such studies have been primarily undertaken in stable contexts, i.e. post conflict and in peacetime (Aldairany et al., 2018), with scholarly investigation on questions of entrepreneurship in countries experiencing conflict limited (Joseph et al., 2023). Eijdenberg et al. (2019) also point to the fact that most institution-focused research employs large-scale sample surveys and inter-country comparisons to construct a comprehensive understanding of institutions at a macro level but fails to offer a micro-level perspective on property rights, which is highly significant in the context of conflict.

This study adopts a property rights perspective to examine the phenomenon of entrepreneurship in the town of Amuda, located in Northeast Syria (NES). Amidst a prolonged civil war, this underdeveloped and impoverished region has experienced a notable increase in entrepreneurial activity. A recent study revealed that it had undergone a complete transformation and now exhibits highly favorable investment characteristics, including factories, agricultural projects and diverse commercial enterprises (Muhammad, 2021). This raises the question: *How does protecting property rights affect entrepreneurship in times of conflict?*

This study should be of interest to scholars, donors, peacekeepers, development agencies, governments, and entrepreneurs, not only in relation to NES and wider Syria, but also in relation to other conflict-affected regions around the world.

In this paper, we argue that productive (opportunity type), peaceful entrepreneurship, protected by new forms of property rights can emerge within conflict-affected contexts and even flourish when the restrictive elements of predatory formal institutions are removed and those introduced by informal institutions seek to encourage entrepreneurship.

The remainder of this article is structured as follows: The next section presents the theoretical background for our research, followed by an overview of the empirical background and research context. We then outline our methodology, including details of our data collection process. In the findings section, we report the results and discuss their implications in the subsequent section. Finally, we conclude with a summary of our key findings.

2. Theoretical background and limitations

Classical economic analysis begins from the premise that specialization and exchange enhance productivity and drive economic growth, as articulated by Adam Smith, by encouraging the development of new technologies and more efficient forms of production. However, the realization of exchange does not depend on market forces alone; it presupposes an institutional framework that governs economic interactions and reduces uncertainty. Within this framework, property rights play a central role in enabling exchange, as markets cannot function effectively in the absence of legal and social rules that protect ownership and regulate the use of resources. These rules are embedded in both formal and informal institutions, which shape the incentive structure—through rewards and sanctions—that influences the allocation of economic resources, including entrepreneurial activity (North, 1984; Acemoglu, 2005). When institutional arrangements operate effectively, they reduce transaction costs and encourage investment in productive assets.

Building on this institutional and property rights framework, entrepreneurship can take different forms depending on how incentives are structured and perceived by economic actors. When entrepreneurs initiate a business in response to identified opportunities, often categorized as opportunity entrepreneurship, they engage in innovation and contribute to economic growth. In contrast, necessity entrepreneurship is typically driven by survival considerations and may involve rent-seeking activities or forms of wealth redistribution that can impede growth. Opportunity entrepreneurs actively explore and exploit recognized market opportunities, whereas necessity entrepreneurs generally face constrained capacities to identify or seize such opportunities (Morris et al., 2023). The stability and efficiency of institutions play a crucial role in shaping these outcomes, as appropriate institutional environments mitigate risk for entrepreneurs (Sendra-Ponsa et al., 2022) while simultaneously fostering productive entrepreneurship with higher returns (Boettke and Coyne, 2009; Baumol, 1996).

Conflict exerts both direct and indirect impacts on entrepreneurship. The immediate consequences manifest themselves in the impairment of tangible and intangible assets, referred to as the shock component. Indirect consequences are associated with institutional collapse (Justino, 2009). Conflict destroys the social contract and leads to a fragile if not failed state (Penh, 2009). This means a crucial change in both formal and informal institutions (Abedtalas, 2024). Institutional changes also drive changes in property rights and incentive structures, resulting in the transfer of higher returns to rent-seeking entrepreneurs and those involved in the war economy, which can be unproductive and destructive (Naudé, 2007). Conflict alters the relative prices of certain commodities used in war and reduces barriers to entry into the market in general, reducing in turn the cost of finding potentially valuable opportunities (Brück et al., 2011).

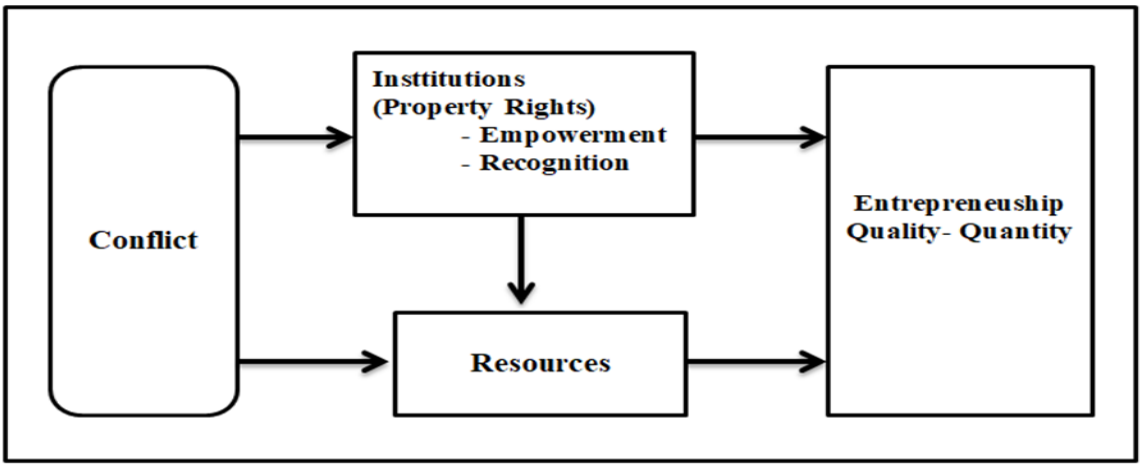
From a property rights perspective, "when a transaction is concluded in the marketplace, two bundles of property rights are exchanged." (Demsetz,1974: 163). "The value of the goods that are traded and, consequently, the terms of trade, depend on the content of property rights in those goods." (Pejovich,1972: 309). Property rights specify which resources can be owned and by whom, and how they can be used (Harris et al., 2020). With the protection of property rights, the cost and benefit to owners of the use of their resources is entirely at their own risk, with strong incentives for efficient use (Xu, 2013). Besley and Ghatak (2010) explain that the efficient allocation of resources is impacted by property rights, limiting expropriation and facilitating market transactions, thereby enhancing investment incentives and improving the collateralizability of assets, and facilitating credit transactions.

