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Beyond governance and conflict: measuring the impact of the neighborhood effect in the Arab region[*]

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Executive summary

- States are linked to each other through a multitude of cultural, economic, security-related and ideological channels. Consequently, developments in one country can have an indirect but strong influence on immediate and more distant neighbors.

- This article conceptualizes this Neighborhood Effect (NE) as the indirect impact that policies, events and outcomes that originate in the neighborhood of a country have on its domestic variables through a variety of channels. The NE is framed around its four main elements: the source variable, the target variable, the channels of transmission, and the definition of the neighborhood.

- A survey of recent studies shows an increasing interest in this topic, explained by the more frequent and more solid evidence of the interconnections between neighboring countries, as well as by recent improvements of data sources in terms of quality and coverage. These studies consistently point out to the existence and significance of the NE across political, economic and security spheres.

- An overview of the Arab region shows that the NE is of particular relevance for this group of countries, as it has become crucially manifest through recent events: civil uprisings swiftly spreading from one society to another, conflict risking to affect neighboring countries, non-state actors broadening their influence across borders and fighting proxy wars, as well as an acute governance deficit and uneven socioeconomic development common to the entire region.

- Indeed, as a neighborhood, the Arab region is marred by conflict: 41% of all Arab countries have experienced at least one internal conflict in the past five years (2009-2013). This had led to a population displacement of unprecedented dimensions, with an equivalent of 2.1% of the population registered as refugees and another 2.9% as displaced inside their country of origin. In addition, the region suffers one of the worst rates of terrorist activities in the world.

- The evidence suggests that countries cannot be studied in isolation, particularly in the Arab region. The influence of one country over its neighbors in terms of political, economic and security events can be potentially vast. Furthermore, the different areas of the NE should not be considered separately from one another, but rather as interacting forces that can jointly exert a significant impact on the countries.

- The article concludes by proposing a quantitative study that takes these factors into consideration and could provide a significant insight into the NE from a broader perspective. This study will consider a large panel of countries and a long period of time, to try to obtain as much evidence as possible about these variables and their interactions. However, the main focus of study will remain the Arab countries and the specific factors at play in this region.

1.   Introduction

States all over the world have witnessed time and time again how their economy and their political institutions are decisively affected by developments in neighboring countries, even if only through an indirect channel: conflicts have repeatedly spread from one State to another; democratic changes have tended to progress (or regress) in waves across the globe and then cluster geographically; economies have been positively or negatively affected by the socioeconomic performance of their main trading and financial partners and neighbors; technological and intellectual innovations have been emulated across borders; countries have engaged in arms races; political actors and institutions have adapted to the changes observed in their major countries of reference. These examples show that developments in the neighborhood of a country may spill over its economic, social and political domains. This indirect influence is collectively called the Neighborhood Effect (NE).

Although the idea is not new, it has become a recurring topic in the literature in recent years. This proliferation could be justified by the plentiful evidence from all regions of the world and from all domains (economic, social and political) that has been documented and analyzed. It can also be argued that, as linkages between countries increase and more goods, services, capital, technology, information and ideas flow across borders, the NE has gained in potency and relevance. Also, the appearance of new extensive databases and statistical methods has recently provided more evidence about the potential influence of the neighborhood.

Even if potentially relevant for all countries in the globe, the NE might be of particular consequence for the Arab world. The countries of this region have constantly faced the spillover effects of the long-standing occupation of Palestine, the involvement of outside forces in Iraq and the frequent cases of internal conflicts of different degrees of severity; this has led to unprecedented levels of conflict-driven population displacement. In addition, the influence and power of ethnic- and religious-based groups ignore national borders and the events in one area can quickly be transmitted to other places. This region also suffers from instances of power politics, including proxy wars, and it has shown inertia towards regional polarization. Cross-border terrorism and arms smuggling are widespread. Additionally, there is a persistent governance deficit that diminishes the capacity of the countries to buffer the effects of the events taking place in the surrounding areas. The recent incidents of civil uprisings and demonstrations in some Arab countries and the spillover of the Syrian and Iraqi conflicts to bordering countries, which led to the influx of millions of conflict-driven displaced persons and the territorial expansion of extremist non-state actors with radical exclusivist ideologies, illustrate how the NE can be an important driving force in the Arab world.

This paper puts forward a conceptualization of the NE (section 2) and attempts to place it in context in relation to some recent works published in this area (section 3). It will also motivate the special relevance of this topic for the Arab region (section 4). Finally, it will delineate an evidence-based, quantitative analysis of the significance of the NE from a broad perspective, carefully identifying the statistical issues of relevance, the main sources of data and the value-added that such a study could provide (section 5). A final section concludes and sets the stage for the forthcoming paper with the complete empirical analysis proposed in this article.

2.   Conceptualization of the neighborhood effect

For the purpose of this paper, the NE for a country is defined as the indirect impact that policies, events and outcomes that originate in countries in its neighborhood have on its domestic variables through a variety of channels.[1] According to this definition, the NE has four essential elements, which are described in further detail below.

a) <u>The policies, events and outcomes that originate in the neighborhood (the source variables)</u>. As the linkages between countries expand through trade, technological advances, cultural factors and political power, the likelihood that the impact of an event or policy will spread over borders also increases. Even if the most studied source variables are internal conflicts, democratic transformations and economic outcomes, the reality is that the majority of changes in a country have the potential to have an indirect effect on its neighborhood. In this study the source variables are classified in the following three spheres.
    i) *Political aspects (democratic neighborhood)*. This category includes adherence to the rule of law, respect for human rights and civil liberties, degree of gender equality, changes in political participation and democratic rules, institutional performance, and changes in governance that may have an influence on the countries in the neighborhood.
    ii) *Socioeconomic development (prosperous neighborhood)*. This area deals with outcomes in all fields of social and economic development, including income growth, macroeconomic stability, equality of opportunities, and social progress in areas such as education and health. It could also comprise environmental and sustainability considerations.
    iii) *Security and military issues (peaceful neighborhood)*. Here are included aspects related to incidence of internal conflict, military expenditure and arms races, political violence, arms smuggling, terrorism and conflict-driven population displacement. This is arguably the sphere that has been more extensively studied in the literature, as it will be shown in the following section.
b) <u>The affected domestic variables (the target variable)</u>. The source variable originating in the neighborhood has an effect in one or more domestic variables in the political, developmental and security spheres. This is the final impact of the NE on the country of interest.
c) <u>The channels of transmission</u>. These refer to the mechanisms through which the source variable in (a) has an influence on the target variable (b). They can be very diverse and will depend on the specific variables in question and the idiosyncrasies of the relationship among the countries in the neighborhood. Since they are highly case-specific, they are better-suited for a case-study approach and not a comprehensive, quantitative study such as the one that will be proposed below. However, they are an essential component of the NE and they should be taken into account when studying this phenomenon.
d) <u>The nature of the neighborhood</u>. How is the neighborhood defined? What criteria (or proximity measures) should be considered when selecting the neighbors? This ultimately depends on the

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[1] This phenomenon has received other names depending on the area of study. Conflict literature refers to this as contagion, political studies have called it diffusion, while economists label it spillover or externalities. Since this study will cover the three areas, the term "neighborhood effect" is preferred as a middle ground.

source and target variables in question, as well as the channels that transmit the signal. In general, even if geography may be the first criterion that comes to mind, there are other possibilities to delineate the neighborhood. It can, for example, be defined according to economic integration parameters, since it is plausible that countries are affected to a higher degree by their main economic partners. A common culture, including ethnic kinship, language, religion, colonial past and minority groups, can also be used to outline the neighborhood. Another potential dimension relates to common memberships in alliances, international treaties, defense pacts, and intergovernmental organizations. Finally, one can also define a neighborhood in terms of the "soft power" or universal influence of countries, including their weight in the world economy, their global military strength and their cultural attraction.
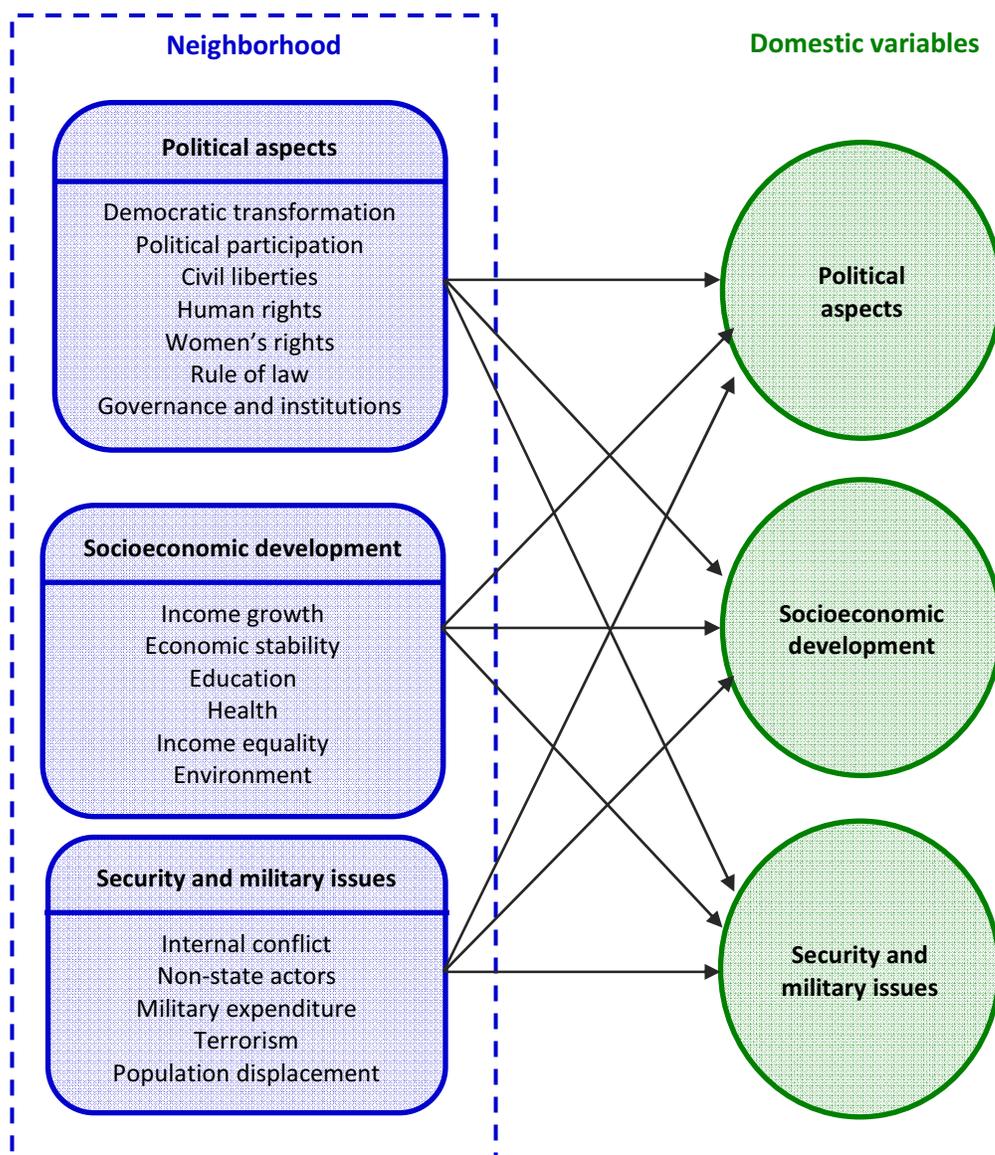
The four dimensions described above are summarized in Figure 1. On the left-hand side are the source variables in the neighborhood, arranged in the three spheres: political, socioeconomic and security/military spheres. On the right-hand side are the affected domestic variables, which can follow a parallel classification. The arrows represent the channels of transmission through which the source variables have an effect on the target variables. It can be noticed that the linkages flow across all spheres since a policy or event in a neighboring country can have a widespread impact on domestic issues, not only contained to one isolated sphere. Even though the arrows are shown in the figure as flowing in one direction (from the neighborhood to the domestic domain), there exists the possibility of a feedback effect. For example, an internal conflict in country A may trigger a conflict in country B, which in turn can further fuel the initial conflict in country A, and so on. In this study we are concerned with the net or overall impact of the NE after these feedback forces stabilize. Finally, the dotted rectangle in the left-hand side symbolizes the demarcation of the neighborhood, which can follow one of the criteria defined in point (d) above.

