

Do Crisis Response Operations Affect Political and Economic Stability?

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Berta Heybey
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Outline



➤ Background

- Data
- Case studies
- Cross-country analysis
- Implications and next steps

Military operations and stability

- Overall question: does US military presence affect global political and economic stability?
- More specifically, can we provide quantitative evidence that crisis response operations affect stability?
- Study builds on previous work relating crisis response operations and stability

Proponents of U.S. military operations abroad often argue that maintaining visibility around the world helps promote global stability. In turn, stability provides an environment conducive to increased economic growth and development by encouraging trade and investment. However, whether or not military presence itself actually affects overall levels of political and economic stability is still an open question.

A previous CNA study began to examine this question. See Berta M. Heybey and Jessica L. Stewart, *Do Crisis Response Operations Affect Foreign Investment Decisions?* Sep 2001 (CNA Research Memorandum D0003914.A1). The approach compared US military-crisis response operations with country risk ratings, which take into account factors such as the level of internal political strife, ethnic tensions, and the possibility of conflict with other countries.

Previous CNA study findings

- Individual country case studies showed no predictable relationship between crisis response and country stability
- Cross-country regression analysis showed some links between crisis response and political stability and economic growth

The findings included the following:

- An examination of sample operations showed no predictable relationship between crisis response and a country's political risk levels. Depending on the type and length of the operation, as well as country-specific effects, crisis response operations may correlate positively, negatively, or not at all with political risk ratings.
- Cross-country regression analysis showed some links between crisis response, political risk ratings, and economic growth. These results suggest that US military involvement in crisis response operations may have a net positive effect on political stability over time. Present political stability is affected by previous crisis response operations, and the effect changes as a function of time. Crisis response operations conducted in the previous month have a negative effect on present political stability, while operations that took place two or three months ago have a positive effect on present political stability. There are two ways in which crisis response operations appear to affect economic growth: directly, and indirectly through the positive effect that political stability has on economic growth.

We must mention some important caveats to these findings, however. First, it is not possible to include all factors that may affect political risk or economic growth in these regressions. It is very possible that other factors, affecting one, two, or all three of these variables, must be considered to be able to determine a conclusive finding. The many interrelationships between military operations, political stability, and economic growth complicate the econometric analysis of these issues.

Second, crisis response operations appeared to have only a small effect on political risk ratings and economic growth. This could be because effects depend on the type of crisis response operation being conducted—a short humanitarian assistance operation may have very different effects than a protracted peacekeeping presence.

Objectives for this study



- Extend existing analysis by examining specific types of operations
- Help inform policymakers of potential effects of crisis response operations in different scenarios

The previous study only scratched the surface of the complex nature of these relationships. This study, a CNA-initiated project, is designed to add depth to the analysis by delving into the relationships between crisis response operations, political stability, and economic stability. An examination of these relationships in more detail should help inform policymakers of potential effects of crisis response operations in different scenarios.

The questions



- Do different types of operations affect the political and economic environments differently? **yes**
- Do different regions of the world react in different ways to crisis response operations? **yes**

Military operations may have differing effects depending on the circumstances of the country in crisis. For example, military forces may bring large amounts of humanitarian assistance that can make a big difference to very poor people. They may also inject large amounts of money into the local economy. However, if military forces are involved in a country for a long period of time, we may not see dramatic effects of their presence when we measure the country's stability.

We look at the following two questions:

- Do different regions of the world react in different ways to military crisis response operations?
- Do countries at different levels of economic development react in different ways to military crisis response operations?

It is important to note that, in this study, we look only at crisis response operations, not "military presence." The term "presence" can incorporate many different types of military activities, from port visits to full-scale operations, depending on the particular definition applied. These varied definitions of "presence" further complicate attempts to understand the relationship between military actions and political and economic stability. In this briefing, we focus only on the crisis response aspect of overseas presence.

Summary findings



- Short operations have long-term effects on political stability
- Long operations may affect both economic and political stability
- Military operations affect African and low-income countries more than Middle Eastern or middle-income countries

This slide shows a summary of the major findings of the study. “Short” and “long” operations are defined as operations lasting one to three months and operations lasting longer than three months, respectively. We explain the reasons for this division in the following section. We discuss each finding in turn in the next sections.

Outline



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Risk data



- International Country Risk Guide (ICRG) is produced by Political Risk Services
 - Company provides information to assist businesses making foreign investment decisions
- Measures many possible factors affecting both political and economic risks associated with foreign investment
- Monthly ratings for each risk factor, 1984-2002

The data on country risk ratings is taken from the International Country Risk Guide (ICRG), produced by Political Risk Services. The ICRG measures many possible factors affecting both political and economic risks associated with foreign investment, and provides numerical ratings for each month from 1984 to 2002, for each risk factor. We chose to use the ICRG because it provides monthly data for both a substantial period of time and a substantial number of countries. It covers more countries and provides more detail than most of the other services and has been used in many studies.

Political and Economic Risk



- “Political risk” refers to risks to investment due to the country’s general environment, including:
 - Government stability
 - Risk of internal and external conflicts
- “Economic risk” refers to the macroeconomic health of the country



Higher scores represent more stability (less risk)

The political risk rating has 12 components, weighted as shown, with a total maximum score of 100:

- Government stability (12 points)
- Socioeconomic conditions (12 points)
- Investment profile (12 points)
- Internal conflict (12 points)
- External conflict (12 points)
- Corruption (6 points)
- Military in politics (6 points)
- Religion in politics (6 points)
- Law and order (6 points)
- Ethnic tensions (6 points)
- Democratic accountability (6 points)
- Bureaucratic quality (4 points)

The economic risk rating has five components, weighted as shown, with a total maximum score of 50:

- Per capita GDP (5 points)
- Real GDP growth (10 points)
- Annual inflation rate (10 points)
- Budget balance as a percentage of GDP (10 points)
- Current account as a percentage of GDP (15 points)

Crisis response data



- Data on crisis response operations are from various sources
- Operations are classified by type of operation, date, and countries involved
- Analysis focuses on about 50 countries where there has been U.S. military involvement since 1984

We collected data on crisis response operations from various sources, including the Chief of Naval Operations' (CNO's) website, internal CNA databases, and the Federation of American Scientists. We used the CNO's categorizations regarding the type of operation: joint operations, contingency buildup, responses to terrorism, peacekeeping, and humanitarian assistance.

Our data include about 50 countries where U.S. forces have performed crisis response operations at some point since January 1984, when the ICRG began to be calculated. (We can compare risk ratings with crisis response operations only as long as the ICRG has existed.) The number of months U.S. forces have been involved varies greatly. In this analysis, we include both major crisis response operations lasting long periods of time (for example, in Iraq and the former Yugoslavia) and smaller operations (such as assisting the Bahamas with disaster relief).

Classifying operations



- Different possibilities:
 - Type of operation (contingency response, humanitarian, etc.)
 - Several difficulties with this: operations often classified in multiple categories; scarcity of data for certain types of operations
 - Length of operation
 - Open question from previous study
 - Does the length of the operation make a difference in terms of stability effects?

The previous study looked at the universe of crisis response operations as a whole. In this paper, we wanted to classify operations into smaller sets. We tried to see whether different types of operations have different effects on the affected countries. (Ideally, we would have separated operations by type—joint operations, contingency buildup, responses to terrorism, peacekeeping, and humanitarian assistance; however, operations are often classified under multiple types.)

An alternative possibility is to divide operations by length. We looked at operations by length in terms of the number of months the operation lasted to see whether short and long operations have different effects on stability.