The state fails to protect property rights when it is predatory, or ineffective, or lacks power and authority. A predator state cannot protect property rights from its own distorted power of expropriation. An ineffective state will fail to invest sufficiently in public goods and infrastructure, such as courts and property rights registration agencies, without the ability to grant and rescind power is unable to protect property rights (Besley & Ghatak, 2010). By defining property rights as "a socially enforced right(s) to select uses of an economic good" protection depends not only on the state, but also on "informal social actions and prevailing ethical and moral norms … which can be found in abundance in informal institutions and more broadly in civil society" (Alchian, 1989:232). This perspective is important to understanding entrepreneurship in the context of conflict where the risk of state failure and ensuing disorder, leading to property violations and economic instability, is high.

Entrepreneurs' property rights are protected when they are free, beyond compliance with regulations, to make their own choices over their resources (Barzel and Allen, 2023). This requires the existence of resource empowerment and resource recognition. Infrastructure, including water and electricity supply, banking services, and financial assistance, falls under the umbrella of resource empowerment, facilitating entrepreneurial engagement. Resource recognition includes security, contract enforcement, market entry and product quality control, conflict resolution, and licensing, all of which legitimize and legalize the entrepreneur's resources as property rights (Abedtalas, 2024).

Building on the theoretical background outlined above, the framework guiding this research is as follows: In addition to its direct impact on resources, the war alters both formal and informal institutions and their roles in protecting property rights, though not always in the same direction. The effect on entrepreneurship depends on the net change in the level of property rights protection as perceived by entrepreneurs. This shift in protection influences the incentive structure, ultimately determining the quality and quantity of entrepreneurship (see Figure 1).

Figure 1: theoretical framework



Empirical background

A number of studies focusing on specific contexts, explored entrepreneurship from an institutional approach. For example, Valdez and Richardson (2013) and Stenholm et al. (2013) demonstrate that informal institutions are more important in incentivizing entrepreneurial activity than formal institutions, whereas Schüler (2022) argues that formal institutions, in general, play a greater role in entrepreneurial activities. Other researchers have taken cross-sectional samples from developing and developed countries. For example, Chowdhury et al. (2019), in their comprehensive study drawing on secondary data, analyzed the critical role played by both formal and informal institutions relative to the quality and quantity of entrepreneurship in 70 countries, both developed and developing, from 2005 to 2015, as confirmed by Sendra-Ponsa et al. (2022).

Yet others, also using an institutional approach, have examined entrepreneurship in transition economies, moving from planned to market economies. Futo et al. (1997) studied Hungary and concluded that during the first stage of the transition, there was a remarkable expansion of small businesses due to the collapse of large government companies, the removal of stifling regulations, and the existence of a legacy of helpful informal institutions. Aidis et al. (2008) demonstrate how Russia's unfavorable institutional environment contributed to low entrepreneurship rates, while Estrina and Mickiewicz (2010) discuss the challenges associated with inheritance following a prolonged period of communist rule within the framework of a so-called "path dependency."[1].

The institutional approach was also used to investigate the dual transition from central planning to the market economy and from war to peace. Hoxha (2009) investigated the barriers to entrepreneurship in Kosovo and found that even in the absence of an effective formal institutional framework, entrepreneurship expanded due to the presence of informal institutions. Williams and Vorley (2017), who investigated Kosovo seven years later, concluded that it had not faced the same challenges as entrepreneurship in other transition countries that faced challenges in extending inherited path dependency. Kosovo, on the other hand, forged an entirely new path by dissolving Yugoslavia's old state institutions and building new institutions from the ground up, with local support for entrepreneurship. The Williams and Vorley (2017) study also confirmed that institutional harmonization, formal and informal, determined the level of productivity of entrepreneurship. This mismatch between formal and informal institutions was addressed in a study by Muhammad et al. (2016) in a conflict-affected area of Pakistan, which focused on the institutional pressures placed on entrepreneurs in conflict situations, to which they responded by managing to establish their legitimacy across the different parties to the conflict.

As with much of the literature informing the theoretical background, the continued reliance on an institutional approach tends to overlook the specific issue of property rights protection. While the study on Pakistan touches on entrepreneurship in conflict settings, it does so from a limited perspective, and studies on Kosovo largely focus on the post-conflict period. More specifically, limited attention has been paid to how property rights are perceived, enforced, and protected at the micro level during ongoing conflict, rather than in post-conflict contexts.

This study on entrepreneurship in Amuda addresses this gap by examining entrepreneurship through a property rights protection lens in an active conflict setting. Given the particular characteristics of the Amuda context, the following section provides a detailed discussion of the research setting.