As an example of these interactions, Figure 2 illustrates the NE and its four components for one particular source variable: conflict-driven population displacement.[2] In this case, the source variable is the flow of refugees from a conflict-affected neighbor into the territory of the country of concern. This figure shows the potentially widespread impact that this may have on domestic variables and the numerous channels of transmission (shown in yellow) that may become active. First, there could be an influence on the political domain. The influx of refugees may create socio-political divisions, undermine the territorial sovereignty by external actors, threaten the local balance of power in affected communities, change the demographic distribution and ethnic/cultural composition of the population, promote changes in regional alliances, and incite political interference, resulting in a loss of legitimacy in the authority of the government. It can also facilitate corruption, loss of accountability of security forces and imposition of states of emergency that could lead to widespread human rights violations and a weakening of the rule of law. These could lead to institutional weakening and a generalized democratic regression.

But the arrival of this population also generates strain in the local and national economy through an increased competition for scarce resources that could lead to higher unemployment and declining

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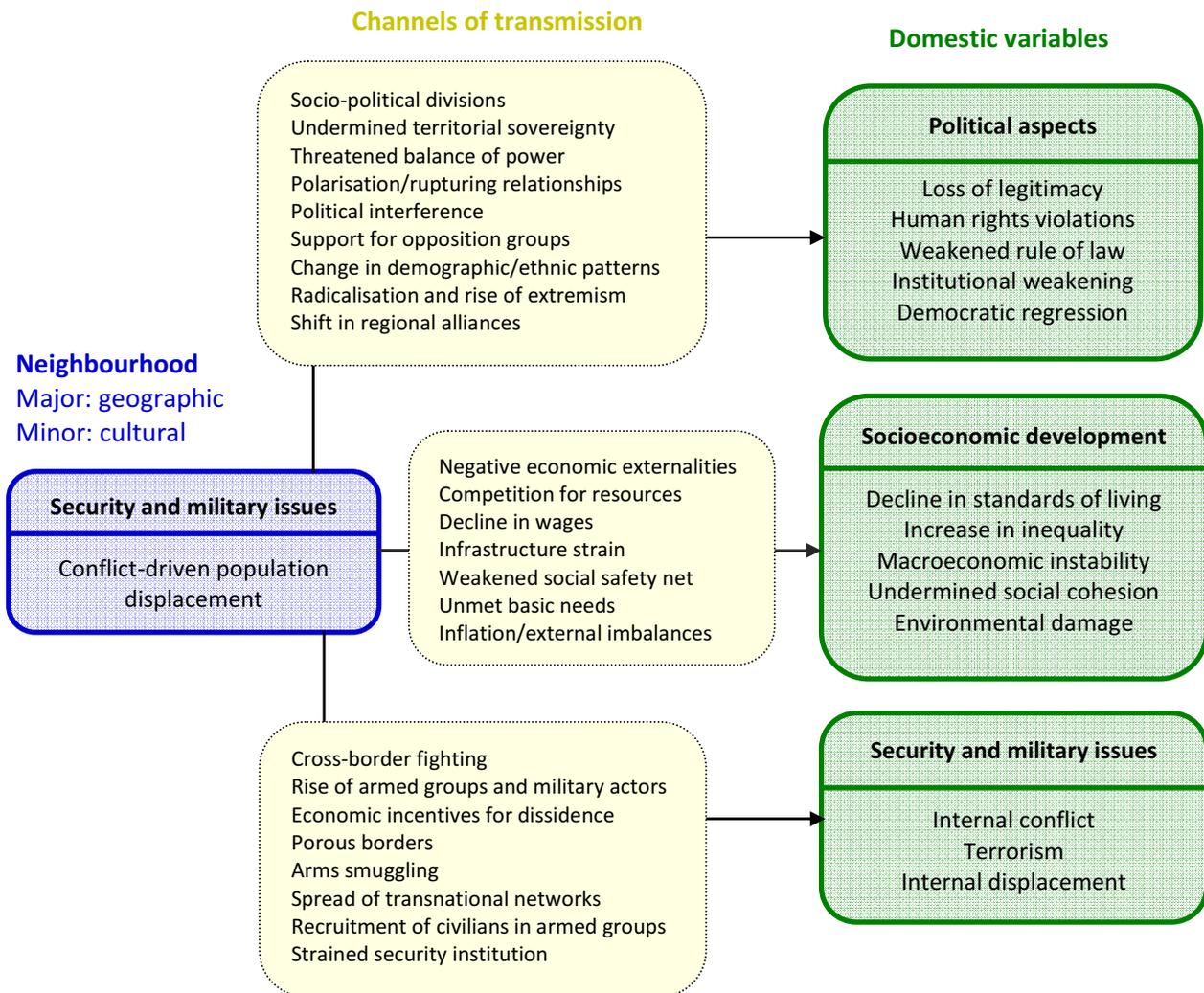[2] This figure draws some information from Salehyan and Gleditsch (2006).

Figure 1. The neighbourhood effect and its essential dimensions

Neighborhood

Domestic variables

Political aspects

Democratic transformation
Political participation
Civil liberties
Human rights
Women's rights
Rule of law
Governance and institutions

Socioeconomic development

Income growth
Economic stability
Education
Health
Income equality
Environment

Security and military issues

Internal conflict
Non-state actors
Military expenditure
Terrorism
Population displacement

Political aspects

Socioeconomic development

Security and military issues

Source: ESCWA.

wages, increases in prices, external imbalances and eventually cause macroeconomic instability and deteriorating standards of living. The infrastructure and ability of the government to provide basic social services such as education and healthcare may be insufficient and result in unmet basic needs, an increase in inequality and deteriorating social cohesion. This by itself may trigger internal conflicts. But there are also other factors that could exacerbate the situation: formation of armed groups, economic incentives for dissidence, unprotected borders subject to smuggling of arms and the spread of transnational networks, and an overstrained security institution that cannot cope with the challenges brought upon by the flow of refugees.

Figure 2. Example of a neighbourhood effect: conflict-driven population displacement

Channels of transmission

Domestic variables

Socio-political divisions
Undermined territorial sovereignty
Threatened balance of power
Polarisation/rupturing relationships
Political interference
Support for opposition groups
Change in demographic/ethnic patterns
Radicalisation and rise of extremism
Shift in regional alliances

Political aspects

Loss of legitimacy
Human rights violations
Weakened rule of law
Institutional weakening
Democratic regression

Neighbourhood
Major: geographic
Minor: cultural

Security and military issues

Conflict-driven population displacement

Negative economic externalities
Competition for resources
Decline in wages
Infrastructure strain
Weakened social safety net
Unmet basic needs
Inflation/external imbalances

Socioeconomic development

Decline in standards of living
Increase in inequality
Macroeconomic instability
Undermined social cohesion
Environmental damage

Cross-border fighting
Rise of armed groups and military actors
Economic incentives for dissidence
Porous borders
Arms smuggling
Spread of transnational networks
Recruitment of civilians in armed groups
Strained security institution

Security and military issues

Internal conflict
Terrorism
Internal displacement

Source: ESCWA, with some information from Saleyhan and Gleditsch (2006).

The last element included in the figure is the nature of the neighborhood. Given that the source variable is population displacement, this would naturally suggest a geographic definition of the neighborhood (and, more specifically, mostly constrained to contiguous countries). However, there is also a cultural/ethnic ingredient that could inflict a significant effect on the potency of the NE for this variable.

One aspect that must be stressed is that, according to the definition described above, the NE considers only the _indirect_ influence of the events that take place in neighboring countries; in other words, it includes only the incidental or subsidiary effect of the neighborhood and not the actions explicitly and directly undertaken by the neighbors to produce a domestic change. For example, the incidental consequences of a civil war in a bordering country are part of the NE, while a direct military incursion and an inter-state war are not; the indirect effect of rapid economic growth and social progress in a

major economic partner can be considered as part of the NE, while a direct intervention in the domestic economy, the explicit imposition of sanctions and the grant of conditional foreign aid cannot.

3.   Recent studies in the neighborhood effect literature

An extensive literature in connection with one or several aspects of the NE has emerged in recent years. This renewed interest could have been sparked by contemporary events that have shown how powerful the impact of neighboring countries could be (the prolific studies on the current conflict in Syria and its negative consequences in bordering countries are an example of this). Observed events could therefore have contributed to raise interest in this topic. Also relevant is the development of recent databases on the fields of politics, socioeconomic outcomes and conflict, with better quality and a wider geographic and time coverage. They have allowed the application of better and more robust statistical methods to test the occurrence of a NE and analyze its mechanisms of transmission. The current section summarizes some of the recent publications, divided according to the impact of the NE in the domestic variables along the three dimensions identified earlier.[3]

3.1 Political aspects

A prevalent topic in the NE literature is the influence of the neighborhood on a country's political institutions.[4] This is a departure from traditional theories (such as the modernization hypothesis and other structural theories) that sustain that democratization is an endogenous process. Berg-Schlosser (2008), for instance, documents the contemporary waves of democratization in Southern, Central and Eastern Europe and tries to identify, through anecdotal evidence, the contagion, diffusion, demonstration and other exogenous effects introduced by their neighborhood (including the countries in the European Union, Russia and the other ex-Soviet republics), given the difficulties introduced by the so-called Galton's problem.[5] Using different spatial measures and methods, Kopstein and Reilly (2000) studied the different paths taken by the post-communist countries of Central and Eastern Europe and Central Asia and they conclude that geography, in particular the proximity to the Western countries, had a strong influence in their progress towards democracy and economic freedom.

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[3] Even if there are many classical and influential studies in this topic, this section will focus only on the literature published over the last 10-15 years in order to account primarily for research supported by recent datasets. Furthermore, this section does not cover the extensive literature about the definitions and mechanisms of contagion, diffusion, demonstration effects, and others. For some references on this, see Most and Starr (1990), McAdam and Rucht (1993), Mooney (2001), Rogers (2003), Simmons and Elkins (2005), Meseguer (2005), Simmons, Dobbin and Garrett (2006), and Shipan and Volden (2008).

