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Political Transformation and Conflict: Post-War Risks in the Arab Region

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Contents:

- Introduction
- Theories of War and War Relapse in the Arab Region
- Methodological Approach and Data
- Results and Discussion
- Policy Recommendations and Future Research
- Bibliography

Abstract:

It is critical for policymakers and stakeholders across the Arab region to prepare for post-civil war peacebuilding, recovery, and transition. Once fighting subsides, societies have narrow windows of opportunity to consolidate their transitions and prevent war relapse. This paper conducts statistical analyses on a dataset of all post-civil war episodes since 1970 to identify risk factors for civil war relapse, with particular attention to factors thought to be relevant in the Arab region. The analyses find three drivers of post-war risk: political institutions, military factors, and income growth per capita. Notably, democracy, elections, and larger armed forces each substantially reduce post-war risk of relapse, *ceteris paribus*. Foreign military intervention triples the risk. Decentralization substantially reduces risk of relapse in the first four-and-one-half years after the end of civil war, but substantially increases the risk of relapse thereafter. The impact of economic growth on risk also changes over time: higher growth per capita is associated with greater risk until about 20 months into the post-war period, and is associated with substantially lower risk thereafter. Other economic variables evidently have no significant association with post-war risk of relapse. The analyses also find that the impacts of predetermined factors, of power sharing institutions, and of post-conflict justice mechanisms are either small or indeterminate. The results have critical relevance for post-war policymaking in the Arab region, and indicate that peacebuilders should focus most of their time and resources on carefully designing the political institutions and military architectures of post-war societies, while balancing the time-variant risks of economic growth.

Key Findings:

- Democracies have 82 percent lower risk of war relapse relative to all other regime types.
- Decentralization is associated with approximately 75 percent lower risk of relapse in the initial months of the post-war period, but these protective effects attenuate over time, and reverse after four-and-one-half years.
- No country with high-quality civil liberties has relapsed into civil war since 1970.
- Having held elections within the previous five years reduces risk of relapse by 56 percent.
- For each year elections are delayed, risk of relapse increases about 6 percent.
- Risk of relapse declines approximately 7 percent for every additional soldier per 1,000 people.
- Foreign military intervention almost triples the risk of war relapse.
- The impact of economic growth on risk of war relapse changes over time. In the initial post-war months, a 5 percent annual GDP growth rate per capita is associated with roughly 25 percent greater risk of relapse, relative to flat growth. This growth-related risk decreases quickly, until approximately 20 months into the peace period, when higher growth becomes a protective factor and begins decreasing the risk of war relapse. By month 75, a 5 percent annual growth rate is associated with a 50 percent reduction in risk, relative to flat growth.

Key Policy Recommendations:

- Post-war Arab countries should strive to improve the competitiveness and representativeness of their governance, even in the absence of full democratic transitions.
- Decentralization can help secure peace in the short and medium term, but planners must counteract the long-term, negative effects of decentralization on post-war risk. If decentralization takes place, national governments need sophisticated institutional capacities to work effectively with newly empowered local governments, and to monitor, evaluate, and guide local authorities—and when necessary, overrule them.
- Delaying elections is risky, and post-war Arab countries should enact them as early as judicious and feasible, given circumstances on the ground.
- Large-scale demobilization of post-war armed forces should be delayed; rebel forces should be merged into government forces to the extent possible. Yet post-war governments should aim to improve the effectiveness of their security sectors not only through size of forces. These reforms should concentrate on improving human rights, human security, meritocracy, internal governance, external accountability, and professionalization.
- Economic stabilization and recovery are critical components of post-war policy-making, but they are not necessarily “quick win” strategies. In the first two post-war years, high growth is associated with higher risk of relapse, and the pacifying effects of income growth only “kick-in” thereafter. In the short term, rapid growth cannot substitute for the careful design of post-war political and military frameworks. Yet once countries emerge from this fragile initial period, they can realize dramatic reductions in their risk of war relapse by maintaining high growth rates.
- Post-war governments should negotiate the rapid exit of foreign forces and the handover of competencies to their national armed forces.

1. INTRODUCTION

The Arab region confronts a bewildering array of intense, complex, and interlocked armed conflicts. Iraq, Libya, Syria, and Yemen have fragmented due to civil wars that have been exacerbated by regional and international politics. Egypt is fighting a low-level insurgency in the Sinai Peninsula, Tunisia has suffered from a number of high-casualty terrorist attacks, and Sudan is only slowly recovering from its long-running civil war and from the Darfur conflict. Transnational terrorist movements have exploited governance deficits and regional instability and are now entrenched across the Middle East and North Africa. Nearby countries are also embroiled in conflict or suffering from instability, including Afghanistan, Chad, Eritrea, Ethiopia, Mali, Niger, Somalia, and Turkey. Countries in the Arab region that have managed to escape significant internal conflict since 2011—such as Jordan, Lebanon, and Morocco—are nonetheless enduring serious spillover effects. The Arab region is only beginning to comprehend the human costs of ongoing conflict and instability, and their legacies will persist for decades.

It is critical for policymakers and stakeholders in the Arab region to prepare for post-war peacebuilding, recovery, and transition. Since 1970, civil wars have lasted an average of roughly 10 years. Once fighting subsides, societies have narrow windows of opportunity to consolidate their transitions and prevent war relapse. Data provided below show that failure is common: about 35 percent of all post-war countries lapse back into civil war between the same actors in the first decade after the end of fighting, and an additional 16 percent see a recurrence of lower-level civil conflict. Most of the risk of relapse occurs in the first five years of the post-war period, meaning that if countries can make it peacefully through the initial post-war phases, their chances of success markedly improve. Practitioners have called these narrow windows of opportunity the “golden hours” of post-war recovery (Dobbins, et al., 2007), both because these periods are so critical for long-term success, and because they are pregnant with possibilities of far-reaching political, social, and economic reforms.

This paper conducts statistical analyses on all post-war episodes since 1970 to identify risk factors for war relapse, with particular attention to factors argued to drive war and instability in the Arab region specifically. The analyses find three drivers of post-war risk. First are the political institutions of post-war countries. Democracies have 82 percent lower risk of relapse relative to all other regime types. Having held nationwide elections within the previous five years reduces risk of war relapse approximately 56 percent, while risk of relapse increases six percent for every year that post-war elections are delayed. Prior experience with democracy, before the start of the war, is associated with 58 percent lower risk, though only at marginal significance levels. Decentralization¹ reduces risk of relapse for the first four-and-one-half years of a peace period, but increases risk thereafter. Simply put, the design of political institutions matters a great deal for shaping post-war risks.

The second set of drivers are military and security-related factors. Perhaps not surprisingly, larger security sectors reduce risk of war relapse: for every additional soldier per 1,000 people in the national armed forces, risk of relapse declines approximately 7 percent. Post-war episodes that follow military victories and post-war episodes with UN peacekeeping missions are associated with lowered risk of relapse, though these associations are not statistically significant

¹ In this paper, decentralization refers to systems of federalism or territorial power sharing, discussed in greater detail below. It does not refer to partition or state fragmentation. Decentralization is further defined below.

at conventional thresholds. Conversely, the presence of foreign troops dramatically increases war risk: a foreign military intervention or occupation during the post-war period almost triples the risk of relapsing back into civil war. These findings suggest the importance of security sector reforms to post-war Arab countries, which are situated in a region with some of the largest militaries in the world on a per capita basis.

A third important influence is economic growth. In general, the analyses undermine key assumptions undergirding international approaches to peacebuilding after civil war: it finds only limited evidence that the economic characteristics of post-war countries have strong influences on the likelihood that they will return to war. The only economic variable found to be associated with post-war risk is income growth per capita. The association changes over time. In the initial post-war months, a 5 percent annual GDP growth rate per capita is associated with 25 percent greater risk of relapse, relative to flat growth. This growth-related risk decreases quickly, until approximately 20 months into the peace period, when higher growth becomes protective and begins decreasing the risk of war relapse. By month 75, a 5 percent annual growth rate is associated with a 50 percent reduction in risk, relative to flat growth.

Other economic variables do not show strong relationships to post-war risk. Income per capita, development assistance per capita, oil rents as a percent of GDP, unemployment rates, and youth unemployment rates are all tested, but none is associated with civil war relapse at statistically significant levels within the first decade following the war. Economic stabilization and recovery are critical components of post-war policy-making, but they are not “quick win” strategies. In the first two post-war years, high growth is associated with higher risk, and the pacifying effects of income growth only “kick-in” thereafter. In the short term at least, rapid growth cannot substitute for the careful design of post-war political and military frameworks. Yet once countries emerge from this fragile initial period, they can realize dramatic reductions in their risk of war relapse by maintaining high growth rates. At the same time, the findings provide no evidence in support of two common international policies for post-war countries: large-scale development aid or employment generating projects.

Other findings are presented below. Political power sharing institutions indicate substantially riskier post-war environments. Post-conflict justice mechanisms have ambiguous effects. Islam, Arabic culture, and location in the Middle East and North Africa do not have statistically significant effects on the likelihood of war relapse, holding everything else constant, suggesting that the Arab countries presently in civil war should experience post-war risks comparable to similarly-situated countries in the historical record.

The findings suggest that peacebuilders should focus their time and resources on the political and military architectures of post-war societies, and on securing long-term economic growth.

2. WAR AND WAR RELAPSE IN THE ARAB REGION

Since 1970, the historical record of post-civil war countries in the Arab region compares favorably with the rest of the world. Of 109 post-war episodes since 1970, 23 occurred in the Middle East and North Africa (Willcoxon, 2015).² Of those 23 episodes, nine relapsed into war within 10 years, giving a success rate of 61 percent—essentially identical to the global success rate of 65 percent. Eight civil wars in the Arab region are ongoing as of 2014.³

Table 1 shows descriptive statistics on some key variables by region. Since 1970, the post-war episodes in the MENA region generally fall in line with global averages. Two exceptions stand out. Since 1970, post-civil war episodes in the MENA region received about half the rate of UN peacekeeping missions as the global average, and no post-civil war episodes in the MENA region began with democratic regimes in place.

² For the purposes of this paper, the Middle East and North Africa region includes Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, the State of Palestine, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

³ By the UCDP/PRIO Armed Conflict Dataset definition, the ongoing “civil wars” are: Algeria (vs. AQIM), Iraq, Libya, Sudan (Darfur), Syria, Israel-Palestine, Yemen (vs. AQAP, Houthis).

Table 1: Descriptive Statistics on Post-War Episodes by Region (based on data from Willcox, 2015)

	Number of Post-War Episodes	Percent that Ended in Victory	Ethnic Fractionalization	Percent UN Peacekeeping	GDP per capita (Year 1) ¹	Percent Democratic (Year 1)	Percent Decentralized (Year 1)	Mil. Personnel per 1,000 (Avg. Year 1)	Percent Relapsing by Year 10
East Asia and Pacific	19	0.11	0.49	0.00	446.70	0.16	0.42	5.81	0.42
Europe and Central Asia	12	0.25	0.39	0.58	5130.27	0.17	0.50	10.80	0.08
Latin America and Caribbean	7	0.43	0.41	0.43	2312.72	0.43	0.29	6.45	0.14
Middle East and North Africa	23	0.26	0.49	0.09	2296.84	0.00	0.39	9.50	0.39
South Asia	11	0.27	0.56	0.00	608.75	0.82	0.55	3.44	0.09
Sub-Saharan Africa	37	0.16	0.74	0.22	804.89	0.03	0.16	4.35	0.49
Global	109	0.21	0.57	0.18	1700.02	0.17	0.34	6.46	0.35

¹ in 2005 US dollars

What risk factors have shaped and will shape post-war recovery in the Arab region? Many of the same factors that contributed to the onset of war in Syria, Yemen, and elsewhere will undoubtedly contribute to risk of relapse in their post-war periods, whenever those wars end. It is therefore appropriate to review existing hypotheses for patterns of war, instability, and regime change in the Arab region. Despite a swell in scholarship since 2011, no consensus has emerged. This section touches upon the most compelling theories, with a particular focus on explanations for the period since 2011. Not surprisingly, these theories of conflict tend to overlap substantially with explanations for authoritarian resilience and economic stagnation, two other striking characteristics of the Arab region in the past few decades.