Research context

Amuda is a town of 150,000 people in Al-Hasakah, a province in Northeast Syria NES[2], with a Kurdish majority (see Figure 2). Before the commencement of the conflict in 2011, the pro-Arab Syrian government endeavored to assimilate the region (Van Wilgenburg and Fumerton, 2022) through the implementation of discriminatory economic and political legislation. For example, in 1962, the exceptional census[3] resulted in approximately 120,000 Kurds losing their Syrian citizenship and being reclassified as Ajānib (foreigners in Arabic) (Schmidinger, 2020) and stripped of their property rights. What is referred to as the "Arab Belt" initiative[4], implemented in the 1970s and 1980s aimed to eliminate what was referred to as the Kurdish "threat" by relocating Kurds to Arab-dominated areas and colonizing traditional Kurdish areas with Arab settlers (Tejel, 2020). In 2008, the Syrian government issued Decree No. 49, which declared Al-Hasakah Province as a border area enabling the imposition of standard border area restrictions such as prohibiting the trade of real estate and property transfer without prior approval from security and administrative agencies. This not only complicated the process of property trading, but also made it impossible on occasion, violating property rights. In his study, Jongerden (2021) employed the theoretical framework of "the center and the periphery" to

[1] 'Path Dependency' is an economics, social and political science concept proposing that decisions or outcomes at a particular point in time are heavily influenced by historical events, past choices and initial conditions, rather than just current circumstances.
[2] NES includes the governorates of Hasakah, Raqqa, parts of Deir ez-Zor, and parts of Aleppo.
[3] This represented 20% of the overall Syrian Kurdish population in 1962, leaving stateless and unable to claim an alternative nationality. https://www.hrw.org/reports/1996/Syria.htm#:~:text=In%201962%2C%20an%20exceptional%20census,no%20claim%20to%20another%20nationality.
[4] The goal of the 'Arab Belt' initiative was to weaken Kurdish political and cultural influence.

contextualize the prevailing circumstances in the region. He labelled the governmental policies applied to Al-Hasakah, as exhibiting characteristics of intentional "de-development". As a result of constrained industrial and service sector activities, the province was forced to become over-reliant on seasonal agriculture and livestock rearing for its economic survival. From a property rights perspective, the region was subjected to dysfunctional governance and what might be more aptly defined as a "super-predatory" state.

Figure 2: Map of Syria highlighting Amuda.

The conflict forced the government to withdraw almost entirely from Al-Hasakah[5] Leaving the Autonomous Administration of North and East Syria (AANES) to assume power in 2014, following its formation. Although under what is referred to as the AANES "social contract"[6], Private property is protected (Item 70). AANES also wanted to build an alternative to the market economy, which could have negative implications for property rights protection and private investment. According to the social contract Item 105, the Council of Economy and Agriculture:

"…E*stablishes cooperatives that achieve a participatory economy and develops projects in the field of securing sources for imports and investments. It works in coordination with finance commissions and committees to open the way for investing money in the communal economy.*"

The alternative AANES, economic model, referred to as "communal economy", is *"based not on profit but on the fairer redistribution of wealth*" (Knapp, 2015). Such a model does not deny "*private property, but rather has the goal of putting private property in the service of all the people*" (Knapp, 2015). It depends on a cooperative model, but has to date played an insignificant role in the province's economy. "*Strategically important areas of production such as electricity or the fuel supply were taken over by the new [quasi] state authorities. Private enterprises and large-scale landholdings remained*" (Schmidinger, 2018: 121). The result is an "*economy … based on a mixture of war economy, small capitalism, and subsistence production of food within which the cooperatives lead a niche existence instead of representing a new economic system*" (Schmidinger, 2018: 121).

[5] The Syrian regime withdrew from the majority of northeast Syria after 2012, following territorial gains by opposition factions.

[6] The AANES Social Contract serves as the region's constitution. It outlines the theoretical and practical principles, laws, and organizational rules that define the relationship between the administration and the people. https://rojavainformationcenter.org/2023/12/aanes-social-contract-2023-edition/

Against a general background of civil war and an environment where supposedly legal property rights are undermined by the communal economy model, productive investment will be increasingly discouraged (Schmidinger, 2018; 2020). The continued deterioration of infrastructure and poor public services under AANES, as evidenced by frequent power outages, poor fuel and road quality, and deteriorating water and sewage networks, poses evident challenges to businesses. In addition, investment laws are poorly formulated, resulting in constant confusion as to the responsibilities of the different AANES agencies in charge of quality control, business licensing and taxation. This last is further exacerbated by corruption amongst those in charge (Muhammad, 2021) and continued regime influence, due to its ongoing presence in pockets within Al-Hasaka, leading to power conflicts between the two entities.

From the perspective of property rights, the situation is a mix of semi-predatory and ineffective quasi-state influence, with neither having a monopoly of power. All of this could be sufficient reason for a challenging environment for entrepreneurship (Justino, 2009).

3. Methodology

Implementation of the study took place in 2021, with the selection of Amuda as the focus informed by our observations and information gleaned from various media platforms, such as Radio Arta FM and Radio Urkesh FM. These indicated a surprise increase in entrepreneurship in Amuda despite the conflict-affected context. Three of the five research team members also had strong ties to Amuda, simplifying the task of contacting suitable respondents and establishing trust.

Secondary data was gathered from AANES agencies, non-governmental organizations (NGOs), and local radio station websites, to gain initial insights into the context and the seemingly vibrant entrepreneurship in Amuda. Since the goal of this research was to develop our knowledge with regard to the determinants of entrepreneurship in a challenging environment, we used qualitative methods in the form of semi-structured interviews (Creswell et al., 2007).

We used information identified from radio station websites, the researchers' personal connections to implement a snowballing approach identifying a sample set of 46 entrepreneurs for us to interview, who had established their businesses post 2011. The interviewees' businesses were located in areas across the town of Amuda as well as offering a cross-section of business sectors, e.g., services, industry and trade, to ensure the sample was representative.

