THE ROLE OF THE INTERNET IN DEMOCRATIC TRANSITION: CASE STUDY OF THE ARAB SPRING

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Abstract

Scholars of technology studies and political science started to hypothesize the causal relationship between the Internet and democracy as early as in 1990s. Nowadays most commentators agree that the Internet plays a positive role in democratization. Their claims, however, tend to be more intuitive and speculative rather than evidence-based. In fact, very little amount of empirical research is available on the topic.

The goal of the present research is to contribute to the mitigation of this gap in the literature. This thesis analyzes the impact and significance of the Internet on the 2011 Middle East and North African uprisings, also known as the Arab Spring. The study derives its main arguments from two sets of theories. The first set is related to the Internet’s democratizing potential and the second to transition to democracy in general. After building up a theoretical framework, multivariate regression analysis is carried out. As a result, the study determines impact and significance of the Internet on the Arab Spring. After performing the quantitative analysis and discussing the findings, the paper also provides policy implications.
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Chapter 1. Introduction

New Information and Communication Technologies have transformed lives on almost all fronts of human activity. They have revolutionized the global economy, reshaped societies and even altered the nature of human interactions. Therefore, it comes no surprise that the advent of modern communication technologies also affected realms of politics and governance.

Information and communication technologies have long been thought to be capable of reinventing governance. Some feared that governments, because of their coercive nature, would take an advantage of accelerating technologies to strengthen their influence over the citizens (see, e.g. Held in Hague and Loader, 1999:3). Others, with more optimistic attitudes towards new technologies predicted that the innovations of the digital age would empower ordinary citizens and undermine the influence of the government (Kurzweil, 1992).

After the emergence of the Internet, the cheapest and most efficient communication medium (Chadwick, 2006), the discourse moved to a new stage. Since the late 1990s it has been the dominant opinion that the Internet facilitates democracy. Because of its characteristics such as fostering free flow of information and low costs of access, the Net was seen as a tool that would primarily empower ordinary citizens and the civil society (Keohane and Nye, 1998; Simon, 2002; Chadwick, 2006). This effect had to be more significant in undemocratic states, as strong civil societies would eventually challenge authoritarian regimes and push for democratic transition.
Kurzweil At the end of the 80s, long before the Internet had gone commercial, argued that the improved flow of information facilitated by the new technologies would ultimately create pressure on authoritarian governments (mainly Soviet Union and China) and force them to democratize (Kurzweil, 1992:Ch 11). Morozov bases his argument on a similar logic while analyzing the Internet’s democratizing potential, to introduce what he calls the *dictators’ dilemma*. The dilemma states that repressive governments have two options: either they limit citizens’ access to the Internet and bear negative economic consequences, or they relax restrictions and therefore create preconditions for a democratic transition (Morozov in Kyriakopoulou, 2011:22). By saying this, Morozov implicitly sides himself with the scholars who argue that the Internet fosters democracy.

Even though the scholars have been hypothesizing causal relationship between the Internet connectivity and democratic transition since the late 1990s, there is almost no empirical research on the subject. Rather, the debate has been theoretical, mostly focused on future speculations (Docter et al. 1999:174). The present study will contribute to filling this gap in the literature. The thesis carries out empirical analysis to assess the Internet’s role in transition to democracy. For this purpose a case study of 2011 the Middle East and North African uprisings (or, the “Arab Spring”) is analyzed. The study seeks to answer the following question: How significant was the role of the Internet in triggering the upheavals? To do so, the research employs regression analysis and tests significance of the access to the Internet in conjunction with several other independent variables on the outcome. The outcome is defined as the magnitude of the demonstrations that took place in different countries of the Middle East and North African region.
The thesis is organized in the following way: The next chapter discusses several theories related to the casual relationship between the Internet and democracy as well as those concerned with transition to democracy. By analyzing these theories I make several important assumptions that will be used throughout the text. The third chapter discusses Internet activism, a very powerful weapon in the hand of the modern pro-democratic forces against authoritarian governments. Several successful cases of Internet activism are highlighted, including those that took place during the Arab Spring. In chapter four regression analysis for determining the Internet’s role in the Arab Spring is presented. Finally, the fifth chapter provides concluding remarks and policy implications of the research.
Chapter 2. Theoretical background: Democracy and the Internet

This chapter will review previously published scholarly articles related to the Internet and democracy. The chapter starts with introduction to three different schools of thought about the democratizing potential of the Information and Communication Technologies. Then, it continues with narrowing down the theoretical discussion to the Internet’s impact on political processes. As it will be shown, the role of the Internet under democracy is substantially different from that of under the authoritarianism. For this purpose, both types of regimes are discussed separately.

2.1. New communication technologies and democracy

Scholars have considered political and social impact of the Information and Communication Technologies (ICT) long before the invention of the Internet. The views about the democratizing potential of those technologies, however, have traditionally been different. The vast majority of authors on the social and political aspects of the ICT can be ascribed to one of the three schools of thought that we may conventionally label as Cyber-Phobia, Cyber-Skepticism and Cyber-Enthusiasm (Corrales, 2002:30-31).¹

¹ Corrales proposes Cyber-Enthusiasm, Cyber-Skepticism and Cyber-Phobia for referring to three different views of solely the Internet’s democratizing impact. Here these terms are used in a broader context, encompassing all kinds of ICTs.
Cyber-phobe writers tend to predict dystopian scenarios, where new technologies are primarily used for surveillance and state control (Bellamy and Taylor, 1998 in Coleman et al. 1999:5). Authors like Davies (1996, in Hague and Loader, 2002:3) have described genuine Orwellian-type nightmares, where leading elites take advantage of new technologies to “invade personal privacy” (Corrales, 2002:30). Surveillance, privacy and increased state control are seen as important issues by some technology scholars and there is a certain body of literature (see Chadwick, 2006:257-288; Muller, 2010) related to these topics. While the author of the present study is aware of these visions and finds some of their arguments appealing, it lies far beyond the scope of the thesis to assess possible threats associated with ICTs. Rather, the paper is concerned with the causal relationship between new media technologies (namely, the Internet) and democracy. For this purpose, the views of cyber-phobes will largely be ignored.