[4] For some influential publications that raised the issue of the role of the international and regional variables, interdependence, diffusion and neighborhood effect in the development of democracy, and which presented mainly exploratory analysis on the available data, see for example Przeworski et al. (1996), O'Loughlin et al. (1998), and Starr (1991) and its updated version in Starr and Lindborg (2003). Also, it must be noted that this section covers only empirical studies of the NE in political variables; however, there is also an important body of literature covering theoretical or simulated analysis; see for instance Cederman and Gleditsch (2004) and Elkink (2011).

[5] In essence, "the problem whether a phenomenon can be considered to have had its own independent origins or must be attributed to intercultural diffusion effects has become known as 'Galton's problem'"; i.e., spatial autocorrelation. See Berg-Schlosser (2008, p. 30).

A recent wave of quantitative studies attempt to explain changes in a certain measurement of democracy with respect to the situation in the neighborhood plus a series of controls. Wejnert (2005) uses a hierarchical model to compare the predictive power of endogenous (socioeconomic development) and exogenous (diffusion processes) determinants of democracy and finds that the latter have a markedly stronger performance in predicting democracy (in particular, indicators of spatial proximity and networks) for the world and the different regions. However, Niemeyer et al. (2008), though using a simpler methodology, refute this hypothesis and determine that both endogenous and exogenous factors have played an important role in the development of democracy, the first saliently in the period before 1980 and the second featuring more prominently thereafter. Brinks and Coppedge (2006) consider a pattern of democratic diffusion that they call "neighbor emulation" through a two-stage regression analysis and find strong evidence for their key hypothesis that neighboring countries tend to converge towards a shared level of democracy; the greater the gap between a country and its neighborhood, the stronger the forces towards convergence.

Gleditsch and Ward (2006) examine the influence of international and regional factors in the likelihood that a country will be a democracy through a Markov chain process of transition between two states (democracy and autocracy) over time. They conclude that a higher proportion of democratic neighbors penalizes the probability that autocracies will endure and decreases the probability that democracies will break down; in addition, a democratic transition in the region and the installment of a peaceful neighborhood makes it more difficult for an autocracy to survive. Leeson and Dean (2009) test spatial interdependence in the advances and relapses of democracy and therewith prove the democratic domino theory;[6] they find evidence for this theory, although this is less dominant than recent foreign policy rhetoric may have led to believe. Finally, Gibler and Tir (2014) also argue in favor of a geographic clustering of democracies, but they find statistical evidence that a reduction in territorial threat is behind this feature: as threats, perceived or real, fade away, the military loses influence and political power and decision-making becomes decentralized, rights and freedoms acquire a central role, and democratic progress follows.

Instead of conducting large cross-country analysis, some research has focused on the specificities of particular regions. For instance, Mainwaring and Pérez-Liñán (2009) study the period 1945-2005 for Latin America and discover that international forces (in particular, regional dissemination mechanisms) played a strong role in determining transitions to or breakdowns from democracy, leading them to conclude that these factors explain democratic changes better than structural conditions such as modernization, class and natural resource dependence. They also note that there exists a feedback effect from the domestic context to the region and back to the country, which may contribute to explain the wave-like behavior of democratization processes. Similarly, Donfouet et al. (2014) find that the level of democracy in African countries is strongly influenced by the level of democracy in their neighbors.

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[6] According to this theory, "changes in one country's political institutions spread to neighboring countries, affecting these countries' political institutions similarly, which spreads to their neighbors, and so on." See Leeson and Dean (2009, p. 534).

Deviating from a strictly geographic definition of neighborhood, Goodliffe and Hawkins (2011) propose instead the use of three international dependence networks: trade partners, alliance partners and international organizations partners. They conclude that, as its network becomes more democratic, a State does as well, even when controlling for geographic proximity. In contrast, Lidén (2011) finds little evidence of diffusion of democracy when simultaneously accounting for several channels of diffusion (geographic, trade and regional) and a longer set of control variables; instead, he sustains that internal factors in the society that are outside the political system (such as education, religion, access to information and communication technologies, etc.) are more relevant to explain the level of democracy.

A conflict in one country may have important consequences on the political developments of neighboring states. Danneman and Ritter (2014) find strong evidence that a state takes reactive measures to a conflict in the neighborhood by increasing political and civil repression at home, thus creating the conditions for a democratic regression, in an attempt to pre-empt potential domestic rebellion and avoid contagion. They also found out that the pre-emptive repression is higher when the state is faced with conflicts in geographically closer states but, unexpectedly, that it does not vary according to cultural or regime type similarities. Similarly, Gibler (2010) argues that an external threat halts opposition efforts by other political actors, reduces party polarization and leads the public to accept shifts in executive power in exchange for security, thus motivating the political leader and elites to seize the opportunity to enact institutional changes that centralize power; this phenomenon can occur in both democracies and nondemocracies. The author demonstrates this process only in cases of a direct threat by other states; it would be interesting to evaluate if the same situation holds when the country is threatened by the contagion of a neighboring conflict.

Another aspect in which the NE can manifest itself is through intergovernmental alliances and organizations. Pevehouse (2002) provides theoretical and empirical evidence that membership in regional organizations promotes transitions to democracy (among other factors such as regional level of democracy, past experience with democracy and internal episodes of violence, while other factors like presence of a military regime and a conflict in the neighborhood, actually reduce the probability of a transition to democracy). In a similar vein, Gibler and Wolford (2006) offer statistical substantiation that an international defense alliance effectively reduces territorial threats to its members and stabilizes borders, thus promoting transitions to democracy among its member states. This implies that alliances act as diffusion agents of democracy and they could contribute to explain the wave-like progression of democratization.[7] Finally, Torfason and Ingram (2010) provide further support for a similar argument, but considering intergovernmental organizations in general and not only defense pacts, and they conclude that these networks have been fundamental to the normative diffusion of democracy.

As a final note, it can be remarked that the impact of the NE on governance has been mostly absent from the literature. Even if such an analysis is constrained by the absence of a universally-accepted definition of governance and how it should be measured, it remains a potential area of future research, as conflict, democratic transitions and changes in governance practices in neighboring country may well

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[7] The effect of international defense pacts and regional organizations on the contagion of neighboring civil wars (and not only interstate wars, as studied by the authors) remains an interest area of research.

diffuse across borders in the same way that other political variables do, as shown in the present review of the literature.

3.2. Socioeconomic development

In terms of development outcomes, it has long been acknowledged that neighbors have a significant impact on the social and economic variables in the country. This is true from the moment that two neighbors start trading goods and services, invest and transfer financial resources to each other's territories, establish (formal or informal) migration flows, construct connected infrastructure and exchange information, technology and ideas. Arguably the most manifest channel of the NE is the impact of the neighborhood in the socioeconomic development of the country. Then again, this influence expands beyond trade and financial links; this section will delve into the other paths through which the NE affects domestic development.

Murdoch and Sandler (2002, 2004) provide evidence of a negative impact on economic growth of a conflict in a neighboring country; the longer and more intense the conflict, the stronger the spillover effect on the economy. The explanation of this effect could come from collateral damage in terms of loss of human lives and damaged infrastructure, disruption of trade and transport channels, investor flight as regional risks augment, diversion of resources to security, border control and refugee assistance, and others. The authors argue that the negative effect is observed with greater intensity in the short run, with a less clear impact on the long run. In addition, this affects not only the states contiguous to the conflict: through a multiplier effect, the spillover can indeed travel greater distances. Ghobarah et al. (2003) identify significant negative effects of neighboring civil wars on health outcomes, in particular death and disability as a consequence of HIV/AIDS, malaria, tuberculosis, respiratory infections and others; it has also an impact on other causes of death, such as homicides. These problems afflict disproportionally women and children.

One specific situation in which conflict in a neighboring country could bring about negative consequences on socioeconomic development is when it entails a large flow of refugees. As argued by Salehyan (2008a), host countries have to redirect resources to provide humanitarian assistance and public services to the refugee population, possible leading to a harmful effect on the economy. The author also mentions that refugees may cause negative public health consequences by diverting health resources away from normal care and by creating conditions that could foster infectious diseases such as malaria, cholera and HIV. In fact, García-Montalvo and Reynal-Querol (2007) find that refugee flows from countries with a high incidence of malaria have a significant impact on the incidence of malaria in the country of asylum. For a more complete summary of the indirect socioeconomic consequences of a neighboring conflict, see Collier et al. (2003).

In the rich existing literature about the links between democracy and development, the exact relationship between the two variables, as well as the sense of the causality, remain topics of intense debate. Until recently, the trend in the literature leaned towards a null (or even negative) effect of democracy on economic growth; however, new research using more advanced statistical methods,

measurement tools and conceptualizations strongly defend a positive and robust relationship between the two variables (see for instance Gerring et al., 2005, and Acemoglu et al., 2014).

Besley and Kudamatsu (2006) offer evidence that health outcomes, measured through life expectancy, are positively correlated to democracy, even when controlling for several factors such as the initial level of human capital and political histories. Vollmer and Ziegler (2009) find a robust, positive correlation between a democratic political system and life expectancy and literacy rates. By comparing survey data before and after transitions to democracy in Africa, Kudamatsu (2012) argues that infant mortality rates improved with democratization. Gerring et al. (2012) also support the hypothesis that democracy improves human development, measured through the infant mortality rate, particularly when the relationship is examined from a historical, long-run perspective. Moreover, Blaydes and Kayser (2011) find that democratic regimes favor redistribution to the poor compared to autocracies. Finally, Acemoglu et al. (2013) find that democracy is associated with higher education outcomes (measured through secondary school enrollment), but that its impact on inequality and redistribution is ambiguous.

As the previous two paragraphs have illustrated, even if the empirical evidence cannot unequivocally affirm that democracy is associated with socioeconomic development, it seems that the recent literature is finding stronger evidence that democratic regimes are positively correlated with social and economic outcome indicators. However, it must be kept in mind that these relationships link the political institutions with development in the same country. To our understanding, there are no studies that link domestic socioeconomic development with changes in political regimes in neighboring countries. However, it could be hypothesized that, if indeed political changes alter the level of socioeconomic development in a neighboring country, they could also have an indirect effect in the country of study through trade, financial or other channels. These links remain largely unexplored and they could serve as interesting topics of research in the NE ambit.

3.3 Security and military issues

A vast array of recent studies has found strong evidence that conflicts cluster geographically, possibly suggesting a diffusion mechanism or a spatial contagion effect in action.[8,9] In an extensive sensitivity analysis of the determinants of civil war onset, Hegre and Sambanis (2006) show that a war in the neighborhood and the regional democratic level have a robust influence in the likelihood to experience a civil war. Gleditsch (2007) not only verified empirically that the presence of a civil war in a neighboring country increases the probability of a conflict outbreak domestically, but also determined other ways in which the neighborhood has an influence of the likelihood of conflict: transnational ethnic ties are positively correlated with the incidence of conflict, whereas trade integration and the prevalence of democratic institutions in the neighborhood reduce the risk of internal civil war. Buhaug and Gleditsch (2008) found evidence that conflict clustering cannot be explained by similarly-clustered country

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[8] According to the definition of NE stated in Section 2, this section only includes studies that cover the indirect effect that events in the neighborhood may bring about in terms of conflict and security matters. Consequently, issues of inter-state military disputes, territorial peace and direct intervention (except when aimed at preventing intra-state conflict contagion) are left out of this literature review.