To allow the study researchers to clarify the potential role of entrepreneurship whether productive or non-productive, the semi-structured interview instrument (see Annex) was designed to enable collection of data to determine the type of entrepreneurship – necessity or opportunity; to establish what the respondent entrepreneurs' resources were that were used to identify and exploit opportunities; and finally, to explore property rights protection. With regard to the question of property rights, respondents were asked to describe the nature of their interactions with formal agencies, such as licensing, control, public services, infrastructure, and tax etc., as well as their experience of societal attitudes in general. The interview instrument also allowed for the initial capture of personal status data, such as education, age, origin, and previous jobs, as well as eliciting information on the factors that had facilitated and/or hindered their entrepreneurship; how the entrepreneur dealt with the contextual conditions; and their longer-term expectations as the Province transitioned hopefully towards peace.

The first interviews were carried out by phone or internet, e.g. WhatsApp and other platforms, but weak responses led a research team member to travel to Amuda to conduct 30 of the 46 interviews in person. Of the 30 in-person interview two were dismissed due to a lack of useful data proffered and apparent bias. Two extra interviews were conducted with AANES representatives. Interviews were coded for analysis using four themes identified from previous studies: 1. Direct Impact of the War on Entrepreneurship; 2. Institutions; 3. Entrepreneurship: Start-up Resources; and 4. Productivity of Entrepreneurship, before refinement across the following sub-themes: i. Entrepreneurship Type: ii. Peace Possibilities; iii. Opportunity Identification; iv. Exploitation Resources; v. Formal Institutions; and vi. Informal Institutions.

Interviewees were fully apprised of the purpose of the study, the intended use of the study data, their opportunity to withdraw before the anonymization of the data, clarification as to data protection and confidentiality, prior to their providing consent orally or in writing. The interview files were uploaded to a secure OneDrive that was only accessible by the study team, with each file assigned a unique code to ensure that personal information remained protected. This qualitative approach is especially appropriate for capturing entrepreneurs' lived experiences and perceptions of property rights protection in a volatile and institutionally fragmented context.

4. Findings

Table 1 shows the demographic characteristics of the entrepreneurs in 2021. The findings are organized around four main themes that capture the impact of conflict, institutional dynamics, entrepreneurial resources, and the productivity of entrepreneurial activity in Amuda. In terms of age range, approximately 63% respondents were 45 or under. We found that there had been a rapid expansion of small projects since 2012, coinciding with the onset of the crisis but before the start of military operations in Al-Hasakah. This expansion came to an abrupt end with the arrival in the Province of military operations, fluctuating in tandem with the proximity of the conflict.

The various businesses were divided into three sectoral categories: service, industry, and trade, with the majority categorized as micro and small industrial enterprises as reflected by employee numbers. Approximately 43% (micro) had five or fewer employees and another 30% (small) had six to ten employees. This finding is hardly surprising given the context of conflict and the underdevelopment of the region pre-2011, as well as scarce financial resources. Given the context, investment of large sums, where these exist, is considered with extreme caution.

Interviewee Profiles: Most entrepreneurs interviewed were Kurds (98%), as would be expected in Amuda, which has a Kurdish majority, with the population of Amuda made up of locals, returnees, and internally displaced persons, with these last representing 18% of study respondents. The limited number of female led-businesses and entrepreneurs in Amuda meant that 95% of interviewees were men who tend to dominate economic activities.

Table 1: Demographic Characteristics of Interview Sample

		Number	%			Number	%
Age range	30 and below	9	20	Sector	Service	10	23
	31-45	19	43		Trading	15	34
	46 and above	12	27		Industry	19	43
	NA	4	9	Employee number	5	19	43
Establishment year	2012	6	14		6_10	13	30
	2013	2	4		11_15	5	11
	2014	1	2		More than 15	6	14
	2015	5	5		NA	1	2
	2016	6	14	Ethnicity	Arabic	1	2
	2017	3	7		Kurdish	43	98
	2018	2	5	Gender	Female	2	5
	2019	5	11		Male	42	95
	2020	8	18	Residency	Displaces	8	18
	2021	6	14		Returnee	5	11
					Local	31	71

Theme 1: Direct impact of the war

None of the businesses involved in the study were conflict-related; however, some of them benefited from the current crisis conditions and resulting market segmentation, as well as the loss of restrictions imposed by the regime on economic activity in the region. Despite consideration having been given to the crisis context before establishing their businesses, the related uncertainties still caused them concern. For example interviewee 3 noted that "*The economy is linked to the political situation. Our political situation is tense and there is no stability*.

Concerns were also expressed in relation to cuts in supply chains, with approximately 50% of the respondents also expressing fear of Turkish military operations and their impact on their businesses: "*For example, the Turkish military operations frighten people, so they reduce buying and selling*" (Interviewer 5). There is also a problem of emigration, including from Al Hasaka due to the war, with resulting labor shortages: "I*n conflict situations…. people flee abroad to Europe, and almost all young people migrate abroad*" (Interview 9). However, a small group of respondents, with negligible levels of capital tied up with their businesses, only expressed indirect concerns relative to the uncertainties of the Syrian situation, "*There is no direct impact, but the conflict affects all businesses and therefore we also lose. But for our work we do not lose much because there is no large capital in our work*" (Interview 14).

Strategies used by respondents to address uncertainties and fluctuations, included the reduced or halted production of certain goods, and the expansion of others. "*If the conflict continues…. the business will fail. For example, we had the same business in Tal Tamr but closed it due to the Turkish military operations.*" (Interview 16). Others simply chose to reduce their investments: "*After the occupation of Afrin, we no longer dared to invest our money*" (Interview 35).

