Political Risk Assessment and the Arab Spring: What Can We Learn?

By

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Whether dealing with debt issues in the Eurozone, investment prospects in emerging markets, or potential disruptions in patterns of global trade, the identification, assessment, and measurement of political risk (PR) are recurring issues for businesses and governments today. In the past few years, abrupt social and political change has become the rule in international relations. A prominent instance of this is the "Arab Spring," the massive and unexpected wave of social and political turmoil that, starting in the winter of 2010–2011, swept across the Middle East and North Africa (MENA) region. The Arab Spring has significantly affected the business climate of the countries involved. In doing so, it has also exposed the shortcomings of the extant approaches to PR assessment. This article discusses the performance of five different approaches to PR assessment (OECD, ONDD, EIU, PRS, SACE) vis-à-vis the Arab Spring, providing some specific suggestions on how to improve PR assessment and analysis. © 2015 Wiley Periodicals, Inc.

Political Risk: A Fuzzy Concept

Although risk assessment in terms of political environment has always been part of any business venture, the reception of political risk (hereinafter PR) in economic and financial literature only dates back to the 1960s. The conceptual boundaries of political risk have always been hazy, as demonstrated by the fact that starting from the 1970s the scholarship on political risk features many literature reviews trying to grab hold of this ambiguous concept (e.g., Chermack, 1992; Fitzpatrick, 1983; Friedman & Kim, 1988; Jarvis, 2008; Kobrin, 1978; Simon, 1984). Yet as a first step in trying to achieve more clarity in this field, it is possible to analyze the use of the term in its historical evolution. In the 1960s, when financial and economic actors began to develop country risk analysis, the political scenario worldwide was shaped by two complex and intertwining processes: the Cold War, with the ideological contrast between capitalism and socialism (i.e., free-market vs. planned economies), and the beginning of decolonization. The likelihood of events—such as the 1956 Suez crisis or the 1960 Congolese one—that could suddenly and drastically change the political as well as the business environment increased.

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Political risk, however, sometimes also referred to as "noneconomic risk," was predominantly considered to be a feature of "underdeveloped" or "modernizing" countries (Green, 1974; Green & Korth, 1974; Zink, 1973): as Jodice (1984) put it, first-generation political risk analysts were mostly concerned about investment disputes deriving from the so-called "economic nationalism," that is, the trend, typical of developing countries, to confiscate or expropriate foreign property in the name of public interest (p. 9).

The 1970s were marked by two events, both—unsurprisingly—with a relevant impact on the perception of political risk by the business world: the 1973 oil shock and the 1979 Iranian revolution. The occurrence of such grand-scale events highlighted the importance of political risk assessment and management, and the political risk industry began to flourish, with the proliferation of consulting firms as well as applications for political risk coverage, provided by both public and private insurers (Simon, 1984). The 1980s saw another shift in the connotation of political risk, with a focus on the problem of debt management by host countries (see, e.g., Picht & Stüven, 1991). During the 1990s, instead, and even more so after the attacks to the World Trade Center in New York City, terrorism has become a major source of concern for international investors and has entered the scene as a form of political risk (Berry, 2010). The scope and breadth of political risk analysis has also evolved in geopolitical terms—from the observer's standpoint—from being mostly performed by and in the interest of Western (mostly American) multinational enterprises (MNEs) to being a truly global activity. Firms from emerging countries invest in risky markets more than their global counterparts (Satyanand, 2011), and in light of the financial—as well as political and economic—crisis started in 2008, developed countries do not look as rid of risk for foreign investors as they did in the past. Thus, political risk is no longer seen as an exclusive attribute of "least-developed countries" (LDCs). Generally speaking, it can be said that the term *political risk* has come to designate a component of country risk, the latter being defined as "the ability and willingness of a country to service its financial obligations" (Hoti & McAleer, 2004, p. 539). However, it should also be noted that "country risk" today commonly refers to a wider array of risks, not only financial but also operational in nature: "country risk is of a larger scale, incorporating economic and financial characteristics of the system, along with the political and social, in the same effort to forecast situations in which foreign investors will find problems in specific national environments" (Howell, 2007, p. 7).

An effective approach to the assessment and management of political risks must be tailored to the needs of individual enterprises. In fact, what constitutes risk for a particular industry and even for a certain company might well represent instead an opportunity for another industry or company. Yet comprehensive, general models that allow for cross-country comparisons are widely used, in particular by insurance companies and export credit agencies that need to build country classifications in order to price their products, but also by managers interested in monitoring the overall risk situation of the countries in which they operate or they are considering to start operating. How well do the existing models for political risk rating fulfill their task? How is it possible to improve the performance of PR measurement tools? As PR assessment is a practice-driven task, it is not surprising that the performance of the existing tools is an issue of primary relevance to investors as well as PR practitioners. The events to which many refer to as the "Arab Spring" offer food for thought in these and other directions, providing a chance to test the effectiveness of PR forecasting models, and allowing for specific remarks and suggestions to improve them.

