



Rabobank

Why people rebel

Analyzing the risk of political instability

May 2012

Economic Research Department

Table of contents

Management summary	3
Assessing political instability	3
Introduction	4
Why do people rebel?	4
1. Triggers	9
1.1 Economic decline	9
1.2 Commodity price volatility	10
1.3 Political change	13
1.4 Conflict trap	16
1.5 Regional instability	19
2. Organizing instability	21
2.1 Economic grievances	21
2.2 Political grievances	22
3. From protest to violence	23
3.1 Financial feasibility	23
3.2 Military feasibility	26
3.3 Mitigators	28
4. Conclusion and indicators of instability	30
4.1 Indicators:	30
Bibliography	33
Colophon	37

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Management summary

Assessing political instability

The unexpected events and the widespread consequences of the Arab Spring have shown that knowledge of (geo)politics is still an important aspect of financial risk analysis. In light of the turmoil that has spread through the Arab region as well as other parts of the world, this report aims to shed some light on the characteristics of political instability and conflict in present-day society.

The best way to evaluate instances of political instability is through what is called the feasibility hypothesis (Fearon & Laitin 2003). According to this hypothesis, political instability (or rebellions) will only occur when there is a trigger, and when instability is organizationally, financially, and militarily feasible. With regards to the triggers of unrest, we identify five events that increase the likelihood of the occurrence of instability: 1) sustained periods of economic decline, 2) commodity price volatility and increases in food prices, 3) political change, most notably a change in political leadership and democratization or autocratization, 4) recent instances of domestic instability, also known as the conflict trap, and finally 5) periods of regional instability. Once one of these triggers has occurred, instability must then also be organizationally, militarily, and financially feasible for it to be 'successful.' Organizational feasibility implies that there are sufficient political and/or economic grievances that can be used to 'organize' enough people who are willing to participate in the instability. The financial feasibility of instability is increased when a country has an abundance in resources, which could provide financial resources for rebel movements. Hostile governments or diasporas could also provide finances or weapons to rebel movements in an effort to undermine the country's government or support their ethnic griuos. Instability becomes militarily feasible when a government is too weak to successfully squash instability, or when a country has certain demographic and/or geographic characteristics that increase the chance of a successful rebellion, like population size or rough terrain. There are also factors that could mitigate the likelihood of instability occurring. Such factors include recent national traumas, the level of education in a country, and international relations.

Instances of instability are hard to predict, and carry with them the risk of becoming a self-fulfilling prophecy. However, the general characteristics described above and the indicators given at the end of this report can provide analysts with a better understanding of civil unrest and a solid framework through which the risk of instability can be incorporated into risk rating models.

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Introduction

Why do people rebel?

It is perhaps no surprise that instances of (political) instability are associated with significant costs to the society directly influenced by it, inferring massive human casualties, destroying infrastructure, deterring investments and disrupting trade flows. However, in this age of globalization, conflicts rarely affect only the country (or countries) in which they are physically present. Over the past couple of decades, we have seen an increasing amount of instances of instability that also had a significant effect on the global financial markets, as recent instances of instability in the Arab world has shown. Despite the fact that the world is becoming increasingly interlinked, and unrest can have significantly negative effects, political instability remains a relatively grey area for many country risk analysts in the financial sector. This paper aims to shed light on the characteristics of modern-day conflicts as an aid to country risk analysts, seeking to answer the question of why people rebel. Shedding some light on the area of political risk has become all the more pressing after the widely unexpected turmoil events of the Arab Spring, which ignited a sentiment that has proven able to spread the risk of political instability beyond the borders of the Arab countries.

The turmoil in the Middle East was set off by what seemed to be a small event. On December 18th 2010, 26-year old Mohamed Bouazizi, a Tunisian fruit seller, decided that he had reached his limit when Tunisian police accused him of selling his food without an official permit. They confiscated his fruit cart for the third time that year, as he did not have enough money to bribe them into letting him keep it. Living in a country with extremely high unemployment and a repressive and corrupt regime, his future looked grim. So, Bouazizi took to the center of his home town and set himself on fire in an act of pure desperation. Bouazizi's action would cause a political earthquake in the Middle East and North Africa. After only a couple of hours, the first Tunisians took to the streets, venting their anger about Tunisia's oppressive regime. The unrest gained momentum and demonstrations spread throughout Tunisia, finally forcing Zine el-Abidine Ben Ali, Tunisia's president of 23 years, to abdicate his position, as the country's security forces failed to support him. However, the turmoil proved not be confined to Tunisia alone. The demonstrations in Tunisia sparked major demonstrations in Egypt, Morocco, Syria, Yemen, Bahrain, Libya, Iran, Israel and Oman and caused several instances of unrest in Jordan, Saudi-Arabia, Iraq, Algeria, Lebanon and Kuwait. The string of protests that spread through the Middle East and North Africa (MENA) was coined the Arab Spring, and has had widespread consequences, igniting civil wars and deposing presidents.

Introduction

The world was stunned by the events in the MENA-region, a region that was until then mostly untouched by the three major waves of democratization that had previously engulfed the rest of the world. The region was thought to be resistant to popular uprisings because of the authoritarian and repressive regimes, which were mostly corrupt and reinforced by the extensive oil riches.

Although the bravery of many (young) Arabs who dared to challenge their dictators surely deserves an applause, the resulting instability also has a downside for the global and local economy. Indeed, the Arab Spring halted everyday life in many parts of the MENA-region, disrupting economic activity, endangering investments and impeding the region's oil exports. Furthermore, the Arab Spring has proven to be able to ignite a sentiment that crosses many borders, as the domino-like spread of protests throughout the MENA-region clearly shows.

Finding reasons for war and instability, such as the Arab Spring, has been a prominent subject in literature for many years, and a multitude of explanations have been given for it. In the early 16th century, Niccolo Machiavelli (1469-1527), wrote on the subject in his *Discorsi*. In this work, Machiavelli (1513, p. 68) describes that man is envious by nature, and that conflict arises because of this feature:

'Men do not feel they are secure in the possession of their property unless they are acquiring more from someone else (...). In addition, their improper and self-interested behavior excites in the hearts of the powerless the desire to have power, either in order to take their revenge on their enemies by taking what they have from them, or in order to acquire for themselves that wealth and those honors they see their opponents abusing.'

Thus, according to Machiavelli, it is man's vice that is the primary reason for conflict; self-interest, either in protecting what is theirs or in attaining what is not. Some three centuries later, Alexis de Tocqueville (1805-1859) posed another theory in response to the events of the French Revolution. This theory would form the basis for the romantic view of revolutions that is still popular today. According to de Tocqueville (1856, p.250), the French revolution was ignited by frustrations over the country's repressive regime:

Introduction

'The careful student of France during the 18th century must have noticed in the preceding pages the birth and development of two leading passions, which were not coeval, and not always similar in their tendencies. One-the deepest and most solidly rooted- was a violent, unquenchable hatred of inequality. (...) The other -of a more recent date, and less solidly rooted- prompted men to seek to be free as well as equal.'

Thus, de Tocqueville theorized that instances of unrest, such as the French revolution, are born out of the virtue of fighting against injustice and fighting for freedom. De Tocqueville's theory has been extremely popular, and provided the basis for many other theories on instability.

One of the most influential 20th century books on instances of instability was 'Why men rebel' (Gurr 1970). In his work, Gurr explains instances of political instability through the theory of relative deprivation (RD). He defines RD as the discrepancy between what people feel they are entitled to have, and what they have in reality. When this discrepancy grows large, between expected and real political power for instance, frustrations start to grow. It is out of these political, social, or economic frustrations, also known as grievances, that violence is born. Thus, following de Tocqueville, Gurr explains rebellions from the perspective of virtue, as they are driven by a sense of injustice. The RD-theory has been very influential among social scientists especially. In the early '90s, the ethnic discourse was added to the RD-theory, emphasizing interracial hatreds and grievances over ethnically based inequality as an important incentive for conflict (Brubaker & Laitin 1998).

Explaining rebellion through virtue has become increasingly scrutinized over the last 20 years. Instead, focus was turned back to vice and towards a more economic, and perhaps less admirable, explanation for conflict; greed, a lust for power, and imagined grievances (Collier & Hoeffler 1998). The greed-hypothesis goes back to the Machiavellian vision of rebellion, stating that conflict originates out of self-interest; (personal) greed for more economic or political power, using conflict as a way to get rich or powerful by taking things from others, instead of producing it yourself (Hirshleifer 2001). Thus, rather than seeing rebellions as ideologically motivated protests, the greed hypothesis perceived them as being the ultimate manifestation of organized crime (Collier 2007a). Furthermore, grievances proved not to exert any significant influence on the probability of civil unrest. It was found that a country with a high level of grievances need not necessarily witness instances of civil unrest (Collier 2009). Rather, grievances became seen more as a framework through which a rebel group could organize people to join the rebellion and justify its existence (see chapter 2).

