SciencesPo
OBSERVATOIRE SOCIOLOGIQUE
DU CHANGEMENT

GLOBALIZATION AND UNREST

ON BOTH SIDES OF MEDITERRANEAN

Hugues Lagrange

Notes & Documents

n° 2015-02 Mars 2015

Résumé :

Pendant le printemps 2011, d'importantes manifestations ont eu lieu dans plusieurs pays du Moyen Orient et d'Afrique du Nord (MENA). Parallèlement, des manifestations de masse se sont déroulées au sud de l'Europe – Espagne, Grèce, Portugal –, tandis que les pays du nord et l'est de l'Europe n'ont pas connu de telles manifestations.

Est-ce que l'on trouve des deux côtés de la Méditerranée, les mêmes aspirations ou les mêmes frustrations ? Sans prétendre démêler l'écheveau complexe des motivations qui sous-tendent ces actions, on se propose d'analyser le contexte socio-économique dans lequel elles ont émergé en s'appuyant sur des données fournies par le BIT, les rapports de l'UNESCO (ESCWA), les statistiques de la Banque Mondiale et la base de données sur l'éducation Baro-Lee.

Un contexte favorable à des manifestations de masse résulte, au nord comme au sud de la méditerranée, de la conjonction d'un taux de chômage élevé des jeunes les plus éduqués et de l'affaiblissement de la légitimité des gouvernants.

Pour citer ce document :

Lagrange, Hugues (2015). "Globalization and unrest on both sides of Mediterranean", Notes & Documents, 2015-02, Paris, OSC, Sciences Po/CNRS.

Pour une version électronique de ce document de travail et des autres numéros des Notes & Documents de l'OSC, voir le site web de l'OSC : http://www.sciencespo.fr/osc/fr/content/notes-documents-de-l-osc

Abstract:

In the spring of 2011, large scale public demonstrations took place in several countries across the Middle East and North Africa (MENA). At the same time, civil unrest caused massive demonstrations in European countries such as Spain, Greece, and Portugal. In this same period, northern and eastern European countries did not experience such massive and widespread social protests.

Do both sides of the Mediterranean share the same mindset? Are common challenges and aspirations molding these protests? Without any desire to delineate the complex thread of motivations underlying these demonstrations and protests, we will analyze their socio-economic context using data from ILO reports, UNESCO-ESCWA reports, World Bank statistics and the Barro-Lee database.

We will show that high unemployment rates among young educated people coincided with the weakening of legitimacy of national governments.

Readers wishing to cite this document are asked to use the following form of words:

Lagrange, Hugues (2015). "Globalization and unrest on both sides of Mediterranean", Notes & Documents, 2015-02, Paris, OSC, Sciences Po/CNRS.

For an on-line version of this working paper and others in the series, please visit the OSC website at: http://www.sciencespo.fr/osc/fr/content/notes-documents-de-l-osc

In the spring of 2011, large scale public demonstrations took place in Tunisia, Egypt, Syria, Yemen, and, to a lesser extent, other countries in the Middle East and North Africa (MENA). The demonstrations involved highly educated young men and women, frequently unemployed and with few prospects for a better life, fighting for democracy, human rights and the end of authoritarian states. These young people were the initiators of major political change. Protests south of the Mediterranean seem to have resulted in, or at least had similarities with protests on the northern side of the sea. During late spring 2011, unrest spread, with massive demonstrations took place in Southern Europe, including Spain, Greece and Portugal. There were massive peaceful demonstrations (except for several meetings in Athens' Syntagma square).

The demonstrations took place almost simultaneously in cultural contexts that were widely different. In many countries, young educated people of both sexes were at the forefront of large peaceful demonstrations. Often triggered by an emotional event in MENA countries, the demonstrations were promoted through the intensive and smart utilization of social networks (Facebook, Twitter, blogs) and the unconventional use of TV programs (talk shows, cartoons). Except in Syria and Libya, where civil wars broke out, the youth-initiated demonstrations brought together a wide range of people of all ages and walks of life, in the name of direct democracy. Under the motto *Democracia real ya!* (True democracy now!), meetings took place round the clock in Madrid's Plaza del Sol, Athens's Syntagma square, and Cairo's Tahrir square, in addition to many other places throughout MENA countries. These protests unfolded outside the confines of the established classical political parties and religious offshoots. Later (The Muslim Brotherhood joined the civil movement in Egypt and Tunisia). Except in Syria, the youth participating in these uprisings spoke of liberty, reform and social justice with little reference to the ethno-religious politics that had animated previous opposition movements**.** Within a historical perspective, "the secular nature of recent movements is not a surprise, but their distance from xenophobic nationalism and statist 'socialism,' in favor of common liberties, is a novelty."[1] Did both sides of the Mediterranean that went beyond a common idiom and forms of transnational dialogue? Were common challenges and common aspirations shaping the protests?

Widespread use of new forms of media communication was essential on both sides of the Mediterranean. One of the most surprising changes concerning the new technologies is that information is often diffused quicker and with greater consequences in countries where

[1] S. Subside, 2011. Since the aim of the movement in Egypt and Tunisia is radical constitutional change and basic aspects of the social order are at stake the term revolution is appropriate.

the previous technologies (landline telephones and electricity) are underdeveloped. The digital equipment (mobile phone and Internet access) gap between the two sides of the Mediterranean is narrow, and mobile phone subscription are sometimes even higher in MENA countries (namely in the Gulf states) than in Europe. Still, regarding IT utilization, countries affected by "Arab Springs" present widely different situations: in 2010, Tunisia and Egypt were among the most "tech-savvy civil societies," while Yemen and Libya were among the least (Hussain and Howard, 2013). The widespread diffusion of information technology was counterbalanced by widespread state instituted censorship, particularly in Iran, Egypt, Algeria, Libya and Saudi Arabia. On the whole, there are no obvious correlations between access to IT and the geography of the Arab Springs (see Figure a1 in the Appendix regarding the diffusion of mobile and Internet technologies and Figure 2 for places of unrest). Lisa Anderson, the President of the American University in Cairo, underlined that, "The important story about the 2011 Arab revolts in Tunisia, Egypt, and Libya is not how the globalization of the norms of civic engagement shaped the protesters' aspirations. Nor is it about how activists used technology to share ideas and tactics. Instead, the critical issue is how and why these ambitions and techniques resonated in their various local contexts."[2] Though the patterns of the protests varied widely, there were common social dynamics. The massive demonstrations of 2011 followed years of growing unrest south of the Mediterranean. During the early 1990s in many MENA countries, human rights activists were isolated[3] and the ruling elite, sustained by the income from oil and tourism, were able to suppress protest by using dictatorial means and making appeals to Arab pride and resentment against the West. The ability faded during the first decade of the 21st century.

In Algeria, recurring Berber strife took place between 1988 and 2002; and in 2002 large Berber demonstrations to defend their linguistic and cultural rights were silenced. Labor unions were a crucial force in protests against the regime's privatization policies and the poor living standards of the working class, which culminated in 2003 and 2008. The Front Islamique du Salut's (FIS) 1992 defeat fostered years of increased fragmentation of civil society and prevented efforts to maintain a secular path devoid of democracy. Morocco had hundreds of protests involving labor unions, youth activists, and professionals demonstrating against unemployment, high prices, and poor living standards. Uprisings in Tunisia also occurred during the 2000s, with major demonstrations erupting in 2008 against a mining

[2] Anderson, 2011, stated that, "The demonstrations in Tunisia spiraled toward the capital from the neglected rural areas, finding common cause with a once powerful but much repressed labor movement. In Egypt, by contrast, urbane and cosmopolitan young people in the major cities organized the uprisings. Meanwhile, in Libya, ragtag bands of armed rebels in the eastern provinces ignited the protests, revealing the tribal and regional cleavages that have beset the country for decades."
[3] Popular Uprising and Arab Democratization, *International Journal of Middle East Studies*, vol. 32, 2000, 71-95.

company over issues of employee workplace standards. In Egypt, the *Kifaya* (Enough!) which movement emerged in 2004, called for an overhaul of the Mubarak regime; initially it failed to develop a mass following. Between 2004 and 2007, Egypt experienced almost a thousand demonstrations. In the Gulf countries, mainly Kuwait and Bahrain, demonstrations and protests were primarily political in nature and relied heavily on clan alignments; only in 2011 did students play a more active role.[4] Protests in Egypt, Algeria and Morocco were mostly socio-economic in nature and apparently lacked any political dimensions. These protests were nevertheless essential to demonstrating the salience of economic concerns to the working poor, as well as to the middle class and professionals. South of the Mediterranean, the political situation began to alter in the mid-2000s with the retreat of the American military from Iraq. A historical cycle was coming to an end. Emotional events, such as the death of Bouazizi (Tunisia), Khaled Said (Egypt) and the death of Dehra demonstrators in Syria, crystallized unrest in large portions of the population.

