



THE RELATIONSHIP BETWEEN THE SECURITY ECONOMICS AND THE ECONOMICS DEVELOPMENT.

Zaher A. Khader* Mohammed J. AlHarazin*

**Economic Researchers*

Abstract

This study aims to study the relationship between the economics security, and the economic development in The American economy, and to measuring the impact of these factors on the economic development in USA, the variables in the estimated model is GDP per capita, unemployment rate, Domestic credit to privet sector, co₂ emissions, armed forces personal, and Military expenditure, and used of annual data during the period from 1991 until 2017.

This study used the applied methods of measuring the economic relations, where the researchers test the stability of the time series by Dickey Fuller test and Phelps Peron test, where the time series is stable in the 2nd difference level, and then make a co-integration test by Johansson co-integration test between the variables of the study test where the researchers found the existence of 3 vectors for integration, and then used the method in order to calculate the impact of the independent variables on the dependent variable using the Ordinary Least Square method(OLS). The study result finding there are a positive relation between economics development and both of Domestic credit to privet sector, and Military expenditure, and negative effect between economics developments and unemployment rate, and co₂ emissions.

Keywords: *Economic Security, OLS, GDP Per Capita, Co₂ Emissions.*

Introduction

Economic development is one of the most important endeavors that countries, and all of the economies seek to achieved it in all possible ways, Where countries are trying to achieve the economic development under economical and political conditions may be volatile, And there is no doubt that the United States of America seeks to achieve economic development in particular, despite the surround economical fluctuations and political tensions with neighbor countries, this opens new horizons for us to study the economics security in the American society, where it can be said that the security is the main factor of economics development, when the security is absence, The economics activity cannot be production or continuation in maximizing investments and eliminating economic and social problems, for example, when the investor touch security in the market the economics activity will increase by the investments, As well as when the investor fell the security this will generate a sense of comfort, which makes him efficient in his performance and even to do his activity better , All this stems from the principle of the need for security in human beings, which the economist Maslow describes it on his famous pyramid as the security is the second most important need after the food, housing, and clothing, Therefore, it was necessary to study the economic security of different types inside United States of America, where the United States of America is fertile ground to study this phenomenon, especially as a democratic state and is care to provide the protections to all of the American people.

Study Problem

The problem of the study can be illustrated by the main question:

What is The Relationship between the Security Economics and The Economics Development?

From this main question merges several questions:

1. Do the co₂ emissions affect the economic development in USA?
2. What is the impact of Domestic credit to privet sector on the economic development?
3. Is there a relationship between economics security and economic development?
4. How do unemployment rates affect economic development?
5. Is there a relation between both of Domestic credit to privet sector, armed forces personal, and economic development?



Study Hypotheses

1. There is a relationship between domestic credit to private sector and economic development in USA.
2. Unemployment rate affects economic development in USA.
3. CO₂ emissions greatly affect the economic development in USA.
4. There is a direct relation between Military expenditure, Armed forces personnel and economic development in USA.

The importance of study

1. Measure the economic factors of economic security that affect economic development in the short-term and long-term
2. Determine the percentage of each of the factors affecting economic development and the length of time it takes for this effect.
3. The search makes use of the time series from 1991 - 2017.
4. The absence of studies which address the relationship between security and development.
5. Study objectives
6. Cognition of economic development in USA.
7. Clarifying the effect of the security economic variables in economic development in USA.
8. Determining the impact of unemployment rate on economic development in USA.
9. Showing the impact of higher armed forces personnel on economic development in USA.

Review of the Related Literature

• Study (Stewart, 2013) entitled: **Development and Security.**

This paper reviews the connections between development and security both within developing countries and globally. It interprets security as human security, and within this category focuses on political violence as an important source of insecurity. Conclusions Both in particular developing countries and in the world as a whole, there are strong three-way connections between security and development. In both cases, societal progress requires reduced insecurity. In both cases, it seems that more inclusive and egalitarian development as between cultural groups is likely to lead to greater security. And in both cases, there are severe problems in achieving the virtuous nexus of more inclusive development, better security and more development. These problems are first, that it is easy to mobilize people politically – especially in a democracy – along cultural lines to unite against the feared ‘other’; and secondly, private interests that gain from conflict can be effective in promoting or prolonging it.