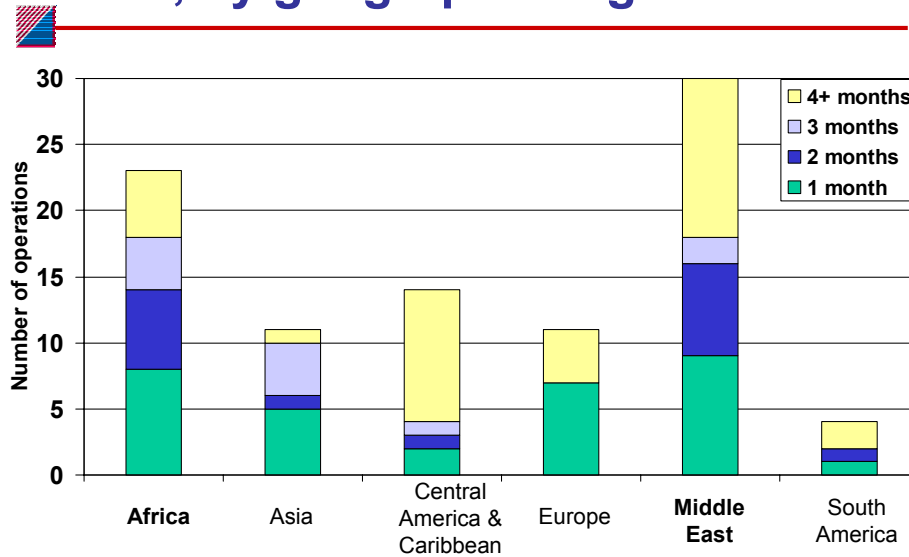
Why analyze differences in length of operation?

- Short and long operations may have very different goals
 - Short operations tend to be geared toward resolving a very specific problem quickly: cleaning up after a natural disaster or evacuating non-combatants
 - Long operations often are geared toward a larger problem: country-wide governmental crises
- Divide into short (1-3 months) and long (4+ months) operations

Short operations tend to be geared toward resolving a very specific problem quickly: cleaning up after a natural disaster, evacuating non-combatants, or helping refugees who are fleeing a particular crisis. On the other hand, long operations, such as Desert Shield and the following Middle Eastern operations centering on the Iraq situation, may slowly change into an issue of presence in the region. Military forces may become incorporated into a country's political and economic climate over time. Therefore, short and long operations may have very different effects on stability.

The question is where to draw the line between "short" and "long" operations. We used a simple methodology: we tested several models using different possible break points and found that there was a distinct shift in the patterns between operations one to three months long and operations lasting four months or more. Therefore, we defined "short" as operations lasting three or fewer months, and "long" as operations lasting more than three months.

Crisis response operations, 1984-2002, by geographic region

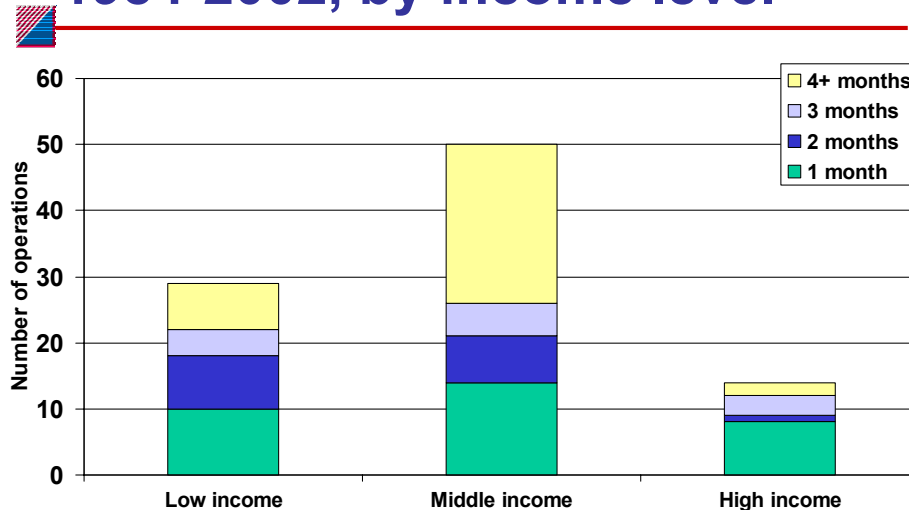


Majority of operations in Africa and Middle East

This slide shows the number of operations, by length and by geographic region. Most operations took place in Africa or the Middle East. The African operations have tended to be isolated events, occurring in only one or two countries (crisis in Somalia, flooding in Mozambique and South Africa). The Middle Eastern operations have tended to be more regional events, many of which occurred over a long time period (Desert Shield/Storm, for example).

Note that this method over-counts the number of operations. An operation that extended over multiple countries is counted as a separate operation in each country. For example, response to flooding in Mozambique and South Africa during the spring of 2000 counts as two separate, three-month operations.

Crisis response operations, 1984-2002, by income level



Majority of operations in low- and middle- income countries

We also divided affected countries by their income level. This slide shows the number of operations, by length and by country income levels. The World Bank divides countries by gross national product (GNP) per capita into low-income, lower-middle-income, upper-middle-income, and high-income countries. The vast majority of crisis response operations have been conducted in low- and middle-income countries.

Outline



- Background
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- **Case studies**
- Cross-country analysis
- Implications and next steps

Case studies



- Two case studies:
 - DR of the Congo
 - Kuwait
- Compare four measures of stability with crisis response operations
 - Political stability
 - Government stability
 - Level of tension
 - Economic stability



Higher scores represent more stability (less risk)

The country case studies relate ICRG scores for selected indicators with US military crisis response operations. Four risk indicators are included in these charts:

• **Political stability** is the sum of all 12 components of the ICRG's political risk rating. Political risk ratings range from 0 to 100, with higher scores denoting less risk. (The United States, for example, normally scores around 90.) A country that has a rating under 50 is considered to be a "very high risk" country. In addition to the overall political risk score, two subsets of this rating are also included:

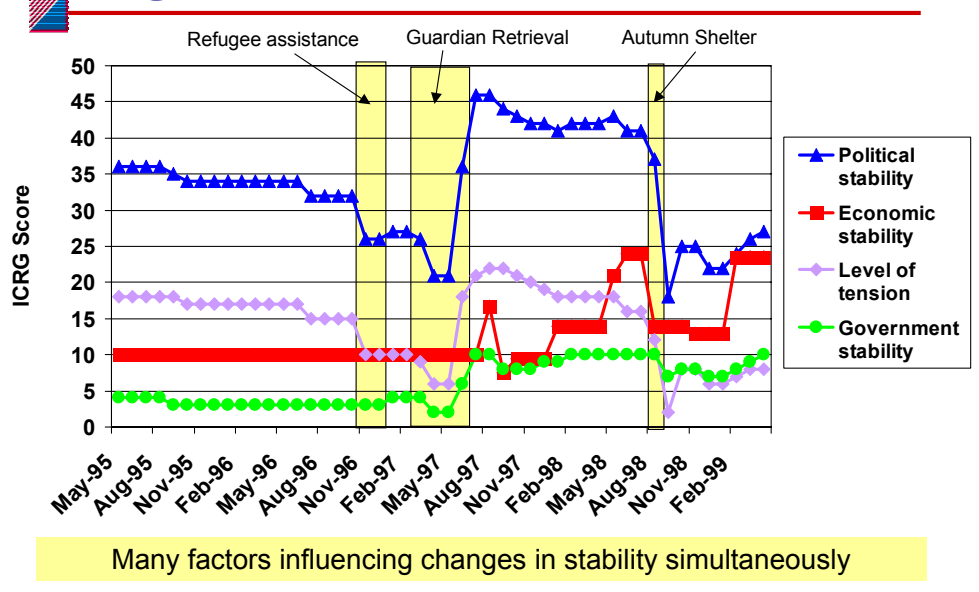
• **Government stability** is one of the most heavily weighted components of the overall political risk rating. The maximum score is 12 points. According to the ICRG, it is "a measure both of the government's ability to carry out its declared program(s) and its ability to stay in office."