The 2011 protests in southern European countries were not preceded by movements analogous to those in MENA countries. During the early 2000s, in several northern European countries—the UK, France, the Netherlands, Denmark, Belgium—violent riots were recurrent involving large numbers of young immigrants from North Africa, and, in the UK, from the West Indies and Central Asia. With the exception of August 2011 events in the UK involving mostly youth from the West Indies; those from Northern and Eastern Europe did not take to the streets in 2011. In contrast to Southern European countries, Northern and Eastern European countries did not experience massive social protests by young educated people or those living in poor neighborhoods. Moreover, in spite of strong community ties, when protests and demonstrations occurred in the Maghreb and the Middle East in 2011, young immigrants from poor districts in Europe remained conspicuously silent.[5] As such this double non-participation among northern minority and mainstream youths is meaningful.

Beyond the simultaneity of the occurrence of protests north and south of the Mediterranean and the use of shared idioms, the main reason to not consider each country as a unique entity is because the actors were mostly young educated people. This reason might seem trivial because youngsters often spearhead revolt and revolutionary processes, however, it has been three decades since they were at the forefront of general

[4] N. Sika, The Arab Uprisings and The Rise of Secularism, March 17, 2011, http://themoornextdoor.com
[5] Muslim NGOs like UOIF in France remained silent. There have been no significant spontaneous solidarity movements among the youth from North Africa and the Middle East. Neither the well-educated nor the under-achieving youth of North-African ancestry in Europe have overtly manifested their sympathy, with the exception of Turkish and Black youths who are not closely tied to the Middle East and North Africa revolutionary processes.

demonstrations in Europe, and very little demonstrations involving young educated people in MENA countries before the 2000s.

A tentative socio-demographic framework of analysis

If it is difficult to create a comprehensive framework for what happened in MENA countries; it is even more daring to try to grasp in the same framework the events on both sides of the Mediterranean. Many publications about the Arab Spring have comprehensively analyzed countries and their political stonewalling. Youth protests in countries south of the Mediterranean have been discussed often; much less is written on youth protests north of the sea, while comparisons of youth unrest and demonstrations on both sides are even rarer. It is difficult to articulate interpretations because, in spite of globalization, the two regions are divided by huge gaps in living standards and political functioning. What occurred on both sides of the Mediterranean during the spring of 2011 is certainly a globalized but still heterogeneous series of events. Unrest condenses the changes made at different levels, and several aspects came into play that each have their own“mode d’existence” (Latour, 2013).

I am interested here in the motivational aspects of the movements and not their immediate or long-term consequences. I will limit my review to point out the commonalities and the main elements of distinction brought to light by the “2011 springs.” Is there a political narrative that bridges this hybridism or at least allows us to discuss the processes that resulted in upheavals?

To build a framework of analysis, at least one scenario, and hopefully several variants, must be used to describe what happened, taking into account long-term changes at different levels of the societies on each side of the Mediterranean during the last several decades. Without any desire to delineate the complex thread of motivations underlying these demonstrations and protests, I propose the hypothesis that the role played by the educated youth in MENA countries lacking democratic procedures could, by contrast, shed light on implications of the youth in the European context where civil liberties and regular democratic processes have—sometime only recently—been granted. These mobilizations reveal common challenges brought on by the globalization process and synchronized by the 2008 financial crisis and its consequences. My argument is that: 1) if two dimensions—freedom and distributive justice—have different weight north and south of the Mediterranean, these massive demonstrations have revealed convergent stakes, at least among educated youth on both sides; 2) in Northern European countries, there is a strict separation between two fractions of the youth which hampered unification and thus large-scale protests, and that

such a split does not exist in Southern European countries; 3) in MENA countries, the youth's ability to unite other age segments, at least in silent support, has been a key factor in spreading the mobilization and inhibiting, to a certain extent the capacity of governments to resort to violent repression.[6]

To understand the dynamics of protest in the second section I will consider some of the more general protest conditions.[7] Especially in countries south of the Mediterranean, where demonstrations are often harshly repressed, it is necessary to consider the legitimacy of the protests, or conversely, the breach in the legitimacy of the power in place. I will start by assembling elements of comparison of the youth situation and their life prospects. The ILO databases provide a systematic account of more than 150 countries of the labor force, the activity rate and unemployment rates according to sex, age and education levels. Obviously the quality of the data and the temporal scope varies. For MENA countries, the UNESCO-ESCWA reports provide some elements of comparison regarding the unemployment of people with basic and tertiary education from 2000 to 2010. To take into account the evolution of education, I have used the Barro-Lee dataset on education, which is a systematic attempt to describe with homogeneous indicators education levels since mid-twentieth century across the majority of countries in the world.[8] World fertility surveys are easily accessible and show the relative importance of age groups.

Youth demography

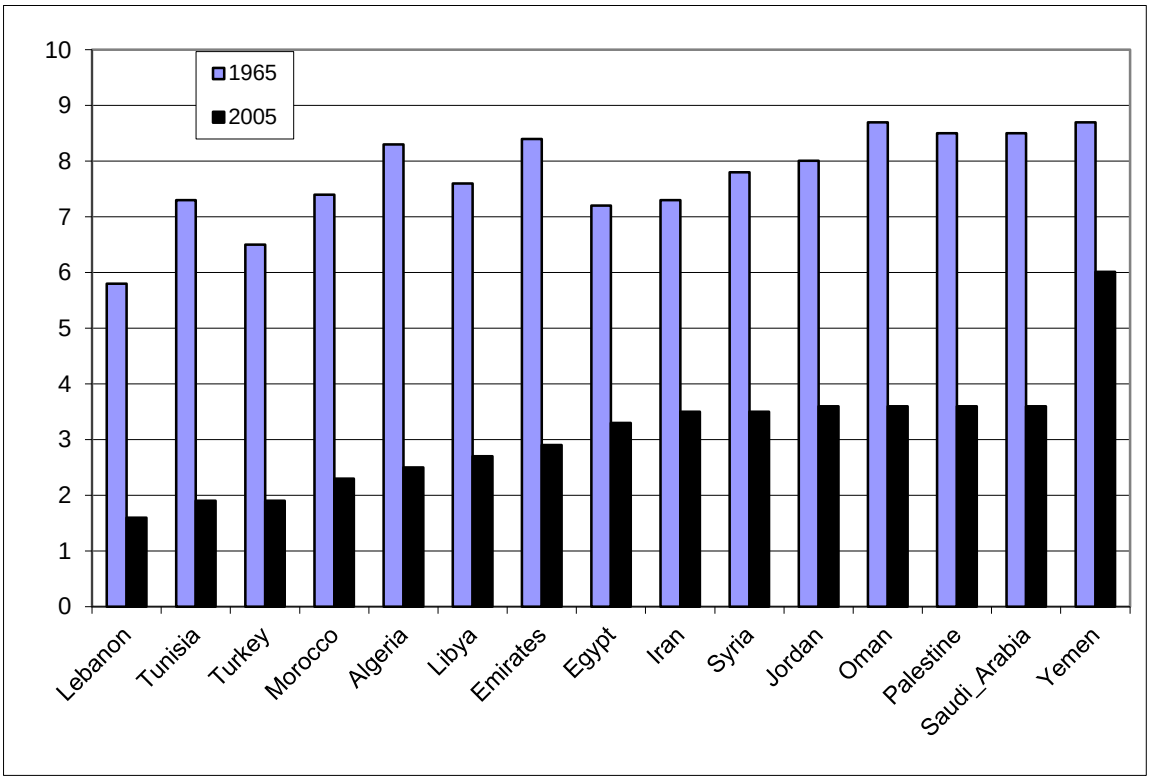
Let us look at the basic factors that are likely to account for the dynamics observed on both sides of the Mediterranean. Which countries were involved? Why these countries and not others? Why did the protests take place in the early 2010s?

The first argument given to explain the wave of youth protests in the MENA region is the demographic bulge of youth coming of age. During the last decades of the 20th century, while the proportions of youth of working age differed widely on both sides of the sea, the socio-demographic gap between countries north and south of the Mediterranean was strongly narrowed through a combination of reduced fertility rates and increased education levels in MENA countries. This provided the basis for a partial social convergence with

[6] In Sanaa, Yemen in 2011, the repression was particularly harsh.
[7] Even after several attempts, I cannot see the usefulness in putting together elements located on different levels into a statistical model, even with the appropriate weights.
[8] The benchmark figures on school attainment (599 census/survey observations) are collected from census/survey information, as compiled by UNESCO, Eurostat, and other sources. The census/survey figures report the distribution of educational attainment in the over-15 population by sex and by five-year age segment, for most cases, in six categories: no formal education, incomplete primary, complete primary, lower secondary, upper secondary, and tertiary.

Europe. We witness on one hand, divergences in Europe in response to globalization, on the other, a narrowing gap between MENA and Southern European countries. In most MENA countries, fertility rates were fairly high during the mid-1960s, with women having an average of seven children, except for Lebanon where the rate was around 5.5. Forty years later, the fertility rates in 2005 varied between 3.0 and 3.5 in Egypt, Syria, Jordan, Saudi Arabia, the U.A.E., and were below 2.5 in Libya, Maghreb and Lebanon. (Yemen and Mauritania are excluded since they have not experienced a demographic transition). Since the mid-1970s, most MENA countries have experienced a rapid decline in fertility rates, which led to rates not so conspicuously different on both sides of the Mediterranean in the early 2000s.

Figure 1: Fertility rates in select Middle East countries and Maghreb: 1965–2005



Source: World Fertility Survey and US Census Bureau, 2008.

