



The Political Economy of Commodity Smuggling (The Case of I.R. of Iran)

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Abstract

Commodity smuggling is considered as one of the issues in the Iranian economy during last decades. Smuggling has had relatively high turnover during recent years and, thus, it has attracted much attention. Although smuggling is often assumed as an economic issue, its non-economic origins are so diverse that it can be regarded as a multidimensional process. Thus, a thorough analysis of this issue should take into account its different aspects. This paper presents an empirical analysis of commodity smuggling in the Iranian economy in terms of political economy. Accordingly, in a descriptive–analytical approach, along with the economic evaluation of smuggling, the non-economic (social, cultural, political, and geographical) dimensions are also studied from national and international perspectives. Results show that in order to fight against commodity smuggling, moving towards equilibrating the markets and relative prices through adopting proper foreign exchange and trade policies coincided with empowering border areas might be recommended.

Keywords: Commodity Smuggling, Export, Import, Iran, Tariff.

JEL Classification: E26, O17, J46.

Introduction

Policymakers not only try to develop the positive aspects of macroeconomy such as creating value added and job opportunities, increasing welfare, and promoting productivity, but also to manage and, if possible, reduce the negative effect of economic challenges such as tax evasion and smuggling, known as informal economic activities. The range and dimensions of the informal economy could be very extensive including a wide variety of activities, which may be summarized as Table 1 based on the framework by Schneider (2012).

A kind of informal economic activities is the smuggling of commodities, which is observed mainly in developing and less developed countries (Haken, 2011; Basu, 2014). Smuggling commodities refers to that section of commercial exchanges between countries carried out with the aim of evading trade arrangements and standards, hidden from the authorities of foreign trade (e.g. the Customs), and not recorded in any formal commercial source. There are a variety of definitions of smuggling. According to World Customs Organization (WCO), customs offence refers to the movement of commodities across a custom frontier in a clandestine manner. Due to this definition, WCO considers smuggling as a criminal offense of

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bringing into or removing things from a country. Those items that are illegal¹ (prohibited) or legal upon which customs or excise duties have not been paid (FICCI, 2016). According to the above-mentioned definition, the typology of smuggling in broad meaning can be depicted in Figures 1 and 2.

Table 1. Types of Informal Economic Activities

Type of Activity	Monetary Transactions		Non-Monetary Transactions	
Illegal	Trade with stolen commodities; drug dealing and manufacturing; prostitution; gambling; smuggling; fraud, human-, drug-, and weapon-trafficking		Barter of drugs, stolen commodities, Smuggling, etc. Produce or growing drugs for own use. Theft for own use.	
	Tax Evasion	Tax Avoidance	Tax Evasion	Tax Avoidance
Legal	Unreported income from self-employment; wages, salaries and assets from unreported work related to legal services and commodities		Barter of legal services and commodities	All do-it-yourself work and neighbor help

Source: Schneider (2012).

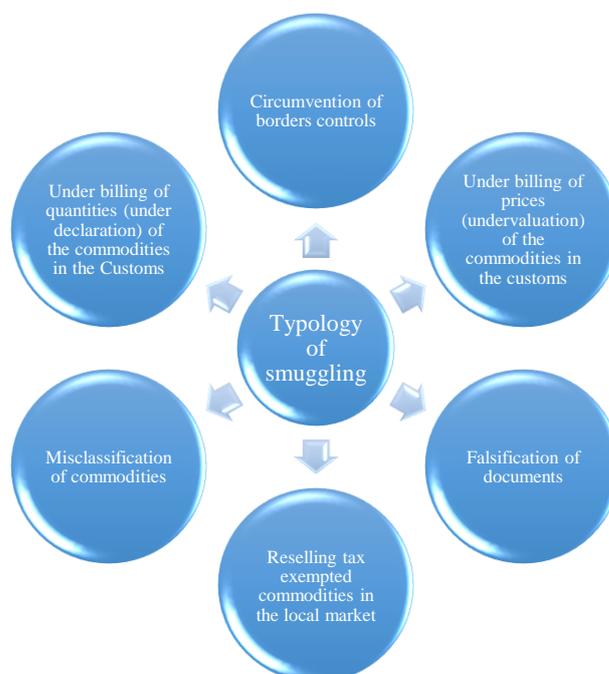


Figure 1. Typology of Smuggling

Source: Research findings, including FICCI, 2016; UNODC, 2018.

1. Illegal trade takes place independently or along with legal trade, which is a kind of commercial fraud, where intention is to avoid or reduce their custom duty burden by adopting different ways and means, and in some texts it is named 'technical smuggling'.