[9] For an introduction to the contagion effects of conflicts in neighboring countries, see Collier et al. (2003).

characteristics, implying instead the existence of a neighborhood effect for conflicts; they identify cultural and ethnic linkages, as well as a secessionist nature of the conflict, as channels of conflict contagion.

Braithwaite (2010) adds a political dimension to the idea of conflict contagion. He finds evidence that the probability of contagion from a neighboring conflict diminishes as the level of state capacity increases. Digging deeper, Maves and Braithwaite (2013) study conflict contagion to autocratic regimes and find that political institutions may actually facilitate or hinder the spread of conflict. They test the hypothesis that autocracies with an elected legislature, an institution originally installed by the autocrats with the objective of offsetting violent challenges to the state, are actually more likely to experience a contagion of neighboring conflict. This would be explained by a weakening of the state caused by the conflict in the neighborhood (impaired economic activity, arrival of refugees, flow of arms, empowerment of minorities, etc.) that directly or indirectly strengthens the opposition relative to the autocrats and that may spark episodes of violent contestation, power struggles and conflict. Quantitative data seems to robustly support this hypothesis.

Weiner (1996) already introduced the idea of "bad neighborhoods" as geographic clusters of countries with a high likelihood of conflict that would end in large numbers of refugees moving across borders. Salehyan and Gleditsch (2006) study the role of refugees as a trigger of conflict and they find through statistical analysis that refugee flows lead to significant increase in the likelihood of conflict onset in the country of asylum. For a visualization of the detailed channels of action explained by the authors, see Figure 2 in the illustration above. Forsberg (2009) uses a more detailed statistical dataset and a model design to specifically study the flow (and stock) of refugees as a cause of *contagion* of conflict (i.e., her hypothesis is that refugees escaping from an internal conflict in their country of origin lead to an increased likelihood of conflict in the neighboring country of asylum, as opposed to the broader idea that sees refugees inflows as determinants of domestic conflict in general); the author finds solid statistical support in favor of her hypothesis for all conflicts and also when narrowing the scope to exclusively ethnic conflicts. In addition, refugee flows also increase the likelihood of interstate conflicts as countries of origin intervene in pursuit of rebels and receiving states intervene to prevent further externalities (see Salehyan, 2008a). The World Bank (2010) reviews the main impacts of refugees on neighboring countries, including socioeconomic, political and security considerations.

A recent branch in the conflict literature has studied the role of ethnic, linguistic and/or religious groups in the diffusion and contagion of conflict. Fox (2004) suggests that violent conflict by a minority in one country is more likely to spread to a minority in neighboring countries if they share the same religion; however, this result only applies to violent conflict and not to peaceful movements or protests. By using a database of the geo-referenced distribution of ethnic groups in Eurasia and North Africa, Cederman et al. (2009) find that the presence of shared ethnic groups across borders has an impact in the likelihood of conflict, but only in situations where the shared ethnic affiliation is marginalized from political power in one country. Similarly, De Groot (2011) construct a measure of ethnolinguistic affinity between countries and show, through an econometric exercise for the countries of Africa, that conflict does tend to spill over to geographically- and ethnolinguistically-proximate neighbors. Moreover, by using a database of conflicts disaggregated according to the type of conflict, Bosker and De Ree (2014) identify

that only ethnic wars tend to spill over and mostly along ethnic lines, also concluding that common ethnic links between countries are an important channel of cross-border contagion for conflicts. Forsberg (2014) also finds support for the thesis that conflict spreads across borders along ethnic lines, particularly when the kin groups in the neighboring countries have reasons (discrimination, lack of autonomy) and resources (relative size, regional concentration) to mobilize. Beiser (2012) argues that ethnic conflict contagion originates in a demonstration effect that takes place as information flows between countries with inter-group similarity, and not necessarily based on geographic proximity or shared ethnic groups.

Salehyan (2007, 2008b) notes that, unlike governments, non-state actors are unconstrained by national boundaries and they may use neighboring states as external sanctuaries in order to evade state repression and secure a better bargain than they could reach if they constrained their operations domestically. The author offers evidence that weak neighboring states, rivalry between neighboring states, the presence of refugees in neighbors and access to external bases contribute to the expansion of rebel groups beyond national borders. This has important security consequences for the state, particularly by prolonging conflicts and stirring interstate wars. The latter effect falls out of the scope of the NE, but it remains an important form of contagion from neighboring conflict; for more on this topic, see Gleditsch et al. (2008).

Gleditsch and Beardsley (2004) and Kathman (2010) tackle the issue of intervention by third-parties in intra-state conflicts. Given the increased likelihood of conflict contagion and the negative consequences this may bring about, they argue that a neighboring state or a regional third-part may be motivated to intervene with the objective of preventing conflict contagion into its territory, limiting other negative externalities or even influencing the outcome of conflict; statistical evidence decisively supports this hypothesis. However, intervention is not only limited to neighboring states. Kathman (2011) finds out that actors other than direct geographical neighbors are more likely to intervene when they have strong economic, security or natural resources interests in the states neighboring the conflict; in other words, the risk of conflict contagion may motivate non-neighboring third parties to intervene in order to protect their regional interests. Investigating another type of intervention, Beardsley (2011) demonstrates empirically that the probability of conflict contagion across borders is significantly reduced when peacekeeping efforts are undertaken, in the form of a deployment of military personnel by the United Nations, a regional security organization or a coalition of countries, in particular when they are directed at securing borders in fragile states.

In addition to all the previous results, there are other variables that can have an influence in the incidence of conflict. For example, Mansfield and Pevehouse (2000) find evidence that common membership in a preferential trade agreement reduces the likelihood of conflict between its members; moreover, the higher the rate of trade between two states, the lower the probability that they will engage in conflict. This could be explained by the possibility of these agreements to become forums for bargaining and negotiation that reduce tension, as well as by the expected future economic loss in trade that could be inflicted in all members should a conflict erupt. Maoz (2009) extends this idea to a broader definition of interdependence beyond trade and commercial agreements and concludes, through a network analysis approach, that it leads to a general reduction in the probability of interstate conflict.

As a final element in the NE literature in this domain, Collier and Hoeffler (2002) examined the factors that determine military expenditure and find an important correlation with the intensity of internal and external threats. In particular, they present empirical evidence that the level of military expenditure in neighboring countries has a strong influence on the domestic level of expenditure, thus creating the vicious circle of an arms race.

4.   Recent events in the Arab region and the relevance of the neighborhood effect

The previous section outlined some of recent trends in the NE literature and the strong support they provide to the importance of the neighborhood in determining political, socioeconomic and military outcomes for all countries. However, the NE arguably operates with singular force in the Arab world not only because of the shared history of many countries of the region, but also because of the multiplicity and intensity of the channels of transmission and the regional dimension of some recent and contemporary events. Some of these are the Arab-Israeli conflict, including the Israeli occupation of Palestine, the protracted conflict in Iraq, communal-driven tensions, high incidence of conflict-driven displacement, security as overriding priority, terrorism and traffic of illegal arms, and international and regional power politics that translates into regional polarization and proxy wars.[10]

The Arab neighborhood's political economy depends on sources of external revenues (commodities, foreign aid or remittances), exhibits a chronic regional integration deficit and long-standing democratic gap, among other factors. These internal and external pressures and the very nature of the Arab neighborhood that came into being have unleashed most of the politico-conflict dynamics that are witnessed today. This section will provide a brief overview of the current political developments that seem to sustain the hypothesis that the NE is of particular consequence for the Arab region.

What came to be regarded as the Arab revolution that ignited in December 2010 in Tunisia and that within a few weeks had spread over large sways of the Arab world, including Egypt, Libya, Yemen, Bahrain and others, provides a compelling piece of evidence in favor of the NE hypothesis. Arab citizens from different social, economic, ideological, religious and ethnic backgrounds united under the banner of bread, social justice and human dignity. Gerges (2014) writes that a critical difference of the Arab revolt of 2011 with respect to previous protests is that it saw the active participation of broad sectors of the population, including urban and rural workers and the poor. The author advocates that "the return of contentious politics signals the end of an era and the beginning of another, one fuelled by new collective psychology of empowerment and engagement."[11]

After these events, can it be stated that the movement of one or more Arab countries towards a democratic governance system induced a change in the neighborhood? Is such a transformation

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[10] Sab (2014) presents examples of these mechanisms in action through three detailed case studies of recent conflicts in the Arab region: the Lebanese civil war (1975-1990), the Iraqi-Kuwait war (1990-1991) and the 2003 invasion of Iraq (2003). The author analyzes the economic impacts in the countries in conflict, as well as regional spillovers.
[11] See Gerges (2014, p. 34).

realizable given inherent circumstances that are manifested, to a certain extent, by external pressures? Is the governance deficit or the political transformation process towards democratization challenged by the neighborhood?

Similar to the transformation trajectory of the "color revolutions" observed in the 2000s in Eastern Europe and Central Asia, great power politics, the foreign policy of "big neighbors" and a large deficiency in democratic neighborhoods have had, and will continue to have, an impact on the political transformation process in the Arab region. As remarked by Nuruzzaman (2013, p. 362) "the Arab Spring, in fact, created a new geopolitical arena for the great powers to either promote or preserve their national interests, real as well as perceived [...] One notes with painful sadness that the promotion of Arab democracy did not genuinely figure in the calculation of their interests."

Vested global security and economic interests are firmly embedded in the Arab world, and regional power politics have at present placed the fault line of their struggle in the occupied Palestinian territory, Iraq, Syria, Lebanon, Yemen and other countries such as Libya and Bahrain. In addition to the external pressures, internal pressures have also remarkably contributed to instability and conflict. Sayigh (2014) maintains that the current state of affairs in the region is the result "of the failure of a majority of Arab states to open up their political systems to wider participation and to institutionalize pluralism. Most have been unwilling even to 'upgrade' or 'modernize' authoritarian structures, improving administrative performance, key public services, and regulatory functions even as they allowed privatization to deepen socio-economic disparities. As a result, applying force to resolve social problems and meet political challenges has taken a growing number of ossified systems to breaking point, releasing or activating new societal actors and agendas."