Governance Deficits and War

In 2010, a leading scholar of democratization, Larry Diamond, noted that governance in the Arab region was “a striking anomaly—the principal exception to the globalization of democracy” since the start of the third wave of democratization in the mid-1970s (Diamond, 2010:93). Five years after revolution swept through the region, only Tunisia has established democratic political institutions. Data from the World Bank suggest that institutions in the Arab region are distinctive in their lack of voice and accountability, though there is considerable within-region variation (Cantu and Chaitani, 2015).

An analysis by ESCWA of governance and conflict relapse found that “a lack of good governance practices or governance deficits is one of the most prominent root causes and drivers of conflict and its relapse in the region. This is particularly true for civil strife, but governance deficits also stunt socio-economic and political development. The study advocates that conflicts, political tensions, rentier economies and parochial systems of governance have greatly undermined social cohesion and justice, inclusive growth, economic diversification, access to natural resources and indeed peace itself... [and that] that a series of mutually reinforcing interacting variables are the driving forces of the governance deficit, forming a vicious cycle of governance deficit, conflict relapse and de-development” (ESCWA 2011).

A 2013 ESCWA report underscored the importance of reforming and modernizing governance in the security sectors in the Arab region (ESCWA 2013). ESCWA’s forthcoming Arab Governance Report outlines a series of governance deficits in Arab countries in conflict, including legislative, administrative, judicial, and security institutions; the report notes the vicious circle linking conflict and governance deficits in the region (ESCWA 2016). These findings build on baseline assessments of governance in Arab countries in transition, published by ESCWA in 2014 (ESCWA 2014).

Many Arab countries clearly suffer from governance deficits, but how do these deficits contribute to civil war, and will such deficits inhibit post-war peacebuilding and recovery?

Lack of state capacity and post-war relapse

The onset of civil wars are instances of severe institutional failures, and often the fighting destroys state institutions and capacity even further. Weakened capacity to implement public policy makes transitioning out of conflict exceptionally difficult. Peacemakers and peacebuilders can craft the best-designed peace agreements and policy recipes, but without state capacity, these policy frameworks will be hollow. State weakness makes it very difficult for post-war governments to make credible commitments to rebels or potential rebels to implement reform agendas or peace agreements (DeRouen et al., 2010).

This type of governance deficit has certainly impacted post-war and transitional recovery in the Arab region since 2011. State weakness in Libya and Yemen meant that the state elites lacked the “institutional capacity to check the escalation of social conflicts or, indeed, hold underdeveloped and weakly consolidated states together in the face of rising violence” (Heydemann, 2016:197). The Qaddafi and Saleh regimes had over decades employed personalism, state weakness, and informality as governing strategies; it is unsurprising that, in these contexts, critical junctures like the Arab uprisings “produced state collapse and violent conflict” (Heydemann, 2016:197).

Authoritarianism and post-war relapse

Another type of governance deficit related to civil war is authoritarian institutions that lack transparency, accountability, and participatory aspects. A key feature of authoritarian regimes is their brittleness and propensity to collapse under stress, when compared to democratic regimes (Hegre, et al. 2001). Authoritarian regimes are also more bellicose than democratic regimes (Gates, et al. 2006).

Lack of Accountability. Compared to democratic governments, authoritarian governments have a harder time making credible commitments to peace agreements. Authoritarian leaders are less constrained by institutions, have less legislative and judicial oversight, do not have to explain themselves to voters or the press, and are generally insulated from political consequences of incompetence and duplicity. Many autocrats in the Arab region have skillfully exploited ethnic, religious, and sectarian differences to sustain their rule: indeed, this divide-and-rule strategy extends back to the colonial period, when European powers frequently elevated minority communal groups to rule over majorities. Having adopted these strategies in the recent past, it is hardly credible that, even if they signed a peace agreement, certain rulers would not renege on promises of reform, and resort to authoritarian strategies in the future. Lack of accountability means that their domestic political opponents, including rebel groups, cannot trust autocrats to implement peacemaking or peacebuilding reforms.

Lack of Independent Civil Society Groups. In times of transition and crisis, countries are often assisted by timely interventions from non-governmental organizations, civil society actors, or other credible third parties. The end of Fascist rule in Spain in the late 1970s was, at key moments, facilitated by a monarchy that had remained neutral during the Francoist period. The Catholic Church played an important role in the transition to democracy in Brazil, Poland, and Hungary, while in Czechoslovakia an organized group of dissidents, artists, and intellectuals stepped in to lead the transitional government in late 1989. During the 1990s, the Turkish Union of Chambers of Commerce and Industry and other non-governmental organizations sponsored ground-breaking research and organized Track II dialogue processes aimed at a settlement of the conflict in southeastern Turkey. Since 2011, Tunisia has emerged as the most stable transition country in the Arab region in part because of the active involvement of labor unions, chambers of commerce, human rights organizations, lawyers’ syndicates, and other civil society groups (Chayes, 2014); the four most important groups won the 2015 Nobel Peace Prize. Prominent civil society groups that are moderate, pragmatic, autonomous from the government, and widely trusted by the public have been decisive actors in many political transitions and conflict resolutions.

Yet civil society actors that meet these criteria are hard to find in the Arab region, due in part to the thoroughness of the region’s authoritarian governance. The legacy of the Qaddafi regime is extreme but instructive. Over 42 years of misrule, Qaddafi deliberately subverted autonomous social institutions because he viewed them as a threat. By the 2011 uprising, Libyan society lacked

even weak or partially-independent political and civil society institutions that could help manage a peaceful transition: Libya had no political parties, regional or local governments, trade unions, independent legislators or judges, independent or robust civil society groups, or even prominent religious or traditional organizations (Vandewalle, 2012). The only social organizations that could draw on independent sources of legitimacy, and were therefore the most likely to provide a focal point for any mediation, were Libya's tribes. Yet even this traditional system had been effectively subverted (Vandewalle, 2012). As a consequence, policy implementation in post-Qaddafi Libya was crippled by a lack of strong institutions to enforce bargains struck between the major factions (Willcoxon, 2017). In other contexts, independent civil society groups would step into the institutional vacuum, but Libya lacked such groups and the result has been a relapse into civil war in 2014.

Economic performance and post-war relapse

The political economies of the Middle East and North Africa have distinctive features that are thought to influence patterns of conflict in the region. In their discussion of the origins of the Arab uprisings, Cammett, et al. (2015) identify root causes as "insufficient job creation, labor market pressures exacerbated by the youth bulge, the mismatch between educational systems and labor market needs, the declining quantity of water and rising dependency on food imports, the continuing decay of the public sector, the mixed record of economic liberalization, a growing housing crisis in urban areas, and the rise of political Islam across the region" (408). Widespread corruption and cronyism, declining welfare regimes, unequal opportunities, and perceptions of insecurity fed popular grievances leading up to the 2011 uprisings (Cammett, et al. 2015).

Social scientists have identified the so-called "youth bulge," and its intersection with poor employment prospects, as a key driver of conflict in the Arab region. The demographic trends are remarkable: over 50 percent of the Arab population is under the age of 25 and two-thirds are under the age of 30. Youth employment in the Arab region persistently lags all other regions. In 2014, youth unemployment was 28.2 percent in the Middle East and 30.5 percent in North Africa (ILO 2015). Youth unemployment has been exacerbated by conflict and instability since 2011, but the problem stretches back much further than the Arab uprisings. The Middle East and North Africa have been the worst regional performers for youth employment for at least the past 20 years (ILO 2015). Unemployed youth, especially unemployed young men, are argued to be at heightened risk of recruitment into criminal behavior (Tanner-Smith, Wilson, and Lipsey, 2012), to be more sympathetic to terrorism (Fair and Shepherd, 2006), and to contribute to the risk of revolution and civil war (Urdal, 2006).

An analysis by ESCWA of data from the World Values Surveys suggest that "young people are more likely to view the use of force as justifiable to achieve certain ends, they are also more likely to have positive views on democracy. A close look at the degree of divergence in youth preferences reveals that, as far as strategies of mobilization and political orientation go, youth cannot be seen as a cohesive category or collective actor. For that they are too divided among themselves. The degree of their ideological radicalization is comparable to that of older generations. Standard deviation analysis of responses shows that, as a group, young people disagree more strongly among themselves than older generations on issues of ideology, the use of violence for political action, and the role of religious institutions" (ESCWA 2015a).

An analysis by ESCWA of conflict trends and unemployment found that “while, on average, there is no statistical effect of unemployment rates on conflict, [there is] a close and significant relationship between unemployment, a lack of opportunities for youth, and conflict intensity in the Arab region... [T]he most intense conflicts are closely linked to the highest levels of unemployment. As conflict intensity and unemployment grow, the correlation between these two factors intensifies even further” (ESCWA 2015b). Certainly, a key task of post-war Arab societies will be to absorb large numbers of youth into their workforces, including ex-combatants, many of whom will have a range of physical and psychosocial disabilities due to exposure to violent conflict.

A second set of economic explanations for conflict in the Arab region center on the role of oil and natural gas production, and the dependency of regional income on exports of those hydrocarbons. Since 1973, oil rents comprised approximately of 30 percent of annual GDP on average—by far the highest average of any region in the world over that time period, and more than triple the average of next highest region, Sub-Saharan Africa.⁴ Large oil revenues are thought to affect conflict patterns in two ways. First, oil is an easily lootable commodity, and its presence provides incentives for rebels to organize, and then to secure the oil production and export it themselves (Collier and Hoeffler, 2002).⁵ Second, oil revenues contribute to a governance “resource curse.” Oil revenues are easy for states to secure and they are extremely lucrative; states with such endowments have little need to develop the intrusive, complex bureaucracies essential for extracting revenues from personal income, commercial exchange, or international trade. As a result, state capacity of oil producers are comparatively low given their per capita income (Fearon, 2005). Nor do oil rentiers need to develop forms of democratic legitimacy that would permit the extraction of taxes directly from their citizens (Huntington, 1991:65). Furthermore, oil producers succumb to the ‘Dutch Disease’: the availability of high and unearned profits in the oil sector change relative prices faced by firms, households, and governments. The political economies of oil producers reorient themselves around oil production and away from productive sectors, leading to static economies that cannot absorb large numbers of new entrants to the labor markets.