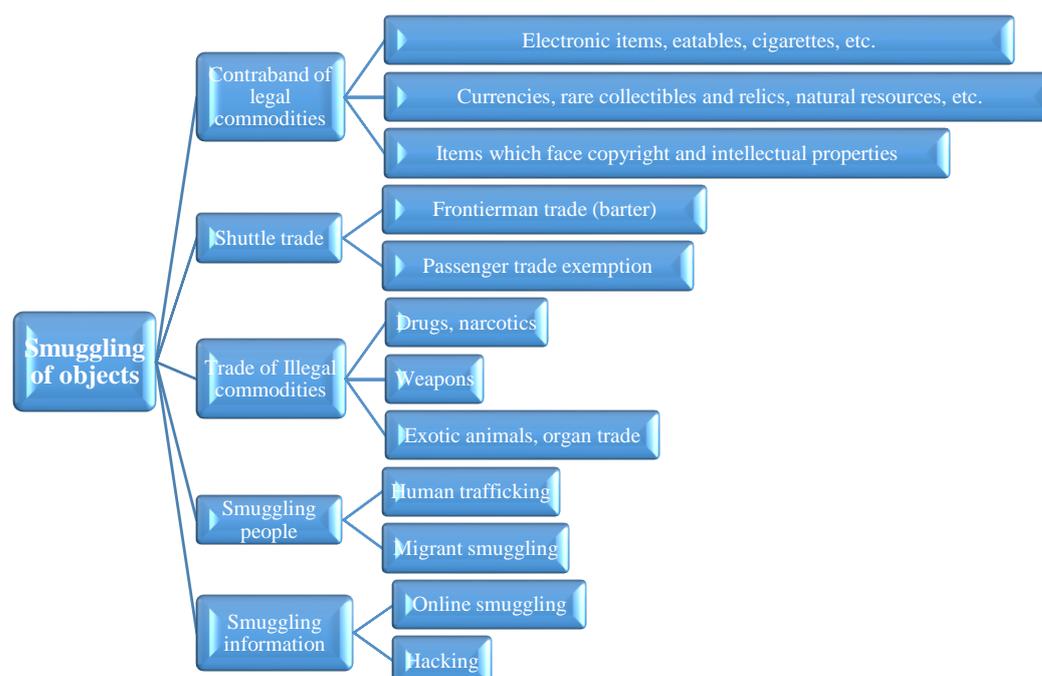


Figure 2. Smuggling Classification by Objects
Source: Research findings, including FICCI, 2016; UNODC, 2018.

Obviously various combinations of these smuggling objects are taking place in countries (depending on their own conditions). In other words, for instance, smuggling happens in some countries like Iran, Philippines, Pakistan, etc. (Alano, 1984; SEARCA and DA-BAR, 2014). Among various objects of smuggling, in this paper, we mainly focus on legal commodity smuggling, which by its nature has considerable turnover and time legal, institutional, and political dimensions (Schneider and Buehn, 2016). While it deprives the government of a part of revenues (including taking taxes and customs duties), it creates jobs for a group of people (Amanpour et al., 2015). Studying this issue in Iran from a political economy perspective, in a descriptive–analytical approach, is what this paper attempts to do from economic and noneconomic points of view. It is very important due to the condition governing the Iranian economy during the last three decades including the geopolitical position of this country and also the considerable contribution of smuggling activities to the national economy of Iran. Some policy recommendations will be proposed by the end of the paper.

The remainder of this paper is organized as follows. Section 2 provides a brief review of literature. In section 3, some stylized facts about the Iranian economy are presented. Section 4 deals with the pathology of the smuggling in Iran. Section 5 provides an analysis to smuggling. Finally, Section 6 concludes the paper and gives policy recommendations.

Literature Review

There are rather limited theoretical and empirical economic studies on smuggling commodities. The earliest studies of this kind included Beker (1968) who discussed the economic aspects of crime, and Bhagwati and Hanson (1971) who analyzed smuggling as a kind of disorder in trade sector. Subsequently, Bhagwati and Srinivasan (1974), Johnson (1974), Krueger (1974), and Maltz (1976) studied smuggling within the foreign trade sector of the countries and its effects on welfare. Since then, a number of researchers began to study smuggling and its consequences. Norton (1988) studied the relationship between tariff rates and smuggling in the agriculture sector within European countries, and found the negative impact of raising taxes on smuggling. Johnson et al. (1998) analyzed the role of government

and institutional agents in the emergence of smuggling. Pajouyan and Maddah (2006) addressed the economic factors affecting the smuggling of commodities in Iran, and identified the effective variables, i.e. the relative price of commodities inside and outside the country, the exchange rate in the parallel (black) market, and the likelihood of contraband confiscation. Bulir (1998), Mozayani (2015), Schneider and Buehn (2016), Romina (2014), Abdolmohammadi (2009), Eesa Abaadi and Shahghaleh (2013), and Janparvar and Ghasri (2014) highlighted factors such as geographical position of countries, quality of institutions, business environment, regulations, tax morale, deterrents, price incentives, sanctions, commercial/foreign exchange/monetary policies, cultural characteristics, and unbalanced regional development. Meanwhile Alimoradi and Tehranchian (2015) discussed that the influencing factors could be variable by fluctuation of macroeconomic and business environments. The most important factors affecting the smuggling of commodities in Iran are demonstrated in Figure 3.

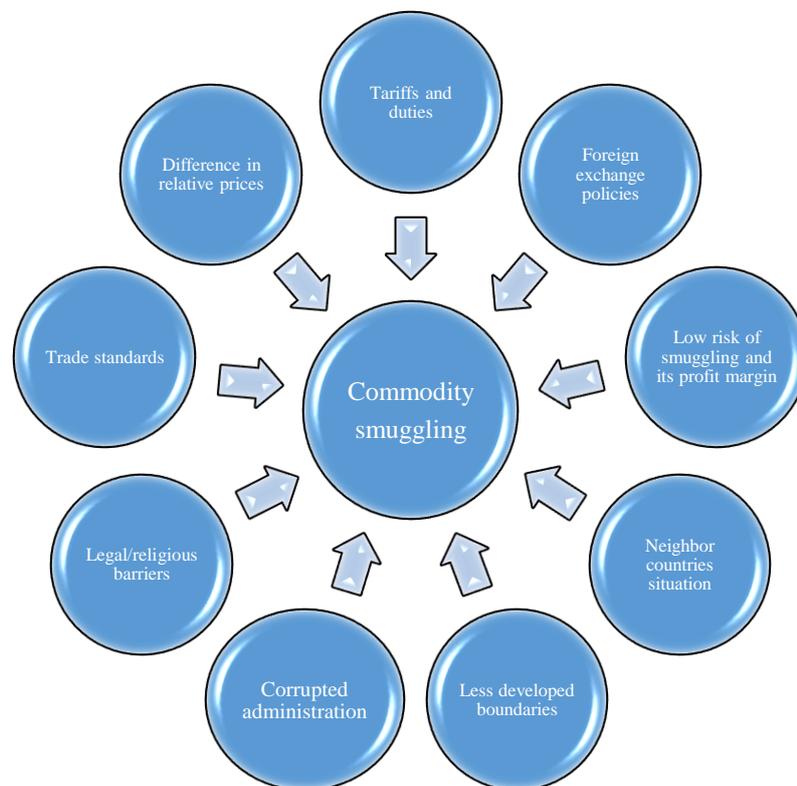


Figure 3. Factors Affecting Commodity Smuggling in Iran

Source: Mozayani, 2015; Farzanegan, 2009; Esmailpour and Ranjbar, 2016; Pajouyan and Maddah, 2006; Romina, 2014; Abdolmohammadi, 2009; Eesa Abaadi and Shahghaleh, 2013; Janparvar and Ghasri, 2014.