Theme 2: Institutions

Through the interviews, we explored both formal and informal institutions, including the effectiveness of AANES in terms of both empowering and recognizing property rights, through their various related roles including licensing, monitoring, tax collection, and the provision of core public services, such as electricity, water and roads.

Formal institutions

Although a small number of respondents reported AANES as carrying out its responsibilities well, including provision of related services, and without excessive taxation "*They [AANES representatives] approached us to ask us to register our business and pay related taxes annually. The sum is modest so it doesn't impact us negatively. AANES also offered us diesel subsidies following licensing.*" (Interview 2) This reflected low expectations due to the conflict conditions and recognition of AANES' still limited administrative capacities: "*AANES is in the process of establishing itself and needs to invest in capacity building, for example, staff recruitment and training.*" (Interview 2). Nevertheless, the majority of interviewees expressed dissatisfaction: *"AANES visited us to register the business and ask questions…, but has not provided us with any services."* (Interview 44). Some also considered that it had negatively affected their businesses due to inconsistent regulations: "*When we need something, we need to submit a request, but receive no response. … We are supposedly supervised by the AANES Board of Economy although it isn't able to support us as it lacks the necessary power and means."* (Interview 42). Another group complained about mismanagement: *"Businesses are being established in an unregulated and chaotic environment…. Businesses emerging in my field [cleaning products] and neighborhood have become common… They mix all sorts of uncontrolled ingredients to create detergents to sell locally."* (Interview 30). Many businesses have attempted to get licenses from both AANES and the Damascus government, with the conflict of power between them seen as another negative dimension: "*Divided power between the two parties creates problems for us*" (Interview 2). Even in the absence of predatory behaviors, the lack of competencies and effective regulatory bodies, as evidenced above, coupled with the reality of competing powers, has weakened recognition of property rights.

The state of AANES services and infrastructure, such as access to electricity and water, was also frequently criticized: *"They have not provided us with anything yet, although we pay taxes. I have applied for an electricity connection but received no response to date ... We also applied for a license for a generator, which was refused."* (Interview 4). Another entrepreneur also noted issues with the road network: *"We need a road to the factory.... As for diesel, formally we are told that there should be good, cheap industrial diesel, in reality we are forced to buy*

expensive diesel." (Interview 40). Complaints were also made about the lack of an industrial zone "*When I arrived in Amuda, and registered shops and warehouses, there was the idea of establishing an industrial zone, but so far nothing*" (Interview 30).

Entrepreneurs' response to the lack of access to services and poor infrastructure has been to turn to the private sector, to use generators, or to relocate. They also dealt with some of these failures themselves, for example by digging wells or repairing roads. The failure to deliver key services and suitable infrastructure highlights a failure to empower property rights.

Informal institutions
Many of the entrepreneurs interviewed, believed that Amuda offered a safer environment in which to establish businesses with local informal mechanisms supporting the recognition of property rights, including for the resolution of property-related disputes:
"There is something special about Amuda, which is the absence of theft. If our business were in another area, we would need many locks in addition to fencing. We have been in Amuda without a fence for nine years without suffering any thefts." (Interview 19).
"I love Amuda, it is not like other cities. Considering it is purely Kurdish, there are tribal relations… when problems occur, they are quickly resolved" (Interview 2).
Because of this, entrepreneurs established their businesses in Amuda despite a limited availability of skilled labor. *"We recruit from Al-Hasaka city amongst other cities and towns in northeast Syria."* (Interview 30).

Theme 3: Entrepreneurship: Start-up Resources
Since entrepreneurship involves the discovery and exploitation of profit opportunities, the resources utilized in this process underscore the role of formal and informal institutions in empowering and recognizing property rights

Identifying Opportunity Resources
The interviews showed that entrepreneurs adopted different approaches to identifying opportunities. Some did so through friendship or family networks, others by identifying a familiar field or an opportunity that allowed them to draw on experience and expertise.
"We had no experience in this field, but some friends drew our attention to it. We grew up in a business environment….my father was a merchant long ago." (Interview 22).
"I have been working in this field for more than twenty years…in Jordan, Libya, Iraqi Kurdistan, then Germany, and finally I returned to Amuda to stay here and start my business." (Interview 26).
The identification and development of these opportunities relies on human resourcefulness and skills, as well as social capital, which is to say, informal institutions through which property rights can be empowered, regardless of the presence or input of formal institutions.

Exploitation Resources
As discussed earlier, entrepreneurs make use of four primary resources: Human, financial, social, and physical. Most of those interviewed had some previous professional experience and expertise in their fields on which they were able to draw, as in the case of an entrepreneur who was running a battery factory in Amuda:
"*I worked in a battery factory for four years, where I was in charge of around seventy-five percent of the business.... which allowed me to start this business."* (Interview 37).
"*I benefited from my experience, as I owned a factory in Aleppo…in addition to being a graduate of the Faculty of Science."* (Interview 19)

Yet others had benefited from training courses "*I was working in Lebanon… I attended training courses on fashion design …*" (Interview 41). A smaller cohort of entrepreneurs had used their initiative to start a business in a totally new field in which they had no previous experience, *"I used to work as a driver... then I became a baker, as there were few bakeries in Amuda."* (Interview 29)

In the case of obtaining financial resources, most entrepreneurs relied on self-financing or their social networks, such as borrowing from friends: *"I have a friend from Aleppo who helped me with raw materials*" (Interview 30) or from close or more distant relatives, involving, in some cases, the sale of family assets:

"Financing was mainly with the help of my father, family and friends. It is debts that I will repay.... even my wife sold her jewelry to help me finance the business." (Interview 18). Only four of the forty-six interviewees secured grants, two from AANES and two from international donors.

