Iran: Past, Present and the Future

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Iran's unimpressive economic performance came about as a result of the Iran-Iraq War and the inevitable collapse of oil prices, both of which were beyond the government's control, in combination with economic sanctions and many self-inflicted and self-destructive policies. Foremost among the self-inflicted and self-destructive wounds is the insecurity of individual citizens, human rights violations; the faltering private investment, is lack of uniformity in the application of the laws of the land and uncertainty due to political instability, corruption, and low exports and imports (total trade) relative to the world total trade.

Introduction

Since the Revolution of 1979, many obstacles, both internal and external, have hindered the stability and growth of Iran's economy. While impediments to economic recovery and prosperity accompany revolutions in general (such as those which occurred in Russia, Algeria and Cuba, for example), they typically emerge with a uniqueness that reflect the constellation and culmination of political, demographic, social, and economic factors specific to that country at the time.

The case of Iran presents a prime example of how the sometimes self-inflicted internal and external economic and political conditions have impeded its attempts to emerge from the seemingly chaotic state of economic and political affairs. It experiences internal rebellion and external sanctions and aggression as it attempts to achieve economic and political independence within the current global political economy. Taken separately, each of the many hurdles to Iran's economic recovery would be somewhat daunting; taken together, they are formidable. Included among the major external factors are the Eight Year War between Iran and Iraq; a limited economic embargo placed upon Iran by the United States; deprivation of Iran from international credit market; inaccessibility to what are considered dual use technologies; massive immigration of refugees from Iraq and Afghanistan; massive outward immigration of upper echelon of Iranians in businesses and universities; confiscation and nationalization of properties; nationalization of banks and establishment of Islamic banking in 1983-84; monetization of the government deficits; a foreign exchange rate regime characterized by too many new initiatives and policy reversals during the first two and half decades; sudden and frequent economic policy reversals in general; absence of the uniform application of laws and regulations; widespread corruption; rampant throughout the country; and dwindling international trade (exports and imports) as a percentage of world trade.

This paper intends to set forth an empirical evaluation of Iran's economic performance and development in post-Revolution Iran. In what follows various socioeconomic indicators will be presented and discussed.

Empirical Evidence

Production (GDP):

After the revolution, during a period spanning approximately ten years, the production of goods and services in real terms fell as long as the Iran-Iraq War continued. After the Iran-Iraq war, in 1988 production started upward. This upward trend was enough to change the direction of per capital GDP upward, which, except for the years 1993-4, has continued to-date. In 2006-7, the real per capita income of Iran reached its pre-Revolution level.

One could identify several factors leading to the decline in income. One obvious factor, justifiably, was the country's preoccupation with its war efforts. Another reason for the economy's lackluster performance was the collapse of oil prices in the mid-1980s.[1] Iran's oil revenues took a tumble and fell to $9.673 billion in 1988, significantly reducing the country's purchasing power and mitigating Iran's plans for potential development and reconstruction of war torn areas. Low and declining private and public investments are beyond disputes as a contributing factor to low income. Marginalization of Iran in international trade and haphazard monetary policies that change with the political wind are shown to be other major determining factors in low growth and overall GDP.[2]

In rationalizing the low GDP, there are those who believe that the officially reported GDP is only a part of the total actual real GDP. That is, some believe that a large part of Iranian economy is not included in reported data.

Even though one cannot deny the existence of this unofficial underground economy, it cannot be shown that they are not included in the official data reported by the Central Bank of Iran. There are two econometric studies on this topic: one by Zangeneh and the other by Taiebnia and Mohammadi. Zangeneh found almost no evidence in the post-Revolutionary period and a sizable amount in the pre-

Revolutionary period, while Taiebnia and Mohammadi found the underground economy is, at most, about 15% of the official economy. Therefore, we can safely assume that, by all approximations, the official data to be a good representative of Iranian economy and the proposition of much larger economy due to the existence of a large unreported underground economy is, more or less, an exaggeration. The existence of a large underground economy found by Zangeneh for the pre-Revolutionary period, however, makes the fall in the GDP and therefore, cost of the revolution much larger than what has been estimated.