Stylized Facts

- 1- Iran is a relatively large country that has common borders with 13 countries.
- 2- The geo-economic condition of Iran easily allows for smuggling into and out of this country (Eesa Abaadi and Shahghaleh, 2013). In this regard, having more than 1700 kilometers of maritime border in the south with Persian Gulf countries, 800 kilometers of land border with Iraq and Turkey, and 100 kilometers of land border with Afghanistan and Pakistan has made these countries the most important sources of smuggling supply and at the same time the target of Iranian commodities smuggling.
- 3- The variety of smuggled commodities in the Iranian households' consumption basket has created problems for the domestic production of these commodities. Examples of

these commodities include home and audio/visual appliances, clothes, shoes, gold and jewelry, tea, rice, health and beauty products (cosmetics), cell phones, medical equipment, cigarette, spare parts for cars, and stationery.

- 4- The foreign trade structure of Iran has prepared an appropriate ground for the exchanges of smuggled commodities as exemplified by border markets, frontiersmen's cooperatives, free zones, suitcase trade (travelers' commodities), unauthorized docks, and manifold sailors' breaks (exemptions).¹
- 5- Livelihood problems and underdevelopment of the border areas has made them roads for smuggling shipments (Rajaaee and Piraaee, 2017). The border areas have mostly high unemployment rates (Kohnepoushi and Jalalian, 2013).
- 6- The considerable magnitude of the government's protective measures in the form of basic commodity subsidies and price controls has prepared the ground for the export smuggling of certain commodities like fuel, livestock, drugs, and wheat (Abdolmohammadi, 2009).
- 7- The amount of smuggling in the economy and its estimation method has been always among the challenging issues in the Iranian economy; particularly in recent years when the estimates indicate a significantly reduced amount of smuggling (Table 2) on the one hand and the government success in fighting against it on the other hand. As Table 2 indicates, the statistics indicate a decrease in the amount of smuggling in the Iranian economy and also the government's prosperity in fighting against smuggling during the recent years. Yet, due to the estimation-based nature of smuggling, the presented statistics have been strongly questioned frequently. However, some international studies (regarding their methodology) estimated the average share of shadow economy (not commodity smuggling) in Iran at about 17.9% over the period 1991–2015 (Medina and Schneider, 2017).

Table 2. The Estimated Rates of Commodity Smuggling² in Iran (in US Billion Dollars)

Indices	2008	2013	2014	2015	2016	2017
Illicit (Smuggled) Import	16	17.2	15.7	14.5	12.1	12
Illicit (Smuggled) Export	3.2	7.8	4.1	1	0.5	0.9
'Illicit Trade/GDP' Ratio	%4.8	%4.8	%4.4	%4	%2.9	%2.9

Source: Iran's Headquarters for Combating Commodity and Foreign Exchange Smuggling (IHCCFS).

Therefore, smuggling commodities is one of the issues in the Iranian economy constituting a rather considerable portion of Iranian consumption pattern. This condition has caused the smuggled commodities to be a part of demand for the domestic products, thus hindering the domestic production. In addition, smuggling has become one of the government's concerns since it deprives the government of a part of its revenues (e.g. through import tariffs). Furthermore, it increases the demand of production sectors from the government to solve this issue.

Pathology of Smuggling in Iran

In diagnosing smuggling in Iran, numerous issues could be referred to. The present paper tries to explain in particular the economic backgrounds of smuggling supplemented by some noneconomic factors.

1. Iran has 26 border markets, 406 frontiersmen's cooperatives, 8 free zones, and 65 special economic zones.

2. It should be noted that in this paper, smuggling refers to the smuggling of the consumption commodities existing in the household consumption basket excluding drug, antiques, etc.

Economic Factors

The Presence of High Tariff Restrictions

In Iran's foreign trade, given that this country is not a member of World Trade Organization (WTO), there are relatively high tariff rates. Although during the last two decades, the simple weighted average tariff rates decreased from 37% and 22% to 20% and 15%, these rates are still high compared to that in other countries.¹ This is an important cause for smuggling. It should be mentioned that besides the above-mentioned tariff rates, the importers have to pay value added tax (amounting to 8%–9% in 2016–2018) and other expenses related to cross border duties that impose, as a whole, a considerable charge on the importers. Table 3 depicts the average import tariff rates of main smuggled commodities into Iran. As can be seen, there are tariff rates above 100% in Iran's foreign trade. Evading (escaping from) the present tax and tariff structure is a reason for committing the act of smuggling (Alimoradi and Tehranchian, 2015).

Table 3. Average Import Tariff Rates of the Main Import Smuggled Commodities into Iran (in percent)

Period/Commodity	Cigarette	Clothes	Shoes	Fabric	Health and beauty products (cosmetics)	Medical instruments	Tea	Home appliances	Audio/visual appliances	Cellphones
Last 5 years	17.6	116	95	20	30	3.8	8.5	26	14	7.2
Last 10 years	20.3	106	105	23	37	4	15	31	27	8.3

Source: Iran custom administration.

Inefficient Foreign Exchange and Monetary Policies

One of the structural issues of the Iranian economy is the distorted mechanism of exchange rate determination. Since this rate is one of the most important channels that link up the national economy to the international area, it plays a significant role in establishing the relative prices, competitiveness, purchasing power, etc. in an economy. So, one of the major issues of the Iranian economy is the inconsistency between monetary, fiscal, and foreign exchange policies. So that during recent years, when governments have issued money to fulfill consecutive budget deficits, they have shown a strong tendency to establish the nominal exchange rate based on their economic and political considerations except for the cases where due to certain out-of-control conditions (e.g. decreased oil revenues, international sanctions, etc.), the nominal exchange rate policy establishment is not possible. In such circumstances, the persistent increase in the currency volume along with the arbitrary establishment of the nominal exchange rate has led to the exchange rate misalignment in a kind of overvaluation in most periods (Mollana and Mozayani, 2006). For instance, during the 2001–2010 period, although currency volume and consumer price index (CPI) increased by %986 and %292, the nominal exchange rate allowed to depreciate only by %30 that led to continuing the overvaluation in foreign exchange market (Mozayani and Parvizi, 2016). Figure 4 indicates the long-lasting overvaluation of nominal exchange rate in Iran during the last two decades (Mozayani, 2018a). This situation has strongly decreased the domestic products'

1. The simple and weighted means of tariffs in the countries leveling Iran in MENA region in the recent years have been about 11.5% and 10%, and their global average has been about 6.8% and 2.8% (World Bank: WDI).

competitiveness in favor of imported commodities leading to a considerable increase in (formal and informal) imports.