Despite these convergences, because of the lag effects of fertility rates on youth population, demographic proportions of young people diverged greatly from one side of the Mediterranean to the other in the 2000s. In MENA countries, numerous cohorts born before the 1980s came of age in the 2000s; the youth bulge is a smooth curve reaching its apex approximately around 2005. Because of different speed of demographic transition, the variation of the share of youth among the working age population is large and the differences in this respect between “young” countries and “older” ones could have been a discriminating

factor of protest. Were these demographic differences precisely associated with waves of protest? The Arab Springs demographically affected young countries (five of the youngest countries experienced large movements in 2011), most of which, but not all, accomplished their modern demographic transition between 1980 and 1990. Countries where the number of 15–24 year-olds was over 25%, like Jordan and Morocco, experienced some demonstrations, but to a far lesser extent than Tunisia or Egypt. Meanwhile, "young societies," such as Algeria and Saudi Arabia, remained quiet despite their youth bulge. Among the Gulf States, only Bahrain participated in the protest events. Thus while population growth may help identify countries where protests are most likely to occur, it is far from conclusive.

Figure 2: Distribution of countries according to % of youth (15–24) in the working age population in European and MENA countries.
Those countries affected by massive protests and demonstrations are in bold letters.

	15<17%	17<18%	18<19%	19–20%	>20%, <26%	26–31%	>31%
Europe	**Greece** *Italy* **Portugal** **Spain**	Austria Croatia Czech Republic Germany	Belgium Denmark Finland Hungary Ireland Netherlands	Estonia France Norway Slovakia United Kingdom	Lithuania Poland Sweden		
MENA countries	U.A.E.	Qatar		*Bahrain*	Kuwait **Oman**	Iran Lebanon Morocco **Tunisia** Saudi Arabia Turkey	Algeria **Egypt** Iraq Jordan Palestine **Syria** **Yemen**

Source: UN World Fertility Surveys compiled by ILO.

The italicized countries were not as involved as those in bold. However, they could be considered as having experienced demonstrations and protest to a certain extent. If, for MENA countries, youth demography is insufficient to characterize the geography of protests, for Europe it is completely misleading. In Europe, the youth bulge occurred a long time ago, in the late 1960s and early 1970s. After that time, demographic rates evolved without showing any north-south gradient: some of the fertility rates in Southern Europe at the time were among the lowest. And yet in the spring 2011, unrest spread mostly in the Southern European countries of Greece, Spain, and Portugal. Demonstrations have arisen in countries where young people are even a smaller fraction of the working age population than in Northern and Eastern European countries. In addition, the variation of the percentage of

youth is very narrow in Europe. In Italy, where the 15-24 year old segment is small, no massive demonstrations took place (but Berlusconi's ejection and the Five Star protests do have some of the characteristics seen in other southern countries).[9] If a common ground between these protests on both sides of the sea exists, it is not defined by the youth demography; thus, to understand the roots and meaning of the protest, other aspects must be taken into account.

Socio-economic context of protests

One argument given to explain protests in MENA countries is that youth perspective in terms of employment was bleak; this argument has been given also in Europe (see ILO reports, Word Bank Statistics, UNESCO statistical committee, Mesiano 2012, Ajbilou and Boudirba 2011, Campante and Chor, 2012). In MENA countries between 2000 and 2011, while the youth unemployment rate hovered around 25%, which was much more than that in Europe, there was no clear trend. In Algeria, despite the wealth of oil resources and major improvements in health and education over the past few decades, the social and economic systems have not evolved in a way that effectively meets the changing needs of the country's rapidly growing young population. In Egypt and Tunisia, both of which are deprived of oil, population growth has exceeded job growth, with the exception of jobs in the tourism industry for the new educated class. Considering the level of unemployment, MENA countries were good candidates for unrest, but 2010 and 2011 were not the precise moments indicated by unemployment figures. Conversely, in Europe, changes in youth unemployment levels in 2009–2010 could have triggered the protests. At least when considering aggregated data, unemployment soared during the 2000s, climbing from 12% to 18% after the 2008 financial crisis. Therefore the brutal increase in unemployment rates could explain the timing of the protests. However, unemployment does not account for the fact that countries such as Ireland, France, Denmark, and several eastern European countries, which have seen soaring unemployment rates, were not involved in the massive protests. Leaving aside the question of "when," let us try to examine more specifically the question of "who."

[9] More surprisingly, during the summer of 2011 in the UK, riots exploded involving native-born poor British and immigrant youths from Africa, the West Indies and Central Asia. This was similar to France in 2005-2006, when violent clashes erupted among students protesting fee hikes and poor youth intervened. Violence and division between different youth segments gave these events a different character from the *Indignados* protests in Southern European countries.

Table 1: Youth (15–24) unemployment rates in main regions of the world during early 2000s.

	2000		*2007*	*2008*	*2009*	*2010*	*2011*
EU and developed countries	*13.5%*		*12.5%*	*13.3%*	*17.3%*	*18.1%*	*18.0%*
Middle East	*24.0%*		*24.8%*	*25.7%*	*25.2%*	*25.4%*	*26.5%*
North Africa	*28.7%*		*23.8%*	*23.0%*	*23.6%*	*23.1%*	*27.9%*
World	*12.7%*		*11.6%*	*11.7%*	*12.6%*	*12.7%*	*12.6%*

Source: ILO and World Bank Statistics, 2012.

More specific characteristics of unemployment must be taken into account. During recent decades, rising oil prices facilitated generous welfare services (education, health, housing) and elevated revenues for a fraction of the middle classes. But in many MENA countries, the number of qualified jobs provided domestically was insufficient and a significant portion of educated youth resorted to exile in foreign countries.

Unlike most northern regions of the world, unemployment rates in the MENA region are highest amongst the educated youth.10 Several ILO reports have cited this. For instance, in Morocco the unemployment rate for educated urban youth is over 1.5 times the uneducated rate (64% vs. 40% in 2005) and three times higher in rural settings (34% vs. 11%).11 To check the unemployment nexus more systematically, we plotted the unemployment ratio (tertiary educated youth vs. primary educated youth on the vertical axis) against the unemployment rate (maximum male/female under 25 on the horizontal axis). The two conditions—a youth unemployment rate over 30% and a ratio of tertiary educated unemployed youth to primary educated unemployed above 2.0—broadly point to those MENA countries that faced massive protests, with one conspicuous exception (Saudi Arabia) and one less conspicuous exception (Algeria), considering these criteria (see Figure 3, north-east quadrant).

[10] "This situation is typical in countries where education and training systems are not adequately linked to the skills required by the economy, including its most promising growth sectors. Graduates, misinformed about the country's working conditions and requirements, may have educational profiles that are inconsistent with reality. This makes it difficult to enter the labor market. Based on a survey of 1,500 youth and 1,500 employers in Egypt, Jordan, Morocco, Saudi Arabia, and Yemen, a report by the International Finance Corporation and the Islamic Development Bank shows that the skills and knowledge taught in Arab schools often have little or no connection to labor market needs." (http://www.makingitmagazine.net/?p=6094).
[11] See B. Boudarbat, A. Ajbilou, Youth Exclusion in Morocco: Context, Consequences, and Policies, 2007.

In Europe, the same combination of unemployment variables points to the countries that experienced widespread protests in 2011 (i.e. the Indignados, or outraged, movements). One part-exception is Italy, which has experienced political turmoil beyond the massive 2011 demonstrations. While high unemployment of educated youth was less common in Europe as a whole, it was distinctively seen in Southern Europe. In 2000, the unemployment rates in both Greece and Spain were almost identical for educated and uneducated youth. While the unemployment rate for uneducated youth has increased faster over the last 10 years, especially in Spain, the ratio of educated unemployed to uneducated unemployed remains high. In contrast, in most Northern and Eastern European countries, the educated unemployment level oscillates between one-third and one-fifth of the uneducated level. In those countries, education protects against unemployment. Moreover, in several Northern countries—the Netherlands, Austria, and Germany—overall low unemployment rates may have prevented the protests (Appendix, Table a1).

The data represented in Figures 3 and 4 suggest that the role of the unemployment ratio between educated and uneducated youth in association with the overall youth unemployment rate plays a central role in the protests. If we want to capture the specific frustrations of educated people, we might consider as a direct incentive of the demonstrations the relative percentage of unemployed educated youth compared to uneducated youth[12].

[12] We could also consider the cross product of youth unemployment by this ratio. However, the product of average youth unemployment multiplied by the percentage of educated youth could be very different from the percentage unemployed with different level of education, because in many MENA countries high unemployment rates are specific to educated youth.