Introduction

Referring to the well-known prisoners' dilemma in which one can choose to defect or cooperate, Jack Hirshleifer (2001, p. 11) went one step further and reformulated the greed hypothesis into what was termed the Machiavelli Theorem; *'No one will ever pass up an opportunity to gain a one-sided advantage by exploiting another party.'* He used the Machiavelli Theorem as an addition to the Coase Theorem, which states that people will never pass up an opportunity to cooperate by means of mutually advantageous exchange. Hirshleifer hypothesized that when a society was not able to find an equilibrium between these two hypotheses, the Machiavelli Theorem would take over, with rebellions as the end result.

In the early 21st century, the greed hypothesis and Machiavelli Theorem were transformed into the feasibility hypothesis by Fearon & Laitin (2003). This hypothesis states that rebellion will occur where it is military, organizationally, and financially feasible. Thus, it is the likelihood of successfully setting up, carrying out, and maintaining a rebellion that determines the risk of domestic stability. Again, grievances are of less importance in this hypothesis.

This report provides a literature review on the main indicators of instability. Recent research is increasingly pointing towards the feasibility hypothesis as providing the best explanation for instances of civil unrest, so this theory will also act as the backbone of this report. We do however add to the theory of Fearon & Laitin (2003) the conclusion of Collier & Hoeffler (2004), that both a motive (trigger) and opportunity (organizational, military, and financial feasibility) must be present for conflict to break out.

Instability is defined in this report as periods of violent conflict, which directly cause civilian deaths. Much of the research done on the subject of instability has been focused towards civil wars, which means that this research is also somewhat skewed towards the more violent incidences of instability.

Furthermore, focus is pointed more towards intrastate conflicts, which have been the prevalent source of instability over the past twenty years, than towards interstate conflicts. Although the word 'rebellion' tends to have a more negative connotation, it is used in this paper as describing a conflict instigated by a party other than the central government itself, without making any judgment on the morals of the 'rebels.' The theory discussed here is applicable mostly to what are considered developing countries. However, the basic hypothesis we hold with regard to the likelihood of instability, the feasibility hypothesis, can be considered the same for all countries. Finally, before proceeding, an important caveat must be added to the literature on instability; attempts to predict periods of instability are in many ways a self-fulfilling prophecy. When a country is thought of having a higher likelihood of the eruption of conflict, the (economic)

Introduction

consequences of this conclusion, such as capital flight or a decrease in investments, could indeed make instability a nearly unavoidable outcome. Furthermore, it should be kept in mind that the direction of causality between conflict and the different triggers of conflict described in this paper goes both ways, as can clearly be seen in the conflict trap (p. 14).

The report is structured as followed; first, a summary will be given of the most important sources (triggers) of periods of instability. In part two will discuss how a framework can be built for conflict, referring to organizational feasibility. Part three will discuss how small-scale (non-violent) protests can transform into severe periods of instability – military and financial feasibility. Finally, the conclusion will provide a practical framework with quantifiable indicators that could help assess the likelihood of instability in a country.

1. Triggers

This chapter looks at what triggers periods of instability. We find that the most important triggers include economic decline, political change, and recent periods of domestic and regional instability.

1.1 Economic decline

A failure of economic development and economic decline are seen as the most important triggers of instability worldwide (Collier et al. 2003, Fearon & Laitin 2003, Justino 2009, Elbadawi & Sambanis 2000, Hegre & Sambanis 2006). This effect is largest in what are considered low-income countries.¹ The confluence of low incomes and economic decline causes a significant increase in the likelihood of domestic instability, and has sparked many rebellions. The risk of domestic instability increases because an economic downturn has a major effect on two groups; citizens and the government.

During an economic downturn, the majority of the population will experience a deterioration in their available income. This has two important consequences, which both increase the likelihood of civil unrest; firstly, and quite straightforward, with a decrease in available income, people can buy less. This can provide an incentive for rebellion in the sense that people want to get back the economic power they have lost. Secondly, if income decreases, so-called 'opportunity costs of rebellion' decrease (Collier 2007a). The poorer people are, and the less prospect they have of any improvement in their economic situation in the near future, the less they have to lose –so the lower are the opportunity costs- by joining a rebel group/being an active part in instances of civil unrest (Justino 2009). In some instances, joining a rebel group even provides people with better prospects, as the potential gain from rebellion could be higher than what could be achieved by working. With low opportunity costs of rebellion and perhaps even better prospects than people have without resorting to rebellion, the likelihood of instability increases.

An economic decline also has an effect on the government. Although governments tend to increase their spending during periods of economic decline in order to mitigate the threat of instability, they cannot keep up this spending if the economic downturn lasts for a longer period of time. Governments are then forced to cut back on their spending and introduce austerity measures (Fearon & Laitin 2003).

¹ World Bank definition: Classification is deduced from a country GNI per capita: High income; > \$12,276, Upper middle income; \$3,976-\$12,276, Lower middle-income \$1,006-\$3,975, and low-income >\$1,005

1. Triggers

Dissatisfaction about the loss of economic power by the citizens could imply an increasingly negative rhetoric towards the government. Furthermore, in weak governments, decreased government spending generally further undermines government effectiveness, possibly providing people with an opportunity for rebellion (as will be discussed later on in chapter 3).

It is estimated that low-income countries typically have a 17.1% probability of the occurrence of periods of severe civil unrest – i.e. civil war. However, if a country's GDP growth rises by two percent, the probability of civil unrest will drop to 14.5% in the short term, and to some 12% if economic growth proves to be sustainable for ten years (Collier et al. 2003). In the occurrence of economic decline, it is estimated that for every percentage point drop of the per capita GDP growth rate, the risk of civil unrest will immediately increase by the same percentage (Collier 2007a).

In 2011, it became clear that economic decline does not only pose a threat to stability in low-income countries. Protests in Greece, Italy, the U.S., and many more Western countries, proved that established economies are also still very vulnerable to changes in income, although the likelihood of violent episodes of rebellion is smaller in these countries.

1.2 Commodity price volatility

Volatile commodity prices can trigger periods of instability through two channels; 1) the effect of commodity price volatility on economic growth and, 2) the effect of commodity price volatility on available household income. Problems related to commodity price volatility are especially pressing in low-income countries that have an undiversified export basket and/or depend on primary commodities for a large part of their income or spending. In a recent report on agricultural price volatility, Rabobank (2011) economists predicted that the prices of agricultural commodities will continue to rise and become more volatile over the next decade. Problems related to commodity price volatility are thus also likely to become more widespread, and the threat they pose to domestic and international stability will become more acute.

Let us begin with the effect of volatile commodity prices on a country's economic growth figures. Countries that depend on primary commodities for a large part of their earnings see a significant amount of volatility in their GDP growth figures (van der Ploeg & Poelhekke 2010). This is because GDP is largely defined by the price level of commodities, and that it moves upwards (downwards) when commodity prices rise (fall). Furthermore, primary commodity exporters also tend to see more volatility in their terms of trade -the ratio of (commodity) export prices to (commodity) import prices-, have smaller inflows of foreign direct investment (FDI), and have lower GDP growth rates than countries

1. Triggers

that have a more diversified economy –diversification has been proven to decrease the probability of conflict (Boix 2008)- or export commodities with more stable prices (van der Ploeg & Poelhekke 2009).

Volatile commodity prices translate directly into the economy of commodity exporters in the form of booms and busts. Although every economy deals with booms and busts to a certain degree, they are unique in their number and intensity in commodity exporting economies, as can be seen in table 1.

Table 1: The incidence of booms and busts between 1970 and 2008

Country	Number per country	Size (amplitude) in per cent	Length (duration) in years
<i>Fuel commodity exporters</i>	2.6	14.7	3
<i>Non-fuel commodity exporters</i>	1.9	15.2	3.2
<i>Other countries</i>	0.5	9.9	4

Source: Spatafora & Tytell (2009)

The boom-bust scenario forms a structural problem for commodity exporters and has two important consequences; it increases uncertainty and erodes governance (Spatafora & Tytell 2009). Both have a negative effect on GDP growth figures, and can so become potential triggers for periods of instability.

