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A Midas Regression Approach to Measure the Impacts of the Brent Oil and Gold Financial Returns on Iran's Macroeconomic Indicators

Brent Petrol ve Altın Finansal Getirilerinin İran'ın Makroekonomik Göstergeleri Üzerindeki Etkilerini Ölçmek için Bir Midas Regresyon Yaklaşımı

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Abstract
The harsh, strict, solid and comprehensive impact of the economic and financial sanctions and bans on the Islamic Republic of Iran directs this country to various resources outside the international markets dominated by the United States. Conversely, the gold and oil markets are the two most important markets. It is a known fact that the citizens of the Islamic Republic of Iran have a positive cultural attitude towards gold. They can easily invest in gold, gold-related materials and jewellery. Moreover, gold is an important medium of exchange in international and regional economic and financial transactions. On the other hand, the country has abundant oil resources. Therefore, countries wishing to do business with the Islamic Republic of Iran should be aware of these facts. Depending on the acceptance of oil and gold in the Islamic Republic of Iran, this research aims to analyse the relationships between gold and oil returns and the main macroeconomic variables of the Islamic Republic of Iran. A Mixed-Data Sampling (MIDAS) regression methodology is used to realise the analysis. This analysis shows that gold and Brent oil returns methodologically affect Iran's economy in terms of unemployment rate, inflation rate and GDP growth. In order to achieve these results, a mixed data sampling (MIDAS) regression methodology was used, which mainly focuses on eliminating lag and frequency differences between variables in time series analysis. The results shed light on the fact that the economy of the Islamic Republic of Iran is vulnerable to gold and oil prices. Even small changes in the global gold and oil markets can cause significant events in the international, macro and micro conditions of the Islamic Republic of Iran.

Keywords: Islamic Republic of Iran, Brent Oil, Gold, Midas Regression, Financial Returns.

Öz
İran İslam Cumhuriyeti'ne yönelik ekonomik ve mali yaptırım ve yasakların sert, katı ve kapsamlı etkisi, bu ülkeyi ABD'nin hakim olduğu uluslararası piyasaların dışında çeşitli kaynaklara yönlendirmektedir. Buna karşılık altın ve petrol piyasaları en önemli iki piyasadır. İran İslam Cumhuriyeti vatandaşlarının altına karşı olumlu bir kültürel tutuma sahip olduğu bilinen bir gerçektir. Altına, altınla ilgili malzemelere ve mücevherata kolaylıkla yatırım yapabilmektedirler. Ayrıca altın, uluslararası ve bölgesel ekonomik ve finansal işlemlerde önemli bir değişim aracıdır. Öte yandan, ülke bol miktarda petrol kaynağına sahiptir. Dolayısıyla İran İslam Cumhuriyeti ile iş yapmak isteyen ülkeler bu gerçeklerin farkında olmalıdır. Bu araştırma, İran İslam Cumhuriyeti'nde petrol ve altının kabul görmesine bağlı olarak, altın ve petrol getirileri ile İran İslam Cumhuriyeti'nin temel makroekonomik değişkenleri arasındaki ilişkileri analiz etmeyi amaçlamaktadır. Analizi gerçekleştirmek için Karma Veri Örneklemesi (MIDAS) regresyon metodolojisi kullanılmıştır. Bu analiz, altın ve Brent petrol getirilerinin metodolojik olarak İran ekonomisini işsizlik oranı, enflasyon oranı ve GSYİH büyümesi açısından etkilediğini göstermektedir. Bu sonuçlara ulaşmak için, zaman serisi analizinde temel olarak değişkenler arasındaki gecikme ve frekans farklılıklarını ortadan kaldırmaya odaklanan karma veri örnekleme (MIDAS) regresyon metodolojisi kullanılmıştır. Sonuçlar, İran İslam Cumhuriyeti ekonomisinin altın ve petrol fiyatlarına karşı kırılgan olduğu gerçeğine ışık tutmaktadır. Küresel altın ve petrol piyasalarındaki küçük değişiklikler bile İran İslam Cumhuriyeti'nin uluslararası, makro ve mikro koşullarında önemli olaylara neden olabilir.

Anahtar Kelimeler: İran İslam Cumhuriyeti, Brent Petrol, Altın, Midas Regresyonu, Finansal Getiriler.