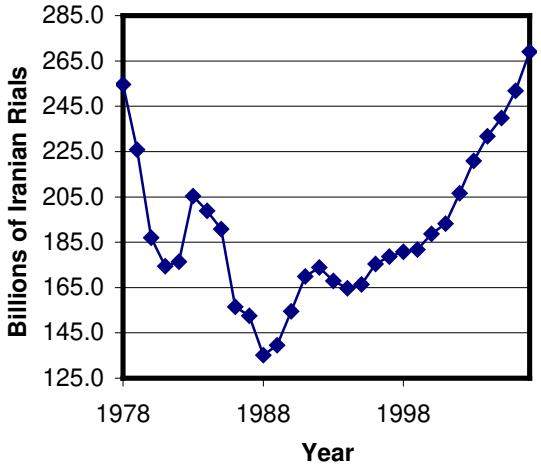
Looking at the country's per capita consumption (graph 2) would convey a similar understanding of the economy's state. As of 2008-9, Iran's per capita consumption has not caught up with its pre-Revolutionary levels. Per capita consumption dipped to lower levels immediately after the Revolution. However, it recovered fairly quickly in 1982-3 to its pre-Revolutionary levels. But the recovery did not last and started to fall again along with the devastating war with Iraq. The downward spiral continued until 1993. The per capita consumption fell from and index of 128.88 to 73.1, a drop of 43.2%. The recovery and growth of per capita consumption, except for the years 1999 and 2000, have been positive ever since. But, despite almost a decade and half of improvements, as of this year, 1388 (2009), it has not caught up with the pre-Revolution levels, yet.

Investment:

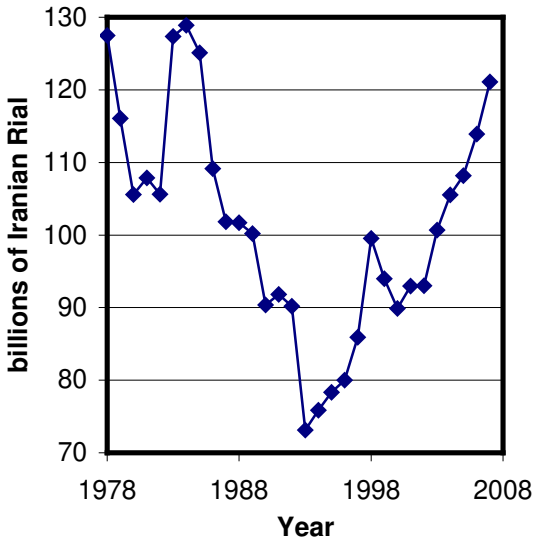
The investment picture of post-revolutionary years has not been promising. The limited rate of investment explains the slow growth rate of the GDP. The low investment rate has not been limited to the private sector, but also has been characteristic of the Iranian government. Both public and private sectors have been investing increasingly lower percentages of the GDP in construction and machinery every year. These figures are low by any standard, whether they are those of industrially advanced countries or of newly industrialized countries. Investments on the part of both the private and government sectors have been higher in the area of construction relative to the resources going toward machinery.

These low levels of investment have alarming implications for the country's industrial capacity to maintain and expand production as well as to contain inflation. There is no doubt that these levels will not lead to an appreciably higher standard of living or to the prospect of a high enough growth rate for the economy to absorb current open and disguised unemployment as well as the estimated one million new entrants into the job market every year in the immediate future.

Graph 1: Real GDP Per Million of Population



Graph 2: Per Capita Consumtion



The question then becomes, why such a low investment? The answer is the same. When there is uncertainty, there is limited or no investment in long-term projects. People will invest only in very liquid businesses so that they can cash in their holdings on short notice to avoid being caught with their wealth tied down in illiquid assets. Uncertainty due to diminish the willingness of

investors and frighten potential long-term investors; hence flight of capital to a social factors such as unrest, lawlessness, and lack of a protective civil society safe haven and avoidance of long term commitment to any investment strategy.