Figure 3: MENA 2007–2010: unemployment ratio of tertiary educated vs. primary according to unemployment rate (maximum male/female <25 years)

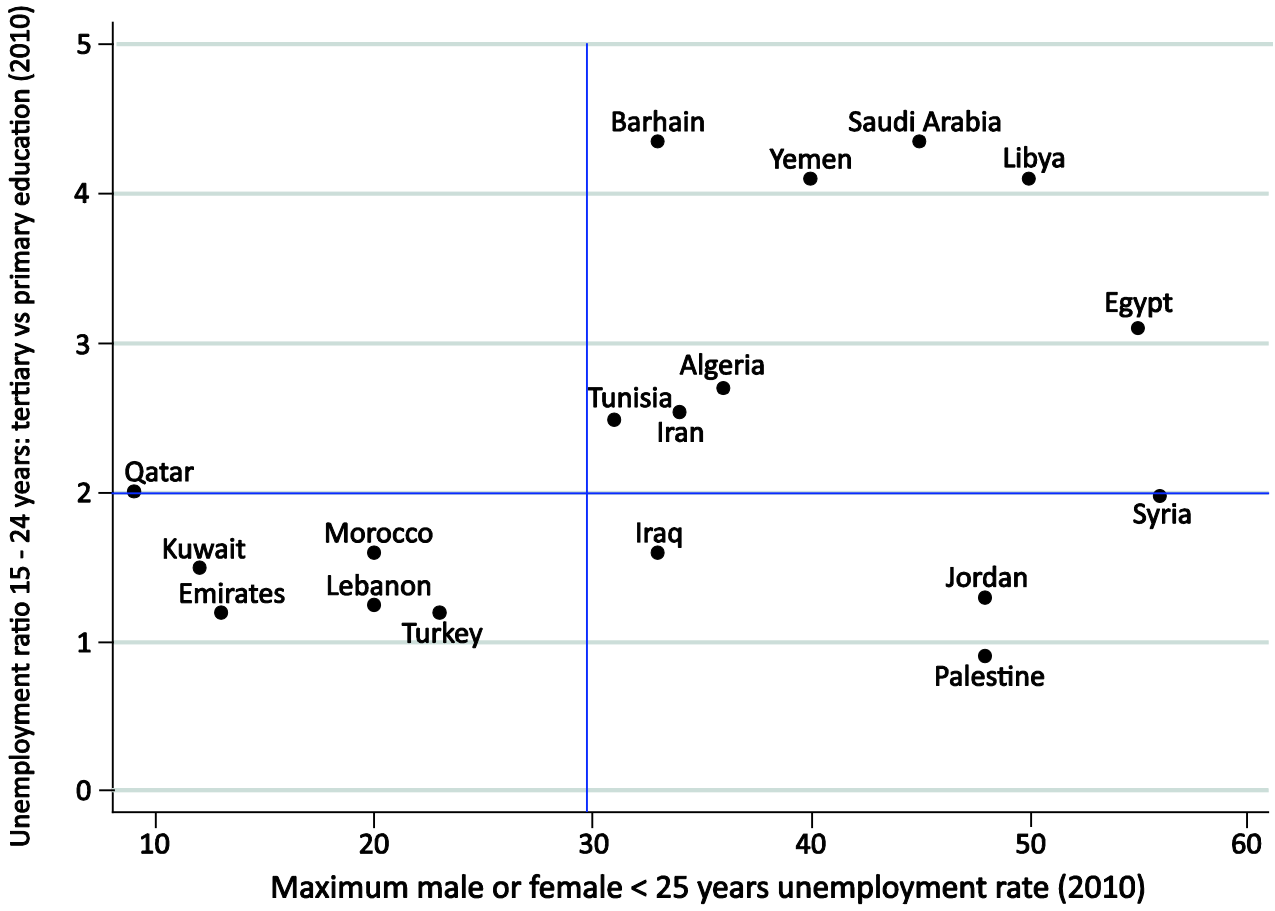
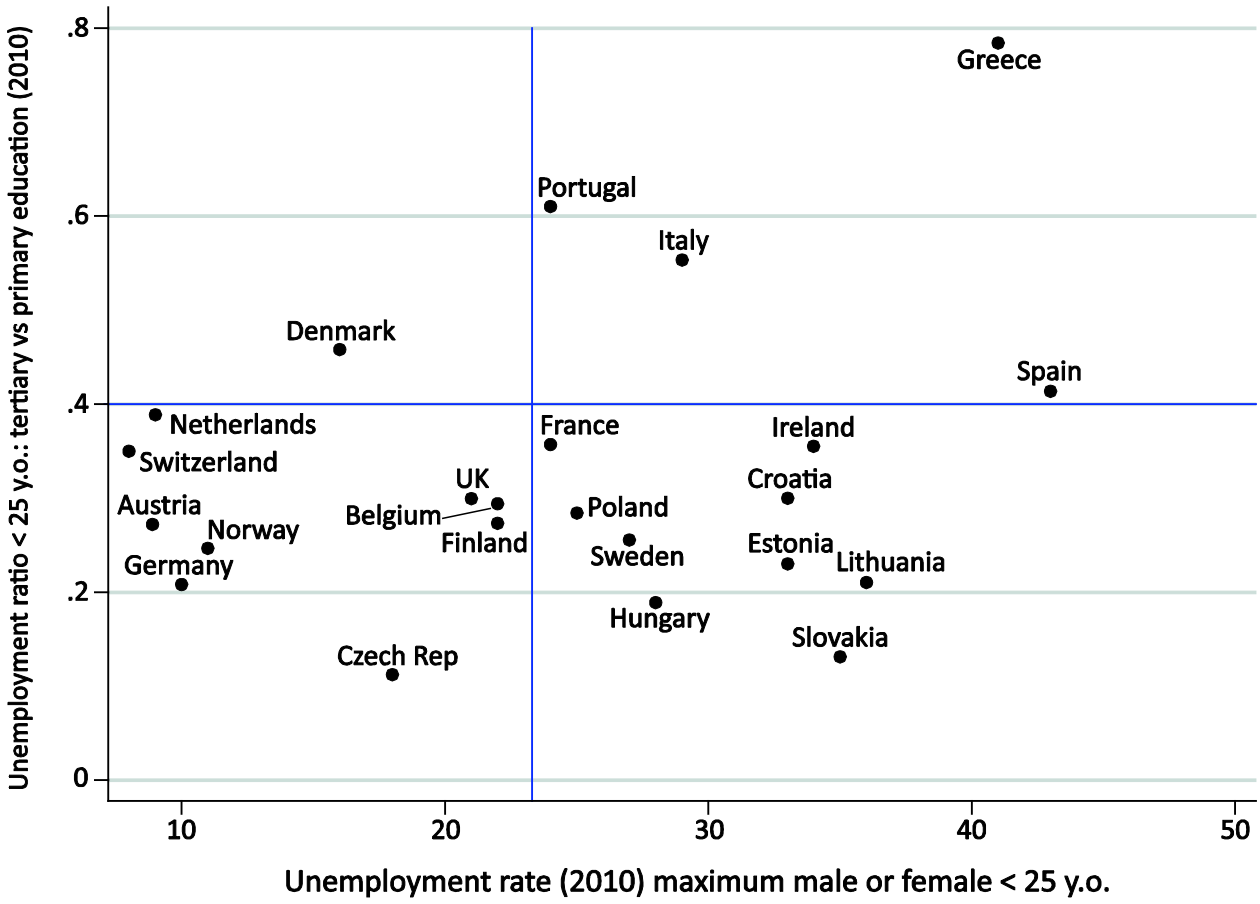


Figure 4: Europe 2010: unemployment ratio of tertiary educated vs. primary according to unemployment rate (maximum male/female <25 years)



We have summarized the interplay of these variables in regressions, taking as an outcome the massive unrest and demonstration in 2011. Most accounts of the Arab Springs involve Egypt, Libya, Oman, Syria, Tunisia, and Yemen. In addition, we built an alternative analysis that includes Bahrain and Saudi Arabia in the list of countries affected by protests. By the same token, we have in a variant added Italy to the core of those Southern European countries (Greece, Portugal, and Spain) involved in the *Indignados* movements. In every models, the contribution of the unemployment ratio between tertiary educated and primary educated is fairly significant. Conversely, the percentage of the youth population of working age is not a statistically significant determinant of protests except in one of the analyses. In Models 2 and 2b, high youth unemployment rates contribute significantly to the protests. In order to take into account the different situation of women and men, we have introduced gender specific unemployment rates in Europe and MENA (analysis not presented). As we have seen, a salient aspect of the modernization process is the increasing size of the

educated population. One of the hypotheses linked to educated youth involvement in demonstrations leads us to take into account the size of the population that could claim qualified jobs.