Perhaps the least influential out of the three schools of thought encountered in the literature is that of Cyber-Skepticism. Scholars in this tradition argue that ICTs have an insignificant effect on democratization. The rise of skeptic scholars in academia has traditionally been cyclical, usually coinciding with frustrations related to the Information technologies. For example, a number of commentators (Dutton, 1992; Arteron, 1987; Abramson et al. 1988, all in Bellamy, 2000:38) started to question the democratizing potential of communication technologies after the underperformance of ICT-based democratic innovations in the 1970s and 1980s (Bellamy, 2000:38). A more significant resurgence of Cyber-Skepticism took place in the early 2000s, following the burst of the dot-com bubble (Corrales, 2002:30). The rise of skeptics has been a temporary phenomenon, highly correlated with interim frustrations towards ICTs. After achieving a short-term recognition in academia, views of the skeptic would soon wither away along with new scientific breakthroughs in the ICTs.
It is the views of Cyber-Enthusiasts that the present research embraces and builds upon. Democratic outcomes of access to the media technologies were theorized as early as in the 1960s (see Lipset, 1960, in Corrales, 2002:34). Along with the development of ICTs, the amount and quality of the scholarly works on the topic increased as well. A number of remarkable contributions have been made starting from the early 1980s. For instance, de Sola Pool in 1983 argued that ICTs like microcomputer and on-line publishing exhibited clear democratic characteristics as their autonomous nature challenged centralized control of communication. Drawing from this reasoning, he coined the term “technologies of freedom” for the ICTs (1983. in Docter et al., 1999:173). Winner, in his analysis labels network communication technologies as “citizen technologies” (1993 in Bellamy, 2000:38) highlighting the feature of equal access for all users. Most subsequent studies had been becoming more cyber-optimistic. Some later commentators have suggested that ICTs have a potential to significantly strengthen the democratic process (Coleman, 1999 in Coleman et al. 1999:5; Hague and Loader, 2002:10).

2.2. Democratizing characteristics of the Internet

The Internet can be viewed as a new paradigm in ICT. Therefore, all general statements about communication technologies and democracy are valid with respect to the Internet as well. Still, there are at least two essential differences that vest the Internet with a much stronger democratizing potential than any other type of ICTs. The first is provided by the definition of the Net itself – the Internet is a complex network of networks (Mathiason, 2009:6; Chadwick, 2006:4), which links hundreds of millions of computing devices operating on various programs (Chadwick, 2006:4). The
complexity of those communications clearly indicates that it is virtually impossible for states to control or regulate the Net (Mathiason, 2009).

The second, equally important democratizing characteristic of the Internet is revealed while comparing it to other mediums of communication. Newspapers, radio and television, for example, are predominantly “one-to-many” media, meaning that information is created by a relatively restricted group of people and delivered to masses. Telephone and telegraph can be seen as “one-to-one” mediums, usually involving two sides communicating with each other (Chadwick, 2006:4-5). Internet, on the contrary, promotes “many-to-many” type of interaction. Via technologies like forums, blogs, discussion boards and chat rooms, large number of people engage in the process of exchanging information (Chadwick, 2006:5; Miller et al. 2009:78; Vintar et al. 1999:92).

There are several other remarkable characteristics encountered throughout the literature which, according to the authors, affect democratic practices around the globe. Most of these characteristics are determined by the fact that the Internet lacks centralized control (Miller et al. 2009:78) and is largely unregulated. These include borderless nature of the cyberspace (Mathiason, 2009:17), improved citizens’ access to information, free speech and freedom of association (Simon, 2002; Hague and Loader, 2002:6 Hacker and van Dijk, 2000:4). The existence of these characteristics led several authors to suggest that the net empowers citizens and diminishes authority of the state (Graham, 1999; Simon, 2002).

While theory makes a convincing claim that the Internet facilitates democracy, the magnitude of this impact is expected to vary under different political regimes. To further assess the democratizing
potential of the Net, therefore, it is necessary to distinguish between different kinds of regimes. In order to avoid unnecessary complications of the analysis, we will dichotomize states simply as “democratic” and “undemocratic” ones. The Internet’s role has to be discussed in both contexts separately. As a result of this comparison, several complementary assumptions will be made that I’ll use extensively throughout the study.

2.3. Internet in democratic states

Citizens in contemporary liberal democratic states have rights to vote and enjoy various freedoms, including freedom of speech and association. They can also influence decision-making of elected officials between elections either by direct communication with their representative or by joining various interest groups and social movements. Still there is a severe issue facing such regimes, namely, declining civic participation in political processes and increasing apathy towards politics (Barber, 1984; Verba et al. 1995; both in Chadwick, 2006:25:87).

Since the early 1970s there have been various attempts to increase citizen engagement in local political processes by new media-aided projects. However, as it was noted in the previous section, many of those undertakings could not meet the expectations that were associated with them. This caused frustration of many scholars and emergence of skeptics who ceased to believe in technology’s democratizing potential.
The ICT revolution at the end of the 20th century, and most spectacularly, advent of the Internet, gave hope to the scholars that something substantially new was happening (Poster, 1995, in Bellamy, 2000:38). The idea that the new media technologies could strengthen democracy started to re-emerge. Commentators coined various terms such as “digital democracy”, “cyberdemocracy”, “virtual democracy”, “electronic democracy” (Hacker and van Dijk, 2000:1; Hague and Loader, 2002:3; Chadwick, 2006:84-85) and a few more to refer to the ICTs’ and the Internet’s potential to enhance democratic practices. While there are slight technical differences between those terms (Hacker and van Dijk, 2002:1-2) they all describe citizens’ way of practicing democracy by using computer-mediated communication and/or ICTs. For the purpose of avoiding confusion while referring to different scholars, these terms will be used interchangeably throughout the text.

Remarkably, some public administration theorists go far beyond simply defining cyberdemocracy. Hoff, Horrocks and Tops (2000:1-9), for instance, view cyberdemocracy as one of the four models of democracy that had been practiced in Western Europe and the US (The other three being Consumerism, Demo-Elitism and Neo-Republicanism). The basic characteristics of the four models are summarized in the table below (source: Hoff, Horrocks and Tops, 2000:7).
<table>
<thead>
<tr>
<th>View on citizenship</th>
<th>Consumer</th>
<th>Demo-elitist</th>
<th>Neo-republican</th>
<th>Cyberdemocratic</th>
</tr>
</thead>
<tbody>
<tr>
<td>(neo-liberal)</td>
<td>(pluralist) liberal</td>
<td>Republican/social democratic</td>
<td>Communitarian/republican democratic</td>
<td></td>
</tr>
<tr>
<td>Domiant democratic value</td>
<td>Freedom of choice</td>
<td>Effectiveness</td>
<td>Deliberation and participation</td>
<td>Community, acceptance of diversity</td>
</tr>
<tr>
<td>Political nexus</td>
<td>‘moment of truth’ (producer/consumer relation)</td>
<td>Expert discourse</td>
<td>Public sphere, media</td>
<td>Electronic discussion (Internet)</td>
</tr>
<tr>
<td>Central form of political participation</td>
<td>Choice of public services (exit)</td>
<td>Consensus creation, lobbying</td>
<td>Public debate, associations</td>
<td>Virtual debate, virtual and real actions</td>
</tr>
<tr>
<td>Main political intermediary</td>
<td>Service declarations, consumption data</td>
<td>Negotiation and campaign institutions</td>
<td>Meetings, hearings (real and virtual)</td>
<td>Electronic networks, electronic communities</td>
</tr>
<tr>
<td>Dominant procedural norm</td>
<td>Development of capabilities (rights)</td>
<td>Development of adaptive political system</td>
<td>Development of identities, development of adaptive political system</td>
<td>Development of identities, development of capabilities (competences)</td>
</tr>
</tbody>
</table>