Uncertainty is a problem in commodity dependent countries because changes in commodity prices, and thus the incidence of booms and busts, are very hard to predict. This uncertainty has several implications for economic growth figures. Most importantly, investments are perceived as being riskier when uncertainty increases. This discourages not only domestic investment, but also puts a cap on FDI-flows. Without a sufficient level of investment, attaining a sustainable growth path will become more difficult and vulnerability to commodity price shocks will increase even further (Collier 2007). Governance is also eroded through boom and bust cycles. During booms, the pay-off for corruption increases in comparison to the pay-off of working on pro-growth activities – especially in countries with weak government- possibly creating a larger group of corrupt government employees. Furthermore, the extravagant spending decisions made during booms and the subsequent invasive spending cuts during

1. Triggers

a downturn undermine effective economic governance. Low quality governance can impede economic efficiency, thus having a negative effect on economic growth.

Besides its effects on a country's economic growth figures, commodity price volatility also has an important effect on available household income. The correlation between volatile commodity prices, household income, and the likelihood of domestic instability is especially important in low-income countries, as a large part of the primary commodities such as wheat and oil are inelastic or

Figure 1: Commodity Food Price Index 2007-2011



Source: Economist Intelligence Unit

non-substitutable goods. Price-increases thus have little effect on the demand for these goods, as they are basic necessities. In low-income countries, food and fuel are responsible for a large part of households' consumption baskets, as it alone accounts for 40-60% of expenditures. When comparing this to the OECD-average, where food accounts for a mere 10% of expenditures, it is obvious that price changes in non-substitutable primary commodities have a larger income effect in low-income countries than in high-income countries (Adam 2011: 68). Consequently, volatile commodity prices have a large effect on available income in low-income countries. A rise in food prices entails the biggest threat to

domestic stability in low-income countries.

Over the last decade, there have been two major spikes in food prices; in 2007-2008 and in 2010-2011 (see figure 1). These surges in food prices were identified as triggers for (food) riots in Africa, Asia, Europe, and the Americas. More recently, costlier food is seen as one of the major causes for the Arab Spring and the famine in the Horn of Africa (Bellamare 2011). An increase in food prices has several effects. Countries that export agricultural commodities generally see an increase in (nominal) per capita GDP, flowing mainly from the terms-of-trade effect (Arezki & Brückner 2011). However, this rise in per capita GDP is likely to give a distorted view of the economic situation in the country. Generally, in poorer countries, a small part of the population –the elite of landowners- profit from the rise in food prices, while the majority of the population does not. Consequently, income inequality generally rises during these periods (this can be seen in a rise in the Gini-coefficient). Besides the increased income inequality, people are also faced with higher food prices. The relatively small increase in GDP is thus offset by the large decrease in available income for poorer households. The economic decline a large part of the population experiences as a result of rising food prices will cause a rise in

1. Triggers

the risk of domestic instability and the likelihood of (food) riots. With food prices expected to rise during the next couple of years due to limited supply and increasing demand, the effects of rising food prices on domestic stability will become bigger (Rabobank 2011).

1.3 Political change

'Governing a society that is democratizing is like driving a car while throwing away the steering wheel, stepping on the gas, and fighting over which passenger will be in the driver's seat. The result, when political institutions are weak, is often war (Mansfield & Snyder 2007, p. 169).'

Political change provides a third potential trigger for periods of instability. Although political repression or the lack of political opportunities is often thought of as being one of the major drivers of rebellions, empirical evidence refutes this claim (Collier et al. 2003). Instead, risk of instability appears to be highest when a country is experiencing a period of political change. A process of political change can be quite hard to determine, so it is perhaps easiest to define it to be either a change in political leadership or a change from an autocratic regime to a democratic regime (or vice versa).

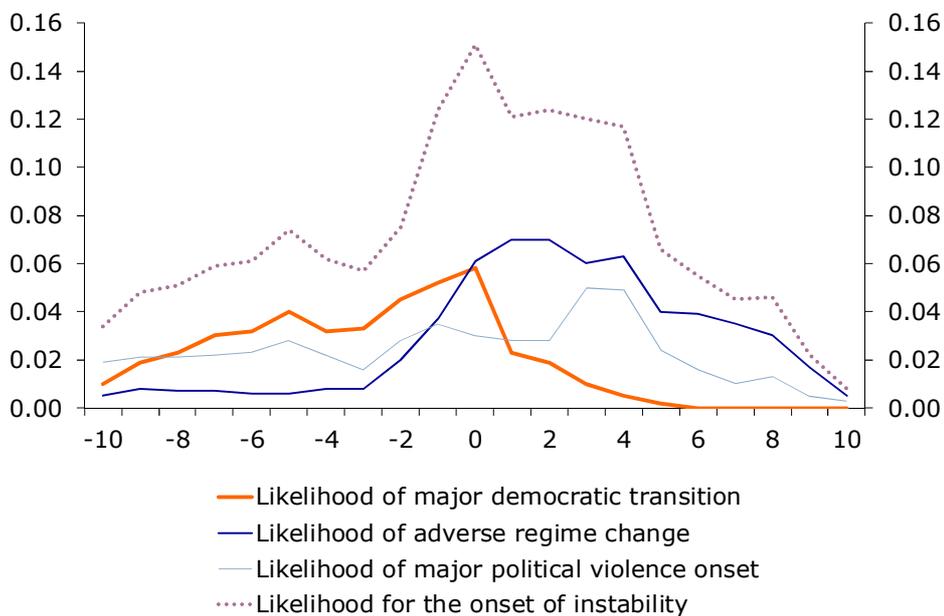
A change in political leadership is regarded as an opportunity to capture political power, which the population can use to better their political position by turning against the government or each other. This is especially true in countries where the political leader is not publically elected, as people in these countries generally lack the possibility to better their political position through non-violent actions (e.g. voting).

A regime change can be potentially dangerous because it often brings with it a weakening of state institutions, an increase in high-energy mass politics, and unstable political coalitions (Mansfield & Snyder 2007). It is easiest to determine a regime change by using a system that divides regimes into three types; democratic at one end, autocratic at the other, and anocratic in the middle. Whichever regime a country has, political change can always force it towards one of the other two types. A democratic regime is seen as a regime that 'has institutionalized procedures for open, competitive, and deliberative political participation; chooses and replaces chief executives in open, competitive elections; and imposes substantial checks and balances on the discretionary power of the chief executive (Marshall & Cole 2011, p. 9)'. A regime is considered autocratic when 'the participation of citizens is sharply restricted or repressed; chief executives are selected to clearly defined –usually hereditary–

1. Triggers

rules of succession from within the established political elite; and chief executives exercise power with no meaningful checks from legislative judicial, or civil society institutions (Marshall & Cole 2011, p. 9).’ Anocracy is caught somewhere in the middle of these two regimes, and is described as ‘a regime that permits some means of participation through opposition group behavior but that has incomplete development of the mechanisms to redress grievance (Regan & Bell 2010).’ Thus, an anocracy is a transition regime between autocracy and democracy. With regard to domestic instability, it is the anocracies that are at greatest risk of experiencing civil unrest.

Figure 2: Political change & likelihood of instability



Source: Polity IV

Figure 2 shows the results of the research of Marshall et al. (2010) into the relationship between regime type and civil unrest. The x-axis denotes regime type by taking the Polity IV-score (see box 1.1); a score between -10 and -5 is an autocratic regime, a score between -5 and +5 is an anocratic regime, and a score between +5 and +10 is a democratic regime. The y-axis denotes the likelihood of the occurrence of three kinds of instability; a major transition

1. Triggers

towards democracy, a major transition towards autocracy (adverse regime change), and instances of major political violence. The dotted line represents the general likelihood for the onset of political instability. The graph shows an

Box 1.1 Polity IV

The Polity-project is an elaborate database on regime changes and the effects of regime authority. Regimes are divided into three types based on their Polity-score. Countries with a score between -10 and -5 are identified as autocracies, scores between -5 and +5 are characterized as anocracies, and countries that score between +5 and +10 are categorized as democracies. The Polity-score is attained by looking at six components, that identify the qualities of executive recruitment, constraints on executive authority, and political competition. The polity-scores are updated every year, and the project has data on regime-characteristics of all countries from 1800 onwards. Every year, the Polity-team publishes a 'Global Report', which records the most significant political changes of the past year together with a state-fragility index.

Source: <http://www.systemicpeace.org/polity/polity4.htm>

inverted-U type of relationship, indicating that anocracies face the highest risk of experiencing periods of civil unrest (Fearon & Laitin 2003, Vreeland 2008, Goldstone et al. 2010, Regan & Bell 2010). Furthermore, anocratic regimes also exhibit the highest likelihood a regime change (both towards autocracy and towards democracy), and the onset of political violence. The fact that anocracies, and not autocracies, face the highest risk of experiencing civil unrest can be explained by referring to the feasibility hypothesis, which was mentioned in the introduction of this report (see page 7). In an anocracy, a regime type that is basically in the middle of a process of political change, citizens are given the opportunity and motivation to rebel (Fearon & Laitin 2003). Anocracies are constantly shaken up by the process of political

change, with weak institutions as a result, and are consequently unable to crush rebel groups if they appear, as would happen in autocracies (see model for political change in Boix 2008 for more on this). A transition from a more democratic regime towards a more autocratic regime entails the highest risk of political instability. This is due to the fact that in the process of autocratization, the majority of the people generally lose some of their political and/or economic power, which they will fight for to get back.

