

Anatomy of the Iranian Economy

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Executive Summary

Iran has a highly diverse and complex economic structure that has suffered as a result of post-revolutionary upheavals. The availability of a unique resource base, both natural and human, and its promising geo-strategic position have endowed Iran with massive potential that has been undermined by external sanctions as well as internal shortcomings linked to mismanagement, incompetence and corruption.

Economic activity is relatively diverse. While the energy sector is the backbone of the economy, it is not the dominant contributor to gross domestic product (GDP). The service sector has dominated GDP alongside petroleum, industry, agriculture and construction. Despite the existence of a number of distortions, such as blanket subsidies, gradual reforms are injecting greater transparency into economic structures.

Economic developments have been heavily dependent on political dynamics. Iran is unique in the sense that its state sector is much larger than its governmental sector. In essence, religious, revolutionary and military institutions belong to the state as a whole but are not controlled by the government. Instead they are controlled directly or indirectly by the Supreme Leader's Office.

Despite various attempts to modernize economic structures, Iran still lacks an economic doctrine. A strategy document entitled Vision 2025 represents attempts to provide such a strategy, but internal and external political events have made it redundant. Current policies are driven in reaction to US sanctions and revolve around the concept of a resilient economy. The objectives are to build domestic capacity, increase efficiency and promote exports. In parallel with the government's efforts to promote domestic capacity building, young entrepreneurs are creating new domestic impetus through start-ups and knowledge-based solutions that will further magnify the medium-term potential of the economy.

External sanctions are also reshaping many industries and leaving a footprint on government finances. In essence, the sanctions-related decline of the petroleum sector will have implications for the overall distribution of power, as semi-state players will be in a stronger position to undermine a government that is in a weaker financial position.

Iran has an underutilized economy for political, cultural and external reasons. Short-termism caused by political, legal and operational uncertainties will continue to impede realization of its economic potential. At the same time, this crisis-ridden economy has demonstrated an ability to adapt to new realities fast, which could prove an advantage for the economic adjustments that will be needed following the current COVID-19 crisis.

Iran's officials describe the current situation as an "economic war". Sanctions and other pressure tools are seen as "economic bombardment" that will continue as long as Iranian-US tensions remain high. It is obvious that the short-term economic impacts have been disastrous. Nonetheless, accompanied by appropriate policies, the Iranian economy has the potential to regain a new balance and to start growing again.



Introduction

Analysed through the metrics of Western economics, the Iranian economy has a peculiar and complex structure. The structure is murky because of the distortions caused by a sizable underground economy and massive subsidies. While management of the economy has been tainted by revolutionary ideals and misconceptions, it is important to assess the characteristics of the economy without ideological biases in order to understand how it has survived despite internal inconsistencies and external sanctions since the 1979 Islamic revolution. This is precisely the aim of this paper: an analytical look at Iran's economic performance to understand what makes it complex and resilient. These characteristics are heavily interdependent with the political, cultural and social realities,¹ which are touched on only briefly in this paper. It should also be noted that this paper does not discuss Iran's political economy,² but only its economic policies and overall economic performance.

It is important at the outset to address two fundamental misperceptions about the Iranian economy. First, it is not an oil economy. Iran's gross domestic product (GDP) is dominated by the service sector, while petroleum, agriculture and industry are the other major sectors. Second, oil and gas are not Iran's only export commodities. In fact, non-crude exports have been higher than crude exports in recent years, although

a number of the former depend on the availability of oil, gas and inexpensive energy resources.³ Third, despite the intensity of the current COVID-19 crisis, exacerbated by external sanctions, the Iranian economy is not about to collapse, mainly due to its ability to adapt to crisis modes.⁴

This paper examines the current economic picture to provide insights on the basic foundations of Iran's economy. It sheds light on the key developments of recent decades in order to identify the main pillars on which economic performance relies, and assesses possible future trends.

A Snapshot of the Economy

This section provides a snapshot of the economy in order to underline the key challenges posed by the economic structure. A snapshot cannot provide an accurate longer-term analysis, but can help to identify some of the core issues. It is useful to identify trends in most of the key indicators, such as inflation and unemployment, while their causes are discussed below.

As noted above, the economy has suffered as a result of internal and external phenomena. There were some signs of an economic recovery early in 2020, but the arrival of COVID-19 and the renewed blacklisting of Iran's banking system by the Financial Action Task Force (FATF) have put

¹ For a better understanding of the social dimensions of Iran's economy, see Harris, Kevan (2017), *A Social Revolution: Politics and the Welfare State in Iran*, University of California Press

² For a good analysis on Iran's political economy, see Pesaran, Evaleila (2011), *Iran's Struggle for Economic Independence, Reform and Counter-Reform in the Post-Revolutionary Era*, Routledge

³ A closer list at the top export commodities in Iran indicates that after crude oil and gas condensate, top items are LPG, propane, various oils and petrochemical products (all derived from oil and

gas), Trade Promotion Center of Iran, Annual Report for the year ending on 20 March 2019, http://www.tpo.ir/uploads/amar_tejarat_khareji_12_mahe.pdf

⁴ For a discussion of the measures by the Iranian government, see: Will Iran's economy collapse under coronavirus crisis?, Al-Monitor, <https://www.al-monitor.com/pulse/originals/2020/03/iran-economy-measures-coronavirus-collapse-business.html>, accessed 26 March 2020.



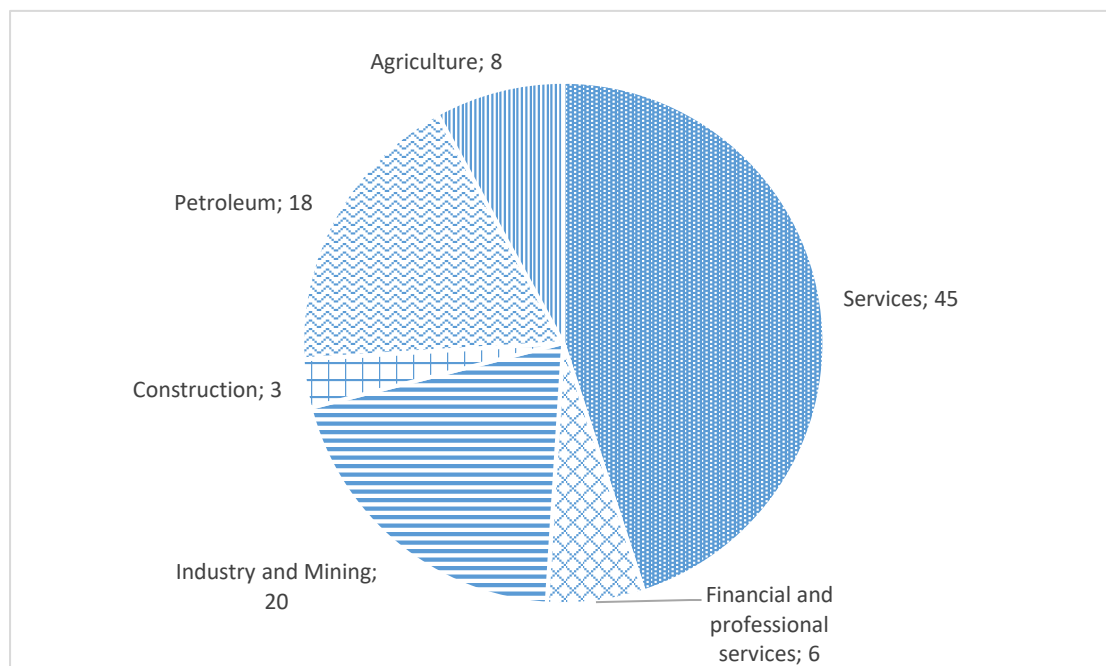
additional pressures on economic performance.

Key Economic Indicators

In contrast to many oil exporting states, Iran has a highly diverse economy. Figure 1 shows that more than half of Iran's GDP is services-based, which makes its economy resilient to occasional fluctuations in other sectors, such as petroleum, industry and mining, agriculture and construction. Statistically, the petroleum sector only contributes about 18% of GDP.⁵ Nonetheless, the sector continues to be the most important earner of foreign currency. Crude oil, condensate, natural gas and various petroleum and petrochemical

products are key export items for Iran, all of which are derived from the petroleum sector. Furthermore, a significant segment of industry is dependent on the availability of inexpensive natural gas and electricity. Thus, although not the dominant contributor to the GDP, the energy sector is the backbone of the economy. The relatively small contribution of the petroleum sector to GDP can also be explained partly by the fact that all fuels and energy suppliers in Iran are subsidized. This in turn creates vulnerabilities in government finances which are explained below. The recent hike in fuel prices has the potential to improve government finances, but the economy as a whole remains under stress caused by sanctions and internal challenges.

Figure 1: Sectoral Contribution to GDP (% for the year ending 20 March 2019)⁶



⁵ ثبت ۲۰۰۰ میلیارد تومان تولید ناخالص داخلی در سال ۹۷/ کدام سال، قله اقتصادی ایران بود؟ بخش-اقتصاد-کلان-<https://www.eghtesadonline.com/361929/3-ثبت-میلیارد-تومان-تولید-ناخالص-داخلی-در-سال-> accessed 5 March 2020.

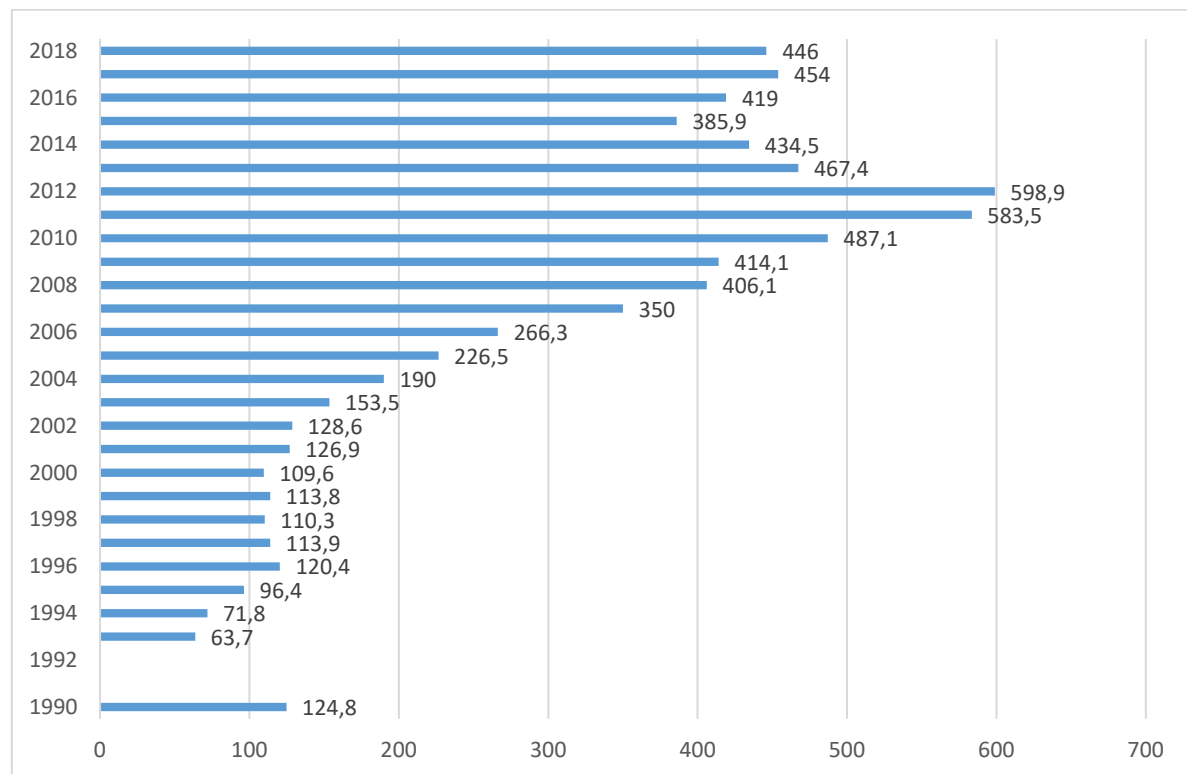
⁶ Ibid.



