

# **ECONOMIC WARFARE HEAVY DAMAGE WITHOUT BLOODSHED**

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***Abstract:** The essay discusses economic warfare on the basis of the author's definition. To introduce the reader to this topic, the author gives some examples of economic warfare in history for a better understanding of the deeper meaning of the term economic warfare. Based on the introductory information, the paper lists and explains the methods and weapons used in economic warfare in present at a glance. Just like conventional wars, fought with military means, the importance of leadership and the professional training of estimate of the situation also play an important role for a successful warfare; therefore the author discusses in a separate chapter these fundamental basic conditions and furthermore gives some advice what kind of leader is best qualified to plan and lead operations in economic warfare as well as what kind of training institutions are best suitable to train leaders for economic warfare. In the final chapter, the author summarizes his ideas and gives some advices to public institution how to prepare the country best possible for economic warfare.*

**Keywords: definition, methods and weapons, leadership and training-system of economic warfare**

## **Preliminary remarks**

The main purpose of this essay is to present the results of the research work of the author within the last decades on a few available pages. The author published his first ideas about this topic in the Austrian Military Journals (ÖMZ-Österreichische Militärische Zeitschrift) in 2005 for the first time and later after his habilitation at Hungarian Military University in Budapest. A secondary purpose is to persuade policy-makers to deal with the topic critically. To reach a very large readership, the author points out, that the essay therefore may have some deficiencies considering the scientific structure. An additional reason is to emphasize the importance of Military Universities which have a training institute for economics to train and educate future leaders for economic warfare.

## **1. Introduction**

Conflicts and wars are like laws of nature an integral part of humankind. During all epochs of humankind these conflicts and wars were not only fought by well armed and equipped soldiers but also with weapons created by economic scientists. It wasn't analyzed until now, which from both kinds of war were more successful in the long history of humankind, but it is evident that both different kinds of warfare led to heavy damage to the society. Because of the use of different weapons or weapon-systems, the war with military weapons mostly goes hand in hand with bloodshed while the economic warfare leads to heavy damage without bloodshed. This fact is one of the most important differences between the two different systems of warfare.

The following essay discusses “Economic Warfare” as a whole beginning with the presentation of a definition, developed by the author as a result of his research work on this topic within the last decade. Based on the definition the author explains three interesting historic examples of economic warfare. The following chapter four - the centrepiece of the essay - discusses the most important weapon systems of economic warfare and their efficiency in the target area. In every kind of warfare important is the education and training of leaders and the estimate of the situation. To underline the importance of this fact, the author therefore discusses the estimate of the situation for economic warfare and leadership in economic warfare in a separate chapter. In a concluding chapter the author summarizes the results of his research work and gives some advices how sovereign states should deal with economic warfare.

## **2. What does the misleading expression “Economic Warfare” stand for?**

The war, Carl von Clausewitz once wrote, is an act of power to force an enemy (opponent) fulfilling the own intention [1]. Wars which were fought with military methods were the objects of many scientific surveys. Special kinds of wars like “economic warfare” haven’t been extensively analyzed until now. Therefore it exist no detailed entire description what economic warfare really means. Economic warfare in the sense of the survey will not include the warfare against the enemies’ armament industry and important facilities for the daily life during a war with military forces.

In the essay economic warfare will be discussed on the basis of the authors own definition: *“Economic Warfare is a warfare based on non- military methods and means with the purpose to hit the opponent economy. At the end of the warfare the opponent’s economy should have lost market shares and the own economy should be better off.”*

As the definition shows no battle-tanks, fighter planes or submarines are the bearer of the fighting in such a war and in normal case no high ranking generals or admirals are the protagonists in the warfare and head of the war-rooms of economic warfare, except generals or admirals studied economic science besides their higher military education.

## **3. Economic Warfare in the past-Selected classic examples**

Human history is full of interesting examples of successful or less successful economic warfare. For the purpose of the essay the author discusses three outstanding examples, the biological warfare against Mongols in 14<sup>th</sup> century, the continental system of Napoleon at the beginning of the 19<sup>th</sup> century and the Operation Bernhard of Third Reich against Great Britain during World War Two.

### *Biological Warfare against Mongols*

On the basis of a 14<sup>th</sup> century report, the Black Death is widely believed to have reached Europe from the Crimea as a result of a biological warfare attack [2].

In 1343 the Mongols under their leader Janibeg besieged Caffa at the Crimea peninsula. The siege of Caffa lasted until February 1344, when it was lifted after an Italian relief force killed 15,000 Mongol troops and destroyed their siege machines. Janibeg renewed the siege in 1345 but was again forced to lift it after a year, this time by an epidemic of plague that devastated his forces. During the siege the Mongols hurled plague-infected cadavers into the besieged Caffa, thereby transmitting the disease to the inhabitants and subsequently the survivors of the siege spread the plague from Caffa to the Mediterranean Basin.

