

## Conference Paper

# The Myth of the Positive Impact of Asymmetric Economic Interdependence on National Security. The Case of the Sino-Japanese Conflict

Thomas Poufinas<sup>1</sup> and Victoria Pistikou<sup>2</sup><sup>1</sup>Department of Economics, Democritus University of Thrace, University Campus, Komotini 69100, Greece<sup>2</sup>Dr. Victoria Pistikou, Visiting Teaching Fellow, Department of Political Science and International Relations, University of the Peloponnese, 1 Aristotelous & Athinon Ave., Korinth, P.C. 20132, Greece

## Abstract

In this paper, the aim is to show that the impact of asymmetric economic interdependence on national security is more a myth than a reality. In order to contribute to the discussion we focus on interstate conflicts with territorial disputes. So far, this debate has been highlighted by Liberals, whose argument was that trade promotes peace. However, our argument is built on the theoretical basis of Realism. We argue that the positive impact of economic interdependence is actually a myth, since it does not raise the levels of national security of the threatened state, therefore it cannot be considered as a power-balancing factor. In order to support our argument we developed an analytical framework, which consists of variables representing economic interdependence and national security. Trade, FDI, energy supply, economic agreements and membership in common economic or monetary organizations are variables that show the level of economic interdependence. Military expenditures, number of violations, possession of nuclear weapons and membership in military alliances are variables that show the level of national security respectively. First, we determine, through objective and subjective factors, which of the two rivals is the threatened state. Second, comparing indicators of economic power, we define the asymmetry in economic interdependence. Third, we analyze the indicators of economic interdependence between the rivals and we examine their impact on the national security of the threatened state. To support our opinion that asymmetric economic interdependence has no impact on national security in this paper we examine the territorial conflict in Senkaku/Diaoyu islands between Japan and the People's Republic of China. We conclude that asymmetric economic interdependence is not a power-balancing factor and it has no positive effects on the national security of the threatened state.

**Keywords:** Realism, International Political Economy, National Security

Corresponding Author:  
Thomas Poufinas; email:  
tpoufina@econ.duth.gr

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## 1. Introduction

According to Koo (2009:212-213), *“if China and Japan have low (high) levels of trade ties, they are more likely to escalate the territorial dispute to higher levels of hostility. The Senkaku/Diaoyu case is particularly interesting not only because the two countries have engaged in various patterns of behaviors, both conflictive and cooperative, in addressing their respective territorial claims but also because their bilateral economic interdependence has varied significantly over time [...]”*

The aim of this paper is to reflect on the relationship between economic interdependence and national security and more precisely, to examine our assumption, that economic interdependence between states in conflict is not a power balancing factor for the threatened state. More specifically, economic interdependence cannot cause de-escalation of the conflict and consequently, cannot affect the levels of national security. In order to do that we created an analytical framework based on Realism's assumptions. Regarding issues of international economics and politics, Realism is represented by significant scholars with a huge contribution to this academic field, such as [3, 4, 11, 16], etc. In the existing literature the issues of economic interdependence and national security are dominated mainly by Liberals, who do not take into consideration important variables, such causes of the conflict as, power balances, relative gains, the worthiness of the disputed area as well as the level of interdependence. This means that some of the main indicators of economic interdependence that were used were merely trade, membership of regional trade organizations and capital movements.

For example, the main point was that there is a direct connection between trade and conflict, in other words, between economic factors and security issues. Most of the authors argue that not only does trade promote peace, but also that conflict decreases trade [9]. According to the Liberal Interdependence approach, the division of labor in the international economy is the main determinant, creating high levels of interdependence between states thereby preventing them from engaging in militarized conflict and war. Thus, suspiciousness among states is reduced and consequently, in case of disagreement there can be a peaceful resolution. For example, [13] has argued that Regional Trade Agreements (RTA) can operate as military alliances and therefore can decrease the likelihood of military actions. In addition, variables such as alliances, trade flows, Gross Domestic Product, contiguity as well as political regime have been the most common among others, used by the Liberals as observable factors. Some other authors differentiate their approach by taking into consideration variables such as trade expectations [2], common interests [8], interaction between domestic politics and the international system [6], income ratio [10] as well as Preferential Trade Agreements [5, 9].

Nevertheless, by examining this issue from a Realists' perspective and by implementing a mathematical model in order to quantify our variables, our results are different from that of Liberals. According to our analytical framework, in order to examine our argument, it is important first to prove that there is asymmetric economic interdependence, therefore the first variable we use relies on economics. More specifically, our variables are in bilateral level and concern trade, FDI, energy supply, and economic

agreements. We use the term asymmetric because interdependence means that there is an exclusive relationship between two states which cannot be replaced by another, meaning that they are both completely dependent to each other. Nevertheless, this term is economic and does not take into account a significant factor, that of power and more specifically economic power. Each state in the international system has a level of economic power, whether it is little or great power. A state without power simply does not exist because it would have been conquered by another, since it would not have enough resources to maintain its military capabilities.