Table 2: Europe and MENA countries in 2011. Outcome: occurrence of massive protest movements and/or revolution (robust probit models, coef.)

	protests 1		protests 2		protests 2b		protests 4		protests 5	
	Coef	se	Coef	se	coef	se	Coef	se	Coef	se
15–24 y.o. as % of 15–64 y.o.	0.01	0.07	-0.19	0.11	-0.25**	0.08	-0.05	0.06	0.02	0.07
Youth unemployment rate 2008–2010 (max. men/women)	0.09*	0.04	0.26***	0.07			0.04	0.03	0.10*	0.05
Europe* Unemployment ratio tertiary vs. primary	8.86**	3.09	16.77***	3.97			4.45*	2.07	12.62***	2.95
MENA*Unemployment ratio tertiary vs. primary	0.98**	0.35	2.99***	0.71			0.90**	0.34	1.17**	0.39
MENA: Youth unemployment rate 2008–2010					0.14*	0.06				
Europe: Youth unemployment rate 2008–2010					0.18***	0.05				
Unemployment ratio tertiary vs. primary					1.89***	0.55				
Constant	-7.64**	2.55	13.50***	2.90	-2.70	.86	-2.89	1.61	-9.15***	2.64
Pseudo R2	0.63		0.84		0.71		0.47		0.69	
Number of observations	42		42		42		42		42	

Note: *** p<0.001, ** p<0.01, * p<0.05

List of protest countries taken in account in the different models 1, 2, 3, 4.
1: Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, Portugal, Spain
2: Egypt, Libya, Oman, *Saudi Arabia*, Syria, Tunisia, Yemen; Greece, Portugal, Spain
3: *Bahrain*, Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, Portugal, Spain
4: Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, *Italy*, Portugal, Spain

In northern and eastern European countries there was no youth unity because the unemployment rate among educated youth was much lower than among uneducated youth,; indeed, violent fights broke out between educated and uneducated youth in 2010 and 2011 in France and the UK. After the 2008 financial crisis, unemployment levels soared. In

Southern European countries, during the early 2000s and even up to the 2010s, the unemployment rates of educated youth remained closer to the uneducated ones, counting for at least half the unemployment rate of non-graduates. In Northern and Eastern countries, the tertiary educated unemployment rate was about one-fifth of youth with only a primary education level (Appendix, Table a1). n this respect youth of different backgrounds shared in Spain, Portugal, and Greece, a common fate; both the educated and uneducated alike found themselves in a bad position. This could explain their involvement in the *Indignados* movements in Spain, their even stronger involvement in Greece and also in Portugal, all of which were countries strongly affected of the financial crisis. From a socio-economic viewpoint, Italy should also have taken part in the Southern European protests, as shown by equation 4, table 2. Political insurgency did eventually take place in Italy, but no massive demonstrations occurred. The case of Ireland, remains different despite rising unemployment levels because the high unemployment rates did not greatly affect the educated. Moreover, with the Western recession, there were fewer possibilities of finding well-paying jobs abroad. Educated youth facing unemployment were in a situation of double foreclosure on their prospects.

Following suggestions from Campante and Chor (2012), I have taken into account the *changes* in the percentages of 15–24 year-olds with secondary or tertiary educations between 1980 and 2010 (Table 3). I have tested the cross product of youth unemployment rates and percentages of youth with secondary or tertiary education, and the product of youth unemployment rates by the increases in percentages of educated youth, across recent decades. In these models, the percentages of unemployed youth under 25 years old have also been included.

Table 3: Europe and MENA countries in 2011. Outcome: occurrence of massive protest movements or revolution (robust probit models. coef.)

	protest_cs1		protest_cs2		protest_cs3		protest_cs4	
	coef	Se	coef	se	coef	se	coef	se
15–24 y.o. as % of 15–64 y.o.	-0.05	0.07						
Youth <25 y.o. unemployment rate 2008–2010 (max. men/women)	0.20**	0.08	0.18*	0.07				
Increase in secondary or tertiary education (completed)	0.13	0.08	0.13	0.07	0.09	0.06	0.09	0.06
*Youth (15–24) unemployment rate * Increase in secondary or tertiary education*	-0.35	0.22	-0.33	0.21	-0.24	0.17	-0.24	0.17
MENA countries * Female <25 y.o. unemployment rate 2008–2010					0.15**	0.06		
European countries Female <25 y.o. unemployment rate 2008–2010*					0.16*	0.07		
Female <25 y.o. unemployment rate 2008–2010							0.15**	0.06
MENA countries dummy	0.59	0.95	-0.02	0.62			-0.13	0.66
Constant	-6.66*	3.05	-7.15**	2.53	-5.93**	2.21	-5.73**	1.90
Pseudo R2	0.45		0.44		0.43		0.43	
Number of observations	40		40		40		40	

Note: *** p<0.001, ** p<0.01, * p<0.05

List of protest countries taken in account in the different models cs1, cs2, cs3, cs4.
1: Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, Portugal, Spain
2: Egypt, Libya, Oman, *Saudi Arabia*, Syria, Tunisia, Yemen; Greece, Portugal, Spain
3: *Bahrain*, Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, Portugal, Spain
4: Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, *Italy*, Portugal, Spain

Campante and Chor, using these variables on a larger set of countries and a slightly different outcome, have proposed an interpretation focusing on the opportunity costs of participating in demonstrations. For them, youth who have completed secondary or tertiary education can better assume the opportunity cost of spending time in demonstrations and political activism than poorly educated youth. But because there are no jobs, this opportunity cost vanishes and thus explains the involvement in protests of educated youth in many MENA countries. They write, “In our interpretation, individuals would be more prone to

devote their energies to political protest not only because they are aggrieved, but also because it is less costly to do so when labor market conditions are weak. […] The weak labor market conditions lower the opportunity cost of political activity more for the highly educated than the less educated (whose time is less valued by the labor market regardless of broader economic circumstances) and more for effort-intensive activities than for less intensive ones." Regressions made on our set of countries, following Campante and Chor's suggestion, show that the increase in education levels is loosely connected to a higher probability of protest (Table 3, all models, line 3). The interaction variable capturing the opportunity cost effect, defined by the product of education increase from 1980 to 2010 with youth unemployment in 2010, is negative and does not reach significant levels (Table 3, line four).[13] It could reflect the fact that Western countries where these percentages are highest were not greatly affected by the protests.[14]

Even if one accepts that the increase in education, considered by the authors as an opportunity cost, has a positive effect on protest occurrence, it could be interpreted as an expression of the relative frustration of educated youth facing bleak economic prospects.[15] A rational choice hypothesis seems too narrow a perspective and, moreover, does not agree with the data.

Gender gap

Multivariate analysis shows female unemployment in MENA countries has contributed to unrest. Analysis presented in the Appendix shows that female unemployment rates are significant, specifically in MENA countries (Table a2). For instance, in Tunisia, Egypt, and Yemen, despite the restrictions and threats against protesting women, many observers have seen that women were very active and present in 2011. However, unemployment rates are not the best measure of women's relative exclusion from economic activities. Rough estimates suggest that, on average, with 75% of women outside the labor market (neither employed nor unemployed) in Middle Eastern countries and 72% in northern Africa countries, this is the region of the world where women are the most excluded from paid activity (the world mean is 50%). In Northern Mediterranean countries, women's overall activity rates are higher, primarily as a result of higher female participation in the labor market. "In Turkey,

[13] This interaction, chosen by Campante and Chor (2012) to verify their hypothesis, does not capture the 2010 unemployment rate of those who have completed secondary or tertiary school curricula, which is a sensitive point (the product could be high with a low unemployment rate for qualified youth).
[14] In the models presented in their paper (Campante and Chor, 2012), including a wide set of non-Mena countries outside Europe, the positive effect of education increase*unemployment is balanced by a negative effect of the increase in education. It is possible that there is a trade-off effect.
[15] There is no political outlet for these new educated elite. As Marxists used to say, educated youth have nothing to lose. This is not exactly a weak opportunity cost.

Malta and Italy, for example, where female activity rates are also low, the overall rate of participation in the labor market still stands at 52 per cent, 60 per cent and 62 per cent respectively."[16] Besides that, "of the 8.5 million unemployed, some 3.5 million (about 41 per cent) are women."[17] It is noteworthy that female unemployment levels were lower in oil producing countries (10% in Bahrain, 2002; 2–3% in Qatar, 2002–2010, but 13% in 2001; 3–10% in the U.A.E., 2000–2009; 10–13% in Saudi Arabia) than in non-producing countries (2–3% in Yemen before 2001, 39–45% after 2004; Oman is in between Yemen 17% and the other Gulf countries).

Low female participation rates combined with high female unemployment mean that only a small number of women (one in seven) are actually gainfully employed in the economy. While women's education is improving, they still struggle to find adequate employment, and there are undoubtedly strong barriers in place that prevent the economy and the labor market from adequately allocating human resources. This may have been an incentive for young women to take to the streets in MENA countries (Table a2 shows multivariate analysis supporting this interpretation). By contrast, in northern European countries, unemployment decreases with higher levels of education for both men and women.

Political context and legitimacy

A High rate of unemployment among educated youth does not automatically translates to turmoil. More than in Europe, where youth educated unemployment soared after the financial crisis, the question of "when" remains in MENA countries and is not addressed by socio-economics changes. These deep demographic and social changes in the Middle East and North Africa provided only a potential basis for turmoil, but educated youth, even more than their European counterparts were deprived of avenues in the political arena. The foreclosure on the future may have been determinant for massive demonstrations. The success of demonstrations, sit-ins and occupations of public squares also depends on the silent approval of wider strata of the society, the inhibition or partial inhibition of the repression, and a dwindling confidence in ruling authorities.