Providing an opportunity as well as a motivation, periods of political change and instability tend to go hand in hand. This is especially true in low-income countries with weak institutions, but also is a considerable source of instability in countries with well-established institutions. A move into anocracy (especially from democracy), which can be identified by using the Polity IV index, entails the biggest risk of domestic instability. As can be seen in figure 2, when a country is in the midst of a transition (with a polity score of 0), the probability of civil unrest breaking out is some 16%.

1. Triggers

1.4 Conflict trap

Once a country has experienced a period of domestic instability, the likelihood of new unrest increases. This is because instability bequeaths instability; risk of instability is higher when the country has recently experienced other episodes of instability. This phenomenon is known as the conflict trap and flows from the fact that the economic and human development related costs of instability, such as capital flight, increased military spending, heightened mortality rates, and a deterioration of state institutions, haunt the country for many years after the period of civil unrest has ended (Collier et al 2003). The most intrusive effects of instability are the economic and human development costs. Both impede the country's economic and political development, and present potential triggers for new periods of instability.

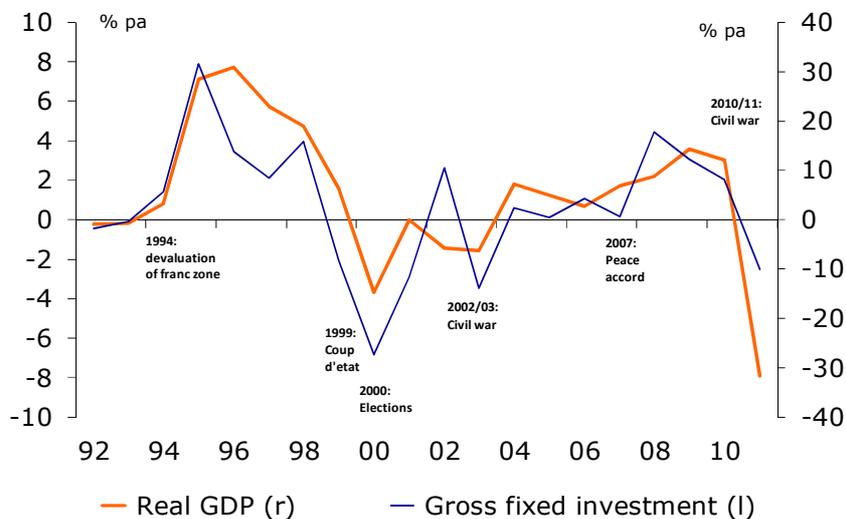
Increased military spending and capital flight together with a decrease in investments are considered to be the main economic costs of political instability. During civil unrest, a country's resources are no longer (fully) used to facilitate economic growth. Instead, they become focused on police and/or military activity to counter the instability. Whereas military expenditure on average accounts for some 2.8 percent of GDP during peacetime, this can increase to as much as 5 percent during instances of political instability (Collier et al. 2003). The main problem of this increased military spending is that it does not immediately return to normal levels when political instability comes to an end as suboptimal usage of resources also continues. It is estimated that during the first decade of peace, as much as 17 percent of GDP is lost to increased military spending. Adding to this loss of GDP as a result of increased military expenditures, are the economic losses incurred due to capital flight and lower investment. Prior to civil unrest, a country on average holds approximately 9 percent of its private wealth abroad. After unrest has come to an end, this level has risen to 20 percent, and continues to rise to 26 percent after the first decade of peace. The reason for this capital flight is the increased economic uncertainty that civil unrest causes. In order to evade the risk of losing money during turmoil, capital will generally be withdrawn from the country and invested abroad. Domestic instability will discourage (foreign and local) investment for the same reason, as risk of losing the investment increases. Together, capital flight and lowered investment create a vicious cycle which can lower economic activity for years after domestic instability has occurred. Box 1.2 shows an example of a country that seems to be caught in the conflict trap (Côte D'Ivoire).

1. Triggers

Box 1.2: The conflict trap: An example

As can be seen, the graph has several striking characteristics that support what was described above. The first surge in investments in 1994 is due to a 50% devaluation of the CFA franc. From then onwards, the impact of political instability on the level of investments in Côte d'Ivoire can clearly be seen; in 1999, Côte d'Ivoire's economy was disrupted by a military coup, instigating a decrease in investments that would last well into 2001. Unfortunately, a civil war broke out just as the level of investment showed signs of recovery, and investments fell again. After the 2002 civil war, investment levels stayed relatively stable. They began to rise again after a peace accord was signed between warring parties early 2007. However, investments were put under pressure again when elections were postponed late 2008. Although general elections were finally held at the end of 2010, the results were much contested, leading to an explosion of built-up tensions. Côte d'Ivoire was hurled into a second civil war, deterring investments even further despite the fact that the country was an important exporter of cocoa. GDP growth was marginal in this period, showing no signs of any economic recovery. Combined with political tensions, the effects of decreased economic activity have pushed Côte d'Ivoire into the vicious circle of the conflict trap.

Figure 3: Real GDP & investment levels Côte d'Ivoire, 1992-2011



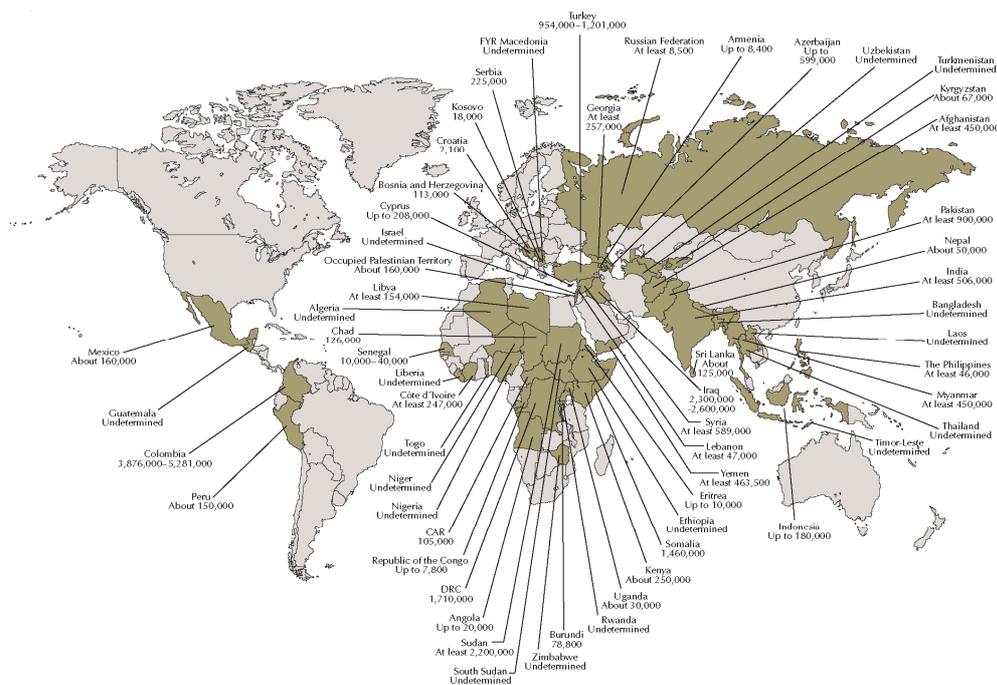
Next to economic costs, political instability also incurs human development costs. Most importantly, periods of instability tend to go hand in hand with a deterioration of general health conditions and displacements of parts of the indigenous population. Periods of instability affect health mainly by increasing the prevalence of infectious diseases. A deterioration in health and safety infrastructure combined with lower government spending on health -because resources are diverted to military spending- cause people to be more exposed to health risks (Hoddie & Smith 2009). As a consequence, morbidity numbers

1. Triggers

increase. Heightened morbidity and mortality rates reduce productivity, thus impeding economic growth, and disrupt civil society, subsequently heightening the likelihood of new periods of civil unrest.

With many people fleeing violence and/or economic adversity, instability can displace hundreds to millions of people, adding to population pressures in other parts of the country or region (Sidel & Levy 2009). Internally displaced people (IDP's) - people who have been forced to flee their home but remain within their country's borders- are a major problem in many parts of the world. Globally, approximately 27,500,000 people were estimated to be internally displaced in 2010 (see figure 4: IDMC estimation, December 2010). These IDP's put pressure on the region they migrate towards, which has to find housing, jobs, and education for them in different parts of the country. Sometimes, the housing, food, and jobs needed to accommodate the inflow of people cannot be provided.