• **Level of tension** is a combination of three components of the political risk rating -- internal conflict, external conflict, and ethnic tensions -- that are likely to be directly affected by US military involvement. The maximum score for the sum of these three components is 30.

• **Economic stability** is the sum of all five components of the ICRG's economic risk rating. The maximum score is 50, and the higher the score, the less risky the country is judged to be. An economic risk rating under 25 is considered to be "very high risk."

When looking at the following charts, keep in mind that higher numbers for the risk indicators mean that the country is better off -- it has less political and economic risk overall, a more stable government and less risk of conflict.

Democratic Republic of the Congo, 1995-99



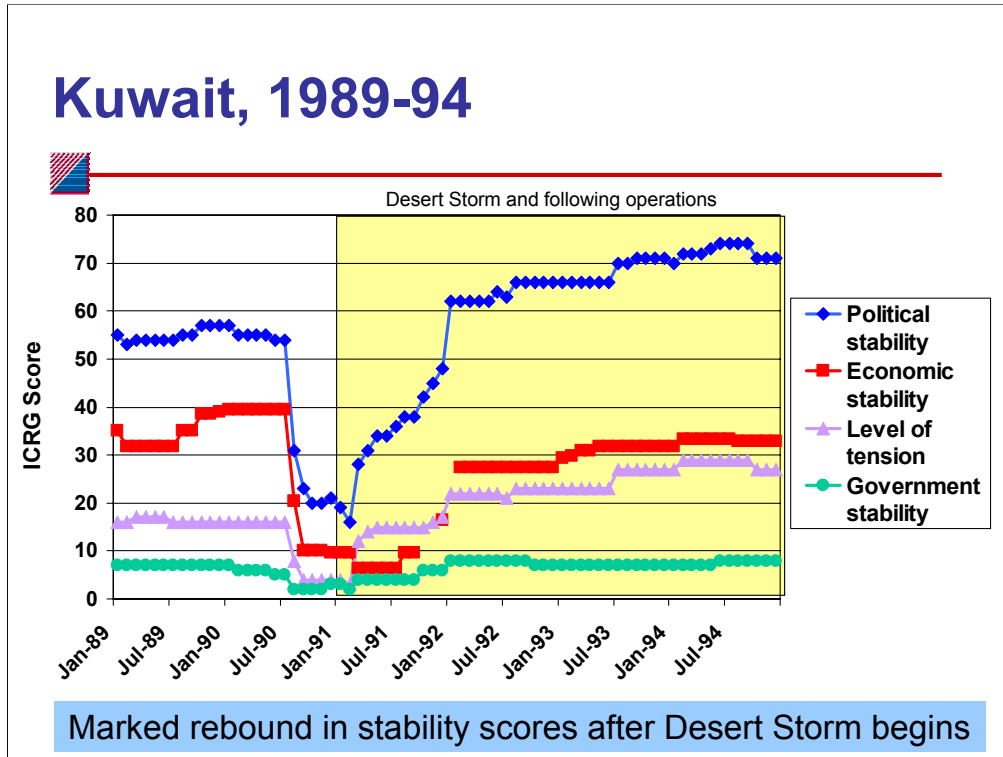
The slide shows data for the DR Congo from May 1995 through April 1999. During this time, there were three separate operations in the country: Operation Guardian Assistance/Assurance/Phoenix Tusk (November - December 1996); Operation Guardian Retrieval (March - June 1997); and Operation Autumn Shelter (August 1998).

- Operation Guardian Assistance/Assurance/Phoenix Tusk (Nov. - Dec. 1996) : The primary goal of the mission was to assist in the delivery of humanitarian aid to Rwandan refugees in the aftermath of civil war and ethnic violence. The operation also included providing security at Goma airfield and helping to airlift Allied forces, as well as supporting ground troops.
- Operation Guardian Retrieval (March - June 1997) : This was a noncombatant evacuation operation (NEO) caused by factional fighting that had spilled over from Rwanda, and an increase refugee population in the eastern part of Congo/Zaire.
- Operation Autumn Shelter (August 1998) : This was another NEO in the wake of a rebellion in the eastern part of the DRC, reportedly with French and Rwandan support, against the Kabila government. In response to the crisis, the embassies of several Western nations closed and evacuated their personnel.

When we look only at the correlations between risk scores and US military involvement, in the case of the Democratic Republic of the Congo, US military crisis response does not appear to coincide with changes in the risk indicators. The DRC's score remained in the "high risk" to "very high risk" categories throughout the five-year period. Since the US military operations were not extensive, and consisted of short periods of involvement for specific events, it appears that they may not have had any substantial impact on the risk indicators. Instead, internal events, such as civil war, rebellion, regional instability and regime change, appear to show a far greater influence on risk levels than US military involvement.

However, it is not possible to tell from these correlations whether US military involvement did indeed influence risk scores, because they do not control for all the other events occurring at the same time.

Kuwait, 1989-94



Kuwait in the early 1990s provides one example of a set of long operations in the Middle East. The US military was involved in the country from the start of Desert Storm in January 1991 throughout the decade following. The overall operation was divided into several pieces, including Operation Desert Shield/Desert Storm (August 1990–February 1991); Operation Desert Calm/Desert Farewell (March 1991–January 1992); and Operation Southern Watch (1991 and beyond).

We analyzed the changes in the risk scores for each of these operations to see whether US military involvement seemed to affect these scores, either during or after the operation. We see that the scores react strongly to Iraq's invasion in August 1990, as we would expect. The scores also react strongly to the success of military operations and the initial recovery of Kuwait in 1991–1992. Then in 1993–1994 we see no large changes in the scores. This example shows that there can be large changes in stability scores at the beginning of an operation—but that during the operation, although the US military may be a stabilizing influence, that influence may not appear in changes in the scores.

In this case, given the magnitude of the operations, it is likely that US military involvement was one of the driving factors behind the changes in stability between 1991 and 1992. However, we cannot say this with certainty if we use only correlation analysis, which does not tell us anything about causation. That is, we cannot determine whether the change in the score is prompted in part by the arrival of the US military or whether, instead, the arrival of US forces is prompted by a crisis that causes the change in score.

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- Background
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Cross-country regression analysis



- Many interrelated factors affect the relationship between crisis response, political stability, and economic stability
- It is difficult to separate the effects of military involvement from the effects of other factors
- Regression analysis allows us to examine the effects of individual factors while holding all else constant

Regression analysis of cross-country data provides information about general trends in the relationship between crisis response and country risk, even though it does not provide information about specific operations in specific countries. This kind of analysis also allows us to examine isolated factors, holding other influences constant. By seeing whether there are any overall trends, policymakers can better understand the possible effects of military operations on affected countries.

Determining the effects of military involvement alone on political and economic stability is difficult since so many other factors may influence these indicators at the same time. For example, when we look at a case study we cannot tell whether an increase in political stability score is due to the stabilizing influence of US troops, an increasingly stable government, or both. Using regression analysis, we can look at the effect of one of these factors while holding other factors constant.

Regardless of the influence of other factors, there is likely to be two-way causation between political stability and crisis response, as well as between economic stability and crisis response. We cannot say in most instances whether changes in the risk ratings are the result or the cause of military response. When there are variables that depend on each other in this way, we have an endogeneity problem that must be taken into account when developing the regression model. We structure the regression models to take these endogeneity issues into account.