Nowhere is the importance of the neighborhood clearer than in the present conflict in Syria. The protests in the country were, during the first seven or eight months, peaceful in nature; this in spite of the violent measures implemented by the Syrian security establishment and the diversity of the opposition camp.[12] But violence soon escalated, the conflict spread and the country became the epicenter of the forces of regional polarization. Global and regional power politics, in addition to the emergence of transnational religious extremism, have detrimentally contributed to divide and even fragment the opposition, not to mention to render a political solution to the conflict difficult. As a result, the originally peaceful uprising degenerated into one of the bloodiest civil wars in the region's history, as the trend of the conflict went beyond the ethnic and sectarian lines and sank into heavy fighting among the competing sides for spoils, namely the control of border crossings, water and oil resources of the country. The fragmentation of rebel groups is not only confined to Syria; similar patterns have manifested themselves in, for example, Libya and Iraq. This extreme proliferation and fragmentation could be attributed to a narrowly-localized social base and weak national structures (Sayigh, 2014). Arguably, one of the stronger manifestations of the neighborhood effect from the Syrian conflict and similar ensuing dynamics is their contribution to the Arab public's preference of the "security first" option. The exacerbation of such sentiments is also explained by the fear of political Islam. But then

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[12] In fact, one of the weaknesses of the Arab uprisings, according to Nuruzzaman (2013), has been the fostering of a close collaboration between democratic and counter-revolutionary camps.

again, the same dynamics that facilitated the return of the armed forces to the political realm in some Arab contexts have, as a matter of fact, also contributed to a more mature and disciplined governance trajectory between the different contending political groups. Tunisia is a case in point.

The draconian and autocratic nature of the Syrian regime coupled with Saudi-Iranian tensions, Russian reassertion on the global stage, the economic significance of gas pipelines routes from the Gulf Cooperation Council (GCC) countries to Europe, the quagmire of extremist groups supported by regional powers or private groups and individuals, and President Bashar Al Assad's support of anti-Israeli armed groups, such as Hezbollah and Hamas (at least before the outbreak of the Syrian revolution), have all been tabled to explain the Syrian bloodletting. One of the most prominent non-state actors in the region, Hezbollah, has openly supported the Assad regime militarily, backstopping Iran's geopolitical interest in the Levant and further contributing to accentuate the communal nature of the conflict in Syria and Iraq, not to mention amplifying the communal tensions among the Lebanese society.

Gleditsch (2007) highlights the role of ethnic linkages in which ethnic kin communities in other states have tended to mobilize and finance insurgencies. The Syrian conflict and the continuous Iraqi crisis have exacerbated communal tensions that in turn have led to massive movements of people to regions that are ethnically or confessionally homogeneous. The most recent example is the massive movement of Syrian Kurds to Kurdistan in Iraq and to Kurdish areas in Turkey. The International Organization for Migration (IOM) has identified over 1.75 million people that were displaced between 1 January and 28 September 2014 as a result of the fighting between the Iraqi security forces, Kurdish Peshmerga and armed militant and opposition groups, including ISIL.[13] Additionally, by mid-September 2014, as Kurdish towns around Ain al-Arab or Kobani in Syria were overrun by the al-Qaida splitter group the Islamic State of Iraq and the Levant (ISIL), at least 160,000 Kurds of the region have fled their homes heading to Turkey.[14] This is already creating tensions across the border in Turkey, as the unrest begins to spread to its domestic Kurdish population.

The conflict decimated the Syrian economy which could entail a much delayed return of refugees to their home. Iraq and Lebanon, whose socioeconomic, political and security systems depend on a delicate balance of their different communities, are particularly vulnerable. Depicting the gravity of the situation, the then Lebanese President Michel Sleiman declared that the Syrian refugees in Lebanon represent an existential threat to the country (Sleiman, 2014). Refugees and host communities are increasingly bearing the pressures of an unsustainable socioeconomic and security situation.[15]

Jordan is also reeling under the influx of the Syrian displaced and Palestinian refugees from Syria. As of the beginning of October 2014, the number of Syrian refugees in Jordan is estimated at 620,000

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[13] See Internal Displacement Monitoring Centre (2014).

[14] As reported by International Crisis Group (2014b).

[15] To name but one example, Human Rights Watch voiced its concern as it identified at least 45 municipalities across Lebanon that have imposed curfews on Syrian refugees, restricting their movements and leading to a series of discriminatory and retaliatory practices. Such measures violate international human rights law and are seemingly illegal under Lebanese law. In addition to attacks against Syrian refugees, it should be noted that these events have also sparked communal tensions in Lebanon, abductions between Sunni and Shia tribes and intermitted fighting in some areas of the country. For this report, see Human Rights Watch (2014a).

(UNHCR, 2014). According to Nerguizian (2014), while having to cope with the continued influx of Syrian refugees, the Jordanian government is expected to face increasing pressures from its own extremist groups while at the same time having to cope with national socioeconomic challenges, such as a growing budget deficit and the growing penetration of extremist Islamic transnational groups into the Levant region.

The crisis in Syria rapidly spread to Iraq, itself suffering from political divisions as well as tensions among its different communities. The country was already subject to frequent clashes, terrorist attacks, political tensions and instability that could be attributed to weak governance structures, including inefficient public institutions, corruption, political and economic marginalization, repression, and a generalized lack of effective political reform and reconciliation.[16] The ongoing Syrian conflict only exacerbated such trends, in particular the communal tensions. Moreover, as noted by the United Nations Secretary-General's Special Representative in Iraq, Nickolay Mladenov (2014), terrorist networks seized the opportunity to establish links across the Syrian border and expand their support base. Violence increased. In fact, the number of civilian deaths as a consequence of violence reached 7,589 in the first half of 2014 (an increase of 136% with respect to the same period of 2013).[17] The situation further deteriorated when the Islamic State in Iraq and the Levant (ISIL) overran major urban centers in northern Iraq, including the city of Mosul. The rapid expansion of ISIL from a base within Iraq into Syria, where it fought to secure oil and arms, later enabled its massive growth back inside Iraq, securing more resources as well as weapons abandoned by the Iraqi army. Worryingly, "[w]eapons, money and volunteers acquired in Iraq will likely cross the border, helping ISIL in its war against rebel opponents in Syria […] ISIL's freedom of movement between Syria and Iraq means that pressure in one country increases its assertiveness in the other, while opportunities it seizes on one side of the border brighten its prospects on both" (International Crisis Group, 2014a, p. 6.)

ISIL, Al-Nusrah Front and other extremist groups appear to be aiming to establish a "Sunni sphere" across the Levant and into the Arabian Peninsula. Such inclinations are competing with a "Shia sphere" that links specific localities and religious-historical sites in Iraq, Syria and Lebanon. Such notions and prospects, in the absence of a strong and effective counter-narrative, are further deepening the ethnic and communal divide of the entire neighborhood. As observed by Sayegh (2014), "[t]he pattern of Arab wars in the early 21st century reveals new dynamics and impacts. Governments that were previously able to maintain authoritarian rule through military means have been unmaking their own, formerly powerful states by waging war on their societies. In several cases this has led to the dismantling of their national armed forces. But the opposite is also true: war is not just a disintegrative process. New types of armed non-state actors are also waging war in ways that not only reorder existing nation-states, but also construct alternative political entities based on fundamentally different socio-cultural bonds and sub- or supra-state identities, whether real or imagined."

The threats of ISIL and similar groups, mainly Al-Nusrah Front, grew to such a degree that the Security Council adopted resolution 2170 on 15 August 2014, where it expressed its gravest concern about the

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[16] See International Crisis Group (2014a).

[17] Figure calculated by ESCWA with data from Iraq Body Count (http://www.iraqbodycount.org).

violent extremist ideology and actions on the stability in Iraq, Syria and the region, "including the devastating humanitarian impact on the civilian populations which has led to the displacement of millions of people, and about their acts of violence that foment sectarian tensions." Acting under Chapter VII of the Charter of the United Nations, the Security Council strongly condemned "the indiscriminate killing and deliberate targeting of civilians, numerous atrocities, mass executions and extrajudicial killings, including of soldiers, persecution of individuals and entire communities on the basis of their religion or belief, kidnapping of civilians, forced displacement of members of minority groups, killing and maiming of children, recruitment and use of children, rape and other forms of sexual violence, arbitrary detention, attacks on schools and hospitals, destruction of cultural and religious sites and obstructing the exercise of economic, social and cultural rights, including the right to education." The resolution condemned the recruitment of foreign terrorist fighters by these groups and reaffirmed that all states shall prevent and suppress the financing of terrorist acts (United Nations Security Council, 2014).

It is widely feared that the foreign fighters in Syria and Iraq will inevitably return to their countries of origin with destabilizing effects. According to Nerguizian (2014, p. vi), "the region may have to contend with the proliferation of Syrian and transnational non-state armed groups in a country flooded with weapons for years to come." This is in addition to the fact that the ease of access to weapons is likely to end up fueling violence in the neighborhood of the countries in conflict. A report from Conflict Armament Research (2014) indicates that ISIL has easily secured the wide variety of weaponry that has being fueling the conflicts in Iraq and Syria. While ISIL's initial supply of armament was to a large extent captured in the theatre of war, the group's income from oil and other sources became sufficient to finance additional purchases of weapons.

Already some countries in the neighborhood of Syria have experienced, to different degrees, a contagion of the conflict. Among the most worrisome cases, the security situation in Lebanon has become more volatile as the influence of the Syrian conflict spilled over its borders, with several rounds of heavy fighting in several areas of Lebanon, including confrontations between the Lebanese army and fighters of ISIL and Al-Nusrah Front (ANF) in the Beqa border area of Arsal. This region has also witnessed frequent clashes between Hezbollah, ISIL and ANF. Some incidents have also been observed in Jordan, Saudi Arabia and Turkey.

But the significance of the neighborhood for the Arab region is not contained to the Syrian and Iraqi conflicts. The strength of Al-Qaeda or splinter groups, sabotage of critical infrastructure by local tribes, increasing armed tribal presence in major cities, Huthi territorial gains in the North all the way to the Yemeni capital, and increasing tensions in the South over the issue of separation are just some of the challenges facing Yemen's political transformation. Some of these have invited direct or indirect intervention from foreign powers. There are drone strikes by the United States against al-Qaeda operatives. In addition, Yemen's immediate and distant powerful neighbors have established firm support groups and proxies inside the country. Northern-based Huthi movement and southern separatists have fallen into the regional struggle. This has translated into an undermining of the implementation of the national dialogue outcomes and frequent clashes between contending groups.

Israel, another influential neighbor of the Arab region, was opposed since the beginning to any kind of democratic transformation in Egypt, fearing the fate of the Camp David Accord and the rise of an anti-Israeli government. The absence of a tangible and just peace, Israel's disregard for international law, and its continued occupation of land in Syria and Lebanon, as well as the threat of invasion or incursion into neighboring Arab territory, have driven the rise of foreign-sponsored non-state actors and fuelled destabilizing forces in the region. Israel's attack on the Gaza Strip in the summer of 2014 was another painful episode of this country's attempts to dictate political outcomes by military means at a complete disregard of international law. Israel's attack on Gaza resulted in the death of 2,133 people (including 1,489 civilians and 500 children) and the displacement of 500,000 Palestinians in Gaza Strip (approximately 28% of its total population.)[18] The entire population of Gaza Strip now depends on food aid. Meanwhile, Israel continues its policy of land confiscation throughout the occupied Palestinian territory for its allocation to settlements: as of 2012 68% of the West Bank was effectively off-limits to Palestinians while Israeli settlements continued their expansion.[19]

In line with the argument in Gibler and Thies (2006) that an external threat hampers the development of democratic transitions and that it can lead to the breakdown of democratic institutions, it could be argued that Israeli threats and actions did not bode well with the progress of the governance systems in the Arab countries. In fact, the spillover effects of Israeli expansion and occupation of Palestinian territory and other Arab land, in particular the waves of Palestinian refugees, some of which were armed and politicized, were partly responsible for the conflict and political tensions in Lebanon and Jordan. The issue of refugees in both of these host countries remains a sensitive and unresolved issue. In addition, the Syrian conflict has further displaced thousands of Palestinians that were residing in Syria, exacerbating the existing socioeconomic, political and security challenges that are associated with the refugee presence in those countries.