An analysis of current economic developments reveals that limitations caused by the United States' so-called maximum pressure on Iran have left a heavy footprint on multiple dimensions of Iran's economy. The economy following implementation of the 2015 Joint Comprehensive Plan of Action (JCPOA) was characterized by economic growth and falling inflation.⁷ In quantitative terms, GDP grew by 13.4% in the 2016–17 financial year and 3.7% the following year. However, this

growth was followed by a contraction of close to 6% in the 2018–19 financial year. It should be noted that the petroleum sector played a key role in both developments. The impressive growth in 2016–17 was due to a massive expansion of the petroleum sector while the decline in 2018 was a consequence of pressures on the same sector. By contrast, non-oil GDP contracted by just 2.4% in the 2018–19 financial year.

Figure 2: GDP trends since the end of the Iran-Iraq war (in current billion US\$)



Source: World Bank⁸ Notes: there are no figures for 1991 and 1992 due to the post-war adjustments that took place.

⁷ Also known as the Iran Nuclear Deal, the JCPOA was an agreement that was signed by Iran, China, France, Germany, Russia, UK and the US in July 2015. It was implemented in January 2016 with the lifting of UN, EU and secondary US sanctions which led to an easing of pressure on the Iranian economy. The Trump

administration decided to exit the deal in May 2018 and reintroduce massive US sanctions which has massively undermined Iran's economy.

⁸ Source: <https://fred.stlouisfed.org/tags/series?t=gdp%3Biran%3Bworld+bank>, accessed 4 March 2020.



Table 1 summarises some of the key indicators for the most recently completed

financial year and projections for the current and following years.

Table 1: Key Economic Indicators

| Indicators | 1397 (21.03.19 to 20.03.20) | 1398* (21.03.19 to 20.03.20) | 1399* (21.03.20 to 20.03.21) |
|---|-----------------------------------|------------------------------------|------------------------------------|
| GDP growth (real in Rial) | -6.0% | -5.5% | -3.0% |
| GDP (nominal in US\$ at median exchange rate) | \$446 bn | \$486 bn | \$495 bn |
| GDP per capita (nominal) | \$5,417 | \$5,927 | \$5,963 |
| Government net borrowing (% of GDP) | 4.0% | 4.0% | |
| Current Account balance (% of GDP) | -0.4% | -0.4% | -0.6% |
| Inflation (Official) | 47.5% | 39.0% | 33.0% |
| Unemployment (Official) | 10.8% | 11.0% | 12.5% |

Sources: Statistical Centre of Iran, Central Bank of Iran, World Bank, Author's projections*
Projections

The likely economic impact of the COVID-19 means that it is conceivable that the economy will not have ended its period of contraction by March 2021 as had been expected.⁹ Even if GDP stabilizes rather than contracts, however, economic performance will still be well behind the planned annual rate of growth of 8%.¹⁰ Consequently, high inflation, loss of purchasing power and unemployment will persist and it will be many years before Iran can return to some degree of economic stability.

Any assessment of the negative impact of the reimposition of US sanctions must

include the impact on inflation. The Rouhani administration's core economic achievements in its first term (2013–17) were containing inflation and stabilizing the exchange rate. Figure 3 shows that the government had managed to reduce inflation to single digits by 2017, but that external and internal factors such as devaluation of the currency have since pushed inflation above 30%. While the outlook is for a decline in inflation, it will remain above 25% and continue to eat into the purchasing power of Iranian families.

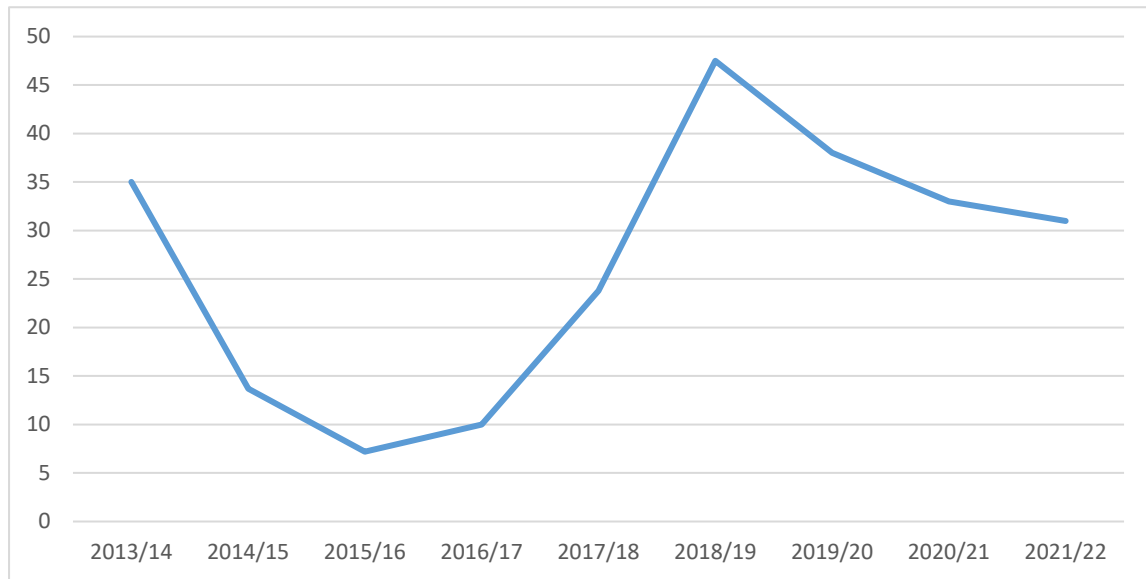
⁹ For a more detailed account of these impacts, see: Coronavirus puts more pressure on Iran's already strained economy, <https://www.al-monitor.com/pulse/originals/2020/03/iran->

coronavirus-impact-economy-health-social-environment.html, accessed 5 March 2020.

¹⁰ Source: World Bank, <https://www.worldbank.org/en/country/iran/overview>, accessed 27 January 2020.



Figure 3: Inflation Trends



Sources: Statistical Center of Iran, Central Bank of Iran, Author's projections

The combination of economic stagnation and inflation is known as stagflation, a phenomenon that Iran has faced in the past and puts further pressure on employment. The most recent job market statistics showed that, as of September 2019, unemployment had fallen to 10.5% (see figure 4).¹¹ However, youth unemployment remains high at 26.1%.¹² It seems certain at this stage that high inflation will continue to put pressure on the economy and produce negative impacts on purchasing power and employment.

Unemployment remains the most significant socio-economic challenge in Iran. Driven by demographic realities and trends in higher education, Iran is witnessing the emergence of a young, dynamic and

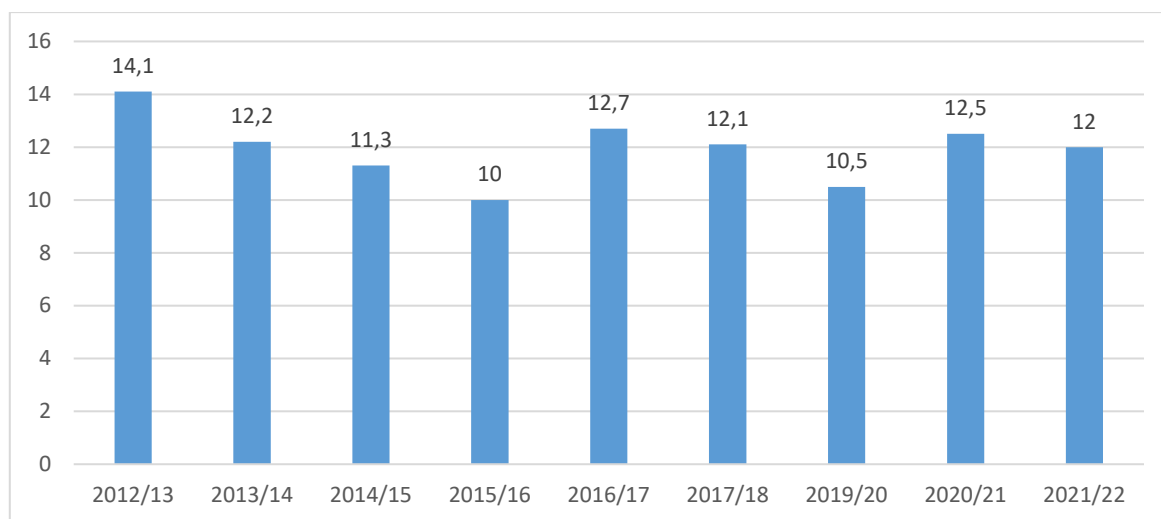
educated society that is faced with economic ills such as youth unemployment, underemployment, injustice, corruption and mismanagement. Such conditions have provided strong impetus for a brain drain, which will further undermine Iran's future economic performance.

Figure 4 depicts unemployment trends. It should be noted that unemployment pressures will persist linked to the youth of Iran's population. There will also be a spike in unemployment in the current financial year following the negative economic consequences of COVID-19. Figure 5 summarizes Iran's demographic profile based on the most recent official census, which took place in 2016.

¹¹ Source: Article in Persian: نرخ بیکاری در تابستان به ۱۰.۵ درصد رسید/افزایش ۸۴۳ هزار نفری جمعیت شاغلان کشور
نرخ-بیکاری-در-<https://www.yjc.ir/fa/news/7095627/>-DB%۸۰۵۵-نفری-هزار-۸۴۳-درصد-رسید/افزایش-تابستان-به-۱۰ درصد-جمعیت-شاغلان-کشور, accessed 27 January 2020.