Regression framework



- Two separate regressions: one explaining political stability and one explaining economic stability
- Explanatory variable of interest is military crisis response, divided into short and long operations
- Other explanatory variables include:
 - Past values of political and economic stability, GDP growth, worldwide economic climate
 - Time, distance, and country effects

We analyzed the results of two sets of models – one explaining the determinants of political stability scores, and one explaining the determinants of economic stability scores. We analyzed the determinants of political and economic risk scores by geographic region and by country income levels.

•**Political stability:** We used an ordinary least squares regression model, with the monthly political risk score as the dependent variable. The explanatory variables included country-specific effects, time, past levels of political risk, and past GDP growth rates, as well as past occurrences of military crisis response. We also included a variable that measured the distance of the capital city to the closest of four major U.S. military areas of interest: Japan, Germany, the Persian Gulf, and Cuba.

•**Economic stability:** We used an ordinary least squares regression model, with monthly economic risk scores as the dependent variable. The explanatory variables included country-specific effects, time, past levels of economic risk, and past 3-month US Treasury bill rates. T-bill rates were used as a proxy for the health of the global economy.

Summary findings



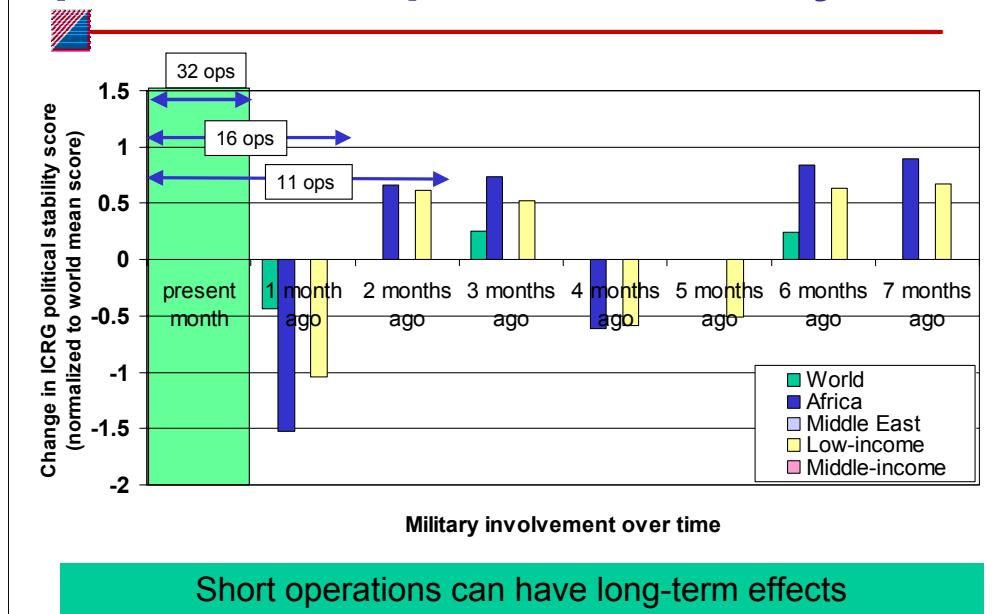
- Short operations have long-term effects on political stability
- Long operations may affect both economic and political stability
- Military operations affect African and low-income countries more than Middle Eastern or middle-income countries

We find the following:

- Short operations tend to affect political stability scores for several months after the completion of the operation, showing that short operations can have long-term effects on political stability. Short operations do not appear to have an impact on economic stability.
- Long operations tend to affect both political and economic stability scores over the long term. The magnitude of this effect is difficult to determine, for two reasons. First, we measure the change in stability scores, not the level of the score: An operation that continues for many years may not affect month-to-month scores during its course. Second, because there are few long operations, outliers may have large effects on the results.
- Crisis response operations affect African countries substantially more than Middle Eastern countries. This result may be due more to the types of operations the US military has undertaken in Africa, than to anything particular about that geographic region. Short operations in Africa, for example, have tended to be for the purpose of assisting with refugees or natural disaster response, whereas short operations in the Middle East have tended to be part of a larger conflict.

•Crisis response operations affect low-income countries substantially more than middle-income countries. Low-income countries may be more likely to react strongly to the introduction of foreign military forces. An injection of highly trained and well-equipped forces into a country with very few resources of its own may have more of an effect than the introduction of those same foreign forces in to a country that is at a higher level of development and has more resources.

Effect of short crisis response operations on political stability



This slide shows the direct effect of the presence of U.S. forces, after controlling for all the other explanatory variables in the regression equation. It shows the number of ICRG political stability points that can be directly associated with a change in the presence of military forces. Using Africa as an example, suppose we compare the political risk scores for two scenarios: one in which US forces were involved in a crisis response operation in the previous month and one in which they were not. Holding all else constant, the predicted current month's political risk score would be 1.53 points lower if there was military involvement in the previous month than it would be if there was no military involvement.

The slide shows the effects of military operations on political stability for several groups: worldwide, African countries, and low-income countries. We also tested Middle Eastern and middle-income countries, but we did not find significant effects on political stability due to short operations in those groups, and so did not include them in the figure. One possible reason for this result is that the short operations in these areas tend to be associated with longer operations rather than with the stand-alone operations we tend to see in Africa. That is, while the individual operation may last only a short time, it is really a part of a much longer operation and may show effects similar to those of longer operations.

The initial drop in stability that is due to military involvement may be the result of the uncertainty that surrounds the beginning of an operation. Once the uncertainty is resolved, we see an increase in stability. A similar amount of uncertainty exists at the end of an operation, which may be one reason why we see a drop in stability in the fourth and fifth months after the beginning of the operation. At that point in a short operation, military forces will have left the country and it may take some time for the country to return to a more stable pattern.

Since the scale of the political risk rating runs from 0 to 100 points, at first glance this change seems insubstantial. However, the change in the political risk score from one month to the next tends to be quite small. Ninety percent of changes in the political risk rating are less than two points in either direction. The DR Congo has some of the largest short-term fluctuations in the political risk ratings in the dataset. However, even the largest change in the DR Congo's score is only 25 points over two months (May - July 1997). Therefore, in comparison, military involvement does appear to have a substantial effect on the risk rating.

Example: Bangladesh (low-income country, short operation)

- Operation Sea Angel: disaster relief force after Cyclone Marian
 - Marian struck in April 1991, killing 140,000 people and over a million livestock
 - Over 7000 U.S. military personnel, along with a multinational force, helped provide disaster relief during May and June 1991
- Relief operations were important in providing stability for the inexperienced government in the face of the massive disaster
 - Civilian government had taken office only two months earlier after many years of military control

An example of a short operation that may have had long-term effects on political stability was Operation Sea Angel in Bangladesh.

Cyclone Marian caused severe damage to Bangladesh in April 1991, killing almost 140,000 people and over a million livestock, and causing massive damage to cropland and infrastructure. Such a disaster affects low-income countries in particular because they do not have the resources to rebuild. In the Bangladeshi case, the cyclone hit only two months after a civilian government had taken office following many years of military governments. Without outside help, there was a potential for serious instability in the country because it was likely that the inexperienced and under-resourced government could not provide the necessary relief for its people.

Operation Sea Angel, the disaster relief force assembled to help Bangladesh, involved over 7,000 U.S. military personnel, along with others in a multinational force. The Navy and Marines who helped provide disaster relief, in terms of both labor and supplies, likely had a large effect on the stabilization of the country. In a country with a better-developed infrastructure, outside help may not have as dramatic an effect.