Such a measurement of the besiegers was deadly because in the 14<sup>th</sup>-Century medical standards were extremely low and antibiotics against plague were successfully used firstly in the 20<sup>th</sup>-Century.

### *Continental System of Napoleon*

After Napoleon could not invade England with military methods he thought, that England could be defeated by economic warfare. Great Britain was an important factor financing alliance against Napoleon. In May 1806 Great Britain organized a naval blockade of French and French-allied coasts. As a reaction Napoleon issued on 21 November 1806 the so-called Berlin decree which brought into effect an embargo against British trade [3]. The Berlin decree forbade every trade of European Countries allied with or dependent upon France. The French measurement led to some damage of British economy between 1808 and 1811 by hiding the British exports which were falling between 25% and 55% compared to pre-1806 level. The British economy was able to compensate the damages otherwise encouraging British merchants to seek out new markets and to engage in smuggling with continental Europe.

Within Europe on the one hand side some parts benefited from the embargo of British economy, especially Belgium and Switzerland saw significantly increased profits due to the lack of competition from British goods. But on the other hand side the embargo had some negative effects on France itself. Shipbuilding and rope-making declined and with few exports and a loss of profits, many industries were closed down.

It is only mentioned in passing that the famous Swedish economist Heckscher showed how the economic policy of Napoleon against Great Britain failed.

### *Operation Bernhard*

The result of the battle of Britain between summer and autumn 1940 taught the Third Reich that it was not possible to conquer the British Isle with military means. Therefore Germany organized an economic warfare against Great Britain using plans which were prepared in 1939.

Britain was especially vulnerable because its effort was founded upon, and sustained by an economy which was global. It consisted of its directly ruled colonial possessions; its self-governing Commonwealth Dominions; and, the Empire's commerce with neutral powers around the globe. All of them were accepting (in exchange for goods and services); and holding British Pounds Sterling, in their currency reserves for transaction with; and within the Empire. Confidence in the integrity of the Pounds as a world wide excepted currency, was essential to sustaining the vitality of the Empire, and the war effort. It is evident flooding the British economy with a large amount of forged bank-notes it is able to shake the foundations of the monetary system of Great Britain's economy and to restore the British economy into the age of barter economy.

The operation Bernhard [4] was named after the German SS Major Bernhard Krüger who was responsible to organize the printing of the forged bank-notes. The operation consisted of production of forged bank-notes and the infiltration of the 5, 10, 20 and 50 bank-notes into the British Economy to destabilize the Economy. The initial plan was to drop the bank-notes from aircraft on the assumption that while some honest people would hand them in most people would keep the notes, in practice this plan was not put into effect because the German Luftwaffe had not enough planes to deliver the forgeries, and therefore the operation was placed into the hands of SS foreign intelligence.

The production of the forged bank-notes were organized in the concentration camp of Sachsenhausen (35 km north of Berlin) employing more than 142 skilful prisoners for the production of the appropriate rag-based paper with the correct watermark and the engraving of the printing plates. In April 1945 the printing press had produced nearly 9 million bank-notes with the total value of 134,610,810 (today worth 3 billion Pounds). The forged bank-notes are considered the most perfect counterfeits ever produced. The

Bank of England detected the existence of the notes in 1943, and declared them “the most dangerous ever seen”.

After getting knowledge about the existence of forged bank-notes the Bank of England initiated defence measurements which were able to contain the damage caused by forged bank-notes.

The German operation has been dramatised in books, the BBC comedy-drama miniseries *Private Schulz* and a 2007 Oscar-winning Austrian film, *The Counterfeiters* (*Die Fälscher*).

The operation was not successful because it started too late. Therefore most of the notes produced ended up at the bottom of Lake Toplitz of Austrian province Styria. It cannot be completely excluded, that certain forged bank-notes could have directly went into the pockets of former bigwig NAZI who were able to flee to safe countries, which have decided not to pursue NAZIS, to finance a relatively trouble-free life after the end of the World War Two.

#### **4. How to fight an economic war successfully?**

Just like conventional wars which were fought with military weapons, an economic warfare had to be planned in detail and leaders of this type of war had to be best possible trained and educated. While the core element of the planning process is the situation assessment the most important parts of training and education are higher military leadership training and studies of economics at a university.

##### **4.1 Methods and weapons of Economic Warfare**

As I mentioned above, economic warfare is as old as humankind. While in the early days of economic warfare the methods and weapons were simple, they became more and more sophisticated within the course of history. Due to its practical results, we can distinguish between different groups of methods and weapons. For the purpose of the essay we will distinguish between, fiscal, monetary, trading, espionage methods, head hunting and biological warfare and the use of goal-oriented information as a weapon.