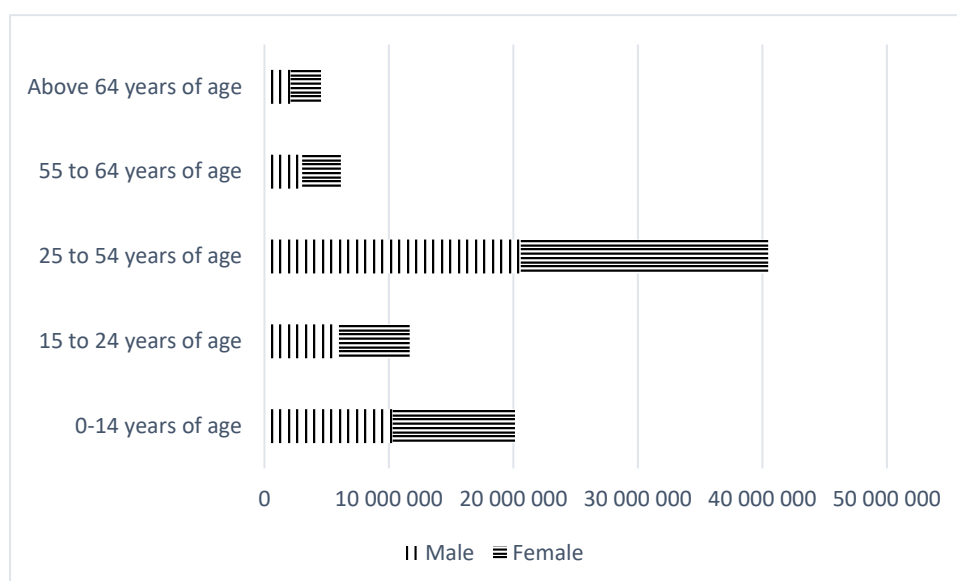
¹² Source: Article in Persian: نرخ بیکاری جوانان ۲۶.۱ درصد شد
<https://www.tasnimnews.com/fa/news/1398/07/15/2113654/نرخ-بیکاری-جوانان-۲۶-۱-درصد-شد>, accessed 27 January 2020.

Figure 4: Unemployment Trends



Sources: Statistical Center of Iran, Central Bank of Iran, Author's projections

Figure 5: Iran's Demographic Profile, 2018 (estimates based on the 2016 Census)



Source: Statistical Center of Iran



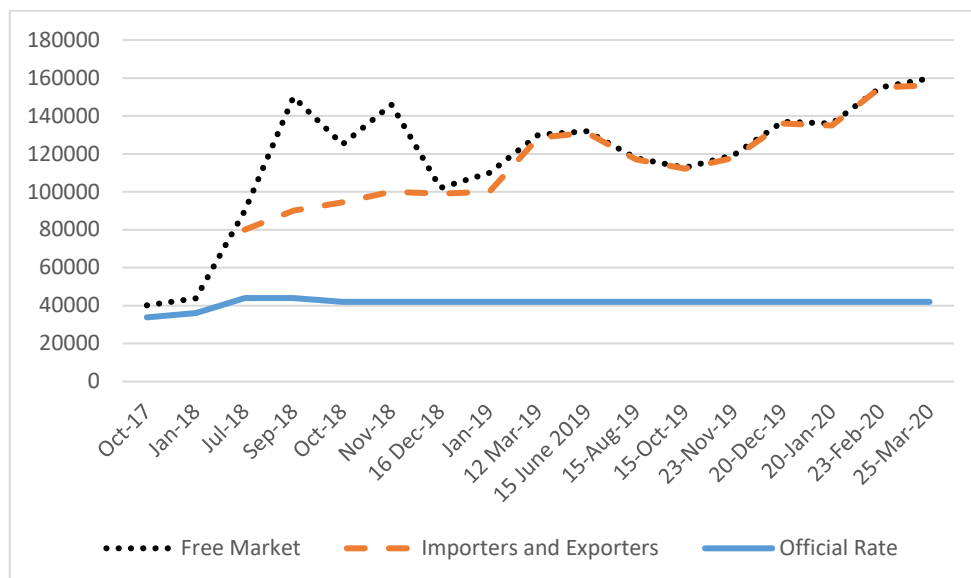
Exchange Rates

Iran is an international trading economy: not just an oil exporter, but a nation that engages in extensive imports and exports. A healthy exchange rate in policy terms and in reality can help to stabilize or destabilize the economy. One peculiarity of the Iranian economy is its multi-tiered foreign exchange regime in which the official rate (currently 42,000 rial to the US dollar) is only a fraction of commercial rates set by the free market and the so-called Nima rate, which are almost identical at about 155,000 rial as of March 2020.¹³ The artificially low rate is a tool for subsidizing what the government refers to as essential goods, such as foodstuffs and pharmaceuticals. The bulk of external trade is conducted at the higher exchange rates and there are signs that the lower rate will eventually be phased out. However, the continuation of a multi-tier exchange rate policy is the main

platform for corrupt practices, which might explain why segments of the power structure have not shown any resolve to overhaul the outdated approach to subsidizing essential goods.

Figure 6 shows that the rial has lost significant value since the US administration announced its intention to withdraw from the JCPOA in May 2018. The degree of vulnerability was so high in early 2018 that a government plan to unify two existing exchange rates not only failed, but led to the creation of the additional rate which meant that the economy effectively had to deal with a three-tiered exchange rate system. In the intervening period, after more than 18 months of turbulence and uncertainty, a certain degree of stability has returned to the market, although recent events in Iran have pushed rates up again.

Figure 6: Exchange Rates



Sources: Central Bank of Iran (CBI), sanarate.ir, bonbast.com

¹³ The Nima is a secondary market where exporters and importers trade their foreign exchange under the supervision of the Central Bank of Iran.



Informal Economy¹⁴

All national economies have an informal sector but in the case of Iran, more than one-third of the economy is thought not to be accounted for, which complicates accurate measurement of national and per capita income. Economies that suffer from phenomena such as underdevelopment and poor governance usually provide a platform for the emergence of an underground economy. Iran's informal sector, however, has mainly grown due to external sanctions and the complex regulatory environment which leads to unlicensed activity and tax evasion. Beyond sanctions, the main drivers of the growth of the informal sector are smuggling, the black market and corrupt practices. Ironically, there are also legal activities that can be considered part of the informal economy. In response to social restrictions such as the dress code for women, many businesses opt to operate in the private sphere away from government and state authorities. The most recent figures and finance estimates published by the Ministry of Economic Affairs state that 36.5% of Iran's economic activity is attributed to the informal sector.

There are many downsides to the existence of a sizable informal economy but for the purposes of this paper, the following observations are useful. First, the high level of smuggling is estimated to cost the Iranian economy 200,000 jobs.¹⁵ Given the desperate need for jobs in Iran, this is likely

to have considerable socio-economic consequences. Furthermore, uncollected tax revenues – especially in the context of the severe curtailment of oil export revenues linked to external sanctions – are estimated to amount to rial 300 trillion (about \$2 billion at the free market exchange rate).¹⁶ A third downside is the fact that individuals engaged in informal activities are not covered by the system of social security. Of the working population of more than 24 million, only about 17 million are covered by mainstream social security organizations. The socio-economic costs of this failure are very high.

The Foundations

The Iranian economy is a hybrid that merges traditional merchant and modern industrial structures. Given the major upheavals of the past four decades, involving revolution, war, reconstruction, sanctions and uncertainty, as well as the related internal and external transformations, it is no surprise that economic structures remain in a state of flux. At the same time, the economy has been distorted through revolutionary concepts such as blanket subsidies and security-driven economic structures. As mentioned above, even though the petroleum sector plays a dominant role in Iran's economic development, Iran has also witnessed an expansion of domestic manufacturing and, despite external sanctions, the growth of non-crude exports.

¹⁴ This segment is based on 'How Iran can address its informal economy', Al-Monitor, <https://www.al-monitor.com/pulse/originals/2017/11/iran-informal-economy-government-tax-revenues-smuggling.html>, accessed 27 January 2020; and Informal Economy: The Invisible Hand of Government, Abbas Khandan, https://www.researchgate.net/publication/316204106_Informal_Economy_The_Invisible_Hand_of_Government

¹⁵ Based on the statements and calculations in the below article, smuggling activity leads to 200,000 jobs lost in the Iranian economy. These are not job

displacements, but rather a loss in industrial jobs that are lost due to lower domestic production.

بخش-بازرگانی-
<https://www.eghtesadonline.com/-/آثار-پیامدهای-قاجاق-کالا-درایران-کاهش-تولیدات-260876/6>
داخلی-عدم-توان-رقابت-با-تولیدات-خارجی - accessed on 30 April 2020.

¹⁶ Source: article in persian:

فرار-مالیاتی-در-اقتصاد-/
<https://snn.ir/fa/news/779114/>
هزار-میلیارد-است-پاسخ--DB%۴%۰-ایران-بسیار-حیثیت-از
سازمان-امور-مالیاتی-به-سخن-گزار-ی-دانشجو
accessed 30 April 2020.



The World Bank describes Iran's economy as "characterized by the hydrocarbon sector, agriculture and services sectors, and a noticeable state presence in manufacturing and financial services".¹⁷ Iran's enormous hydrocarbon reserves have obviously played a key role in shaping the economy.¹⁸ Economic activity and government revenues continue to depend to a large extent on oil revenues, which remain volatile. To understand the overall structure of the Iranian economy, however, it is necessary to interrogate its foundations.

The Resource Base

Economies rely on resources and in the case of Iran there are three types: its vast natural resources, its highly educated human resources and its geostrategic location. In

economic terms, the most utilized of these three factors has been its natural resources. Table 2 summarizes Iran's key natural resources, which beyond oil and gas include copper, zinc, coal and iron ore, as well as other minerals such as precious stones. Oil and gas have been the most prominent of these assets, but Iran also has major deposits of minerals and metals that are being further developed now that the petroleum sector is coming under pressure.

Iran is believed to possess reserves of 68 different minerals and metals amounting to 37 billion tonnes of confirmed reserves and a potential 57 billion tonnes of "reserves in place".¹⁹ These assets make Iran one of the top 15 nations in terms of mining potential. Even so, the mining sector contributed only 1% of Iran's GDP in 2018.