The Arab countries in political transition and their neighbors suffer from the involvement of foreign jihadists and the proliferation of non-state actors in the region. Extremist ideologies have resorted to terrorism to change the political system by force. In Tunisia, for instance, the transition has witnessed political violence.[20]

The situation has also aggravated in Egypt, in particular in the Sinai Peninsula where an Al-Qaida affiliated group, Ansar Beit al-Maqdis (ABM), has claimed responsibility of most of the attacks. Since the summer of 2013, the Egyptian army has been heavily engaged to secure the Peninsula; however, the state's security personnel and military have come under frequent attacks. There are also reports that ABM is in contact with ISIL. Significantly, terrorist attacks have expanded to include Cairo and other governorates. The country fears the resurgence of armed Islamist groups on the eastern border that would facilitate the movement of money, weapons and fighters across its territory. Egypt's leadership is also concerned about stemming the influence of the Muslim Brotherhood, a concern also shared by the United Arab Emirates and Saudi Arabia but opposed by Turkey and Qatar. Such trends are echoed in

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[18] See OCHA-OPT (2014).
[19] See ESCWA (2014).
[20] See "Tunisia army launches 'huge' manhunt for jihadists" (2013) and International Crisis Group (2013).

Nerguizian (2013, p. vii), in which the author warns that "ungoverned and under-governed spaces have become fertile ground for increasingly radical Salafi-Jihadi groups" like ISIL, Al-Nusrah Front and ABM. He highlights the fact that, under the competition among regional actors, "the Levant may yield even more space within which Salafi-Jihadi groups can try to consolidate their expansion in the Levant."

More worrisome is the case of Libya.[21] Wehrey (2014) states that Libya is in a state of civil war, fueled by "competing claims to power and with interference from regional actors serving to entrench divides […] The country is now split between two warring camps: Operation Dignity, a coalition of eastern tribes, federalists, and disaffected military units; and Operation Dawn, an alliance of Islamist forces aligned with armed groups from the city of Misrata. Each camp lays claim to governance and legitimacy, with its own parliament, army, and prime minister. Regional backing of the two camps […] has deepened these divisions." Similar to the situation with the Syrian opposition, regional polarization served to deepen Libyan fissures, as fighting in the country intensifies.

The chaos in Libya has turned the country into one of the major sources of weapons in the neighboring areas, fuelling the conflicts in Mali, Egypt, Syria and other countries. In fact, there are cases under investigation concerning illegal shipments from Libya to more than 12 countries and including heavy and light weapons, air defense systems carried by fighters, small arms and ammunition, explosives and mines.[22]

This is another relevant aspect of the NE: the easy flow of arms within the neighborhood across porous international borders. The arms that flow into a country suffering from instability can also move outward to its neighbors. Recent incidents in Jordan, Iraq and Egypt show the extent of these illegal arms smuggling.[23]

Real or perceived insecurity stemming from Israel, Iran or other regional and global powers has induced the Arab region to spend exorbitantly on weapons. As a matter of fact, the Middle East has become a region notorious for its military spending, diverting vast amounts of resources from social expenditure and investment. This high spending in arms is indicative of the priority Arab states exert on security, even if propping up the military may come at the expense of much needed social programs.

To conclude this section, Table 1 presents a comparison of the Arab countries with other regions of the world based on some of the main factors relevant to the NE: political aspects, socioeconomic development and security/military issues. These figures provide a basic characterization of the Arab

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[21] Throughout 2012 and 2013, Libyans suffered from ongoing violence, with clan clashes, deadly attacks on foreign diplomatic missions and international organizations, destruction of Sufi religious sites, kidnappings for financial and political reasons, and targeted killings of former Gaddafi security officers. In 2014, fighting between rival militias triggered an armed conflict in Tripoli, Benghazi and other areas of the country, causing the United Nations, the International Committee of the Red Cross, the United States and other states to withdraw their staff and close their missions in Libya. During the fighting, the warring factions indiscriminately shelled civilian areas and targeted violence at civilians and civilian property. Thousands of Tripoli residents were internally displaced or fled the country. See Human Rights Watch (2014b).

[22] See United Nations Security Council (2013).

[23] For an examples of this situation, see "جدل بالعراق حول تهريب السلاح إلى سوريا" (2014).

neighborhood along these dimensions, sustain the findings described above and motivate the significance of the NE when carrying out any study of the region. For details on the sources and construction of these variables, see Annex 1.

The Human Development Index in column 1 of the table, which is constructed from four economic and social outcome variables, assigns a score of 0.68 to the Arab region in 2013, which places it in the category of medium human development. It thus exhibits a higher level of development than other regions such as Sub-Saharan Africa and South Asia, but still significantly below the developed economies and several other regions in the developing world. If the 22 Arab states are split into two subgroups, one with the 10 commodity exporters and another with the rest of the countries, the first subgroup would be classified in the category of high human development.

Columns 2 and 3 show that the Arab region has achieved positive progress in terms of health indicators, performing better than the average for the developing countries for under-five mortality rate and life expectancy at birth. However, as evidenced in the next column, the same is not true for the mean years of schooling, a comprehensive measure of education. The Arab population, in total but also when dividing it according to the two subgroups described above, exhibits less years of education on average than most other regions, with the exception of Sub-Saharan Africa and South Asia.

Averaging economic indicators for all Arab countries mask the two realities of this region. If they are divided between commodity exporters and the rest of the countries, the first subgroup exhibits a level of GDP per capita comparable to the advanced economies, while the income per capita of the other Arab nations stands at half the average of the developing world (only Sub-Saharan Africa and the Pacific have a lower level of GDP per capita). More worrisome, with the exception of the island regions (the Pacific and the Caribbean), which are particularly vulnerable to volatility and instability and as a consequence have particularly suffered in recent years, the Arab region is the one with the lowest rate of growth among the developing countries (see column 6 of Table 1).

In terms of military and security issues, the Arab countries are also in a dire situation of high incidence of conflicts leading to significant population displacement and remarkable levels of military spending. The seventh column of Table 1 shows that the Arab region in general represents the highest buyer of weapons in the globe in relative terms with 4.15% of its total GDP; this is even higher for the subgroup of commodity exporters, with 4.66% of their GDP. This is more than twice the military expenditure of the developed economies and far higher than other regions of developing countries. In all likelihood, this is at least partly motivated by the high rate of conflict in the region: 41% of all Arab countries suffered at least one conflict during the five-year period from 2009 to 2013. This is one of the highest rates of conflict in the world, second only to South Asia, and significantly higher than the more peaceful regions of the developing world (the Pacific and the Caribbean with no conflicts, Eastern and Central Europe with an incidence of 7.7%, and Latin America with 10%). Terrorism represents another important threat to the Arab region, as shown in column 10 of the table, with one of the worst scores in the world (again, only South Asia has a higher incidence of this security problem).

Table 1. Political, socioeconomic and security/military indicators by region

	(1) Human development index[1]	(2) Under-five mortality rate[2]	(3) Life expectancy[3]	(4) Mean years of schooling[4]	(5) GDP per capita[5]	(6) Rate of growth, GDP per capita[5]	(7) Military expenditure (% GDP)[6]	(8) Refugees (% population)[7]	(9) Conflict (% countries)[8]
Developed countries	0.88	4.5	80.0	10.9	34187.0	0.5	1.71	0.15	2.6
Developing countries	0.64	47.1	67.0	7.1	7939.9	2.4	2.05	0.25	24.1
East and South-East Asia	0.67	31.7	71.4	7.1	11379.9	4.3	1.65	0.03	35.7
The Pacific	0.64	33.5	68.8	8.5	3270.4	1.1	1.04	0.10	0.0
Eastern & Central Europe	0.78	9.7	74.2	9.5	11817.9	2.2	1.58	0.39	7.7
Former Soviet Republics	0.71	28.4	68.8	10.8	8163.4	4.4	2.73	0.01	25.0
Latin America	0.71	24.1	73.8	8.1	7139.5	2.4	1.10	0.06	10.0
The Caribbean	0.73	18.8	72.3	8.9	10545.5	0.9	1.17	0.00	0.0
South Asia	0.61	48.8	68.7	5.4	4707.2	3.9	2.48	0.17	55.6
Sub-Saharan Africa	0.49	93.9	56.4	4.9	2773.4	2.3	1.79	0.31	29.5
Arab region	0.68	38.0	70.2	6.4	16515.8	1.4	4.15	2.10	40.9
Commodity exporters	*0.76*	*19.9*	*73.2*	*7.0*	*31584.6*	*1.0*	*4.66*	*0.40*	40.0
Other Arab countries	*0.62*	*53.0*	*67.7*	*5.8*	*3958.4*	*1.7*	*3.41*	*3.29*	41.7

Source: ESCWA calculations based on data from several sources. See Annex 1 for details on the construction of the variables.

[1] Score in the Human Development Index for the year 2013, data from UN Development Programme (UNDP).

[2] Probability of dying between birth and exactly five years of age per 1000 live births, average 2008-2012, data from UN Inter-agency Group for Child Mortality and UN Department of Economic and Social Affairs (DESA)'s "World Population Prospects: The 2012 Revision."

[3] Life expectancy at birth in number of years, average 2008-2012, data from UN DESA's "World Population Prospects: The 2012 Revision" and World Bank's "World Development Indicators."

[4] Number of years of formal schooling received on average by adults over age 25, average 2008-2012, data from International Institute for Applied Systems Analysis (IIASA) and Vienna Institute of Demography (VID)'s "Reconstruction of population by age, sex and level of education for 120 countries for 1970-2000 using demographic back-projection methods", Barro and Lee's "Educational Attainment Database" and UN Development Programme (UNDP)'s "2014 Human Development Statistical Tables."

[5] GDP per capita in constant 2005 PPP USD in 2012 and its average rate of growth during the period 2008-2012, data from Penn World Table (various versions), Maddison Project Database, K.S. Gleditsch's "Expanded Trade and GDP Data", World Bank's "World Development Indicators" and Economist Intelligence Unit's CountryData.

[6] Military expenditure as percentage of total GDP, average 2009-2013, data from Stockholm International Peace Research Institute (SIPRI).

[7] Stock of refugees by country of asylum as a percentage of total population at the end of 2013, data from UNHCR and UNRWA. It does not include internally displaced persons.

[8] Percentage of countries in each region that had at least one conflict during the period 2009-2013, data from UCDP/PRIO Armed Conflict Dataset.