###### *4.1.1 Fiscal methods and weapons*

In the eyes of Europeans, the production, marketing and sale Airbus passenger liner is a success story which is based on an economic warfare between the European aircraft industry and the aircraft industry of the USA, especially Boeing the worldwide leading commercial aircraft produces until the foundation of Airbus-Industries.

Thought it costs billions of US-Dollar to design and engineer a new airliner in detail - money that aircraft producers must borrow up in front, and pay interest on every day during the several years that pass from the start of design to the first sale of a complete aircraft - Airbus-Industries is virtually exempt from such financial agonies, because it was subsidised in the past with millions of Euro by the Airbus owning countries, i.e. the development of the first model of Airbus which was launch in May 1969, the A300, was subsidies with 800 million US-Dollar and the development of one of the modern plans, the A330 and A340 family, was subsidised with 4.5 billion US-Dollar by the governments. Due to best conditions for the granted loans, Airbus-Industries were able to calculate a lower price than the most important competitor Boeing [5].

Boeing stayed not inactive and hit back during a public tender of the Ministry of Defence of USA (Pentagon) for new tanker aircraft. In the first round of the tender, Airbus-Industries offered with its strategic partner Northrop-Grumman, a large US-based defence armament producer, a tanker plane granting good conditions to the Pentagon, but in the final period of the tender Northrop-Grumman dissolved the strategic partnership and left

Airbus-Industries alone. In the final end and after the last best offer process in the tender Boeing received order worth 52 billion US-Dollar.

As we showed above, fiscal policy is an important weapon to improve competitiveness of the own economy. With the purposeful use of taxes, contributions, customs duties states can thereby strengthen their own economies competitiveness.

#### *4.1.2 Monetary methods and weapons*

The current situation in Russia shows us how vulnerable a currency really is. Due to the limited space for the essay, it is not possible to tell the true story about the dubious monetary measurement fired by some think tanks against the Russian Rouble and which happened parallel to the open asymmetric military conflict in Eastern Ukraine.

In principle, monetary measurement can be used both as defensive or offensive weapons. Important is the devaluation of the own currency to reduce the price of own exports. Also important is money laundry to legalize earnings. With the legalized money further economic warfare can be financed.

Another weapon is stock exchange speculation. With this weapon share prices could be devaluated and as a result enterprises could loose market shares.

#### *4.1.3 Trade related methods and weapons*

Trade is an important factor in economic activity. Trade makes every country better off. Trade can be steered by using exchange rates as key elements of control the stream of goods and services across borders. To stimulate exports or imports, a country can use depreciation or a appreciation of a currency as a measurement.

Another successful weapon in trade is embargo. The word “Embargo” comes from Spanish and it means “Distrain”. Embargo is the complete prohibition of commerce and trade with a particular country or group of countries. In nearer past, embargoes were imposed on Cuba by the USA, and, in the special case of arms trade, USA imposed embargoes to Peoples Republic of China. The effects of embargoes could be widespread and efficient for the own economy, but some scientist voiced concerns against embargoes because of negative effects on the own economy.

#### *4.1.4 Espionage methods and weapons*

Espionage was and is an important factor in warfare. Political and military leaders need all available information to judge the current situation. Therefore they normally use all available human and non human resources to get all necessary information about the enemy’s position, economy and so on. Espionage is in the chain of information collecting the practice obtaining secrets from rivals or enemies for military, political, or economic advantage. It is usually thought of as part of an organized effort.

During the cold war intensive espionage between the NATO and Warsaw Pact had taken place, but recently, espionage agencies have targeted the illegal drug trade and those considered terrorists. Besides these targets espionage daily happen the so-called industrial espionage conducted for commercial purpose. Countries and most large corporations spend considerable amount on espionage of opponent enterprises and on precautions to protect against more cloak-and dagger varieties.

Modern warfare of the 21<sup>th</sup> Century is characterized by intensive use of electronic and communication technology. Network centric warfare is one of the most modern words in modern military discussions. The use of new technology allows a more efficient reconnaissance, deception and security measurements. In the economic warfare receiving and veiling of information has got a vigorous importance.

#### *4.1.5 Head Hunting*

Today among economists it is widely accepted, that investment in education and human capital is one of the most important factors to achieve economic progress. For the further development of a developed country it is vital to have excellent research and development capacities at one's disposal. Developed countries head-hunt the most qualified scientists to make use of their research results and thereby strengthen their own economy.

In relation to head-hunting exist many examples in the past. Imagine the large emigrations waves to the United States of America. During these waves many excellent European scientist left Europe to make further research work in USA. As a result of all these research works, the USA earned a lot of money. In a critical accounting estimate Europe had the high costs for educating all these emigrating scientists and the USA earned a lot off money.

#### *4.1.6 Biological economic warfare*

Biological economic warfare is a special case of biological warfare and a modern biological economic war is different from ancient time biological economic war due to the rapid changing standard of medical treatment of victims of biological warfare.