Measuring the effects of long operations

- More difficult than measuring effects of short operations
 - Wider variety of operations, yet a smaller number of data points
 - Since we look at *changes* in stability scores, may not see much effect from very long operations looking month to month
- Results only suggestive, not definitive

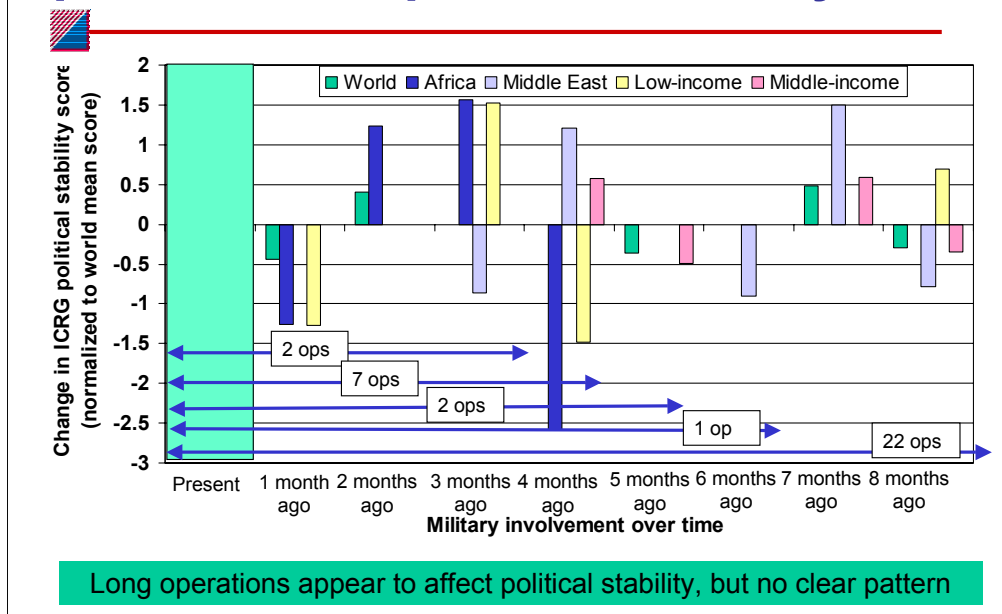
We also measured the effects of long operations on stability scores. This process is much more difficult than analyzing the effects of short operations for several reasons:

- We have 59 data points for short operations worldwide, compared to only 34 for long operations. Further, many of the long operations were actually part of one operation (Iraq) that spread across several countries, while most of the short operations were distinct. Therefore, we have an extremely small dataset for long operations. With such a small dataset, the results can be affected greatly by outliers, making it difficult to tell what the true effects might be. For example, Somalia (at 22 months) is one of only 5 long operations in Africa. The effects of the Somalia operation may outweigh other results for Africa.

- We look at how operations *change* stability scores from one month to the next. With a short operation, we may see large changes in stability scores before, during, and after a short crisis. With a long operation, military forces that are in the area for long periods of time may not change the perception of stability from month to month while they are there.

Despite these caveats, we do see some quantitative effects on stability from long operations. Additional research is needed in this area in order to understand more fully the effects of long operations on affected countries' stability scores.

Effect of long crisis response operations on political stability



The slide shows the effects of military operations on political stability for several groups: worldwide, African countries, Middle Eastern countries, low-income countries and middle-income countries.

The slide shows the direct effect of the presence of U.S. forces, after controlling for all the other explanatory variables in the regression equation. It shows the predicted change in the political stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model. Using Africa as an example, suppose we compare the political risk scores for two scenarios: one in which US forces were involved in a crisis response operation. In the previous month and one in which they were not. Holding all else constant, the predicted current month's political risk score would be 1.3 points lower if there was military involvement in the previous month than it would be if there was no military involvement.

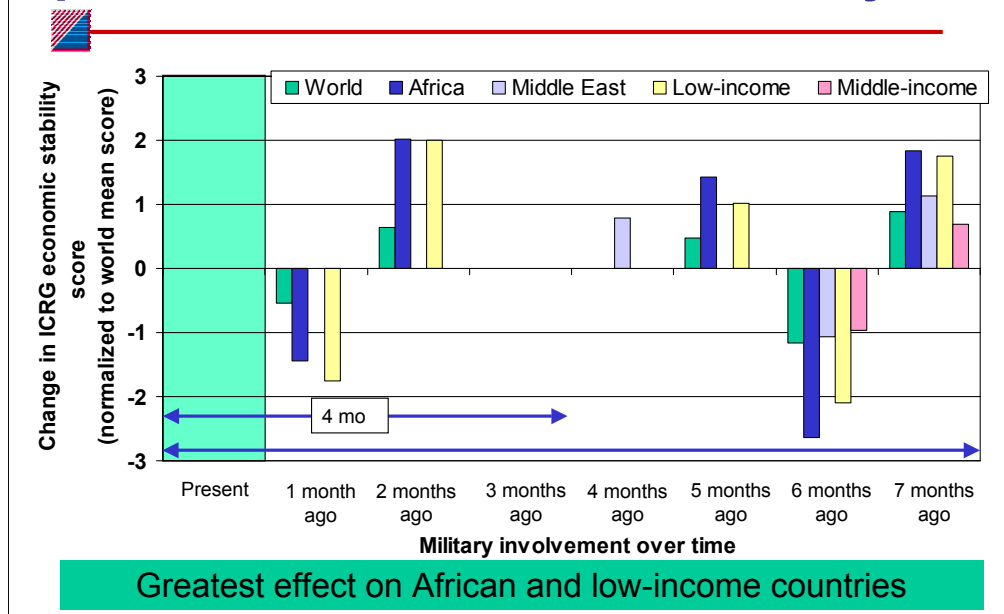
It is difficult to tell from the results what the magnitude of the effect is; we only see that there is an effect. One reason may be that a long operation may not change political stability scores much from month to month, even if it affects the overall level of the stability score, since its presence is not a shock to the system. Therefore, since we measure the change in stability scores from month to month, with a long operation we may not see much of an effect during the course of the operation.

Effects of crisis response operations on political stability

	Short operations	Long operations
Africa	Long-term effects	Short-term effects
Middle East	No effect	Long-term effects
Low income	Long-term effects	Short-term effects
Middle income	No effect	Slight long-term effect

This slide summarizes our results for the four different country groupings. One question from our previous study was whether short operations had any substantive effect on stability. We found in this study that, particularly in Africa and in low-income countries, short operations do affect political stability for several months after the operation is completed. Short operations in the Middle East are often parts of a longer operation and so in this framework it was not possible to separate those effects from their of the overarching operation.

Effect of long crisis response operations on economic stability



Unlike short operations, long operations affect economic stability as well as political stability. An operation may have a long-term effect on economic stability due to the injection of money needed to support troops as they stay for a long period of time. Military forces who stay in a country for a long period may also boost economic growth and stabilize the economy. For example, a firm that is not afraid of being put out of business by a war will likely produce more goods, stimulating the economy. Service providers, such as restaurants, may be more likely to remain open if they feel more secure. In addition, forces themselves may make purchases while in country, further assisting economic growth.

The slide shows the effects of military operations on economic stability scores. The figure shows the predicted change in the economic stability score when we have military involvement compared to when there is no military involvement in a given month. We see a more consistent pattern here than in the results for political stability. As with the results for short operations and political stability, we see an initial drop in economic stability after forces arrive, indicating the uncertainty in investors' minds regarding the effects of the military action, followed by positive effects as time passes. (The drop in stability we see in the sixth month is likely associated with the uncertainty surrounding the departure of forces after the four- to six-month operations.)

