



**LUND UNIVERSITY**  
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# **Economic Costs of Conflict:** Designated studies in the Middle East

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*This paper investigates the economic costs of conflict and wars in the Middle East. By providing an overall view of the region as well as using narrative-based country-case studies of Iraq's invasion of Kuwait 1990-1991 and US invasion of Iraq in 2003 this paper has found out that these conflicts resulted in weakened financial systems, lower levels of GDP per capita and higher inflation. These conflicts have also had significant consequences in terms of population loss, debilitated education and great damages to production capacity. Furthermore, as this paper wants to provide with an overall view of parts of the region, the economic impact on neighbouring countries have been presented and the results demonstrate that they vary and differ in comparison to the countries that were directly involved in the conflicts.*

Keywords: Conflict, Middle East, Counterfactual, and Typology of Costs

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# 1. Introduction

Conflicts and wars are one of the main reasons for why many developing countries and regions around the world are currently still not able to develop at the same rate as developed nations and why millions of people are currently experiencing starvation and running away from their homes. Most of the literature concerning conflict studies is currently focusing on the political instability and weak institutions in these countries followed by policy recommendations, which are provided as an attempt for a possible stabilized development for the future of these countries. However, this thesis aims at focusing on the economic aspect and impact of wars and conflicts. How much damage is created in economic terms when a country decides to go to war and what form of development would the country have experienced in absence of the war? The literature for this field is limited in comparison to conflict studies that focus on the consequences of political instabilities and feeble institutions.

However, in recent years a few scholars such as Stiglitz & Bilmes (2008) on the cost of US invasion of Iraq and Bilmes (2013) on Germany's cost of being involved in the US war in Afghanistan have presented new data on the economic costs of conflicts and wars (Smith). However, these studies are mostly concerned with the economic costs for western and developed countries. This thesis is therefore focusing on presenting the costs of the wars of the country where the war is actually taking place mainly because this thesis attempts to partly argue that it is more likely that another war would start and be led by a country or a group in the Middle East than a western country. Moreover, this paper also argues that these forms of studies can be used as a tool for the international community to hinder or stop wars and conflict around the world.

## 1.1. Purpose and research question

The aim of this thesis is to investigate and present the economic costs of conflict by focusing on conflicts and wars in the Middle East. Furthermore, this thesis aims at focusing on two specific wars, Iraq's Invasion of Kuwait 1990-1991 and its Spillovers in Iraq and US invasion of Iraq to demonstrate costs over different parts of the region. A side note and a significant aim however is also to demonstrate how the country would have developed on average in absence of the conflict. Furthermore, an explanation of the importance of these forms of studies as well its methodological complications will be provided. The research question of this thesis is specified as: **What are the economic costs of conflict in the Middle East? Selected studies for this paper: Iraq and Kuwait.**

### *The choice of Iraq, Kuwait and the Middle East*

As Iraq is involved in both of the selected wars and studies, it will also be the country in which this thesis will specifically draw examples upon in order to demonstrate how

a country is effected by a war in economic terms. Iraq is overall one of the countries in the region, which has over decades been involved in conflict, and essentially has its entire economy collapse drastically more than once. A short comparison with Kuwait will also be provided in order to present an example of a neighbouring country that recovered faster than Iraq after experiencing a conflict. Iraq will also be compared to Jordan, Syria and Iran when studying macro economic factors. Furthermore, the choice of the Middle East lies close to the author's personal interest and background. Moreover, this is not an area, which has been explored, in broad terms by other authors. Therefore, the author of this paper argues that if perhaps more of these forms of studies and research are made, the future of the countries of the Middle East might be able to be brighter than what their current status is demonstrating.

## **1.2. Disposition**

In the next section, definitions, a theoretical framework as well as other explanations such as the importance of this form of study will be presented. The following section will present a literature review, of the existing literature on the economic costs of conflict, including a specific example of the complications behind measuring certain factors such as military expenditure. This will be followed by two different methods, which can be used when discussing the economic costs of a conflict, these include a counterfactual and of typology of costs where both direct and indirect costs are comprised. In order to understand the case studies, a historical background and overview over the region and selected countries will be provided followed by the empirical data for Iraq's invasion of Kuwait 1990-1991 and its spillovers in Iraq and the US invasion of Iraq in 2003. It is however important to recognize that all costs and details will not be provided as this paper will not be able to cover that, however, the main findings and costs will be presented for all three cases. The last section will consist of an analysis of the results, which were presented in the previous section followed by a conclusion, which briefly sums up the paper.

## **2. Theory, Methods and Explanations**

In order to understand the context and arguments of this paper, significant concepts need to be defined. Furthermore, it also needs to be explained why and how relevant this form of study is for the international community as well as what it demonstrates in the field of traditional economic theory.

### **2.1. How do we define an armed conflict?**

According to a study from Uppsala Conflict Data Program (UCDP), an armed conflict is defined as "*a contested incompatibility that concerns government or territory or both, where the use of armed force between two parties results in at least 25 battle-related deaths in a year.*" (Hosseini 2012: 46).

Moreover, UCDP categorizes conflicts conferring to their strength:

“• *Minor armed conflicts: At least 25 battle-related deaths in a year but fewer than 1,000, and*

• *War: At least 1,000 battle-related deaths in a year.*” (Hosseini 2012: 26).

## **2.2. Theoretical framework - Conflict economics**

Conflict and war is a challenging topic to comprehend from a traditional economic perspective. The challenge comes from the emphasis that the field places on the win-win aspects of exchange and the gains from trade, at the expense of overlooking environments with poorly specified and poorly enforced property rights. The last environments are the ones that conflict normally arises from (Garnfinkel, Skaperdas: 2006). Furthermore, one could say that the field is a branch of economics, which puts the allocation of resources by means of violent fighting by for instance putting conflict into different forms of economic models. Conflict economics presents the idea that agents have to decide between productions of resources and production of weapons.

Conflict economics has two defining features. Firstly, it maintains that the conceptions, principles and methods of economics can be productively applied to the study of conflict actions. Therefore, varied concepts such as war, arms races, alliances and terrorism are examined and understood as results of purposeful choices receptive to changes in fundamental incentives. The second defining characteristic of conflict economics is that it treats appropriating as a central economic activity, joining production and exchange as a means of obtaining wealth (Anderton & Carter).

Traditional economic theories and models assume that economic behaviour is peaceful, however, in real economies conflicts over commodities and capitals demonstrate the opposite. Conflict economics pursues to close the gap between theory and reality. Therefore, a variety of appropriative actions have been modelled, including resource conflicts, piracy and extortion. These theories and models demonstrate how conflict both shapes and is shaped by the traditional economic activities of production and exchange (Anderton & Carter) where the term “appropriation” refers to a taking that rests on force or the threat of force.

## **2.3. Why measure economic costs of conflicts?**

It has been recognized that one of the least researched areas within economics is the economic consequence of war and conflict. However, in recent years this topic has attracted certain scholars and received more attention than ever before. Scholars including Stiglitz and Bilmes (2008) have researched the cost of the Iraq war to the US, Bilmes (2013 together with Bruck et al. (2011) have analysed the cost of German involvement in Afghanistan and most recently Abadie and Gardeazabel (2003) have published an article on the cost of the Basque conflict (Smith, 2013).

In many cases the purpose of calculating the costs of conflict is to try to influence governments choices on whether to go to war or not. However, if the war has already taken place, the aim of these studies is to try to persuade governments to take and action and cooperating with international forces to end the war. If these calculations are made before a potential conflict, the costs and benefits can be presented as a method of preventing a country from going to war (Smith, 2013). In general, there are three significant reasons for why it is important to measure the costs of wars and conflicts. The first reason it because conflict is a key source of poverty and underdevelopment. Second, new working policies for reducing the economic costs of conflicts and wars can only be developed if one knows how economic activity is effected during a conflict. Third, in order to form new policies to end or reduce conflict it is necessary to understand economic behaviour and incentive during the conflict. Measuring the costs are a significant key in the process development of preventing or ending a conflict and better estimates of costs of different wars and conflicts are necessary in order to produce approximations of the economic value of conflict prevention (Lindgren, 2014).