It can be observed that cyberdemocratic model, exhibits the most horizontal structure of interaction. The values of the model are intrinsically egalitarian, based on mutual respect and acceptance of diverse opinions. Therefore, it comes as no surprise that the very substance of cyberdemocracy challenges traditional constitutional institutions, such as elections, parties and legislative procedure (Bellamy, 2002:33-50). Constitutional institutions are based upon the principle of representative democracy, while the advent of new media technologies has always been associated with plebiscitary views in western societies (van Dijk, 2000:42).
Many authors speak of the Internet’s contribution in the shift from representative to participatory and even in some cases direct-type democracies in western states (Taylor and Burt, 1999: 154; Graham, 1999:70; Chadwick:2006). Bimber has argued that the Internet facilitates the process that he calls “accelerated pluralism” (1998) meaning creating a soil for promoting diverse opinions, ideas and social movements. The Internet has stimulated various policy entrepreneurs, non-governmental organizations and individual campaigners to go online (Chadwick, 2006:91). This has resulted in emergence of myriad of new communities who actively participate in local political processes and discussions.

The impact of Internet-enhanced participatory democracy is most apparent in case of legislative bodies. Some scholars studying the relationship between the Internet and parliament (Carter, 1999; Wolfensberger, 2002) have pointed to the increased pressure on legislators by their constituents and interest groups via e-mails and other means of Internet communication. Increasing number of constituents send various requests and proposals to their representatives, which the latter are already unable to handle (Carter, 1999:105). This substantial change in citizens-legislators relationship motivated Wolfensberger in his analysis of the US congress to propose a scenario where decision-making autonomy of representatives is essentially gone and the congress “merely [processes] public opinion polls into public laws” (2002:91). So far, at least one attempt has been made towards this kind of direct democracy. A newly established Australian party, Senator Online has it in their agenda to promote direct online voting by citizens in the Australian Senate (Miller et al, 2009:81).
There have been two complementary theories put forward to explain the Internet’s ability of increasing civic engagement in political processes. One maintains that the Internet, because of its horizontal, egalitarian structure of networks facilitates intensive communications. This, as a consequence, enhances social capital, promotes network communities and fosters trust among members of online groups (Chadwick, 2006). The other theory is related to the concept of ‘public sphere’. The term ‘public sphere’ was introduced by Jurgen Habermas to describe a sphere of citizen association, which encompasses several activities such as participating in local events, reading independent press and, most importantly, gathering in public places for political discussions (Bellamy, 2000:36; Chadwick, 2006:88; Keane, 2000). Public sphere is considered to have played an enormous role in the formation of civil society in the nineteenth-century Europe and in forging ‘public opinion’ (Bellamy, 2000:36), gradually limiting the influence of then-despotic European states. It has been argued that the rise of forums, discussion boards, blogs and other kinds of Internet means for political discussion is nothing less than emergence of “virtual public spheres” (Wilhelm, 1999). The pervasiveness of the Internet gave rise to the Network citizens (netizens) who started to participate in the online discussions on regular basis and strengthen what can be called the digital civil society.

The impact of digital public spheres and enhancement of social capital is increased cohesion within online communities. They have become more viable as well as capable to overcome issues related to the collective action (Chadwick, 2006). Empowerment of Internet communities as well as improvements in their cooperation diminishes state influence even further. Individual netizens can challenge experts, governments and public officials as easily as never before.
In addition to the theoretical research, several empirical studies have also assessed the correlation between the Internet and civic engagement. One of the first of such studies was published by Wired magazine in 1997. The research concluded that “people who are most connected to the Internet are also more civically engaged in general, including commenting public policy issues and voting” (in Carter, 1999:104). A more recent study which reaffirmed earlier findings was carried out by Weber and his colleagues. Based on statistical modeling, it was shown that “engagement in online activity ‘significantly affects’ formal political participation beyond voting, such as signing petitions, letter writing, attending rallies, and so on, even when controlling for race, education, age, gender and membership in local groups and hobby clubs” (Weber et al. 2003:32 in Chadwick, 2006:104).

As a concluding remark of the section it can be said with certainty that the Internet facilitates civic participation by enhancing social capital and public spheres. While this characteristic of the Net is unquestionably important under the democratic regimes, it proves to be even more crucial in undemocratic states. The role of the Internet under authoritarian regimes is discussed in the following section.

### 2.4. Internet in undemocratic states

In order to sustain the simple dichotomy, this category encompasses both intermediary (or, alternatively, flawed democracies) and authoritarian states. Interestingly, while there is a huge body of literature on the political impact of the Internet under democratic regimes, the Net in undemocratic states in almost an unexplored topic. Luckily, there are certain similarities and some of the theories discussed in the previous section can be applied to non-democratic regimes as well.
To understand the magnitude of impact the Internet may have under authoritarian regimes, it is useful to start the analysis by considering the theories that attempt to explain the emergence of democracy. One of the classical approaches has been to ascribe democratic transition to the absence of conditions that generate autocracy (Olsen, 1993). In other words, transition of a regime takes place when there are several (or many) parties willing to govern while no single political force that can effectively seize the power exists.

Another, non-conflicting explanation of regime change can be applied to modern authoritarian states. According to this approach, transitions take place when a state experiences external pressure from democracies combined with internal tensions such as an economic or a political crisis. Change of a regime becomes extremely likely when both internal and external pressures occur in conjunction (Gasiorowski, 1995). Authoritarian governments can therefore sustain grasp on power as long as they can, but once a crisis takes place, the viability of a regime immediately comes under question (Whitehead, 2001; Haggard and Kaufman, 1995; both in Corrales, 2002:45).

While analyzing the “third wave of democratization” Huntington identifies one more highly important condition for transition to democracy, the demonstration effect (1991:100). The demonstration effect can be understood as one group’s exposure to the “cues/prototypes/models” (Starr, 1991) of another group, leading to the influence on the former’s behavior. As Huntington maintains, demonstration effects merely demonstrate what can be achieved and by what means in other countries. Citizens may get inspired by political events going on abroad (such as a regime change in other authoritarian states) and imitate same processes in their own countries (Huntington, 1991).

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2 A term coined by Samuel P. Huntington in 1991. It refers to the global transition to democracy in 60 countries throughout the world in 1974-1991. Vast majority of those states had been communist before.
Based on the theories above, four general preconditions for a regime change can be identified:

1. Politically active citizens (or groups of citizens) willing to participate in governance
2. Economic malfunction (measured by macroeconomic parameters) borne by the population
3. Weak government
4. Demonstration effect

Presence of all four conditions can be seen as sufficient for a regime change. If all the conditions are met, a transition to democracy will inevitably take place, either peacefully or after a violent uprising. However, if the government is strong enough to retain power for a long time period, the transition to democracy may be more ambiguous, but there will still be an attempt for a regime change. It therefore follows by implication that civic engagement, economic malfunction and existence of a demonstration effect are sufficient conditions for a civil unrest (such as major demonstrations) to occur in an authoritarian state.