In order to measure economic power accurately we use two types of economic indicators. The first type refers to primary indicators of economic power, such as the Gross Domestic Product (GDP), the growth in GDP, GDP per capita and Foreign Exchange Reserves because these indicators are directly connected with the state's power. Nevertheless, sometimes states may have almost the same rates on these indicators and maybe it is difficult to clearly define which of them is greater in power. Therefore, in order to avoid this we also use secondary indicators of economic power, such as the Balance of Trade and Exports as a percentage of GDP. In addition, in order to show that there is economic interdependence between the two rivals we focus on indicators at a bilateral level, such as Trade, Foreign Direct Investments, Economic Agreements, Energy Supply and Membership of Economic or Monetary Organizations. The three first indicators as well as membership of Economic and Monetary Organizations have been also adopted by most scholars in order to measure the level of economic interdependence. However, we believe that it is also important to focus on energy and consider it as a vital economic indicator, since it has also a direct impact on a state's national security, since a state's power refers to economic and military capabilities ([1]: 66).

The second type of economic indicators we use relies on military indicators which are directly related to a state's national security. These indicators are Military expenditure, possession of Nuclear Weapons, Membership of Military Alliances and the number of sovereignty violations and disputes using military force, since all of these indicators show whether a state feels more secure. As Mearsheimer (1991) mentions, land forces remain the most significant factor of a state's power. It is also crucial to define the threatened state, in order to measure the impact of economic interdependence on its national security, therefore it is necessary to create a timeline of the conflict, in order to observe which of the two sides is more aggressive. Additionally, there are also four objective factors which define the threatened state. These are review of the status-quo, proximate power, aggregate power as well as threatening statements. According to Walt "The greater a state's total resources, the greater a potential threat it can pose to others" ([15]: 8). In order to examine our assumption we implement our analytical framework in the case of the Sino-Japanese territorial conflict in Senkaku/Diaoyu islands.

## 2. The Sino-Japanese conflict in Senkaku/Diaoyu islands: Defining the Threatened State

The Senkaku/Diaoyu islands are located in the East China Sea covering 6.3 km<sup>2</sup> in total [12]. Their strategic and economic importance is high, because, according to [12], if China owned these islands, this would put Japan into *disadvantaged position*. The same can be said for Japan. If Japan owned the islands, then China would be into *disadvantaged position*. That's because the continental shelf of the Senkaku/Diaoyu islands cover almost 40.000 km<sup>2</sup> which gives a great advantage to the state in order to exercise further influence, because it can expand the limits of its Exclusive Economic Zone. In addition, this disputed area offers significant natural resources which can be used and, according to some surveys, the likelihood of finding hydrocarbon reserves is high [12], "between 10 to 100 billion barrels" ([7]: 213).

The conflict between China and Japan begins in the early 1970's, when both states proceeded to ocean claims in the East China Sea, however the roots of the conflict are in the nineteenth century and more specifically in 1895 when the Shimonoseki Treaty marked the end of the Sino-Japanese War (1894-1895). According to that Treaty, and more specifically the Article 2b, "*China cedes to Japan in perpetuity and full sovereignty [...] (b) The island of Formosa (Taiwan), together with all islands appertaining or belonging to the said island of Formosa*" (Treaty of Shimonoseki, 2016), however, the Treaty does not clearly define the limits of this island. China's position regarding this issue is based in two components. The first relies upon the existence of some historical documents which refer to China's jurisdiction over the Senkaku/Diaoyu islands but without making clear a concrete control over these islands. The second component relies upon the territorial cession to Japan. More specifically, China claims that these islands were ceded to Taiwan according to the Shimonoseki Treaty, however, the Japanese side claims that "*the Government of Japan incorporated the Senkaku Islands into Okinawa Prefecture and consistently treated the Islands as part of Okinawa Prefecture, not as an area under the jurisdiction of the Governor-General of Taiwan which was ceded to Japan after the Sino-Japanese War.*" (Ministry of Foreign Affairs (a), 2016). In addition, Japan is not willing to negotiate any claim over these islands because it considers them as part of Japanese territory [14]. Moreover, Japan also claims that according to the San Francisco Peace Treaty 1951 (San Francisco Peace Treaty, 1951) the Senkaku/Diaoyu islands *were left as territory of Japan* without any of the involved parties, including China, raising any objections [14], Ministry of Foreign Affairs (a), 2016). In addition, according to the Article 3 of the Peace Treaty "*the United States will have the right to exercise all and any powers of administration, legislation and jurisdiction over the territory and inhabitants of these islands, including their territorial waters.*" (San Francisco Peace Treaty, 1951).

Nevertheless, the significant point of the conflict was in 1969, when the United States of America and Japan agreed, according to the Okinawa Reversion Agreement (Okinawa Reversion Agreement, 1972) that the Senkaku/Diaoyu islands were part of Okinawa and therefore, Japan had to regain sovereignty over them. This decision led to a crisis [7] in 1978 between China and Japan with continuous frictions both in diplomatic

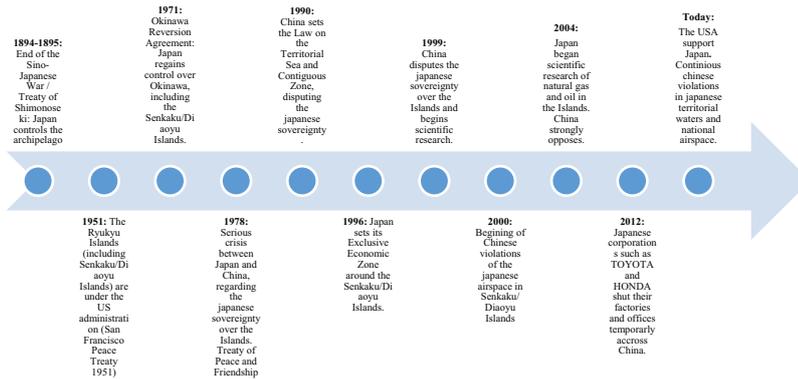


TABLE 1: Timeline of the Sino-Japanese Conflict.

and military levels, which ended up signing the Treaty of Peace and Friendship in the same year.