Figure 4: Number of IDPs worldwide



Source: Internal Displacement Monitoring Centre, IMDC

All in all, instability brings with it a wide array of new problems, which do not cease after civil unrest has come to an end. The economic and human development costs mentioned above impede economic development, and can in this way become triggers of new periods of unrest. Combined, it is estimated that the indirect costs of instability cause 50% of all countries who have experienced civil unrest to fall back into conflict within ten years (Collier et al 2003).

1. Triggers

1.5 Regional instability

Regional instability provides a final potential trigger for domestic instability, due to the threat of spillovers. Examples of instability-spillovers are the explosion of coup d'états in South America in the 1970s, major outbursts of (political) violence in the interlacustrine region (Rwanda, Uganda, Burundi, DR Congo) in the early 1990s, and the recent wave of demonstrations in many Arab countries during the Arab Spring. Civil unrest in neighboring countries can increase the risk of domestic instability in several ways; through economic and social pressures, and through direct civil war spillover (Collier et al. 2003, Ades & Chua 1997).

The domestic economy is put under pressure by regional unrest through increased military spending and disruptions in regional trade flows. As was discussed earlier, military spending increases during periods of instability. However, it seems that indirectly, this also causes an increase in military spending in neighboring countries. According to Collier et al. (2003), a 2 percent increase in country A's military spending can cause up to a 0.7 percent increase in military spending in its neighboring country B. This is due to the fact that country B perceives country A to be a bigger threat when it increases its military spending, so country B increases its defense expenditures accordingly in order to mitigate this threat. Consequently, instability in one country can lead to suboptimal resource mobilization in neighboring countries as well, impeding regional economic development (Ades & Chua 1997).

The disruption of trade flows due to instability in neighboring countries puts the economy under further pressure. When instances of instability occur, travelling through important trade routes tends to get increasingly dangerous, impeding trade and transport (Ades & Chua 1997). In this way, economic activities are dampened throughout the region as a result of instability in one of the countries.

Social pressures are mainly the result of the consequences of instability for human development described earlier; a deterioration in health conditions and an increase in refugee flows. Refugee flows are usually not limited to the country experiencing instability, but often spill over to neighboring countries as well. This increased inflow of people forces the neighboring country to divert more resources to accommodate the refugees, pressurizing the country even further. Adding to this, the prevalence of infectious diseases often soars when refugee inflows grow, causing a deterioration of health conditions in the entire region (Collier et al. 2003).

A final spillover is direct conflict spillover. Direct conflict spillover can happen in two ways; Firstly, when neighboring countries have strong cultural, political,

1. Triggers

and economic similarities, the risk of direct conflict spillover is large. On the contrary, when neighboring countries have distinct cultural, political, or economic differences, this can be a mitigator of conflict spillover. A second way direct conflict spillover can occur is when the neighboring countries are flooded with rebel refugees. A good example of this was the civil war spillover in the interlacustrine region since the early '90s, where instances of instability in Rwanda, Burundi, and the Democratic Republic of the Congo have consistently spilled over each other's borders.

It is estimated that domestic instability in a neighboring country can decrease the annual growth rate by as much as 0.5 percent per year (Collier et al. 2003). Economic deterioration as a result of regional instability together with the social consequences described above both imply that regional instability poses a significant threat to domestic stability. The impact of these social and economic costs have been discussed earlier. Finally, neighboring countries can be at risk of direct conflict spillover.

2. Organizing instability

'With suitable instigation, a fostered sense of identity with one group of people can be made into a powerful weapon to brutalize another (Sen 2006).'

Observing instances of instability, we see that the presence of triggers alone is usually not enough to induce conflict. For a rebellion to be successful, it must also be organizationally feasible. This implies that it is possible for the rebel group to unite a group of people that is big enough to stand up against the government. In many cases, a rebellion becomes organizationally viable because rebel groups succeed in pinning two different identity groups against each other. These identity groups are generally emphasized or created through a grievance-based discourse; rich vs. poor, Hutu vs. Tutsi, or political outcast vs. political elite. The emphasis on, or the creation of, identity groups through social, economic, or political grievances makes it possible for the rebel group to organize a large group of people, to bring them together more efficiently, and to carry out a rebellion more successfully. Thus, the more difficult it is to create such a 'framework', based on different identity groups, the less likely domestic instability becomes.

The creation of such frameworks raises organizational feasibility through three channels: 1) Increased efficiency; members of the same (ethnic) group tend to speak the same language, have access to the same types of information, and share the same social networks. Also, 2) similar goals; people in the same (ethnic) group generally tend to have similar goals. Finally, 3) it can act as a justification for violence; when a relatively small group of people decides to opt for violence as a way to get more political power for instance, they must find a way to persuade a larger group of people to follow them if they want to succeed. In order to create this cohesion, they use a grievance-based framework, building a story around it to convince people to follow them in their rebellion (Habyarimana et al. 2008). Furthermore, grievance-based rebellions tend to be more appealing internationally, creating more opportunities for increased media-attention and foreign money for the rebellion.

The most important grievances that can be used to build a framework for conflict are economic and political.

2.1 Economic grievances

Economic grievances arise mainly from large income inequality and/or from high (sustained) unemployment figures. When income differences are large, rebel groups can emphasize this difference and pose the economically disadvantaged against the economically advantaged groups (Collier et al. 2003). Furthermore, high unemployment figures can create dissatisfaction within a society, especially when there is no stable social security system that can provide the unemployed with an alternative income. The potential for economic grievances can be seen in structurally high unemployment figures and a (relatively) high Gini-coefficient,

2. Organizing instability

or, if this is not available, a high percentage of income held by the top 10% of the population, poverty headcount ratio at \$1.25 PPP a day, or a high percentage of people working in agriculture combined with a (relatively) low share of agriculture in GDP (Worldbank).

Over the last two to three decades, economic grievances arising from environmental degradation have also become increasingly important. Scarcity of certain resources, such as food and water, or disputes over land or waterways have been used as a justification of several instances of instability, especially in the Middle East. Although some researchers paint a bleak picture of the future, predicting a major increase in the number of conflicts due to global warming (Burke et al. 2009), a direct causality between environmental characteristics or environmental degradation has not been found (Gleditsch 2007, Buhaug 2010, Urdal 2005). Instead, the environment seems to have a similar role to characteristics such as economic inequality, acting as a sort of organizational framework for rebellion. Possibilities for environmental 'grievances' can be ascertained by looking at a country's geographic features; access to water, shared waterways with other countries, availability of land, impact of global warming and so on.

2.2 Political grievances

Political grievances are related mostly to unequal political access, government illegitimacy, and/or corruption. Thus, once a trigger has occurred, countries who have a highly bureaucratic and corrupt government, who do not have a publically elected leader, or who have a clearly defined (and relatively inaccessible) political elite, have a higher risk of the occurrence of civil unrest than countries that do not (Vreeland 2008).

The potential for political grievances can be determined with the help of the Corruption Perceptions Index (Transparency International), the Voice and Accountability/Government Effectiveness/Control of corruption variables in the World Governance Indicators, and all different aspects in the Polity IV State Fragility Index (Center for Systemic Peace). Political grievances can also be expressed through the increased emphasis on, or creation of ethnic or religious groups (Collier et al. 2006, Fearon & Laitin 2003, Cederman et al. 2010). In this setting, a strengthened sense of ethnic identity can simplify the organization of a rebellion because it can give the people a cause to fight for, can make the rebel movement run more efficient, and gather more people to join the rebellion (Mansfield & Snyder 2007). A sudden change towards ethnic or religious identification or an increase in the instances of hate speech can thus also be an indicator of a heightened probability of domestic instability.

3. From protest to violence

When a country exhibits one or more potential triggers, and can provide some sort of grievance-based framework through which instability can be organized, the final requirements for a 'successful' rebellion are that it is financially and militarily feasible. Natural resource abundance, hostile governments, and rich diasporas add to the financial viability of rebellion, whereas a weak government together with geographic and democratic characteristics can make it militarily feasible. However, there are also factors that could mitigate the likelihood of domestic instability, such as membership of international organizations, foreign (political) pressure, or a recent national trauma.