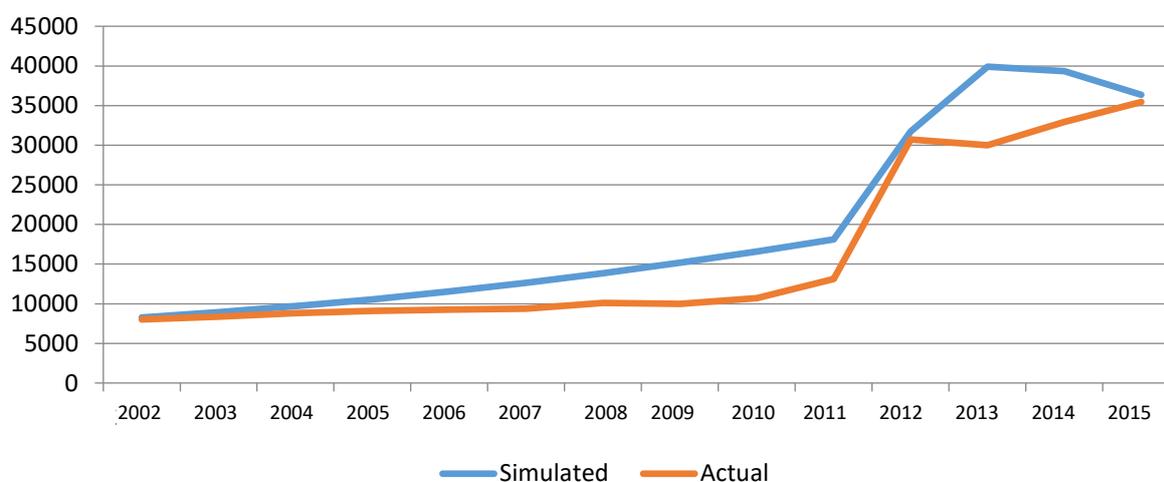


Figure 4. Nominal Exchange Rate Misalignment (Iranian Rials per one US Dollar)
Source: Mozayani (2018a).

Underdevelopment of Iran's Border Areas

In terms of welfare indices, e.g. Gini coefficient, unemployment rate, and poverty line, the border provinces of Iran seem to have an unfavorable condition rather than other provinces. Meanwhile, some provinces that are the major input and output channels of smuggling in the East, South, and West of Iran (i.e. Sistan and Baluchestan, Hormozgan, and Kermanshah) have the worst situation. Apparently, this issue along with other factors has made the citizens of these provinces to engage in informal job market and smuggling activities due to lack of job opportunities. Amanpour et al. (2015), Kohnepoushi and Shayan (2013), and Kohnepoushi and Jalalian (2013) discussed that commodity smuggling had a significant effect on creating job opportunities and income in certain border areas of Iran.

Smuggling Profit Margin

The significant difference in the prices of commodities in either sides of the borders (due to various reasons including tariff, value added tax, and legal and religious constraints) provides considerable profit for the supply chain of smuggled commodities. For instance, in 2014, for commodities such as clothes, bags, and shoes, tariff rates on imports amounted to 167%, 120%, and 95%, respectively. The possibility of bypassing such tariffs via smuggling could bring the smugglers a considerable profit margin. In addition to the high profit margin, the risk of smuggling commodities being seized by the Police, the Customs, Border Troops, the Coast Guard, etc. seems to be not too high, reinforcing the economic justification for smuggling activities. In 2009, the probability of seizure of smuggled imports, depending on the type of commodity, was estimated on average between 3.8% and 4.8% (Mozayani, 2009), and indicated the low risk of smuggling in Iran.

Low Competitiveness of the Domestic Products

Except certain commodities that are completely prohibited in the country (e.g. alcoholic drinks), for a great bulk of smuggled commodities, their higher production costs as well as their inappropriate quality seem to be among the reasons for them to be smuggled. This is

especially true for commodities such as clothes, bags, shoes, tea, and rice. Therefore, smuggling should be partially attributed to the low competitiveness of certain domestic productions. According to Global Competitiveness Report, Iran's rank over the period 2017–2018 is 69 (out of 137 countries). This rank for indices such as innovativeness and favorable business environment is 66 and 97 respectively, which indicates Iran's inappropriate situation (World Economic Forum, 2017).

Government-Paid Subsidies

Export smuggling constitutes a part of informal economic activities in Iran. Yet, it is much less than import smuggling. The main reason is the difference in the prices of the export smuggling commodities in Iran and those in neighboring countries due to the high subsidies paid to these commodities inside Iran.

Among the most important subsidized commodities are fuel (gasoline, petrol, oil, etc.), medicine, and chemical fertilizers. These commodities to which high subsidies is given are offered with much lower costs in Iran than in the neighboring countries, which creates a favorite opportunity for benefiting from the profit margin in selling them outside the borders. It should be mentioned that since 2011, Iran's government has attempted to sell energy carriers with their real prices based on Persian Gulf FOB prices by targeting subsidies plan that has reduced fuel smuggling out overseas. However, fuel is still Iran's major export smuggled commodity, especially during recent years that Iran's economy faced great national currency depreciation.