With regard to physical capital, such as land, real estate, machinery etc. before the crisis, entrepreneurs wanting to open a new business, were constrained by seemingly insurmountable regime regulations linked to the licensing or disposal of property. Due to the conflict, these have since disappeared from non-regime-controlled areas, simplifying property exchange procedures, however, fears were also voiced as to how their new businesses would be affected by the end of the conflict. Some considered the conflict had been beneficial in that respect:
"We had a small business started in 2000… but were unable to expand it before 2011 due to the impact of Legislative Decree No. 49[7]. However, after 2011 we were able to start a new business, without those restrictions." (Interview 31)
"The longer the conflict continues, the more Rojava will improve and progress. Currently, the situation is better than before 2011, when we were oppressed by the regime." (Interview 32).

Theme 4: Productivity
Entrepreneurship Type
As noted in the literature, there are two broad types of entrepreneurships: 'opportunity' and 'necessity'. However, the literature fails to explore in any depth a third 'mixed' type combining both 'opportunity' and 'necessity', all three of which were evident in the case of Amuda, where the majority of entrepreneurs were motivated by both the need to work and the identification of an investment opportunity. 'Opportunity' entrepreneurs were fewer in number, with the smallest group, those who had become entrepreneurs out of necessity.

With regard to the largest 'mixed' entrepreneurship group, one of those interviewed spoke for many others when he described what had driven him to start his business: *"Because of the war, there were no opportunities relevant to my degree, so ...we established a small lab linked to cleaning products … where previously there were none."* (Interview 30)

In terms of 'opportunity' entrepreneurs, one of those interviewed had based his business on an identified demand for consumption commodities. *"Our understanding of the region and its situation, led us to do something industrial and productive … the industries that succeed in the region are light industries, so we focused on consumption commodities."* (Interview 42)

In respect of those whose entrepreneurship was borne out of necessity, this included people with limited skills and resources: *"I set up this business because I worked in this field since my childhood and only know this work."* (Interview 25)

The Possibility and Perceived Impact of Peace
Although entrepreneurs' views on the possibility of peace varied, the majority (60%) believed that it would have a positive impact on their lives and businesses:
"*We are optimistic about peace in Syria, which will enable the set-up of many new businesses.*" (Interview 12)
"*Its impact not only on my business but on society as a whole will be positive*" (interview 36).

Discussion
The discussion interprets the findings through an institutional and property rights lens, emphasizing the interaction between formal and informal institutions in shaping entrepreneurial incentives. In general, our findings concur with those of other studies carried out in different contexts. For instance, Schüler (2022) confirms that institutions (formal and informal) can play both a positive and negative role in entrepreneurship.

[7] Legislative Decree No. 49 (2008) imposes strict regulations on property transactions in border areas. The decree requires individuals to obtain prior authorization from the relevant authorities before creating, transferring, modifying, or acquiring any real property rights in these regions.

Valdez & Richardson (2013) and Stenholm et al. (2013) also highlight the effective role of informal institutions relative to that of formal institutions.

When compared to other conflict-affected areas, the Amuda experience shows some similarities to those of Kosovo (Hoxha, 2009; Williams & Vorley, 2017) and Pakistan (Muhammad et al. 2016). As in Kosovo, many of Amuda's established formal institutions did not survive the conflict. With new formal institutions slow to replace them, existing informal institutions came to the fore and played a crucial role in supporting entrepreneurship. However, in Kosovo, both informal institutions and new formal institutions supported entrepreneurship, which was not the case in Amuda.

In the case of the Swat Valley in Pakistan, despite the conflict between the Taliban and the central government, government institutions remained active in the area, forcing entrepreneurs as in Amuda to navigate between two sets of authorities (Martens et al., 2007), although unlike in Amuda no alternative economy emerged.

Quite a number of studies consider all entrepreneurship in transitional countries and conflict areas as being driven by necessity (Cañares, 2011; Ciarli et al., 2010; Ciarli et al., 2015); however, our findings show that the majority of entrepreneurship in Amuda fell predominantly within the 'mixed' and 'opportunity' types. We suggest this is due to the following three factors: the first being the restricted influence of the Syrian regime following its defeat in the area; the second, the overall weakness of AANES; and the third, the segmentation of the Syrian market as a result of the conflict.

Prior to its defeat, in an attempt to pacify the population in NE Syria, the regime had begun to reduce its discriminatory development economic policies in the area, increasing property rights protection from its predatory behavior, opening up a considerable number of new investment opportunities for entrepreneurs. In April 2011, the authorization of building permits was "*transferred to Al-Hasakah Governorate instead of Damascus to enable the Kurds to use lands and real estate in their place of residence*" (Fawaz, 2018:25). Restoration of citizenship stripped from Kurds as part of the 1961 census and the suspension of Decree 49 in 2012, also had a major impact. A large number of the entrepreneurs interviewed pointed to those as enablers, removing prior restrictions on their ability to buy and sell real estate:
"*The war benefited me in general…. helping me open my factory which at the time of the regime's control, was not possible.*" (Interview 22).
Welter and Smallbone (2011) confirm that institutional change can positively affect the development of entrepreneurship when it removes or reduces barriers to entry and/or exit from the market opening up new opportunities.

Without ignoring its negative impact, ironically AANES' weaknesses also played a positive role, given its limited authority, regulatory ambiguities and confusions, and lack of experience and expertise, opening the ways for informal institutions. Our interviews with two AANES officials, in an attempt to clarify their position on entrepreneurship, demonstrated the absence of a clear vision and ambiguity in terms of procedures. This explains AANES's failure to establish an alternative economy aligned with its ideology, and its *de facto* acceptance of a market economy.