Security sector governance and post-war relapse

Another set of arguments about war in the Arab region center on the peculiar endowments and preferences of coercive security apparatuses. Bellin (2004, 2012) argues that authoritarianism in the Arab region is robust specifically because of the capacity and will of the security sector to “repress democratic initiatives originating from society” (Bellin, 2012:128). The capacity of Arab security sectors to repress dissent depends on two factors: 1) large fiscal resources available to the coercive apparatuses, derived from massive hydrocarbon and strategic rents,⁶ 2) and alliances with western powers. The willingness of Arab security sectors to repress dissent derives from 1) low institutionalization and professionalism, and the close alignment of security sectors with governing regimes, and 2) weak popular mobilization to challenge the ascendancy of the security apparatuses. Arab countries vary on these four dimensions, and the configuration of these factors shape strategic interactions that ultimately explain patterns of internal violence.

⁴ These figures are calculated from the World Development Indicators.

⁵ Whether this hypothesis is empirically true is controversial. See, Fearon 2005, and Ross 2006, 2012, for more discussion.

⁶ “Strategic rents” are revenues disbursed by great powers to strategically significant states in the region that are designed to retain loyalty of the regime and keep them in power (Cammett, et al., 2015).

Regime opponents decide whether to challenge the regime based in part on the potential size of their protest movement, and the regime's security services decide whether to respond with repression.

Bellin's theory provides a direct and parsimonious explanation for regime survival and civil war during and after the Arab uprisings in 2011. In Tunisia and Egypt, the security sectors were more professionalized and the protests were largest, and as a result, the militaries were least willing to use violence to repress their uprisings, and instead facilitated the exit of their autocrats. In Libya, Syria, and Yemen, the militaries were less professionalized, more closely entwined with their regimes, and initially faced smaller and less coherent protest movements. In these countries, security sectors fragmented, leading to civil war.

Violent extremism and spoilers

One newer phenomenon that will certainly influence post-war Arab countries is the presence of extremist terrorist groups that will act as spoilers. Stephen John Stedman (1997) elaborated the concept of civil war spoilers, which he defined as "leaders and parties who believe the emerging peace threatens their power, world view, and interests and who use violence to undermine attempts to achieve it." The threats from spoilers come both from violent non-state actors left out of peace agreements and also disgruntled followers who defect from settlements to which they object. Their impact on stability can be catastrophic, sometimes undermining years of negotiations and trust-building. Other scholars have conceptualized the critical problem as how to "transform spoilers into stakeholders" (Hartzell and Hoddie, 2010).

One distinguishing characteristic of al Qaeda and Da'esh is their recalcitrance and extremism: their 'bargaining' positions are so far removed from 'normal' post-war bargaining spaces that evidently no amount of crisis management or "soft-intervention" will transform these groups from spoilers into stakeholders invested in stability, peacebuilding, and recovery, as advocated by Hartzell and Hoddie (2010) and others. As they implement their peacebuilding and recovery strategies, future post-war governments in the Arab region will also be forced to implement counterinsurgency or counterterrorism strategies, ideally strategies that are sustainable in the long run. A review of best practices in counterinsurgency and counterterrorism is beyond the scope of this paper, but such practices are said to combine military, police, and intelligence activities with mechanisms for addressing root causes of conflict, respecting human rights, implementing social reconciliation process, and improving legitimacy through participatory governance.⁷

Peacebuilding strategies after civil war

The policy menu for post-war peacebuilding and recovery is vast. One recent review found over 100 individual policy prescriptions in the academic or practitioner literatures, or implied from the historical record (Willcoxon, 2015). Among the broad categories of policies advanced or undertaken are: democratization, international peacekeeping, growth-promoting economic reforms, transitional justice mechanisms, demobilization and reintegration of ex-combatants, national dialogue processes, jobs programs for youth, security sector reforms, and many, many

⁷ See, for example, the United Nations Security Council Counter-Terrorism Committee, at <http://www.un.org/en/sc/ctc/practices.html>

others. The task for national and international policymakers is to select the policies that best mitigate the risk of war relapse, given the circumstances of their post-war society.

The paper now turns to assessing the impact of both predetermined factors and policy choices on war relapse, with a particular focus on the distinctive features of the Arab region discussed in this section.

3. METHODOLOGICAL APPROACH AND DATA

To explore the impact of background conditions and policy choices on the prospects of post-war recovery and transition in the Arab region, this paper conducts statistical analyses on a dataset of all post-war episodes since 1970. Willcoxon (2015, 2016) provides a list of post-war episodes and relapses since 1970, extracted from the UCDP/PRIO Armed Conflict Dataset and the UCDP Armed Conflict Encyclopedia. A civil war episode is defined as an internal armed conflict⁸ that surpasses 1,000 battle deaths during a continuous spell of fighting.⁹ Countries can experience multiple, simultaneous civil war episodes, as occurred, for example, in Ethiopia, Iran, Myanmar, and Uganda. Following the UCDP/PRIO codebook and standing practice in the political science literature, this definition excludes episodes of purely communal violence in which the state was not a combatant, as well as episodes of one-sided violence for which there was no organized, armed resistance (e.g. episodes of mass killings and terrorism against civilians).¹⁰ A civil war episode is considered ended when fighting halts for at least one year; the end date is then recorded as the date of the last reported fighting. This definition yields 135 civil war episodes since 1970. Of these civil war episodes, 109 ended for at least one year, giving us 109 post-war episodes to study.¹¹

When a civil war episode ends, a post-war episode begins. Most post-war episodes endure for a substantial amount of time, but many episodes collapse back into fighting. Using the same data source, the dates for any post-war relapses are recorded. A post-war relapse occurs when a new civil war episode begins in that country between substantially the same combatants. A new war between new combatants, or the recurrence of a different conflict, does not count as a failure. A recurrence of lower-level conflict (less than 999 battle deaths) does not constitute a failure, even when the lower-level conflict is between the same actors. The analyses focus on the decade after the end of fighting. If no war resumes in that time frame, then the post-war period is censored 10 years after the end of fighting, or 31 December 2014 for more recent wars.¹² Of the 109 post-war periods under consideration, 38 relapsed into civil war within a decade, giving an average decade-risk of failure of approximately 35 percent.

Compared to some other lists of civil wars and post-war periods (e.g. Collier and Hoeffler, 2000; Collier, Hoeffler, and Rohner, 2008; Doyle and Sambanis, 2000, 2006; Fearon and Laitin, 2003), these definitions are relatively restrictive: the post-war episodes under evaluation follow major

⁸ The definition of internal armed conflict is from the UCDP/PRIO Armed Conflict Dataset Codebook, version 2015-4.

⁹ This threshold was selected to match the prevailing definitions in the Correlates of War project and the UCDP/PRIO project. Note, however, that the threshold is not for a single year greater than 1,000 battle deaths, as in the Correlates of War database, nor greater than 1,000 battle deaths over the course of the entire conflict (including multiple spells of fighting) as in the UCDP/PRIO definition. The definition used here yields a list of “civil war episodes”—continuous spells of fighting than reach 1,000 battle deaths during that spell.

¹⁰ Most scholarship on violent conflict considers communal violence and one-sided violence as separate phenomena with distinctive data generating processes (Collier and Sambanis, 2005:323-4). Note that civil wars that feature communal violence or one-sided killing are included in the list—the list only excludes episodes of violence where the state was never involved or where there was never organized resistance.

¹¹ I have added observations for the Iraq-SCIRI conflict, Krajina conflict, and the first Liberian War, since the Armed Conflict Encyclopedia appears to undercount battle deaths, and these conflicts are typically included in cross-national civil war datasets.

¹² There are two exceptions. A post-war period in South Yemen is censored due to its merger with North Yemen in 1990, and a post-war period in Sudan is censored once South Sudan achieves independence in 2011.

wars (not minor conflicts), and ‘success’ or ‘failure’ of that post-war period is determined solely by whether major war reemerges (and not minor conflict) between substantially the same combatants. For the present analyses, other possible definitions of post-war success—the elimination of all political violence, rapid economic recovery, a lack of coups d’état, democratization—are not considered.

Annual data were collected on a variety of potential risk factors, based on thorough readings of the civil war, peacekeeping, and post-war recovery literatures. The data sources follow Willcoxon (2016).

This paper conceptualizes post-war risk as the probability that a post-war country returns to war. The statistical approach employed is called survival analysis. Survival analysis—also known as duration, hazard, or event-history analysis—has a venerable lineage in political science and international relations for studies of timing, endurance, change, tenure, and stability, in a variety of different contexts. In particular, survival analysis has been used to study a number of topics related to civil war, peacekeeping, and post-war stability, including the duration of civil wars (Balch-Lindsay and Enterline, 2000; De Rouen and Sobek, 2004), the correlates of peace duration after civil wars end (Collier, Hoeffler, and Soderbom, 2008; Dahl and Hoyland, 2011), the effectiveness United Nations peacekeeping missions (Fortna, 2004; Gilligan and Sergenti, 2008), the impact of peace agreements and the importance of agreement design (Fortna, 2003; Mattes and Savun, 2010), and power-sharing approaches to post-war governance (Hartzell and Hoddie, 2003, 2015).

Though there are a variety of parametric and non-parametric survival models, Box-Steffensmeier and Jones (2004) recommend using the Cox proportional hazard model because such an approach makes no assumptions about the shape of the underlying hazard rate.¹³ The Cox approach is also appropriate for the present analyses because most key covariates change over time—such as GDP per capita, military personnel per capita, and democracy—and this approach allows the subdivision of time into short intervals (Rodriguez, 2016).

Note that two datasets are used in the following analyses. The first is a time-invariant dataset (N = 109, relapses = 38), used to explore the potential impact of the fixed and essentially predetermined factors on risk of relapse after civil war. The second dataset used is a time-variant dataset (N = 887, relapses = 38); this latter dataset is used for the majority of the following analyses. For the latter dataset, time is subdivided into calendar years; this approach assumes that the baseline hazard is constant within a given calendar year but can change moving from one year to the next.

The following tables report hazard ratios, rather than regression coefficients. Hazard ratios are interpreted relative to 1.0. If a hazard ratio is greater than 1.0, higher values of that covariate are associated with greater risk, while a hazard ratio less than 1.0 indicates that higher values of that covariate have an association with lower risk. For example a hazard ratio of 2.50 implies the risk is increased by 2.5 times, while a hazard ratio of 0.80 implies the hazard had decreased 20 percent.

¹³ The most common alternative, the Weibull model, assumes that the hazard is constantly increasing or decreasing over time.

For the time-variant dataset, diagnostic tests revealed strong evidence for non-proportional hazards for the core model and for several variables, suggesting that the impacts of at least some covariates change over time, as countries progress through their post-war decade. The standard response to the presence of non-proportional hazards is to introduce time-dependent control variables. Interacting just two variables with time (measured in months since the war episode ended) successfully accounted for the non-proportional hazards; these two variables were income growth per capita and decentralization. Once time-dependent controls were added to the models, diagnostic tests show no further evidence of non-proportional hazards and the Cox procedure is therefore appropriate.

Table 2 presents descriptive statistics on selected variables. There are a good number of cases on many these variables.