Inflation:

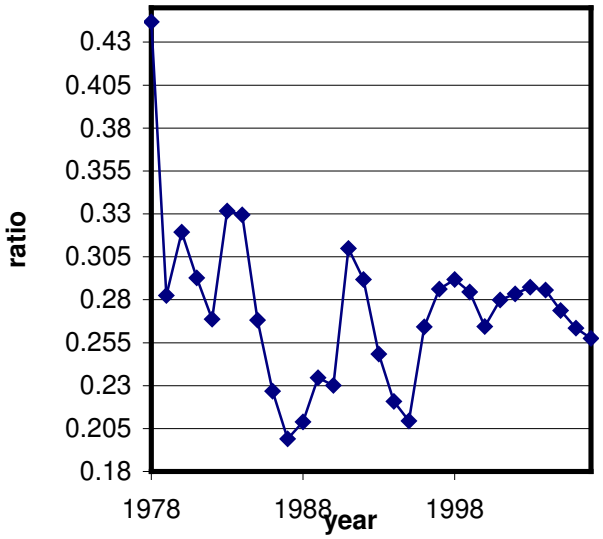
Table 1 shows annual inflation rates grouped into different time periods. The first grouping covers the early years before the oil price rise. The second time period includes the years after the oil price increase and up to the revolution. The third period covers the post-revolutionary years most of which were taken up by the Iran-Iraq War. The fourth period reflects the post-war and 'post *Khomeini'* era, Rafsanjani's Presidency. The next three groups belong to Khatami and Ahmadinejad's Presidency years.

As Table 1 shows, prior to the 1970s and before the oil price rise, inflation in Iran was rather tame, with an average rate approximating 3.87% per year. However, this does not hold true for the subsequent time periods.

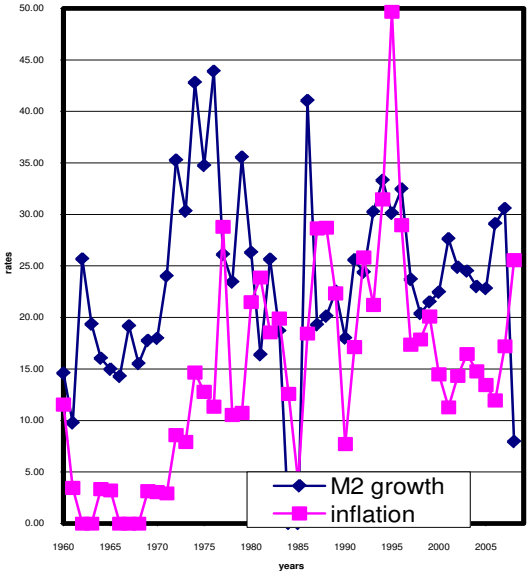
Budgetary constraints became almost irrelevant to Iran's economic planning, at least for a short-while, when huge oil revenues earned due to the spiraling oil prices triggered by the Arab oil embargo in 1973 against the West. Prior to 1973, the availability of foreign exchange dictated the government's project selection, and therefore, imported inflation was not a problem.[3] The tremendous increase in the price of oil gave the government an opportunity to engage in grandiose nation-wide projects that were beyond the absorption capacity of the country. Iran's infrastructure was too limited to accommodate these new projects, and inflationary pressure started to mount.

In pursuit of rapid economic development, the government, on one hand, used the oil revenues to finance almost all of the old and new projects. This contributed to an increase in the monetary base and money supply (discussed below), and therefore in aggregate demand. On the other hand, due to the limited capacity, the higher aggregate demand could not be satisfied internally, hence, goods had to be ordered from abroad. Due to the universal inflationary situation of the 1970s, all of the ordered materials carried with them an inflationary premium. Regardless of this, however, the open door policy was ineffective because of the inability of importers to bring their merchandise into the country due to inadequate port and transportation facilities. There was a waiting period of over six months for ships to unload their cargo in the port cities of the Persian Gulf. And when they did unload, they were unable to transfer the merchandise to its final destination. Since there were no storage facilities, the imported goods could not be safely stored in these port cities. As a result, the imported items were stored in open facilities located around the outskirts of the port cities, a practice which resulted in their ruin. Therefore, the inflationary pressure could not be eased by a greater volume of imports.