Noneconomic Factors

Various Decision-Making Authorities within Borders

One of the issues of decision-making in the Iranian economy is the inconsistency between national policies and regional (provincial) policies, especially in border areas. While the Customs are there along with police as the authorities of control-tariff, governors in border provinces, in coordination with the government and to facilitate the livelihood of frontiersmen, establish institutions such as border markets, frontiersmen's cooperatives, and smuggling backpacks, so that residents of border areas will benefit to a certain extent from various import exemptions. Yet, since the government is not able to control and manage the frontiersmen or is not willing to restrict them for security reasons, a considerable volume of import smuggling into the country takes place. For example, only in western and eastern provinces of the country, there exist, respectively, 8 and 12 border markets engaging in commercial exchanges with neighboring countries including Turkey, Azerbaijan, Iraq, Afghanistan, Pakistan, and Turkmenistan. It should be noted that Iran's government approved a regulation in November 2017 entailing the delegation of authority of all the organizations to the Customs through Coordinated Border Management (CBM) in order that through implementing customs single window project, the country's foreign trade in border areas will be organized.¹

Religious and Legal Restrictions

The presence of certain religious and legal constraints in the production, consumption, and transaction of some commodities (e.g. alcoholic beverages, the equipment for receiving satellite channels, etc.) has made it impossible to supply them through official channels in the country, so that regarding the demand in the country and the profit margin in their trade, they have to be offered through informal channels as import smuggled (Romina, 2014).

1. <https://www.irica.gov.ir-12/03/2018>

Inefficiency of Commercial Infrastructures

Iran's foreign trade structure imposes considerable costs on trade actors through inadequacies and restrictions. This becomes more perceptible when Iran is compared to other countries. Table 4 indicates the relative condition of Iran regarding trade sector indices. As can be seen, except a considerable improvement in 2018, its performance is not good, particularly regarding bureaucratic indices of foreign trade. This condition seems to persuade foreign trade actors to enter the informal sector. Accordingly, it seems that immaturity of Iran's banking system, especially when it comes to connect with international financial system, has facilitated informal activities such as smuggling and money laundering over the period 2012–2017. So that Iran has had the highest risk of money laundering across the world. Meanwhile, those neighboring countries which are Iran's main trading partners (such as Afghanistan, Turkmenistan, and somewhat Turkey) have had unfavorable ranking, too (Basel AML Index Report¹, 2017).

Table 4. Iran's Logistics Performance Index (LPI) Ranking

Index/Year	2010 (out of 155)	2012 (out of 155)	2016 (out of 160)	2018 (out of 160)
Customs	106	126	110	71
Logistics quality and competence	69	87	82	62
Tracking and tracing	110	108	111	85
Timeliness	85	138	116	60
Overall LPI	103	112	96	64

Source: World Bank (LPI).

The Presence of Neighbors Which Facilitate Smuggling in Geopolitical Terms

The international geopolitics of Iran and its neighboring countries has played a complementary role during recent years in establishing and growing smuggling flows (Kalantari et al., 2017; Eesa Abaadi and Shahghaleh, 2013). These characteristics include:

Civil War and Political Unrest

Regarding this characteristic, we may refer to two countries of Iraq and Afghanistan where war and political unrests have made their central governments unable to perform their duties concerning the management of national economy and international interactions. Accordingly, shortage of job opportunities and unfavorable business environment for these countries' citizens has caused a large number of citizens, especially in border areas, to enter informal sector of economy, and become the business parties of smuggling activities for the Iranian informal trade actors. Undoubtedly, the presence of politically powerful governments and economic stability in Iraq and Afghanistan can play a significant role in managing smuggling in the area (Grawert et al., 2017).

Common Ethnicity in Iran and Neighboring Countries

The common ethnicity, culture and language in Iran's border areas with each of neighboring countries outside the borders is a facilitative factor in economic exchanges. The presence of Arab, Kurd, Turk, and Baluch in Iran's border provinces and the border areas of Iran's neighboring countries, such as Iraq, Iraqi Kurdistan, Turkey, Azerbaijan, and Pakistan has increasingly facilitated the informal commercial exchanges between these people and those of the same ethnicities on the other side of the border.

1. <https://www.baselgovernance.org>

Neighboring Countries' Complementary Role in Supply and Demand of Smuggled Commodities

The structure of informal trade between Iran and neighboring countries suggests that these countries have reached equilibrium in supplying their needs, for example regarding fuel as Iran's most important export smuggling case. While the price of fuels in Iran is very low due to the government-paid subsidies, this price in the neighboring countries, which are the export smuggling targets, is high. For instance, in October 2018, while the price of petrol per liter in Iran was 0.29\$, it amounted to 0.68\$ in Iraq, 0.75\$ in Pakistan and Afghanistan, 1.1\$ in Turkey, 0.7\$ in Armenia, and 0.7\$ in United Arab Emirates.¹ As can be seen, the difference between retail prices of fuel in the neighboring countries and that in Iran results in a considerable profit margin for the smugglers of this field. This condition is still in place.

Inconsistency in Fighting against Smuggling

Fighting against smuggling in Iran is a challenging issue; especially, during the recent decade that Iran's government has faced international challenges, it has taken on new dimensions. On the one hand, vast smuggling and the significant contribution of the smuggled commodities to the household consumption basket (Mozayani, 2018b)², and the relevant damages to the domestic production have forced the government to fight against it. On the other hand, if we classify the actors of smuggling into two groups of the workers (low-level people) in borders and the organized gangs of smuggling management and distribution, the government seems to be unable to fight against both groups. Because on the one hand, it is not possible for the government to fight against lots of frontiersmen for whom smuggling is the only way to subsistence and, on the other hand, fighting against smuggling gangs is not possible due to different reasons including the corruption in the government.³ The complexity of this issue is aggravated when due to lack of job opportunities within border areas and the presence of smuggling as the only source of gaining income for a group of frontiersmen or as a means of supplying some items needed by people in the sanction situation, the government is reluctant to fight against smuggling.