Table 2: Selected descriptive statistics, post-war countries¹

Per capita income in war termination year, average	\$650
Democratic regime at any point in post-war period, proportion	0.27
Decentralized regime at any point in post-war period, proportion	0.39
War ends in victory by one side, proportion	0.21
UN peacekeepers present at any point in post-war period, proportion	0.19
Foreign military intervention at any point in post-war period, proportion	0.16
Any power sharing	0.64
<i>Political power sharing</i>	0.51
<i>Economic power sharing</i>	0.31
<i>Military power sharing</i>	0.51
Any post-conflict justice	0.65
<i>Trial</i>	0.27
<i>Truth commission</i>	0.14
<i>Reparations</i>	0.15
<i>Amnesty</i>	0.53
<i>Purge/Lustration</i>	0.08
<i>Exile</i>	0.15

¹ Data sources discussed in text and Willcoxon (forthcoming)

4. RESULTS AND DISCUSSION

I first test whether and to what extent ‘predetermined’ factors are associated with civil war relapse. Post-war episodes begin with many historical, social, geographic, and conflict-related aspects already fixed and essentially unchangeable by post-war policymakers. We should expect that some types of civil wars generate distinctive handicaps for their post-war societies. Perhaps quick, less intense, and less divisive civil wars are easier for societies to recover from than civil wars lasting decades, generating hundreds of thousands of battle deaths, or implicating and deepening social cleavages. Table 3 shows the results of a survival analysis of risk factors due to either the nature of the civil war or the nature of the post-war country. Each of these variables features prominently in the civil war and peacekeeping literatures. From the perspective of post-war governments, these factors are essentially predetermined or immutable, including a country’s initial post-war development level, whether the war ended in victory by one side, the size of population and area of the country, how mountainous the terrain is, the ethnic diversity of the society, the duration of the war episode, the intensity of the war episode measured in battle deaths, whether the war episode was itself a recurrence of a previous war, the duration of the regime in years, and any prior experience with democratic governance.

Table 3 reports the results of Cox proportional hazard regressions using the time-invariant dataset. The results for two models are presented; the second specification includes dummy variables for world region, to test for region-specific effects.

Table 3: Predetermined Factors and Risk of Civil War Relapse (Time-Invariant Dataset)

	<i>Predetermined</i>		<i>Region Dummies</i>	
	<i>Hazard Ratios</i>	<i>Robust SE</i>	<i>Hazard Ratios</i>	<i>Robust SE</i>
<i>Development</i>				
Per capita income ¹	0.693	† (0.202)	0.844	(0.22)
<i>Governance</i>				
Prior democracy	0.418	† (0.485)	0.616	(0.51)
Regime duration ¹	1.001	(0.01)	1.002	(0.01)
<i>Social factors</i>				
Ethnic fractionalization	1.182	(0.862)	0.722	(0.954)
Population ¹	0.904	(0.148)	0.991	(0.188)
<i>Geographic factors</i>				
Area	1.032	(0.183)	0.909	(0.201)
Mountainous terrain	0.991	(0.007)	0.993	(0.008)
<i>War-related factors</i>				
Prior war	1.138	(0.362)	0.822	(0.424)
Victory by one side	0.771	(0.478)	0.765	(0.493)
War episode battle deaths	0.886	(0.155)	0.877	(0.151)
War episode duration	1.000	(0.002)	0.999	(0.002)
<i>Region dummies</i>				
East Asia & Pacific			7.888	(1.441)
Latin America & Caribbean			2.641	(1.589)
Middle East & North Africa			5.575	(1.226)
South Asia			1.417	(1.751)
Sub-Saharan Africa			9.340	† (1.193)
Log likelihood	-163.489		-159.418	
Observations	109		109	
Number of failures	38		38	

¹ In the war termination year

***significant at the .001 level; **significant at the .01 level; *significant at the .05 level; †significant at the .1 level.

Two-tailed tests. Hazard ratios are reported. Robust standard errors, clustered by episode, are given in parentheses.

The results indicate that none of the predetermined factors tested is associated with post-war risk at conventional significance thresholds. Initial development levels, as measured by per capita income in the year the war ended, is marginally significant (at the $p \leq 0.10$ level). Prior experience with democracy is also marginally significant. Yet both these findings disappear with the inclusion of region dummies in the second model. The sub-Saharan Africa region is associated with nine-fold greater risk of relapse compared to the European and Central Asia regions (the omitted dummy variable), but that finding is also only marginally significant. Taken together, the findings in Table 3 provide little evidence that predetermined factors substantially handicap post-war countries. These results should be encouraging since they imply that post-war success or failure is not driven mostly by factors outside the control of post-war actors.

I next test a larger array of historical, geographic, social, economic, political, military, and policy-relevant factors to uncover the significant influences on patterns of post-war relapse. Table 4, Table 5, and Table 6 present results from Cox proportional hazard regressions using the time-variant dataset, where the potential covariates of post-war risk are permitted to change from one calendar year to the next.

The first column in Table 4 presents the results for the core specification, based on standard models in the literature (e.g. Collier and Hoeffler, 2000, 2008; Fearon and Laitin, 2003). I also tested a series of alternative model specifications (not shown), including many of the predetermined factors from Table 3, including indicators for rough terrain, ethnic fractionalization, and war intensity, among others. These latter covariates were not significant, and their inclusion did not change any findings or improve model fit, so they were dropped from the core specification and from subsequent analyses. The findings are now discussed by theme.

Table 4: Governance and Risk of Civil War Relapse (Time-Variant Dataset)

	Core Model			Democracy I			Democracy II			Election I			Election II			Human Rights		
	Hazard Ratios	SE	Robust SE	Hazard Ratios	SE	Robust SE	Hazard Ratios	SE	Robust SE	Hazard Ratios	SE	Robust SE	Hazard Ratios	SE	Robust SE	Hazard Ratios	SE	Robust SE
Per capita income	0.891	(0.168)	(0.037)	0.865	(0.163)	(0.036)	0.870	(0.163)	(0.035)	0.900	(0.167)	(0.031)	0.864	(0.176)	(0.037)	0.900	(0.172)	(0.037)
Per capita income growth	1.046 js***	(0.037)	(0.001)	1.054 js***	(0.036)	(0.001)	1.055 js***	(0.035)	(0.001)	1.051 js***	(0.031)	(0.001)	1.045 js***	(0.037)	(0.001)	1.046 js***	(0.037)	(0.001)
Per capita income growth*Time	0.998 ** js**	(0.001)	(0.001)	0.998 ** js***	(0.001)	(0.001)	0.998 *** js***	(0.001)	(0.001)	0.998 *** js***	(0.001)	(0.001)	0.998 ** js***	(0.001)	(0.001)	0.998 ** js***	(0.001)	(0.001)
Democracy	0.177 *	(0.726)	(0.794)	0.230 †	(0.788)	(0.788)	0.232 †	(0.791)	(0.791)	0.212 *	(0.738)	(0.738)	0.192 *	(0.731)	(0.731)	0.193 *	(0.722)	(0.722)
Decentralization	0.241 †	(0.794)	(0.794)	0.230 †	(0.788)	(0.788)	0.232 †	(0.791)	(0.791)	0.202 *	(0.806)	(0.806)	0.202 *	(0.815)	(0.815)	0.238 †	(0.791)	(0.791)
Decentralization*Time	1.027 *	(0.013)	(0.013)	1.027 *	(0.013)	(0.013)	1.027 *	(0.013)	(0.013)	1.028 *	(0.014)	(0.014)	1.028 *	(0.013)	(0.013)	1.027 *	(0.011)	(0.011)
United Nations PKO	0.528	(0.611)	(0.611)	0.631	(0.629)	(0.629)	0.641	(0.634)	(0.634)	0.588	(0.581)	(0.581)	0.558	(0.57)	(0.57)	0.525	(0.791)	(0.791)
Military personnel per capita	0.929 *	(0.037)	(0.037)	0.925 *	(0.04)	(0.04)	0.925 *	(0.039)	(0.039)	0.925 *	(0.039)	(0.039)	0.920 *	(0.041)	(0.041)	0.929 *	(0.612)	(0.612)
Victory	0.603	(0.456)	(0.456)	0.621	(0.449)	(0.449)	0.617	(0.449)	(0.449)	0.562	(0.457)	(0.457)	0.533	(0.488)	(0.488)	0.604	(0.037)	(0.037)
Population	0.856	(0.157)	(0.157)	0.823	(0.142)	(0.142)	0.825	(0.141)	(0.141)	0.920	(0.16)	(0.16)	0.914	(0.158)	(0.158)	0.857	(0.457)	(0.457)
Area	0.945	(0.149)	(0.149)	0.952	(0.173)	(0.173)	0.951	(0.173)	(0.173)	0.907	(0.146)	(0.146)	0.910	(0.151)	(0.151)	0.947	(0.157)	(0.157)
Democracy, alternative measures																		
PolyY2				0.947	(0.034)	(0.034)												
PolyY2inter							0.945 †	(0.034)	(0.034)									
Elections																		
Elections within past five years										0.438 *	(0.344)							
Duration since last election													1.057 *	(0.027)				
Human rights																		
Free civil liberties																0.000 ***	(0.979)	(0.979)
Log likelihood	-154.704			-157.665			-157.585			-152.095			-152.828			-154.514		
Observations	887			887			887			887			887			887		
Number of failures	38			38			38			38			38			38		

***significant at the .001 level; **significant at the .01 level; *significant at the .05 level; †significant at the .1 level; two-tailed tests; js denotes joint significance. Hazard ratios are reported. Robust standard errors, clustered by episode, are given in parentheses.

Table 5: Power Sharing, Justice, and Military Factors and Risk of Civil War Relapse (Time-Variant Dataset)

	Power Sharing I			Power Sharing II			Post-Conflict Just. I			Post-Conflict Just. II			For. Mil. Interv.			Mili. Power Sharing		
	Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE	
Per capita income	0.921	(0.168)		0.802	(0.175)		0.838	(0.167)		0.799	(0.175)		0.835	(0.168)		0.884	(0.178)	
Per capita income growth	1.038 js***	(0.039)		1.043 js***	(0.035)		1.056 js***	(0.033)		1.069 * js***	(0.033)		1.041 js***	(0.035)		1.046 js***	(0.036)	
Per capita income growth*Time	0.998 ** js***	(0.001)		0.998 ** js***	(0.001)		0.998 ** js***	(0.001)		0.427 *** js***	(0.001)		0.998 ** js***	(0.001)		0.998 ** js***	(0.001)	
Democracy	0.173 *	(0.718)		0.161 *	(0.746)		0.281 †	(0.75)		0.356	(0.822)		0.220 *	(0.731)		0.177 *	(0.727)	
Decentralization				0.246	(0.864)		0.142 *	(0.851)		0.065 ***	(0.771)		0.253 †	(0.796)		0.250 †	(0.8)	
Decentralization*Time				1.027 †	(0.014)		1.033 *	(0.014)		0.998 ***	(0.012)		1.026 †	(0.013)		1.026 *	(0.013)	
United Nations PKO	0.481	(0.542)		0.415	(0.609)		0.545	(0.719)		1.108	(0.896)		0.479	(0.641)		0.522	(0.631)	
Military personnel per capita	0.931 *	(0.035)		0.940	(0.039)		0.939 †	(0.034)		0.929 †	(0.039)		0.950	(0.033)		0.928 *	(0.037)	
Victory	0.743	(0.515)		0.675	(0.516)		0.633	(0.519)		0.662	(0.491)		0.672	(0.469)		0.595	(0.469)	
Population	0.888	(0.178)		0.864	(0.189)		0.853	(0.16)		0.846	(0.159)		0.947	(0.155)		0.839	(0.21)	
Area	0.982	(0.146)		1.084	(0.164)		0.927	(0.16)		0.929	(0.165)		0.993	(0.138)		0.948	(0.148)	
Power sharing																		
Any power sharing	1.389	(0.469)																
Political power sharing				3.655 *	(0.51)													
Economic power sharing				1.381	(0.553)													
Post-conflict justice within past five years																		
Any post-conflict justice mechanism							0.529	(0.434)										
Trial										0.124 *	(0.931)							
Truth Commission										0.373	(1.044)							
Reparations										0.435	(0.943)							
Amnesty										0.877	(0.439)							
Purge/Lustration										5.938	(1.106)							
Exile										0.795	(0.612)							
Military influences																		
Foreign military intervention/occup.													3.020 *	(0.509)				
Military power sharing				0.427 †	(0.504)													
Log likelihood	-155.915			-151.792			-136.364			-127.779			-152.488			-154.698		
Observations	887			887			770			759			887			887		
Number of failures	38			38			35			34			38			38		

***significant at the .001 level; **significant at the .01 level; *significant at the .05 level; †significant at the .1 level; two-tailed tests; js denotes joint significance. Hazard ratios are reported. Robust standard errors, clustered by episode, are given in parentheses.