Testing the Effectiveness of PR Models: A Difficult Task

A major problem associated with political risk models regards their reliability. Understanding and assessing political risk is an essential part of an enterprise's strategic planning, yet the scant information about the extent to which PR ratings are accurate undermines their credibility and usefulness for the investor. Indeed, the challenge of testing these models' relevance is made particularly daunting by the lack of transparency and available data, and by the problem of measuring the actual losses due to politically generated events (or finding adequate proxies thereof).

A few studies took up the issue of political risk modeling assessment. In a groundbreaking work in this field, Howell and Chaddick (1994) conducted a comparison across three different approaches to political risk assessment (*The Economist,* BERI, and PRS Group), building a loss indicator for 36 countries (ranging from 0 to 10), based on the *Overseas Private Investment Corporation's (OPIC)* record of payments for claims related to expropriation, inconvertibility, war damage, and civil strife damage, and on information drawn from "Foreign Economic Trends," news reports, and corporate reports or interviews (Howell & Chaddick, 1994, p. 73). The effectiveness of political risk indices for the period 1987–1992 was then

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tested against the loss index resorting to multiple correlation and stepwise regression. The authors found that, among the three indices examined, the one presenting the highest level of correlation with the losses was the PRS Group's, followed by BERI, with *The Economist*'s PR index scoring worse than the other two.

Apart from providing much-needed insights on the performance of PR indices, studies like the one recalled here allow us to assess the effect of individual components concurring to the construction of total indices (and also to rule out some of those components in cases of high multicollinearity, for instance). Nonetheless, the operation of building a loss index poses in itself a number of methodological challenges, especially regarding (but not limited to) the time- and resources-consuming quest for reliable information about losses incurred by enterprises. Moreover, the limitations of loss indicators are manifold: for instance, the one built by Howell and Chaddick (1994) covered only 36 countries and contained information limited to losses by US enterprises. In addition, the extent to which the results of loss-index based studies can be generalized is often limited. An attempt at replicating the study by Howell and Chaddick for the period 1994–2004 was made by Nel (2009) but with diverging results compared to the original. Differences in the outcome of the study might be explained by the partially different research design and country sample, and they epitomize the difficulties that observers inevitably encounter when trying to test the predictive power of PR models. The problem, however, is the general lack of available data, not only as far as losses are concerned but also as regards country ratings proper. In a comparative analysis of country risk ratings, Oetzel, Bettis, and Zenner (2001) solve the first problem by using currency fluctuations as a surrogate for overall country risk. However, although their original intention was to compare 11 country risk measures across 17 countries during a period of 19 years, the researchers were compelled to limit their study to 4 out of 11 measures, among other reasons, "either because it was cost prohibitive to purchase them … or because access was limited by the publisher" (Oetzel et al., 2001, p. 134). Other, but inevitably less efficient, proxies for direct losses ascribable to political events are inflows of foreign direct investment (FDI), widely used in panel regressions, and volatility in stock exchange indices.

Models for PR Rating: OECD, ONDD, EIU, PRS, SACE

As anticipated, in most cases the performance of the existing methodologies for obtaining political risk country ratings is not completely satisfactory, and when it comes to assessing their effectiveness, some shortcomings inevitably emerge. At this point, it is timely to present some of those models and to exemplify those shortcomings. The second task will be carried out in the next section, which addresses the problem of meta-assessment of political risk. We now turn to the first task.

Trying to keep up with the fast pace of globalization, a number of agencies, public and private, have developed systems to respond to the transnational investors' increasing need for reliable ways of categorizing countries, taking into account their level of risk for business operations. PR country ratings basically aim at providing a snapshot of the comparative political risk situation of the countries considered. As already shown, political risk can be conceptualized in many different ways, and such diversity in the approaches to operative definitions is widely reflected in the numerous, diverse methodologies adopted for assessment.

Table 1 summarizes the definitions and methodologies adopted by five different agencies: the Organization for Economic Cooperation and Development (OECD), the Office Nationale du Ducroire (ONDD), the Economist Intelligence Unit (EIU), Political Risk Services (PRS), and Servizi Assicurativi per il Commercio Estero (SACE). These models were selected for a number of reasons. The first is that analyzing them allows for a comparison across different categories of actors providing political risk ratings: an international organization (OECD), export credit agencies (ECAs; ONDD and SACE), and private consulting firms (EIU and PRS). Second, although they are all "Western," those actors vary notably for geographic base and approaches, allowing for some diversity in the sample. Finally, they were selected because the data on political risk used here were freely available on their websites (OECD, PRS, EIU, SACE) or because they agreed to provide it (ONDD). The first step toward an assessment of the performance of such indices is to give them a closer look.