Table 2: Snapshot of Selected Natural Resources

| Resource | Reserves |
|-------------|----------------------------|
| Natural gas | 31.9 trillion cubic metres |
| Oil | 155.6 billion barrels |
| Copper | 3.3 billion tonnes |
| Iron ore | 4.5 billion tonnes |
| Zinc | 220 million tonnes |
| Coal | 50 billion tonnes |
| Gold | 340 tonnes |

Sources: BP Statistical Yearbook 2019, Iran Mines and Mining Industry Development Organization (IMIDRO)

Potentially more important than its natural resources is Iran's human capital. A growing proportion of Iran's population of around 83 million is highly educated. The United

Nations Development Programme's Human Development Index (HDI) measures achievements in key dimensions of human development, such as a "long and healthy

¹⁷ World Bank, <https://www.worldbank.org/en/country/iran/overview>, accessed 29 January 2020.

¹⁸ Based on the BP Statistical Review of World Energy 2019 Iran ranks second in the world in natural gas reserves and fourth in proven crude oil reserves. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy->

[economics/statistical-review/bp-stats-review-2019-full-report.pdf](https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf)

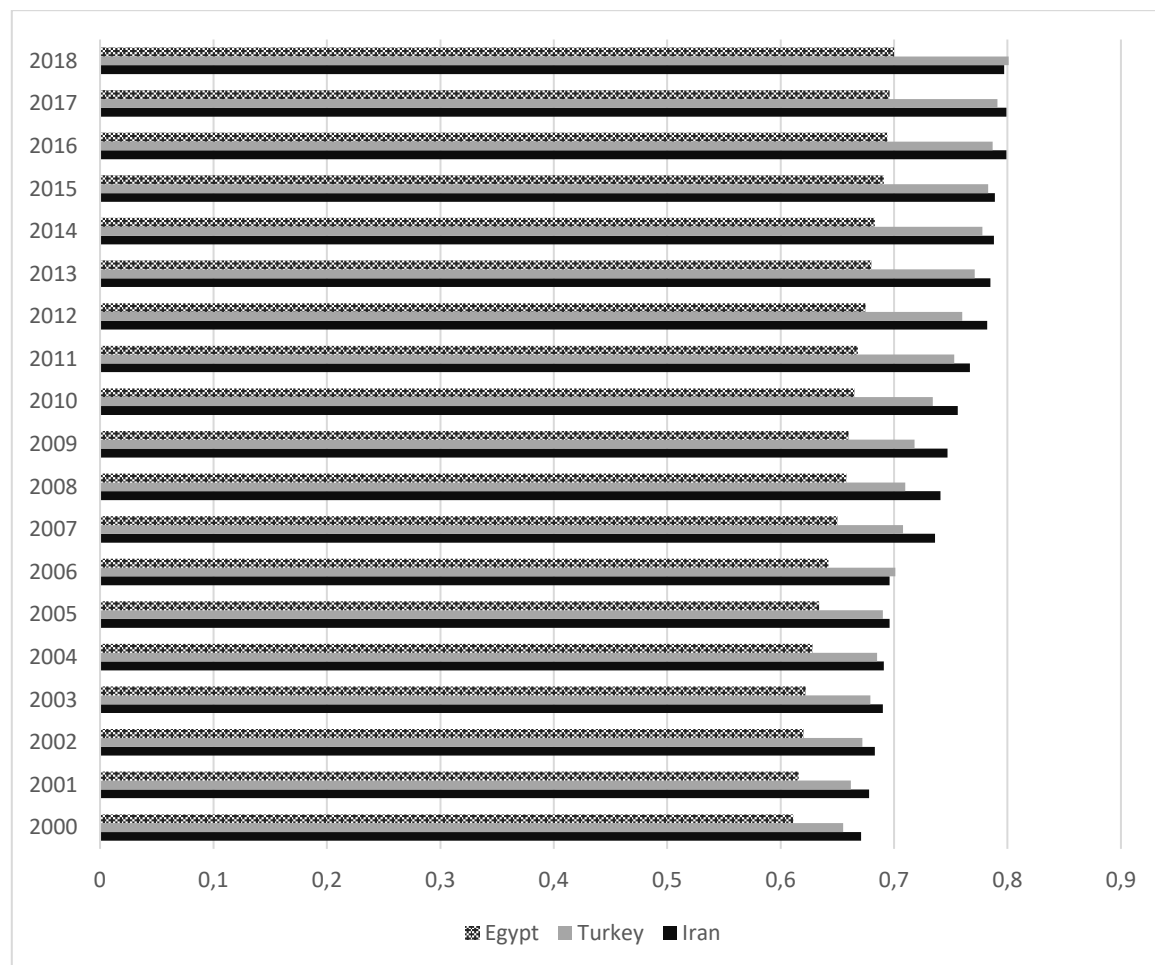
¹⁹ معادن ایران، سرمایه خفته, <https://www.irna.ir/news/83176850/-سرمایه-معادن-ایران-سرمایه-خفته>, accessed 5 March 2020.



life”, level of education and standard of living.²⁰ Iranian governments have prided themselves in having a positive trend in HDI for the past two decades.²¹ More recently,

however, UNDP data suggests that Iran’s HDI has been stagnant.

Figure 7: HDI Trends since 2000



Sources: UNDP, <https://countryeconomy.com/hdi/>

Figure 7 compares Iran’s HDI score with its regional peers, Turkey and Egypt, since 2000. In 2017, Iran had an HDI score of 0.799, just slightly below “very highly advanced”.²² The decline to 0.797 could be a consequence of the impact of sanctions, on health issues in particular. It is important to

acknowledge that Iran has enormous potential in its human capital – a phenomenon demonstrated by the recent surge in start-up activity by young university graduates. A UN report on Iran’s human development notes that: “Despite such

²⁰ UNDP, <http://hdr.undp.org/en/content/human-development-index-hdi>, accessed 27 January 2020.

²¹ UNDP, <http://hdr.undp.org/en/data>, accessed 27 January 2020.

²² Iran’s progress to 2015 can be viewed in graph form at <https://i.imgur.com/LjWSu6M.jpg>



positive progress, Iran strives to meet a range of development challenges such as

environmental degradation, disaster preparedness and gender equality. Iran is very rich in natural resources and conservation of biodiversity and the wildlife remains one of the most important challenges in the time of climate change”.²³

Iran’s geostrategic position means that it connects two of the most important energy hubs in the world: the Persian Gulf and the

Caspian basin. It is also a geographical bridge between various important regions in Asia, Eurasia, Europe and North Africa. Furthermore, it has land and sea borders with 15 states, some of which – such as Turkey, Iraq and Russia – are also important trading and technology partners. Its geostrategic position means that Iran features strongly in the planned infrastructure investments linked to China’s Belt and Road Initiative (BRI).

Figure 8: Iran and the BRI



Source:
<https://whotrades.com/people/474441518/timeline/4515234?showMore=1&highlightPinned=1&gam=frbtr>

²³ UNDP,
<https://www.ir.undp.org/content/iran/en/home/countryinfo.html>, accessed 27 January 2020.



Economic Policies

Economic policy in Iran has been shaped by revolutionary ideals, socio-economic necessity and responses to external pressure. In recent decades, the government has attempted to move the economy away from a focus on basic needs towards a growth economy. However, a number of distortions and structural deficiencies, which are discussed below, have prevented this transformation from being an easy path.

To help understand how economic policies have shaped Iran's economy, the cornerstones of economic policy since the end of the 1980–88 Iran–Iraq War are outlined in this section. During the war, government policy was based on a war economy. In the aftermath of the war, however, new thinking emerged and it was no coincidence that Iran began to define its economic policies in five-year plans in 1989.

Economic Policies under **President Rafsanjani, 1989–1997**, were heavily reliant on central planning and government dominance of all large-scale enterprises. The private sector was mainly focused on small-scale trading, services and agricultural ventures. At that juncture, economic policies evolved around post-war reconstruction and economic restructuring. Initial attempts at post-revolutionary privatization emerged in the first five-year plan. The Rafsanjani government also invested heavily in training for public sector managers in order to professionalize technocrats and the managers of state enterprises. However, economic adjustment policies were accompanied by high inflation

as well as an external debt crisis that left a negative legacy.

Economic Policies under **President Mohammad Khatami, 1997–2005**, acknowledged the interdependency of different policy areas – the social, political and economic – and shifted the overall theme from economic to political adjustment. Legal and political reforms were introduced in areas such as civil society, media liberalization and implementation of constitutional provisions on electing local councils. Khatami's administration understood the importance of and tried hard to lay the legal and political foundations for the growth of the private sector, including by attracting foreign investment.²⁴ However, his political reforms alienated those in lower income classes who were unhappy about inflation and the high level of unemployment seemingly inherent in the Iranian economy.

Economic Policies under **President Ahmadinejad, 2005–2013**, shifted attention away from systematic structural reform to populist policies and an attempt to redefine central planning. He reversed a number of policies that were introduced by previous administrations and dissolved the Management and Planning Organization in charge of economic policy and planning. Although privatization picked up pace during his administration, it happened for all the wrong reasons, especially as a process for expanding the economic interests of the semi-state sector which put additional pressures on the genuine private sector. A populist social housing programme, the so-called Mehr Housing project,²⁵ had catastrophic consequences

²⁴ Iran's current foreign investment law (so-called Foreign Investment Promotion and Protection Act or FIPPA) was drafted and passed during President Khatami's term and laid the grounds for more effective attraction of foreign investment.

²⁵ For more details on this social housing project, see: Iran's economy struggles to support Ahmadinejad's ill-

conceived housing vision, <https://www.theguardian.com/world/iran-blog/2014/jan/30/irans-economy-struggles-to-support-ahmadinejads-ill-conceived-housing-vision>, accessed 5 March 2020.



for the economy as it exploded Iran's money supply. One important shift in this era was the introduction of subsidy reforms and cash handouts, which was in principle significant, but the impact was undermined by the subsequent inflation and loss of value of the national currency.

The economic Policies of **President Rouhani since 2013** have partly undone the structural changes of the previous administration and resorted to pre-Ahmadinejad economic policies. In a number of fields, however, especially subsidy reform and social housing, the government has been obliged to continue with existing policies as they are codified in law. The administration's attempts to reconnect with the policies of the Khatami era with regard to attracting foreign investment and promoting a genuine private sector failed in the light of the reintroduction of US secondary sanctions. The current sixth five-year development plan focuses on the development of a resilient economy, progress on the knowledge-based economy and reform of state-owned enterprises and the financial sector. Some of these reforms are making progress, particularly in the banking field, but such policies are usually hampered by political priorities, especially in the light of the need to push back against US maximum pressure.