Moreover, measuring the economic costs of a conflict is a way of presenting data, which may influence decision making processes and so for instance, before a possible conflict, calculating the costs and benefits can help in terms of a how much the country should spend on military defence in order to attempt to deter the conflict (Smith, 2013). Furthermore, it is also significant to look at which groups are benefiting from the conflict, such as weapon sellers and people who operate on the black market. It is in hope that more knowledge concerning this field will increase the opportunity that more decisions are made in a way, which avoids and prevents conflicts that affect thousands and millions of people around the world (Lindgren, 2014). Although, many scholars are critical towards this form of literature (Smith, 2013) it is crucial to continue further research, in hopes that it will be acknowledged and beneficial for policy makers around the world.

In a more detailed aspect, many have come to question how a research study such as this one can have any sort of affect when it comes to changing peoples minds-set and preventing conflict and wars and as this is one of the central arguments of the sceptics it is crucial to have some sort of respond to it. These studies demonstrate the relevant and credible data in relation to diplomacy, which is one of the most peaceful methods to attempt to have an impact on wars and conflict around the world. Moreover, currently many negotiations concerning reducing nuclear weapons are on the top priority of the international arenas global issues agenda, and as author Hossein Askari wrote in one of his books *“If the world can reduce nuclear warheads, why not conflicts and wars?”* (Askari 2012: 21).

## **2.4. Methods and complications**

Before presenting the calculation methods that will be used, it is important to discuss some methodological issues in terms of quantification of the costs of conflict. Calculating the cost of a conflict is frequently preserved, as it was comparable to a physical measurement, although, it is a different form of social estimate. According to Smith (2013), clarifying the issues can make it easier to understand the political calculation of conflict. One issue when it comes to cost-benefit analysis, is that it does not receive as much attention as one could argue that it should. The reason for this is that it is easier to calculate and present the costs rather than the benefit and because of this it could be argued that the calculations are limited by bias (Smith, 2013).

The second issue is related to the counterfactuals, i.e. what time periods are being compared. The most common method is to compare the pre-war period with post-war period. The fundamental problem with this comparison is that in both periods, either war or no war is analysed and so it becomes difficult to specify what form of development would have taken place in absence of the conflict. A possible solution to this issue has, however, been demonstrated by comparing the case study with an almost matching country in terms of economic development that was not involved in the conflict. The most recent example of this is Abadie and Gardeazabal (2003) analysis on the Basque region conflicts. Other Spanish regions were included that are comparable to the Basque region though they were uninvolved in the conflict.

The third factor where credibility of the material needs to be taken into consideration and questioned is where the data comes from. The reason for why many studies within this topic may be limited in comparison to other topics is often due to shortage of reliable data, or that it is difficult to draw any form of concrete conclusion on what effect conflict may have had on the country. It is also important to recognize that many effects of conflict are highly difficult to quantify, these include the movement of population, the occurrence of rape and the psychological effects. Moreover, in many cases it has been proved many years after the conflict that the wartime government manipulated great amounts of data or simply hid it from the public. Therefore, the outcome is often that most data that can be found is either biased or is missing significant numbers (Smith, 2013).

## **3. Literature Review**

Before presenting the previous work, which has been established by other scholars, it is first and foremost significant to mention that this is field with limited data as well as a field where less research has been made in the past in comparison to other more common disciplines. Studies of macro economic shocks in the world economy and different economies around the world are not new topics, however specific case studies within the topic of economic costs of conflict are still few due to incomplete numbers and data from the wars and conflict (Abadie & Gardeazabel, 2003). For this reason it becomes challenging to compare this paper with other work within the same

subject area. Nevertheless, it is worth mentioning some of the previous research made in order to give some sort of view and understanding of this particular topic. A specific example where one scholar has attempted to provide a theoretical explanation for the destruction of a country during a war will be provided at the end of this section in order to demonstrate and clarify the reason for why this literature review might perhaps be different from other researched fields.

Within the field of economic costs of conflict and war, some studies have focused on the overall economic impact of conflicts. Collier (1999) found that when it came to civil wars, most of them resulted in loss of real GDP per capita whilst wars over border led to a direct output of reduction and a gradual loss of capital stock and dissaving. These influence economic sectors differently when it comes to capital and transaction-intensive sectors such as manufacturing, construction, transportation and finance are diminishing more drastically in comparison to total GDP (Collier, 1999).

Furthermore, Gupta (year), together with others, studied the fiscal consequences of armed conflict and terrorism in a group of low- and middle-income nations. The results demonstrated that in the 22 conflicts studied, lower economic growth, higher inflation, lower tax revenues and lower investment came about. Moreover, they also discovered that conflicts had an opposing impact on growth reflecting a shift of capitals toward military expenditure at the expense of spending on more beneficial and productive economic sectors (Collier, 1999).

Addison and others evaluated the impact of conflicts on the financial sector in 79 countries and they found that financial development is greatly susceptible to conflict. Specifically, their study demonstrated that conflict reduced the demand for domestic currency due to uncertainty and reduced confidence. It was also found that conflict results automatically in a weak financial regulation within the country, therefore negatively impacting financial development, which on occasion can lead to more conflict (Addison, Abdur, Chowdhury etc, 2002).

Some studies have researched the spillover effects of conflict in neighboring countries. Ades, for example, discovered that political instability and difficulties in neighboring countries had an adverse effect on a country's economic development and growth. The investigation demonstrated two main channels where regional instability lowers growth. The first one is through a disruption of trade and increased military expenditure, and the second one is the strain that massive groups of refugees seeking aid and protection put on the domestic economy, unable to be absorbed by the economy in the short term and so are only a burden (Ades, Alberto, and Hak B. Chua, 1997).

One of the most recent papers within this field, which is often cited in other works and is also relevant to mention here is the case study of the Basque Country by Abadie and Gardeazabel (2003). The article investigates the economic costs of



conflict by focusing on the terrorist conflict in the Basque country. Essentially what they found out through different measures, calculations and models, is that in the late 1960s the result of terrorism in this region was a decline of 10% ...(of what). Furthermore, the paper provides methods that can be applied to investigate the economic impact of conflicts in other parts of the world. Besides from an accurate case study analysis, these authors are offering new ways of measuring and calculating and for this reason the study is a significant one within this topic.

### **2.5. A specific example of Military Expenditure and its measurement issues: A theoretical explanation for the destruction of a country during a war or conflict**

Increasing your military expenditure automatically means the removal of people, equipment and resources from productive and civil activities that benefit society, to be used for the preparation for warfare. This form of act has had a two-edged effect on civilizations that have been involved or affected by a war or conflict. Great numbers of hours needs to be spent on soldiers and their training for war, which takes away from the countries production of goods and services intended for inhabitant's consumption. The opportunity cost of moving labor away from the productive sectors of the economy leads to the military sector can be seen to directly account for the loss in output. Furthermore, given finite resources, the diverting of resources from production of consumer products to military use applies an extra negative weight on the population. In many examples it has been demonstrated that this has left many citizens to experience a much reduced quality of life as shortages of basic economic goods are frequent, leading to starvation and poorer health conditions (Wahid 2009: 15).

Moreover, the people who are part of the countries army and involved in the conflict require feeding, clothing and tools in large amounts, services and goods, which are produced by others. This change would have two significant effects on the country. Extra taxes in form of money or printing of new money would have to be imposed and gathered prior and during the war. This would reduce the financial capability of the population to spend money as their disposable income would shrink and more people would be needed within sectors, which focuses on the production of warfare products such as bombs, tanks and weapons. Putting the consequences and costs of war itself to the side for a moment, only the increased activities for military expenditure creates a great burden on civil society and costs millions of dollar for the country (Wahid 2009: 16).

### **3. How to measure costs**

#### **3.1. Counterfactuals (indirect method)**

When measuring economic costs of conflict there are different forms of modelling methods that can be used to receive results and numbers that reflect the events during and after a conflict. One of the modelling methods that this paper will attempt to use in the case studies is extrapolation. An extrapolation is similar to an educated guess of a hypothesis. When one makes an extrapolation, it means that one takes the available data and explanations concerning a present or past situation and use the information to make a prediction about what might eventually happen or how the development process would have looked like without the negative occurrence. In extrapolation earlier economic trends are inferred (Lindgren, 2014).