It is far beyond the ambition of this paper to characterize the social and political dynamics in northern European and MENA countries. The political situation of the MENA region underwent crucial transformations following the nationalist revolutions of the 1950s

[16] Integrated social policy: labor Markets and labor Market Policy in the UN-ESCWA Region, UN-ESCWA, Report IV, 2012; p. 4.
[17] Abide, p. 9.

and 1960s. These revolutions inaugurated authoritarian and/or military regimes—Nasser in Egypt, the Baath party in Syria and Iraq, the FLN in Algeria, Gaddafi in Libya, and several different leaders in Yemen. In those places, Shiites are often excluded from power as well as from economic achievement. In several cases, the ruling elite, which came to power by way of a secularist party, has built a patrimonial state. The secularized ruling elite funneled access to wealth and resources to a narrow circle of clients.[18] If the ruling families in Saudi Arabia, Bahrain, and other Gulf states found some measure of legitimacy, supported by petrodollars currencies , by consolidating a patrimonial state, legitimacy was much more difficult to attain for the secularized elite in countries lacking petrol, for reasons including unfair elections, the absence of independent justice, and lack of free press. But up until the early 2000s, an inescapable deadlock remained at the political level throughout the MENA countries. In contrast with Europe, the autocrats in MENA countries, and their families and clients, stayed in power for decades through intense coercion.

If I had to summarize the socio-political conditions during the 2011 wave of protests, I would consider the *suspension of legitimacy* of the ruling authorities. When those who are ruling are no longer legitimated to do so, there is a breach that demonstrators can use. Often there is a fraction of motivated actors, whose claims are supported by wider strata of the population. The notion of the suspension of legitimacy (which could be said both for legal governments as for dictators) is wide and somewhat vague. The idea is that legitimacy is suspended or weakened when large strata of the population consider that the rulers have failed in their primary mission, namely the provision of basic goods. The suspension of legitimacy encompasses a two-part process. First, situations occur in which rulers, who in many cases were not elected, no longer have the aura that surrounded them when they deposed the previous authority (i.e. kings ?; e.g. Gaddafi in 1969). Second, this suspension of legitimacy is linked to the inability of these rulers to ensure that the basic needs of the population at large are met. Let us begin with the latter.

Food revolts?

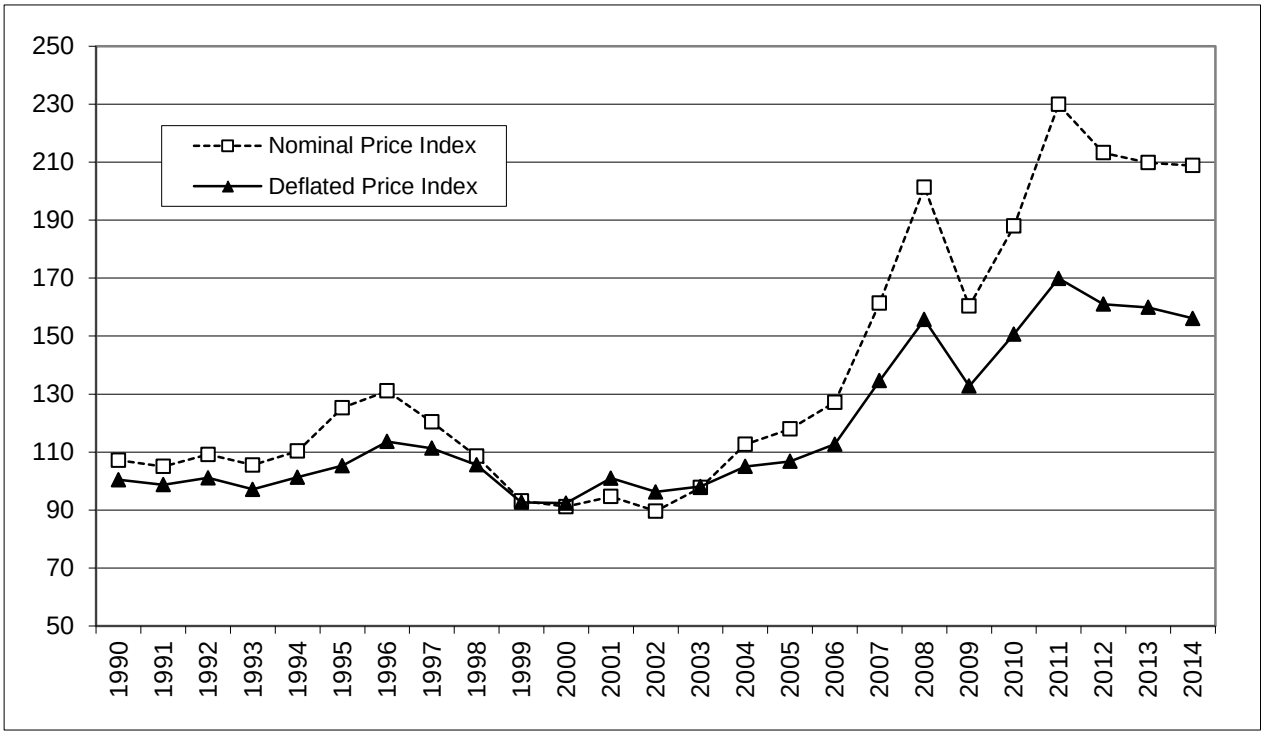
While globalization causes homogeneity in many domains, discontinuities and heterogeneity remain in others. ?. Food riots occurred in Europe in the middle of the 19th century, following periods of drought and food scarcity (they are at the root of the 1848 revolutionary process). Regarding this basic good, the countries south of the Mediterranean do not face the same challenges. Today a paper entitled *Food Crisis and Political Instability*

[18] The Trabelsi/Ben Ali family in Tunisia, the Al-Assad family in Syria, and the Moubarak family in Egypt were autocrats and gathered in private hands a significant part of their country's resources.

in Africa and the Middle East by Lagi, Bertrand and Bar-Yam (2011) includes a figure showing a food price curve that is so precisely related to the timing of the unrest that it seems difficult to discard the argument or even consider others factors such as demographic bulge and youth unemployment, which do not have such a precise temporal connection with the wave of unrest as to be pertinent in explaining the protests. Authors state that "the timing of violent protests in MENA in 2011, as well as earlier riots in 2008, coincide with large peaks in global food prices. […] These observations suggest that protest may reflect not only long standing political failings of governments, but also the sudden desperate straits of desperate population." Today many countries rely on the global food supply system and are thus sensitive to global food prices. The synchronization of events is, from this viewpoint, the consequence of price volatility (caused by intense speculation) and a dependence on imported food products in the absence of good governance. The authors write that the inability of governments to protect the population from hunger is the starting point of the collapse of their legitimacy. One must be sensitive to the importance given to the suffering indicated by this price curve; beyond the steep index lie hungry people. During the 1990s, social movements were reduced to nothing in Tunisia and Libya, and were fragmented in Egypt. The lowest strata of the population were recurrently involved in what L. Sadiki has called "riots of the belly" (*khubz*). In the case of MENA upheavals, food prices seem to have been of great concern in Egypt. In Tunisia, demonstrations started in neglected rural areas where the union movement was strong and spiraled toward the capital.

At this point in their argument, the authors make a big leap. It is easy to understand how food price hikes could both foster anger against authorities and provide an incentive for taking to the street. However, the way anger delegitimizes a ruler may be modified by many specific factors. If we were to adhere to such an argument, it remains to be explained why certain countries in the MENA region have seen widespread demonstrations and not others. Among the many grounds for action cited by the educated youth who have taken to the street and occupied the central squares, hunger in its literal meaning has not been a major motivation. Thus, it is necessary to combine that argument with the motivations of the youth and the illegitimacy of the rulers.