Table 6: Economic, Social, and Cultural Variables and Risk of Civil War Relapse (Time-Variant Dataset)

	Develop. Assistance			Oil rents			Unemployment			Youth Unemploy.			Islam			MENA Region			Arab country		
	Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE		Hazard Ratios	Robust SE	
Per capita income	0.885	(0.169)	0.930	0.930	(0.195)	0.857	0.822	(0.224)	0.931	0.931	(0.17)	0.922	0.876	(0.18)	0.876	1.043	1.043	1.043	1.043	1.043	
Per capita income growth	1.044	js***	1.064	1.064	js***	1.101	1.091	js***	1.050	1.050	js***	1.049	js***	1.049	js***	0.998	0.998	0.998	0.998	0.998	
Per capita income growth*Time	0.998	** js***	0.997	0.997	** js***	0.997	0.997	** js***	0.998	0.998	** js***	0.998	** js***	0.998	** js***	0.998	0.998	0.998	0.998	0.998	
Democracy	0.177	*	0.167	0.167	*	0.245	0.251	†	0.152	0.152	*	0.152	0.152	*	0.152	0.165	0.165	0.165	0.165	0.165	
Decentralization	0.234	†	0.367	0.367	(0.832)	0.265	0.242	(1.269)	0.259	0.259	†	0.259	0.259	†	0.259	0.259	0.259	0.259	0.259	0.259	
Decentralization*Time	1.027	*	1.022	1.022	(0.015)	1.024	1.024	(0.021)	1.026	1.026	†	1.026	1.026	†	1.026	1.026	1.026	1.026	1.026	1.026	
United Nations PKO	0.532	(0.603)	0.482	0.482	(0.597)	0.907	0.893	(0.602)	0.522	0.522	(0.591)	0.500	0.552	(0.616)	0.552	0.552	0.552	0.552	0.552	0.552	
Military personnel per capita	0.930	*	0.948	0.948	(0.04)	0.941	0.944	(0.077)	0.925	0.925	*	0.931	0.929	*	0.929	0.929	0.929	0.929	0.929	0.929	
Victory	0.601	(0.462)	0.525	0.525	(0.488)	0.483	0.463	(0.823)	0.615	0.615	(0.458)	0.592	0.600	(0.458)	0.600	0.600	0.600	0.600	0.600	0.600	
Population	0.875	(0.179)	0.875	0.875	(0.167)	0.773	0.837	(0.268)	0.847	0.847	(0.161)	0.839	0.877	(0.17)	0.877	0.877	0.877	0.877	0.877	0.877	
Area	0.945	(0.148)	0.940	0.940	(0.147)	1.312	1.253	(0.233)	0.954	0.954	(0.153)	0.950	0.944	(0.154)	0.944	0.944	0.944	0.944	0.944	0.944	
Economic influences																					
Development assistance per capita	1.000	(0.001)																			
Oil rents as a percent of GDP			0.990	0.990	(0.014)																
Unemployment						0.920		(0.056)													
Youth Unemployment							0.976														
Cultural and Geopolitical influences																					
Islam									0.996		(0.005)										
Middle East & North Africa												0.792		(0.469)							
Arab country															1.202						
Log likelihood	-154.669		-128.980	-128.980		-64.516	-65.137		-154.243	-154.243		-154.587	-154.639		-154.639						
Observation	887		778	778		557	557		887	887		887	887		887						
Number of failures	38		33	33		19	19		38	38		38	38		38						

***significant at the .001 level; **significant at the .01 level; *significant at the .05 level; †significant at the .1 level; two-tailed tests; js denotes joint significance. Hazard ratios are reported. Robust standard errors, clustered by episode, are given in parentheses.

Democratic governance and war relapse

Post-war democratic reforms and elections are key components of an international peacebuilding consensus that emerged in the 1990s and 2000s. The results presented in Table 4 provide strong evidence in favor of such approaches. Democracy matters: it has large downward effects on risk of relapse and is statistically significant across a number of different model specifications and alternative measures.

In the core model (Table 4), democracy is measured by a dummy variable indicating a score of six or better on the Polity IV index for that year.¹⁴ The missing dummy variable represents all other regime types.

In the core model, democracy is associated with a massive 82.3 percent drop in post-war risk of relapse, compared to all other regime types, a finding that is significant ($p \leq 0.05$). I checked the robustness of this finding by substituting alternate measures for democracy in two subsequent columns: the polity2 scores and 'corrected' polity2 scores suggested by Plümper and Neumayer (2010). In each case, the results were substantively similar, showing large risk-mitigating effects of democracy, though at only marginal significance levels (the polity2 hazard rate just misses the cutoff for marginal significance).

Adhering to human rights also indicates for post-war stability. Adding a dummy variable for strong civil liberties, as measured by Freedom House, essentially zeros out the risk of war relapse. Indeed, since 1970 no post-war country scoring 'free' on the Freedom House ratings for civil liberties relapsed into civil war.¹⁵

Taken together, the results suggest that strongly democratic regimes are quite resistant to the risk of war relapse. This resistance is not due solely to the presence of mature democracies among post-war cases: new democracies in the population that avoid relapse include Burundi, Guatemala, Liberia, Kosovo, Namibia, Nicaragua, Nepal, Peru, and Sierra Leone.

Post-war elections are another key pillar of the international peacebuilding consensus, despite mixed empirical evidence that they mitigate risk (Brancati and Snyder, 2013; Collier, Hoeffler, and Soderbom, 2008). The results in Table 4 suggest that elections are indeed effective at reducing risk of relapse. Having held any type of nationwide election within the previous five years is associated with a 56.2 percent reduction in post-war risk, all else held constant, and this finding is significant at the $p \leq 0.05$ level (model Election I). Moreover, longer durations between elections increase risk. For each year since the last election, the risk of war relapse increases approximately six percent, *ceteris paribus*, a finding that is also statistically significant (model Election II).

We should not interpret these results as evidence that post-war elections are appropriate in all circumstances, or that such elections have no negative effects. However, the policy implications

¹⁴ The Polity project operationalizes democracy by scoring regimes on the competitiveness of political participation, the openness and competitiveness of executive recruitment, and constraints on the chief executive (Polity IV Project: Dataset Users' Manual v2013). The operationalization of autocracy is similarly constructed. The polity2 scores were used; missing data were imputed as zero.

¹⁵ Country-year observations scoring two or better on the Freedom House ratings for civil liberties include: Argentina (1984-1987), Croatia (2000-2005), Sri Lanka (1977), Namibia (1992), South Africa (1995-1998), and the United Kingdom.

are straightforward: elections should be held as early as feasible and judicious in the post-war period, if not during the war termination phase itself. Delaying elections should be considered a risky strategy, and policymakers should not rely on such delays to enhance stability. Elections—especially early elections—may not be appropriate in every case, but on average they tend to decrease risk of civil war relapse. If policymakers decide to delay elections (and there are certainly legitimate and practical reasons for doing so), then they should explore alternative risk-mitigation policies.

Taken together, the results on the democracy, human rights, and elections variables strongly suggest that post-war policymakers can reduce the risk of war relapse by advancing political reform agendas that improve representation, competition, political and civil liberties, and the rule of law.

Decentralized governance

The core model also tests whether decentralized governance reduces post-war risk. Since the 1990s, decentralization has figured prominently as a peacebuilding strategy, and as a policy recipe for developing countries more generally. The models in Table 4, Table 5, and Table 6 include a simple dummy variable for decentralization, coded 1 under one of two circumstances: first, if a post-war country has a federal system, and second, if regional autonomy arrangements are incorporated into negotiated post-war settlements (based on data from Hartzell and Hoddie, 2015). Scholars of post-war power sharing consider decentralization as a quintessential power sharing approach (e.g. Hartzell and Hoddie, 2003, 2015; Cammett and Malesky, 2012). As noted, diagnostic tests provided evidence of non-proportional hazards for decentralization, violating a key assumption of the Cox approach. Introducing a linear time interaction with decentralization accounted for this violation, per follow-up diagnostics. Decentralization and its time-interaction are individually significant across a number of models presented, though decentralization is only marginally significant in the core specification.

Interpreting the overall impact of decentralization on post-war risk is difficult due to the introduction of the time-interaction term. Figure 1 shows simulated relative hazards of decentralization on risk of war relapse, from the first month after the civil war to month 120. The relative hazards here are the expected change in the hazard when decentralization is implemented (represented by the curve and ribbons), compared to when decentralization is not implemented (represented by the horizontal line at the hazard ratio of 1.0, meaning no effect). The simulations are run 1,000 times, and the ribbons show the middle 50 percent of the simulations.

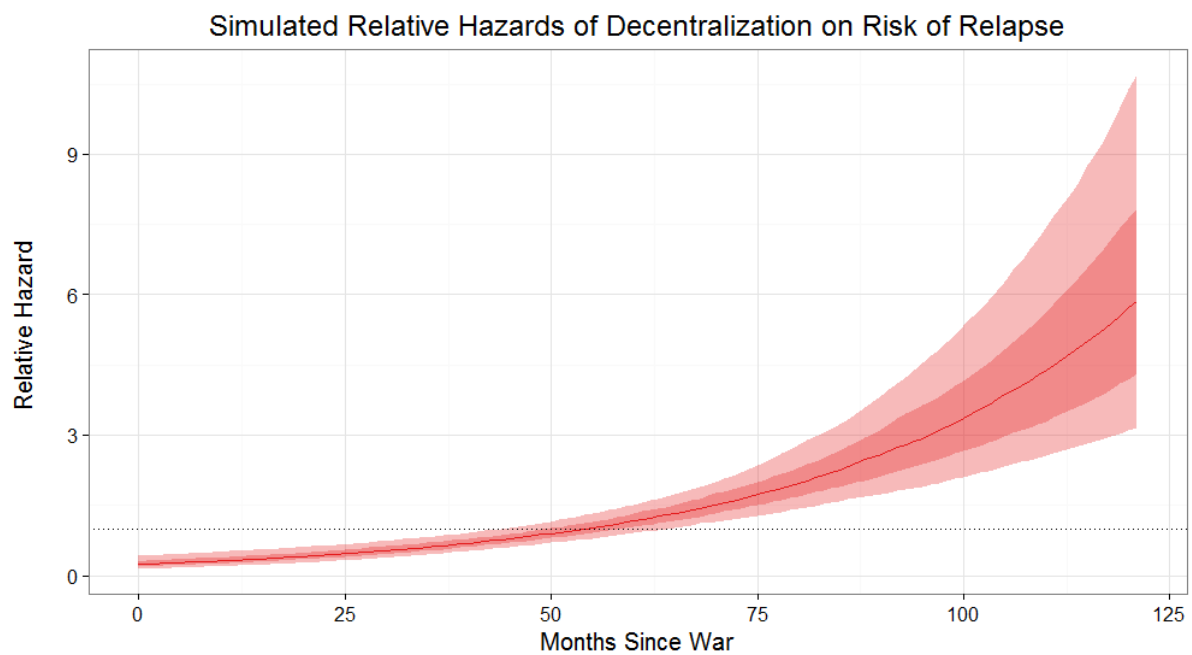


Figure 1: Decentralization and Post-War Risks

Figure 1 shows that the impact of decentralization changes over time: it is a risk-mitigating policy in the early years of the post-war period (the relative hazard is below 1.0), but is significantly risk increasing by the end of the first decade (the relative hazard is above 1.0). Decentralization is associated with a 75 percent reduction in risk in the first month after the end of conflict, but an approximately six-fold increase in risk by month 120. The crossover point is roughly month 55, when the hazard rate changes from less than 1.0 to greater than 1.0.