• Study (Asghari, 2017) entitled: **National security and economic growth.**

During the past few decades, national security plays a central role in the process of economic development. Also, foreign investment and trade have rapidly increased worldwide and have enhanced economic growth in developing countries. Although foreign investment and trade bring huge economic benefits, many developing countries fear that by opening up markets to competition and foreign investment without restriction, they will lose national security. Therefore, the balance between economic gains from foreign investment and trade presents a challenging task for national security. Is national security a necessary mechanism for Persian Gulf countries to promote their economic growth? This article will examine how national security and its relation with foreign investment and trade affect Persian Gulf region’s economic growth over the 1990-2014 periods. The results show national security has a negative effect but its relation with foreign investment and trade has a positive effect on the region’s economic growth.

• Study (Augustine & Others, 2013) entitled: **The Role of Security Agents on Economic Development and Growth in Nigeria.**

This paper looks at the role of security agents and their relevance and contribution to economic growth and development in Nigeria. In conclusion we have outlined the role and importance of security agents to the Nigeria economic development course. In doing the paper clearly outline the meaning of security and national security as well as their benefit to the nation. We conclude that the success of any nation is for the citizens to have absolute confidence in the government. It is only when there is confidence that the citizens can imbibe a new form of orientations towards their security duties and responsibilities. This cannot be possible unless the citizens are made



to reap maximally, the dividends of democracy, devoid of marginalization repression and primitive accumulation of wealth.

The need for security in economy

It is obvious that security has an economic dimension and security is directly proportional to economic and financial power and insecurity is directly proportional to poverty. Without a well-performing and long-term sustainable economy, there may actually be no safety, prosperity and stability, since economy and finance have direct impact on the military, order and public safety, that is security, and, equally, to the extent to which this potential ensures the functioning of the economy. In fact, economy represents a key structure of power, an architecture generating power, security and stability. A country having a strong economy is able to take political and strategic action on a geopolitical scale and will always be a country influencing international relations. It is the case of Germany, the country with the strongest economy in Europe, France and Switzerland or Japan, a country lacking natural resources and importing 90% of the raw material, but still having one of the strongest economies in the world.

In the last years, security became a major objective of governments and a priority of public organizations and companies. In this respect, we should mention the USA National Security Doctrine (2002 and 2006), the NATO Strategic Concept (1999) or the European Security Strategy (2003), which offer a new vision of globalization and state that, besides military threat, national security should be discussed in relation to economic, energy supply or environmental threats and violations of private property rights: "The last ten years have also seen the appearance of complex new risks to Euro-Atlantic peace and stability, including oppression, ethnic conflict, economic distress, the collapse of political order and the proliferation of weapons of mass destruction.

Since the last decade of the 20th century, economic risks have been considered on the level of risks involved by ethnic conflicts, the proliferation of weapons of mass destruction or organized crime – as threat vectors essentially of military nature – in relation to the impact on national security. As of that time, on a correlative and compulsory basis, countries adapted their national security strategies to the new kinds of risk and threat, irrespective of their nature. The American security strategy of the G.W. Bush Administration clearly stated: "We will continue to take all necessary measures to protect our national and economic security against the adverse effects of their bad conduct. Also, the economic factor is considered for creating geopolitical relations and a global security structure: "We will harness the tools of economic assistance, development aid trade, and good governance to help ensure that new democracies are not burdened with economic stagnation or endemic corruption. In the cause of ending tyranny and promoting effective democracy, we will employ the full array of political, economic, diplomatic tools at our disposal. "Greater economic freedom also leads to greater economic opportunity and prosperity for everyone. History has judged the market economy as the single most effective economic system and the greatest antidote to poverty. To expand economic liberty and prosperity, the United States promotes free and fair trade, open markets, a stable financial system, the integration of the global economy, and secure, clean energy development. Rich countries have concentrated so far on measures for intensifying financial cooperation, but this solution is irrelevant to poorer countries, and fundamental economic reforms are required to eliminate social polarization and the gap between the poor and the rich, which has widened in the last three decades. The annual international security report prepared by the Oxford Research Group; a non-governmental organization points out that the determination to implement such policies might be weakened by financial problems confronting governments in the next few years. But if rich countries decide to lay stress on aiding the poor in the world and on environmental policies, the years to come could be decisive for a greater global stability.