This review of the economic policies of the past three decades underlines how the economy has been negatively affected by the zig-zag measures of successive administrations. The Islamic Republic has never had a genuine economic doctrine and a trial and error mentality has prevailed. Some much needed reforms, such as privatization in the financial sector,

improving the business climate or amending the law on foreign investment, emerged under the reformist President Khatami, but partly due to the complexities of the power structure, these were not accompanied by a comprehensive set of policies. To address these challenges, a 20-year vision document, Vision 2025, was drafted in 2005 in order to define a pseudo-economic strategy. However, this was undermined by the continuous politicization of economic decisions. Vision 2025 called for Iran to develop to be the region's top technological and economic power by 2025 and depicted an Iran in 2025 that was a "Knowledge-based Economy" that would be an inspiration for other nations as well as an active player in global trade and the global economy.²⁶ However, the document remained vague on which concrete policies and strategies would help Iran achieve its goals.

Vision 2025 presented ambitious plans for Iran: a change in the role of government from the direct ownership and management of enterprises to policymaking, guidance and regulatory functions; the empowerment of the private and cooperative sectors, and enabling these to enhance the competitiveness of their products in international markets; preparing Iranian enterprises to apply global trading rules intelligently and in a gradual and target-oriented manner; the development of a knowledge base and human capital; the development and enhancement of national standards and efforts to ensure that quality assurance systems conform to international standards; and a privatization plan with the goal of improving efficiency and competitiveness, and greater levels of share ownership.²⁷

²⁶ For a detailed analysis of the 20-Year Prospect Document, see: Jahangir Amuzegar, *Iran's 20-Year Economic Perspective: Promises and Pitfalls*, Middle East Policy Council,

<http://www.mepc.org/journal/middle-east-policy-archives/irans-20-year-economic-perspective-promises-and-pitfalls>

²⁷ Ibid.



These objectives will not be achieved if Iran continues to undermine the development of the private sector and fails to create an investment regime in which private investors feel secure and protected. In the meantime, the promotion in response to US pressures of a concept known as a “resilient economy” has further confused domestic economic actors.²⁸ While the principle of domestic capacity building remains the favoured approach, the successful empowerment of domestic industries will require a package of economic, legal and structural reforms that is absent for the current political discourse in Iran.

Poverty and Inequality

In the absence of a comprehensive economic doctrine, policies since the 1979 revolution have evolved around revolutionary concepts such as fighting poverty and achieving social justice. Various studies have shown that the government has been successful at fighting poverty, but

not as effective at reducing income equality, despite the provision of subsidies in various forms over the past four decades.²⁹

In addition to an inadequate taxation regime, the prevalence of the informal economy, which enriches the upper classes, limits the options for addressing income equality. The government therefore falls back on redistributive policies that in turn pave the way for corrupt practices. In consequence, a vicious circle of inadequate policies and weak governance has impeded any improvement in Iran’s Gini Coefficient³⁰ over the past decade.³¹ The improvement in 2011, which was sustained for three consecutive years, was a direct consequence of the subsidy reform of 2010 and the introduction of direct cash handouts that massively improved the income levels of lower income households. However, those improvements faded away in the light of inflation and the subsequent mismanagement of resources.

²⁸ For a critique of the concept, see How feasible is Khamenei’s economic doctrine for Iran? - <https://www.al-monitor.com/pulse/originals/2019/05/iran-khamenei-economic-doctrine-domestic-production-jcpoa.html>

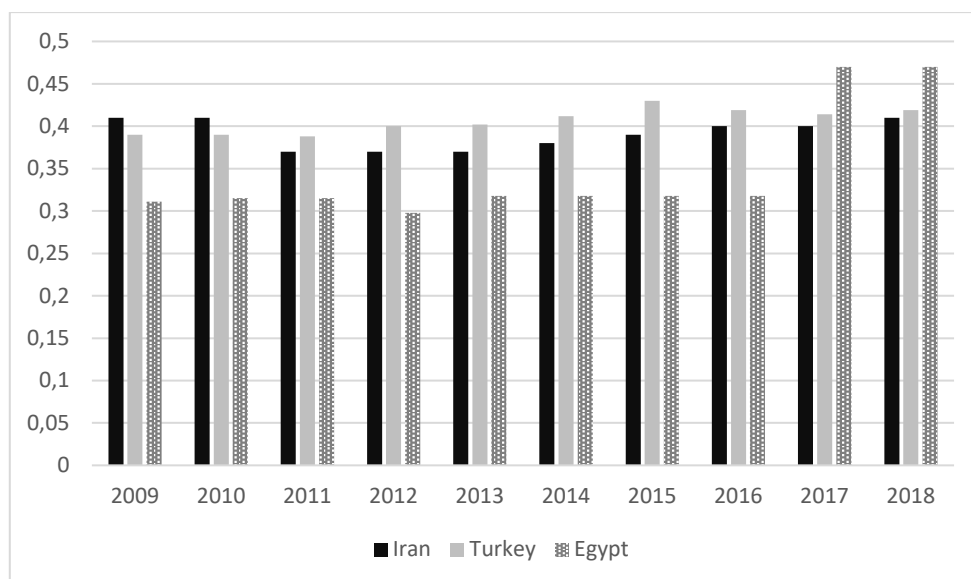
²⁹ See e.g. “Poverty and Income Inequality in the Islamic Republic of Iran”, Djavad Salehi-Esfahani, <https://www.cairn.info/revue-internationale-des-etudes-du-developpement-2017-1-page-113.htm#>, accessed 4 March 2020.

³⁰ The Gini coefficient is a statistical indicator for measuring income distribution. The coefficient ranges from 0 to 1, with 0 representing perfect equality and 1 representing perfect inequality.

³¹ Sources: *ضریب جینی در سال ۹۷ چقدر شد؟+نمودار*, <https://www.mashregnews.ir/news/966786/>-*ضریب جینی-در-سال-۹۷-چقدر-شد-نمودار*, Statistical Center of Iran, Amar.org.ir – accessed 4 March 2020.



Figure 9: Gini Index in Iran, Turkey and Egypt



Source: World Bank

Income inequality has a number of consequences, from petty crime to social discontent, that can affect the overall economic performance of a state. It is widely believed that the wave of social protest that erupted at the end of 2017 was a direct consequence of the level of social injustice.³² This is a phenomenon that is likely to recur as long as the issue of inequality is not addressed through comprehensive policy corrections.

The Government as An Economic Player

Iran is unique in the sense that its state sector is much larger than its governmental sector. In other words, a large number of state-owned entities are not owned by the government. In essence, institutions such as religious, revolutionary and military foundations belong to the state as a whole but are not controlled by the government. They are controlled either directly or indirectly by the Office of the Supreme Leader.

Historically, Iran's economy had been a mixture of central planning, state ownership of large enterprises, cooperative agriculture and small-scale private trading and services ventures. Privatization and economic reform have transformed the economic structure in the past two decades, but the roles of the government and the semi-state institutions continue to dominate.

In essence, in addition to its regulatory role, the government is also one of the largest economic actors. The basis for its role is provided by Article 44 of the Iranian Constitution:

The economy of the Islamic Republic of Iran is to consist of three sectors: state, cooperative, and private, and is to be based on systematic and sound planning. The state sector is to include all large-scale and mother industries, foreign trade, major minerals, banking, insurance, power generation, dams and large-scale irrigation networks, radio and television, post,

³² See e.g. <https://inequality.org/great-divide/iran-protests-inequality/>, accessed 4 March 2020.



telegraph and telephone services, aviation, shipping, roads, railroads and the like; all these will be publicly owned and administered by the State. The cooperative sector is to include cooperative companies and enterprises concerned with production and distribution, in urban and rural areas, in accordance with Islamic criteria. The private sector consists of those activities concerned with agriculture, animal husbandry, industry, trade, and services that supplement the economic activities of the state and cooperative sectors. Ownership in each of these three sectors is protected by the laws of the Islamic Republic, in so far as this ownership is in conformity with the other articles of this chapter, does not go beyond the bounds of Islamic law, contributes to the economic growth and progress of the country, and does not harm society. The [precise] scope of each of these sectors, as well as the regulations and conditions governing their operation, will be specified by law.³³

The process of reducing the size of government has relied on a so-called re-interpretation of Article 44 – a decree drafted by the Expediency Council and signed by Ayatollah Khamenei which paved the way for a different approach to privatization.³⁴ The main objectives of this initiative are to accelerate economic growth in the national economy, promote broadly based public ownership to achieve greater social justice, enhance the efficiency of economic enterprises and the productivity of human and material resources and

technology, reduce the financial and administrative burdens on the government linked to its role in economic activities and increase the general level of employment.³⁵ With regard to the size of the government's role in the economy, the original decree envisaged that a number of enterprises would be privatized. All major industries, which are referred to in the law as "mother industries", were to be privatized, including downstream oil and gas, as well as large mining interests (excluding oil and gas) and all international trade activities unless the sector was defined in law as a government monopoly.³⁶ Any continuing government role or participation in such industries would require the permission of parliament. In addition, the decree instructed the government to prepare the ground for the Iranian economy to interact with the global economy through "a gradual and targeted process".³⁷

Nonetheless, political, legal and administrative obstacles remained and diverse political factions implemented the privatization programme based on their own reading of their own interests. For example, President Ahmadinejad introduced a populist plan offering shares in government entities to low income social classes in a scheme known as "Justice Shares". This concept allowed the government to maintain partial control over some key entities as the government ended up "representing" the share blocs owned by

³³ Islamic Republic of Iran Constitution: <http://www.iranonline.com/iran/iran-info/government/constitution.html>

³⁴ Implementation of the decree was debated in the Iranian Parliament and became law in July 2008. For the Persian text see the website of the Iranian Parliament www.majlis.ir

³⁵ Iran Privatization Organization, "General Policies of Article 44 of the Constitution of the Islamic Republic of Iran", <http://www.en.ipo.ir/index.aspx?siteid=83&pageid=822>

³⁶ Downstream refers to the processing of oil and gas, such as refining and petrochemicals plants. Oil and gas reserves are excluded from the mining sector and will remain owned by the government.

³⁷ Iran Privatization Organization, "General Policies of Article 44 of the Constitution of the Islamic Republic of Iran", <http://www.en.ipo.ir/index.aspx?siteid=83&pageid=822>



private citizens as “trustees”.³⁸ In addition, as is discussed below, a significant number of government companies were transferred to semi-governmental entities such as pension funds, or revolutionary and religious cooperatives.

In fact the central government has been weakened while the “states within the state” have become more powerful, at least with regard to economic power. At the same time, the government is still the main actor in principal control of the petroleum sector. The sanctions-related decline in the petroleum sector will obviously have implications for the overall distribution of power, as semi-state players will be in a stronger position to undermine a government that is in a weaker financial position.

Semi-State Economic Players and the Islamic Revolutionary Guards Corps

As mentioned above, a number of entities make up the semi-state sector in the Iranian economy. The key players among these are the Islamic Revolutionary Guards Corps (IRGC) and senior religious and revolutionary foundations such as the Astan-e Qods Razavi (AQR) in Mashad and the Mostazafan Foundation (MF).