3.1 Financial feasibility

Financial feasibility is of utmost importance in the transformation of (non-violent) protest into violent rebellion. If a rebel group cannot find enough means to support its actions financially, rebellion will be unsustainable as it will be easily crushed by the government, even if state institutions are weak. Three factors play an important role in determining whether a rebellion is financially feasible. Firstly, natural resource abundance can provide financial support for rebellion. Furthermore, hostile governments could choose to back the rebel groups financially once a rebellion breaks out. Finally, (rich) diasporas have also been a major source of money and weapons during numerous rebellions.

Resource abundance

Valuable resources, if easy to capture, can provide structural financial support to rebel groups (Collier & Hoeffler 2004). Thus, if a country has an abundance in natural resources, rebel groups will find it easier to become financially sustainable. Research has proven that the most dangerous level of natural resources is when it accounts for some 25-30% of GDP. At this level, natural resources are worth enough for rebels to use it for financial support, but revenues are too small to provide the government with enough money to support a big enough security sector to crush rebellions quickly. An example of the dangers posed by resource abundance is the civil war that ravaged Sierra Leone in the last decade of the 20th century, which was (partly) fuelled by the country's mineral riches, especially diamonds. For more information on the potentially hazardous features of resource abundance, see box 3.1.

3. From protest to violence

Box 3.1: The resource curse

It seems reasonable to think that resource-poor countries are closer to instability, as a small resource base would mean that these countries have less to export and could imply a small and poor economy. However, surprisingly, studies conducted in the late 1980s and 1990s have indicated the contrary, namely that countries with a valuable or large resource base are more likely to encounter instability (Humphreys 2005, Sachs & Warner 1995). The so-called 'resource-curse' theory was first described in the early 1990s and was made famous by Sachs & Warner (1995). According to this theory, countries with an abundance in natural resources tend to have a lower degree of development, a lower economic growth rate, and stronger volatility in economic growth than countries with a small resource base. Although the resource curse theory is not undisputed, it has been widely used to explain lagged development in certain parts of the world. The risk that an abundance of natural resources can pose to a country's stability is threefold; political, social, and economic.

When examining the political systems of resource abundant countries, such as Saudi Arabia, Angola and Nigeria, the most striking characteristics are that they generally suffer from a lack of transparency, a high degree of corruption, a failed rule of law system and weak governmental institutions. Furthermore, most of these countries tend to have an autocratic form of government (Collier 2008). The main reason for these distinct political characteristics are the resource rents. Resource rents are a major source of income for resource-rich countries, and in some instances they provide the government with a sufficient source of income so that it no longer needs to (fully) tax its citizens. With a smaller degree or even total absence of taxation, the incentive to respond to the demand of civilians or justify the government's actions is reduced in these states (Losman 2010). Without the need for a representative government, the power of the state remains in the hands of a political elite, fortifying the strength of autocratic governments in resource-rich countries (Humphreys 2005). Furthermore, affluent resources make it more appealing for government employees to seek resource rents than to work on pro-growth activities, spurring on corruption and working against the creation of an effective bureaucracy (Sachs & Warner 2001). This lack of strong government institutions consequently means that there is not only a lack of a system of checks and balances on the government, but that there is also a lack of control of the government over its citizens (Kurtz & Brooks 2011).

The willingness to capture future resource rents could give certain groups an extra push towards rebellion. Furthermore, once conflict has arisen, natural resource abundance could be an easy source of rebel finance and could so prolong the conflict (Ron 2005).

3. From protest to violence

With regard to the economic consequences of resource abundance, the natural resource curse is perhaps best known for its growth paradox. It appears that resource abundant countries have a slower economic growth rate than their resource-poor counterparts (Sachs & Warner 2001). The most important reason for this lag in growth is Dutch disease. Dutch disease occurs when the exchange rate appreciation resulting from profitable resource exploitation threatens the competitiveness of the domestic manufacturing sector (Kurtz & Brooks 2011). The high demand for specific natural resources could so render other exporting sectors out of business, as prices become too high for them to remain competitive. Furthermore, the economy will suffer significant productivity losses as the re-allocation of resources from the high-skill manufacturing sector to the low-skill natural resource sector will cause a downturn in innovative and entrepreneurial activity (Sachs & Warner 2001).

In resource abundant countries, economic growth does not necessarily imply changes in the country's economic structure or practices, as economic growth figures generally do, but could also be the result of a simple appreciation of the price of the resources in the ground. Thus, solid economic growth figures in resource abundant countries could cover up a lack of productivity growth (Losman 2010).

Altogether, it seems that natural resource abundance could bring with it a wide range of threats for the country's domestic stability. The combination of the political, social, and economic effects increases the likelihood of instability and could lead to protracted conflicts in resource abundant countries. There are indeed many examples of the negative effects of the resource curse, such as Saudi-Arabia's well-known autocratic rulers, Venezuela's laggard economy, and the war-ridden Democratic Republic of Congo.

3. From protest to violence

Hostile governments

A second factor that could aid the financial feasibility of rebellions are hostile governments. Tense relations between countries could create an incentive for foreign governments to back a rebel group financially, if they see a way in which they could benefit from this rebellion (Collier & Hoeffler 2004). An example of this was the financial support of the Rwandan government to different rebel groups active in the Democratic Republic of the Congo (for further information, see Letter to the UN Security Council on the DRC, 2008). However, Western governments are also known to provide financial support during rebellions, as the example of aid to Libyan rebels by among others the US, Great Britain, Italy, and Turkey, shows.

If the likelihood is high that a rebel group will be backed by a hostile government, be it through money or directly with weapons, the military advantage can be tilted towards the rebel group, increasing the military feasibility of a conflict.

Diasporas

A final potential source of rebel finance comes from diasporas (Collier & Hoeffler 2004). Migrants living in other parts of the world can still very much identify themselves with their homeland, and/or with the objectives of rebel groups, that they become an important source of finance for these rebel groups. In some cases, finance provided by diasporas enabled rebel groups to keep going for years, such as is the case with financial support provided by North-American Tamils to the Tamil Tigers in Sri Lanka.

Unfortunately, although diaspora-financing is sometimes a very important part of rebel groups, there is very little data on the money-flows from diasporas to rebel groups. It is thus hard to confirm whether diasporas could potentially be a factor in the financial viability of a rebellion.

3.2 Military feasibility

Next to being financially feasible, a rebellion must also be militarily viable in order for it to be 'successful.' If waging a violent battle against the government has little chance of succeeding, because the state has a monopoly of violence for instance, the likelihood of (sustained) domestic instability becomes markedly smaller. Two factors are important when determining military feasibility; the state of the government and demographic/geographic features. If state institutions are weak, the government will be less able to crush rebellions. If a country is mountainous, relatively big, and has a young and male-dominated population, military feasibility also increases.

3. From protest to violence

Weak governments

When a government is weak, it will be less capable of defeating an insurgency if one arises (Goldstone et. al 2010, Fearon & Laitin 2003). Consequently, rebellions carried out in countries with weak or inept governments have a higher military feasibility. Furthermore, without the capacity to effectively crush rebellions, weak governments generally resort to very violent measures in order to retain power. This policy of brutal retaliation has the important consequence that it tends to drive more, previously peaceful, citizens into rebel movements (Fearon & Laitin 2003).

Government weakness can also be a consequence of a phenomenon described earlier, namely resource abundance. The quality of government and governance are generally eroded in countries with ample natural resources at their disposal (for a full explanation of the risks and workings of resource abundance, see box 3.1), which consequently also adds to the military feasibility of rebellion in these countries.

Demographic and geographic characteristics

Certain geographic and demographic features can add to the military feasibility of violent conflict. Firstly, the size of the population is important (Fearon & Laitin 2003, Collier & Hoeffler 1998). The larger a population is, the more difficult governance becomes, as larger populations require more sophisticated (and larger) bureaucracies. If a government does not succeed in extending its institutions in concurrence with the rate of population growth, they will have more difficulty controlling its population. With a lack of control, creating a non-governmental 'army' of rebels becomes easier. Furthermore, larger populations can simply provide more sources of rebel recruitment, especially if a large part of the population lives under the poverty line (see opportunity costs of rebellion, paragraph 1.1). Brückner (2010) estimates that a 5% increase in overall population size can increase the risk of civil conflict by as much as six percentage points. Rebel recruitment is also easier when a country's population is skewed towards young people, especially if the majority of these young people is male. Collier & Hoeffler (2009) estimate that if the proportion of 15-29 year old men in a population doubles, the risk of conflict increases from 4.6% to 19.7%. The most likely explanation for this fact is that young men seem to be more predisposed to using violence, and are also more likely to be recruited as rebels.

With regard to geographic features, size and terrain are important factors that can decide whether a rebellion is militarily feasible (Collier 2007a, Buhaug et al. 2009). Countries that are bigger tend to be harder to control than

3. From protest to violence

countries that are small in size. Furthermore, rough or mountainous terrain can also hinder effective government control on certain parts of a country, simplifying rebel activity in those places (Fearon & Laitin 2003).