Food price index, 1990–2014: nominal and deflated



Source: FAO, 2013, base 2000–2004=100

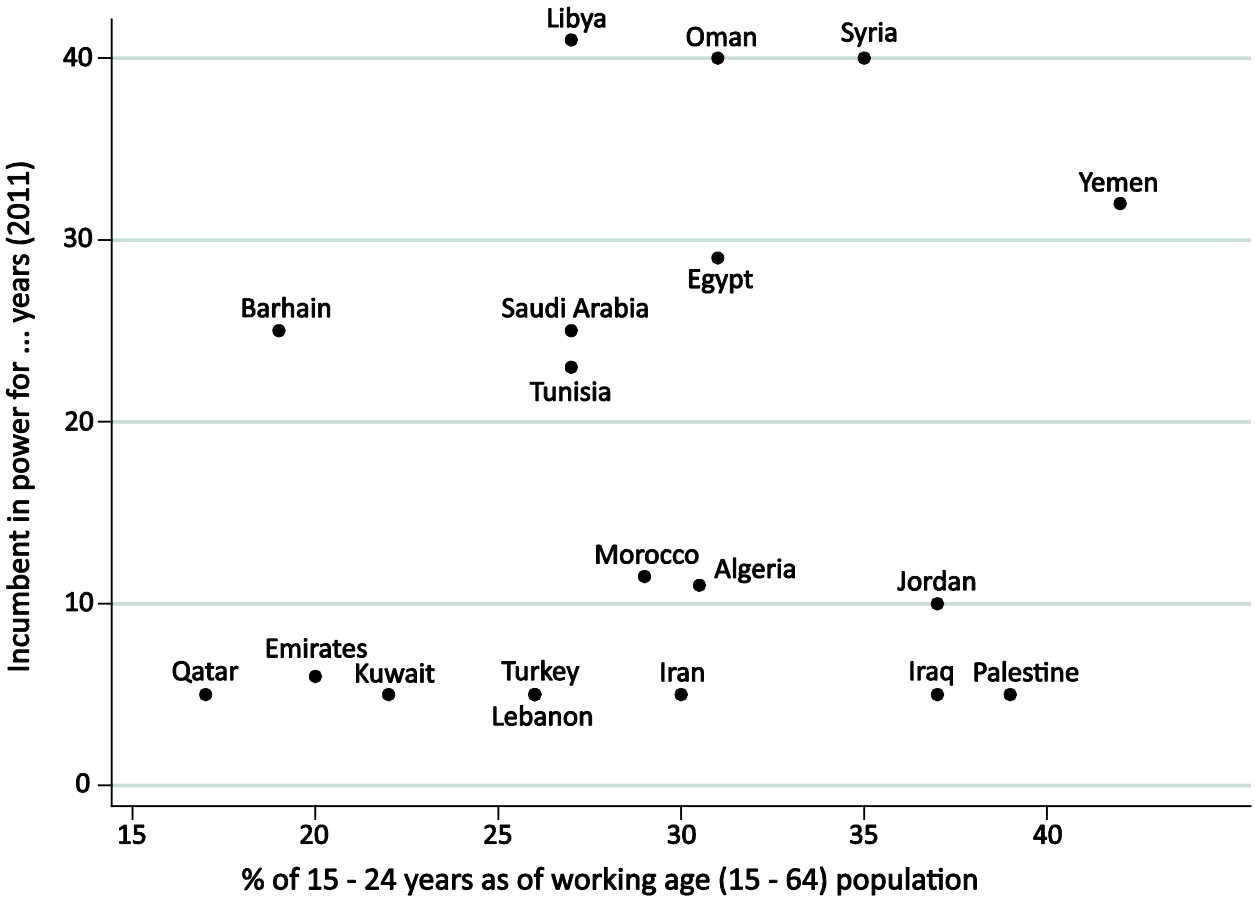
The collapse of the legitimacy of public authorities often allows motivated actors to gain momentum. South of the Mediterranean, the construction of an alliance between educated youth and large fraction of the population may have been facilitated by the inability of the rulers to provide basic goods (affordable food, oil). If food hikes contributed to the socio-political context of these surges of unrest, they are also characterized by the exhaustion of patronage arrangements that developed in the 1960s and early 1970s.

Army, corruption and dictatorship

In Tunisia, the army, which did not control the domestic economy, refused to support Ben Ali's regime in the early days following Bouazizi's death. In Egypt, the army, which was deeply involved in the domestic economy and the public sector, clearly corrupted the rent economy at all levels, therefore was adverse to economic liberalization and aimed to maintain its influence on private sector growth through real estate implications. However the army quickly decided to abandon Mubarak as a measure of self-preservation. Like the police, the army is a feared power in Egypt. There is widespread distrust between the police and the people. However, its neutral position, when Mubarak was ousted, was never seen as support for the demonstrators, as was the case in Tunisia. In Syria, the army was not very supportive during the early days of the civil strife and, despite the defection of several prestigious

officers, it remained largely supportive of Al-Assad's regime. In Yemen, Ali Saleh never lost the army's full support but there was a split in allegiance between different factions. Corruption is present everywhere in varying spectrum, even among dictatorships. There are many shades between the Trabelsi/Ben Ali family and Mubarak, and Gaddafi, the latter prohibited private ownership and retail trade, banned a free press and subverted civil service, replacing the state by kin networks of clients. One would be right in asking if such a thing as a Libyan society even existed before 2011. In Tunisia, according to Wiki-leaks, more than half the Tunisian business elite were linked to the Trabelsi/Ben Ali family[19]. However, it is fairly difficult to systematically take into account the corruption process because international indices are of unreliable.

Figure 5: *MENA 2010–11: protests and political change based on percentage of youth among total working age population*



The erosion of legitimacy over time is obviously not the same in Morocco and Libya since the establishment processes and the nature of the political regimes there are very different. However, they shared one general aspect: the longevity? in power. As can be seen

[19] Anderson, 2011.

in Figure 5, the incumbent's duration of power is closely associated with the development of protests in MENA countries. The length of the incumbent's time in office is a good indicator for unrest but there are exceptions among some MENA countries. The Arab Spring uprisings neither fully engulfed Jordan nor entirely passed it by. Frustration in Jordan began bubbling up in 2010, and the following year a series of protests of modest size, but not modest significance, brought together a wide-ranging group: East Bankers, citizens of Palestinian origin, Islamists, and unaffiliated youth. Those who took to the streets had a variety of grievances, "but at their core they were expressing anger with the state of the economy, ostentatious corruption, unaccountability and the concentration of power in the hands of the few."[20] The situation in Saudi Arabia should also have elicited protests. However, three interrelated factors seem to have repressed the movement: oil wealth, powerful coercion and, to a lesser extent, the legitimacy of the Saud. But, for how much longer? "The al-Saud must fear that future democratic parliamentary and presidential elections in Egypt and other Arab countries, coupled with articulated Islamic reasoning in support of democratic representative governance in Islam, will pressure Riyadh's absolute monarchy to become representative and participatory, let alone a republic."[21] This also seems to be the case in Iran. One may ask whether the many battles fought by Iranian youth against the clerics' authoritarian hierarchy, specifically in 2009 after the elections because of the lack of transparency in the electoral process/results and the denial of Amir Moussavi's victory, might be termed an Arab Spring movement.

Meritocracy and its discontents

There is no parallel in Europe in this respect. The weakening legitimacy north of the Mediterranean cannot be easily captured using the same observations. North of the Mediterranean, those countries with *Indignados* movements did experience dictatorships: the Regime of the Colonels in Greece from 1967 to 1974, Franco in Spain from 1939 to 1975, and Salazar in Portugal from 1928 to 1974; but not now. Thus, the return to democracy could not be seen as a central objective of the 2011 movements as it was with the Arab Spring movements. Moreover, the left was already in power in all three countries: the Pasok party under Papandreou in Greece, Gonzalez and Zapatero in Spain, and Soares in Portugal.

[20] In the past, it was relatively easy for the monarchy to play the card that has come to define the Jordanian polity and that separates East Bankers from Palestinian Jordanians. The former believe they are the country's legitimate inhabitants and fear usurpation of their traditional dominance by the more numerous citizens of Palestinian origin. Their support for the monarchy has been linked in part to their over-representation in the public sector, the security services and parliament (through gerrymandered electoral districting). Conversely, Palestinian Jordanians have felt marginalized, shut out from key state positions and at times treated as disloyal; the memory of the bloody 1970 civil war in which Palestinian groups were defeated by regime forces also informs their perception of central authorities and contributes to a lingering sense of exclusion.

[21] Elhadj, 2012.

The basic good provided in European countries by governments is no longer the protection against hunger, which is systematically warranted. Nevertheless, when the minimum expectations of employment and the ability to earn an income are difficult to achieve, the deterioration of legitimacy extends to the whole political spectrum. The exclusion from paid activity of those who are compliant with the terms of the implicit social contract (i.e. those who have diplomas) is a major breach of that contract and is seen as a sign that the authorities' legitimacy is greatly weakened. If it exists, the ordinary functioning of the democracy gives people the means by which to say no; however, it sometimes does not ensure social stability because the political system as a whole seems unable to take into account major stakes and basic grievances. Because political channels through party mobilization and elections seem to fail to fulfill these basic aspirations in some European countries, this could also entail a suspension of legitimacy, at least in part. In 2011, this suspension stemmed from what we may call the broken promises of meritocracy. Drawing on the correlation between the level of education and the places occupied in society, meritocracy proclaims the worth of academic success against inheritance. In Northern and Eastern Europe, with three to five times lower unemployment rates than young people with no diploma or only basic schooling, graduates are significantly better off on the labor market. In addition, the careers open to them are more interesting and symbolically more rewarding. The low unemployment rates based on the level of education common to Northern and Eastern European countries, which did not disappear during the financial crisis, have contributed to support the legitimacy of the meritocratic ideal. However, in southern Europe, the educated youth have shared the fate of the least educated despite their education and thus no longer believe in meritocracy. A large percentage of them are disillusioned and outraged over the failure of the meritocratic promise. The fact that only the interaction between unemployment and education levels, not unemployment itself, is statistically significant, points in the direction of a relative frustration.

Those elements are motivational arguments. Beyond that, the main issue is the capacity of educated youth to build an alliance that is able to define a social hegemony beyond its own interests. Even though Southern European countries mostly caught up with Northern European countries in terms of living standards during the last quarter of the 20th century, the average southern European worker is still less protected by work contracts than northern European workers. Thus, when unemployment climbed to high levels in the late 2000s, the deep differences in societal responses to this challenge contributed to dividing European countries.

REFERENCES

Adelka F., 2000, *Être moderne en Iran,* Paris*,* Presses de Sciences Po.

Anderson L., 2011, "Demystifying the Arab Spring", *Foreign Affairs*, vol. 90, no 3 (May/June).

Boudarbat B., and Ajbilou A., 2007, "Youth Exclusion in Morocco, Causes, Consequences and Policies", *The Middle East Youth Initiative Working Paper n°5*, Wolfensohn Center for Development at Brookings and Dubai School of Government.