From that time onwards, the conflict between China and Japan escalated many times. More specifically, in 1990 China claimed that the “Diaoyu Islands” were Chinese territory, by setting the Law on the Territorial Sea and Contiguous Zone [12]. In 1996 Japan responded by declaring its Exclusive Economic Zone around the “Senkaku Islands” and China three years later, in 1999, began scientific research, by sending naval vessels in the islands and declaring that *“the Diaoyu Island and its adjacent islets have been an integral part of China”* [12]. From 2000 onwards the conflict has been escalated many times, especially in 2004, when Japan started its research for natural gas in an area where China strongly opposed to Japan’s right of oil and natural gas exploration, in the East China Sea. In addition, in 2012, Japanese corporations such as TOYOTA and HONDA shut temporarily their offices and their factories across China (South China Morning Post, 17/9/2012). However, apart from the sovereignty issues over the Senkaku/Diaoyu islands there are also disputes regarding the *“demarcation of maritime boundary”* ([12]: 77) and China, from 1992 tries to change the status-quo with disputes and violations of the Japanese territorial waters and air intrusions, using military means (Ministry of Foreign Affairs (b), 2016).

Therefore, according to our analytical framework, the threatened state in this case is considered to be Japan, because China is more aggressive, taking into consideration the continuous violations of the Japanese national airspace and territorial waters, and also China wants to change the status-quo. It is crucial to mention here the fact that the United States of America also feel threatened because of the Chinese rise of power, therefore support the Japanese side regarding that issue, especially in military level (Financial Times, 29/2/2016) *“US President Barack Obama has confirmed that the security pact applies to the islands”* (BBC, 10/11/2014,), which is the most effective deterrent factor. In addition, China is also the aggregate power and proximate power. However, the previous factors are more representative regarding the definition of the aggressive power. Table 1 illustrates the most crucial facts during the Sino-Japanese conflict in the Senkaku/Diaoyu islands.

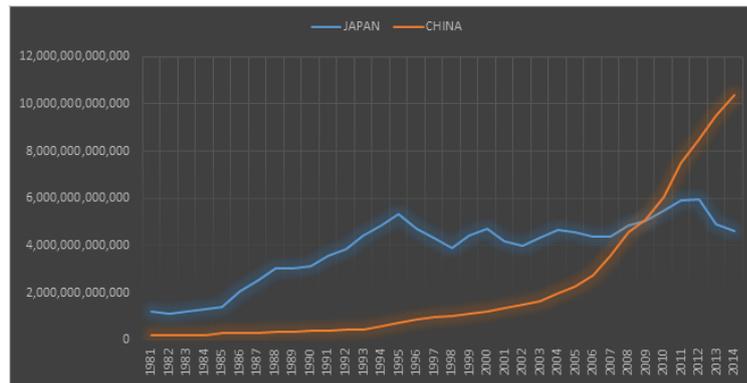


Figure 1: Gross Domestic Product, (current USD). Source: World Bank (a), 2016.

### 3. Economic Power and Asymmetric Economic Interdependence

#### 3.1. Economic Power

In order to test our hypothesis and according to our analytical framework, it is crucial first to show the asymmetry in economic power between the two rivals. In order to do that, we compare the primary indicators of economic power such as GDP, GDP growth, GDP per Capita and Total Reserves, between the two countries through the years, according to the available data. Figures 1, 2, 3 and 4 below illustrate Japan's and China's economic power between, from 1981 to 2014.

From 1981 to 2008, Japan was greater economic power than China. More specifically, from 1981 to 1985 the divergence between the two countries was almost stable; however, from 1986 to 1995 the Japanese economy had a remarkable progress. China, instead, for the same years, remained stable with a slight increase of its rates for 1995. However, from 1996 to 2008, Japan had many fluctuations while China was increasing its GDP rapidly. From 2009 onwards, there was a reverse situation between the two economies. China had a rapid increase within five years by 104%, while Japan although it had raised its rates, it did not manage to prevent the reduction, from 2012 onwards. As a result, from 2008 to 2014 China was more powerful in economic level than Japan.

As far as the GDP growth is concerned, once again China had better rates through the years. More specifically, as it is illustrated in Figure 2, China from 1981 to 1988 raised its GDP growth by 117%. Despite the fact that during 1989 and 1991 Japan had slightly higher growth rates, China raised again its rates, reaching in 1992 and 2007 the highest levels, 14.3% and 14.2% respectively. Japan, on the other hand, had many fluctuations through that period however it did not manage to reach higher levels since 1988. On the contrary, in 2009 Japan had its lowest growth rate, which was -5.5%.