Having defined three broad conditions of civil unrest, now the role of the Internet can be considered. As it was clearly shown in the previous section of this chapter, major contribution of the Internet in fostering democracy is its ability to facilitate establishment of civil society. Pluralistic society (Bimber, 1998), empowered interests groups (Corrales, 2002) and social movements (Chadwick,
will inevitably challenge authority of a government. The Internet serves as a means of citizens’ political participation and thus directly promotes civic engagement, which is one of the necessary conditions for major demonstrations.

The role of the Internet in stimulating social unrests under authoritarian regimes becomes even more apparent when demonstration effect is considered. Huntington stressed the importance of information and communication technologies in the 1974-1991 wave of democratization. Demonstration effect, according to Huntington, was particularly influential in would-be transition states because of the improvements in ICTs. It was getting increasingly difficult for the authoritarian governments to prevent their citizens from receiving the information from abroad. Via faxes, computers, radio and television the population had relatively free access to the news and learned about democratic innovations in other authoritarian states worldwide (Huntington, 1991:102). ICTs were seen as important means for the diffusion of democracy in communist and dictatorial states by many other writers (Starr, 1991:360; Keohane and Nye; 1998, Kurzweil, 1992).

Similar argument can be applied to the Internet in the 21st century. The Net, by its nature grants its users free access to the information, thus strengthening the demonstration effect. Citizens of the authoritarian states are empowered by technological means to follow both the old-established democracies as well as the ongoing democratic transitions throughout the world. The demonstration effect will ultimately translate into citizens’ willingness to enjoy similar political and economic freedoms as their counterparts do in democratic states.
As we can see, the modern communication technologies and particularly the Internet can play a decisive role in triggering the process that may end up with a democratic transition. Internet-driven protest waves and major demonstrations will become even more likely in dire economic conditions, as some theorists have suggested (Whitehead, 2001; Haggard and Kaufman, 1995; both in Corrales, 2002:45; Gasiorowski, 1995). Under an authoritarian regime any domestic issue, including an economic crisis, may lead to such demonstrations when the population has high access to the Internet.

Many authoritarian governments have contemplated risks associated with pluralistic society as well as the dangers of free flow of information. It comes no surprise, therefore, that several authoritarian states have been severely limiting the population’s access to the Internet (Mathiason, 2009; Simon, 2002). Regulating the Internet, however, is costly and to a large extent ineffective. Even though the governments can successfully monitor virtual public spheres like blogs, forums and discussion boards, many other means of Internet communications still remain beyond the government’s easy access. Examples include private chat rooms and user’s personal social networks. The implication here is that the access to the Internet, no matter how severely limited, still enhances social capital and public spheres to a certain extent. Furthermore, it might well be that the restrictions imposed on the free flow of information by coercive governments are precisely what triggers groups of netizens to engage in Internet activism (Kyriakopoulou, 2011:23), a practice which is the topic of the next chapter.
Chapter 3. Internet activism

This chapter covers history and nature of Internet activism. After briefly discussing the origins of the practice, some theoretical framework is provided. Several recent cases of Internet activism are also illustrated in order to prepare grounds for further discussion. At the end of the chapter, the case of Arab Spring is introduced.

3.1 The nature of Internet activism

“Internet activism (also known as … cyberactivism … E-campaigning and E-activism) is the use of electronic communication technologies such as e-mail, World Wide Web and podcasts [for] … fundraising, organizing volunteers … lobbying and organizing” (Miller et al, 2009:1).

Internet activism has been employed by groups of netizens to achieve a variety of political and social goals since 1990s. The practice has played an important role both in democratic states and under authoritarian regimes. Internet activism has been successful in a number of cases. Some of the classic examples include global online support movement of the indigenous farmers’ uprising in Mexico in 1994 (Corrales:2002:40; Chadwick, 2006:127), holding a massive anti-globalistic demonstration in Seattle during the WTO meeting in 1999 (Chadwick, 2006:127) and organizing pacifistic demonstrations on 15 February, 2003 simultaneously in 122 countries (Hickey, 2004; Kahn and Kellner, 2004; all in Chadwick, 2006:122).
These several classic cases of successful Internet activism indicate that this form of activism can be employed in various occasions. It can be used for political, social or economic purposes, both under democracies and authoritarian regimes. The list of successful Internet campaigns could be extended much further. However, this paper is concerned with the Internet’s democratizing potential which tends to be most apparent under undemocratic regimes. For this purpose, only Internet activism cases in authoritarian states will be considered.

3.2 Internet Activism in authoritarian states

In the previous chapter it was shown that the Internet increases civic engagement and magnifies the demonstration effect. These two characteristics can explain why citizens who are connected to the Internet stay politically more active. The concepts of civic engagement and demonstration effect do not provide an insight however, on why Internet activism should be strongly preferred to other means of citizen mobilization, including face-to-face interaction. For answering this question, another dimension of the Internet has to be explored: the Net’s ability to eradicate issues related to collective action.

Some theorists have argued that democracy exhibits important characteristics of a public good (Fleurbaey, 2006). The same is true for a transition to democracy. This is to say that all citizens in the country would benefit if democratization takes a place, but a given individual may have little incentive to contribute to the process of democratic transition. Individuals’ incentives are particularly low if
their participation in demonstrations is associated with a high risk, such as imprisonment or losing one’s job. Consequently, a problem of collective action emerges, which makes citizen coordination more difficult.

The Internet, however, exhibits characteristics that can help to overcome the problem of collective action to a large extent. First, the Net lowers communications costs virtually to zero, which improves citizens’ access as well as facilitates coordination. Second, in many online environments non-participation is easy to spot (Lupia and Sin, 2003 in Chadwick, 2006:141) thus those who attempt to free ride on others might risk the exclusion from their communities. And third, dissemination of information among netizens might help to increase the number of demonstrators for the upcoming protests. According to some sociologist theorists, before joining a protest movement, individuals assess risks and make decisions accordingly. Most people follow “safety in numbers” and “you first” reasoning. They subjectively tend to perceive certain numbers of demonstrators as safety thresholds (Granovetter, 1978 in Chadwick, 2006:140) above which it becomes virtually impossible to punish activists individually. Internet makes it possible to effectively inform netizens that other activists are engaging in the collective action (Reingold, 2002 in Chadwick, 2006:140), thus attracting more people who employ the “safety in numbers” logic.

The networks used for Internet activism are horizontal, with no apparent leaders. Rather, they are based on egalitarian principles and facilitate plurality. The main tool for Internet activism is User-generated content (UGC)\(^3\) that is created by individual activists and uploaded on various Internet platforms (Comninos, 2011:4). The highly decentralized organizational form is what makes Internet

\(^3\) Contemporary UGCs include, but are not limited to: Twitter and Facebook status updates, video-uploading, posts on Internet forums and blogging (Comninos, 2011)
activism very elusive for authoritarian governments to tackle. The recent events of the Arab Spring also confirmed this view.