Effects of crisis response operations on economic stability



	Short operations	Long operations
Africa	No effect	Long-term effects
Middle East	No effect	Slight long-term effect
Low income	Slight short-term effect	Long-term effects
Middle income	No effect	Slight long-term effect

This slide summarizes our results for the four country groupings. We see little to no effect on economic stability scores from short operations. Long operations have the greatest effects in Africa and in low-income countries. An injection of highly trained and well-equipped forces into a country with very few resources of its own may have more of an effect on that country's economy than it would have on the economy of a country that is at a higher level of development and has more resources.

Outline



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Implications



- This analysis provides more detailed quantitative evidence that crisis response operations influence political and economic stability
 - Short operations can have long-term positive effects on political stability
 - Evidence that long operations affect both political and economic stability, though effects are not as clear

This analysis focused on the effects of military crisis response on political and economic stability. By separating crisis response operations by length, and countries by geographic region and by level of economic development, we came to the following main conclusions:

- Short operations have a positive effect on political stability for several months after completion of the operation, particularly in Africa and low-income countries. This result may be due more to the types of operations the US military has undertaken in Africa, than to anything particular about that geographic region. Short operations in Africa, for example, have tended to be for the purpose of assisting with refugees or natural disaster response, whereas short operations in the Middle East have tended to be part of a larger conflict.

- Longer operations can affect both political and economic stability over the long term, but the extent of the effect is unclear. This result may be due to the way in which the ICRG risk scores are calculated. After a certain amount of time, the scorers may fold the presence of US military forces into their general assessment of the political environment. On the other hand, the economic effects may linger, as US forces continue to support economic growth by purchases for their own use, as well as by providing a stable economic environment for other investors.

Next steps



- This analysis focused on the effects of military crisis response on political and economic stability
- Often, other types of support/aid is involved in resolving a crisis – financial help, political intervention, etc. it is hard to separate the effects of the military operation from these other influences
- How can we examine the effects of non-military approaches to crisis response?

This analysis provides quantitative evidence that crisis response operations do affect future political and economic stability. Given the nature of the data, it is difficult to know the exact magnitude of these effects, but it appears that there is some kind of linkage between crisis response operations and political and economic stability.

There are still many unanswered questions, however. Issues that should be addressed in future research include the following:

- In many of these operations, other types of support are also involved in resolving the crisis—financial help, political intervention, or actions by other countries working along with the United States. How do these other types of aid affect stability in the crisis countries?
- How is stability affected by the beginning and end of long operations? Do we see a net positive or negative effect from the intervention in the years after an operation is completed?
- This analysis looked only at Navy and Marine Corps crisis response operations. How do Army and Air Force operations affect stability? Are there different effects depending on the service involved or the types of operations performed by each service?
- Are there regional effects on stability? If an operation takes place in one country, do we see effects on the countries around it, or are the effects contained by national borders?

Backup



Countries with crisis response operations, by geography



Africa

- DR Congo
- Ethiopia
- Kenya
- Liberia
- Mozambique
- Sierra Leone
- Somalia
- South Africa
- Sudan
- Tunisia

Middle East

- Egypt
- Iran
- Iraq
- Israel
- Jordan
- Kuwait
- Lebanon
- Qatar
- Saudi Arabia

This slide shows the countries in Africa and the Middle East where the US Navy and/or Marine Corps have performed crisis response operations since 1984.

Countries with crisis response operations, by income level



Low-income (<\$760 annual GNP per capita)

- Bangladesh
- DR Congo
- Ethiopia
- Haiti
- Indonesia
- Kenya
- Liberia
- Mozambique
- Sierra Leone
- Somalia
- Sudan

Middle-income (\$760 - \$9360 annual GNP per capita)

- Albania
- China
- Ecuador
- Egypt
- El Salvador
- Guatemala
- Honduras
- Iran
- Iraq
- Jordan
- Lebanon
- Libya
- Panama
- Peru
- Philippines
- Saudi Arabia
- South Africa
- Tunisia
- Turkey
- Venezuela
- Yugoslavia

This slide shows the low- and middle- income countries where the US Navy and/or Marine Corps have performed crisis response operations since 1984.

Results by country groups



- Results by geographic region
 - Africa
 - Middle East
- Results by income level
 - Low-income
 - Middle-income

The next set of slides present our results by country groups. As stated earlier, we focus on the two geographic regions (Africa and the Middle East) where most of the crisis response operations in our dataset occurred. We also divide our dataset by the income level of the affected countries, according to the World Bank's classification. Again, we focus on the two groups where the most operations occurred: low- and middle-income countries.

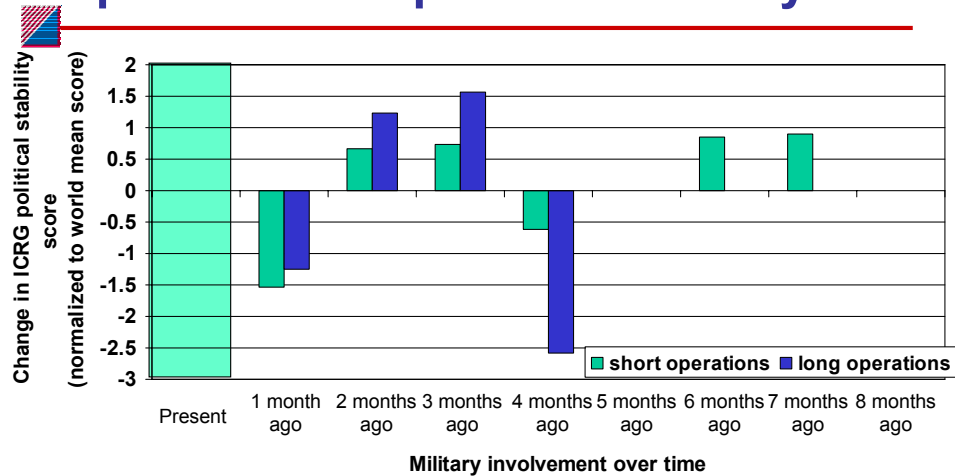
Findings: geographic region



- Operations appear to affect geographic regions differently
- Africa and Middle East have the highest numbers of operations so we concentrate on those two regions
 - 75% of African operations are <4 months long
 - 50% of Middle Eastern operations are >3 months (most of the long operations are Desert Storm and follow-up operations)

We looked at two geographic regions: Africa (excluding Egypt) and the Middle East (including Egypt). Most operations occurred in these two regions. The African operations tend to be isolated events, occurring in only one or two countries. (Somalia, flooding in Mozambique and South Africa) The Middle Eastern operations tend to be more regional events, many of which occurred over a long time period (Desert Shield/Storm, for example).