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Introduction

The revolution of the State of the Iran Islamic Republic (IIR) has a lot of layers if it is concentrated on the last 75 years such as the rise of the extremist Shia movement, the Islamic Revolution, the wars and conflicts in the Middle East Region (relationship with Iraq), high tensions with Europe and USA and problems in international oil politics. IIR stays often in the middle of high pressures under international sanctions and bans that have financial and economic results depending on, such as its nuclear policies, and its governance understanding.

Out of the external and internal politics, the sanctions and bans deeply impact the state of the IIR's economy. For example, Samadi et al. (2021: 35) state that negative events such as COVID-19 and financial and economic crises double the impacts of the sanctions and bans. Furthermore, they maintain that variables of the inefficiency of the policies adopted, macroeconomic indicators such as high inflation, high inflation expectations, rampant unemployment, deepening recession and increasing devaluation of the national currency are showing the economy's fragile state. In this viewpoint, IIR should find its method to overcome the negativities of the international financial context. Furthermore, Zeinedini et al. (2022:7) argue that there is no significant relationship between world gold prices and the Iran Stock Exchange index but, there is a negative and significant relationship between OPEC oil prices and the Tehran Stock Exchange index in the Covid-19 period. Out of a shortage or a huge financial-related catastrophe such as Covid 19, this research investigates the long-term relationship between returns of oil and gold and IIR's critical macroeconomic variables of GDP Growth, Unemployment rate and Inflation rate. It will serve to fill a research gap in how macroeconomic variables are impacted by returns of oil and commodities in a sanctioned and banned country between the years 1991 and 2023.

Yalçınkaya and Tuğlu (2021) summarised how the IIR reaches the international financial markets to finance its economy and the most favourable method is gold payment to oil trades under international financial sanctions with China, India and Turkiye, therefore attitudes of the international investors (returns) toward oil and gold are important in the absence of a specific payment system such as SWIFT (Society for Worldwide Interbank Financial Telecommunication). In their analysis, Yıldız (2020) and Küpeli (2016) affirm the existence of an economic bottleneck even after the sanctions of bans related to nuclear program activities. According to Carswell's (1981:260) analysis, the history of sanctions and bans in IIR is older than its current situation and has different identities in comparison with sanctions and bans of China, Cuba and Vietnam. Nevertheless, the IIR is not the only country that suffers from the hard sanctions and bans of the United States, there were 60 sanctions on 35 countries at the beginning of this millennium and this situation opened its doors to a new gold market (Taskinsoy, 2019: 22). Despite these hard conditions, IIR continues to take its place in international markets with its partners with fluctuations. Table 1 shows the economic relationships of the IIR between the years of 2018, 2019 (first six months) and 2019 (second six months) and the great

majority of these international trades were originally developed around the strategic commodities, of oil and gold.

Table 1. IIR's trade volumes with countries

Countries	2018 Million US	2019 Million US	2019 Million US	Change (%)
EU 28	21,470	4,280	4,602	-80
China	35,100	23,200	23,202	-34
India	17,570	7,300	7,308	-58
Iraq	9,550	12,000	12,000	26
Turkey	9,320	5,590	5,590	-40
S. Korea	6,4	2,60	2,60	-60
Japan	4,140	1,180	1,180	-72
Afghanistan	2,530	1,950	2,330	-23
Others	31,720	14,020	27,720	-56
Total	**137,800**	**72,100**	**86,530**	**-48**

Source: IRAM, Center for Iranian Studies in Ankara, 2020.

Moreover, the main impacts of US sanctions and results of these developments can be in the following fields such as i) Economic, social, cultural and political development domains, ii) Macroeconomic fields such as GDP, inflation, unemployment, industrial production and investment, poverty and immigration, iii) The negative sentiments in oil exports, stock exchange markets and financial markets, iv) Extension of sanctions in non-oil sectors such as iron, steel, aluminium and copper (IRAM, Center for Iranian Studies in Ankara, 2020). The country has suffered from these kinds of unbalanced sanctions for almost 50 years.