Paul Rogers, a consultant of this organization and professor at the Peace Study Department of the Bradford University, said that the option to be made by the world countries in the next few months will clarify whether mankind becomes more peaceful or less peaceful in the next ten years.

Similarly, Robert B. Zoellick, the World Bank President, stated that the occurrence of the financial crisis so soon after the food and fuel crises will probably affect the pauper individual in developing countries. Especially in the present stage of the global economic-financial crisis, one should note how the political factor is trying to exert more control over the economic factor in order to achieve greater coordination of the state's policies and mechanisms.



National security as a whole is perceived as being in close and indestructible relation to economic security and unavoidably to procedures and costs of security implementation, that is, with security economy.

The present evolution of the society is an indication of the fact that the security sector will be in the near future an important economic field in expansion. According to OECD statistics, the growth in turnover of companies trading security products and services is about 7-8% every year, much higher than, for example, average annual rates of economic growth of other companies, in conditions of global financial and economic stability². First of all, this quick expansion is a consequence of the world demand for security goods and services, due to the direct impact of the society's progress. The engine of development of the security economy consists of a multitude of social, economic and institutional factors that involve public institutions and private and state-owned companies willing to prevent, detect and protect themselves against crimes in the real economy.

On the other hand, the problem of security means implementation raises the problem of deontology, morality and respect for privacy. Nobody knows how the society will react against the extension of surveillance and if such means considered by company managers a way to protect their business – are not considered by employees and, by extension, by the society as an aggression against privacy and a restriction on democratic values.

Methodology

The results of stationary tests

Time series that describe the macro-economic variables are often characterized by un-stationary, because most of them are grow and change with the time, the mean and variance making it un-stationary and linked in time, so it is necessary to make the stationary test of the time series and find out the degree of the integration, and the test of stationary aimed to examine the properties of time series for each of the inflation and its determinants in Palestine during the period of Q1 2000- Q4 2013.

And to make sure of the extent of tranquility, and to identify the rank of each variable separately, where the time series to be static if it fluctuated around the middle of my constant, with variance has no relation with the times, and to confirm or deny it, it requires the use of unit root tests.

Although there are several unit root tests, but we will depended in this study on two tests: Augmented Dickey Fuller test, and Phelps - Perron test, in order to test the null hypothesis that there unit of root, and Dickey Fuller test depends to study stationary of the time series X_t by estimates the following models by using the ordinary least squares:

$$\text{Mod (1): } \Delta X_t = \delta X_{t-1} - \sum_{i=2}^p \theta_i \Delta X_{t-i+1} + \varepsilon_t$$

$$\text{Mod (2): } \Delta X_t = \delta X_{t-1} - \sum_{i=2}^p \theta_i \Delta X_{t-i+1} + C + \varepsilon_t$$

$$\text{Mod (3): } \Delta X_t = \delta X_{t-1} - \sum_{i=2}^p \theta_i \Delta X_{t-i+1} + C + b_t + \varepsilon_t$$

Where the second model differs from the first model in that the second model contains a fixed limit C, and the third model is different from the first model and the second to contain a fixed limit C and variable time trend b_t .

To determine the appropriate length of time gaps are in the habit use a lower value of AIC and SC standard, and after calculate the first differences $\Delta X_{t-1} = X_{t-1} - X_{t-2}$, and the second differences $\Delta X_{t-2} = X_{t-2} - X_{t-3}$, and estimate the model by the ordinary least squares method, and tested the hypothesis $H_0: \phi = 1$ against the hypothesis $H_1: |\phi| < 1$, If the null hypothesis was accepted, it means there is unit root and thus the time series is un-stationary.