This can be done in a few different ways. One way is such as by looking at the changes of the world economy outside of the country in conflict and comparing it to the economic development of the country. For instance, if tourism everywhere is decreased because of terrorism and the consequences that arrives with that then this can be handled by not extrapolating earlier trends but instead by introducing a reduction in the estimate based on the experience of other countries which look similar to the country that is in a war or conflict. One way of dealing with this is to take the average for other countries in the region for instance and compare it to a single case study (Lindgren, 2014). This paper will attempt to demonstrate trend-lines, which shows how the economy would have developed in absence of the war. It is essentially a modelling method that finds how the economy could have developed in the absence of conflict (Lindgren, 2014).

#### **3.2. Typology of costs (Direct method)**

Although, trend-lines and the use of extrapolation shows how the country is affected on macro-level, this paper is including other methods in order to provide with some detailed data concerning the changes in the economy during and after the conflict. There are two different methods, which can be used when presenting a more detailed data set for the conflict (Lindgren, 2014).

- Accounting method, which counts the direct and indirect costs of conflict and it, it is directly is based on theory and empirical analysis (Lindgren, 2014).

#### **3.3. Accounting methods**

The accounting methods account for a great part of the costs and they usually include direct costs and indirect costs. Although, it is significant to recognize that it excludes important measurements such as opportunity costs (decreased tourism and foreign direct investments) mainly due to the reason that they can be debated. Direct costs are

those that can be witnessed and calculated, whilst indirect costs are the controversial and more challenging findings in the process (Lindgren, 2014).

Direct costs are those costs, which can be observed and calculated, at least in principle. As all calculations on countries in who are or have been in a war are usually hard to gather, and in most cases are overall untrustworthy, in many cases it causes issues when one in practise attempts to calculate and measure the direct costs of a conflict. For instance, infrastructure, factories and machinery have some form of price tag and can usually be summed up. Another cost which is easier to grasp and calculate is the increase military expenditure throughout the conflict. However, on the other hand it has been recognized that land mines are for some countries a hinder for calculations as is causes massive amounts of destroyed territory.

➤ ***Direct costs (immediate destruction to territory)***

- Infrastructure
- Factories
- Machinery
- Farmland
- Increased military expenditure (Lindgren, 2014).

A great problem with many calculations is that they are not entirely built on actual visible costs. The major problem with indirect costs is that they are much more controversial since they cannot be openly seen but are despite that estimated. It is important to recognize that these numbers can always be interrogated and have influence from more than just numbers such as debatable assumptions.

➤ ***Indirect costs (long-term consequences)***

- Emigration (educated and skilled labour force)
- Tourism
- Damages to production capacity (drawbacks of exports)
- Development aid
- Investment in human capital (health care and education) (Lindgren, 2014).

## **4. Historical and regional background**

### **4.1. An overall trend of the Middle East region:**

Before World War I, Angell (1910) argued that economic integration made war excessively costly, even for the conqueror (Smith, 2013). However, this has yet not become a reason for many governments involved in conflicts and wars to take a step back. Looking back at history, since the fall of the Ottoman Empire the Middle East has unlike any other region in the world been stricken with numerous military conflict, inter-state hostility and civil wars (Wahid 2009: 1).

After World War II, with the threat of nuclear war, a separation emerged between the East and the West, not only did it result in broken negotiations but also in many conflicts and wars in the future years coming. Proxy wars started to become more common between the two sides due to this divided, and the Middle East was one of the regions which was vastly affected. This part of history has according to Hossein rarely been recognized and in his findings he argues that it is one of the significant turning points when trying to provide a background in research studies concerning economic costs of conflict (Hossein 2012: 24).

In the Middle East, the number of conflicts increased in the 1980s and has been generally continuous over time (this data is excluding the Arab Spring of 2011) (Hossein 2012: 48). An overall estimation has demonstrated that conflict in the Middle East have endured for over sixty years. For this reason new initiative such as demonstrating the cost of conflict has been used as an approach for new positive developments in the region. Not only would this have an positive impact on the region but also on countries outside of the region that are constantly involved in these conflicts such as USA, countries of the European Union and Russia (Strategist Forecast Group). The decision to either start or becoming involved in a conflict or war is usually, although not always, taken by a certain type of group in the country such as a monarch, a prime minister, a president, a dictator or as in a democracy – an approval of national legislature (Hossein 2012: 2), all examples which will be found in the case studies of this paper.

As a region the Middle East have faced high risks when it comes to conflicts and wars, in particular regional and internationalized civil wars. It has not only created huge amounts of costs but also ripped the whole region apart. It has been close to impossible to measure all consequences of the conflicts within this region and missing data in these cases means that the research becomes in terms of assessing the economic costs of the conflicts even more difficult methodically. Analysing the region post 1945 it can be demonstrated that a strong increase of conflicts did occur from 1945 up until early 1990s – after the early 1990s there was a strong decline the next ten years. However, the past years have showed that the trend of 1990s changed quickly and not only was there an increase of conflict in the region but also in the rest of the world (Gates, Hegre, Nygård etc: 2010).

Already during the 1970s the Israel-Palestinian conflict started to broaden. The 1980s and 1990s did not bring any positive changes as is was followed up by the Iran-Iraq war and the Algerian Civil War – two of the most intense conflicts in the region over time. The region is specially known for its particular religious beliefs and its strong dependency on oil – two factors which have in different cases been the one of the reasons for conflict occurring (Gates, Hegre, Nygård etc: 2010). Furthermore, it is significant to have an understanding over the overall patterns of the regions in order to study a specific country.

A great part of the literature is concerned with the economic conflict trap, which refers to that underdevelopment is both a cause and a consequence of conflict – this essentially means that economic underdevelopment increases the risk of conflict. When it comes to regions in Sub-Saharan Africa and South Asia, one can find huge effects on conflict on several of different development indications. However, for the Middle Eastern region the effects are less dramatic. An effect of the conflict on the overall economic performance of the region can be found, however, it is not as clear as other regions. Moreover, the initial values of this region are different if one would compare it to other developing regions in the world (Gates, Hegre, Nygård etc: 2010).

#### **4.2. Iran-Iraq War (1980-1988)**

Although this war is not one, which this paper will study in detail, it is crucial to mention it as it needs to be studied and recognized in order to receive a clearer understanding of the two other selected conflicts for this paper, especially when presenting the macroeconomic damages of both the invasion of Kuwait 1990-1991 and the US invasion of Iraq in 2003.

The war between Iran in Iraq was an armed conflict that lasted from the year 1980 to 1988 and has been estimated as being that centuries longest conventional conflict. The war began when Iraqi armed forces invaded the western part of Iran, however according to Iraq that war had already started months before the invasion of Iranian territory. There were many different reasons for why the war broke out and among these were taking control of the rich oil producing Iranian border, a huge amount of and were many different minorities including Iranians live. Saddam Hussein had however underestimated Iran's strength, moreover, the population of Iran was three times more than the population of Iraq (Hossein 2012: 95).

By 1982, Iran had already regained all of the territory, which was lost for Iraq in 1980. However, as the leader of Iran at the time, Ayatollah Khomeini did not agree with the suggested terms for peace in 1982, the war continued until 1988. The war had huge consequences, for instance, the oil exporting capacity of both countries was drastically decreased and the pipeline shutoffs lead to a direct hit on the countries income and foreign-currency incomes. Eventually it brought both countries economic development programs to a cessation. Moreover, the conflict also leads to approximately half million casualties and several billions of dollars worth of damages (Hossein 2012: 95-96).

#### **4.3. The Gulf War (1990-1991)**

The Gulf War took place between 2<sup>nd</sup> of August 1990- 28<sup>th</sup> of February 1991. On August 2<sup>nd</sup> 1990, the Iraqi army trooped into Kuwait requesting to be replying to a call for help from Kuwaiti revolutionaries who had overthrown the Al-Sabah ruling family and already on the 8<sup>th</sup> of August, Saddam Hussein professed the capture of

Kuwait. The northern part of the county was already devoted to the Basra province and the so the southern part become Iraq's nineteenth province for the first time in history. The original plan was to only invade the major oil fields and not to include an invasion of all of Kuwait, however, the decision to take this action was decided drastically and something, which is today known as Saddam Hussein's rushed decision (Hossein 2012: 101-102). The conflict ended in an estimation of one million people of Iraq's population, mostly children dying (Hossein 2012: 107). Furthermore, it has also been recognized that the war was partly caused by an oil price disagreement within OPEC between the high-price group including Iraq and the low-price grouping of Kuwait, Abu Dhabi and Saudi Arabia (Halliday 1991: 233).