We observed that the reduction in administrative and regulatory restrictions linked to economic activities, triggered widespread resolve to establish new businesses. However, the minimal nature of AANES' administrative services also resulted in increasing corruption and tensions between the various regulatory agencies, posing new challenges. Some interviewees were clearly able to run their businesses without any engagement with AANES *"The business is free, there are no subsidies, taxes, or licenses, they did not provide any services and did not ask for anything either."* (Interview 39).

Previous discriminatory de-development economic policies had forced NES to become dependent on other areas for the majority of its needs, whereas the conflict, the region's relative isolation, and reduced outside competition, offered a new and attractive investment environment. "*After the closure of the road to Aleppo in 2013, I took advantage of the opportunity and new demand to open my business*" (Interview 4). International aid in the form of cash programs and new employment opportunities, and the flow of displaced people to the area, were evident factors influencing and facilitating growing demand. This marries with the finding of Bruck et al.

(2011) that some entrepreneurs benefited from increasing local demand due to migration and international aid.

5. Conclusion

This study contributes to the literature on entrepreneurship in conflict-affected contexts by demonstrating that productive and opportunity-driven entrepreneurship can emerge when property rights are perceived as protected, even in the absence of strong formal institutions. To this end, the study examines the phenomenon of entrepreneurship in Amuda through an institutional approach grounded in a property rights perspective.

However, our data analysis revealed that most new enterprises in Amuda were of the 'mixed' and 'opportunity' type of entrepreneurship, challenging the views of many scholars who would expect entrepreneurship in relatively poor and conflict-affected contexts, such as Amuda, to be driven by necessity, i.e. of the 'necessity' type, and linked to conflict-related activities.

Despite its inherent dangers, the Syrian conflict has had a positive impact on entrepreneurship in Amuda, improving the property rights protection as a result of the decreased influence of the predatory state institutions, regulations and policies, the emergence of a less predatory and ineffective state, and an increasing role for informal community-based institutions, all of which have been shown to increase property rights protection and incentivize productive entrepreneurship.

This study provided a unique opportunity to enhance our understanding of the roles of formal and informal institutions in changing levels of property rights protection and how that in turn shapes and influences both the level and types of entrepreneurship, emphasizing the importance of context-specific characteristics.

Given that the dominant forms of entrepreneurship identified in Amuda are predominantly productive, they have the potential to contribute significantly to the broader economic development of Northeast Syria and to support the prospects for sustainable peace. In light of this potential, the Autonomous Administration of North and East Syria (AANES) needs to move beyond the discourse of the alternative or communal economy and articulate a clear economic vision that upholds private property rights while prioritizing a market-oriented approach.

More broadly, the findings indicate that policymakers in fragile and conflict-affected contexts should focus on reducing regulatory ambiguity, improving coordination among governing bodies, and constructively engaging with informal institutions that play a role in protecting property rights. These efforts should be complemented by measures to streamline and unify government agencies responsible for supporting entrepreneurship, enhance administrative efficiency, and strengthen bureaucratic capacity. In addition, establishing regular channels for dialogue and consultation with entrepreneurs is essential to ensure that policies are responsive to the needs of the business community. Finally, targeted investments in public services and infrastructure, alongside the development of business incubators, advisory bodies, and training and community education programs, are likely to be crucial in fostering a more supportive and sustainable entrepreneurial environment. The study's narrow geographic focus on Amuda and its relatively small sample of entrepreneurs, limit our ability to generalize its findings, encouraging further studies on other parts of NES.

References

Abedtalas, M. (2024). The bidirectional relationship between social contracts and entrepreneurship: Syrian refugee entrepreneurs in the Kurdistan Region of Iraq. *Mediterranean Politics*, 1–23.

Acemoglu, D. (2005). Politics and economics in weak and strong states. *Journal of Monetary Economics*, 52(7), 1199–1226.

Aidis, R., Estrin, S., & Mickiewicz, T. (2008). Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of Business Venturing*, 23(6), 656–672.

Alchian, A. A. (1989). Property rights. In *The Invisible Hand* (pp. 232–238). London: Palgrave Macmillan.

Aldairany, S., Omar, R., & Quoquab, F. (2018). Systematic review: Entrepreneurship in conflict and post-conflict contexts. *Journal of Entrepreneurship in Emerging Economies*, 10(2), 361–383.

Barzel, Y., & Allen, D. W. (2023). *Economic analysis of property rights*. Cambridge: Cambridge University Press.

Baumol, W. J. (1996). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Business Venturing*, 11(1), 3–22.

Besley, T., & Ghatak, M. (2010). Property rights and economic development. In *Handbook of Development Economics* (Vol. 5, pp. 4525–4595). Elsevier.

Boettke, P. J., & Coyne, C. J. (2009). Context matters: Institutions and entrepreneurship. *Foundations and Trends in Entrepreneurship*, 5(3), 135–209.

Brück, T., Justino, P., Verwimp, P., Avdeenko, A., & Tedesco, A. (2016). Measuring violent conflict in micro-level surveys: Current practices and methodological challenges. *World Bank Research Observer*, 31(1), 29–58.

Brück, T., Naudé, W., & Verwimp, P. (2011). Small business, entrepreneurship and violent conflict in developing countries. *Journal of Small Business & Entrepreneurship*, 24(2), 161–178.

Cañares, M. P. (2011). In violence as in peace: Violent conflict and rural entrepreneurship in the Philippines. *Journal of Small Business & Entrepreneurship*, 24(2), 253–264.

Chowdhury, F., Audretsch, D. B., & Belitski, M. (2019). Institutions and entrepreneurship quality. *Entrepreneurship Theory and Practice*, 43(1), 51–81.