Effects of African crisis response operations on political stability



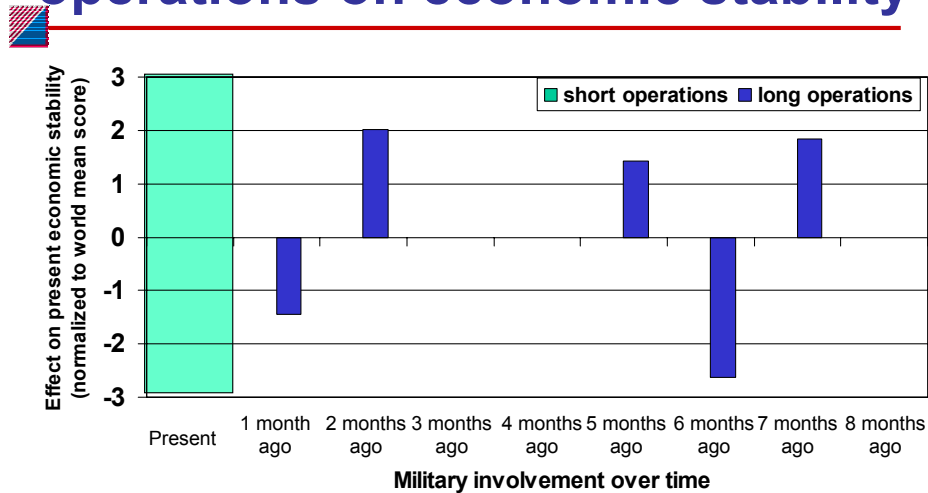
Short operations have a positive effect on political stability over time

Effects of short operations on political stability last longer than effects of long operations

This slide shows the effects of military operations on political stability for African countries. The slide shows the predicted change in the political stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model.

In Africa, we see distinct patterns between short and long operations in terms of their effects on political stability: Short operations have long-term effects on political stability. Long operations, on the other hand, have short-term effects on political stability. These results imply that military operations similar to those undertaken in Africa will likely have significant effects on political stability, and possibly economic stability, in those countries. Short operations in Africa tend to be those where the US assists with refugees or natural disasters, as opposed to those in the Middle East, which are often a part of a larger conflict.

Effects of African crisis response operations on economic stability



Long operations affect economic stability scores, but short operations do not have any significant effect

This slide shows the effects of military operations on economic stability for African countries. The slide shows the predicted change in the economic stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model. Short operations do not have any significant effects on economic stability. Long operations do affect economic stability scores, though care should be taken in interpreting these results, given the small size of the dataset.

We found that military operations had a much greater effect on political and economic stability in Africa than in the Middle East. Crisis response operations in Africa have significant effects for an extended period of time. One reason may be that many of the operations in Africa involve forces responding to a specific contained crisis (flooding in Mozambique, refugees in the Democratic Republic of Congo) and can have a quantifiable effect on political and economic stability fairly quickly.

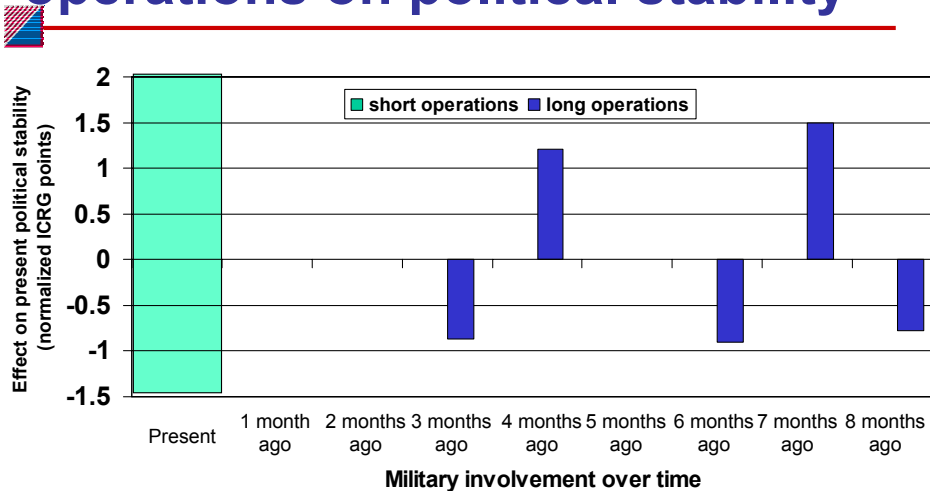
Middle East



- 50%/50% short/long operations
- Many operations very long – Iraq related
- These operations blur the line between ‘crisis response’ and ‘presence’ since they take place over many years
- Do not expect to see much effect directly due to US military forces on the overall stability of the region – those forces have been incorporated into the climate in the region

In the Middle East, on the other hand, even the short operations tend to be part of a larger pattern of forces remaining in the region for an extended period of time. (Desert Fox, for example, can be related to the larger effort of containing Iraq over a long period.) Therefore, it is not possible to separate the effects of these short operations from those of the extended operation. The operations that we can analyze separately include engagements during the Iran-Iraq war, as well as those during the war in Lebanon. In the larger context of these wars, US operations played only a small role; this may explain why we see little direct effect from them.

Effects of Mideast crisis response operations on political stability

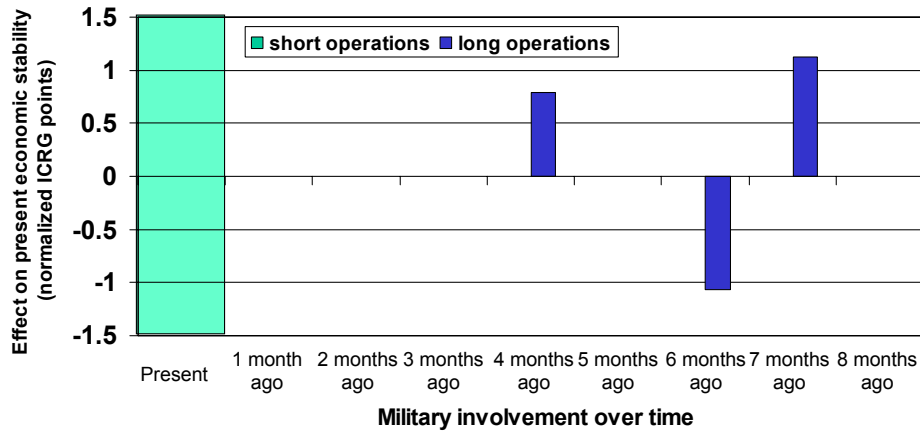


Short operations do not have a significant effect on political stability; long operations have a slight overall positive effect

This slide shows the effects of military operations on political stability for Middle Eastern countries. The slide shows the predicted change in the political stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model.

In the Middle East, long-term operations are dominated by multi-year activities that blur the line between crisis response and long-term presence in the region. Even the long operations in Africa tend to be much shorter than those in the Middle East: the longest operation in Africa lasted 22 months, while some of those in the Middle East have spanned many years. The length of those Middle Eastern operations may make it more difficult to determine a direct effect on political and economic stability using this type of analysis, since forces that have been absorbed into the overall environment may not change stability scores on a month-to-month basis.

Effects of Mideast crisis response operations on economic stability



Short operations do not have a significant effect on economic stability; long operations have only a very slight overall positive effect

This slide shows the effects of military operations on economic stability for Middle Eastern countries. The slide shows the predicted change in the economic stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model. We see very little effect on political and economic stability that can be directly tied to crisis response operations. This result may mean that these operations are now incorporated into the overall political and economic climate in the region, and that the presence of US forces is no longer a shock to the country. Further research is necessary to explore this area.