The results suggest that decentralization is a good short-term peacebuilding strategy but a poor long-term one. Decentralizing power to local actors through federalism or as part of a power-sharing settlement may encourage local actors to “buy-in” to the post-war political system and may entice ex-combatants to “give peace a chance” (Lennon and McCartney, 1969); however, this effect comes at a steep long-term cost. The findings suggest that, in the long run, decentralization hardens political divisions and generates its own conflict risk.

There are at least three policy recommendations that emerge from this empirical result. First, as a rule of thumb, decentralized governance in post-war countries should be avoided unless such reforms are necessary for parties to agree to a peace settlement, unless such reforms are necessary for a post-war society to survive its initial peace period, or unless the post-war environment is exceptionally favorable, risks are low, and actors are reasonably certain that decentralization can be safely pursued for its intrinsic benefits. Second, decentralization can be used to “purchase” short-term stability to give policy-makers and stakeholders a window of opportunity to enact longer-term political reforms, to stimulate economic recovery and long-term growth, or to reconcile societies torn apart by violence. After all, peace cannot endure in the long term if it does not survive the short term. Third, if decentralization is pursued, then the long-term risks generated from that institutional choice should be offset by other, risk-mitigating policies.

Other power-sharing strategies

In addition to decentralization, three other power-sharing strategies are common in post-war societies. Political power sharing refers to consociational political institutions: proportional representation, grand coalitions in the cabinet, proportional integration of the administration and judiciary, and internal group autonomy in the realms of education, family law, language, and culture. These communal and political rights are often secured with a mutual, communal veto over the terms of the bargain. Economic power sharing involves the explicit redistribution of economic resources across social groups, such as oil revenues, development spending, and land tenure rights. Military power sharing refers to policies regulating the distribution of coercive authority in a post-war society. Such policies may include proportional representation of communal groups into the security sector, the incorporation of rebel forces into the post-war military, or power-dividing arrangement whereby government forces control most territory and rebel forces control their own strongholds.

Data on power sharing are drawn from Hartzell and Hoddie (2015). Data are missing for several cases and all observations since 2006; I have imputed missing data using multiple imputation, but because data are likely not missing at random, the following results should be treated cautiously. Table 5 tests power-sharing approaches twice—first by adding a dummy for any form of power sharing in a post-war country (model Power Sharing I), and second by adding dummy variables for each of the four types (model Power Sharing II; decentralization, political power sharing, economic power sharing, and military power sharing).

Confirming results from Hartzell and Hoddie (2003), the hazard ratio was not statistically significant for the dummy variable indicating any form of power sharing (Power Sharing I). In the second model (Power Sharing II), political power sharing is associated with more than triple the risk of war relapse, a statistically significant association, but one whose interpretation is problematic. This result is likely not due to the impact of the institutions themselves, but rather due to the fact that post-war countries adopting political power-sharing institutions are inherently more fragile. Post-war governments adopting political power-sharing institutions have been forced to do so, at least implicitly. By definition, such governments are in weaker positions vis-à-vis their societies (or segments of their societies) than post-war governments that do not consist of political power-sharing institutions.¹⁶ What we can say with confidence is that post-war countries that feature political power-sharing institutions are at much higher risk of relapse than countries that adopt no power-sharing institutions at all. Post-war governments forced into power-sharing arrangements with rival communal or political groups are therefore good candidates for intensive international support.

Military power sharing is associated with 57.3 percent lower risk of relapse, at marginal significance levels, while economic power-sharing institutions show no statistically significant relationship with risk of civil war relapse.

Military influences

Barbara Walter (1997, 1999) and others have argued that the military architectures of post-war societies are the critical factor for establishing a durable peace after civil war. This argument makes intuitive sense: civil wars, especially the most intense conflicts, are military events first

¹⁶ This interpretation implies that post-war countries are not ‘randomly assigned’ to power sharing institutions, and that methodologies other than survival analysis are more appropriate for investigating the impact of power sharing on war relapse. We can mark this down as an area for future research.

and foremost. These wars involve large, hierarchical, heavily-armed organizations inflicting mass violence on other, similar organizations. It follows that post-war peace should depend to a great extent on preventing actors from reengaging each other—that is, convincing these organizations to disband or to remain dormant. Keeping armed groups from fighting one another in post-war settings then depends, in turn, on the arrangement, coherence, discipline, disposition, regulation, and relative strength of these military organizations, including the post-war government’s own forces. Yet such factors are often discounted or ignored by many scholars of post-war peacebuilding and recovery. Partly this is due to a lack of data adequate for cross-national regressions on military factors, such a relative strength among post-war factions, the completeness of demobilization and reintegration of ex-combatants, and the fragmentation and reformation of security sectors.

Table 4 and Table 5 report results from a number of tests on military factors. The findings indicate the critical influence of military architectures on the risk of relapse in post-war countries. Larger militaries reduce risk of post-war relapse: greater numbers of military personnel per capita reduce risk at statistically significant levels, across the majority of model specifications in Table 4, Table 5, and Table 6. In the core model, increasing personnel by one soldier per 1,000 residents reduces risk of relapse by just over seven percent. In a country the size of Libya (approximately 6 million people), achieving this effect would require about 6,000 additional security personnel; for Syria a similar effect would require approximately 20,000 additional personnel—difficult and perhaps expensive, but certainly at a feasible scale for many states. Indeed, increasing military personnel is a comparatively simple strategy for post-war governments to purchase a measure of stability, at least in the short run, even if high military expenditures are an unsustainable policy choice for low-income countries in the long run. Certainly such personnel increases are often far more feasible, and often more politically palatable, than implementing tough economic reforms, or democratizing and liberalizing governance.

The hazard ratios for United Nations peacekeeping operations, across all models, are reliably lower than one, indicating an association between peacekeeping and lowered post-war risk. This effect is consistently large, but never statistically significant. This analysis almost certainly underestimates the risk-mitigating effects of UN peacekeepers for at least two reasons. First, I only code the annual observations for the presence of peacekeeping troops. Once a mission concludes and UN troops depart, the observations are coded zero, meaning that peacekeepers do not receive any ‘credit’ for peace continuing to hold after their departure (see Fortna, 2003:284 for short discussion on this issue). Second, prior research on peacekeeping has established a significant selection effect for peacekeeping missions: the United Nations Security Council sends peacekeepers to ‘hard’ post-war cases (Fortna, 2004, Mullenbach, 2005, Gilligan and Sergenti, 2008). The bias created by this selection effect means that the hazard rates in Table 4, Table 5, and Table 6 probably underestimate the effect of peacekeeping in mitigating the risk of war relapse. As a control variable, this indicator is adequate, but to quantify the impact of UN peacekeeping on post-war risk, alternative methodologies are needed, such as matching.¹⁷

¹⁷ Using such a methodology, Gilligan and Sergenti (2008) find that the presence of UN peacekeepers reduces risk of war relapse by 85 percent. They show that estimates of the effect of UN interventions on relapse that do not account for non-random assignment are biased and underestimate the effectiveness of UN peacekeeping. One drawback of the genetic matching technique is that, by dint of the matching process itself, the impact of other covariates cannot be assessed.

Nonetheless, the results in Table 4, Table 5, and Table 6 are broadly supportive of the central finding of the peacekeeping literature—that peacekeepers do indeed keep peace.

Despite several disastrous examples since 1970, foreign military intervention remains a common post-war military strategy. Often, foreign militaries active during the civil war remain into the post-war period. Historical examples include the Syrian military presence in Lebanon (1976 to 2005), the Israeli occupation of southern Lebanon (1982 to 2000), the Russian military presence in Abkhazia (1994 to present), the NATO mission to Bosnia and Herzegovina (1995 to 2004), and many others. The impact of foreign military interventions is profoundly adverse for the risk of war relapse. Holding all other variables constant, foreign military intervention almost triples the risk of relapse for post-war societies (Table 5). Foreign military intervention is counter-productive as a post-war military strategy, from the perspective of building a sustainable peace. The presence of foreign troops evidently generates its own conflict risk; echoing some arguments made during the U.S. occupation of Iraq that the presence of coalition troops was not dampening the insurgency but rather inflaming it. These results also lend support to arguments that Israeli occupation of the West Bank (and before that, southern Lebanon and Gaza) is not a sustainable conflict-reduction strategy, even from the Israeli perspective.

Other military variables do not show statistically significant associations with war relapse. Military power sharing agreements (Table 5) are associated with higher risk of relapse, but this association is not significant at conventional thresholds. The hazard ratios for victory, across all models, are consistently lower than one, suggesting that wars ending in victories have more stable post-war periods than all other types of war endings, however this effect is never statistically significant.¹⁸

Economic growth

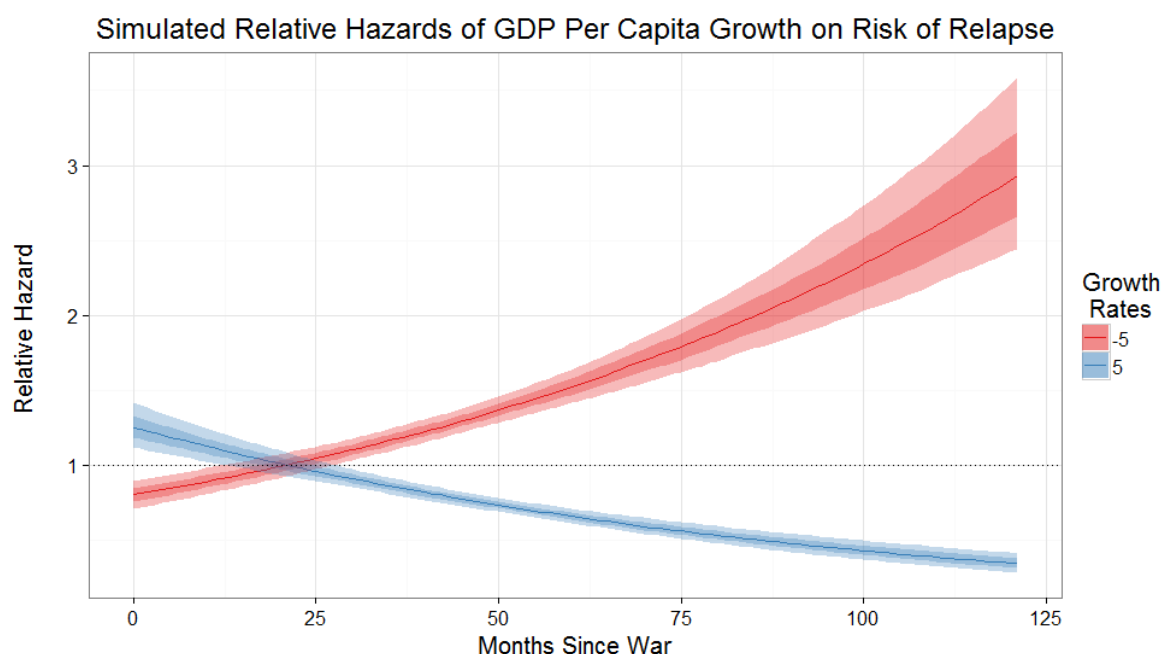
Diagnostic tests revealed that per capita income growth violated the proportional hazards assumption, like decentralization, and so I introduced a linear-time interaction to account for the violation. Though income growth per capita is individually insignificant, the time-interaction term is highly individually significant and a Wald test revealed that the two terms are jointly highly significant ($p \leq 0.001$).