Ciarli, T., Parto, S., & Savona, M. (2010). Conflict and entrepreneurial activity in Afghanistan. *WIDER Working Paper* No. 2010/008. Helsinki: UNU-WIDER.

Ciarli, T., Kofol, C., & Menon, C. (2015). Business as unusual: An explanation of the increase in private economic activity in high-conflict areas in Afghanistan. *SERC Discussion Paper* No. 182.

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, 35(2), 236–264.

Demsetz, H. (1974). Toward a theory of property rights. In *Classic Papers in Natural Resource Economics* (pp. 163–177). London: Palgrave Macmillan.

Eijdenberg, E. L., Thompson, N. A., Verduijn, K., & Essers, C. (2019). Entrepreneurial activities in a developing country: An institutional theory perspective. *International Journal of Entrepreneurial Behavior & Research*, 25(3), 414–432.

Estrin, S., & Mickiewicz, T. M. (2010). Entrepreneurship in transition economies: The role of institutions and generational change. *UCL SSEES Centre for Comparative Economics*, Working Paper No. 106.

Fawaz, A. A. (2018). The future of Syria's Kurds between regional alliances and international balances. *Almustakbal Al-Arabi*, 470. (In Arabic)

Futo, P., Hoggett, P., & Kallay, L. (1997). Small firms and economic transformation in Hungary. *Innovation: The European Journal of Social Science Research*, 10(2), 171–184.

Harris, C., Cai, M., Murtazashvili, I., & Murtazashvili, J. B. (2020). *The origins and consequences of property rights*. Cambridge: Cambridge University Press.

Hoxha, D. (2009). Barriers to doing business in Kosovo: An institutional approach. *International Journal of Entrepreneurship and Small Business*, 8(2), 186–199.

Ireland, R. D., Hitt, M. A., Camp, S. M., & Sexton, D. L. (2001). Integrating entrepreneurship with strategic management actions. *Academy of Management Executive*, 15(1), 49–63.

Jongerden, J. (2021). Autonomy as a third mode of ordering. *Journal of Agrarian Change*, 22(3), 592–607.

Joseph, J., Katsos, J. E., & Van Buren, H. J. (2023). Entrepreneurship and peacebuilding: A review and synthesis. *Business & Society*, 62(2), 322–362.

Justino, P. (2009). Poverty and violent conflict. *Journal of Peace Research*, 46(3), 315–333.

Knapp, M. (2015). Rojava–the formation of an economic alternative. Retrieved from https://www.peaceinkurdistancampaign.com (accessed 28 October 2022).

Martens, M. L., Jennings, J. E., & Jennings, P. D. (2007). Entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50(5), 1107–1132.

Morris, S., Carlos, C., Kistruck, G. M., Lount, R. B., & Thomas, T. E. (2023). Growth mindset training and entrepreneurial action. *Strategic Entrepreneurship Journal*, 17(3), 671–692.

Muhammad, M. S. (2021). *The development role of small and medium-sized enterprises in the Al-Jazeera region*. Alforat Center, Qamishlo.

Muhammad, N., Ullah, F., & Warren, L. (2016). An institutional perspective on entrepreneurship in a conflict environment. *International Journal of Entrepreneurial Behavior & Research*, 22(5), 698–717.

Murphy, K. M., Shleifer, A., & Vishny, R. W. (1991). The allocation of talent. *Quarterly Journal of Economics*, 106(2), 503–530.

Naudé, W. (2007). Peace, prosperity and pro-growth entrepreneurship. *WIDER Discussion Paper* No. 2007/02.

North, D. C. (1984). Transaction costs, institutions, and economic history. *Journal of Institutional and Theoretical Economics*, 140(1), 7–17.

North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.

Penh, B. (2009). New convergences in poverty reduction, conflict, and state fragility. *Journal of Business Ethics*, 89, 515–528.

Pejovich, S. (1972). Towards an economic theory of property rights. *Review of Social Economy*, 30(3), 309–325.

Schmidinger, T. (2018). *Rojava revolution, war, and the future of Syria's Kurds*. London: Pluto Press.

Schmidinger, T. (2020). *The autonomous administration of North and East Syria*. London: Transnational Press.

Schüler, D. (2022). Institutional change and entrepreneurship as occupational choice. *Journal of International Entrepreneurship*, 21(3), 385–439.

Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448–469.

Sendra-Ponsa, P., Comeig, I., & Mas-Tur, A. (2022). Institutional factors affecting entrepreneurship. *European Research on Management and Business Economics*, 28(3), 100–187.

Stenholm, P., Acs, Z. J., & Wuebker, R. (2013). Institutional arrangements and entrepreneurial activity. *Journal of Business Venturing*, 28(1), 176–193.

Tejel, J. (2020). History of Syrian Kurds and their political parties. In *The Autonomous Administration of North and East Syria* (pp. 21–23). London: Transnational Press.

Valdez, M. E., & Richardson, J. (2013). Institutional determinants of macro-level entrepreneurship. *Entrepreneurship Theory and Practice*, 37(5), 1149–1175.

Van Wilgenburg, W. & Fumerton, M. (2022). The consolidation of power in northeast Syria. *Studies in Conflict & Terrorism*, 47(9), 1090–1109.

Welter, F. (2011). Contextualizing entrepreneurship. *Entrepreneurship Theory and Practice*, 35(1), 165–184.

Welter, F., & Smallbone, D. (2011). Institutional perspectives on entrepreneurial behavior. *Journal of Small Business Management*, 49(1), 107–125.

Williams, N., & Vorley, T. (2017). Fostering productive entrepreneurship in post-conflict economies. *Entrepreneurship & Regional Development*, 29(5–6), 444–466.

Xu, G. (2013). Property rights, law, and economic development. *Law and Development Review*, 6(1), 117–142.