Campante F. and Chor D., 2012, "Why the Arab World Poised for Revolution? Schooling, Economic Opportunities, and the Arab Spring", *Journal of Economic Perspectives*, vol. 26 n° 2, p. 167-188.

Elhadj, E., 2012, "The Arab Spring and the Prospects for Genuine religious and political reforms", *Arab News*, November 14.

Habermas, J., 1995, *Après l'État-nation*, Paris, Fayard.

Hussain M. and Howard Ph., 2013, "What Best Explains Successful Protest Cascades? ICTs and the Fuzzy Causes of the Arab Spring", *International Studies Review*, vol. 15, no 1, p.48–66.

Kepel G., 2004, *Fitna*, Paris, Gallimard – Folio.

Khosrokhavar F., 1997, *L'islam des jeunes*, Paris, Flammarion.

Lagi M., K. Bertrand, Y. Bar-Yam, 2011, "The Food Crisis and Political Instability in North Africa and the Middle East", New England Complex Systems Institute, August 11th.
http://arxiv.org/pdf/1108.2455v1.pdf

Lagrange H., Oberti M., 2006, *Émeutes et protestations urbaines*, Paris, Presses de Sciences po.

Latour B., 2013, *Enquête sur les modes d'existence*, Paris, La Découverte.

Medheb A., 2002, *La maladie de l'islam*, Paris, Seuil.

Mesiano, R., 2011, "*Green Jobs for Youth Unemployment in the Arab Region"*, UNESCO- ESCWA report.
www.ocemo.org/file/125829/

Ramadan T., 2011, *L'islam et le réveil arabe*, Paris, Presses du Châtelet.

Redissi H., 2006, *Le pacte de Najdj*, Paris, Seuil.

Roy O., 2002, *Globalised Islam: The search of a new Ummah, London*, Hurst and Company.

Sadiki, L., 2000, “Popular Uprising and Arab Democratisation”, *International Journal of Middle East Studies*, vol. 32, no 1, p. 71–95.

Sika, N., The Arab Uprisings and the Rise of Secularism, March 17, 2011.
http://muftah.org/the-arab-uprisings-the-rise-of-secularism-by-nadine-sika/#.VIlkGHsb17s

Springborg R., 1982, *Family Power and Politics in Egypt*, Philadelphia, University of Pennsylvania Press.

Stampini M., Verdier-Chouchane A., 2011, “Labor Market Dynamics in Tunisia: The Issue of Youth Unemployment”, *African development bank working paper,* Working Paper 123 – February 28th. http://www.afdb.org/en/documents/document/working-paper-123-labor-market-dynamics-in-tunisia-the-issue-of-youth-unemployment-23002/

Zubaida S., 2011, The Arab Spring in historical perspective, *Arab News*, October 21.

Zubaida S., 2011, *Beyond Islam: A New Understanding of the Middle East*, London, I.B. Tauris.

DATA SOURCES

Barro R.-J., J-W. Lee, 2012, A New Data Set of Educational Attainment in the World, 1950–2010. *Working Paper 15902*. http://www.nber.org/papers/w15902

ILO 2011, 2012 Labor forces report.

ILO 2012 Global employment trends for youth.

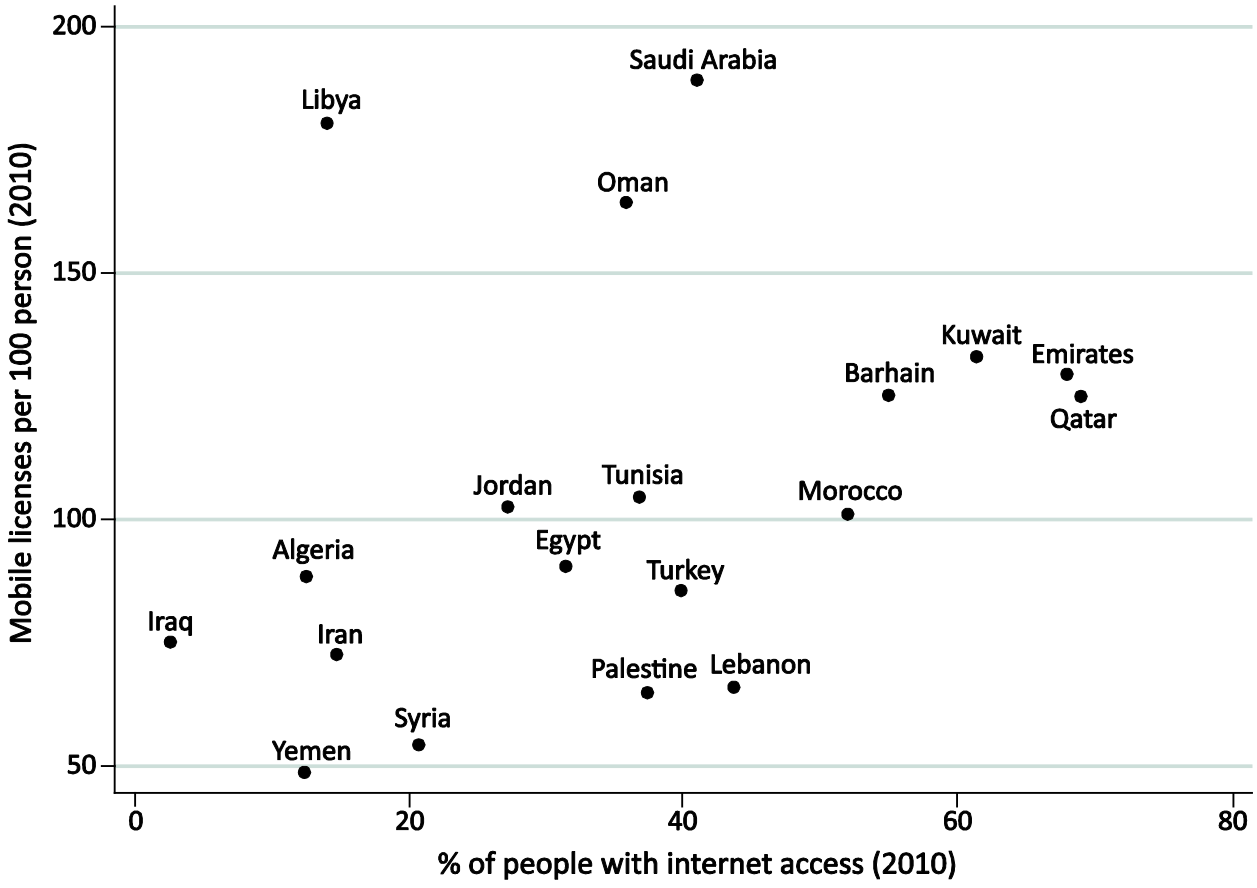
ILO 2012 *The Youth Employment Crisis: Time for Action*, Report of the Director-General, International Labor Conference, 101st Session, Geneva.

World Bank Indicators, 2012.

World Fertility Survey and US Census Bureau, 2008.

Appendix

Figure a1: People using internet and mobile subscription per 100 in 2010



Source: ITU estimates

Table a1: Europe: % of 15–24 youth unemployed by educational level

	2000			2010	
	primary	tertiary		primary	tertiary
Austria				8.8	2.4
Belgium	10.3	2.7		15.3	4.5
Czech Rep	22.6	3		25	2.8
Denmark	6.2	2.6		10.7	4.9
Finland	18.7	5.2		16.1	4.4
France	*15.3*	*5.5*		*15.4*	*5.5*
Germany	*12.6*	*4.3*		*14.9*	*3.1*
Greece	**9.2**	**8.1**		**12.5**	**9.8**
Hungary	11.5	1.4		24.9	4.7
Ireland	7.9	1.7		21.1	7.5
Italy	12.1	6		10.3	5.7
Netherlands	4.4	1.7		7.2	2.8
Norway	6.6	2.5		7.3	1.8
Poland	21.8	5.5		17.6	5
Portugal	**3.9**	**2.8**		**11.8**	**7.2**
Slovakia	40.4	5.3		44.2	5.8
Spain	**15.2**	**10.9**		**27.3**	**11.3**
Sweden	8.1	3		17.6	4.5
UK	8.8	2.5		13.7	4.1

Source: ILO 2011.

Table a2: Supplementary regressions (probit models): outcome protests, with distinct female unemployment rate

	protest 1c		protest 2d	
	coef	se	coef	se
*Europe*Female unemployment rate 2008–2010*	0,09	0,05	0,18*	0,07
MENA*Female unemployment rate 2008–2010	0,08*	0,04	0,14*	0,05
*Europe*Unemployment ratio tertiary vs. primary*	7,71**	2,89	11,93***	3,53
*MENA*Unemployment ratio tertiary vs. primary*	0,96*	0,44	1,98***	0,53
_cons	-6,72***	1,85	-11,51***	2,79
Pseudo R2	0,622		0,790	
Number of observations	42		42	

Note: *** p<0.001, ** p<0.01, * p<0.05

Protest countries :

1: Egypt, Libya, Oman, Syria, Tunisia, Yemen; Greece, Portugal, Spain
2: Egypt, Libya, Oman, *Saudi Arabia*, Syria, Tunisia, Yemen; Greece, Portugal, Spain