Conclusions

Smuggling of commodities may be considered as one of the existing issues of the Iranian economy. It has a long history in the economy. The statistics of smuggling discovery indicates that although the composition of the smuggled commodities in Iran has undergone some changes during the recent decades, it is still in place as an economic issue. Meanwhile, in some cases, there has happened no change in the kind of smuggled commodities. For example, in the early 1990s, commodities such as tobacco products, audio-visual appliances, home appliances, and satellite antennas were among the major import smuggled commodities, and commodities such as fuel, medicine, and livestock were among the major export smuggling commodities. They still are the major export and import smuggled commodities having a significant share in the Iranians' household consumption pattern. Therefore, the issue of smuggling commodities has been institutionalized in the Iranian economy assuming different economic, political, cultural, and social dimensions (Romina, 2014), which are briefly described in the following:

A) *Economically*; smuggling is rooted mainly in the difference between the relative prices in the source and target countries, and consequently the profit gained via arbitration of the

1. <https://www.globalpetrolprices.com>

2. For instance, based on 2014 data, the average per capita import smuggling for 'bags and shoes', 'cell phones' and 'home and audio/visual appliances' had been 42.2, 17, and 22.4 UD Dollar, respectively.

3. In 2017 and 2018, Iran has ranked 130th and 138th respectively (among 180 countries) in Corruption Perception Index (<https://www.transparency.org>).

smuggled commodities. Various factors may contribute to this issue, e.g. low competitiveness of the domestic products, inefficient foreign exchanges, and certain policies of the countries e.g. trade dumping and paying subsidies policies.

It should be noted that in the case of some commodities, economic variables seem to have no significant effect on smuggling. For instance, upon decreasing/increasing import tariffs, the import smuggling is expected to decrease/increase. Yet, according to Romina (2013), in the statistical analysis of import smuggling, this pattern is not true for all commodities. For example, if we consider the seize of smuggled commodities by the Police, the Border Troops, the Coast Guard, and the Customs as a proxy for the main flow of smuggling, and then investigate its correlation with import tariff, the expected relationship is observed between tariff rate and the bulk of smuggling in case of commodities such as clothes. However, for commodities such as medical equipment, this relationship is not necessarily the case (Figures 5–6)¹. Figures 5 and 6 indicate that economic factors (e.g. import tariff rate) in some cases are not enough for the explanation of commodities' smuggling flow.

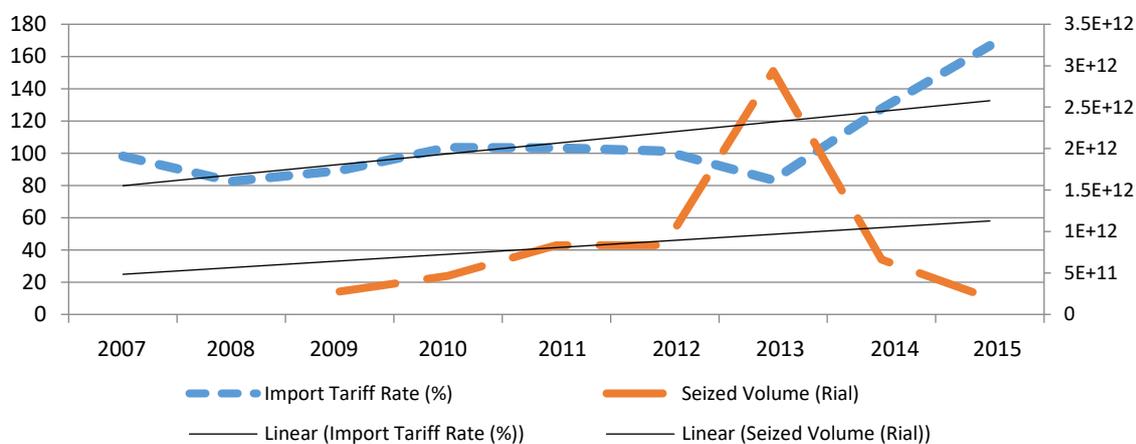


Figure 5. Positive Correlation of Import Tariff and Seized Volume of Clothes
Source: Research findings.

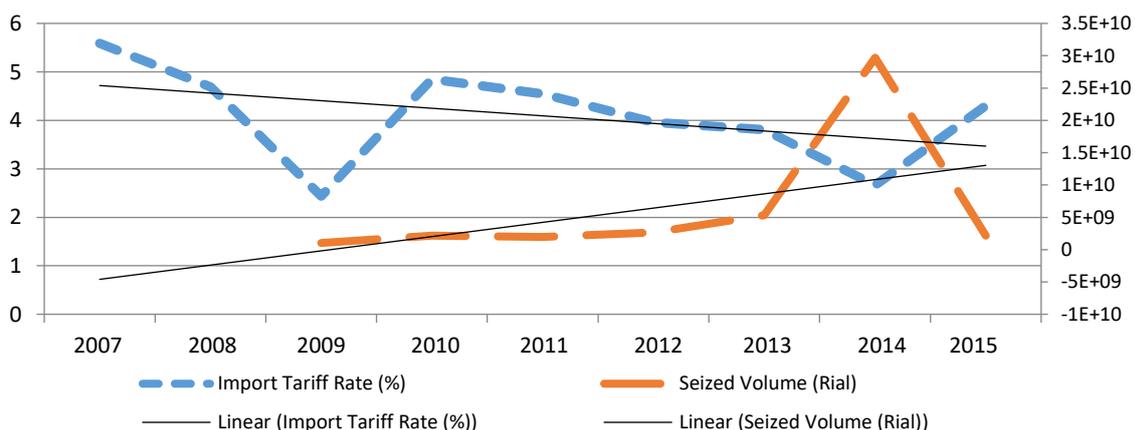


Figure 6. Negative Correlation of Import Tariff and Seized Volume of Medical Instruments
Source: Research findings.

B) Socio-culturally; the growth of smuggling seems to be partially rooted in social and cultural backgrounds of the Iranian society. The conducted studies indicate that Iranian citizens not only do not put Iranian products in their consumption pattern, but also prefer to

1. Depending on the availability of data related to seizing of smuggled commodities released by IHCCFS.

buy foreign commodities for different reasons (Ghaffari et al., 2010; Mataaee and Molaee, 2017). These conditions have made smuggling to be embraced by the Iranian citizens to buy foreign commodities, which is especially more evident for things such as clothes, home appliances, audio/visual appliances, and toys.