The IIR suffers from these high-degree sanctions, therefore the state had no option the regulate its economy soundly and comprehensively. Finding the correct strategy to form the correct financial management portfolios is another important problem for Iranian investors under these regulations. Oil for food and life is the only strategy for this state. And the importance of oil and selling oil is only one option in the short term and middle term to economize the nation (Shirvani and Volchenkov, 2022) Under harsh sanctions of the US and sometimes international order, the markets of IIR are so far from US Dolar and its calming impacts for countries, for these reasons, the country realizes oil and gold-based financial and economic transactions.

To be a part of the international financial system, to ensure financial interdependence with other countries and to integrate regional and continental economic and financial associations are essential goals for a state. Especially, an efficient and effective state should complete all of these steps to draw an economic perspective in terms of high-tech products and services, sustainability and energy policies.

In light of the arguments above, the research gap is formed around the questions of whether or not IIR's two main and general commodities' returns (oil and gold) have impacts on the macroeconomic variables. While realizing an analysis on this question, a Mixed-Data Sampling (MIDAS) analysis will be useful to work on the

problem of the frequency of the macroeconomic variables in the light of the arguments of Andreu et al. (2013) regarding the usefulness of daily data in MIDAS analysis of Macroeconomic Models. There will be a literature review and some statistics in the second section of this research, a presentation of economic variables and methodology will be in the third part, discussion and conclusion will be in the last part.

1. Literature Review

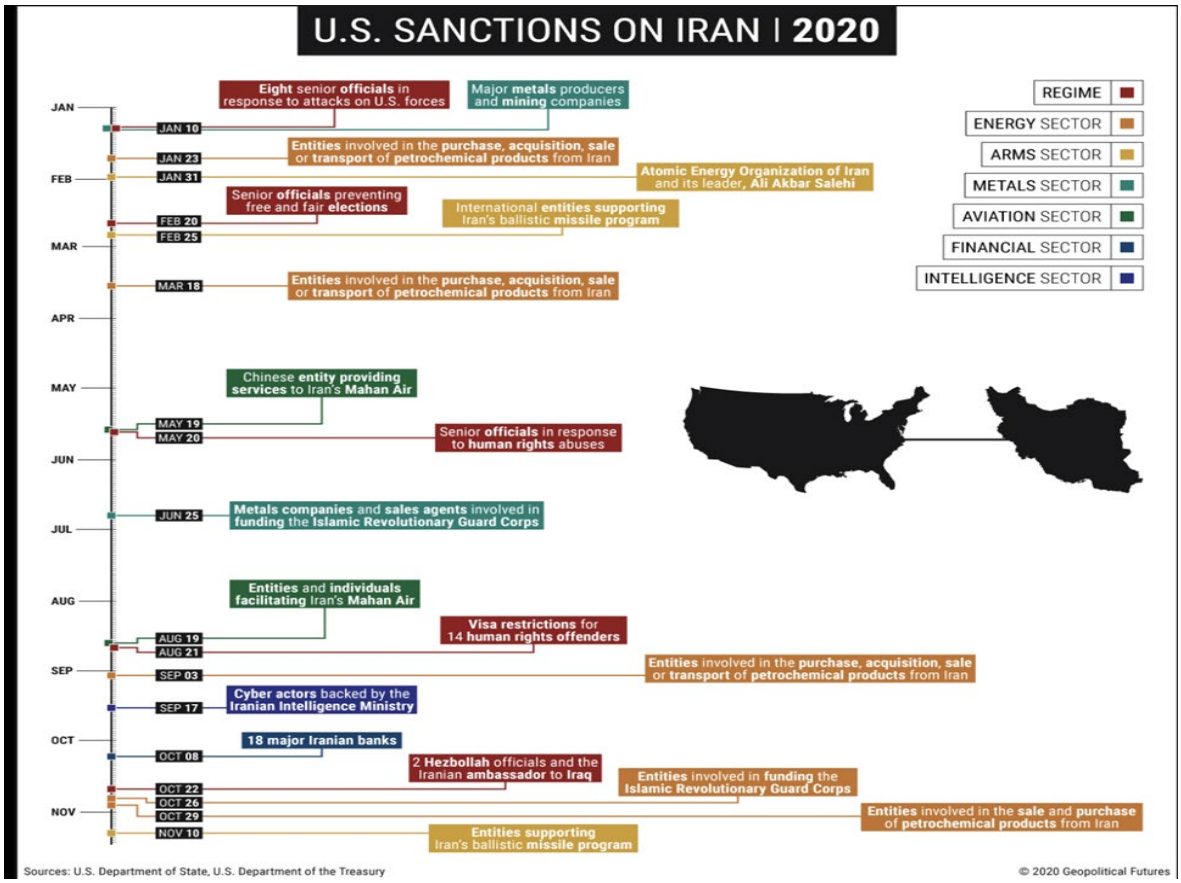
The economic situation of IIR has been subjected to a lot of research for many years because of its idiosyncratic character in terms of sanctions and bans in many scientific papers. In particular, gold and oil-depended analyses and detailed impacts of sanctions are subjected to specific statistical and econometric models. And they have taken great attention. For example, Zamani et al. (2022) underline that sanctions have a low and positive impact on the exchange rate with a Markov switching analysis, Mashayekhi et al. (2013) show the impacts of world gold prices on the exchange rates of IIR. Zeinedini et al. (2022) argue a negative and significant relationship between OPEC oil prices and the Tehran Stock Exchange index. There is no significant relationship between the world gold price and the Tehran Stock Exchange index with a quantile regression. Samadi et al. (2021) maintain that oil prices had a low co-movement with the stock exchange, exchange rate and gold markets in IIR markets and Covid has affected these relationships. Fattahi and Moghadam (2023) state that international interdependence and integration are very important for the Iranian financial markets. US sanctions mainly affect these relationships. In the long run, the interdependence and integration of financial markets increase. The highest impact on the interdependence of financial markets in the short run. And medium run is related to the exchange rate and gold price. Movahedizadeh et al. (2014) show that there is a positive correlation between stock returns and oil prices and gold prices between the years of 2006 and 2012 in IIR. Total oil supplied and consumer price index have a negative relationship with the stock index. While gold price and consumer price index have a short-run relationship with the TSE index at a 10% significance level this amount for the oil price is significant at 5% and there is no significant short-run relationship between supplied oil and Tehran stock returns. Shakeri et al. (2023) confirm a mutualism between cryptocurrency volatility and gold and oil prices. Volatility in oil and gas prices has a positive effect on cryptocurrency volatility in IIR. Sedigh et al. (2022) reveal the relationships between the stock market and the foreign exchange market, the global oil and gold markets are non-linear. This dependence is different during the boom and recession periods. In extreme conditions of the market such as crisis time, these dependencies are increasing between 2011 and 2019. Mahmoudinia (2021) frames a research model and affirms that the coefficients of monetary policy, exchange rate and currency crisis on the food prices in different quantiles are positive and significant between the periods of 2004 and 2008. Kasaeezadeh (2022) aims to seek answers to the questions of the selection and development of IIR's new criteria in oil contracts. In this context, the criteria of providing and attracting foreign investment, the balance between risk and reward, expected return, flexibility and safety withdrawal from the reservoir have been given higher priority in the