The OECD proposes a notion of country risk as a function of two categories of variables: transfer and convertibility risk (i.e., "the risk a government imposes capital or exchange controls that prevent an entity from converting local currency into foreign currency and/or transferring funds to creditors located outside the country") and cases of *force majeure* (e.g., "war, expropriation, revolution, civil disturbance, floods, earthquakes"). The first set of variables is embedded in the Country Risk Assessment Model (CRAM); the second, since it is related to phenomena that are difficult to quantify, is incorporated in the model through a country-by-country

TABLE 1 PR Definitions and Models Compared

Agency	PR Definition	Model Type	Model Essential Features	Critical Aspect(s)
OECD	"Country risk is composed of transfer and convertibility risk, and cases of force majeure (e.g., war, expropriation, revolution, civil disturbance, floods, earthquakes)."	Country risk rating	Two components: 1. The Country Risk Assessment Model (CRAM) produces a quantitative assessment of country credit risk based on three groups of risk indicators (payment experience of participants, financial situation, and economic situation) 2. A qualitative assessment of the CRAM results by country risk experts from OECD members, considered country by country to integrate political risk and/or other risk factors not taken (fully) into account by the CRAM	Expert judgment Not an actual forecast
ONDD	"Any event occurring abroad which assumes the nature of force majeure for the insured or for the debtor, such as in particular, wars, revolutions, natural disasters, currency shortages, government action."	Risks for export credit: Short-term PR Medium-long-term PR	The classification largely relies on the ECA's obligations under the OECD Arrangement	Expert judgment Not an actual forecast
		Risks for FDI: War risk Expropriation/government action Transfer risk	Scheme testing a set of quantitative indicators against additional qualitative elements (full methodology not disclosed). Countries classified in categories ranging from 0 to 7 (7 = highest risk).	
EIU	"The level of threat posed to governments by social protest."	Political instability index	Two component indices—an index of underlying vulnerability and an economic distress index. The overall index is a simple average of the two component indices. Fifteen indicators in total—12 for the underlying and 3 for the economic distress index (see Annex 1)	Causal assumptions Not an actual forecast Weights
PRS	"The political risk rating is to provide a means of assessing the political stability of the countries covered by ICRG on a comparable basis."	Political risk rating	12 dimensions: Government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, bureaucracy quality (see Annex 2)	Expert judgment Causal assumptions Weights
SACE	"The whole of decisions, conditions, or events of political nature able to trigger directly or indirectly a financial loss or a physical damage for an investment project."	Political risk index[a]	3 dimensions: Expropriation risk (subdimensions: rule of law, property rights, government intervention, control of corruption); transfer risk (subdimensions: regulatory quality, monetary policy, investment freedom, financial freedom); and political violence risk (subdimensions: voice and accountability, political stability and rule of law)	Causal assumptions Not an actual forecast Weights

[a]To the purpose of the present work, since the case studies adopted assume a time horizon prior to 2011, SACE's approach to political risk is the one described in Ferrari and Rolfini (2008).

qualitative assessment integrating political risk and/or other factors not accounted for by the CRAM.

The ONDD, a Belgian ECA, relies on a similar methodology. However, to the purposes of its activity, the ONDD differentiates between political risk for short (less than one year) and medium/long-term export credits (more than one year), on the one hand, and three categories of risk (war risk, expropriation/government action, and transfer risk) for FDI, on the other.

The EIU builds a model that aims at measuring the level of threat posed to governments by social protest. The overall index on a scale of 0 (lowest vulnerability) to 10 (highest vulnerability) consists of two components: an index of underlying vulnerability and an economic distress index. The overall index is a simple average of the two component indices. There are 15 indicators in total, 12 for the "underlying" vulnerability and 3 for the economic distress index. The former include inequality, state history, corruption, ethnic fragmentation, trust in institutions, status of minorities, history of political instability, proclivity to labor unrest, level of social provision, a country's neighborhood, regime type, and factionalism. The latter are economic distress, unemployment, and level of income per head.

The PRS political risk model consists of 12 variables, to which different weights are assigned. The variables are government stability (12 pt.), socioeconomic conditions (12 pt.), investment profile (12 pt.), internal conflict

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(12 pt.), external conflict (12 pt.), corruption (6 pt.), military in politics (6 pt.), religious tensions (6 pt.), law and order (6 pt.), ethnic tensions (6 pt.), democratic accountability (6 pt.), and bureaucracy quality (6 pt.).

As far as the SACE model is concerned, PR is broken down into three components, that is, expropriation risk (whose subdimensions are rule of law, property rights, government intervention, control of corruption), transfer risk (subdimensions: regulatory quality, monetary policy, investment freedom, financial freedom), and political violence risk (subdimensions: voice and accountability, political stability, and rule of law). Before proceeding to a comparison of the indices, some preliminary concerns should be addressed regarding the rationale for comparing models, which at first glance appear to be quite different. As regards the OECD model, it is important to point out that although countries are ostensibly classified on the basis of country risk, comparing it to political risk models seems reasonable for at least two reasons: (1) because it incorporates a political component, but since the details of the models are not disclosed, it is impossible to assess it separately; and (2) because the OECD classification is used as a benchmark for PR ratings both by private agencies and by ECAs (e.g., ONDD and SACE are bound by the OECD Arrangement on Officially Supported Export Credits, and they both use the OECD rating as a basis for assessing the transfer risk component of political risk). Similarly, although the EIU model is conceptually and technically meant to measure political instability, its focus on structural vulnerability and economic distress make it comparable to the other models. Since the objective of this contribution is to test the performance of various models against the occurrence of widespread social turmoil, the five models considered seem equally fit for comparison—indeed, looking at how they do in a comparative perspective may provide some insights about their performance.