C) *In terms of political sovereignty*; smuggling in Iran is rooted, to some extent, in the way the government deals with this flow. As mentioned before, factors e.g. the inability of government in fighting against smuggling and its distribution and supply chain along with an organized corruption in the form of smuggling gangs abandoned by the government and government's occasional lack of determination in fighting against some ways of smuggling, justified by motivations like creating jobs for the deprived border areas or providing a share of commodities needed in the sanction situation, has created a grey area around the smuggling by the government.

D) *Geopolitically*; the geographical extent and having common land borders with 7 countries and also common maritime borders with 6 countries has prepared a ground for Iran's (formal and informal) commercial exchanges. This condition along with political unrest and civil war in some neighboring countries (e.g. Iraq and Afghanistan) on the one hand, and allowing for smuggling flows by some other neighbors of Iran (e.g. Turkey, Pakistan, and United Arab Emirates) on the other hand have played a significant role in growing the smuggling flows in Iran. Figure 7 depicts the approximate geographical flows of commodity smuggling border provinces of Iran.

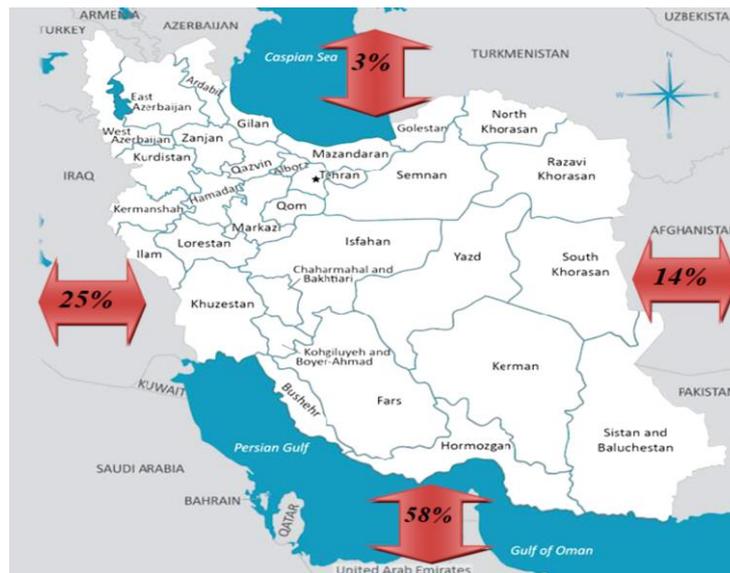


Figure 7: The Main Geographical Flows of Smuggling in Iran

Source: Research findings.

Policy Recommendations

Smuggling of commodities may be regarded as one of the structural problems of the Iranian economy during the last decades. Although smuggling is affected by the geopolitical situation of Iran and its neighboring countries, it is rooted mainly in the condition inside the country. As mentioned in this paper, the economic, political, social, and cultural dimensions of smuggling have made it a multidimensional issue. Fighting against smuggling requires solutions in all these areas, although its economic dimension is much more important than other dimensions. In this regard, considering that illicit import is much greater than illicit export (Global Financial Integrity, 2017), among the major things on the agenda, we could refer to the following policy recommendations:

- a. Avoiding the exchange rate misalignment as a source of disorder in the relative prices by moving towards equilibrium exchange rate;
- b. Moving toward optimum persistent tariff regime and—if necessary—implementing limited non-tariff policies in order for supporting national products;
- c. Organizing border exchanges in the form of coordinated border management by the Customs;
- d. Stimulating the economic growth of border areas, for instance by creating job opportunities and empowering frontiersmen;
- e. Reducing the regional exemptions.

References

- Abdolmohammadi, A. (2009). The Study of Influencing Social factors on Commodity Smuggling in Iran. *Discipline & Security Order Quarterly Journal*, 2(3), 179-207.
- Alano Bienvenido, P. (1984). Import Smuggling in the Philippines: An Economic Analysis. *Journal of Philippine Development*, XI(2), 157-190.
- Alimoradi, H., & Tehranchian, A. M. (2015). Calculating Import Smuggling Index and its Influencing Factors (A Fuzzy Approach). *Macroeconomics Research Journal*, 10(20), 56-82.
- Amanpour, S., Manouchehri, S., Akbari, M., & Abbasi, Z. (2015). Analyzing the Impacts of Commodity Smuggling Remove on Quality of Rural Life Level (The Case of Marivan Rural Villages). *Geographical Information Journal*, 24(96), 121-134.
- Basu, G. (2014). Combating Illicit Trade and Transnational Smuggling: key Challenges for Customs and Border Control Agencies. *World Customs Journal*, 8(2), 15-26.
- Beker, G. S. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy*, 7(2), 167-217.
- Bhagwati, J., & Hansen, B. (1971). A Theoretical Analysis of Smuggling. *MIT Working Paper*, Retrieved from https://jstor.org/stable/pdf/1882182.pdf?seq=1#page_scan_tab_contents
- Bhagwati, J., & Srinivasan, N. (1974). *Illegal Transactions in International Trade*. Oxford: Oxford Press.
- Bulir, A. (1998). The Price Incentive to Smuggle and the Cocoa Supply in Ghana (1950-96). *IMF Working Paper*, 98/88, Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=882596
- Eesa abadi, A., & Shahghaleh, S. (2013). Geopolitics of Iran and its Impact on Commodity Smuggling. *Geographical Researches Quarterly Journal*, 28(2), 49-68.
- Esmailpour, M., & Ranjbar, M. (2016). Identifying and Ranking the Factors Affecting Commodity Smuggling in Coastal Areas of Boushehr Prvince. *International Journal of Economic Research*, 13(1), 195-209.
- Farzanegan, M. R. (2009). Illegal Trade in the Iranian Economy: Evidence from a Structural Model. *European Journal of Political Economy*, 25, 489-507.
- FICCI (Federation of Indian Chambers of Commerce and Industry). (2016). Invisible Enemy, Thought Arbitrage Research Institute (TARI) for FICCI Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE). Retrieved from <http://ficci.in/spdocument/20807/final-Smuggling-report.pdf>