#### **4.4. The Iraq War (2003-2011)**

In 2002, the former president of the United States, George W. Bush declared that an invasion of Iraq needed to occur for different reasons. He stated that the vulnerability of the United States after the September 11<sup>th</sup> attack of 2001, joint with Iraq's continuations of manufacturing weapons of mass destruction and its relation to different terrorist groups. Furthermore, on the 19<sup>th</sup> of March 2003 the start of a conflict, which today is known as the 2003 Iraq war and the Second Persian Gulf War took place on Iraqi territory. It consisted of two different periods. The first of period was a brief conventionally fought war in 2003 were troops of the United States and Great Britain together with some other countries invaded Iraqi territory, and in a short period of one month the Iraqi military was defeated. The second period was much longer than the first phase and it mainly refers to US occupation of Iraqi territory. However, in 2007 the military presence started to decline and in December 2011, the United States had formally withdrawn most of its troops from Iraqi territory.

## **5. Empirical analysis**

### **5.1. An overall trend in the Middle East region**

It is significant to have an understanding over the overall patterns of the regions in order to study a specific country. When measuring and discussing the economic costs of a conflict spill overs from others parts of the region does not necessarily have to be but can be one of the main factors for why there has been major economic costs for that particular country.

A great part of the literature is concerned with the economic conflict trap, which refers to that underdevelopment is both a cause and a consequence of conflict – this essentially means that economic underdevelopment increases the risk of conflict. When it comes to regions in Sub-Saharan Africa and South Asia, one can find huge effects on conflict on several of different development indications. However, for the Middle Eastern region the effects are less dramatic. An effect of the conflict on the overall economic performance of the region can be found, however, it is not as clear

as other regions. The initial values of this region are different if one would compare it to other developing regions in the world (Gates, Hegre, Nygård etc: 2010).

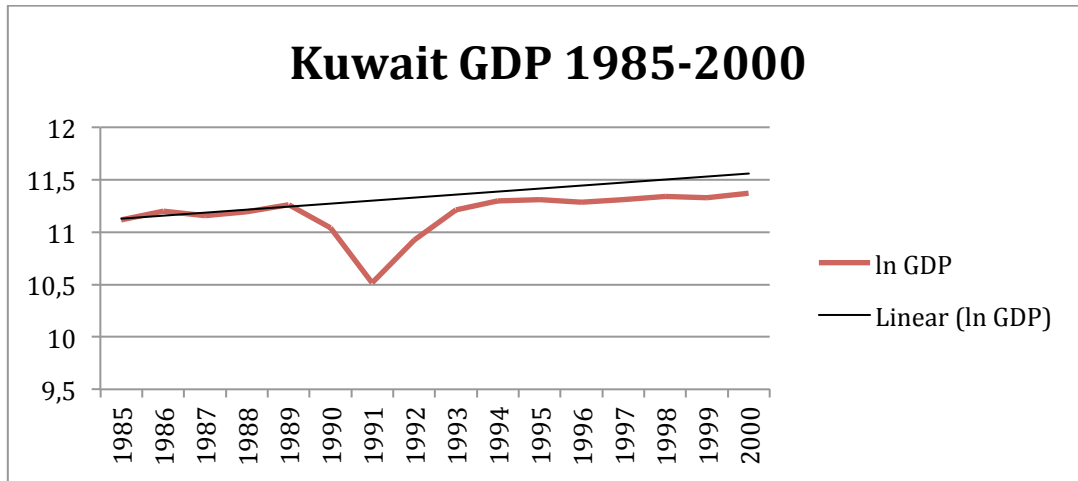
## **5.2. Gulf War (1990-1991)**

Before the Iraqi invasion, Kuwait had reached significant economic progress and growth mainly from its oil resources. During the second half of the 1980s economic growth had reached an averaged 5.5% per year and the prices increased by an average of 1.5% per year. The economy mainly relied on oil and calculations demonstrated that it made up to 60 per cent of the GDP. Other areas, such as services and construction started to grow throughout the 1980s. In the early 1990 the emigrants of the population accounted for about 70 per cent of the total population, which was back then around 2.1 million and 85% of the overall workforce (Sab, 2014).

Iraq's invasion of Kuwait imposed extensive physical damage to the territory and it resulted in large budgetary and balance of payments deficits. Moreover, it disordered the domestic and financial market, ceased foreign trade and disabled the labour market completely. Over 60 per cent of the existing oil bores were set on fire by Iraq. This automatically led to a total shutting down of production, which essentially paused all foreign trade. Furthermore, as the territory was set on fire it had a major effect on water sources and the environment (Sab, 2014).

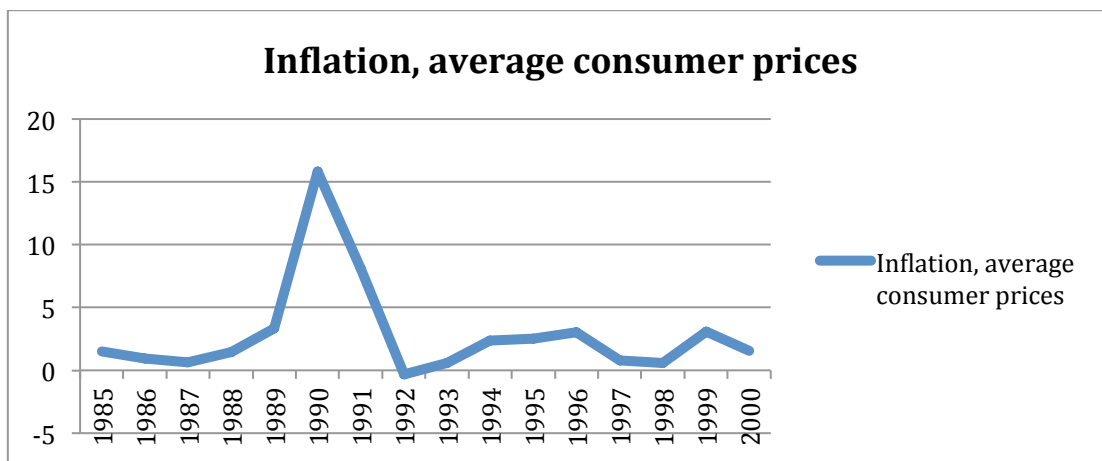
The oil sector experienced major damages to drilling rigs, oil-gathering centres, refineries and oil loading and shipping facilities. However, it was not only the oil sector, which was damaged. The physical disturbance spread to other sectors such as communication systems, private and public building, and electricity plants. Most significantly for this form of study is data and during the invasion the majority of statistical data systems were lost and destroyed (Sab, 2014).

Moreover, the financial system was harmfully affected as an outcome of the invasion. Financial contracts were disrupted and assets serving as security were destroyed. A few banking system's assets were burgled, including the Central Bank of Kuwait's gold assets and unissued currency. Furthermore, whilst transferring the information abroad contained the damage to the financial databases, there were some disturbances to the archives. Essentially the invasion and occupation led to extensive migration of both Kuwaitis and emigrants. The large reduction of Kuwait's population by the end of 1991 had both supply and demand side factors. When it came to the supply side, labour markets were disrupted by the reduction of workers and the inaccessibility of certain skills. The outcome capability restraints on the supply side were supplemented by a reduction in aggregate demand caused by lower consumption as an outcome of the decrease in population (Sab, 2014).



Source: The IMF Database, Country details of Inflation. January 2014.

The graph shows the development process of GDP in Kuwait between the years 1985-2000. It can be seen how the logged GDP level was steady and high between the years of 1985-1989. The invasion of Iraq in 1990 is shown by the drastic decrease between the years of 1990-1992, though the economy did start to recover before the end of the war in 1992. Although there was a relatively quick recovery period after the war and somewhat of a return to steady growth, the gap between the linear trend-line and actual GDP growth reveals that the country did not manage to recover to the same extent as before the invasion. This means that the conflict did not only drastically decrease the level of GDP during the conflict, but it also had a long lasting after effects, especially seeing as the country has not reached the level of GDP pre 1989 still today.



Source: The IMF Database, Country details of Inflation. January 2014.