financial system depending on oil contracts. Roudari et al. (2023) show that institutional quality brings about an improvement in the stock market in the medium term; however, without institutional quality, there is only an improving short-term effect between 1984 and 2020. Monjazeb (2014) states that World oil prices, with a lag, had a significant positive impact, and gold prices had a significant negative impact on the stock return of banks for the period of 2008 to 2012.

On the other side, commodity prices gain importance in macroeconomic balances in the global context. Yin and Han (2015) state that the macroeconomic policies of China and the United States have determinative impacts on commodity prices. From this work, it can be concluded that commodity prices can be a pressure actor for the emerging world. Moreover, Jacks and Stuermer (2020) maintain that price fluctuations and shocks should be evaluated according to demand and supply analysis. The necessary policy answers to the developing and emerging world for these shocks cannot be effective sometimes (Siklos, 2021) as in the example of Knittel and Pindyck (2016).

The Iranian gold and oil trade and the prices of these commodities have great importance in nourishing this country's economy under the hard and comprehensive conditions that are raised by sanctions and bans in Figure 1 (only for the year 2020, the process is older than this timetable). According to Figure 1, the sanctions are aimed at hitting the most important sectors and industries of IIR such as Energy, Aviation, Metal and Finance. Other sanctions can be examined under the groups of intelligence, military and political relationships.