Graph 3: Percentage of Investment in Output



Graph 4: Rate of Growth in Money Supply (M2) and Inflation rates



Another factor contributing to the inflationary build-up prior to the Revolution was the higher per-capita

income. As purchasing power trickled down to the masses, demand for goods and services increased, which in turn increased the intensity of inflation. Pre-Revolutionary Iran provided a classic example of a country in which there were too many dollars chasing too few goods.

Table 1: Inflation Rates		
Years	explanation	Average
1973 – 1979	before the oil price increase	3.87
1973 – 1979	before the Revolution	13.81
1980 – 1988	the Iran-Iraq War period	19.58
1989 – 1997	Rafsanjani Years	24.62
1998 – 2005	Khatami Years	15.34
2006 – 2008	Ahmadinejad Years	18.23
2009	Ahmadinejad Year	10.80

The sudden rise in inflation immediately after the jump in oil prices jolted the economic system because people were not used to that magnitude of instability. However, the years following the Revolution were not any better. Although inflation rates reported by official sources are high, unofficial anecdotal estimates are at much higher levels. One must be cognizant of the fact that the official estimates include all of the prices that are controlled by the government directly or through its agencies, companies, and bonyads (religious foundations). These goods and services, such as electricity, water, bread, tobacco and tobacco products, tea and sugar, are subject to government mandated price controls and subsidies. Since the controlled prices of these commodities are combined with the prices of other free market goods, it results in much more moderate official inflation rates. This implies the existence of a serious hidden inflationary bias, which will show itself when these controls and subsidies are removed in the current year, 2010.

Subsidies and Inflation outlook:

In the last couple of years, the Central Bank has been controlling the rate of money supply and therefore the economy experienced a rather sharp reduction in the rate of inflation (see table 1). But the outlook for inflation in the coming years might not be encouraging because of the change in policies of the government.

Early in 2010 (in the last months of Iranian year 1388), the Parliament passed a law eliminating subsidies on 16 basic staples and allocated $20 billions (this figure could be raised to $40 billions if a new agreement is reached and the law is modified as President Ahmadinejad has been insisting upon) for direct cash payments to the public instead. According to this law all subsidies on gas, diesel, natural gas, electricity, water, wheat, flour, rice, milk, sugar, cooking oils, aviation, rail, and postal services will be eliminated.

The overall intentions of this law, enunciated by the regime, are: reform consumption patterns and reduce excessive consumption, especially energy consumption by raising their prices to world levels; redistribution of income in favor of the lower economic classes; reduction of subsidies and allocation of saved resources to improving economics infrastructure; removing subsidy generated distortions and allowing allocation of resources to the best uses through market mechanism.

Potential negative consequences of this law are: increased cost of exportables and therefore reduction in non-oil exports. This might be compensated somewhat by the falling value of the Iranian Rial. But the falling value of Ir. Rial would contribute further to the inflation rate by causing imports prices to go up more; increase in inflation rates. The Parliament is expecting an increase of 35% and the Central Bank is expecting an increase of 15%, while independent economists have predicted a 35 to 40 percent in inflation rate in addition to the current 10% rate; severe change in income distribution from have-nots to haves.

According to the current scheme, a family is expected to receive 50,000 toman as cash subsidy. Assuming a 35% inflation rate, the cash subsidy would compensate a loss of purchasing power of those with income of 142857 toman. So, 50,000 is enough compensation for a family earning 142,857 toman to stay on even-keel. Any income higher that that necessarily means, other things constant, loss of purchasing power in favor of the government and those who are not wage earners, i.e. producers and merchants. Given the fact that 142,857 toman incomes is even below the lowest of the low income workers, this implies that all wage earners who are not in a position to bargain for higher wages to compensate for purchasing power losses would lose.