These foundations, which are also known as bonyads, were an important element in the process of state building in post-revolutionary Iran. They developed into states within the state, largely becoming a burden to the very government that created them. One structural characteristic that has contributed to tensions between the

government and these semi-state institutions is the fact that bonyads are only accountable to the Supreme Leader. Some of the proceeds due to the religious and revolutionary bonyads are allocated to the Supreme Leader’s office, which on paper spends these funds on religious and charitable activities. Lack of accountability, tax exemptions and opaque operational structures have raised major questions with regard to bonyads, leading to a push for reform and restructuring in recent years. There have been many attempts to impose transparency and accountability, such as obliging the bonyads to pay taxes and breaking up their monopolies in a number of economic sectors. Nonetheless, they have maintained considerable influence, especially as they have been the main beneficiaries of privatization in Iran.

The bonyads were the key semi-state players until the 1990s, but in the past two decades the IRGC has gained in significance and increased the size of its economic activity. The emergence of the IRGC in the post-reconstruction era began when IRGC-affiliated companies started to bully their way into government projects during the Khatami presidency. The most visible cases of friction were the cancellation of the Turkcell mobile phones licence in 2004 and the cancellation of the Imam Khomeini International Airport security contract with the Turkish company TAV in 2005.³⁹ Both these contracts were later awarded to IRGC-affiliated consortia. There was still a reluctance in the Khatami era to allow the IRGC to enter strategic sectors such as petroleum. Under Ahmadinejad, however, all key sectors were opened up to IRGC interests, to the point where Rostam

³⁸ For a detailed analysis of the approach by the Ahmadinejad administration, see Kevan Harris, *Pseudo-Privatization in the Islamic Republic: Beyond the Headlines on Iran’s Economic Transformation*, Muftah, 15 October, 2010, <http://muftah.org/pseudo-privatization-in-the-islamic-republic-beyond-the-headlines-on-iran%E2%80%99s-economic-transformation-by-kevan-harris/>

headlines-on-iran%E2%80%99s-economic-transformation-by-kevan-harris/

³⁹ See <https://www.al-monitor.com/pulse/originals/2017/08/iran-irgc-economy-footprint-khatam-olanbia.html>, accessed 9 March 2020.



Qassemi – the head of Khatam-ol-Anbia (KOA), the largest economic enterprise owned by the IRGC and one of the leading infrastructure contractors in the country – was appointed petroleum minister.

IRGC principals have justified the expansion of their economic activities throughout the past two decades by claiming that the IRGC was entering economic fields that were too challenging for the private sector with the intention to help the government and improve economic conditions.⁴⁰ From the perspective of the private sector, this justification would only explain the IRGC's presence in construction and heavy industry, not its entry into sectors such as banking, insurance, trading, food and telecommunications. There are now no sectors in which the IRGC is not either directly or indirectly present.

In 2013 President Rouhani asked the IRGC to scale back its economic activities in order to create more space for the private sector. There has been some limited success in reducing the IRGC's negative impact on the activity of genuinely private sector companies, such as the application of a minimum size for projects so that smaller projects are left to the private sector. Nonetheless, ambiguity about the ownership and control of entities as well as the withdrawal of international companies in response to US secondary sanctions have opened up new spaces for the growth of IRGC activities in Iran's economy.

At the same time, the actual share of economic activity linked to the IRGC has been overestimated by international

observers. A 2017 analysis by the author put the share of the IRGC network of companies at about 15% of GDP.⁴¹ This share is certain to grow in the next few years, mainly because sanctions are putting extreme pressure on the government and the private sector. Many of the new investments associated with local capacity building will come from the IRGC, which has easier access to financial and human resources than the other key players in the economy. There is no doubt that the growth of IRGC-related economic activity in Iran will have political and economic consequences, some of which are discussed in Chapter III.

Vibrant Merchant Class and Modern Industrialists

Much has been written about the close links between the traditional merchant class and the clergy as two pillars of the 1979 Islamic revolution. The role of the bazaar as a socio-economic phenomenon and determinant, however, goes much deeper.⁴² It may sound like a cliché to mention the merchant class, or the bazaaris, as one of the foundations of the economy, but it is important to underline how the bazaar mentality has shaped economic activity in Iran. Before oil and modern industries emerged in the 20th century, the key economic players were the bazaaris whose trading activities defined the core of the Iranian economy.

Their impact is still manifold. On the one hand, the central location of the traditional bazaar creates a centrality of the flow of goods in every city. Although the physical bazaar has lost its significance in major urban centres, the centrality of the

⁴⁰ Interview with Mohammadreza Yazdi, deputy chief commander of the IRGC, Khabaronline, <https://www.khabaronline.ir/news/132927/>-اگر کسی-بگوید-فعالیت-اقتصادی-سپاه-شفاف-نیست-یا-معرضانه-حرف-می-زند, accessed 4 March 2020.

⁴¹ The real footprint of the IRGC in Iran's economy, <https://www.al-monitor.com/pulse/originals/2017/08/iran-irgc->

[economy-footprint-khatam-olanbia.html](https://www.al-monitor.com/pulse/originals/2017/08/iran-irgc-economy-footprint-khatam-olanbia.html), accessed 27 January 2020.

⁴² For a comprehensive analysis of the role of the Bazar in Iran, see *Bazar and State in Iran* by Arang Keshavarzian, <https://www.cambridge.org/core/books/bazaar-and-state-in-iran/6E5C6DEE791F7F88F9B4721DB541939A>



merchant class can be seen in the fact that the new generation of merchant families has multiple trading and distribution companies that influence commercial flows throughout Iran. These are now organized through modern institutions such as chambers of commerce and guilds.

On the other hand, the short-term nature of trading transactions has created a tendency towards short-termism in many commercial and industrial decisions. Furthermore, it is possible to identify a deep-set zero-sum game mindset which has a major impact on many economic and commercial decisions. On a different note, the concept of trust among bazaar peers has facilitated two important phenomena in the Iranian economy: the prevalence of the informal economy and the hawala system used for transactions on the free foreign exchange market.

Looking at the private sector beyond traditional merchants, a number of modern industrial enterprises fill the challenging space between the government and the semi-state sectors. Some of these industrialists are a new generation of bazaaris that has decided to diversify the family business, but most are private sector entrepreneurs who have benefited from the growth of the Iranian market and the absence of international competitors. This sector faces a number of challenges, not least the fact that many lucrative opportunities are essentially closed to the genuine private sector and mainly available to the semi-state entities. In addition, the rare contracts that are secured by the private sector face an array of obstacles, sometimes generated by the semi-state entities.

While the private sector has not benefited much from privatization, the process has helped it to be confident that the government per se has moved out of some key sectors, such as banking and insurance. In the words of one private sector player, the reinterpretation of Article 44 led to a “more transparent interpretation of private sector activity” in the Iranian Constitution, thereby removing some obstacles. The growth in private sector activity in banking, insurance, light industry, telecommunications and even some heavy industry can be considered the most significant driver of job creation in recent years. Statistics based on the 2016 Census indicate that the government has no potential for creating new jobs and that all new employment opportunities will be created by the non-governmental sectors of the economy, especially the private sector.⁴³ Consequently, private sector enterprises will be the most significant driver of the economy when it comes to employment. Nonetheless, the private sector is still less significant in terms of its contribution to GDP, because all strategic sectors and enterprises remain under the control of central government or the semi-state entities.

Key Drivers of Change and Significant Shifts

In the absence of a viable economic strategy, what is shaping economic development in Iran? In attempting to assess the roles of the above-mentioned economic pillars in future development, it is essential to understand the key drivers of their actions.

⁴³ See نگاهی به ترکیب اشتغال دولتی و خصوصی, <https://www.ettelaat.com/etiran/?p=349474>, accessed 5 March 2020.



The Impact of External Sanctions and the Economy of Resistance

Iran has been subjected to various waves of sanctions for the past four decades. The 2015 JCPOA was a stepping stone in the process of ridding the economy of this negative phenomenon, but the withdrawal by the Trump administration in May 2018 presented Iran with the most restrictive set of external sanctions that it has ever experienced. The short-term economic impact of these sanctions was discussed in chapter I. If the responses that emerge are accompanied by reasonable policies, however, the longer-term impact might be to the benefit of the country.

The core element of Iran's response to sanctions has been called a "resistance economy". Some believe that this concept can help Iran resolve some of its longstanding structural economic problems, such as an over-reliance on oil revenues, low productivity rates and the lack of a strong private sector. Before assessing the objectives of the concept, it is important to note that a better translation of the Persian term "eghtessad-e moghavemati" would be "resilient economy" as the goal envisaged is to be resilient in the face of external sanctions.

The original strategy document, which defines the "Principles of a Resilient Economy", focused on domestic capacity building and maximum use of Iran's resources, with a special focus on the participation of the lower- and middle-income classes in the process of wealth creation.⁴⁴ At the heart of the strategy were issues such as the promotion of a knowledge-based economy, increased

efficiency, subsidy reform, comprehensive reform of the financial systems, export promotion and increased domestic value creation. In essence, these policies are focused on making Iran less vulnerable to foreign pressure.

Historically, sanctions have hampered Iran's access to western technology and to international financial flows. It is clear that the above policies are intended to reduce dependence on external sources of technology and financing. However, implementation of these goals has been sporadic, especially as it requires a high degree of interaction with the global economy and access to financial flows, both of which are severely restricted under the current sanctions regime.

The core element of the plan is domestic capacity building. Nonetheless, while domestic manufacturing has increased in response to external pressure, various industrial entities find themselves sandwiched between sanctions-related impediments and misplaced government policies. Even large industrial units such as car companies have reduced production by up to 40% and been forced to make staff redundant.⁴⁵ Companies are facing additional challenges in the field of human resource management, especially as sanctions and deteriorating economic conditions reduce the pool of human resources.

Domestic manufacturers have found new space to operate under current conditions. According to Roghani Golpayegani, head of the Industries Commission at the Iran Chamber of Commerce, producers with a sizable domestic market, such as of

⁴⁴ See سیاست‌های کلی «اقتصاد مقاومتی» ابلاغ شد <http://isna.ir/fa/news/92113020882>, - policies decreed in February 2014 - accessed 27 January 2020.

⁴⁵ Source: تأثیر تحریم‌ها در ساخت و تولید داخلی + جدول <https://www.gostaresh.news/industry/63208>

ها-در-ساخت-و-تولید-داخلی-جدولE2%80%8Cتحریم.html, accessed 5 March 2020.



household appliances and food, have been able to expand. In addition, sectors that are able to rely on a solid export market, such as steel and petrochemicals, have grown despite external sections.⁴⁶

The expansion of domestic production and the development of regional markets have also presented Iranian companies with export opportunities to neighbouring markets such as Iraq, Central Asia and Afghanistan. The success of Iranian enterprises in growing these markets will partly depend on the intensity of external sanctions and the policies of the Iranian government. Thus far, however, the export-orientation of many domestic entities has been a positive development for the economy.