3.3 Mitigators

After showing the triggers of instability, and how a rebellion can become organizationally, financially, and militarily viable, a few factors that could mitigate the incidence of instability should also be mentioned. Firstly, all of the triggers mentioned in chapter 1 are mitigators when they occur in reverse. Furthermore, a recent national trauma, high degree of education, and strong foreign relations have the potential to lessen the likelihood of instability occurring.

Recent national trauma

In paragraph 1.4, the conflict trap theory is discussed. This theory implies that a country is at a higher risk of domestic instability when a country has recently witnessed periods of instability. However, a caveat must be added to this conclusion. In some instances, recent national conflict could actually act as a mitigator for future periods of instability, if it has left the country with some kind of national trauma (Smith 2011). Examples of this are found in the conflict history of Algeria.

During the wave of uprisings that swept across the MENA-region, and was coined the Arab Spring, Algeria was strikingly calm. One of the reasons that has been given for this is the brutalities the country has experienced during the 20th century. After a bloody independence war in the 1950s and early 1960s, which left some 700,000 people dead, and a civil war in the 1990s, in which approximately 150,000 Algerians lost their life, the country was left with a national trauma. With fresh memories of the consequences of political instability on a country's economy and social life, many Algerians opted against rebellion as violence erupted in their neighboring countries in an effort to protect their country from instability (Smith 2011).

3. From protest to violence

Education

Enrollment in education has proven to substantially reduce the risk of conflict (Collier & Hoeffler 2004). This is because education raises the opportunity costs of rebellion, which were mentioned in chapter 1, as higher education generally means a higher income later in life. However, an increase in the general level of education must be accompanied by a similar rise in GDP or, perhaps more importantly, productivity. The recent turmoil in Egypt is a perfect example of what can happen when this is not the case; although the level of education was on the rise, and an increasing share of the population had access to higher education, jobs did not follow a similar development. As graduates flooded the job market, many found themselves structurally unemployed, as many industries remained underdeveloped and government jobs remained accessible only to the political elite. Eventually, students and educated unemployed were the first to flood the streets in Cairo, as the opportunity costs of rebellion had become low enough for these groups.

Foreign relations

A third important mitigating factor in the likelihood of instability are foreign relations. Firstly, foreign pressure can be an important mitigant, either persuading the government to give in to some of the demands of the rebel groups, or impeding the feasibility of rebellion on the side of the rebels. Somewhat related to the option of foreign pressure is the membership of regional and international organizations and trade agreements. International organizations and trade-agreements signify an increased interdependency of partner-countries, and the big threat of spillovers thus make stability in these countries widely strived for.

4. Conclusion and indicators of instability

Although often unanticipated, conflict cannot arise unless a number of boxes have been checked. First of all, there must be a trigger for instability. The most important triggers of instability have proven to be 1) an economic decline, 2) political change, and 3) recent instances of domestic or regional instability. Furthermore, conflict will not occur unless it is feasible. Feasibility is determined by three factors; organizational feasibility, financial feasibility, and military feasibility. For a rebellion to be organizationally viable, a rebel group needs a 'framework', formed with a set of grievances. Financial feasibility is determined by the presence of (an abundance in) natural resources, a rich diaspora, or a hostile government that is willing to finance the rebels' cause. Finally, conflict can be carried out militarily if the government is too weak to adequately crush a rebellion, or if the country's demographic and/or geographic characteristics work in the advantage of the rebels. Even when all of these characteristics are present, certain mitigating factors, like foreign pressure or a national trauma, could still prevent violence from breaking out. If, and when, it does however, the effects of conflict on society should not be underestimated. As the conflict trap theory shows, the consequences of instability have a long-lasting impact on a country's economy and society, which could whirl it into a vicious cycle that is very hard to get out of.

Emphasizing again that predicting instability is extremely hard, and that such a prediction could become something of a self-fulfilling prophecy, the practical framework below provides some indicators that country risk analysts could take into account. Not every indicator has a fully quantifiable explanation, as many hinge on relative rather than absolute figures.

4.1 Indicators:

Triggers:

Economic decline:

- A direct decline in GDP levels, that proves to be sustainable for a longer period of time (+/- 1-2 years).
- Large, and sustained, increases in unemployment levels.
Higher per capita income decreases the risk of civil war. With all other variables at the median values, the annual probability of war onset declines from 2.4 percent for a per capita income of \$500 (in 1996 dollars) to 1.6 percent for \$1000 and less than 0.5% for \$5.000.

4. Conclusion and indicators of instability

Commodity price volatility:

- Commodity price volatility: the most dangerous level of primary commodity dependence is when the earnings from this primary commodity comprise some 26 percent of GDP. At this level the otherwise ordinary country has a risk of conflict of 23 percent. In contrast, if it had no primary commodity exports (but was otherwise the same), its risk would fall to 0.5% (Collier 2007a).
- Rise in commodity prices: Portion of households' consumption basket which is taken up by food and fuel; If this percentage is high, a rise in food and fuel prices will have a more significant effect in this country, and is more likely to lead to food riots.
- Gini-coefficient; if Gini-coefficient is high, any potential profits from a rise in commodity prices in a commodity dependent country will not be evenly distributed. Income inequality –the Gini-coefficient- will rise further, increasing chances of domestic instability.

Political change:

- Change in political leadership; a change in political leadership, be it publically elected or not, provides potential rebel groups with an opportunity to rebel.
- Regime change; using the Polity-index, a score between -5 and +5 (anocracy) entails a greater risk of instability. A score of 0 in the Polity IV index puts a country at the highest chance of domestic instability.

Conflict trap and regional instability:

- Recent (i.e. within the last ten years) and severe instances of domestic instability, which had a significant effect on investment and growth levels and general health conditions. It is estimated that of all countries that have experienced periods of violent instability, 50 percent will fall back into conflict within ten years.
- Significant periods of instability in neighboring countries that caused an increase in domestic military spending,

Organizing rebellion:

Economic grievances:

- Gini-coefficient/share of people working in agriculture (World Bank)
- Structurally high unemployment figures
- Increasing scarceness of resources such as water, land etc.

4. Conclusion and indicators of instability

Political grievances:

- Unequal political access & corruption (CPI, World Governance Indicators)
- A sudden increase in ethnic discourse, for example an increase in the instances of hate speech, is an indicator of a heightened risk of domestic civil unrest. There are few reliable indices that keep track of this, but the 'interpersonal safety and trust' indicator of the social development indices (<http://www.indsocdev.org/home.html>) are usable, but are updated only once every five years. An increase in 'identity' discourse can generally also be recognized in the national media of the country concerned.
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Resource abundance:

- When assessing natural resource abundance, one should not look at the total amount of resources in a country, but the total amount of exploitable resources. When it's unprofitable or even impossible to exploit natural resources, the risk they pose disappears.
- Natural resources are most likely to act as a catalyst when resource rents account for between 25-35% of total GDP; at this share of total income, natural resource abundance forms a sufficiently large source of income to negatively impact the political sphere, to heighten the chance of lower economic growth figures, to be an object of interest for people willing to capture future rents, and to provide sufficient income to finance the rebel group.
- Natural resources are unlikely to extend the duration of conflict if resource rents form an excessively large part of total GDP; a large part of resource rents flow back to the government. If they become high enough, even ineffective governments will be able to provide their citizens in their basic needs and services. Furthermore, the money can be used to construct a strong security sector, so that instability can be nipped in the bud. Saudi Arabia is a prime example.
- The resource curse is almost exclusively applicable to countries with an abundance in fossil fuels and certain minerals. Countries with an abundance in other non-agricultural and all agricultural commodities seem to suffer less from the negative effects of abundance.

Geographic and demographic features:

- Size of the country (CIA World Factbook)
- Size and age of the population (CIA World Factbook)
- Mountains, rivers etc. (CIA World Factbook)

Bibliography

Adam, C. (2011). 'On the Macroeconomic Management of Food Price Shocks in Low-income Countries.' In: *Journal of African Economies*. Vol. 20, AERC Supplement 1, pp. 63-69.

Ades, A., Chua, H. (1997). 'Thy Neighbor's curse: regional instability and economic growth.' In: *Journal of economic growth*, Vol. 2: pp.279-304.

Arezki, R., Brückner, M. (2011). *Food prices and political stability*. IMF Working paper, accessed at: <http://www.imf.org/external/pubs/ft/wp/2011/wp1162.pdf> (22 September 2011).

Bellamare, M. (2011). *Rising food prices, food price volatility, and political unrest*. Sanford: Duke University.