Regarding the GDP per capita, Japan had higher amounts than China. More specifically, as it is illustrated in Figure 3, Japan from 1981 to 2014 raised its GDP per Capita by 254%, from 10,212 USD to 36,194 USD, while the highest rise was between 1981 and 1995, from 10,212 USD to 42,522 USD. China, on the other hand, did not have remarkable changes regarding its GDP per Capita, and the divergence with Japan has increased

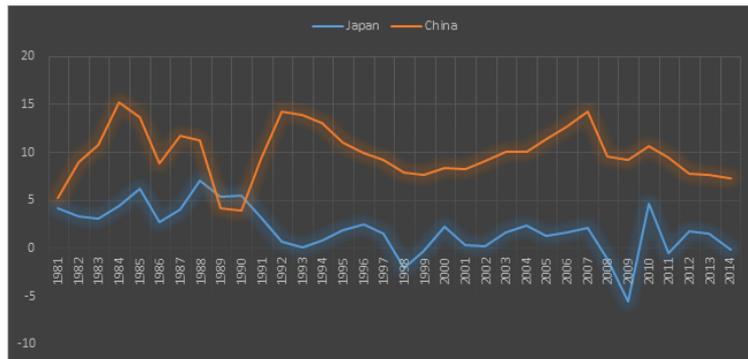


Figure 2: GDP Growth (% annual). Source: World Bank (b), 2016.

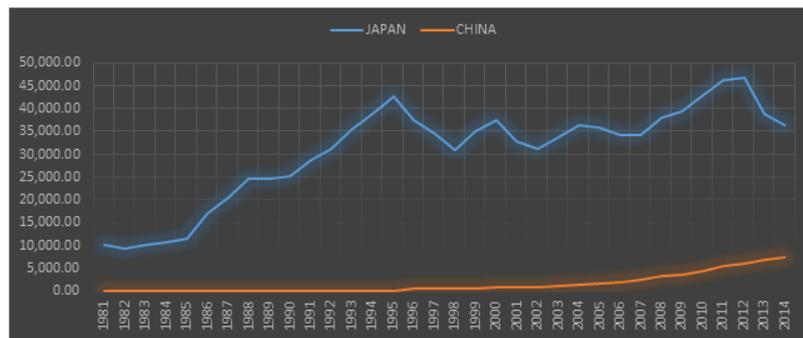
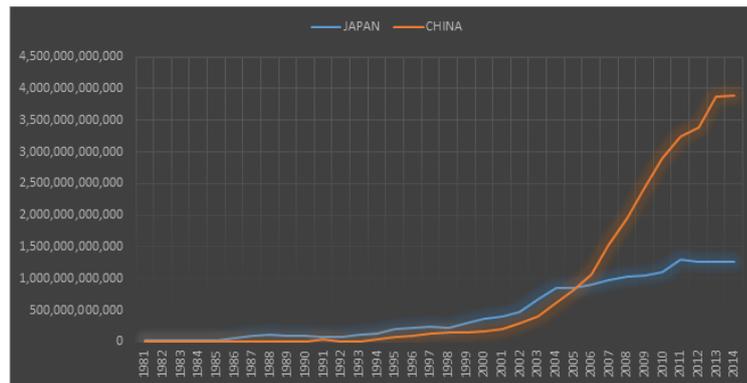


Figure 3: GDP per Capita, current USD. Source: World Bank (c), 2016.

through the years. However, China had a stable increase from 1981 to 2000 by 388% and from 2001 to 2014 this amount increased by 625%, reaching in 2014 7,590 USD. Nevertheless, the Japanese supremacy regarding this indicator is easy to be perceived.

As far as the total reserves are concerned (including gold), the two rivals had similar amounts the years between 1981 and 1986. From that time to 2005 Japan had slightly higher amounts than China, however, from 2005 onwards the Chinese reserves increased fast, while the divergence between the two rivals was increasing faster than the previous years. More specifically, as it is illustrated in Figure 4, the Chinese reserves increased by 527%, reaching in 2014 the 3,900 billion USD. Japan, on the other hand, although it had also raised its reserves, it did not follow the Chinese rates. From 2005 the Japanese reserves increased only by 48.9%, reaching 1.260 billion USD. Therefore, this indicator shows that China has higher amounts than Japan in the last decade while the divergence is growing simultaneously.

Summarizing, according to the primary indicators of economic power, we conclude that both rivals have different levels of economic power, therefore the asymmetry between them is clear so we do not have to take into consideration the secondary indicators of economic power, which are Balance of Trade and Exports as a percentage of GDP. As far as the GDP is concerned, we observed a change in the leading power. While Japan seemed to be more powerful than China for 28 years, which is from 1981 to 2009, China managed to increase its economic power the last seven years and become greater power. In addition, the GDP growth showed the dynamic process of the Chinese economic power in contrast to the Japanese, which had many fluctuations and



**Figure 4:** Total Reserves (including gold), current USD. Source: World Bank (d), 2016.

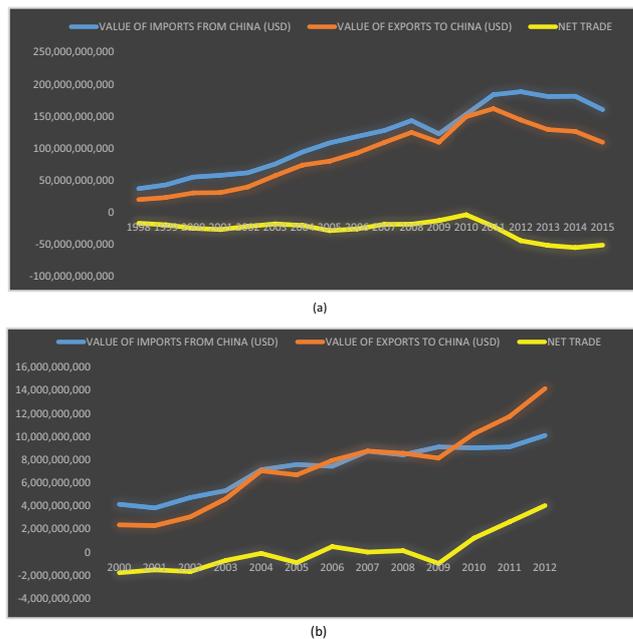
sometimes it was negative. On the other hand, the Japanese superiority regarding the GDP per capita is also noticeable, since the divergence with the Chinese remains high. Nevertheless, regarding the total reserves, although it was not clear enough which of the two rivals was the leading power, from 2005 onwards China increased its rates, showing that it is more powerful than Japan.