To begin with, a few general remarks can be made. As far as the OECD and the ONDD are concerned, the most critical aspects regard the methods and criteria according to which expert judgment contributes to the ratings. When it comes to the EIU, the most problematic aspect apparently relates to the causal assumptions embedded in the model, for instance, as regards the relationship between regime and political stability. The PRS model relies on a web of country experts, and in this sense, to the purposes of an assessment of its effectiveness, at least three main concerns arise: (1) issues related to expert judgment; (2) as in the case of the EIU, the problem of causal assumptions; and (3) the theoretical foundations for attributing different weights to individual determinants of risk. Since it relies on secondary data, SACE's model does not raise issues of expert judgment, but apart from that, the same concerns mentioned with regard to the PRS model apply to it.

A relevant, cross-cutting issue regards the very nature of the PR indices. In fact, although risk analysis and assessment are intrinsically forward-looking tasks, many PR indices today still do not actually convey information about the estimated likelihood of future events. To the contrary, they mostly constitute mere snapshots of a country's present situation. For instance, after reviewing 14 PR rating systems, Howell (2014, p. 314) finds that only a few of them provided actual forecasts, and he explicitly recommends that PR indices become actual forecasts rather than mere assessments of current conditions.

MENA Countries and the Arab Spring as a Political Risk Case Study

Thinking of the Arab Spring from the standpoint of the PR data user, simple yet intriguing questions arise: How did political risk models do in forecasting the occurrence of widespread turmoil in the Middle East and North Africa (MENA) region? Is it possible to gain some insights from a comparative analysis of the performance of PR indices in this respect? Before turning to these questions, it is important to pinpoint the rationale for considering the Arab Spring a political risk case study suitable to provide insights about PR assessment tout court.

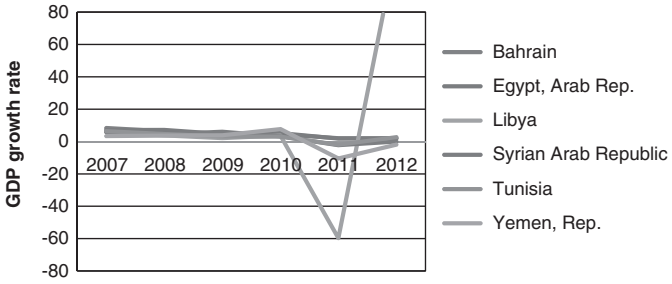
The overall economic ramifications of the Arab Spring have been relevant. Table 2 and Figure 1 show the impact of the 2010–2011 events on the gross domestic product (GDP) growth rate of six economies in the region. The slump is particularly impressive in the case of Libya, where cuts in oil and gas output due to

TABLE 2 The Arab Spring and GDP Growth Rate in Six Economies in the MENA Region

Country	2007	2008	2009	2010	2011	2012
Bahrain	8,34	6,30	3,10	4,50	2,10	1,90
Egypt, Arab Rep.	7,09	7,16	4,69	5,15	1,80	2,00
Libya	6,00	3,80	2,10	3,70	–59,70	120,00
Syrian Arab Rep.	5,70	4,50	6,00	3,20	–2,30	N/A
Tunisia	6,34	4,62	3,05	3,00	–2,00	2,70
Yemen, Rep.	3,34	3,65	3,87	7,70	–10,48	–1,90

Sources: World Development Indicators 2012 and CIA Factbook.

FIGURE 1 The Arab Spring and GDP Growth Rate in Five MENA Countries



Sources: World Development Indicators 2012 and CIA Factbook.

the rebellion against Muhammar Gaddafi's regime and international sanctions had an immediate and visible impact on the GDP. It is not surprising then that the share price of the Italian energy firm ENI, the leading energy company in Libya, fell 5.1% in February 2011, the biggest drop since July 2009.

As of October 2011, the overall costs of the Arab uprisings were reported to exceed $55 billion, with countries affected by civil wars (Libya and Syria) bearing the economic brunt, although high losses in terms of GDP were also borne by Egypt, Tunisia, Bahrain, and Yemen. Two years later, a study report released by the bank HSBC estimated that the Arab uprisings would cost the MENA economies about $800 billion in lost output by the end of 2014.

Lost output also means losses for foreign companies, in a region where they have been traditionally investing in strategic sectors such as energy, construction, infrastructure, and telecommunications, as well as tourism.