The above graph shows that inflation levels were consistently low during the period 1985-1989. It can be seen that the conflict lead to a sudden increase of the inflation levels from around 4to16%, and then later drastically dropping when the war was over in 1992. The trend from 1992 to 2000 has demonstrates a return to normality of



the inflation level, some years showing rates back at the same level as it was standing on before the war. However, due to other instabilities in the economy it can be seen on the graph that rather than a steady level, the inflation rate fluctuates more than prior to the war.

### **5.3. The spillovers in Iraq – negative externality of the war**

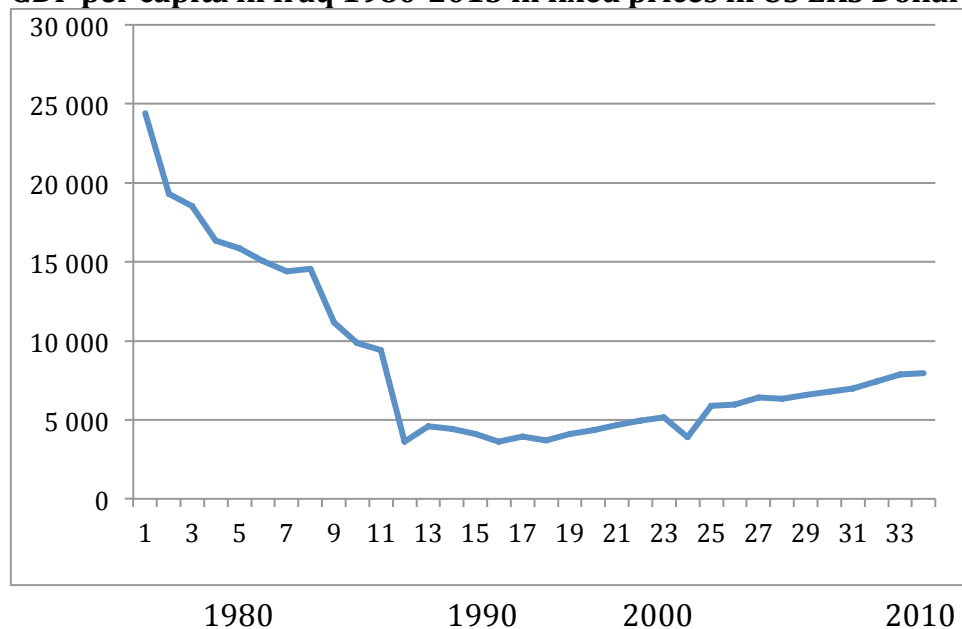
In the late 1970s Iraq was one of the most developed countries in the region. Iraq had not only developed a well-organized infrastructure, it also owned the second largest oil reserves in the world. However, due to wars including the invasion of Kuwait, Iraq's development stopped and some authors would argue that it was sent back to the pre-industrial age (Ismael: 2007). As the Iraqi government refused to start a process of diplomatic negotiations, the Anglo-American response to the invasion of Kuwait was a bombing campaign. Besides from destruction of Iraq's infrastructure (Alnasrawi, 1992), documents have revealed that the US intentionally destroyed Iraq's water treatment capability and within a couple of months of the war, the UN reported that Iraq was facing a water and sanitation crisis, which according to the UN could have resulted in a famine (Ismael, 2007).

The invasion led to freezing of the majority of Iraq's assets in the industrialized countries and a UN complete restriction on all transactions, including both imports and exports with Iraq. Furthermore, the sanctions resulted in a decline in Iraq's oil output from 3.3 million barrels per day in 1990 to less than 14 per cent of that level in the following months, which demonstrated that it was barely enough to meet the needs of the local economy. Moreover, it had been calculated that the changing conditions in the market for oil also caused a heavy decrease in Iraq's oil revenue per capita from a peak of \$2000 in 1980 to \$792 in 1989. The overall economical loss from this decrease is calculated to be 8.5 billion dollars in 1990. Since Iraq depended highly on imports of inputs for its industrial sector, capital goods and equipment for all areas of the economy such as military goods and other products for private and public consumption it didn't shock researchers when they the calculations of the decline were being made (Alnasrawi, 1992).

In the later part of 1991, an international study team sent a group of 87 researchers and professionals who were specialized in different areas, including medicine, health care and child psychology to conduct a broad study of the impact of the 1991 Gulf War on the Iraqi population, particularly the effects on children. The research was based on 9000 household interviews in more than 300 locations. The result from the research demonstrated that there was an increase in infectious diseases connected with filthy water supplies. Moreover undernourishment was caused by a collapse in crop production and the inability to import enough food. The immediate result of this process was a great increase in infant and child mortality as well as severe effects on the social and psychological wellbeing of women and children (Ismael, 2007).

The study demonstrated that the mortality rate for children under the age of five increase 380 per cent after the war, for children aged one year or less the increase in mortality was 350 per cent. It is difficult to put an economic cost on this for of measurement, however, when it comes to preventing or stopping a war, it can in some cases be enough to present data of these sorts of factors. In this case, an overall estimation showed that around 46,900 children died during the first eight months of 1991 (Ismael, 2007). Of the children who survived, the study demonstrated that almost two thirds of the children who were interviewed believed that would not live for much longer due to psychological issues and the experience of traumas. 80% reported daily fear of losing their families through death or separation. Nearly 80% also reported experiencing shelling at close range (Ismael, 2007).

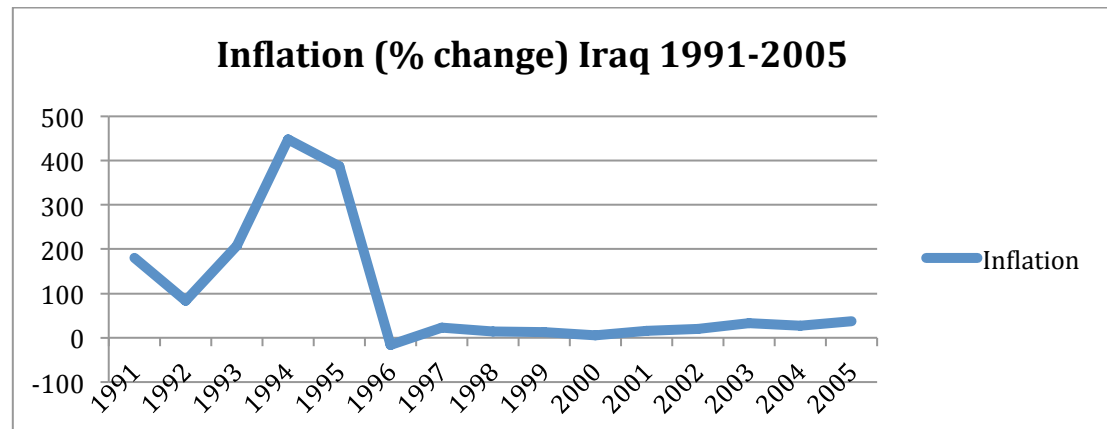
**GDP per capita in Iraq 1980-2013 in fixed prices in US EKS Dollars**



*Source: Source: The Conference Board Total Economy Database. Output, Labor and Labor Productivity Country Details, 1950-2013. January 2014.*

The graph above presents data for GDP per capita in Iraq in relation to its neighbouring countries, Jordan, Syria and Iran between the periods of 1980-2013 in fixed prices, US dollars. The periods include the Iran-Iraq war 1980-1988, Iraq's invasion of Kuwait 1990-1991, and US invasion of Iraq 2003. From this graph it can be shown that before the Iran-Iraq war took place, GDP per capita was significantly high in comparison to the rest of the periods. Furthermore, it can be assumed that the GDP per capita fell drastically during the Iran-Iraq war by the time of Iraq's invasion of Kuwait it reached a \$5,000 from a high of \$35,000. Furthermore, GDP per capita has remained on the same level throughout the US invasion of Iraq up until today. It can therefore be concluded that Iraq has not been able to recover due to wars and

conflict that started in 1980. Additionally, it can be assumed that the economic development process of Iraq would have, in the absence of war, more than likely demonstrated higher levels of GDP per capita.



Source: The IMF Database, Country details of Inflation. January 2014.

Inflation was already high when the invasion started in 1991. The graph shows a severe and significant increase in inflation between the years of 1992-1996. From this it can be concluded that inflation was not severely affected until the war was over and so inflation wise, the country was in long-term hit by high numbers and did not recover quickly as Kuwait. Furthermore, from 1996 up until 2005 it can be shown that inflation decreased drastically and kept a steady and low in percentage for the next decade.