3.3. Internet activism in context: Arab Spring of 2011

There is a small minority of scholars who believe that the Internet had a negligible impact on the recent wave of popular uprisings (see e.g. Gladwell, 2010). However, most commentators (Simmons, 2011; Ritter and Trechsel, 2011; Comninos, 2011; Shirky in Ritter and Trechsel, 2011:2) recognize the role of the Internet and according to these authors social media sites and other platforms for uploading the UGC played an indispensable role in successful uprisings. There are several important aspects of the Internet’s impact on recent events in MENA, which will be considered below.

3.3.1 The Internet as a tool for mobilization

Perhaps the Internet’s most important contribution to the revolutions has been made at the outsets of the uprisings in MENA. Social media and video-uploading sites served as an initial momentum to the revolutions (Comninos, 2011:6; Rittel and Trechsel, 2011). Activists used Internet technologies for mobilizing large groups of supporters and disseminating information to stir up the protest movements.

It is remarkable to observe how effectively the Internet and UGC-sharing tools were utilized during the Arab Spring. In Tunisia, for example, it took less than a day to start the Internet-aided massive movement. On December the 17th Mohamed Bouazizi, set himself ablaze in front of the governor’s office in the city of Sidi Bouzid. The event immediately triggered local demonstrations that started on the same day (Ridai, 2011 in Ritter and Trechsel, 2011:13). The state-controlled Tunisian media did
not highlight the protests and the activists started disseminating the information via the Internet themselves. Various UGC sites were employed, including Facebook, where Bouazizi’s story was told in detail. Within a few days demonstrations of the enraged Tunisians broke out in most major cities of the country (Anderson, 2011; Miladi, 2011; both in Ritter and Trechsel, 2011:13) converting into the upheaval which would result in the regime change.

Online social media played a crucial role in overcoming the problem of collective action in Egypt. Organizers of the January 25 demonstration created an interactive tool on Facebook that allowed users to pre-register and therefore indicate that they were going to participate (Simmons, 2011:5). Around 85 000 Facebook users signed up. Some scholars suggest that the high “virtual turnout” motivated many Egyptians to attend the rally (Ritter and Trechsel, 2011:14) as the “safety in numbers” and “you first” arguments would have predicted (Chadwick, 2006:140). In other words, had there not been a Facebook page aiming at mitigating the collective action problem, fewer activists would show up on the demonstration.

The Internet has played a crucial role at the initial stages of some uprisings in MENA. Various UCG-uploading means were utilized to disseminate information among the population. Once massive protests moved from cyberspace to the streets, however, the Internet’s role as a means of activists’ mobilization declined (Ritter and Trechsel, 2011). For instance on 27 January, 2011 the Internet use was reduced virtually down to zero in Egypt because of the restrictions imposed by the government. Nevertheless, this fact did not prevent people from joining the demonstration at Tahrir Square (Sharekh, 2011:57). The implication here is that the Internet plays most significant role at the dawn of civic unrests. Once the uprising is strong enough and enjoys support of broad masses, the Internet
assumes a different primary function: informing the outside world about ongoing protests (Ritter and Trechsel, 2011).

### 3.3.2 Creating international awareness via the Internet

Once an uprising against an authoritarian regime reaches a certain level of success domestically, it needs to generate support from abroad as well. In order for such a movement to survive, it is necessary that there exists some kind of international pressure on the government so that violent crackdowns or extreme human right violations are less likely. Thus, it becomes the responsibility of the Internet activists to promote internationalization of the event (Ritter and Trechsel, 2011:12). Beth Simmons (2011), in the presidential address presented an accurate map that showed Twitter activities by the demonstrators from Tahrir Square. Some of the messages (“tweets”) were reproduced and shown to the audience. It is striking to observe how many of those messages were sent in English. High number of the tweets in English indicates that much of the UGC uploaded by Egyptian Internet activists were aimed at the audience abroad.

Internet activism in Egypt complemented Al Jazeera’s efforts to discriminate Mubarak’s regime by exposing human rights violations to the rest of the world. This led to solidarity protests targeting Egyptian embassies in a number of Capitals worldwide. As the international tensions grew, Barack Obama’s administration gradually changed its position towards its allied government of Egypt and finally was demanding a political transition in Egypt (Ritter and Trechsel, 2011:18).

The same was the case in Tunisia, where activists by sending tweets, updating Facebook statuses, blogging and uploading videos drew a considerable attention upon themselves. Efforts of Tunisian Net activists paid off on the international level. It not only further discriminated the regime, but also put
pressure on foreign officials linked to Ben Ali’s government. For example, French popular outrage led to forced resignations of some of the French politicians who were closely allied with Ben Ali’s government (Ritter and Trechsel, 2011:17).

In some of the MENA states, where foreign journalists were almost completely restricted, UGC platforms played an absolutely vital role. They served as virtually the only means for streaming the news to the rest of the world. A good example here is Syria (Comninos, 2011:9).

### 3.3.3 Facilitating a “double demonstration effect”

The populations of the MENA countries have experienced something that can be called a “double demonstration effect”. Many citizens of the Arab states with access to ICTs had been influenced by the success of western democracies long before the 2011 revolutions. This demonstration effect was eloquently explained by one of the young activists in Iraq: “Young people watch satellite TV and ask why Americans can elect new leaders every four years but they cannot.”

Only pioneer countries of the Arab Spring (such as Tunisia and Algeria) experienced just the external impact. The late-joiners, like Bahrain or Libya were exposed to both external and regional demonstration effects combined, or the “double demonstration effect”.

It goes almost without saying that the Internet, as a facilitator of the demonstration effect, did play a role in influencing the youth. The question is, however, how significant the role of the Internet was in triggering mass demonstrations. To answer this question, quantitative analysis techniques should be employed.

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Chapter 4. The role of the Internet in Arab Spring – Quantitative Analysis

This chapter adopts quantitative analysis techniques to answer the following question: How significant was the Internet’s role in Arab Spring? For this purpose, the impact of Internet connectivity is analyzed in conjunction with several other variables. The selection of the variables is in line with the assumptions of the regime transition theories discussed in Chapter 2. After carrying out the regression analysis, a summary of findings is provided. The chapter concludes by mentioning limitations of the research.

4.1. Correlation Analysis

As it was noted earlier, a number of authors (Kurzweil, 1992; Keohane and Nye, 1998; Morozov in Kyriakopoulou, 2011:22) have argued that the improvements in ICTs and the increased flow of information would limit the influence of the authoritarian regimes. As a result, not in the too distant future, all of those regimes would either have to completely isolate themselves from the outside world, or democratize. It follows by implication that authoritarian regimes and the Internet are, at least in the long run, incompatible. Furthermore, not only the Internet and democracy are expected to be closely related, also the former should cause the emergence of the latter to a certain extent.