Just like political turmoil, those losses came largely unexpected. In addition, the recovery of normal economic activity was hindered both by ongoing unrest and by the widespread perception of increased risk coming from social and political sources.

According to the arbitration firm Norton Rose, typical sources of losses to foreign investors were physical damage to property during riots, cancellation of concessions by the incoming governments, or from major policy changes contradicting the investors' legitimate expectations. Nonetheless, as reported by Maher (2013) losses were also originated by soaring oil prices in the immediate aftermath of the Arab uprisings, as well as by the disruption of supply routes. According to the consulting firm Grant Thornton, six months into the uprisings, more than a fifth (22%) of privately owned companies reported a negative impact on their business. The figure is higher in North America, where 26% of businesses reported a negative impact. The MIGA World Investment Report 2013 (Multilateral Investment Guarantee Agency [MIGA], 2014) confirms that the recent evolutions in the political landscape of the MENA region took a heavy toll on economic growth, with most investors concerned about political violence, terrorism, and breach of contract. Widespread political instability in the aftermath of the Arab Spring has also made it more difficult for companies to claim compensation under the existing bilateral investment treaties (BITs) protecting foreign investors.

The increase in the real and perceived probability of losses inflicted to foreign investors from the end of 2010 onward is reflected by the slump in incoming FDI reported by the World Bank: net FDI in the MENA region is 2012 was 26% lower than in 2011, 38% lower if developing MENA countries only are taken into account. According to the *Financial Times*, the number of FDI projects in Libya and Yemen had declined by 80%, in Egypt by 29%, in Syria by 26%, and in Tunisia by 14% in 2012 compared with the previous year.

The picture just sketched out is one of much higher risk than the years prior to 2010: looking at the performance of PR indices against the backdrop of the drastic political change occurred could shed light on their shortcomings as well as on possible improvements.

Political Risk Forecasts and the Arab Spring

Let us go back to the first question asked at the beginning of the previous section. How did political risk models do in predicting the occurrence of widespread turmoil in the MENA region? Table 3 shows the political risk "top 15" of EIU, PRS, and SACE before the outbreak of the Arab upheavals. Because the rankings by OECD and ONDD are not based on continuous but on categorical values, the countries belonging to the top risk categories (6 and 7) are shown separately in Table 4.

What is evident at first glance is that none of the countries which were about to experience dramatic political change were included in the "top 15" of political risk in the ranking provided by PRS, SACE, and EIU. Tunisia and Egypt, the countries that experienced a drastic change of regime, ranked 93rd and 32nd, respectively, out of 140 countries according to the PRS's approach, 134th and 106th out of 165 according to the EIU's, 109th and 62nd out of 209 according to SACE. According to the EIU political instability index, Tunisia in 2009–2010 scored better for political stability and economic distress

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TABLE 3 Top Risk Countries According to PRS, SACE, EIU

#	PRS	#	SACE	#	EIU
1	Somalia	1	Somalia	1	Zimbabwe
2	Congo, D.R.	2	Iraq	2	Chad
3	Iraq	3	Afghanistan	3	Congo, D.R.
4	Sudan	4	Congo, D.R.	4	Cambodia
5	Cote d'Ivoire	5	Zimbabwe	4	Sudan
6	Haiti	6	Korea, North	6	Iraq
7	Guinea	7	Sudan	7	Cote d'Ivoire
8	Zimbabwe	8	Myanmar	7	Haiti
9	Nigeria	9	Uzbekistan	7	Pakistan
10	Myanmar	10	Liberia	7	Zambia
10	Pakistan	11	Eritrea	7	Afghanistan
12	Venezuela	12	Turkmenistan	7	Central African Republic
13	Korea, D.P.R.	13	West Bank Gaza	13	North Korea
13	Niger	14	Haiti	14	Bolivia
15	Ethiopia	15	Iran	14	Ecuador

Data for PRS refers to October 2010, for SACE to 2008, for the EIU to 2009–2010.

TABLE 4 Top Risk Countries According to OECD and ONDD

OECD		ONDD	
"Category 7" countries	Afghanistan, Belarus, Bosnia and H., Ethiopia, Iraq, Lebanon, Liberia, Malawi, Maldives, Mauritania, Moldova, Myanmar, Nepal, Nicaragua, Niger, Pakistan, Rwanda, Sierra Leone, Somalia, Sudan, Tajikistan, Togo, Ukraine, Venezuela, Yemen	"Category 7" countries	Afghanistan, Iraq, Palestine, Somalia
		"Category 6" countries	Burundi, Congo, Eritrea, Ethiopia, Guinea, Haiti, Iran, Kyrgyzstan, Korea (North), Myanmar, Pakistan, Sudan, Chad, Western Sahara, Zimbabwe

Data contained in the table refers to year 2010.

than Italy, France, and the United Kingdom (which occupied respectively the 110th, 121st, and 132nd position in the ranking).