Figure 1. IIR Sanctions of USA



Source: Geopolitical Futures, 2020, https://geopoliticalfutures.com/us-sanctions-on-iran-in-2020/, 26.12.2023.

2. Methodology

To create an understanding of Iran Islamic Rebuplic's current situation in terms of economics and financial relationships, a MIDAS Regression is utilized. The frequency of variables, timespans and resources of the data are given in Table 3. As it concentrates on the reality of oil and gold dependence of the IIR, it can hypothesized that these two variables should have a relationship with the main macroeconomic variables.

Table 3. Information on Dataset

Variable	Variable Explanation	Frequency	Data start	Data finish	Resource of Data
Gold Price	Gold price in the world market	Daily	01.01.1991	31.12.2022	investing.com
Brent Oil Price	Brent Oil price in the world market	Daily	01.01.1991	31.12.2022	investing.com
Iran Islamic Republic's GDP Growth	GDP Value of Iran Islamic Republic	Yearly	1991	2022	Worldbank.com
Iran Islamic Republic's Inflation rate	GDP Value of Iran Islamic Republic	Yearly	1991	2022	Worldbank.com
Iran Islamic Republic's unemployment rate	GDP Value of Iran Islamic Republic	Yearly	1991	2022	Worldbank.com

To reach return values, the following statistics are utilized on both the Gold and Brent oil prices,

$R_s = [(P_{i,t}) - (P_{i,t-1})] / (P_{i,t-1})$

Where,

R_s = Return of World Gold and Brent Prices,

P = Price of the World Gold and Brent Prices,

i = Variable (Gold or Brent),

t= Time.

The results of the Phillips Perron (PP) and Augmented Dickey-Fuller(ADF) unit root tests are given in Table 4. Unit root tests are necessary to yield correct analysis results from the time series. They are a requirement and rule of thumb for MIDAS regression. T the correlation between dependent variables is given in Table 5. According to the results, there are no problems regarding multicollinearity because of the relatively low correlation values (r = 0.70)

Table 4. PP and ADF unit root test results.

Variable	ADF			PP		
	t statistic	**P value**	**%1 Critical Value**	**t statistic**	**P value**	**%1 Critical Value**
Gold Return	-90.673	0.000	-3.430	-90.702	0.000	-3.430
Brent Oil Return	-92.327	0.000	-3.430	-92.327	0.000	-3.430
Iran Islamic Republic's GDP Growth	-5.295	0.000	-3.661	-5.302	0.000	-3.661
Iran Islamic Republic's GDP Growth [1]	-6.590	0.000	-3.679	-15.281	0.000	-3.670
Iran Islamic Republic's Inflation rate	-2.766	0.074	-3.661	-2.778	0.073	-3.661
Iran Islamic Republic's Inflation rate [1]	-7.292	0.000	-3.670	-7.292	0.000	3.670
Iran Islamic Republic's unemployment rate	-3.222	0.028	-3.661	-2.286	0.1823	3.661
Iran Islamic Republic's unemployment rate [1]	-4.748	0.006	-3.670	-7.755	0.000	-3.67017

Table 5. Correlation Relationships between variables.

	Growth	Inflation	Unemployment
Growth	1.00		
Inflation	-0.12	1.00	
Unemployment	0.13	-0.36	1.00

Today, frequencies of data have great importance in utilising specific analysis. Investors focus on yearly profits, monthly profits and daily profits since the forms and designs of the financial markets. Besides these, there are different opportunities to make profits benefiting from the advantage of high frequency such as per hour, per minute and even per second. On the theory side, the arrangement and analysis of data because of frequency differences is a real problem. To solve this frequency problem MIDAS (Mixed-Data Sampling) type regression equation was developed.