As with decentralization, I ran simulations of the relative hazard of per capita income growth on the risk of war relapse, across the post-war period, from the first month to month 120. Figure 2 shows the results of these simulations, comparing zero growth (represented by the horizontal line at the hazard ratio of 1.0, meaning no effect) with 5 percent annual growth in a given year (the blue curve and ribbons) and negative 5 percent annual growth (the red curve and ribbons). Again, the simulations were run 1,000 times and the ribbons show the middle 50 percent of simulations.

The impact of post-war economic growth on risk of relapse changes over time. During the first 20 months of the post-war period, higher growth is associated with higher risk of relapse. Figure 2 shows that a five percent annual growth rate in the first months after the end of the war corresponds to roughly 20 to 25 percent greater risk, compared to zero growth, while negative 5

¹⁸ Controlling for both victories and negotiated settlements (leaving only low-intensity conflicts and stalemates in the missing dummy variable) does not substantially change the results and does not improve model fit.

percent annual growth rate in the first few months is associated with 20 to 25 percent lower risk, compared to zero growth. These effects diminish quickly, however, such that the impacts reverse by approximately month 20. From month 20 to month 120, the risk mitigating impact of high economic growth increases: by month 120, 5 percent annual growth is associated with 75 percent lower risk of relapse, relative to zero growth, while negative 5 percent annual growth in month 120 is associated with almost triple the conflict risk, relative to zero growth.



Other economic influences

The results find little evidence that other economic characteristics influence the risk of war relapse at statistically significant levels. Measures for per capita income, external development assistance, oil revenues, unemployment, and youth unemployment did not show statistically significant results. There are significant missing data for certain cases and years on oil rents, unemployment, and youth unemployment. These non-results contradict conventional wisdom widely held by many policymakers in the United Nations, the World Bank, western governments, and elsewhere that addressing poverty, underdevelopment, unemployment, the youth bulge, and poor political economies will protect post-war societies from falling back into conflict.

Post-conflict justice mechanisms

Post-conflict and transitional justice mechanisms have been introduced in a variety post-war contexts, especially since the success of the South African Truth and Reconciliation Commission, which began work in 1994. Two major research projects on post-war and transitional justice have identified six individual mechanisms: truth commissions, trials, amnesty, reparations, exile, and purges, also known as lustration (Olson, et al., 2010; Binningsbo, et al., 2012). Such mechanisms should have both instantaneous effects in the years they are ongoing, and residual effects in subsequent years. To test for both effects, I introduced dummy variables to indicate whether post-conflict justice mechanisms had begun in the previous five years (stretching back into the wartime period) based on the datasets from Olson, et al. (2010) and Binningsbo, et al. (2012). In Table 5, two models are introduced: one with a dummy variable indicating the presence of any

post-conflict justice mechanism in the previous five years, and a model with six dummy variables indicating the presence of truth commissions, trials, amnesty, reparations, exile, and purges.

Only post-war trials have associations significant enough to reject the null hypothesis of no difference in the duration of peace after civil war: trials are associated with an 87.6 percent reduction in post-war risk of relapse. The data provided by the two research programs cited above do not include information on whether the justice mechanisms adhere to basic standards of justice or human rights, and their lists combine show trials with international war crimes tribunals. Interpreting the findings on the post-war trials is therefore difficult. Are trials associated with lower risk because they provide justice and punish bad actors, because they are effective at deterring rebel activity, or because they proxy for something else, perhaps the presence of a functioning judiciary? At present, we lack cross-national data adequate for answering these questions, and we must mark this area down for future research.

Policymakers may decide to implement post-war justice mechanisms for a number of compelling reasons, such as human rights, equity, and reconciliation, but the results here suggest that they should not expect such mechanisms to reduce post-war risk.

Islam, Arab Culture, and Geopolitics of MENA

As noted above, many scholars argue that Arab countries are distinctive on various dimensions, and that this distinctiveness translates into patterns of conflict. We can use this dataset to test whether these theories are broadly true in explaining post-war outcomes since 1970, and whether there is some basis to discuss ‘Arab exceptionalism’ in such contexts. In Table 6, I test three variables that should capture some of the ‘distinctiveness’ of the Arab region: a continuous variable measuring the percent of the population that practices Islam, a dummy variable for membership in the League of Arab states, and a region dummy for the Middle East and North Africa. The results are shown in the latter columns of Table 6. None of the three variables show statistically significant results. From a macro-level and historical perspective, there is no evidence to suggest that war-affected Arab countries will perform any worse in their post-war periods than countries from other regions, *ceteris paribus*. The results do not lend any support to arguments about ‘Arab exceptionalism’ in post-war recovery and transition.

State Capacity

Several of the above findings seem to point to the importance of strong state capacity in reducing post-war risk of relapse, arguments also made by DeRouen, et al. (2010) and ESCWA (2011). Notably, the hazard ratios for military personnel per capita and post-war trials indicate risk-mitigating associations, while regime weakness or incoherence potentially explains the risk-heightening associations with political power-sharing institutions and foreign military interventions. It would be preferable to measure state capacity directly, but conceptualizing and operationalizing state capacity is notoriously difficult. The World Bank has published six indicators for state capacity and administrative quality for most countries from 1996 to 2014. Introducing these six indicators to the core model, together or individually, produces no statistically significant results.¹⁹

¹⁹ The number of annual observations drops from 887 to 431 for these regressions.

5. POLICY RECOMMENDATIONS AND FUTURE RESEARCH

The central findings of this paper are that political institutions, military factors, and income growth have the greatest impact on the risk of civil war relapse in post-war countries. Democracy, elections, and greater numbers of troops per capita are clearly protective factors, substantially mitigating the risk of relapsing back into civil war. Decentralization and income growth have significant impacts that change over time. Decentralization is protective in the initial post-war phase, but substantially increases risk of relapse after approximately month 55. Higher income growth per capita is associated with greater risk of relapse until approximately month 20, and is increasingly protective thereafter. Foreign military interventions almost triple the risk of relapse, holding everything else constant. The presence of political power sharing institutions indicates for substantially higher risk of relapse, and the presence of military power-sharing and post-war trials apparently indicates for substantially lower risk of relapse, though these three findings are quite tentative, not robust to alternative model specifications, and are worthy of additional research and data collection. At the same time, several prominent hypotheses about post-war stability have been undermined: many economic indicators, all measures for culture, and most predetermined factors appear not to contribute to post-war risk, one way or the other, at statistically significant levels.

Several of the findings provide motivation for additional research and alternative methodological approaches. For many post-war policy approaches—including peacekeeping, foreign military interventions, and power sharing—there is likely selection bias: peacekeepers are known to go to the hard cases, presumably foreign military interventions also go to hard cases, and power sharing institutions are implemented only where polities are sharply divided, to identify just three examples. Matching techniques or qualitative approaches are preferable to investigate such variables further.

The results raise at least two new sets of interesting questions. First, given their prominence in the practitioner literature, why are the economic characteristics of post-war countries such poor predictors of the risk of relapse? Only one economic indicator, income growth per capita, is found significant, and the impact changes over time. Income per capita, oil rents, unemployment, youth unemployment, and economic power sharing are evidently uncorrelated with risk of relapse. The policy implications of these questions are critical: international institutions, including the United Nations and the World Bank, have repeatedly and emphatically argued that post-war stabilization depends on implementing economic reforms, generating employment, and eradicating poverty, and post-war governments have implemented policies reflecting those beliefs. The empirical findings in this paper suggest that those arguments have rested on shaky foundations. The most we can say is that robust economic growth has a more complex relationship with stabilization than commonly assumed, only decreasing risk of war relapse after month 20, *ceteris paribus*. The results here suggest that the development- and humanitarian-centered recovery strategies advocated by the international community in post-war settings should be pursued mainly for their intrinsic benefits, and policymakers should not depend on such strategies to generate post-war stability.

The second set of interesting questions relates specifically to the Arab region, where the most devastating, ongoing civil wars are now located. How distinctive is the Arab region compared to other regions? Can regional actors learn lessons from global and historical experiences? The analysis provided some historical evidence that post-war countries in the Arab region have

performed roughly in line with global averages. This paper has also provided some statistical evidence that Islam, Arab identity, and the geopolitics the Middle East (however crudely measured) have not elevated post-war risks, at least in historical perspective. It remains a question whether the Arab region has entered a 'new world' in which the external validity of the findings here—their ability to explain new cases—is in doubt.

Yet the Arab region has experienced and recovered from devastating civil wars before, and historical cases in Algeria, Kurdistan, Lebanon, and Yemen, for example, look broadly similar to the current wars in the region. Moreover, post-war experiences in the Middle East, Africa, Central Asia, and East Asia look broadly similar to many potential post-war scenarios in Iraq, Libya, Syria, and Yemen, for example. The findings of this paper, based on statistical analyses of historical cases, can therefore inform policymakers and stakeholders as they devise post-war recovery and peacebuilding strategies for the Arab region.

What are the lessons for policymakers and stakeholders in the Arab region?

Representation, competition, and the rule of law

Post-war governance reforms in the Arab region should aim to increase the representativeness and competitiveness of political institutions, and post-war governments should adhere to international standards of human rights and the rule of law. The historical record indicates that such strategies are feasible, even despite recent setbacks to political reform in the Arab region. Despite various factors working against them, many post-war countries since 1970 have moved swiftly through their political transitions and established reasonably democratic regimes during their first post-war decade, including Burundi, Guatemala, Liberia, Kosovo, Namibia, Nicaragua, Nepal, Peru, and Sierra Leone.²⁰ Though post-war democracy tends to emerge under favorable circumstances—a robust international peacekeeping mandate, a strong and unified state, supportive regional contexts, or the absence of residual violence and resilient spoilers—and though favorable contexts are unlikely to be present in many post-war Arab countries, careful institutional reforms can probably still capture some of the risk-mitigating effects of democracy, human rights, and the rule of law—even in the absence of a full transition.

Elections are not a panacea. Reasonably free and fair elections were implemented in post-war Iraq (January 2005), post-war Lebanon (August to October 1992), and post-war Libya (July 2012). Each election was considered a reasonable success at the time, and yet each failed to accomplish their goals of a stable, democratic transition. This points to the importance of embedding elections in a broader political reform framework: while the findings of this paper suggest that elections can contribute to post-war success by reducing risk of relapse, they are not capable of preventing conflict relapse on their own. National reconciliation processes, the rule of law, political and civil liberties, and other institutional and governance reforms can contribute to the success of elections as a peacebuilding strategy.