### 3.2. Asymmetric Economic Interdependence

As is mentioned in the analytical framework, in order to show the economic interdependence between the two rivals, we examine macroeconomic indicators in bilateral level, such as Trade in goods and services, Foreign Direct Investments as well as energy supply. However, in this case, there is not any economic activity between China and Japan regarding the energy supply, therefore, we will focus only in Trade and Foreign Direct Investments, in order to show the interdependence, which is asymmetric, as we showed in the previous section, by mentioning the different levels of economic power between the two rivals. Figures 5(a), (b) and 6(a), (b) show the bilateral Trade in goods and services as well as Japan major import and export partners respectively, while Figure 7 illustrates the Foreign Direct Investments, in bilateral level.

As far as the bilateral trade in goods is concerned, according to Figure 5(a) below, Japan, from 1998 to 2015 had trade deficit, which increased the last five years. Despite the fact that the value of Japanese exports to China was slightly less than the imports, from 2011 onwards this divergence grew fast. On the contrary, in the previous years and especially from 2009 to 2010 the divergence between the value of imports and exports was extremely small. On the other hand, it is also noticeable that both exports and imports from China increased through the years. More specifically, despite the trade deficit in goods, Japan raised the value of its exports to China by 444% as well as the value of imports from China by 332%, approximately.

Regarding the bilateral trade in services, according to Figure 5(b), the amounts are better for Japan, since the last years, and more specifically, from 2010 to 2012 Japan had a trade surplus. The same can be said for the years between 2006 and 2008, however, the previous years, from 2000 to 2004 Japan had trade deficit which managed to reduce it in contrast to the trade deficit in goods, which was increasing, as we noticed



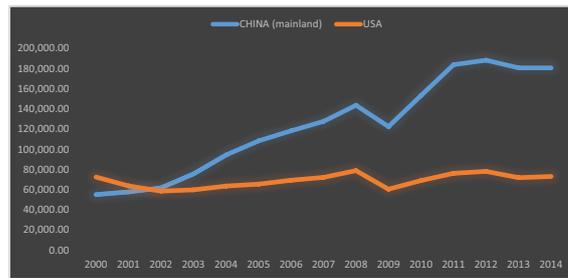
**Figure 5:** (a) Value of Trade in Goods (for Japan), in USD (Source: UN Comtrade Database, 2016); (b) Value of Trade in Services (for Japan), in USD (Source: UN Comtrade Database, 2016).

in Figure 5(a). What is also noticeable here is the rise of the value of imports of Japan from China and the value of the Japanese exports to China, with regard to the trade in services. More specifically, the value of imports from China from 2000 to 2012 increased by 144%, whereas the value of exports also increased by 496% (for the same period).

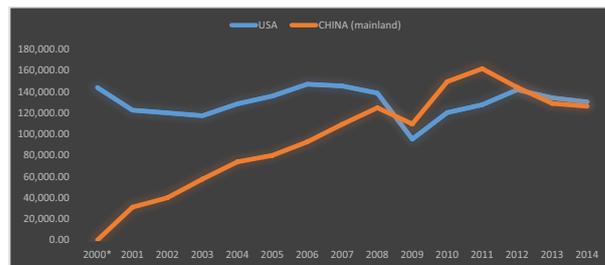
Nevertheless, it is also necessary to take into consideration the ranking, regarding Japan’s trade partners in exports and imports, in order to have a complete view of bilateral trade. As it is illustrated in Figures 6 (a) and 6 (b), China and the USA are in first and second place. More specifically, regarding Japan’s import partners, China is in first place, meaning that China is Japan’s major partner in trade, from 2002 onwards. The USA were also in first place from 2000 to 2001; however, for the rest of the years they remained in the second place. It is also noticeable that not only did China remain in the first place, but in addition its distance from the second major partner increased.

On the other hand, regarding Japan’s major export partners, the USA is in the first place for most of the years, however, China from 2009 to 2012 is in first place. At this point we have to clarify that only for the year 2000 China was in fourth place. From 2001 to 2008 and from 2013 to 2014, China is Japan’s second major export partner. As in Figure 6(a), we notice that China, which is Japan’s second major export partner, decreased the distance from the first major partner.