The information technology (IT) sector is also offering extensive opportunities to educated youth and contributing positively to domestic capacity building. Both established companies and start-ups have invested heavily in developing local capacities in the IT and games sectors. These are also attracting the Iranian diaspora as well as foreign investment.

The legitimate hope that the resilience strategy might compel the authorities to introduce much-needed economic and structural reforms may remain unfulfilled. External pressure has provided the state authorities with an excuse to divert attention from the long list of policy mistakes as well as issues such as mismanagement and corruption. As mentioned above, the "underground economy" is growing and, as a result of banking sanctions, a growing proportion of

financial transactions has moved to the informal sector.

Representatives of domestic industry, especially the chambers of commerce, have lobbied for further economic liberalization to ease some of the existing impediments to business activity. The term "self-imposed sanctions" has been used to describe those limitations that are caused by domestic regulations and realities. One such example is the inability of the political establishment to pass or enact legislation relating to the Financial Action Task Force (FATF). The Foreign Minister, Javad Zarif, disclosed during a meeting in the Iranian parliament that corrupt networks engaged in money laundering were responsible for the political opposition to FATF-related legislation.⁴⁷ All in all, sanctions and economic hardship have further aggravated the issue at the heart of the Iranian economy: how empowerment of the semi-governmental sector presents further challenges for the private sector.

At the same time, the current state of the economy could make the push for greater efficiency a game changer. The tightening of the government's financial resources has pushed all key stakeholders to increase efficiency. The government's own plans outline that 35% of planned economic growth will have to be generated through increased efficiency.⁴⁸ While sizable investments will be needed, a new approach to issues such as energy efficiency and efficient governance would unleash new resources that could be put at the disposal of domestic capacity building.

⁴⁶ Source: خودمان را گول زنیم؛ جهش نرخ ارز و تحریم ها، فرصت برای تولید بود، <https://www.khabaronline.ir/news/1312064/-را-خودمان-را-گول-زنیم-جهش-نرخ-ارز-و-تحریم-ها-فرصت-برای-تولید>, accessed 27 January 2020.

⁴⁷ Zarif Says Money Laundering In Iran Amounts To Billions Of Dollars, <https://en.radiofarda.com/a/zarif->

[says-money-laundering-in-iran-amounts-to-billions-of-dollars/30251041.html](https://www.radiofarda.com/a/zarif-says-money-laundering-in-iran-amounts-to-billions-of-dollars/30251041.html), accessed 5 March 2020.

⁴⁸ بهره‌وری اهرمی مهم برای توسعه رشد اقتصادی است، بخش اقتصادی-713604/4-بهره-<https://www.ilna.news/>، accessed 27 January 2020.



Allocating governmental and non-governmental capital to domestic capacity building also means diversifying the Iranian economy and attracting investment into sectors that have been underdeveloped, such as tourism (including health tourism), IT start-ups, agriculture and related processing industries, mining and the processing of mining products, and transportation. The growth in tourism, which may be undermined by increased tensions, could generate much-needed hard currency for the economy while also increasing cultural interaction between Iran and other nations.

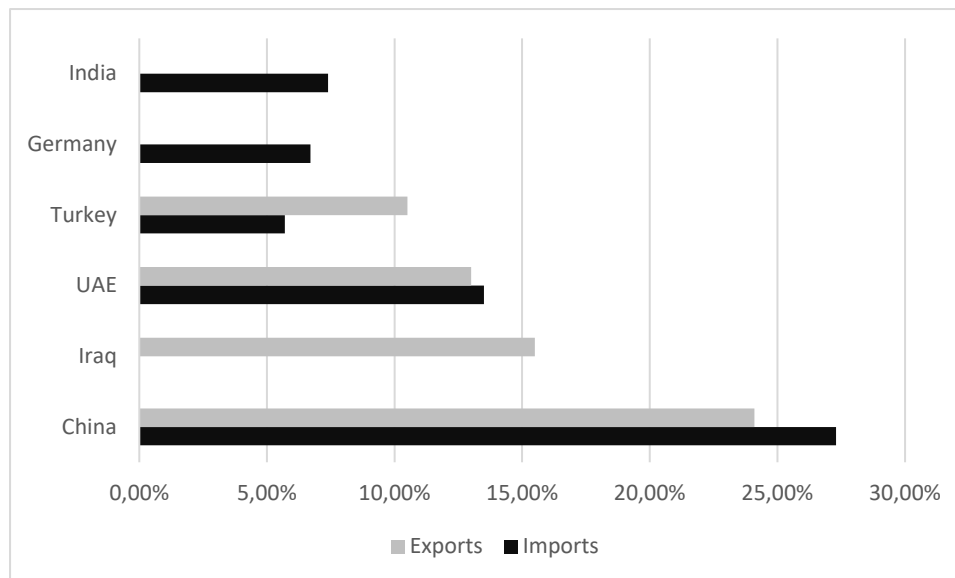
Shifting Trade Patterns

Historically, western technology, machinery and equipment formed the backbone of Iranian industry. It is obvious that the current sanctions have limited Iran's access to such technology. Against this backdrop, there has been a push to identify substitutes

Figure 10: Iran's Main Trading Partners in 2019

either by finding new international partners, or by building up domestic capacity.

A comparison of trade volumes between 2010, the year before the previous round of major sanctions was imposed on Iran, and 2019 identifies a number of shifts. The real value of Iranian exports declined from US\$ 93.5 billion in 2010 to 57.5 billion in 2019.⁴⁹ Over the same period, the real value of Iranian imports declined from US\$ 71.4 billion to US\$ 41.0 billion. It is clear that some of Iran's needs are being met domestically. Furthermore, the main exported commodities in 2019 were crude oil (20.6%), plastics (8.6%), mineral fuels (7.9%) and gas (6.4%). The main imported commodities were motor vehicles, tractors and working trucks (6.5%), rice (4.2%), special industrial machinery (3.4%) and pharmaceutical goods (3.3%) and corn (3.3%). Figure 10 shows Iran's main trading partners in 2019.



Source: Will US Iran tensions destabilize the Middle East and global oil markets?
<https://ihsmarkit.com/research-analysis/will-us-iran-tensions-destabilize-middle-east-and-oil-markets.html> - accessed 27 January 2020

⁴⁹ All of these statistics are in current US dollars.



The most important fact to be highlighted in the above figures is that the role of the European Union (EU) has diminished over the past decade. Compared to the late 2000s, when it was Iran's largest trading partner, the EU now plays a marginal role and has been overshadowed by Iran's trade with China, Iraq, the United Arab Emirates (UAE) and Turkey. That said, it is important to note that the level of European exports to Iran is distorted by the fact that a large proportion goes through third countries such as Turkey and the UAE. It is therefore more accurate to say that the EU as an economic bloc is the second largest source of Iranian imports, potentially contributing about 15% of its imports.

Despite all the obstacles, European companies continue to export machinery and equipment worth some €300–€400 million to Iran every month.⁵⁰ This means that a segment of Iranian industry continues to benefit from European technology, mostly through interactions with European small and medium-sized enterprises (SMEs).

In the meantime, commencement of the trade agreement between Iran and the Eurasian Economic Union (EAEU) in November 2019 has gradually increased the level of mutual trade between Iran and Russia. There are 380 categories of goods that can flow between Iran and the Russia-led bloc at preferential tariffs. This agreement is likely to shift Iran's trade away from Europe and towards the EAEU, as many European exports to Iran are replaced with Russian commodities.

This means that future sources of technology and investment in Iran will mainly be Russian, Asian and Turkish

companies as well as a number of European SMEs. In the meantime, the European side has disappointed the Iranian government and business community by not managing to operationalize the special purpose vehicle known as Instrument for Special Trade and Exchange (INSTEX).⁵¹ A number of financial channels have been set up to manage the financial aspects of trading with Iran in order to minimize the volume of cross-border financial transactions, but these channels impose heavy costs on the Iranian business community.

According to the United Nations, Iran attracted a record amount of over US\$ 5 billion in foreign investment in 2017, but that figure had declined to about \$3.5 billion in 2018 and has probably declined further since. This means that Iran will have to rely on its hard currency reserves and domestic capacities to generate the investment needed in its economy. Whether the government will be able to keep to its own 2020 plan not to use oil and gas export revenues to fund its state budget remains to be seen. If the plan is adhered to, Iran will have an important hard currency reserve for future infrastructure investment.

Transformation of the Energy Sector

A number of phenomena are shifting the realities of Iran's petroleum sector, which has long been the most prominent sector of the economy. First, the sector has been undermined by external sanctions and has had to redefine its strategies. In addition, the gradual ending of energy subsidies has made energy efficiency an important issue, paving the way for the use of efficiency factors in value creation in the sector.

⁵⁰ 2019 Q1 EU-Iran trade down sharply, <https://iran.ahk.de/en/media/news-details-eng/2019-q1-eu-iran-trade-down-sharply>, accessed 30 January 2020.

⁵¹ INSTEX, An Instrument Only on Paper, <https://financialtribune.com/articles/business-and-markets/101968/instex-an-instrument-only-on-paper>, accessed 5 March 2020.

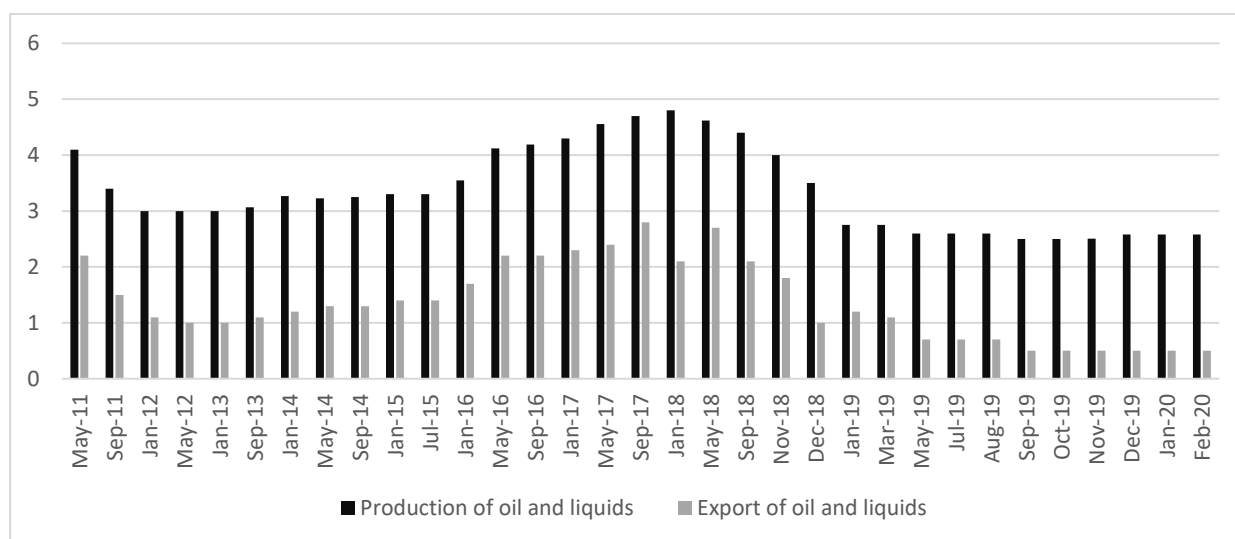


The petroleum sector has been the main target of secondary US sanctions on Iran. A number of US officials have stated that their goal is to reduce Iran's oil exports to zero. The lifting of sanctions that followed JCPOA implementation in January 2016 allowed Iran to successfully rehabilitate its crude oil production and recapture some of its lost share of the international oil market. However, oil exports suffered a heavy blow as a result of the reimposition of sanctions in 2018.