Table 1 (*continued*)**.** Political, socioeconomic and security/military indicators by region

	(10) Terrorism[9]	(11) Polity IV[10]	(12) Unified Democracy Score[11]	(13) WGI: control of corruption[12]	(14) WGI: government effectiveness[12]	(15) WGI: political stability, absence of violence[12]	(16) WGI: regulatory quality[12]	(17) WGI: rule of law[12]	(18) WGI: voice & accountability[12]
Developed countries	1.58	9.31	1.49	1.38	1.43	0.86	1.36	1.37	1.19
Developing countries	2.00	2.93	-0.03	-0.41	-0.41	-0.31	-0.40	-0.44	-0.38
East and South-East Asia	2.29	1.17	-0.19	-0.52	-0.31	-0.19	-0.34	-0.45	-0.77
The Pacific	1.00	3.00	0.09	-0.20	-0.65	0.78	-0.87	0.02	0.49
Eastern & Central Europe	1.65	9.08	0.69	-0.09	0.14	0.02	0.41	0.02	0.28
Former Soviet Republics	1.67	-0.17	-0.44	-0.85	-0.58	-0.39	-0.59	-0.81	-1.01
Latin America	1.68	6.85	0.50	-0.33	-0.29	-0.28	-0.17	-0.57	-0.05
The Caribbean	1.33	7.50	0.64	0.50	0.48	0.59	0.15	0.29	0.75
South Asia	3.19	4.00	-0.12	-0.60	-0.52	-1.17	-0.80	-0.64	-0.66
Sub-Saharan Africa	1.83	2.60	-0.11	-0.63	-0.74	-0.44	-0.63	-0.69	-0.60
Arab region	2.60	-2.35	-0.55	-0.48	-0.55	-1.00	-0.49	-0.49	-1.06
Commodity exporters	*2.55*	*-4.50*	*-0.73*	-0.18	-0.16	-0.61	-0.22	-0.16	-1.09
Other Arab countries	*2.65*	*-0.20*	*-0.39*	-0.73	-0.87	-1.33	-0.71	-0.75	-1.03

Source: ESCWA calculations based on data from several sources. See Annex 1 for details on the construction of the variables.

[9] Score on the indicator "terrorist activity" of the Global Peace Index for the year 2014, data from Institute for Economics and Peace.

[10] Score in the variable polity2 of the Polity IV database for the year 2013, data from Polity IV Project.

[11] Mean values of the Unified Democracy Score for the year 2012, data from Pemstein et al (2010).

[12] Score in the Worldwide Governance Index for the year 2012, data from World Bank.

This also derives in high numbers of displaced people. As shown in column 9 of the table, the Arab region has the highest number of refugees in the world relative to population. Indeed, refugees amount to 2.10% of the population of these countries, a proportion more than five times higher than the region that comes in second place. In addition, it must be noted that these figures are for 2013 and do not include the full extent of the refugee emergency caused by the Syrian conflict and that has continued to swell these numbers, particularly for neighboring Jordan, Lebanon and Iraq.

The figure cited in the previous paragraph considers only the displaced population that crosses borders in search of a safe haven. In addition, a significant number of persons are also forced to move but remain within their country (the Internally Displaced Persons or IDPs) and this is also a significant issue of great concern in the Arab region. By the end of 2013, 2.9% of the Arab population was internally displaced, for the most part in Syria, Somalia and Iraq (all of them countries undergoing conflict). This means that the total displaced population in the Arab region, both internally and externally, makes up 18.6 million persons, an equivalent of 5.0% of the total population. As noted before, these figures do not yet consider the events of 2014 that further increased the ranks of refugees and IDPs.

In terms of political indicators, the Polity IV project gives the Arab region a score of -2.35 on a scale from -10 (absolute autocracy) to 10 (absolute democracy), and typifies it as that with the highest democratic deficit in the world and far from the developed countries, Eastern and Central Europe, Latin America and the Caribbean, the five regions that fall in democratic territory (a score of six or higher). According to this indicator, the subgroup of commodity exporters, with a score of -4.50, is mostly responsible for the score of the region leaning towards autocracy. This is confirmed by the Unified Democracy Score, a synthetic index constructed from ten existing democracy indicators through a Bayesian Latent Variable model, shown in the following column of the table.

Finally, columns 13 to 18 of the table show the most recent results for the six dimensions of the World Bank's Worldwide Governance Indicators. The Arab region as a whole falls below the average of the developing economies across all categories, but there are differences inside the region. The subgroup of commodity exporters has a relatively good performance on corruption, government effectiveness and rule of law, but falls below the average for political stability and absence of violence and, predominantly, for voice and accountability, category in which they score at the bottom of the table. The rest of the Arab countries have the worst performance of all regions for political stability and absence of violence, and for government effectiveness; for the other four categories they are consistently rated as the second worse region in the world.

As the recent data, events and developments described in this section suggest, the Arab region circumscribes a challenging neighborhood, characterized by a deep governance deficit, a problematic security context and an insufficient and uneven level of socioeconomic development. This could lead to a vicious circle where the problems in one place cause a negative impact in the neighboring countries, which in turn return through a harmful feedback effect to further complicate the domestic situation. A systematic study of the evidence across all three dimensions of the NE could determine if these effects are indeed present and, in case they are, how strongly they affect the performance of neighboring countries.

5.   Prospects for a quantitative study

As it was mentioned in section 3, most of the existing literature in the subject concentrates on the NE of a single source variable on a single domestic variable: how a neighboring civil strife affects the domestic likelihood of onset of conflict, how political transformations in the neighborhood influence the internal democratic indicators, and so on. Even if this approach allows a more detailed study of a specific type of NE and the mechanisms involved, it fails to take into account the interaction among the different variables in the neighborhood and the combined impact they can inflict upon the political, developmental and security domains of the country of concern. It is also possible that, since the source variables in the neighborhood are most likely intercorrelated, a quantitative study that considers neighboring factors individually may overestimate the NE that they bring about. To the extent permitted by data availability, considering all the sources of NE defined in the conceptualization simultaneously may allow to distinguish the significance of each source and the interactions among them.

Part of the added-value of the proposed study is thus to include simultaneously the different sources of NE and allow for a possible interaction and mutual reinforcement (or mitigation) among them. However, this imposes a challenge since, as shown in Figure 1, there are many potential source variables of NE. It would be an overwhelming task to include them exhaustively, and this would also create statistical difficulties because many of them would undoubtedly be highly intercorrelated. One possibility is to choose one representative variable for each category; this appears as a viable option since the variables in each sphere are expected to vary together. For example, for security and military issues, the incidence or intensity of conflict could be selected since this variable is very likely correlated with population displacement, arms smuggling, military expenditure and the other variables in this category. A second option is to construct a composite indicator in order to "summarize" the information in each sphere; this is a promising solution in particular for the political aspects category, in which elaborate, comprehensive measures of democracy already exist.[24] Similar latent variable or unobserved components approaches could be used to obtain synthetic indicators for the other spheres as well. The same composite indicators could in the same way be employed to measure the target (affected) domestic variables.

In this regard, the following options were selected for the study proposed in this document. For the first sphere, political aspects, a summary measure of democracy will be considered. This seems like a reasonable solution since the existing indicators of democracy are generally constructed by using combined measures of civil liberties, political rights, electoral systems and limitation of political power. The democracy measure may be the polity score from the Polity IV project[25] or, even better, the Unified Democracy Score cited previously. It would also be interesting to include a separate module on the incidence of the NE of domestic governance practices, but this requires a careful conceptualization of the concept and an appropriate dataset.

For the second sphere, socioeconomic development, we propose the construction of an aggregate measure of economic development, social well-being and, to the extent allowed by the data,

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[24] See, for example, the Unified Democracy Scores mentioned in Table 1. This variable is proposed by Pemstein et al. (2010) and it is constructed through a Bayesian latent variable analysis of ten existing democracy indicators.
[25] See Marshall and Gurr (2013).

environmental sustainability; this measure could be akin to the Human Development Index published by UNDP,[26] but reviewing the underlying indicators and modified by using data-dependent weights (two options are the Bayesian latent variable approach used by the Unified Democracy Score and the unobserved component model of the World Bank's Worldwide Governance Indicators.)[27]

For the third sphere, the situation is more complicated since the data is more varied and, although the variables are presumably correlated, they may have strong idiosyncratic components. The only variable that may summarize the entire category is conflict (onset, incidence or intensity thereof), since this variable could in principle drive displacement, military expenditure, terrorism, political violence and arms smuggling. However, the information available from, for example, the UCDP/PRIO Armed Conflict Dataset[28] is limited in the sense that it only indicates if a conflict was occurring or not and whether it was a minor or major conflict.[29] However, even with its limitations, this variable will be considered in the initial proposal; however, other sources of data or the parallel use of more than one variable from this category should also be evaluated.

The first step of the quantitative analysis is therefore the construction of a database with the summary/representative indicators for each of the three spheres (political, development and security) described above. These variables will be used both as explanatory variable (source variable of the NE) and as explained variable (target domestic variable). The quantitative analysis intends to include as many countries as allowed by data availability. This choice of a large-N study serves to answer the overall objective of finding general trends in the NE and its diverse impacts. However, as argued by Mainwaring and Pérez-Liñán (2006), regional factors impose particular dynamics, causal processes and specificities in all political phenomena; for this reason, they would be incorporated in the analysis to the extent permitted by the data and the specific models chosen to study the NE.

The second step is to use these indicators plus a series of controls in a comprehensive statistical analysis of the impact of the NE. This study will be divided in three modules, each with interesting hypotheses that could be evaluated.

i)   The impact of the NE on the democratic scores of the country. As key hypotheses, a positive feedback from democratic, prosperous and peaceful neighborhoods on domestic democratic performance can be anticipated, with a potential reinforcement between the three spheres. Some of the controls that could be used in this model are regime history, population, income level, educational attainment, and regional idiosyncrasies. Possibly also consider a separate module of the NE and governance.

ii)   The influence that the neighboring countries may impose on the socioeconomic development of the country. It can be expected that a prosperous neighborhood will have a positive impact through increased trade, remittances, investment and other economic linkages. A conflict in a

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[26] See UNDP (2013).
[27] See Kaufmann et al. (2010).
[28] See Gleditsch et al. (2002) and UCDP (2013a).
[29] Even if there is a more complete dataset for conflict intensity, the UCDP Battle-Related Deaths Dataset, it is available starting on 1988 and it would thus severely limit the time coverage of the study. See UCDP (2013b).

neighboring country may have negative consequences in those economic links and may therefore harm the domestic economy. This model could be constructed following the structure of traditional growth regression, but incorporating the three spheres of the NE and their interactions.

iii) The effect of the neighborhood in the onset or incidence of internal conflict. Here the primary hypothesis to study is the contagion of neighboring conflicts or security issues; it would also be interesting to study if the political aspects and socioeconomic performance in the neighborhood have an influence either by themselves or as reinforcing/mitigating forces for existing conflicts in the neighborhood. Some control variables that could be incorporated are conflict history, population, domestic democratic score, educational attainment, unemployment, ethnic composition and relevant regional factors.

It is of particular importance to employ adequate statistical methods for each of the three parts described. They should consider the nature of the data (cross-country, time-series data) which can be modeled through particular block-structures in the variance-covariance matrix of the errors or through relevant panel methods. In particular for the third module, the dependent variable would likely be binary or at most have a few categories; this should be accounted for through a (multinomial) probit/logit methodology. Finally, special consideration to potentially problematic issues, such as multicollinearity, high frequency of missing values and endogeneity, must be kept in mind when judged pertinent.