Regarding the Japanese Foreign Direct Investments, as it is illustrated in Figure 7, the amounts of the outflows to China are higher than the amounts of the inflows from China. More specifically, outflows investments to China increased through the years

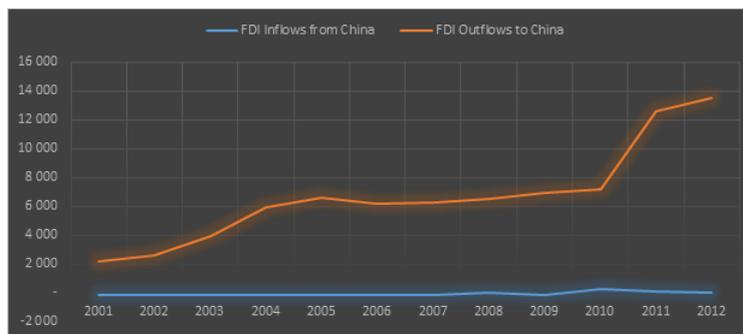


(a)



(b)

**Figure 6:** (a) Japan's Top 2 Import Partners, mil USD (Source: IMF, Direction of Trade Statistics, 2016). (b) Japan's Top 2 Export Partners, mil USD (\*Only for 2000, China is in fourth (4th) place, Taiwan in second (2nd) and Korea in third (3rd) place) (Source: IMF, Direction of Trade Statistics, 2016).



**Figure 7:** Foreign Direct Investments, mil USD (Source: UNCTAD FDI/TNC database, 2016 (based on data from the Bank of Japan)).

by 524%, reaching in 2012 13.484 mil USD, while the inflows from China reached the same year the 71 mil USD, while in 2001 it was at 1 mil USD.

In addition, the Japanese investments to China in 2001 accounted for 0,16% of GDP, in 2005 for 0.29% of GDP, in 2010 for 0.11% of GDP and in 2012 the Japanese investments to China accounted for 0,15% of China's GDP. On the other hand, for the same years, China's investments to Japan accounted, in 2001, for 0.00002% of GDP, in 2005 for 0.0002% of GDP, in 2010 for 0,005% of GDP and in 2012 the Chinese investments accounted for 0,001% of Japan's GDP. Therefore, although the value of the Japanese direct investments to China increased, it remained in low levels. The same can be said for the Chinese direct investments to Japan.

#### 4. Bilateral Military Relations

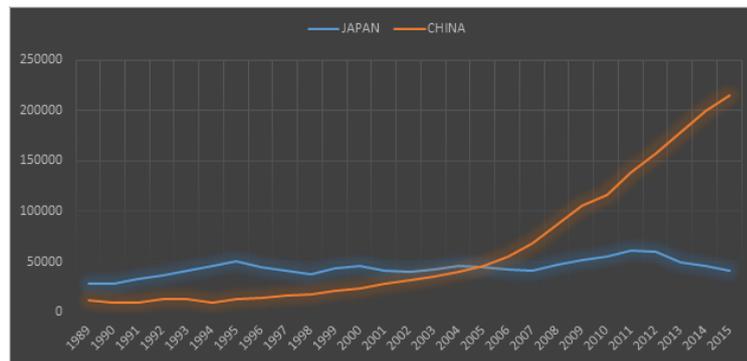


Figure 8: Military expenditures, mil USD (Source: SIPRI (a), 2016).

#### 4.1. Military Expenditures

As mentioned in the analytical framework, in order to examine the impact of asymmetric economic interdependence on the national security of the threatened state, we have to focus on indicators of national security, such as military expenditures, number of sovereignty violations with military means, military alliances and possession of nuclear weapons. In this case-study, the Sino-Japanese conflict in Senkaku/Diaoy Islands, the threatened state is Japan, as we mentioned in the previous section, since China disputes the Japanese sovereignty and wants to change the status-quo. Also, in this section we are going to examine indicators such as the military expenditure, possession of Nuclear Weapons and Violations of the Japanese sovereignty. We do not examine the military alliances as they do not exist for the two rivals. Figures 8 and 9 below show the military expenditures of the two rivals as well as the number of territorial violations of the Japanese sovereignty, respectively.

Regarding the military expenditures, Japan had more expenditures than China, from 1989 to 2005. More specifically, in 1989 Japan spent 27,966 mil USD for defense, while China spent 11,403 mil USD. However, the divergence between the two countries was decreasing and from 2004 onwards China increased its expenditures more than Japan. For example, from 1989 to 2015 China reached 214,787 mil USD raising its expenditures by 1,783%, while Japan also raised its military expenditures by 46.1%, reaching in 2015 40,885 mil USD.

As far as the possession of nuclear weapons is concerned, according to Table 2, China is in the fifth place, after the USA, Russia, UK and France, with 260 warheads. Japan does not possess nuclear weapons, therefore, this indicator shows that China is more powerful in military means and its deterrence is more efficient.

With regard to the Chinese violations within the Japanese territorial waters and airspace, according to Figure 9 and the available data, the number of Chinese disputes over the Japanese sovereignty has increased through the years. The available data from 2001 to 2015 refer only the disputes of the Japanese national airspace while the data for the disputes of the Japanese territorial waters are available only from 2008 onwards. More specifically, from 2001 to 2005 the Chinese violations of the Japanese national airspace increased from 15 to 105 but then they decreased again. However,

Country	Year of first nuclear test	Deployed warheads	Other warheads	Total Inventory
United States	1945	2080	5180	7260
Russia	1949	1780	5720	7500
United Kingdom	1952	150	65	215
France	1960	290	10	300
China	<b>1964</b>	...	<b>260</b>	<b>260</b>
India	1974	...	90–110	90–110
Pakistan	1998	...	100–120	100–120
Israel	...	...	80	80
North Korea	2006	...	...	...
Total		4300	11 545	15 850

TABLE 2: Possession of Nuclear Weapons. Source: SIPRI (b), Yearbook 2015 (Oxford University Press: Oxford, 2015).