In practice, intentional design can improve the competitiveness and representativeness of political institutions. For example, membership in parliament can be engineered such that ethnic and sectarian groups are proportionally represented, and such that half the membership is men and half women. Post-war governments can ensure representativeness through an electoral law

²⁰ Each of these countries scored highly on the Polity IV or Freedom House indices by the end of the post-war decade.

that requires alternation on closed party lists in a proportional representation system, or through direct appointments if elections are delayed. If interim parliamentarians are appointed under a power-sharing agreement, then each faction could be required to submit lists for consideration that are representative across ethnicity, sect, and sex. International actors should further insist that post-war governments should govern according to international standards of human rights and the rule of law.

Decentralization in the Arab context

Many expert observers have argued for some form of decentralized governance in post-war Iraq, Libya, Syria, and Yemen, including federal arrangements. Countries in the Arab region are some of the most centralized polities in the world; governments in the Middle East have been especially resistant to decentralization reforms, even before the recent conflicts, because they perceive such reforms as precursors to state fragmentation, to imperialist redesign of their borders, or to the formation of ethnic enclaves. The present conflicts have reinforced these anxieties.

The findings in this paper suggest that decentralization decreases short-term risk of relapse, but increases it in the long run. Therefore, if decentralization is pursued as a peacemaking and peacebuilding strategy in the Arab region, it must be done carefully and in combination with policies that reduce conflict risk in the long-run, such as policies to promote robust economic growth. In some places, such as in the least developed countries, there may be too little institutional capacity at the local level to assume such responsibilities. In Yemen, for example, significant international support is needed to institutionalize effective, rule-based center-local relationships, including monitoring, coordinating, guiding, and, when necessary, overruling local authorities. Absent external support in such contexts, decentralization is clearly a risky post-war strategy.

If decentralization reforms are pursued in post-war Arab countries, the challenge will be to institutionalize center-local relationships that enhance local governance without entrenching regional divisions that later lead to state fragmentation. In practice this means preventing armed groups from securing local monopolies of force and from subverting national peacebuilding and recovery programs. Such a fragmented transition occurred in Libya after Qaddafi, ultimately leading to the transition's collapse in 2014 (Willcoxon, 2017). Post-war Arab governments can balance against local armed groups by appointing strong transitional governors and district executives who are credible, civilian, well-respected, and representative of local communities, and who can act as trustworthy interlocutors to these armed groups, as well as their constituents. These leaders should be assisted by councils at the governorate and district levels that have strong technocratic flavors while still representing the communities in a given jurisdiction. Governorate and district governments should include equal numbers of women at all levels, including the top leadership. Such steps may help reduce the long-term risks of decentralization as a post-war reform.

Professionalism and integration of the armed forces

A third lesson for post-war stability in the Arab region relates to the security sector. The findings in this paper indicate that post-war governments should maintain or increase the number of active-duty military personnel under their control during the first decade of the post-war period. For every additional military personnel per 1,000 people, a country's risk of relapse declines approximately 7 percent. Though Arab militaries are some of the largest in the world on a per

capita basis, conflicts in Iraq, Libya, Syria, and Yemen have put tremendous stress on those governments' military forces, even leading to fragmentation and collapse in the cases of Libya and Yemen. In addition to rebel forces, new pro-government militias have stood up in all four countries. Reconstituting and reforming the security sectors in these countries will be a central task of any post-war government.

How might this work in practice in the Arab region, in the context of negotiated settlements? As part of negotiated settlements, the highest-quality government and rebel forces could potentially be merged into a single command structure, and then carefully retrained, reequipped, and integrated fully over the post-war period. Such mergers are extremely difficult to implement in practice (e.g. Licklider, 2014), but they are often the only way to conclude a settlement. Secondary forces, such as informal rebel units and pro-government militias could be withdrawn from the field, retrained, and redeployed as reserve forces, gendarmes, or national guards, along lines suggested by Wehrey (2015). Demobilization and reintegration programs could focus their efforts on the least effective rebel and loyalist forces.

If competing forces remain mobilized in a post-war environment, then issues of timing, coordination, and boundary policing become paramount. Third-party military observers, perhaps from the United Nations and perhaps utilizing aerial surveillance technologies, could provide credible information to all parties on troop movements and counterterrorism activities, in order to forestall misunderstandings and reduce perceptions of vulnerability. Furthermore, unarmed observers might helpfully contribute to retraining and redeployment of lesser-quality forces, and the demobilization and reintegration of the least-effective forces. With the consent of post-war governments, international peacekeepers could also temporarily garrison communities that would otherwise feel too vulnerable to demobilize their local militias or hand over weapons.

In negotiated settlement scenarios, post-war governments would probably establish an inclusive national security council and general staff to manage these processes. A national security law would be needed to provide the legal and institutional framework for the control and regulation of the security sector, including imposing military justice and discipline on all armed groups. Experiences in post-war Lebanon and post-Qaddafi Libya indicate how critical it is to enact, early in the post-war period, a national security law that provides a framework for the ongoing regulation and eventual integration or demobilization of all non-state armed groups. Once non-state armed groups entrench themselves into post-war politics, it becomes increasingly hard—if not impossible—to subordinate them to the formal security sector, let alone demobilize them completely, without resort to force. The basic terms of such a law could be embedded into an overall peace agreement.

Attention to personnel numbers is important, but it is not the only way to enhance internal security in the post-war environment. Even before 2011, the Arab region's armed forces, intelligence agencies, and police organizations were universally regarded as too large, under-trained, politicized, top-heavy with personnel, equipped with obsolete weapons systems, incapable of providing adequate levels of security, incapable of providing human-rights centred security, suffering from poor morale, unresponsive to civilian authorities, and unable to engage in long-term planning, produce transparent and accountable budgets, or submit to legislative or civilian oversight.²¹ In many countries in the region, the security sector's primary function was

²¹ For critical reviews of the security sectors in the Arab region, see, for example: Anthony H. Cordesman

and remains to protect the regime from domestic and international political opposition, rather than to supply public order, deter external aggression, or provide justice to their societies. When wars in Iraq, Libya, Syria, and Yemen finally end, post-war governments in those countries should not miss the opportunity to break from this regional pattern, and reconstitute their security sectors along global best practices (see, for example, Ban, 2013). Reforms should concentrate on improving human rights, human security, meritocracy, internal governance, external accountability, and professionalization. Holding the size of the armed forces constant, but improving their effectiveness, would presumably have beneficial effects on the risk of conflict relapse, similar to adding extra personnel per capita.

Negotiating the exit of foreign troops and dealing with foreign fighters

Over the past five years, conflicts in the Arab region have become highly internationalized. The Syria conflict is again instructive. Possibly tens of thousands of foreign troops are active in Syria. Based on credible news reports, it appears that at least Iran, Russia, the United States, and Lebanon's Hezbollah have ground forces operating in the country. A U.S.-led coalition has been bombing Da'esh targets in Syria since September 2014, and Russia has conducted an air campaign in support of the government since September 2015. The Gulf Cooperation Council and Turkey have expressed readiness to send ground troops into Syria. More than 30,000 foreign volunteers have traveled to Syria and Iraq to join Da'esh. Large numbers of volunteers from Iran, Iraq, and Turkey have joined a variety of loyalist, Kurdish, and independent non-state armed groups with a variety of organizational goals.

External influences are known to have great impact on the duration of civil wars and their outcomes. Dobbins et al. (2013) identify 'geopolitics' as a key driver of conflict relapse, and Weinstein and Francisco (2005) show how the sudden end of the Cold War—and the subsequent withdrawal of external support for proxies—swiftly ended the decades-long conflict in Mozambique. This paper has provided evidence that the presence of foreign forces nearly triples risk of conflict relapse.

Negotiating the rapid withdrawal of foreign forces is one clear strategy for the post-war governments in the Arab region to reduce their risk of relapse. Compared to some other post-war policies, such a strategy is also relatively feasible in that it depends only on obtaining the agreement of foreign powers. The international community could play a key role in facilitating the rapid but judicious withdrawal of foreign troops. International observers could also assist in the monitoring and verification of the exit of foreign ground troops.

Addressing the issue of non-state foreign fighters will be far more difficult. Post-war governments in the Arab region, with assistance from international and regional partners, should consider a regional 'demobilization and repatriation' program for fighters willing to return home to countries willing to take them. It is currently unclear how many foreign fighters will seek to return home after wars end in Iraq, Libya, Syria, and Yemen. Some unknown proportion will go underground and try to spoil any settlement, and others will attempt to relocate to other theaters

and Aram Nerguizian. 2010. *The North African Military Balance: Force Developments & Regional Challenges*. Center for Strategic and International Studies; Risa Brooks. 2015. *Understanding Shifts in Egyptian Civil-Military Relations: Lessons from the Past and Present*. The Geneva Centre for the Democratic Control of the Armed Forces; Aram Nerguizian. 2015. *The Military Balance in a Shattered Levant*. Center for Strategic and International Studies.

of war. Still others will join regional criminal networks that can exploit their skills at violent, clandestine, and illicit activities. Rigorous research on this topic is sparse, but actors in the region should begin collecting best practices and begin planning now to ‘sift’ fighters by their risk profiles, neutralizing some, and demobilizing, deradicalizing, and reintegrating others.

Long-term economic growth

The final lesson for post-war countries in the Arab region is the importance of sustained economic growth. Economic stabilization and recovery are critical components of post-war policy-making, but potential risks associated with rapid growth should be offset in the first two years of the post-war period. Once countries emerge from this fragile initial period, they can realize dramatic reductions in their risk of war relapse by maintaining high growth rates.

The costs of conflict in the Arab region are immense. In 2016, UN ESCWA estimated that the annual gross domestic product of Syria had been cut in half by the conflict, that cumulative economic losses were almost \$260 billion, and destruction of housing and infrastructure was approximately \$90 billion (ESCWA, 2016b). The World Bank reported that Yemen’s economy contracted roughly 28 percent in 2015 (World Bank, 2016). Libya’s economy is almost totally dependent on oil production, and conflict in that country has dramatically impinged official production and export since 2014. Iraq’s economy has been hit by both the global oil shock and the Da’esh insurgency.

The economic performance of post-war countries is quite variable, and development aid in such contexts can have profound influences on income growth (Collier and Hoeffler, 2004). (In the dataset of post-war episodes used in this paper, the mean annual growth rate is 3.0 percent, with a standard deviation of 10.5.) Even countries devastated by war can rebound quickly, and middle-income countries are among the best performers in the dataset, suggesting that Iraq, Libya, and Syria could see sustained growth in any future post-war period. Though each case is different, the end of combat, the restart of oil exports, and the injection of reconstruction funds should jump-start the economies of each country. Maintaining high growth through the entire first post-war decade, and thus capturing the large risk-mitigating impacts of growth, will be more difficult, especially given the well-known stagnation in the region. Policymakers should consider bold, persistent structural reforms to promote growth in the latter half of their post-war decades.

Conclusion

This paper has provided strong evidence that political institutions, military factors, and income growth have the greatest impact on the risk of civil war relapse in post-war countries. Both international and national policymakers and stakeholders should design post-war strategies in the Arab region that incorporate the lessons of global and historical experiences. Political reforms, security sector reforms, and reforms to promote economic growth, along the lines described above, should be the primary elements of any post-war strategies.

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