As for the test of Phelps Peron (PP) its depends on the same estimate of Dickey Fuller (DF) model, but it differs in that it takes into account the mistakes of variance un-homogenized, And that by correcting Dickey Fuller (DF) tests by the non-parametric process, before this it must to determine the number of slow periods calculated in terms of the number of views:



$$I \approx 4\left(\frac{\pi}{100}\right)^{2/9}$$

It is well known that Augmented Dickey Fuller (ADF) test is based on the assumption that the time series generated by Autoregressive (AR) process, while Phelps -Peron (PP) test is based on a more general assumption is that the time series generated by Autoregressive Integrated Moving Average (ARIMA) process, so the Phelps Peron test has best ability and most accurate than Dickey Fuller test, in particular when the sample size is small, and in the case of conflicting results of the two tests, the better to rely on the P-P test results, where the test is being in four stages: -

1. The estimation by OLS of the three previous DF models.

2. Estimate the short-run variance $\delta^2 = \frac{1}{t} \sum_{t=1}^t \varepsilon_t^2$ where ε_t representing the residuals.

3. Estimate the debugger coefficient S_1^2 called the long-run variance and extracted from common variances of the previous models residuals where:-

$$S_1^2 = \frac{1}{t} \sum_{t=1}^t \varepsilon_t^2 + 2 \sum_{i=1}^i \left(1 - \frac{i}{i+t}\right) \frac{1}{t} \sum_{t=i+1}^t \varepsilon_t \varepsilon_{t-i}$$

4. calculate P-P statistical

$$K = \frac{\delta^2}{S_1^2} \text{ with } t_{\theta^*} = \sqrt{K} \times \left(\frac{\theta^* - 1}{\delta_{\theta^*}} + \frac{t(K-1)\delta_{\theta^*}}{\sqrt{K}} \right)$$

Which is equal to 1 in convergent situation and that when ε_t has the white noise, this statistic compared with the critical value of Mackinnon.

Table no. (1) illustrates the statistical results obtained by the application of the previous two tests at the level, also includes the critical values for each test at the 5% significance level.

Table No. (1). The results of stationary tests

Variables	ADF			PP		
	Level (p-value)	1 st df (p-value)	2 ^{ed} df (p-value)	Level (p-value)	1 st df (p-value)	2 ^{ed} df (p-value)
PCAP	0.272 (0.972)	-3.123 (0.031)	-	0.178 (0.966)	-3.276 (0.027)	-
DCP	-1.660 (0.439)	-5.315 (0.000)	-	-1.679 (0.429)	-5.314 (0.000)	-
UEM	-3.015 (0.047)	-	-	-1.852 (0.348)	-2.997 (0.048)	-
CO ₂ E	-1.935 (0.311)	-1.535 (0.498)	-9.179 (0.000)	-2.007 (0.282)	-4.500 (0.002)	-
MILE	-3.612 (0.015)	-	-	-1.794 (0.375)	-2.175 (0.219)	-4.307 (0.003)
AFP	-5.255 (0.000)	-	-	-4.922 (0.001)	-	-

Source: prepared by the researchers - Output software EViews

Through the results of previous tests, it turns out that the time series is stable at the 2nd deference level, and does not contain the unit of the root, as the calculated values greater than the critical values of Mackinnon and it confirms that this result is the possibility critical younger than 5% values.



View (Figure) confirmed this result, where we note that the time series fluctuate around the constant mean, with variance has not relation with the time. This means that there is a possibility for a joint integration between the independent variable economic development and the dependent variables the security economics in USA. To investigate this, we used the method of Johansen co-integration.