Table 2: inflation and Purchasing Power			
money income	Purchasing Power (PP) 35% inflation	PP plus subsidy 50,000	Loss of PP
142,857	92,857	142,857	0
200,000	130,000	180,000	-20,000
300,000	195,000	245,000	-50,000
500,000	325,000	375,000	-125,000

The worst outcome of this law and its unintended consequences could be a redistribution of income of great magnitudes from have-nots to haves. As table 2 shows, the higher the wages, other things remaining the same, the higher are the losses of purchasing powers of different income groups. Also, given the low elasticity of demand for most of these necessities,[4] total expenditures (revenues) on these products are going to increase. These losses of purchasing power are going to go to the producers, merchants, and the government, which imply sever a

redistribution of income for the worse; income redistribution from have-nots to haves. That necessarily means a greater inequality and eventually a change in standard of living of lower income echelon of the population.

A simple outcome of this in the short run is going to be change in the composition of consumption baskets of lower income classes. That is, they would necessarily cut or modify their expenditures on what they might consider "marginal" such as food, healthcare, education, and leisure. However, in the medium and long run, this could add to and enlarge the size of the impoverished lower income classes. That is, in the medium and long run, these cuts will deprive them of the opportunity of moving to a higher class through better education. In other words, many more could fall in the vicious circle of poverty-low education-low paying jobs-poverty.

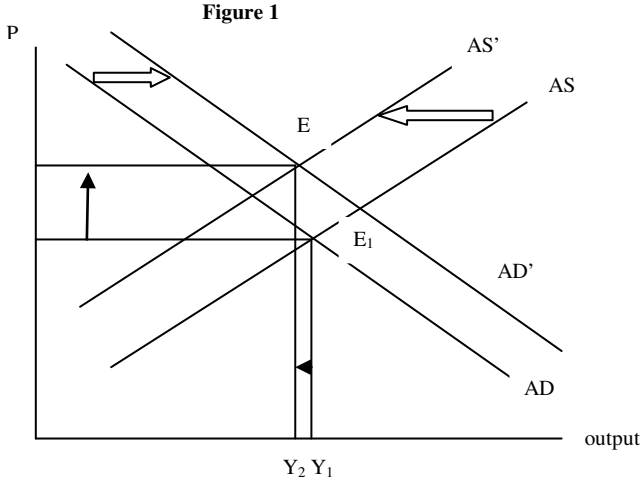
The other side of the story of this law is a recessionary environment. It could create stagflation. On the one hand, removal of these subsidies would increase cost to producers and merchants, who would pass them along to consumers. It increases the cost of energy from $9.8 to $49.00. This would shift the aggregate supply curve up and to the left (see figure 1).

On the other hand, the cash subsidies are going to increase aggregate demand. This would shift aggregate demand up to the right.

Depending on the strengths of these changes, output could increase, decrease, or stay the same but prices would definitely rise.

According to the IMF estimates, the new subsidy law would lead to a jump in the consumer prices by about 33% in the first year (1389; 2010) and, if proper monetary and fiscal policies are undertaken, "the inflation would gradually subside thereafter." [5] In the same report, the IMF predicts a slow down of the economy to a sluggish growth of under 2% for the first year (2010) and, with proper mix of fiscal and monetary policies, to 6.5%-7.5% growth in the medium run.

Figure 1



So, the question that remains to be answered is: what has been the main culprit(s) in causing price instability in Iran? Already mentioned within this paper have been various contributing factors, such as inadequate investment, decline in real per capita output, excessive population growth, urban migration, influx of international refugees, and the Iran-Iraq War. While these conditions have had significant direct and indirect impact upon the problem, all of them taken together could not have sustained inflation at such high rates, without monetary accommodations.

Money supply growth:

Starting in 1387 (2008), a serious change in monetary policy took place. All measure of monetary aggregates, except for the monetary base turned around and a much tighter monetary policy was pursued, which resulted in sharp drop in rate of growth in money supply, M2.