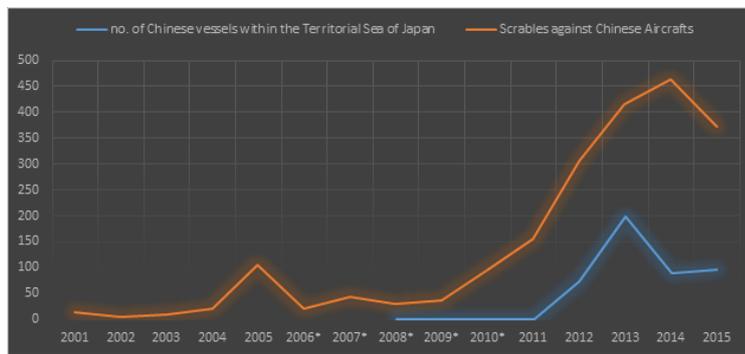


Figure 9: Number of Chinese Violations over the Japanese sovereignty. Source: Ministry of Defence (a), \*Source: Ministry of Defence (b).

from 2009 onwards, they increased again and from 38 they reached 464 in 2014 with a slight reduction in 2015, reaching 373 violations.

On the other hand, the number of Chinese vessels which intruded into the Japanese territorial waters also increased. More specifically, from 2008 to 2011 there were only 4, in total, Chinese vessels which disputed the Japanese sovereignty, however, in 2012 the number of vessels increased to 73. The highest point was in 2013 where 198 Chinese vessels violated the Japanese territorial waters. Nevertheless, despite the fact that this number decreased again reaching in 2015 the 95, the escalation of the conflict was continuous and especially in years 2013 and 2014 the tension between the two rivals was high.

## 5. Measuring the impact of Asymmetric Economic Interdependence on National Security

We performed a series of regressions in order to realize whether there are variables that can affect the Defense Expenditure of the threatened country. We consider that the Defense Expenditure is an indicator of the national security, in the sense that

increased national security results in reduced Defense Expenditure. We use Military Expenses as a measure of the Defense Expenditure. As a second indicator of the national security we considered the total number of Violations of the airspace and the territorial sea, in the sense that increased national security results in reduced Violations. We applied the above in the case of the Sino-Japanese conflict.

## 6. Regression 1

Dependent variable: Japan Military Expenses as a percentage of GDP "JAPANMEGDP".

Independent variable: Trade Balance of Goods of Japan "TRADEBALANCEJPN".

Sample Years: 1998 – 2014 (years for which data were available for both variables).

```
. regress JAPANMEGDP TRADEBALANCE
```

Source	SS	df	MS			
Model	3.6005e-08	1	3.6005e-08	Number of obs =	17	
Residual	9.8588e-07	15	6.5725e-08	F( 1, 15) =	0.55	
Total	1.0219e-06	16	6.3868e-08	Prob > F =	0.4706	
				R-squared =	0.0352	
				Adj R-squared =	-0.0291	
				Root MSE =	.00026	

JAPANMEGDP	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
TRADEBALANCEJPN	-3.55e-15	4.80e-15	-0.74	0.471	-1.38e-14	6.68e-15
_cons	.009726	.0001361	71.46	0.000	.0094359	.0100161

### 6.1. Interpretation

We observe that the p-value is rather high, from which we infer that the Trade Balance is not statistically significant for the Military Expenses of Japan as a percentage of GDP.

## 7. Regression 2

Dependent variable: Japan Military Expenses "JAPAN".

Independent variable: Trade Balance of Goods of Japan"TRADEBALANCEJPN".

Sample Years: 1998 – 2015 (years for which data were available for both variables).

```
. regress JAPANMEGDP TRADEBALANCE
```

Source	SS	df	MS			
Model	3.6005e-08	1	3.6005e-08	Number of obs =	17	
Residual	9.8588e-07	15	6.5725e-08	F( 1, 15) =	0.55	
Total	1.0219e-06	16	6.3868e-08	Prob > F =	0.4706	
				R-squared =	0.0352	
				Adj R-squared =	-0.0291	
				Root MSE =	.00026	

JAPANMEGDP	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
TRADEBALANCEJPN	-3.55e-15	4.80e-15	-0.74	0.471	-1.38e-14	6.68e-15
_cons	.009726	.0001361	71.46	0.000	.0094359	.0100161

### 7.1. Interpretation

We see again that the p-value is quite high; therefore Trade Balance is not statistically significant for the Military Expenses of Japan.

From regressions 1 and 2 we observe that although the imports of Japan from China seem to be higher and higher that does not seem to affect the stance of China towards Japan. Hence Japan does not reduce its military expenses.

## 8. Regression 3

Dependent variable: Air Violations.

Independent variable: Trade Balance of Goods of Japan "TRADEBALANCEJPN".