The absence of any of the autocracies of the MENA region in the list of top risk countries (apart from Yemen) is equally striking in the case of the OECD classification. The same can be said for the ONDD: a closer look at ONDD war risk rating for 2010 reveals that, in a scale going from 1 to 7 where 1 is the lowest and 7 is highest risk category, Tunisia was awarded a 2 (just like countries such as Greece, Hong Kong or Japan), Egypt a 3, Syria a 4.

Adding the time dimension to this cross-sectional analysis, another remark can be made: if we compare PRS political risk rating dating back to October 2010 with the one related to January 2011, while Tunisia's score plunged (according to the PRS's coding system, the higher the risk, the lower the score a country receives), Egypt's remained almost unvaried. This epitomizes what can be considered to be another possible shortcoming of PR indices, that is, the fact that they generally do not seem to systematically take into account possible regional contagion effects. As well known, democratization "waves" have often unfolded in the past according to regional trends (see, e.g., Huntington, 1991). None of the models analyzed seems to incorporate this hypothesis. To be sure, if modeling social reality is quite a difficult task, modeling the impact of international variables on political risks is even harder. However, in light of the Arab Spring but also of general democratization theory, it might be timely to start and make some efforts in this sense.

Risk Dimensions and Built-in Causal Hypotheses: Political Risk and Regime Type

A datum that any conscious user of PR ratings should take into account is clear: any sub-dimension which is operationalized to represent numerically a component of risk is a statement about a causal relationship linking one or more "independent" or "explanatory" variables and a "dependent" or "outcome" one. A good example to illustrate the relevance of this assertion and its impact on PR assessment is the relationship between a country's political regime and its risk profile.

Although a rich literature exists about the determinants of FDI, little has been said about the mechanisms that link political institutions to risk for foreign investors—still, the question has emerged over time. In their PR meta-assessment study of 1994, for instance, Howell and Chaddick criticize *The Economist*'s model because it incorporates an inverse causal relationship between authoritarianism and political stability; that is, it considers authoritarianism as a factor that jeopardizes instead of enhancing the stability of a given polity. Historically,

Howell and Chaddick (1994) hold, "authoritarian rule has been both characterized and justified as necessary or contributing to stability" (p. 76). Therefore, following this line of reasoning, at least in the short-term authoritarianism could be positively linked to stability and the theoretical foundations of *The Economist*'s approach would be flawed. Interestingly and somewhat surprisingly, the more recent EIU Political Instability Index seems to have embraced such criticism, as when it comes to assess political stability, it assigns the same "stability score" to democracies and to autocracies, while attributing a lower score to hybrid regimes, although, as further illustrated below, this approach is far from being unproblematic.

Coming back to the main question at issue, there are a number of ways in which a country's institutional arrangements may influence the activity of foreign investors. Notably, a major source of concern regards the possibility of expropriations of foreign investments. A recent research by the World Bank (Eden, Kraay, & Qian, 2012), besides providing empirical support for the distinction between sovereign risk (risk of government default) and political risk (of which expropriation risk can be considered to be a subtype), confirms the existence of a correlation between poor policy performance and both risks. Although expropriation proper remains perhaps the most catastrophic event for the multinational enterprise, politically induced losses can also derive from far less "spectacular" moves by the host government, such as the so-called creeping expropriation, that is, the introduction of adverse fiscal regulation, which normally fall outside the scope of expropriation risk insurance.

Another obvious source of risk is the occurrence of political violence or regime change, like in the case of the MENA countries examined above. In this case, losses may derive from damages to plants and/or to the personnel, not to mention the possible repercussions in terms of share price due to the following climate of uncertainty that inevitably affects business operations. Although all political in nature, these risks are quite different and should therefore be measured recurring to different tools. For instance, while expropriation risk presupposes the existence of a government with the capacity to enforce regulation and materially execute expropriation, violence risk may instead be higher in cases in which institutions are weak. Building on the work of Jensen (2008) and Jensen and Young (2008), two sets of simple models are presented here to test the effect of different institutional arrangements on two categories of political risk: expropriation risk and war risk.

The baseline model is the ordered probit one estimated by Jensen (2008, p. 1046) to assess the impact of democracy on political risk pricing categories:

$$\text{Risk} = \alpha + \beta 1\ \text{Democracy} + \beta 2\ \text{GDP Growth} + \beta 3\ \text{GDP} + \beta 4\ \text{Europe} + \beta 5\ \text{Latin America} + \beta 6\ \text{SS Africa} + \beta 7\ \text{North Africa} + \beta 8\ \text{Eastern Europe} + \beta 9\ \text{Asia} + \beta 10\ \text{Oceania} + \varepsilon i$$

In the first set of models (see Figure 2) the dependent variable is expropriation risk measured in terms of insurance pricing for year 2012. The rating chosen is the ONDD one. Data on the explanatory variables is from years 2009–2010, meaning that in all calculations the output is lagged two years behind the explanatory variables. Thus, although the models are formally cross-sectional, in practice they contain information on the interaction between institutional environment and risk over time. The source of data on GDP and GDP growth (expressed in US dollars) is the World Bank World Development Indicators database. Data on democracy instead is from the well-known Polity IV *Political Regime Characteristics and Transitions, 1800–2011* data set (Jaggers & Gurr, n.d.).