Graph 4 shows the tight association of money growth rates (M2) and inflation rates. As it is clear, the recent fall in the inflation rate to 10.8% in 2009 is in line with the decrease in the rate of increase in the money supply, as expected.

Iran's Trade in the Post Revolution Era:

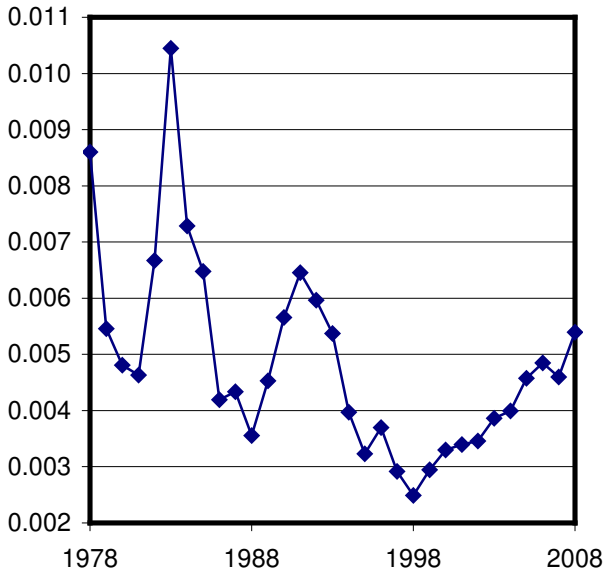
Despite the post-Revolutionary rhetoric, it seems that the Islamic Republic of Iran has been less than successful in advancing the countries interests in international arena. The seeming failure of the country in international trade could be, at least partially, a result of domestic policies. But a large extent of it could be attributed to the US sanctions and unfavorable treatments by the industrialized countries. Whatever the reason, there has been a considerable shift in Iranian trade away from developed countries and in favor of other LDCs.[6] However, Iran's overall trade in general and exports in particular, have not kept pace with the rest of world, in absolute as well as in relative terms.

Total exports fell to a low level of US $8.15 billion in 1988 and ever since, have inched upward and, in recent years, have surpassed their pre-1977 levels. However, due to the many fold increases in world trade (both imports and exports) Iran's share in world trade woefully declined to negligible level of .002% of world trade in 1998. But in the last few years, it has more than doubled to about .005%, which is still negligible for a country as rich as Iran.

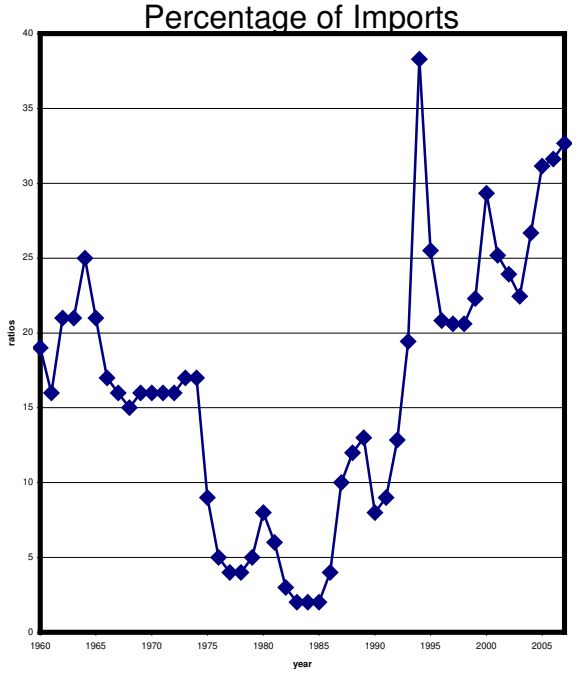
Non-Oil Exports:

In 1356 (1977) non-oil exports totaled $563 million. In 1353 (1974), the ratio of non-oil exports to total imports was at 9%. Even though this low ratio is understandable in the face of a sharp rise in imports due to a large increase in oil revenues, it never recovered to any significant degree until later in the 1990s, when draconian import restrictions were imposed. Decline in the ratio of non-oil exports to total imports was at its worst throughout most of the post-Revolutionary era (see Graph 6).