Biological economic warfare includes elements of uncertainty because it is not possible to exclude all neutral or friendly people from the attack, i.e. during an attack against a production facility with influenza-virus to bring a production to a standstill the virus can also infect other people who are not employed in the attacked facility.

#### *4.1.7 Information as a main weapon-system*

An interview with the current director of école de guerre économique in Paris, Christian Harbulot, published in the German newspaper "Der Spiegel" on April 20, 2006 makes one sit up and takes notice: In the interview he clearly stated, that the European Unions acts like a "headless chicken ", because in respect of economic warfare the European Countries are total beginners and all the states have no ideas what concentrated effects in information as a weapon lie and he explained from his own experience that within a successful economic warfare the information-management plays a decisive role. The economic warfare with the weapon "information" is warfare in real time, i.e. if a competing company launched falsehood about a product of a competitor it is necessary that the competitor had weapons for retaliation in his arsenal.

### **4.2 Types and organization of economic warfare**

Modern military science identified different kinds of wars fought with military means. In principle we can differentiate between nuclear, conventional, civil and asymmetric warfare. The most interesting appearance of military warfare is the asymmetric warfare which can be characterized as a conflict between two or more opponents of drastically different levels of military capabilities or size. An economic warfare classified using similar characteristic as military warfare. Categorically we can differentiate between a conventional economic warfare and an asymmetric economic warfare. Conventional economic warfare is an economic war between two or more countries. Such an economic war is planned and fought by official authorities of the involved countries. An asymmetric economic warfare is similar to military

Fought between opponents of different levels of capabilities, i.e. between an official authority of a country and a private enterprise or between two or more private enterprises. As a result of analyzing the situation of all the independent states in the world, we can summarize, that only a few of the 194 independent states recently fought wars, but all of them established a Ministry of Defence. None of them maintains a Ministry of Economic Warfare. Merely the great powers have installed special governmental institutions to collect information, which are useful for managing the economic warfare to impose the

nation's economic interests on other nations. A planning process of economic warfare is not the responsibility of a government alone it could also be made by enterprises. Successful leaders in the economic warfare normally act in the same way as military leaders do. Therefore in some parts the education of leadership and the training of leaders could be the same.

#### **4.3 Estimate of the situation, leadership and training system**

After discussing economic warfare in general we had to answer questions like what are the main responsibilities of planners or who are the leaders of the economic warfare and what role should career officer play in this warfare?

Today, it is state of the art in military training of military leaders to teach the estimate process. The estimate process had its origins in the Prussian Army's attempt in the early 1800ies to develop a systematic and logical approach to the solution of military problems. In economic warfare the estimate of the situation also plays an important role and therefore had to be trained carefully similar to the training programs of military education institutions. It is evident that on a careful estimate of the situation guarantees best possible success in the following operation.

In the warfare with military means the success of military leaders depend on the use of a balanced combination of talent and the successful use of military knowledge trained at military universities. In the economic warfare the success also is the result from well-based use of knowledge about the influence of the taken measures on the economic process and the talent for analyzing economic interrelationships trained at universities.

The complex requirements for leaders of economic warfare more or less require an all-in-one solution of education and training suitable for all purpose. The best possible preparation to achieve well educated and trained leaders for economic warfare could be taken place in military universities which are not only teaching the military core subjects like assessment of situation, issue of orders, leadership and control but also economics as a science discipline.

Looking around in the world we can find a shining example for an educational institution for economic warfare. In 1997 General Jean Pichot Duclos founded the *École de Guerre Économique* ([www.ege.fr](http://www.ege.fr)) in Paris. The current director of école de guerre économique is Christian Harbulot. Since its founding, the école de guerre économique has been educating students to learn all the necessary knowledge to fight an operation in an economic war successfully. It is worthwhile looking at the training curriculum presented at the homepage mentioned above to gain an impression what will be thought at école de guerre économique.

#### **5. Prospects**

For a long time power and influence of states has been based not only on military power but also on economic strength. With their economic policy, states attempt to guarantee the best possible standard of living for their population. These could only be achieved by conquering desirable roles in the world economy and by further protection against attacks from opponents. For this reason states have vital interests to strengthen their economies. A strengthening of the economy could be achieved by organizing the national economy in the best possible way and by organizing an economic warfare which is fought with the purpose to hit the opponent economy but doesn't destroy the opponent's economy completely.

Every country is been well advised to establish academic educational training centres which are able to teach leadership and economics for an economic warfare.

## References

The available literature is full of books and papers about this topic, which shows the importance of Economic Warfare for Geo-Economics in a globalized world. The author published his first result on this topic in "Österreichische Militärische Zeitschrift (ÖMZ) 4/2005 and after his habilitation at former Military University in Budapest in Hadtudományi szemle 2009.

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