In the traditional type of time series, both the dependent and independent variables share the same frequency. This is a must. To resolve the frequency problems, alignment methods are utilized on the time series (Armesto et al., 2010; Guliyev, 2018). According to Ghysels's (2004) presentation, the frequency of the dependent variable can be less than the independent variable. According to the features of the data in Table 3, the MIDAS approach is an important method to measure the relationship between, GDP Growth, Inflation, Unemployment and Brent and Oil returns with the following mathematical formulation.

$$y_t = \beta_0 + \beta_1 B\left(L^{\frac{1}{m}}; \theta\right) x_t^{(m)} + \epsilon_t^{(m)} \ldots\ldots$$

Equation.1

for **t = 1,…,T,**

where,

$\boldsymbol{y_t}$ is a lower frequency Variable,

$\boldsymbol{x_t^{(m)}}$is the high-frequency variable,

$\boldsymbol{\beta_1 B(L^{\frac{1}{m}}; \theta) x_t^{(m)}}$ **=** is a lag operator,

$\boldsymbol{\varepsilon_t^{(m)}} = error\ term.$

To overcome the multicollinearity problem in the distributed lag, the Alman lag polynomial is an often-used technique with the following mathematical formulation (Almon, 1965);

$\boldsymbol{B(k; \theta)} = \sum_{i=0}^{p} \boldsymbol{\theta_i k^i} \ldots\ldots\ldots\ldots$. p signifies the degree of the polynomial, and it's important to note that $p < k$. In this analysis, this methodology is utilized for its flexibility and accuracy.

Equation.2

3. Empirical Findings

The relationship between GDP Growth and Brent Oil, Inflation and Brent Oil and Unemployment and Brent Oil according to MIDAS regression can be presented in Table 5. The first section of the findings shows the relationships between time series which have different frequencies (term structures). The utilization of the Midas regression and representations of findings are designed according to (Khan and Raza, 2023).

Table 6. GDP Growth, Inflation Rate, Unemployment Rate and Brent Oil Returns

Dependent Variable (GDP Growth) – Independent Variable (Brent Oil Returns[1])		**Dependent Variable (Inflation Rate) - Independent Variable (Brent Oil Returns[1])**		**Dependent Variable (Unemployment Rate) - Independent Variable (Brent Oil Returns [1])**	
PDL01	22.484*	**PDL01**	168.298	**PDL01**	1.230
PDL02	-6.879	**PDL02**	-208.473	**PDL02**	-1.518
PDL03	0.820	**PDL03**	53.616*	**PDL03**	0.194
Lag 00	16.426	**Lag 00**	13.441	**Lag 00**	-0.093
Lag 01	12.012	**Lag 01**	-34.183	**Lag 01**	-1.028
Lag 02	9.240	**Lag 02**	25.424	**Lag 02**	-1.575

Lag 03	8.111			**Lag 03**	-1.734
Lag 04	8.625			**Lag 04**	-1.504
Lag 05	10.781			**Lag 05**	-0.886
				Lag 06	0.120

***=0.10, **=0.05, ***=0.01 significance level**

According to the main results in Table 5, there are relationships between GDP Growth and Brent Oil Returns with a significance of 0.1 and PDL value of 22.484 and Inflation Rate and Brent oil returns with a significance of 0.1 and PDL value of 53.616. These values suggest that the relationship between GDP Growth and Brent Oil Returns and the Inflation Rate and Brent Oil Returns are positive and significant.

Additionally, the lagged Brent Oil returns coefficients remain statistically significant up to lag 7 for GDP Growth, up to lag 3 for the Inflation Rate and up to lag 7 for the Unemployment Rate, the lag dimension shows the duration of the relationships. According to the lag structure, the relationships continue for 7 years for GDP Growth, 3 years for the Inflation rate and 7 years for the Unemployment rate.

On the other side, the relationships between Gold Returns and GDP Growth, Inflation rate and Unemployment rate can be observed in Table 6.

Table 7. GDP Growth, Inflation Rate, Unemployment Rate and Gold Returns.

Dependent Variable (GDP Growth) – Independent Variable (Gold Return)		**Dependent Variable (Inflation Rate) - Independent Variable (Gold Return)**		**Dependent Variable (Unemployment Rate) - Independent Variable (Gold Return)**	
PDL01	-282.090	**PDL01**	893.169	**PDL01**	74.649
PDL02	262.207**	**PDL02**	-575.525**	**PDL02**	-38.329
PDL03	-48.198**	**PDL03**	76.997**	**PDL03**	4.952
Lag 00	-68.081	**Lag 00**	394.641	**Lag 00**	41.273
Lag 01	49.530	**Lag 01**	50.108	**Lag 01**	17.802
Lag 02	70.746	**Lag 02**	-140.430	**Lag 02**	4.238
Lag 03	-4.435	**Lag 03**	-176.974	**Lag 03**	0.579
Lag 04	-176.013	**Lag 04**	-59.523	**Lag 04**	6.826
		Lag 05	211.922	**Lag 05**	22.979
		Lag 06	637.362		