Graph 5: IRI Share of World Trade (Exports Plus Imports)



Graph 6: Non-oil Exports as a Percentage of Imports



For five years in a row, 1360-4 (1981-5), the ratios of non-oil exports to total imports fell to about 2 percent.

This situation is not surprising given the Iran-Iraq War, which caused much destruction and required the reallocation of resources to the war efforts. As graph shows, there is substantial increase in the ability of the country to pay for its imports with non-oil exports. The ratio increased to 38% in 1373 (1994) but fell back to a little over 21% by 1997. However, this was mostly artificial and due to "the impact of an increasingly appreciated exchange rate, a weaker demand for Iranian products in some export markets, and anti-export bias in policy. In particular, the single largest component of non-oil exports - carpets - declined markedly to US$600 by 1996/97, compared with US$2.1 billion in 1994/95."[7] In any way, the ratios of non-oil exports have improved in 2000s, which should be a good omen for the future of the country.

However, this improved position could well be destroyed overnight if the value of the Iranian Rial is not allowed to fall at least proportionally with the inflation. The higher cost of energy and probably other inputs are going to increase exportables prices and decrease their competitiveness in the international market. Therefore, Iran's non-oil exports could suffer as a result

Observations and Conclusions

Iran's unimpressive economic performance came about as a result of the Iran-Iraq War and the inevitable collapse of oil prices, both of which were beyond the government's control, in combination with economic sanctions and many self-inflicted and self-destructive policies. Many of the negative economic conditions could easily be reversed if Iran's ideological straight jacket were removed from the policy making process.

Foremost among the self-inflicted and self-destructive wounds is the insecurity of individual citizens. Human rights violations are repeatedly acknowledged by officials of the United Nations and independent researchers, and are highlighted by the media with a troublesome frequency. One could refer to the student unrest the arrests and, imprisonment of prominent figures, as well as, and serial killings during the 1997-99, and most recently, the continuing arrests, tortures, and even execution of the those who participated or connected to the 2009 presidential election disputes.[8] Second, the ease and frequency with which laws and regulations are revoked and modified. It seems that when a law or regulation does produce instant results, it is changed.

Thirdly, one might not be able to depend, with certainty, on the laws of the land as the guiding principles. These laws may or may not stand the test of time; may be dismissed as un-Islamic or against the interest of Islam. It contributes to the sense of uncertainty about laws and regulations that is felt by potential foreign and domestic investors.[9]

A fourth related problem, which would explain the faltering private investment, is lack of uniformity in the application of the laws of the land and uncertainty due to political instability, and the sense of individual insecurity which these conditions instill. Court decisions as well as other official rulings depend on who you are, where you are, and with whom you are acquainted. In Iran, individual government officials could and would interpret the law to suit the person and not the situation. In Iran, as is notoriously known, nothing is impossible if you know the proper authorities and have the monetary ability to buy their favors. Iran is the 16the from the bottom of the list of countries in terms of corruption.

Fifth, since the revolution Iran has been paying for its political leanings in other less quantifiable ways. One punitive method, promoted by the United States, is the unwritten and circuitous international prohibition of the transfer of technology, which might be considered as capable of serving dual purposes by the United States. Even though, on the surface, other countries do not directly subscribe to and participate in this prohibition, they have conducted business with Iran with a watchful eye on these transactions. This means that Iran cannot openly buy what it needs without a great deal of European and Japanese governmental red tapes. They do not want to be accused of supporting or arming a "rogue" nation, therefore, they have been making it increasingly more difficult and costly to buy state of the arts machinery and equipments. The second way that Iran is penalized by the "dual containment policy" is in the financial markets, where Iran's credit rating is far lower than what a country like Iran should receive. There is not even one instance in which Iran has failed to pay its debt, even during those chaotic days of the hostage crisis and frozen Iranian assets. Yet, Iran must pay higher interest rates due to, among other things, low credit ratings and high country risk. Other examples abound. Iran has not been able to buy oil technology in a competitive way. Third, the "dual containment" strategy keeps foreign investors away. Even though Iran has been trying to lure businesses to invest in the country proper or in the Free Trade Zone areas, the attempts have been less than successful.[10]