Sample Years: 2001 – 2015 (years for which data were available for both variables).

```
. regress AirViolations TRADEBALANCEJPN
```

Source	SS	df	MS			
Model	293242.532	1	293242.532	Number of obs =	15	
Residual	83388.4016	13	6414.49243	F( 1, 13) =	45.72	
Total	376630.933	14	26902.2095	Prob > F =	0.0000	
				R-squared =	0.7786	
				Adj R-squared =	0.7616	
				Root MSE =	80.091	

AirViolations	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
TRADEBALANCEJPN	-9.40e-09	1.39e-09	-6.76	0.000	-1.24e-08	-6.40e-09
_cons	-122.5513	43.98564	-2.79	0.015	-217.5765	-27.52611

### 8.1. Interpretation

Trade Balance of Goods seems to be statistically significant at any level for the number of Air Violations and negatively related with it, as the p-value is practically zero and  $R^2$  is at a pretty good level (0.7786). This means that as Trade Balance of Goods decreases for Japan, i.e. Japan imports more from China, the number of Air Violations increases. Hence, although Japan imports more and more from China, the latter has not changed its practice on the matter.

## 9. Regression 4

Dependent variable: Air Violations.

Independent variable:

1. Trade Balance of Goods of Japan "TRADEBALANCEJPN".
2. FDI Inflows (Japan from China) "FDIINFLOWSTOJPN".

Sample Years: 2001 – 2012 (years for which data were available for all variables).

```
. regress AirViolations TRADEBALANCEJPN FDIINFLOWSTOJPN
```

Source	SS	df	MS			
Model	51142.9215	2	25571.4608	Number of obs =	12	
Residual	32773.9951	9	3641.55502	F( 2, 9) =	7.02	
Total	83916.9167	11	7628.81061	Prob > F =	0.0145	
				R-squared =	0.6094	
				Adj R-squared =	0.5227	
				Root MSE =	60.345	

AirViolations	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
TRADEBALANCEJPN	-6.41e-09	1.94e-09	-3.31	0.009	-1.08e-08	-2.03e-09
FDIINFLOWSTOJPN	.4445641	.1766036	2.52	0.033	.045059	.8440692
._cons	-84.41595	47.39609	-1.78	0.109	-191.6334	22.80145

### 9.1. Interpretation

Trade Balance of Goods seems to be statistically significant at any level for the number of Air Violations and negatively related with it, as the p-value is very small and  $R^2$  is at a pretty good level (0.6094). This means that as Trade Balance of Goods decreases for Japan, i.e. Japan imports more from China, the number of Air Violations increases. FDI Inflows to Japan is statistically significant at the 5% level for the number of Air Violations and positively related with it, which means that as China invests more in Japan, then the Air Violations increase.

## 10. Conclusions

The aim of this paper was to reflect on the relationship between economic interdependence and national security. Based on the theoretical framework of Realism, we created an analytical framework in order to contribute to the discussion that trade promotes peace, by answering the question “Is Asymmetric Economic Interdependence a power-balancing factor for the threatened state”? Therefore, we created a framework of analysis based on the assumptions of Realism, which perceived the state as the dominant and rational actor within the international system and we implemented in the case of Sino-Japanese conflict. Given that China is more aggressive power and wants to change the status quo, we considered Japan as the threatened state. According to the timeline of the conflict, China seems to be more aggressive, since in most of the times initiates the conflict escalation. However, there are also objective factors, such as the fact that China is the aggregate and proximity power who tries to change the status quo, therefore China is the revisionist state. Then, we examined the relationship between economic interdependence and national security of the threatened state.

The first conclusion that can be drawn is that there is asymmetry in economic interdependence between Japan and China. We first measured economic power, using mainly primary economic indicators, such as the Gross Domestic Product (GDP), GDP growth, GDP per capita and Foreign Exchange Reserves because these indicators are directly connected with the state’s power. Apart from GDP per capita, in all other indicators China has better indicators than Japan, therefore is greater economic power.

Second, by examining indicators of economic interdependence in bilateral level, such as Trade in goods and services, and Foreign Direct Investments, we concluded that Japan and China are highly interdependent, since China is the first destination for Japanese products and FDI and the same can be said for the Japanese imports from China. However, the energy supply does not exist in bilateral level.

Third, we analyzed the indicators of national security, such as military expenditures, violations of sovereignty of the threatened state (Japan) as well as possession of nuclear weapons. We did not mention military alliances because none of the two countries are members in any military alliance; however, we have taken into consideration that the USA supports Japan. As it is mentioned, *"the US is given military bases in Japan in return for its promise to defend Japan in the event of an attack. This means if conflict were to erupt between China and Japan, Japan would expect US military back-up. US President Barack Obama has confirmed that the security pact applies to the islands - but has also warned that escalation of the current row would harm all sides."* (BBC, 10/11/2014), (THE GUARDIAN, 24/4/2014). Therefore, the conclusion that can be drawn is that although China is definitely greater military power than Japan, its superiority can be reduced by the fact that the global hegemon, that is the USA is in favor of Japan.

Fourth, we regressed our data in order to examine the relation between the two pairs of variables, those of asymmetric economic interdependence and those of national security, i.e. whether Japan's national security is related to its economic interdependence with China. According to the results Trade Balance does not seem to be related with the amount of Military Expenses and is negatively correlated with the number of violations. As Trade Balance becomes negative and drops it leads to increasing number of violations. One would expect the opposite. FDI seems to be positively related with the number of air violations. As China invests more in Japan the number of violations increases. Hence, although China seems to have increased interest in increasing in Japan it still violates its airspace.

Therefore, we concluded that asymmetric economic interdependence cannot be considered as a significant factor of national security, since in interstate conflicts cannot be used as a power-balancing tool in order to mitigate the threat.

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