- Ghaffari Ashtiani, P., Charsetad, P., & Loni, N. (2010). Analysis of Factors Affecting Consumer Preferences for Foreign Versus Domestic Brands. *Journal of Marketing Management*, 8, 227-253.
- Global Financial Integrity. (2017). Illicit Financial Flows to and from Developing Countries: 2005-2014. Retrieved from <https://gfintegrity.org>
- Grawert, E., Nusrat, R., & Ali Shah, Z. (2017). Afghanistan's Cross-border Trade with Pakistan and Iran and the Responsibility for Conflict-sensitive Employment. *BICC Working Paper*, 4, Retrieved from https://bicc.de/uploads/tx_bicctools/bicc_workPaper_04_2017.pdf
- Haken, J. (2001). Transnational Crime in the Developing World. *Global Financial Integrity (GFI)*, Retrieved from <https://gfintegrity.org>
- Janparvar, M., & Ghasri, M. (2014). The Study of Influencing Factors of Commodity Smuggling among Borders: Primary Approach for Iran's Border Management. *Geographical Security Research Journal*, 2(7), 55-86.
- Johnson, H. (1974). Notes on the Economic Theory of Smuggling, In J. N. Bhagwati (Ed.), *Reprint on Illegal Transactions in International Trade*. Amsterdam: North-Holland.
- Johnson, S., Kaufmann, D., & Lobaton, p. (1998). Government in Transition, Regulatory Discretion and the Unofficial Economy. Retrieved from https://researchgate.net/publication/4726223_Regulatory_Discretion_and_the_Unofficial_Economy
- Kalantri, M., Ghezelbash, S., & Mousavi, A. (2017). Geographical Analysis of Commodity Smuggling in Boushehr Province. *Border Studies Research Journal*, 5(1), 75-109.
- Kohnepoushi, H., & Jalalian, H. (2013). Commodity Smuggling Impact on Border Rural Economy. *Geography and Development*, 32, 61-74.
- Kohnepoushi, H., & Shayan, H. (2013). The Study of Commodity Smuggling Economic Impacts on Border Cities: The Case of Marivan City. *Geographical Science Applied Research*, 13(29), 51-73.
- Krueger, A. O. (1974). The Political Economy of the Rent-Seeking Society. *American Economic Review*, 64(3), 291-303.
- Maltz, M. D. (1976). Technical Note - on the Estimation of Smuggling in a "Gray Market" Commodity. *Operations Research*, 24(6), 1156-1163.
- Mataaee, P., & Molaee, M. (2017). Study of Affecting Factors of Relative Purchasing Preference of Iranian Commodities Using Logit Model. *Economic journal*, 5-6(53), 59-73.
- Medina, L., & Schneider, F. (2017). Shadow Economies around the World: New Results for 158 Countries over 1991-2015. Retrieved from https://ideas.repec.org/p/ces/ceswps/_6430.html.
- Molana, H., & Mozayani, A. H. (2006). Is Monetary Discipline a Precondition for the Effectiveness of Iran's Export Promotion Policies? *Journal of International Development*, 18, 319-330.
- Mozayani, A. H. (2018a). Calculating Imported Smuggling Commodities to Iran: Proposing an Operational Framework. *Fiscal & Economical Policy Journals*, 6(23), 61-96.
- (2018b). *The Study & Estimation of Equilibrium Real Exchange Rate in Iran Economy* (Unpublished Research Project). Tehran: Iran National Science Foundation.
- (2015). *Analyzing Iran's Economy: A Commodity Smuggling Approach* (Unpublished Research Project). Tehran: Economic Research Institute, Tarbiat Modares University.

----- (2009). *Estimating Commodity Smuggling in Iran's Economy* (Unpublished Research Project). Tehran: Economic Research Institute, Tarbiat Modares University.

Mozayani, A. H., & Parvizi, S. (2016). Exchange Rate Misalignment in Oil Exporting Countries (OPEC): Focusing on Iran. *Iranian Economic Review*, 20(2), 261-276.

Norton, D. (1988). On the Economic Theory of Smuggling. *Economica*, Retrieved from https://jstor.org/stable/2554250?seq=1#page_scan_tab_contents.

Pajouyan, J., & Maddah, M. (2006). Economic Study of Smuggling in Iran. *Economic Research Letter*, 6(1), 43-70.

Rajaaee, H. A., & Piraaee, K. (2017). Measuring Underground Economy and Casualty Test between Underground Economy and Unemployment Rate in Iran. *Journal of financial and Economic Policies*, 5(18), 103-129.

Romina, E. (2013). Criticizing on Commodity Smuggling Tariff Theory and Proposing a New Theory. *Afaagh- e- Amniat Journal*, 5(18), 193-206 (in Persian).

Romina, E. (2014). Theoretical Interpretation of Importing Commodity Smuggling and its Managing in Countries. *Geopolitics Journal*, 10(1), 83-105.

Schneider, F. (2012). The Shadow Economy and Work in the Shadow: What Do We (Not) Know? *IZA DP*, 6423, Retrieved from <http://ftp.iza.org/dp6423.pdf>

Schneider, F., & Buehn, A. (2016). Estimating the Size of the Shadow Economy: Methods, Problems and Open Questions. *IZA DP*, 9820, Retrieved from <http://ftp.iza.org/dp9820.pdf>

Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) & Department of Agriculture - Bureau of Agricultural Research (DA-BAR) of Philippines. (2014). Smuggling of Selected Agricultural Commodities in the Philippines, Retrieved from <https://searca.org/pubs/briefs-notes?pid=23>.

UNODC (United Nations Office on Drugs and Crime). (2018). Global Study on Smuggling of Migrants. United Nations publication, Sales E.18.IV.9, Retrieved from <https://www.unodc.org/unodc/en/data-and-analysis/glosom.html>

World Economic Forum. (2017). The Global Competitiveness Report 2017–2018. Retrieved from <https://weforum.org/gcr>.



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