According to the main results in Table 6, there are relationships between GDP Growth and Gold returns with a significance of 0.05 for PDL values of 262.207 and -48.198 and Inflation Rate and Gold returns with a significance of 0.05 and PDL values of -575.525 and 76.997. These values suggest that the relationship between GDP Growth and Gold Returns and Inflation Rate and Gold Returns are positive negative and significant. This means that on the negative side of the Gold return and the positive side of the Gold return, the relationship occurs.

Additionally, the lagged Gold returns coefficients remain statistically significant up to lag 5 for GDP Growth, up to lag 7 for the Inflation Rate and up to lag 6 for the Unemployment Rate the results demonstrate that the lag structure, the relationships continue for 5 years for GDP Growth, 7 years for the Inflation rate and 6 years for the Unemployment rate.

Conclusion

According to the literature, commodities such as Brent oil and gold prices are problematic for countries. In parallel with these words, Labys and Maizels (1993) examine their situation in a macroeconomic context by stating their efficient and effective roles in money supply, interest rates and exchange rates for the developed world. La Torre et al. (2019) underline the importance of commodity price booms for a developing world country, Ecuador. For their analysis, as commodity prices collapsed, the augmenting countries were impacted negatively regarding fiscal policies and external balances such as payment balances. The shocks in the financial structures of the global oil prices show their impacts in the form of undesired comovements of commodities such as Gold in China (Chen, 2015). According to the analysis of Joets et al. (2017), agricultural and industrial markets are highly sensitive to commodity price variability and the level of macroeconomic uncertainty. Li (2017) confirms these relationships for China by emphasizing the place and size of economic growth, money supply and inflation. For Cespedes and Velasco (2012) commodity price shocks have a significant impact on output and investment dynamics and macroeconomic performances. Caporale et al. (2016) point out that macro-dimensional news can have direct impacts on strategic commodities such as Gold and Silver. Again, it should be an unforgettable reality that oil and gold prices always can cause a global crisis (Bialkowski et al., 2015; Shafiee and Topal, 2010). Larosei and Mally (2016) define commodities as a strategic element in the hands of developing countries on both sides of supply and demand. Therefore, they can be easily utilized for political purposes.

Another important paragraph should be added to international sanctions and bans. Because there are a lot of conflicts between countries in the world. Similar consideration can be thought for Russia after it conflicts with Ukraine (Hausman et al, 2024; Fedoseeva and Herrmann, 2019; Korhonen et al., 2018). On the other side, if it is realized a detailed analysis of international sanctions and bans in the 1950-2016 period, it can be seen their negativies on international trade. (Felbermayr et al, 2020). Tostensen and Bull (2002) and Gordon (2011) focus on the design of sanctions for the sake of international, regional and national development. In parallel with this idea, emerging technology has diversified sanctions measures from traditional trade restrictions to financial restrictions, travel bans, and contract cancellation measures (Hufbauer and Jung, 2021).

As it stated in the literature review, the Iran Islamic Republic lives in hard times under the harsh impacts of sanctions and bans. For this reason, its main economic conditions are formed around gold and oil. On the other side, returns are important

determinants of investors' and corporal investors' sentimental or rational behaviours. In Table 2, all of the variables are focused on the prices, but it is essential to realize an analysis in terms of the returns.

According to the results, there are relationships between gold, Brent oil and the main macroeconomic variables of Iran Islamic Republic. Without accessing international markets dominated by the United States and sanctioning countries, the Iran Islamic Republic draws an economic framework sourced from gold and oil. Therefore, the economy of the Iran Islamic Republic widely depends on world oil and gold markets and these relationships are also confirmed by Mansouri Danesvar et al., (2024); Farhadi et al, (2024) and Chavari et al, (2024), even the financial and economic impacts of these commodities can be observed for region countries such as Turkey (Pata et al, 2024). On the other side, the economy and management mechanisms behind these commodities should be evaluated so well by authorities in Iran Islamic Republic or the International dimension. The punishments against a state should be a problem for people.

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