To assess the first claim, related to the positive relationship between the Internet and democracy, correlation analysis should be performed. For this purpose, I’ve selected two variables to carry out the test. These are degree of democracy and Access to the Internet for any given country. For the former, the Economist Intelligence Unit (EIU) Democracy Index is used from the previous year. The
The advantage of this index is that it is a single aggregated measure derived by analyzing 60 indicators for every country. The indicators that are examined to obtain the aggregate measure include electoral process, civil liberties government functioning and political culture (EIU, 2010). The Index covers 167 countries and rates them on a scale from 0 to 10. As for the Internet connectivity, I’ve referred to the data provided by Internet World Stats, a site that regularly uploads numbers of estimated Internet users in different countries. The only case for which the Internet statistics were not given was North Korea that I omitted from the analysis.

The results of the correlation analysis are summarized in the scatter plot and the table below.

![Figure 1. Correlation between the access to the Internet and democracy for 166 countries](image)
Table 2. Correlation between the access to the Internet and democracy for 166 countries

<table>
<thead>
<tr>
<th></th>
<th>IntAccess</th>
<th>Democracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>IntAccess</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>166</td>
</tr>
<tr>
<td>Democracy</td>
<td>Pearson Correlation</td>
<td>0.648**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>166</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

As we can observe, there is a strong positive relationship between access to the Internet and democracy. The correlation coefficient is 0.648 at 0.01 level of statistical significance. In other words, it is a general trend that citizens in democratic states have higher access to the Internet.

Here, however, a problem of endogeneity emerges. It is impossible to make any inference about causation solely based on the correlation analysis. It is unclear whether access to the Internet leads to democratization or the other way around. Internet access could be a precondition for democratic transition but there is an alternative explanation of the relationship. Namely, democratic states usually have a better economic performance than their authoritarian counterparts. Therefore, it would be reasonable to assume that people in democratic states are simply wealthier and can afford possessing personal computers. Besides, authoritarian states, either because of undeveloped telecommunications infrastructure or lack of liberalized markets, have far less Internet service providers who set monopolistic prices on their services (Chadwick, 2006:64-65). These shortcomings of the correlation indicate that more thorough analysis is needed to be performed.
The results obtained by the correlation test can be further elaborated to derive an important variable that provides more insights on the Internet and democracy for any particular country. The variable, conventionally labeled as “Distance” is obtained by measuring shortest distances between the points and the trend line. The countries situated around the correlation line have lower Distance values, while outliers have higher. The outliers represent either extremely undemocratic states with unusually high access to the Internet, or democratic states with very low Internet access. Given that a distance is always expressed in terms of an absolute value the two types of outliers need to be distinguished. For this purpose I’ve conventionally assigned negative values to authoritarian states and positive to the democratic ones.

As the derived theory from chapter two predicts, the authoritarian states with high access to the Internet are most prone to social unrests. Once some kind of domestic crisis emerges the viability of the regime will be endangered. On the other hand, authoritarian states with low Internet access are expected to experience less fierce demonstrations even in case of an economic crisis. Thus, higher negative values of the Distance variable should be associated with higher probabilities of upheavals. To test this hypothesis regression analysis are required.
4.2 Regression analysis

4.2.1 The dependent variable

This part of the research examines impact of the Distance variable derived in the previous section, on the outcome. The outcome is an ordinal variable assuming value from 0 to 3 according to the number of activists at the major anti-governmental demonstrations. Thresholds are set as follows:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Less than 1000 activists or no demonstration took place</td>
</tr>
<tr>
<td>1</td>
<td>1000 to 5000 activists</td>
</tr>
<tr>
<td>2</td>
<td>5000 to 15000 activists</td>
</tr>
<tr>
<td>3</td>
<td>15000 activists or more</td>
</tr>
</tbody>
</table>

The thresholds of 1000, 5000 and 15000 are in line with those used by Center of Systematic Peace to measure magnitudes of conflicts. For assigning numerical values to the dependent variable, primary data of mainstream media reports was used. Vast majority of news articles on Arab Spring demonstrations mention the numbers of activists. In case of few conflicting claims, I gave advantage to those that were mentioned most often. Search was performed for each country of the sample within the relevant time range (see the next section). The following news sources were used as references: Reuters, CNN, New York Times, Al Jazeera, BBC, Wall Street Journal, The Guardian and Bloomberg.
4.2.2 Sample and time horizon

The Arab Spring started to unfold less than six months before writing this study and the process is far from being finished. For this reason, a sample of most similar states was selected, so that the effects of revolution diffusion could be observed in the short-run. As Huntington has argued, demonstration effects tend to be strongest among geographically proximate and culturally similar countries (1991:102). Thus the sample was compiled with the countries of the Arab League. The states in the Arab League share many major similarities, including the language, prevalence of Muslim population and geographical proximity. The sample excludes Palestine and Somalia due to the lack of necessary data and Comoros because of its geographical distance from other Arab League countries. As a result of these modifications, there are following nineteen countries left in the sample:

Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen.

Another advantage of selecting this particular sample, besides the similarities among the countries, is that all but two states in the Arab League are listed as authoritarian by EIU. Only two, Lebanon and Iraq score slightly higher. That takes them to the “hybrid regimes” category, which also consists of undemocratic states (EIU, 2010). This fact makes answering the research question easier, since the hypothesis about the Internet’s democratizing potential was established with respect to the authoritarian states.

Because of the cultural and geographical proximity, it is reasonable to presume that the demonstration effect would have stimulated upheavals in all the Arab League states under fragile authoritarian
regimes. The time period required for pro-democratic movements to emerge should be rather short in case if all general preconditions for social unrests are present. Because of this assumption, the study takes into consideration events that took place during the first quarter of 2011. Those states that have not experienced a social unrest until the 31st of March are presumed not to have had sufficient socioeconomic conditions for an upheaval by the time the Arab Spring started. The same holds for the magnitude of protests. The number of activists may have changed since March but those changes need to be ascribed to the factors other than the preconditions prior to the protests.

Thus, analyzing nineteen selected states of the Arab League during the first quarter of 2011 provides sufficient answers to the question of what contributed to triggering the unrests in each of the countries and whether the Internet’s role was significant.

### 4.2.3 Independent Variables

The effect of the derived *Distance* variable is studied in conjunction with six other independent variables. Before proceeding to introducing each of them, it pays to review theories related to the regime change. These theories were discussed in Chapter 2 and I’ve used them to derive four conditions of transition to democracy:

1. Politically active citizens (or groups of citizens) willing to participate in governance
2. Economic malfunction (measured by macroeconomic parameters) borne by the population
3. Weak government.
4. Demonstration effect
In case if the authoritarian government is not weak, the regime may not change, but a social unrest will inevitably take a place. This implies that the presence of other three conditions is sufficient for unrest. The Internet, no matter how severely restricted, facilitates civic engagement and magnifies the demonstration effect (See Chapter 2). Thus, it follows by implication that any economic malfunction will lead to some kind of unrest in an authoritarian country where citizens have high access to the Internet.