#### 5.4. 2003 invasion of Iraq

##### *Impact of the war on the economy*

By 2003, real GDP had fallen by 35%, which mainly was a reflection of a reduction in oil production and a major cutback in non-oil economic activity. Unemployment was valued at about 28% in 2003 and as a result of supply disturbances caused by the war, inflation increased from 19% in 2002 to 34% in 2003. Moreover, close to \$1 billion in foreign currency was taken out of the Central Bank of Iraq (CBI) vaults, mostly because the government needed money in order to stabilize different forms of operations for society. Furthermore, gross international reserves of the CBI were about \$1.1 billion by end of 2003. The prowling of the main central bank building, combined with the destruction of several commercial bank branches worsened the shortage of bank notes in the instant aftermath of the conflict (Sab, 2014).

It is also worth noting that a CBI printing press, used for the production of ID 10,000 notes was stolen during the 2003 conflict, which led to a situation where these notes were traded at a less valued share of 20-30% because of the fear of copying. Since the

CBI had not started to operate to the full extent by the year of the war, monetary policies were passive during the conflict. Since the quality of Iraq's statistical data centre was lacking great amounts of information due to limited access and isolation, overall, it is difficult to analyse the fiscal policy for the year due to the conflict and. Essentially, the year of 2003 resulted in the government spending great amounts of money on war which proved to limit wage payments to employees around the country (Sab, 2014).

The invasion of Iraq in 2003 partly stopped the economic decline that Iraq suffered from the past two decades. For instance, oil making and exports rose to 2.183 million barrels per day in 2007 and per capita income reached \$1,935. This can be considered remarkable compared with the economic decline of the 1990s, however, it is still far poorer than the levels of the late 1970s (Wahid 2009: 98).

### ***Military Expenditure***

<b>Years</b>	<b>Military Expenditure (\$m)</b>	<b>ME/GDP</b>	<b>Armed Forces</b>
<b>1990</b>	<b>14,210</b>	<b>18.4</b>	<b>1390</b>
<b>1991</b>	<b>8,776</b>	<b>17.5</b>	<b>475</b>
<b>1992</b>	<b>4200</b>	<b>17.9</b>	<b>407</b>
<b>1993</b>	<b>3,530</b>	<b>18.5</b>	<b>407</b>
<b>1994</b>	<b>3,330</b>	<b>19.1</b>	<b>425</b>
<b>1995</b>	<b>3,600</b>	<b>19.7</b>	<b>415</b>

*Sources: WMEAT (2001); Cordesman (1999a)*

In 1990 military expenditure increased drastically in Iraq. As a sign of the invasion it can be demonstrated from this table that in 1990 18.4% of GDP was spent on military expenditure, this included an armed force of 1390 people as well as equipment's such as weapons. Furthermore, the data also shows how these numbers were kept up after the war, however, armed forces decreased at the same time as the percentage level of military expenditure of GDP was kept at the same level. This means that Iraq was cutting down on its armed forces, however it kept on investing in military equipment. The table overall indicated that Iraq continued to spend about a fifth of its GDP on military expenditure during the 1990s, this has been estimated as one of the highest ratios in the world (Wahid 2009: 118).

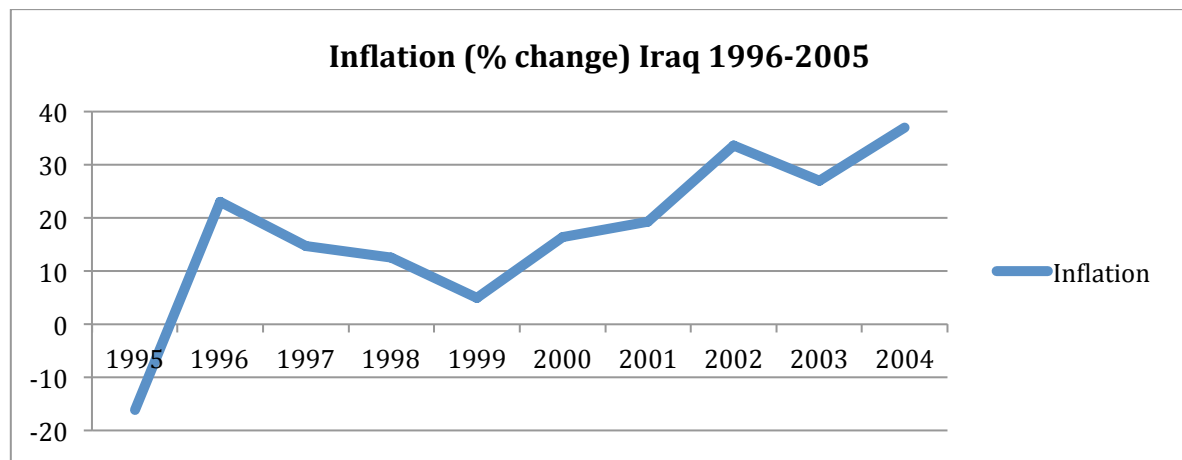
### ***Human losses***

The governments of Iraq and the US human loss estimations demonstrate that when it comes to the military, anywhere between 50,000 and 120,000 Iraqi soldiers were killed during the invasion of Kuwait. However, when it comes to the civilians the data becomes even less clear. During the invasion it was estimated that between 5000-

15,000 Iraqi civilians had lost their lives. However, it did not take long until the estimations of the numbers increased and disagreements of the data made difficult to officially release any numbers. It was also estimated that 15,000-30,000 Kurds and 4000-16,000 Iraqi's who had been displaced died in refugee camps due to starvation and inability to provide healthcare (Alnasrawi, 1992).

Some would argue that the invasion of Iraq in 2003 has not only paused the development, but also has brought the country to a situation of lawlessness, with widespread insecurity and corruption at many different levels (Ismael: 2007). Although Iraq is estimated to have the world's second largest oil reserves and in the 1970s was seen as a middle income country with modern infrastructure, good quality of education and a working healthcare system, resulting from the many wars, Iraq has been brought to its knees. Iraq suffered mainly through three major wars and a long period of economic and financial misconduct as well as international sanctions started to be implemented during the 1990s. These occurrences damaged the country not only economically, but also politically. The overall GDP per capita was estimated at about only \$820 in 2002, and the country suffered greatly from a crippling debt burden (Sab, 2014).

### ***Inflation***



*Source: The IMF Database, Country details of Inflation. January 2014.*

From this graph it can be demonstrated that inflation has overtime between 1995-2004 increased drastically. During the actual invasion inflation dropped slightly, however, it was quickly as shown in 2004 increased to a percentage it had not reached post 1995 and pre 2004. By the end of the invasion and as a long-term consequence, inflation had reached almost 40%.

### ***Impact on children, Healthcare***

One year after the invasion reports were being sent from Baghdad concerning the increase in leukaemia among the whole population in Iraq due to the 1700 tons of

DU, which was dropped over the country that had irreversibly mixed with the soil. Furthermore, in Douglas Westerman's report who is a specialist within the field of uranium stated that DU has a half-life of 4.7 million years, which means that millions of Iraqi children will suffer for tens of thousands of years to come. Health reports demonstrated that cancer had increased with 10 per cent. By 2002, the Iraqi government informed the UN that 1,614,303 Iraqis – including 667,773 children under five had died from diseases which could not be preserved due to economic sanctions and already major harm to the bodies. Some reports even concluded "Economic sanctions may have been a necessary cause of the deaths of more people in Iraq than have been slain by all so-called weapons of mass destruction throughout history." (Ismael 2007: 343).