Boix, C. (2008). 'Economic roots of civil wars and revolutions in the contemporary world.' In: *World Politics*, Vol. 60: pp. 390-437.

Brubaker, R., Laitin, D. (1998). 'Ethnic and nationalist violence.' In: *Annual review of sociology*, Vol. 24: pp. 423 – 452.

Brückner, M. (2010). 'Population size and civil conflict risk: is there a causal link?' In: *The Economic Journal*, Vol. 120 (No. 544): pp. 535-550.

Brush, S. (1996). 'Dynamics of theory change in the social sciences: relative deprivation and collective violence.' In: *Journal of conflict resolution*, Vol. 40 (No.4): pp. 523-545.

Buhaug, H., Gates, S., Lujala, P. (2009). 'Geography, rebel capability, and the duration of civil conflict.' In: *Journal of conflict resolution*, Vol. 53 (No.4): pp. 544-569.

Burke, M., Miguel, E., Satyanath, S., Dykema, K., Lobell, D. (2009). 'Warming increases the risk of civil war in Africa.' In: *Proceedings of the National Academy of Sciences*, Vol. 106 (No. 49): pp. 20670-20674.

Cederman, L. , Wimmer, A., Min, B. (2010). 'Why do ethnic groups rebel? New data and analysis.' In: *World Politics*, Vol. 62 (No. 1): pp. 87-119.

Collier, P., Hoeffler, A. (1998). 'On economic causes of civil war.' In: *Oxford economic papers*, Vol. 50: pp. 563-573.

Collier, P., Elliot, L., Hegre, H., Hoeffler, A., Reynal-Querol, M., Sambanis, N. (2003). *Breaking the conflict trap: Civil war and development policy*. World Bank Policy Research Report, Washington: World Bank. Accessed at: <http://homepage.mac.com/stazon/apartheid/files/BreakingConflict.pdf>

Bibliography

- Collier, P., Hoeffler, A. (2004). 'Greed and grievance in civil war.' In: *Oxford Economic Papers*, Vol. 56 (No.4): pp. 563-595.
- Collier, P., Hoeffler, A., Rohner, D. (2006). *Beyond greed and grievance: feasibility and civil war*. Oxford: Department of Economics, Oxford University. Accessed at: <http://www.csae.ox.ac.uk/workingpapers/pdfs/2006-10text.pdf> (12 October 2011)
- Collier, P. (2007). *Managing commodity booms: lessons of international experience*. Oxford: Department of Economics, Oxford University. Published for the African Economic Research Consortium
- Collier, P. (2007a). 'Economic causes of civil conflict and their implications for policy.' In: Crocker, A., Hampson, F., Aall, P. (2007). *Leashing the dogs of war: conflict management in a divided world*, Washington: United States Institute of Peace; pp. 197-218.
- Collier P. (2008). *The bottom billion: why the poorest countries are falling and what can be done about it*. New York: Oxford University Press.
- Ehrlich, P., Ehrlich, A. (1970). *Population, resources, environment: issues in human ecology*. San Francisco: W.H. Freeman and Company.
- Fearon, J., Laitin, D. (2003). 'Ethnicity, insurgency, and civil war.' In: *The American Political Science review*, vol. 97 (No.1); pp. 75-90.
- Gleditsch, N. (2007). 'Environmental change, security, and conflict.' In: Crocker, A., Hampson, F., Aall, P. (2007). *Leashing the dogs of war: conflict management in a divided world*, Washington: United States Institute of Peace; pp. 177-197.
- Goldstone, J., Bates, R., Epstein, D., Gurr, T., Lustik, M., Marshall, M., Ulfelder, J., Woodward, M. (2010). 'A global model for forecasting political instability.' In: *American Journal of Political Science*, Vol. 54 (No. 1): pp. 190-208.
- Gurr, T. (1970). *Why men rebel*. Princeton: Princeton University Press.
- Habyarimana J., Humpreys, M., Posner, D., Weinstein, J., Rosecrance, R., Stein, A., Muller, J. (2008). 'Is ethnic conflict inevitable? Parting ways over nationalism and separatism.' In: *Foreign Affairs* (June 1 2008).
- Hegre, H., Ellingsen, T., Gates, S., Gleditsch, N. (2001). 'Toward a democratic civil peace? Democracy, political change, and civil war, 1816-1992.' In: *The American Political Science review*, Vol. 95(No.1): pp. 33-48.
- Hegre, H., Sambanis, N. (2006). 'Sensitivity analysis of empirical results on civil war onset.' In: *The journal of conflict resolution*, Vol. 50 (no. 4): pp. 508-535.

Bibliography

Hirschleifer, J. (2001). *The Dark Side of Force*. Cambridge: Cambridge University Press.

Hoddie, M., Smith, J. (2009). 'Forms of civil war violence and their consequences for future public health.' In: *International Studies Quarterly*, Vol. 53: pp. 175-202.

Humphreys, M. (2005). *Natural resources, conflict, and conflict resolution: uncovering the mechanisms*. In: *Journal of conflict resolution*, Vol. 49 (No.4): pp. 508-537.

Justino, P. (2009). 'Poverty and violent conflict: a micro-perspective on the causes and duration of civil war.' In: *Journal of peace research*, Vol. 46 (No. 3): pp. 315-333.

Kurtz, M., Brooks, S. (2011). 'Conditioning the "resource curse:" Globalization, Human Capital, and Growth in oil-rich nations.' In: *Comparative political studies*, Vol. 44 (No. 6): pp. 747-770.

Lange, M., Dawson, A. (2009). *Dividing and ruling the world? A statistical test of the effects of colonialism on postcolonial violence*. In: *Social forces*, Vol. 88 (No.2): pp. 785-817.

Losman, D. (2010). *The national oil company and national oil companies: an economic and political perspective*. In: *Middle East Journal* Vol. 20 Issue 3, pp. 427-445.

Machiavelli, N. (1513). 'Discourses.' In: Wootton, D. (1996). *Modern political thought: readings from Machiavelli to Nietzsche*. Indianapolis: Hackett Publishing Company, pp. 58-91.

Mansfield, E., Snyder, J. (2007). 'Turbulent transitions: why emerging democracies go to war.' In: Crocker, A., Hampson, F., Aall, P. (2007). *Leashing the dogs of war: conflict management in a divided world*, Washington: United States Institute of Peace; pp. 161-177.

Marshall, M., Jagers, K. (2010). *Polity IV project: Political regime characteristics and transitions, 1800-2010*. Accessed at: <http://www.systemicpeace.org/polity/polity4.htm>

Marshall, M., Cole, B. (2011). *Global Report 2011: Conflict, governance, and state fragility*. Center for systemic peace.

Ploeg, van der, F., Poelhekke, S. (2009). 'Volatility and the natural resource curse.' In: *Oxford Economic Papers*. Vol. 61: pp. 727-760.

Bibliography

Rabobank (2011). *Rethinking the F&A supply chain; impact of agricultural price volatility on sourcing strategies*. Rabobank International: Food & Agribusiness Research and Advisory

Raleigh, C., Hegre, H. (2009). 'Population size, concentration, and civil war. A geographically disaggregated analysis.' In: *Political geography*, Vol. 27: pp. 224-238.

Regan, P., Bell. S. (2010). 'Changing lanes or stuck in the middle: why are anocracies more prone to civil wars?'. In: *Political research*, Vol. 63 (No. 4): pp. 747-759.

Ron, J. (2005). 'Paradigm in distress? Primary commodities and civil war.' In: *Journal of conflict resolution*, Vol. 49 (No.4): 443-450.

Sachs, J., Warner A. (December 1995). *Natural resource abundance and economic growth*. NBER Working paper No. 5398, issued in December 1995. Updated version (November 1997) accessible through: http://www.cid.harvard.edu/ciddata/warner_files/natresf5.pdf

Sachs, J., Warner, A. (2001). 'The curse of natural resources.' In: *European economic review*, No. 45: pp. 827-838.

Sen, A. (2006). *Identity and violence: the illusion of destiny*. New York: W.W. Norton & Company.

Spatafora, N., Tytell, I. (2009). *Commodity terms of trade: The history of booms and busts*. Washington: IMF Working Paper

Tocqueville, de, A. (1856). *The old regime and the French Revolution (Ancien régime et la Révolution)*. New York: Harper & Brothers

Urdal, H. (2005). 'People vs. Malthus: population pressure, environmental degradation, and armed conflict revisited.' In: *Journal of peace research*, Vol. 42 (No.4): pp. 416-434.

Vreeland, J. (2008). 'The effect of political regime on civil war: unpacking anocracy.' In: *Journal of conflict resolution*, Vol. 52 (No. 3): pp. 401-425.

Colophon

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