The democracy indicator is an additive 0 to 10 scale derived from codings of four main components: the competitiveness of political participation, the openness and competitiveness of executive recruitment, and constraints on the chief executive. Another important feature of the models presented, which distinguishes them from the one originally estimated by Jensen (2008), is that a further "political regime" dummy variable is used to introduce a more refined distinction, to gain insights about the risk environment in the so-called hybrid regimes.

In fact, in recent years, growing attention has been paid to institutional arrangements that cannot be satisfactorily classified as democratic, but at the same time cannot be labeled as traditional authoritarian regimes either. A vast array of definitions was developed to designate such arrangements, such as "competitive authoritarianisms" (Levitsky & Way, 2002), "partial democracies" (Epstein, Bates, Goldstone, Kristensen, & O'Halloran, 2006), "electoral authoritarianisms" (Schedler, 2009), to quote only few of them. Conceptual endeavors by Diamond (2002) and more recently Morlino (2009, 2011) led to the following definition of *hybrid regime*: "A set of institutions that have been persistent, be they stable or unstable, for at least a decade, have been preceded by authoritarianism, a traditional regime (possibly with colonial characteristics), or even a minimal democracy,

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FIGURE 2 Political Regime and Expropriation Risk

	democracy1 b/t	hybrid1 b/t	exprop_res b/t
exprop2012			
democ	-0.023*** (-3.55)		
gdpg_log	0.305** (3.04)	0.184 (1.85)	
gdp_log	-0.842*** (-5.11)	-0.769*** (-4.51)	-0.729*** (-4.42)
europe	-0.559 (-1.19)	-0.415 (-0.93)	-0.519 (-1.18)
latamcarib	1.292** (2.58)	1.650*** (3.39)	1.755*** (3.75)
subsaharanafrica	0.912 (1.95)	1.009* (2.20)	0.952* (2.19)
northafricamiddlee~t	1.881*** (4.42)	1.624*** (3.88)	1.656*** (3.69)
eefsu	1.081* (2.43)	1.152** (2.94)	1.106** (2.80)
asia	0.843 (1.77)	1.014* (2.20)	1.176** (2.58)
oceania	0.224 (0.49)	0.749 (1.29)	0.350 (0.56)
o.northamerica	0.000 (.)	0.000 (.)	0.000 (.)
Aut_dum		0.928*** (3.35)	0.833** (2.86)
Hyb_dum		0.505 (1.82)	0.518 (1.85)
rent from natural ~o			0.019* (2.42)
cut1			
Constant	-7.661*** (-4.48)	-6.569*** (-3.58)	-6.261*** (-3.58)
cut2			
Constant	-6.839*** (-4.18)	-5.707** (-3.24)	-5.456** (-3.24)
cut3			
Constant	-6.134*** (-3.81)	-4.974** (-2.86)	-4.699** (-2.83)
cut4			
Constant	-5.077*** (-3.30)	-3.899* (-2.32)	-3.654* (-2.29)
cut5			
Constant	-4.133** (-2.74)	-2.961 (-1.79)	-2.717 (-1.75)
cut6			
Constant	-3.767* (-2.49)	-2.605 (-1.57)	-2.356 (-1.51)
N	127.000	127.000	139.000
Pseudo R2			
chi2	171.216	163.070	169.248

* p<0.05, ** p<0.01, *** p<0.001

FIGURE 3 Political Regime and War Risk

	democracyw1 b/t	hybridw1 b/t	war_res b/t
war2012			
democ	-0.026*** (-3.61)		
gdpg_log	0.108 (0.98)	-0.071 (-0.61)	
gdp_log	-0.770*** (-5.84)	-0.656*** (-5.02)	-0.709*** (-5.67)
europe	-0.469 (-0.89)	-0.111 (-0.25)	-0.715 (-1.17)
latamcarib	0.659 (1.41)	1.386*** (3.50)	0.570 (0.95)
subsaharanafrica	0.487 (0.90)	0.745 (1.67)	-0.235 (-0.37)
northafricamiddlee~t	1.916*** (4.02)	1.737*** (3.67)	0.962 (1.40)
eefsu	0.896 (1.92)	1.104** (3.07)	0.234 (0.39)
asia	0.652 (1.37)	1.011** (2.68)	0.116 (0.19)
oceania	0.275 (0.49)	1.305* (2.14)	0.039 (0.05)
o.northamerica	0.000 (.)	0.000 (.)	0.000 (.)
Aut_dum		1.418*** (4.13)	1.229*** (3.68)
Hyb_dum		1.075*** (3.54)	0.971*** (3.36)
rent from natural ~o			0.018** (2.75)
cut1			
Constant	-7.201*** (-5.26)	-5.422*** (-3.98)	-6.649*** (-4.86)
cut2			
Constant	-6.377*** (-4.68)	-4.459*** (-3.30)	-5.648*** (-4.13)
cut3			
Constant	-5.475*** (-4.05)	-3.442* (-2.55)	-4.718*** (-3.45)
cut4			
Constant	-4.741*** (-3.51)	-2.682* (-1.97)	-3.989** (-2.90)
cut5			
Constant	-4.041** (-3.02)	-2.016 (-1.48)	-3.242* (-2.38)
cut6			
Constant	-3.191* (-2.45)	-1.189 (-0.91)	-2.253 (-1.71)
N	132.000	132.000	147.000
Pseudo R2			
chi2	145.186	147.902	151.173