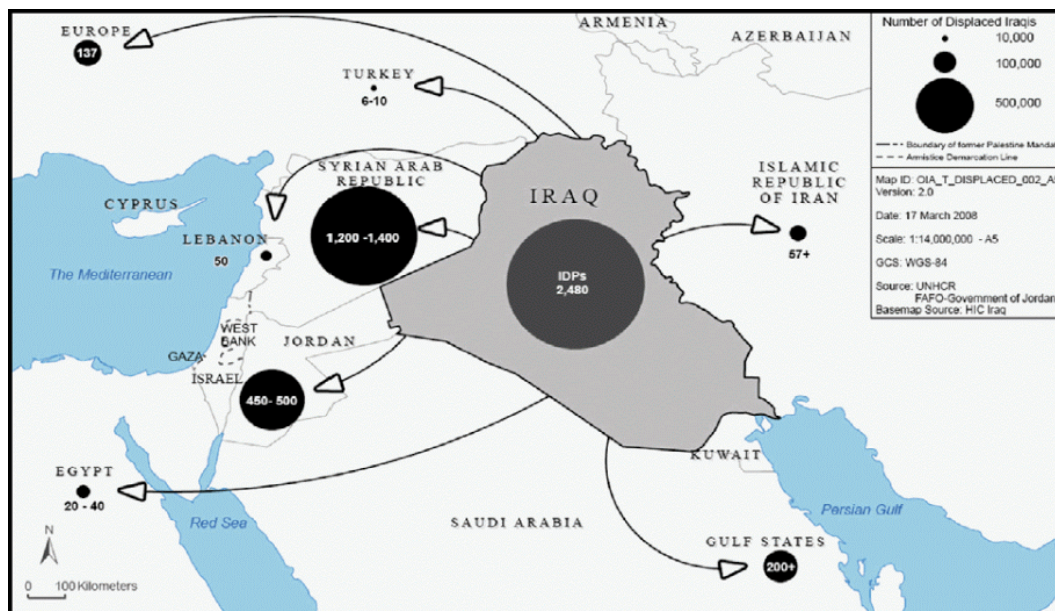
At the end of 2003, it was projected that about 50 per cent of the children in Iraq were suffering from Post Traumatic Stress Disorder (PTSD), an estimation, which one can presume it higher now. Moreover, many children were forced into becoming child soldiers, which also contributed to the numbers of children living with PTSD, although numbers for this have been difficult to calculate as there have not been as much contact with this group of children. A report which was written by two specialists within this field stated that Children are fearful, anxious, and depressed about the prospect of armed conflict, and many have nightmares, and 40% do not think that life is worth living." (Ismael 2007: 345). In 2006 on January 27<sup>th</sup> the Iraqi education minister reported that there were 4 million children eligible for primary education in 14,000 primary schools, and of this number only 10,000 schools were open with approximately 106,000 students attending schools. Furthermore, the majority of these schools were without clean water and working toilets (Ismael, 2007).

### ***Emigration***

Due to the invasion, which resulted in disorder over the entire country approximately one million people of the Iraqi population immigrated to neighbouring countries such as Jordan, Syria, Egypt and the Gulf States. The New York Times reported in 2006 that most of these people were from the middle class and in the next running of 10 months new passports had been issued for over 1.85 million people of the Iraqi population, which is 7 per cent of the total population and it was demonstrated that a quarter of this number were middle class people. The disorder and no accessibility to education forced many students to also leave the country and since 2004 the Ministry of Education has issued 39,554 letter-authorizing parents to take their children's academic records abroad. In 2005, this number had doubled and one could assume that the numbers would be even higher if estimation of these sorts of numbers would be done today.

The amount of Iraqi refugees to neighbouring countries demonstrates one of the most important yet commonly misunderstood effects of the Iraq War in 2003. Studies have

mainly focused on either the immediate humanitarian challenge this crisis has resulted in or on refugees as looming security risks, where some scholars have seen this from a point of view, which focuses on factors such as diseases and terrorism. In numbers, it has been estimated that around 2 million Iraqis have been forced to leave their homes and flee to neighbouring countries and that over 2.5 million are internally expatriate within Iraq. This refugee flow has been calculated as one of the largest in the region in history since 1948. Of those refugees who have left the country, more than 1 million are assessed to be in Syria and around half a million in Jordan. Other countries, which have been forced to open their borders for refugees, are Lebanon, Egypt, Iran and Turkey. This has financially have had a negative effect on these countries economic, in particular Jordan, where over 1 billion US dollars per year have been used to help these people. Furthermore, it has also lead to over crowdedness in schools, higher competition for jobs and one of the biggest challenges yet, the social tensions among the groups (Wehrey, Kaye, Watkins etc, 2010).



SOURCE: UNHCR  
RAND MG892-4.1

In one of UNHCR's reports the flow of refugees was demonstrated in a map. As one can comprehend from this image, the refugee flow affected almost all of Iraq's neighbouring countries.

### *Unemployment*

As a direct result of the invasion unemployment was as high as 68 per cent. Because of this many organizations together with 169 US-based agencies were forced to cooperate in order to support almost 6.5 million people, which counted for 25 per cent of the population, who were dependent on food, clean water and healthcare. From 2003, it was estimated that the number of people living below the poverty line has

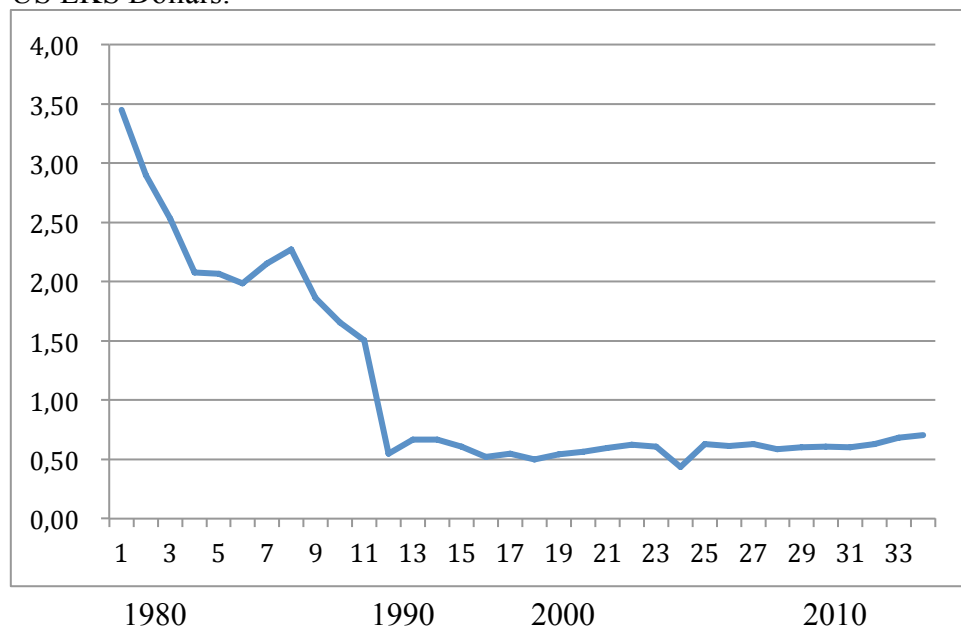
drastically increased by 20 per cent. A report demonstrated that out of two million Iraqis under poverty line only 171,000 persons were receiving social assistance of approximately 30-35 dollars/per months. Furthermore, due to the disorder in the countrywomen were the group that was heavily affected by this, as they couldn't work safely in order to help out financially to provide for their families.

### ***Education***

Sine Iraq's revolution in 1958, access to all levels of education and healthcare was mostly free despite the war with Iran and a report from UNESCO demonstrated in 2003 that the education system, which Iraq had pre 1991, was one of the best one's in the region with over 100 per cent when it came to the enrolment of students in primary schooling. Furthermore, the higher education system such as scientific and technological institutions was ranked as good institutions with high quality staff, however, in 2003 it was reported that 84 per cent of these institutions had been burned. This included 2000 laboratories and 30,000 computers. Furthermore, the invasion resulted in one in four students not having access to pre university education and 50 per cent of children did not attend schooling as their parents were to afraid to send them due to kidnapping and bombings. According to UNICEF 2006, 74 per cent of the 600,000 Iraqi children who did not attend schooling were girls. Furthermore, according to the report thousands of schools had been severely damaged during the occupation.

## **5.5. Iraq in relation to neighbouring countries and the rest of the world**

GDP per capita in Iraq relative to Jordan, Syria and Iran 1980-2013 in fixed prices in US EKS Dollars.