All but two of the Arab League states in the selected sample are authoritarian, while Lebanon and Iraq being also undemocratic (alternatively, hybrid or intermediary). The demonstration effect, as discussed in the third chapter, was strong during the 2011 MENA upheavals. Even in those countries where Arab Spring was initiated, the citizens had been influenced by the success of western democracies, while late joiners, as the previous chapter suggested, experienced double demonstration effects. According to the theory then, the Arab League countries with high Internet connectivity would inevitably witness social unrests in case of economic malfunctions. It goes almost without saying that the reverse causality is not assumed. That is, authoritarian states in dire economic conditions do not necessarily need high Internet connectivity for witnessing social unrests. Rather, the existing theories only provide grounds for hypothesizing that citizens’ access to the Internet during crises would lead to the uprising against the authoritarian regime.

Thus, in order to assess the Internet’s role in Arab Spring, three conditions need to be measured for each country: the degree of authoritarianism, access to the Internet and economic background. To do so, I analyze seven independent variables and their impact on the outcome – the peak number of people at major demonstrations as reported by international news sources.
The first independent variable is “**Distance**” which was derived after the correlation test. It combines citizens’ access to the Internet and degree of democracy in a country. Such measurement of Internet connectivity is imprecise, however, as it takes into account only populations’ access to the computers. In order to amend this gap, I introduce another variable “**Mobile**” which measures mobile phone subscriptions per 100 inhabitants. Mobile phones are an increasingly important means for connecting to the Internet, which is omitted from the first variable. The statistics are taken from Comninos (2011:6), who cites the 2009 data compiled by the International Telecommunication Union. The price for introducing a variable that performs essentially the same measurement as **Distance** is increased autocorrelation between the two variables. However, due to the large number of the Internet users that would have remained undetected otherwise, the benefits exceed the costs and the new variable comes handy despite the slight distortion of the model.

Most of the remaining independent variables are macroeconomic indicators, measuring overall economic welfare in any given country. The most straightforward indicator is GDP per capita (PPP) (**GDP_PerCap**) which measures domestic output per citizen. The actual output is accompanied by real GDP growth rate (**GrowthRate**). It is assumed that even if a country’s economy has a low output, high growth rate fosters optimism among population and lowers probability of unrest (Xu, 2011:14). Another macroeconomic variable is **Unemployment**. Not only the high level of employment leads to citizens’ well-being and satisfaction, but it also implies that employed population has less energy and desire to participate in demonstrations (Huntington, 1996 in Xu, 2011:15). The last macroeconomic indicator selected as an independent variable is **Inflation**. As it is widely accepted, soaring food prices were one of the main determinants of Tunisian and Egyptian revolutions (Sharekh, 2011:52; Xu,
The rapid increase in prices generally negatively affects an economy and is usually borne by ordinary people. The last independent variable of the study is life expectancy at birth (\textit{LifeExp}). This measure shows not only how long on average citizens live, but it also provides insights on the population’s access to healthcare and availability of medical services in the country.

I have used the IMF 2011 World Economic Outlook for PPP-adjusted per capita GDP. For all other indicators I have referred to the CIA 2011 Factbook since it contains data on all the nineteen Arab League states selected for the sample\textsuperscript{5}.

\subsection*{4.2.4 Model specification and analysis}

The model employed for this regression analysis is the Ordinal Regression, or PLUM (Polytomous Universal Model) in SPSS. This model belongs to the broader family of logit regressions and is generally useful while dealing with ordinary dependent variables. All the explanatory variables, because of their continuous nature were treated as covariants. The results of the analysis are presented in the table below.

\footnote{To view the data table used for the analysis, see the Appendix.}
Table 3. Results of the ordinal regression analysis

<table>
<thead>
<tr>
<th>Model Fitting Information</th>
</tr>
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<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>Intercept Only</td>
</tr>
<tr>
<td>Final</td>
</tr>
</tbody>
</table>

Link function: Logit

<table>
<thead>
<tr>
<th>Goodness-of-Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chi-Square</strong></td>
</tr>
<tr>
<td>Pearson</td>
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<tr>
<td>Deviance</td>
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</table>

Link function: Logit

<table>
<thead>
<tr>
<th>Pseudo R-Square</th>
</tr>
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<tbody>
<tr>
<td><strong>Goodness-of-Fit</strong></td>
</tr>
<tr>
<td>Cox and Snell</td>
</tr>
<tr>
<td>Nagelkerke</td>
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<tr>
<td>McFadden</td>
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Link function: Logit

<table>
<thead>
<tr>
<th>Parameter Estimates</th>
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<tr>
<td><strong>Threshold</strong></td>
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<td></td>
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<tr>
<td><strong>Location</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Distance</td>
</tr>
<tr>
<td>Unemployment</td>
</tr>
<tr>
<td>Mobile</td>
</tr>
<tr>
<td>Growth Rate</td>
</tr>
<tr>
<td>Life Exp</td>
</tr>
<tr>
<td>Inflation</td>
</tr>
</tbody>
</table>

Link function: Logit

As the Goodness-of-fit table shows, the model is useful and has a good explanatory power. High Chi-square value allows us to confirm that the seven independent variables indeed affected the outcome in the selected states. McFadden (pseudo) R-Square is 0.548 meaning that more than half of the variation in the probability of social unrest can be explained by the explanatory variables.
The study is more concerned, however, with statistical significance of the Distance variable as well as with its impact on the outcome. As the table shows, the relationship between Distance and the dependent variable is strictly negative. In other words, when Distance assumes negative value (indicating a highly authoritarian state with broad access to the Internet) the probability of unrest increases. The reverse also appears to be true - the states with lower Internet access and relatively higher degree of democracy experience less likelihood of social unrests. These results suggest that the Internet indeed had an impact on the magnitude of demonstration during the first three months of the Arab Spring.

Distance has the largest β coefficient, or the slope (1.132) among all independent variables and second-largest statistical significance after life expectancy. Distance is statistically significant at level α = 0.07.

Clearly, Distance proves to be an important variable in stimulating major demonstrations during the Arab Spring. Authoritarian regimes with high Internet connectivity indeed turn out to be more fragile and prone to pro-democratic movements. Once some kind of domestic crisis emerges, the viability of the regime is questioned by massive pro-democratic protests. The best such example is perhaps Bahrain, a country with 88% Internet penetration rate and a deeply authoritarian government. The same two conditions apply to its neighboring Qatar and United Arab Emirates but the latter countries have not witnessed any considerable anti-governmental demonstrations. This has to do with the fact that the Per Capita GDP in the Emirates is almost twice as high as in Bahrain while Qatar dwarves all of the Arab League states by all the macroeconomic indicators used for this study. In fact, Qatar tops the IMF’s global list of countries by PPP-adjusted per capita GDP.
The conclusion is that authoritarian regimes like those of Qatar and United Arab Emirates can maintain power despite citizens’ access to the Internet as long as these states perform decently and their populations don’t experience significant economic issues. However, once the economic conditions start to deteriorate, a social unrest is expected to occur. Therefore, it can be concluded that authoritarian regimes are, at least in the long run, incompatible with high access to the Internet.