Economic development

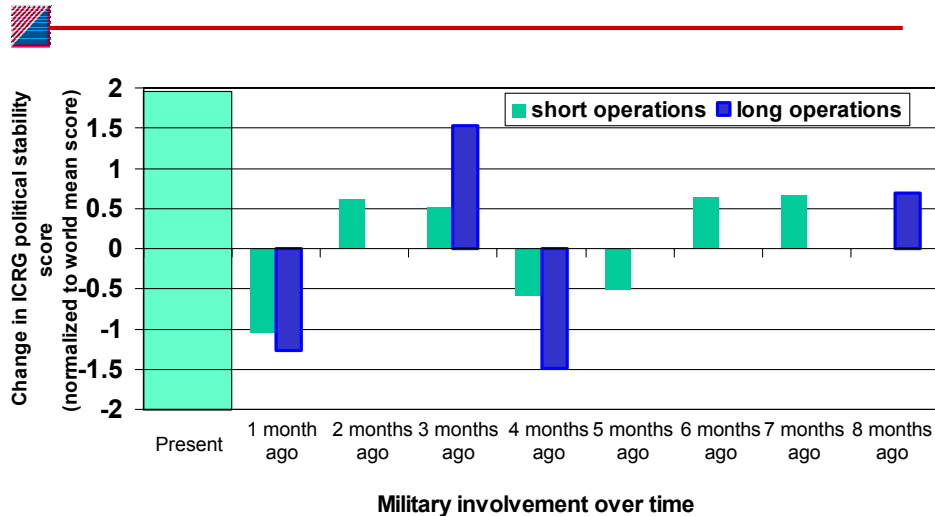


- Another approach is to separate countries by income levels
- Low income countries are affected more by crisis response operations than middle-income countries
- Short operations in low-income countries affect political stability over the long term
- Long operations in low-income countries affect economic stability over the long term

We see that military operations have much more significant effects on low-income countries than on middle-income countries. Low-income countries may be more likely to react strongly to the introduction of foreign military forces. An injection of highly trained and well-equipped forces into a country with very few resources of its own may have more of an effect than the introduction of those same foreign forces into a country that has a well-equipped military of its own. In addition, the same amount of money spent by US troops may have a much greater effect in a low-income economy than in a middle-income economy.

The following slides show our results when we divide the data by country income level.

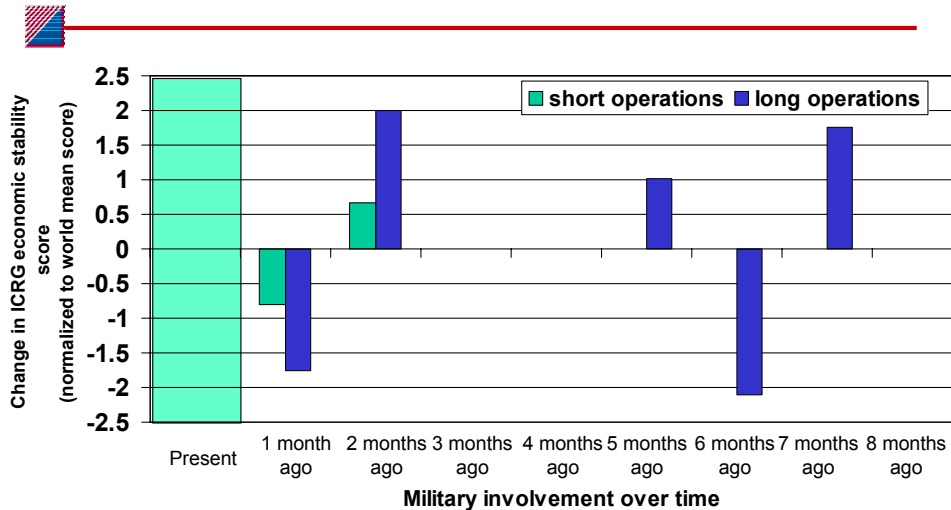
Effect of crisis response operations on political stability – low-income countries



Short operations have long-term effects on political stability

This slide shows the effects of military operations on political stability for low-income countries. The slide shows the predicted change in the political stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model.

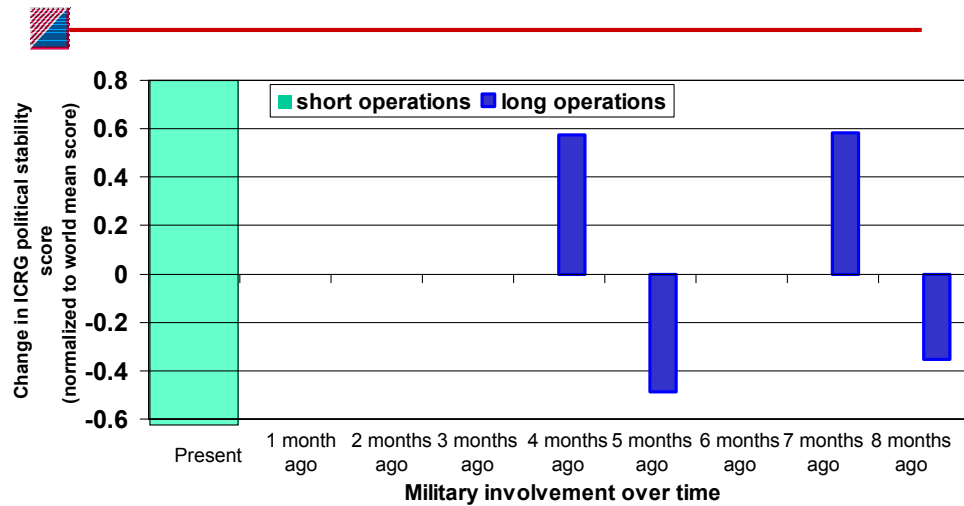
Effect of crisis response operations on economic stability – low income countries



Long operations affect economic stability

This slide shows the effects of military operations on economic stability for low-income countries. The slide shows the predicted change in the economic stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model.

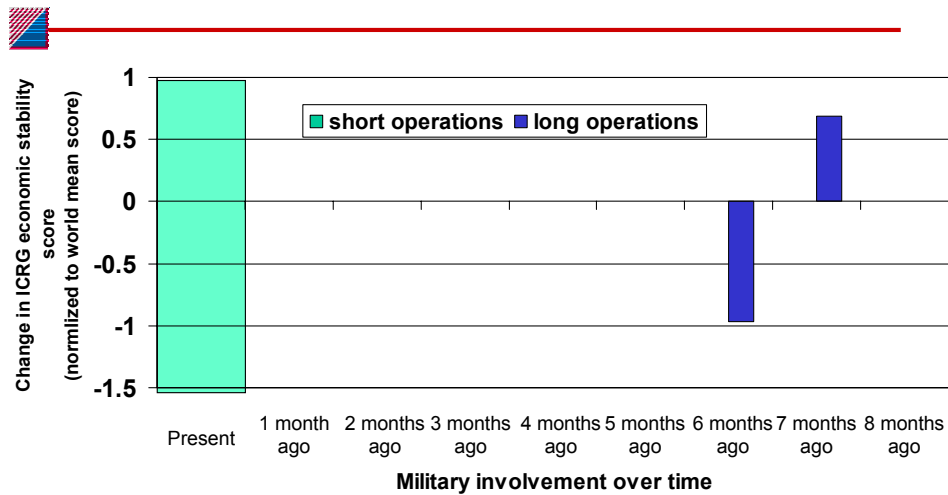
Effect of crisis response operations on political stability – middle income countries



Crisis response operations have much smaller effects on middle income countries than on low income countries

This slide shows the effects of military operations on political stability for middle-income countries. The slide shows the predicted change in the political stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model.

Effect of crisis response operations on economic stability – middle income countries



Crisis response operations have much smaller effects on middle income countries than on low income countries

This slide shows the effects of military operations on economic stability for middle-income countries. It shows the predicted change in the economic stability score when we have military involvement compared to when there is no military involvement in a given month, after controlling for the other factors in the regression model.

These slides show that operations in countries where US military involvement is a large shock to the system—such as a poor country without resources to react to a natural disaster—can have large effects on both political and economic stability. On the other hand, we may not see much of an effect on stability in a more highly developed country that has its own resources to cope with disasters. This result does not mean that forces in middle-income countries do not affect stability in those countries but rather that those effects may be more subtle and a more detailed classification may be needed to bring out specific effects on different types of economies. Further research is needed to explore this area.