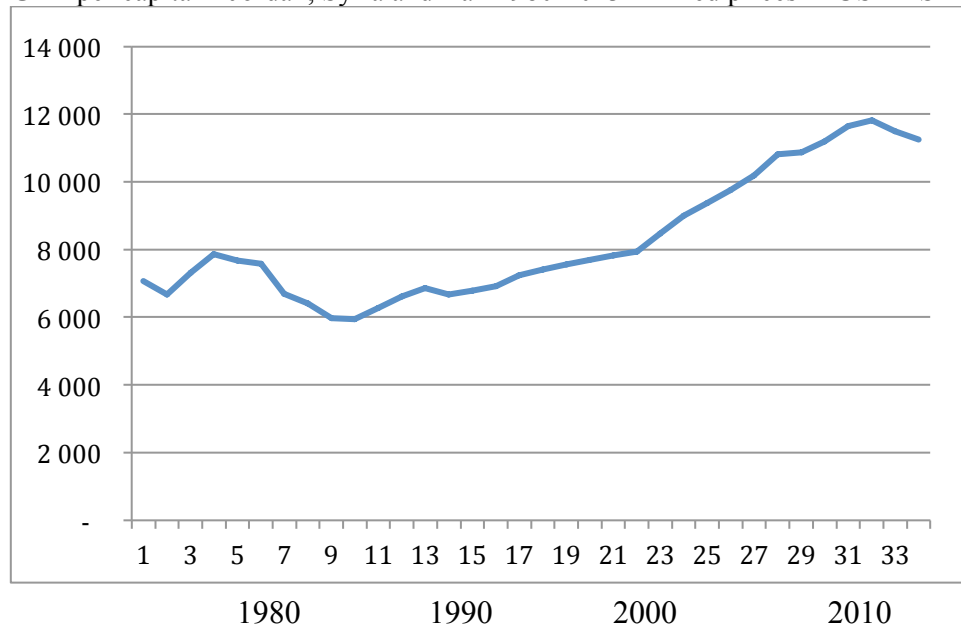


Source: *The Conference Board Total Economy Database. Output, Labor and Labor Productivity Country Details, 1950-2013. January 2014.*

This graph shows Iraq's level of GDP per capita in relation to its neighbouring countries, Jordan, Syria and Iran in fixed prices and US dollars. In relation to its neighbouring countries Jordan, Syria and Iran it can be demonstrated from this graph that Iraq had in 1980 a level of 3,5 higher GDP per capita in average in comparison to its neighbouring countries. However, this dropped drastically due to the Iran-Iraq war 1980-1988 and by the 1990 Iraq level of GDP per capita was 0,5 less than average in comparison to Jordan, Syria and Iran.

From this it can be concluded that Iraq has not yet been able to reach the level it was on before the 1980 and was up until 2010 the country with the lowest level in GDP per capita in comparison to Jordan, Syria Iran. Furthermore, what is significant to recognize here is that Iran, which were the second country involved country in the 1980-1988 war managed to keep the country more or less stabilized, whilst it can be assumed that Iraq's number would have perhaps looked much different in absence of all of the wars, however in particular in absence of the Iran-Iraq war 1980-1988.

GDP per capita in Jordan, Syria and Iran 1980-2013 in fixed prices in US EKS Dollars.



Source: *The Conference Board Total Economy Database. Output, Labor and Labor Productivity Country Details, 1950-2013. January 2014.*

The graph shows an average of GDP per capita in Jordan, Syria, and Iran in period 1980-2013 in fixed prices and in US dollars. The graph demonstrated that GDP per capita has in average been increasing in these three countries between the years of 1980-2013. This means that Iraq's neighbouring countries were not affected by the

wars, which were carried out by Iraq in 1980-1988 and 1990-1991 and not either by the US invasion of Iraq in 2003.

## **6. Analysis of Results**

Irrespective of where a war is taking place or if it as an on going of a war, which has ended, all wars has certain unities. All wars and conflict are difficult to calculate and each economic factor has its complications when it comes to measurement mainly because in economics it is usually easier to create models and draw conclusions from data which demonstrates an average, however, conflicts and wars results in a shock for the economy and therefore in many cases it becomes problematic to measure different sectors of the economy. However, the intention with this study has been to attempt to provide some clarifications and insight to the field as even shorter studies such as this one is currently very limited.

From this study it can be concluded that wars generally lead to a sharp inconsistency in different macroeconomic factors such as inflation, output and GDP and at the same time it is expected that the financial system will overall deteriorate significantly. Depending which war it is the numbers can differ, however, more or less the macro economic factors decrease drastically and has a long-term affect when the war has ended. In all three cases of this study the country has not been able to recover from the war and so it can be concluded that wars does not only result in great amounts of economic costs, but also lead to a development, which differs hugely in comparison to absence of the war. Furthermore, it can be assumed that if the studied wars would have lasted longer a broader damaging economic impact would have occurred and essentially made it even more difficult for the country to recover.

In both studies, it has been mentioned the there was a great drawback on foreign direct investment. Furthermore, when a country decides to start or involve themselves in a war, in some cases as in the case of Iraq's invasion of Kuwait it can lead to a cut in being included in the international community as well when it comes to international trade. Factors, which are significant in the economic and social development of a country. As the region overall including the countries mentioned in this study is dependent on foreign trade and investment, it can be concluded that in order for these countries to recover from a war they would not only need to attract foreign companies to invest once more but on a large scale they would be dependent on significant amounts of external assistance in particular when it comes to the damaged infrastructure, but most importantly assistance in terms of setting up new stable and functional institutions which contributes to the post war economic development in a positive way. As there might be too much conflict and disagreements between different groups in the country, an unbiased part from outside would perhaps need to assist to establish new working policies. In short, the country

needs to stabilize politically in order for any form of development process to take place, which would lead to a recovery.

Furthermore, this thesis mentioned the negative externalities of Iraq's invasion of Kuwait. Although this was briefly touched upon, it can be concluded that conflicts and wars often have either direct or indirect affect on neighbouring countries and so it can essentially be said that the overall trend in the region decreases as more than one country is being influenced. Moreover, emigration and the flow of refugees from the Iraq war in 2003 demonstrated a clear negative effect on neighbouring countries within several of economic and social factors. However, in a rapport from 2010 it was concluded that the overall threat of direct negative externalities to neighbouring countries had decreased, which essentially puts a lower pressure financially and economically on those countries. Still, it needs to be recognized that other factors such as ethnic mobilization, tension among groups and other social difficulties are still challenges that the country is dealing with today (Wehrey, Kaye, Watkins etc, 2010).

Although, when specifically looking at the results of this study, it can be concluded from that in terms of macroeconomic factors such as GDP per capita, neighbouring countries mentioned in this study such as Jordan, Syria and Iran were on average actually increasing their GDP per capita, not only through one of the wars mentioned in this research but through all three wars, the Iran-Iraq war, Iraq's invasion of Kuwait and the US invasion of Iraq, which is over the periods of 1980-2003. Furthermore it was demonstrated from the measurement that even after 2003, these three countries continued to have a steady increase in the level of their GDP per capita.

The theoretical concept of conflict economics establishes a big part of the base for authors to understand how to carry out calculations and what to take into consideration when doing to research. Specifically when it comes to establishing varied concepts such as war and terrorism (Anderton & Carter). This paper wants to therefore point out that, in order for these forms of studies to be close to as credible and accurate as they can be further research within its theoretical framework is needed and will always be needed as concepts will need to modernise since wars and conflict change structure with time.

## 7. Conclusion

In conclusion, this paper has attempted to investigate the economic costs and impact of conflict and wars in the Middle East by specifically focusing on two wars, Iraq's invasion of Kuwait 1990-1991 and its spillovers in Iraq as well as the US invasion of Iraq. The theoretical explanation of conflict economics has been presented as it attempts to close the gap between theory and reality, which traditional economic theory is avoiding. This has been significant for this paper, as the concept demonstrates how conflict economics is different to traditional economic theory and what forms of complications arises when attempting to close the gap between theory and reality.

Moreover, this paper has also demonstrated some analysis of how these wars affected neighbouring countries in the region. This study has demonstrated through country based case studies that conflicts can lead to a great reduction in macroeconomic factors such as output, production and GDP per capita as well as an increase in inflation. Moreover, it has been shown that the financial system weakens drastically at the same time as the country struggles with emigration, population loss, and other indirect costs, which have been mentioned in the analysis.

By using trend lines this paper has attempted to demonstrate what the economy of Iraq and Kuwait might have looked like in absence of the wars. This paper has not been focusing much on post-recovery of the wars, as this would have required other forms of data and measurements and calculations. Although, this study can perhaps be at help for studies that focuses and tries to answer such questions as this paper has essentially endeavoured to present how much economic loss there was in these countries due to the wars.

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