* p<0.05, ** p<0.01, *** p<0.001

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and are characterized by the break-up of limited pluralism and forms of independent, autonomous participation, but the absence of at least one of the four aspects of a minimal democracy" (Morlino, 2011, p. 56).

To our purposes, the empirical notion of hybrid regime hinges on the aspect of duration over time: following Morlino (2011), in order to single out empirical instances of hybrid regimes, data provided by the Freedom House (n.d.) was used to create a dummy variable called "Hyb_dum" for those countries whose regimes were classified as "partially free" for at least 10 consecutive years between 1989 and 2010. Countries which do not meet this requirement are classified as authoritarian or democracies, on the basis of the Freedom House (n.d.) and Polity IV (Jaggers & Gurr, n.d.) data.

As far as the first set of models is concerned (Figure 2), the existence of a statistically significant and inverse relationship between the level of democracy and expropriation risk is confirmed. Controls include the level of GDP and regional dummies (model 1: "Democracy1"). Democracy is a good predictor for lower risk of expropriation also when including in the baseline model a measure of rents from natural resources, which is associated with lower levels of democracy (in line with the extant literature on the so-called "resources curse"), but the hybrid regime dummy apparently bears no statistically significant effect on the explained variable.

When it comes to the second set of models (Figure 3), instead, results are different. The dependent variable here is ONDD category for "war risks," which include "risks of external conflict and the risks of domestic political violence. Apart from the extreme case of civil war, domestic political violence also covers risks of terrorism, civil unrest, socio-economic conflicts, and racial and ethnic tension."

Even after controlling for GDP and resource rents, the model proposed supports the hypothesis that, although operating both in an authoritarian and in a hybrid regime increases the likelihood of incurring in political violence compared to operating in a democracy, there is a statistically significant difference between authoritarian and hybrid regimes. That is, there is further empirical evidence, apart from that already revealed by the extant literature, suggesting that political risk is not regime neutral. At the same time though, such evidence seems to be in contrast with models such as the EIU's political instability index, which, as already explained, assumes that authoritarian and democratic regimes are equally stable, and more stable than hybrid regimes. Another lesson that is possible to draw at this point is that every single independent variable included in a PR model should be subject to careful consideration and where possible tested empirically.

Conclusions

As the world grows global, so do the challenges that businesses need to meet in order to succeed in the international arena. In the information age more than ever, the availability of reliable tools and sources of intelligence is key to any business venture. Yet, in spite of the existence of extremely sophisticated statistical techniques, modeling political risk today remains a difficult task. Equally difficult is to test the effectiveness of PR models, especially because the quest for data about actual versus forecasted losses is a time- and resource-consuming activity. The Arab Spring, as an example of widespread turmoil on a regional scale, offered food for thought with respect to the unsatisfying performance of PR forecasting models. As the events in the MENA region unfolded starting from December 2010, uncertainty in the business environment of the countries swept by social and political change suddenly skyrocketed, together with the likelihood of heavy losses for the companies operating in the region.

The models analyzed here epitomize some common criticalities that can be summarized as follows: (1) exception made for the PRS model—they are not actual forecasts but rather assessments of current conditions; (2) causal assumptions are often embedded into them without being tested rigorously; (3) the rationale/theoretical justification for assigning different weights to the independent variables they feature is not made explicit; and (4) they all seem to have failed in adequately capturing the "contagion effect" taking place as turmoil spread from one country to another.

The first two points appear to be particularly relevant as they are generalizable to all PR analysis endeavor. It is crucial for PR models to give formal recognition to the fact that PR analysis and assessment are forward-looking tasks, and explicitly provide probability estimates of possible outcomes. It is equally crucial to ensure that the causal relationships postulated by the models are defendable in light of the relevant literature or, where possible, are supported by empirical evidence as in the case presented here of the relationship between institutional arrangements and PR. This also holds true with regard to the usage of weights to attach different values to the explanatory variables. Finally, as far as the last point raised is concerned, models aiming at forecasting violent political change should include regional indicators of risk that help to detect possible contagion effects.

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