With respect to the definition of the neighborhood, the following ideas could be pursued: geography (measured through common border, minimum distance between borders or inter-capital distance), economic links (through variables such as trade, investment or remittances), cultural factors (shared minorities, common language, same colonial past or mutual religion), and alliances (common membership in defense agreements or intergovernmental organizations). As suggested by Zhukov and Stewart (2012), several proximity criteria should be tested in order to choose the one with the best performance. In all likelihood, the "optimal" definition of the neighborhood would depend on the source and target variables in question.

The data for the source and target variables and the control variables included in the models will be annual observations at the macro level from publicly available databases on political, socioeconomic and security issues comprising all countries of the world and an ample time coverage. The intention is to maximize the amount of information for the concerned variables, particularly for those related to "rare" or relatively infrequent events such as conflict. There are many recent attempts to improve the reliability and expand the temporal and geographic coverage of economic and social data and these should be taken into consideration. Even then, there will be a fraction of missing values in the databases. The specific variable in question and the availability of additional information will determine if these should be imputed or not; this should therefore be decided on a case-by-case basis.

Once the estimation for the three modules has been completed, the third step is to analyze and present the results. First a general description of the relation between the variables, a comparison of the different definitions of neighborhood, and an evaluation of the main hypotheses will be presented in general terms, as obtained from the entire sample of countries in the world. The specific results and

implications for the Arab countries will follow in greater detail, given that the specific focus of the study lies in this region.

6.   Conclusion

The transfer of people, goods, ideas and information across borders is an undisputed element of the international system. These inter-country links have become inexorably stronger as globalization progresses. As countless recent studies demonstrate by using current theoretical developments, the newest databases and state-of-the-art statistical methods, the NE is a significant force that has an unquestionable effect on domestic variables. This document argues that no study in the political and economic spheres would be complete if the effect of the neighborhood is neglected.

And this is especially true in the Arab world, a region afflicted by conflict and occupation, ethnic and religious tensions, polarization, population displacement, porous borders, uneven development, and a persistent governance deficit. As illustrated in Section 4, there are plentiful examples of how powerfully the NE spreads through the Arab region just by looking at the previous few months.

The main objective of this document is to take these studies and recent observations as a motivation to study the NE from a broader perspective, by considering its impact on political, economic and security aspects. The full-fledged quantitative analysis proposed would calculate these elements, including their multiple interactions. Even if the intended study would perform the statistical analysis over a large panel of countries, the main focus would remain in the Arab region.

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Annex 1. Sources of information and notes for Table 1

Table 1 intends to provide a basic panorama of the situation in the Arab region compared the other main regions of the world, in terms of the socioeconomic, political and military/security dimensions. The details about the construction of the variables included are detailed below.

Human development index

The Human Development Index (HDI) is a composite indicator constructed as the geometric mean of normalized indices for income (measured through gross national income per capita at PPP constant USD), health (measured through life expectancy at birth) and education (measured through mean years of schooling per adult of age 25 and higher, and expected years of schooling for children of school-entering age). The United Nations Development Programme (UNDP) is responsible for publishing the HDI and its underlying variables yearly.

Under-five mortality rate

This variable measures the probability of dying between birth and exactly five years of age per 1000 live births. The figures included in the table represent averages for the period 2008 and 2012. The main source of data is the UN Inter-agency Group for Child Mortality. However, this database does not cover a few countries and other sources of data were used: for Hong Kong SAR and Macao SAR figures come from "World Population Prospects: The 2012 Revision", prepared by the United Nations Department of Economic and Social Affairs (UN DESA); for Liechtenstein the data was imputed with that of Switzerland; and for Taiwan the data was obtained from the National Statistics website of the Republic of China (Taiwan).

Life expectancy

The data on life expectancy at birth measured in number of years is based on the "World Population Prospects: the 2012 Revision" published by UN DESA. A few countries[30] are not included in this database so their data was imputed from the World Bank's World Development Indicators (WDI) with some limited interpolation. For Taiwan, the data was obtained from the National Statistics website of the Republic of China (Taiwan). The figures presented in Table 1 are average for the period 2008-2012.

Mean years of schooling for adults

This variable measures the number of years of formal schooling received on average by adults over age 25 on average for the period 2008-2012. Most of the data comes from International Institute for Applied Systems Analysis (IIASA) and Vienna Institute of Demography (VID)'s "Reconstruction of population by age, sex and level of education for 120 countries for 1970-2000 using demographic back-projection methods". An additional 37 countries[31] were obtained from Barro and Lee's "Educational Attainment

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[30] Dominica, Kosovo, Liechtenstein, Marshall Islands, Palau, San Marino and Saint Kitts and Nevis.

[31] Afghanistan, Albania, Algeria, Barbados, Botswana, Brunei Darussalam, Burundi, Congo (Democratic Republic of), Congo (Republic of), Fiji, Gambia, Iceland, Iraq, Israel, Jamaica, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Liberia, Libya, Moldova, Myanmar, Papua New Guinea, Qatar, Senegal, Serbia, Sierra Leone,

Database". Even contemplating both sources, several countries were still lacking data. For 31 of these countries, the UNDP's Human Development Report Office (HDRO) has data based on the UNESCO Institute of Statistics, but for a limited number of recent years. These data points were used for each of the 31 countries, and the remaining trajectory was estimated by applying the growth rate observed in a country with similar results in this indicator from the same region.[32] Since all sources are published at five-year intervals, the data was interpolated linearly to obtain a consistent annual dataset.

GDP per capita

The GDP per capita data is primarily based on the most recent version of the Penn World Table (PWT, version 8.0 published 2013). This source provides the purchasing power parity (PPP) adjusted GDP per capita at constant 2005 US dollars. Some countries are completely missing from the PWT 8.0 and were thus imputed from the K. S. Gleditsch's "Expanded Trade and GDP Data" version 6.0 (published in November 2013), which is based mainly on several version of the PWT and the Maddison Project Database. Both sources stop at 2011 and, in addition, the data for the last year was only provisional for some countries. For this reason, the rate of growth of GDP per capita in constant PPP USD obtained from the World Bank's WDI was applied to all countries for 2011 and 2012; for a few countries with no information in this source (Argentina, Cuba, Myanmar, Syria and Taiwan), the rate of growth for 2011-2012 was extracted from the Economist Intelligence Unit's CountryData. The figures reported in the table are average for the period 2008-2012.

Rate of growth of GDP per capita

This is the average yearly rate of growth of GDP per capita for the period 2008-2012, calculated from the series of PPP-adjusted constant GDP per capita described above.

Military expenditure

These numbers correspond to the average yearly military expenditure as percentage of GDP over the period 2009 -2013. The source is the Stockholm International Peace Research Institute (SIPRI).

Refugees

The United Nations High Commissioner for Refugees (UNHCR) publishes data on the refugee population across the world. The data presented in the table correspond to the stock of refugees in 2013 by country of residence/asylum as a percentage of total population. It also includes the Palestinian refugees

Sudan, Swaziland, Taiwan, Tajikistan, Tonga, Trinidad and Tobago, Tunisia, United Arab Emirates, Venezuela and Yemen.

[32] In parentheses, the country used to estimate the remaining trajectory: Andorra (Spain), Angola (Côte d'Ivoire), Antigua and Barbuda (Barbados), Azerbaijan (Armenia), Belarus (Lithuania), Bhutan (Bangladesh), Bosnia and Herzegovina (Turkey), Cape Verde (Liberia), Djibouti (Sudan), Dominica (Panama), Equatorial Guinea (Cameroon), Georgia (Armenia), Grenada (Colombia), Guinea-Bissau (Gambia), Kiribati (Indonesia), Lebanon (Jordan), Liechtenstein (Poland), Micronesia (Fiji), Montenegro (Greece), Oman (Saudi Arabia), Palau (Philippines), Palestine (Kuwait), Samoa (Tonga), Sao Tome and Principe (Liberia), Seychelles (Mauritius), Solomon Islands (Papua New Guinea), Saint Kitts and Nevis (Cuba), Saint Lucia (Cuba), Saint Vincent and the Grenadines (Cuba), Suriname (Honduras), Timor-Leste (Papua New Guinea) and Vanuatu (Fiji).

accounted for by the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). Data concerning the total population was obtained from UN DESA's "World Population Prospects: The 2012 Revision", except for Taiwan (National Statistics website of the Republic of China) and Kosovo (World Bank's WDI).

Conflict

This column includes the percentage of countries in each region that had at least one conflict in their territory during the period 2009-2013. It is constructed from the "Armed Conflict Dataset" jointly released by the Uppsala Conflict Data Program (UCDP) of the Uppsala University and Peace Research Institute Oslo (PRIO).

Terrorism

This variable compiles the score in the indicator "terrorist activity" of the Global Peace Index 2014. This index, comprised of 22 indicators, is calculated annually by the Institute for Economics and Peace. The variable takes values from 1 (minimal terrorist activity) to five (maximal terrorist activity). It is a weighted average of number of fatalities, injuries and material damage resulting from terrorism over the last five years.

Polity IV

This column refers to the score in the variable polity2 of the Polity IV database for the year 2013, obtained directly from the Polity IV Project. This score varies from -10 (absolute autocracy) to 10 (absolute democracy). A country is normally considered to be a democracy if they have a score of six or higher.

Unified Democracy Score

The Unified Democracy Score (UDS) is a synthetic indicator that combines ten existing measures of democracy through a Bayesian latent variable methodology. Reported are the mean values for the simulated sample of the posterior distribution for the UDS in 2012, obtained directly from Pemstein et al. (2010).

Worldwide Governance Indicators (WGIs)

Score of the six dimensions reported in the latest version (2012) of the World Bank's Worldwide Governance Indicators.

Definition of regions

The countries of the world were divided first between developed and developing according to the IMF definition used in their April 2014 World Economic Outlook (plus some micro-states that presumably would make part of the "advanced economies" group). The developing countries were then grouped according to geographic/geopolitical considerations. All independent countries currently in existence

were considered. The figures included in Table 1 are simple averages of the countries of each group that have available information.

- Developed countries: Andorra, Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Republic of Korea, Latvia, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States.
- Developing countries
    o Eastern and South-Eastern Asia: Brunei Darussalam, Cambodia, China, Indonesia, Korea (Democratic Republic of), Lao People's Democratic Republic, Macao SAR, Malaysia, Mongolia, Myanmar, Philippines, Thailand, Timor-Leste, Vietnam.
    o The Pacific: Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.
    o Eastern and Central Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, Lithuania, Macedonia (Former Yugoslav Republic of), Montenegro, Poland, Romania, Serbia, Turkey.
    o Former Soviet Republics: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.
    o Latin America: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela.
    o The Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.
    o Southern Asia: Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, Sri Lanka.
    o Sub-Saharan Africa: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo (Democratic Republic of), Congo (Republic of), Côte d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe
    o Arab region
        - Commodity exporters: Algeria, Bahrain, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen.
        - Other Arab countries: Comoros, Djibouti, Egypt, Jordan, Lebanon, Mauritania, Morocco, Palestine, Somalia, Sudan, Syria, Tunisia.