Table no (2). The result of Johansson co- integration test

Trace test			
Test statistics	Critical value	Null hypothesis	Alternative hypothesis No. of co- integration direction
	5%		
149.14	95.75	$r > 0$	$r = 0$
86.59	69.82	$r > 1$	$r \leq 1$
56.87	47.86	$r > 2$	$r \leq 2$
28.51	29.80	$r > 3$	$r \leq 3$
Trace test indicates 5 cointegrating eqn(s) at the 0.05 level			
Maximum test			
62.55	40.08	$r > 0$	$r = 0$
29.72	33.88	$r > 1$	$r \leq 1$
28.36	27.58	$r > 2$	$r \leq 2$
17.52	21.13	$r > 3$	$r \leq 3$
Max eigenvalue test indicates 5 cointegrating eqn(s) at the 0.05 level			

Source: prepared by the researchers - Output software EVIEWS

Evident from the table (2) that all the calculated values of all variables to be estimated was the biggest of the critical values at the level of 5% and thus refuse the hypothesis that there is no common integration between variables to be estimated, and to accept the imposition of the existence of common integration between the variables of the study. Therefore, the researchers will be used the ordinary least squares method to estimate the relationship between GDP per capita as the dependent variable, and both of GDP per capita, unemployment rate, Domestic credit to privet sector, CO₂ emissions, armed forces personal, and Military expenditure as independent variables, and after hold the regression between the variables of the study as illustrated by the following table found that :-

Table no(3). The result of multiple regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
Log (DCP)	1.12	0.11	10.524	0.000	5.40
Log (UEM)	-0.22	0.08	-7.492	0.000	5.22
Log (CO ₂ E)	-1.71	0.22	4.704	0.000	2.10
Log (MILE)	0.69	0.15	-6.803	0.000	7.85
Log (AFP)	-1.41	0.21	11.184	0.000	7.02
C	50.92	4.55	11.184	0.000	NA
R-square = 0.80, Adjusted R- square = 0.977, DW = 2.48					

$$\text{Log PCAP} = C + \beta_0 \text{logDCP} - \beta_1 \text{logUEM} - \beta_2 \text{logCO}_2\text{E} + \beta_3 \text{logMILE} - \beta_4 \text{logAFP} +$$

PCAP = GDP per capita (current us \$).

DCP = Domestic credit to privet sector (% of GDP).

UEM = Unemployment rate.

CO₂E = CO₂ emissions.



MILE = Military expenditure (% of GDP).

AFP = Armed forces persons.

, : Production flexibility for the estimated.

: representing the remaining portion (residual).

Findings

1. There is positive relationship between economic development and Domestic credit to privet sector, and this is consistent with economic theory, i.e., as a rise of Domestic credit to privet sector lead to encourage the investment and increase productivity in the local economy, which is often lead to increase the economic development.
2. There is an inverse relationship between economic development and the unemployment rate in the American economy and this is consistent with economic theory also., i.e., as the rise in unemployment rate, leads to decline the productivity in the labor sector, this lead to decrease the domestic demand of goods and services, leads to decrease the economic development in USA.
3. There is direct correlation between economic development and armed forces persons, and this is consistent with the economic theory, i.e., as it is the rise of army forces leads to increase the safety, and attract the investment and transmission the investors from the less secure countries to the stable countries, this leads to increase the economic development in the secure countries.
4. There is an inverse correlation between the economic development and co2 emissions, as rising of co2 lead to increase the temperature and environmental pollution, which destroys the agricultural sector as a result of climate change and water pollution, this leads to decrease the economic development.

Recommendation

- I. Giving the importance of security agents in safeguarding lives and property, governments should do well in equipping our security personnel so as to help them brace up to the challenges of maintaining law and order in the society.
- II. More covert and advance technique in checking the activities of terrorist groups such as ICIS must be entrenched on our security agents. This also calls for training and retraining to better equip them with modern sophisticated technique of societal policing.
- III. Developing countries national security policy must take full cognizance of the yearnings of minority groups whose continuous clamor have led to political tension in the country.
- IV. we posit and recommend that democracy just be nurtured with highly mobile and professional nurtured with highly mobile and professional armed forces to argument the nonmilitary security needs of under developing countries.
- V. Immediately, the government should also concentrate on providing for the welfare of the people. The so much premium attached to politics has only facilitated ethnic cleavages from those who feel alienated from government and the result is frequent civil unrest and conflicts that are a constantly breach of peace and security in the developing country.

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