It is well established that Iran is a marginal country in exports and imports (total trade) relative to the world total trade. But her absence from international arenas denies her a forum to defend and protect her interests. It is also important to be reminded of the impact of openness on the economy. Openness imposes the tyranny of the global market. The country is no longer allowed to plunder its scarce resources in the production of commodities that do not have clear international comparative advantage. International competition forces each country to be much more judicious and a great deal less cavalier in its choices of what and how much to produce.

Finally, from the discussion of output (GDP), faltering investment in machinery and construction, and spiraling inflation except in a few years, it is apparent that monetary policy has not been effective in stimulating real economic activities, nor has it been used successfully to control the value of the currency. It has been employed in an on-again-off-again manner rather than as a tool for proactive decision making. If this undesirable tendency (to use monetary policy in the regulation of short-run ups and downs) were to be overcome, it would require three initiatives. First and foremost, the Central Bank must be given independence and the authority to make monetary policy without regard to politics. When the Central Bank is unencumbered by political considerations, the short run vacillation in its monetary decisions would be eliminated or considerably mitigated. Second, given the limited usefulness of monetary policy in directing and influencing the real variables of the economy such as real output, and employment in the long run, the Central Bank must be directed to strive to achieve the one and only objective over which it has much control -- price stability. This would enable the Central Bank to focus its resources and power upon a realistic and feasible outcome. Third, the Central Bank must adhere to a set of explicitly and publicly announced quantitative targets for inflation, and also, to a set of rules designed to achieve those quantitative targets. These would go far in cooling the speculative minds of the bazaaris who would no longer profit from hoarding and from speculation about the future higher prices. And, arguably most importantly, these changes would promote a considerable reduction in uncertainty, a problem that has been pervasive and harmful to the economy in the post-revolutionary Iran.[11]

Endnotes

[1] Cyrus Bina (1992). Global Oil and the Oil Policies of the Islamic Republic In Cyrus Bina and Hamid Zangeneh, eds., *Modern Capitalism and Islamic Ideology in Iran.* St. Martin's Press.

[2] See Zangeneh for a discussion of rules vs. discretion see Zangeneh, Hamid (2006). Saving, Investment and Growth: A Causality Test.

[3] Under a regime of fixed exchange rates, inflation could be imported through several channels, including higher imported goods prices, monetization of foreign reserves by the Central Banks, and higher demand for exportable goods.

[4] IMF estimates the short run elasticity of demand for gasoline to be -0.124 and the long run elasticity of demand for gasoline to be -0.494. See Guillaume, Dominique and Roman Zytek, page 11.

[5] IMF Staff Report for 2009 Article IV Consultation, *International Monetary Fund*, Washington, DC, page 15, January 11, 2010.

[6] For a discussion of Iran's trade philosophy as well as empirical evidence, see Hamid Zangeneh (1997). International Trade in Iran: An Appraisal. *Research in Middle East Economics,* Vol. 2.

[7] IMF Staff Country Report No. 98/27, *International Monetary Fund*, Washington, DC, P. 39, April 1998.

[8] For a thorough discussion of the problems associated with student unrest, *see Journal of Iranian Research and Analysis,* vol. 15, no. 2, November 1999.

[9] See Hamid Zangeneh, "The Iranian Economy and the Globalization Process."

[10] See, Hamid Zangeneh (1997). International Trade in Iran: An Appraisal. *Research in Middle East Economics*, Vol. 2,.

[11] For a discussion of rules vs. discretion see Zangeneh, Hamid, "Saving, Investment and Growth: A Causality Test."

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