4.3. Limitations

The present study has several limitations that need to be addressed for suggesting the ways to improve similar research designs in the future.

First, it must be admitted that the sample of nineteen countries is rather small and doesn’t allow for perfect generalizations. In order to draw broad conclusions about the Internet’s impact on 2011 uprisings a larger sample is required. It would be desirable to include states like Iran, Azerbaijan and some other Asian or sub-Saharan countries that experienced major demonstrations in 2011. It was unfeasible, however, to analyze all of those states in the present research. This is due to the fact that as of writing this thesis the Arab Spring is still an ongoing process and looks too far from being finished. Therefore it would have been hasty to make any judgments about the outcomes of pro-democratic movements in the states outside of the selected sample. Members of the Arab League, on the other hand, share too many similarities, thus they would be expected to import revolutions from other Arab League states at much more rapid pace. The research sample of nineteen states and the time period of
three months are therefore sufficient to fully observe the initial impact of the Arab Spring solely in the regional context. For the global analysis, larger and more diverse samples are required.

Second, and perhaps more apparent weakness of the research is possible inaccuracies in measure of the dependent variable. Unfortunately, at this point no secondary data dealing with magnitudes of protests exists and I had to use a number of primary sources to operationalize the dependent variable. The best efforts were made to minimize a possibility of measurement errors by searching only websites of mainstream news sources but existence of conflicting number claims even among some of those sources points to a certain probability of the measurement error.

Third, not all socioeconomic indicators that I initially intended to analyze were present in the model. The reason for this is that the data was either unavailable for several Arab League states or was considerably outdated. The two variables that in my opinion would have made the model more robust are a measure of social inequality and degree of internal tensions, such as, for example, presence of an ethnic or a religious conflict within the country. High level of social inequality, for instance, could have explained minor protests in Kuwait where most demonstrators were local bedouns/bidoons (“the stateless”), economically most deprived stratum of the population. Internal tensions among large groups of population, on the other hand, could provide better insights on uprisings in Syria and Bahrain.

Given all this drawbacks and limitations it should be concluded that further research on the Internet’s role in the Arab Spring is absolutely essential. This study simply lays the foundation for more

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6 See, e.g. [http://www.reuters.com/article/2011/02/18/kuwait-protest-idUSLDE71H1ZW20110218](http://www.reuters.com/article/2011/02/18/kuwait-protest-idUSLDE71H1ZW20110218)
thorough researches that will definitely emerge as soon as credible secondary data related to the Arab Spring becomes available to scholars.
Chapter 5. Concluding remarks and policy implications

5.1 Summary of the thesis

The present study analyzed the impact of citizens’ access to the Internet on the recent wave of uprisings in the Middle East and North Africa. The paper started by building up a comprehensive theoretical framework based upon the two bodies of literature: the one related to the Internet’s democratizing potential and to the theories of democratic transition respectively. It was deduced that the Internet, by its nature, fosters two out of three sufficient conditions for starting pro-democratic movements. These conditions are citizens’ engagement in political processes and enhanced demonstration effect. Thus, it was argued that once the third condition (economic crisis or malfunction) is met in conjunction with high Internet connectivity, an authoritarian state is expected to experience some kind of social unrest.

The third chapter discussed Internet activism as the most powerful tool for Network citizens (Netizens) to contribute to the democratic transition in a country. Several examples of successful Internet activism were provided, including most recent ones from the Egyptian and Tunisian revolutions.

The fourth chapter presented quantitative analysis to assess the significance of the citizens’ access to the Internet during the first three months of the Arab Spring revolutions. For this purpose, a sample of nineteen Arab League states was studied by using the ordinal regression analysis. The findings of the
regression supported previously established claims about the Internet’s ability to play a role in the process of democratization. It was shown empirically that authoritarian states with high Internet connectivity are more likely to witness anti-governmental demonstrations.

### 5.2. Policy Implications

As one scholar has eloquently put it, “…Instead of validating Orwell’s vision of Big Brother watching the citizen, … [the information revolution] enables the citizen to watch Big Brother” (Wristone, 1997 in Kyriakopoulou, 2011:20). Indeed, the Internet has a strong potential to undermine the state authority and foster democratic environment. This gives a clear hint to the Western governments and policymakers that the power of the Internet can be utilized to spread democratic values in the states ruled by hostile regimes. Similar to the Voice of America and other technological means of propaganda during the Cold War, western democracies are able to subvert authoritarian governments by using the Internet. This time, however, no direct propaganda will be needed since the Internet itself facilitates democracy and creates fragile conditions for the existence of authoritarian regimes. Once citizens’ high access to the Internet is achieved, any domestic crisis can trigger major anti-governmental demonstrations, meaning increased probability of democratic transition.

Many policymakers as well as politicians have realized that the Internet can be used as a means of democratization. Recently, there have been some efforts made to ensure citizens’ access to the Internet. The US Secretary of State Hillary Clinton referred to Internet freedom as the new foreign priority of the country in January, 2010. Later, in March, 2011 she reaffirmed her views and expressed the US government’s determination to export Internet freedom to the rest of the world (Morozov, 2011:2). During its 17th session in 2011 the UN Human Rights Council proclaimed access to the
Internet a basic human right.\textsuperscript{7} The government of Finland has adopted a law that guarantees broadband Internet access as a legal right to the Finnish citizens.\textsuperscript{8} However, these are still the exceptional cases and vast majority of policymakers yet have to make their contributions to the promotion of the universal Internet access. Hopefully the successful outcomes of the Arab Spring will stimulate more stakeholders in the western democracies to spare no efforts in advancing cheap and unrestricted access to the Internet across the globe.

\textsuperscript{7} For more information about the session visit http://www2.ohchr.org/english/bodies/hrcouncil/17session/
\textsuperscript{8} http://www.bbc.co.uk/news/10461048
# Appendix

The data entries for the regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Country</th>
<th>Distance</th>
<th>Outcome</th>
<th>GDP PerCap</th>
<th>Unemployment</th>
<th>Mobile</th>
<th>Inflation</th>
<th>Growth Rate</th>
<th>LifeExp</th>
<th>VAT</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
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<td>3</td>
<td>Djibouti</td>
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Databases used for the research

IMF – World Economic Outlook 2011

CIA Factbook 2011

Economist Intelligence Unit Democracy Index 2010

Internet World Stats accessible at http://www.internetworldstats.com/list2.htm

For measuring the number of activists, Google search was used with the following commands:

- Search words: [Country name], “protest” OR “demonstration”
- Time range: January, 1 2011 – March, 31 2011
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