Figure 11 shows how production of crude oil and condensates peaked in January 2018 at 4.8 million barrels per day (mbpd). This level

of production was even higher than the peak in 2011, before the previous round of sanctions took effect. The additional growth was achieved by growing capacity in the production of gas condensates, which was facilitated by development of the giant South Pars gas field in the Persian Gulf. All these achievements have since been overshadowed by the reimposition of US sanctions. According to the Organization of the Petroleum Exporting Countries (OPEC), crude oil production in Iran has fallen to below 2.1 mbpd, which puts overall crude and condensate production at 2.4–2.5 mbpd.

Figure 11: Trends in oil production and exports



Sources: NIOC, OPEC, Industry sources

While in the short run the collapse of Iranian crude oil exports is a major issue, the more damaging consequence of sanctions is the lack of investment in new technologies and capacities. In the aftermath of the JCPOA, Iran's ministry of petroleum developed a plan to attract some US\$ 200 billion in new investment in the sector. However, most of this will not be realized under the current sanctions. The Iranian response has been to rely on the domestic capital market, which

has a number of shortcomings, although some smaller projects can be implemented through this approach.

One remedy has been to increase refining and petrochemical production capacities in order to diversify petroleum-related exports. New investments focus on expanding capacities and diversifying product mix. The government has also issued new licences to operate mini-



refineries, which can be established in regions that are close to off-take markets, such as Pakistan and Afghanistan. The equipment and technology needed for such mini-refineries can be secured from Russian and Chinese companies.

Currently, nine refineries are engaged in converting crude oil and part condensate into various products. All these entities are located in the western half of Iran, which indicates that the planned mini-refineries will mainly be located in the northern (Caspian) regions and eastern provinces. In addition, all existing refineries are also engaged in projects to optimize their production.

Iran's petrochemical complexes are also the subject of massive renovation and optimization plans. These entities are mostly located in the south and south-west, and concentrated in two special zones – the Mahshahr Petrochemical Special Economic Zone and the Pars Special Economic Energy Zone in Assaluyeh. These expansion plans will require massive investment and be difficult to achieve under the current sanctions. Nonetheless, the Iranian government will pursue these investments, albeit at a slower pace. Appendix 1 summarizes the existing and planned capacity in Iran's downstream sectors.

While the Trump administration has also put sanctions on the petrochemical sector, it is generally more feasible to export petroleum and petrochemical products due to the fragmentation of demand.

In addition to the above-mentioned capacity building, the Iranian authorities

have engaged in various initiatives to reduce the negative impact of sanctions:

- Use of the existing Iran Energy Exchange as a platform for the sale and export of crude oil and petroleum products, albeit with limited success thus far;
- Increasing energy efficiency in the production, distribution and consumption of energy in order to generate value without increasing production or exports. This is significant in Iran, where it is in most cases cheaper to save a barrel of oil than to produce one; and
- Empowering domestic companies to act as prime contractors in oil and gas projects. On 14 September 2019, the Ministry of Petroleum announced that two investment projects had been signed with local firms.

One important piece of the puzzle in the energy sector is the issue of energy subsidies. Iran began a multi-phase subsidy reform in December 2010, when the law was passed removing subsidies. The second phase was implemented in 2014.⁵² A hike in fuel prices in November 2019 and was met with public anger and protest.⁵³ From a macro-economic point of view, however, the policy could have positive consequences in terms of containing smuggling, increasing energy efficiency and improving the government's financial position.

There is also an expectation in the petroleum sector that Iran will be able to generate US\$ 5.5 billion in annual revenues from exporting the surplus fuel that will be

⁵² For a complete analysis of the law please read: Iran radically raises petrol prices by 50 percent, <https://www.france24.com/en/20191115-iran-radically-raises-petrol-prices-by-50-percent>, accessed 30 January 2020.

⁵³ Source: Will Iran's 50% gas price hike pay off for the economy?, <https://www.al-monitor.com/pulse/originals/2019/11/iran-gas-price-increase-economic-impact-protests.html>, accessed 5 March 2020.

freed up as a result of reduced consumption and reduced smuggling. This surplus would be exported to neighbouring markets, which would compensate for some of the losses in export revenues caused by US sanctions.⁵⁴

The policy shift will also have negative implications, most notably an increase in inflation. According to Abdolnasser Hemmati, the governor of the Central Bank of Iran (CBI), the direct and indirect consequences of the price hikes will increase inflation by 4%.⁵⁵ In the short term, these additional inflationary pressures will further undermine purchasing power and increase economic vulnerability. In the medium term, the CBI and the government will have to engage in contractionary fiscal policies to prevent major long term inflationary effects.

Shifting Government Finances

One of the direct consequences of the collapse in oil export income is a decline in government revenues. Consequently, the authorities have resorted to a number of remedies to reduce their dependence on oil revenues. These measures have included a shift to performance budgeting, an increase in tax revenues and a revamp of subsidies. As is the case with many other reforms, however, the low capacity of Iran's bureaucratic structure to implement them will be a key bottleneck.

It is nonetheless useful to assess the measures that are likely to have a longer-term impact on the economy. In addition to

the above-mentioned subsidy reforms, implementation of a tax code might impose non-cash transactions on professionals such as doctors and pharmacists who have historically been able to evade taxes. Interestingly, the tax to GDP ratio in Iran is about 9%, compared to a ratio of about 25% in developed economies. The government has also drawn down on Iran's hard currency reserves to fill some of the financial gap, and engaged in a new wave of privatization focused on selling its stake in a number of large companies.

Financial bottlenecks have compelled the authorities to focus on financial, administrative and governance efficiencies to make up for the decline in revenues. This has led to a highly visible campaign against corruption, although many see the anti-corruption initiatives as political ploys to marginalize some of the sub-factions in Iran's politics.

To understand how sustainable these recent policy corrections might be, it is necessary to assess the feasibility and success of the government plan to eliminate the dependence of its operational budget on oil export revenues. In the state budget presented to parliament for the year 21 March 2020 to 20 March 2021, the government has proposed not using a single cent of its income from oil and gas exports in its current expenditure or for infrastructure spending. It will only invest such income in developing long-term assets.⁵⁶ This is a clear departure from previous approaches, in which oil export revenues contributed 30–50% of the state

⁵⁴ Source: Iran Gov't Expects to Make \$5.5 Billion From Gasoline Export – Financial Tribune <https://financialtribune.com/articles/energy/100894/iran-gov-t-expects-to-make-55-billion-from-gasoline-export>, accessed 30 January 2020.

همتی: افزایش قیمت بنزین حدود ۴ درصد در طول یک سال آینده بر تورم تاثیر دارد - Aftab News
<https://aftabnews.ir/fa/news/622507/> - همتی-افزایش

قیمت-بنزین-حدود-۴-درصد-در-طول-یک-سال-آینده-بر-تورم-تاثیر-
دارد, accessed 30 January 2020.

Tabnak - خط‌کش دولت برای بودجه بدون نفت در سال ۹۹
<https://www.tabnak.ir/fa/news/933649/خط%۲۲%۸۰%۸C-کش-دولت-برای-بودجه-بدون-نفت-در-سال-۹۹-سه-منبع-هزار--DB%B0%DB%B0%۲۲%۸۰%۸C-جایگزین-نفت-در-بودجه-بیش-از-۶-میلیارد-تومان-یارانه-پنهن-در-بودجه-۹۸-مازاد-های-نفتی-با-رفع-تحریم-چه-۸C%۸۰%۲۲%۸۰%۸C-درآمد>
 accessed 30 January 2020.

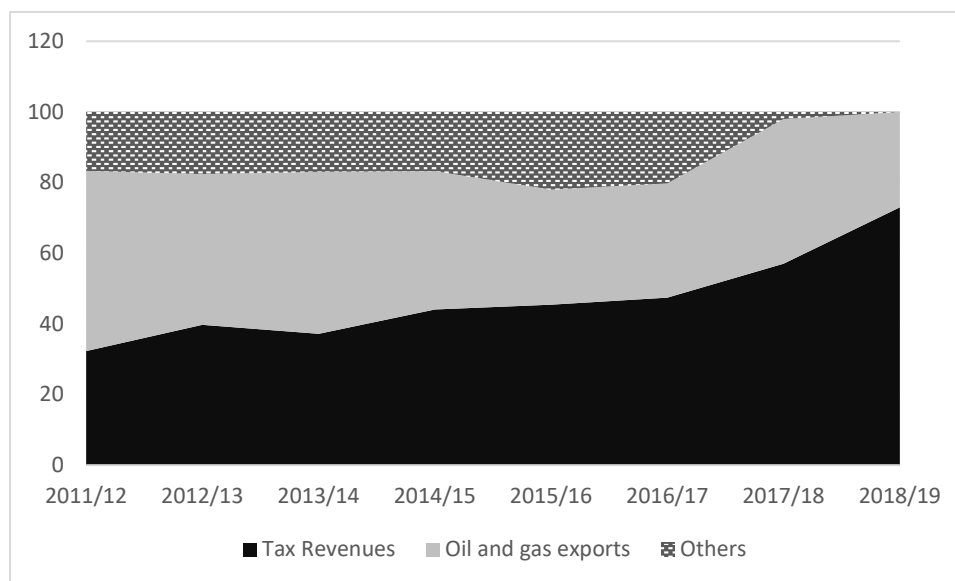
budget. An operational budget without oil export revenues will have to rely on expanded taxation, which could change the relationship between the government and society, and the business community in particular.

While the success of the new approach is uncertain, finding ways to improve the government's financial position will be important in order to reduce the inflationary impact of budget deficits, and because the government needs additional resources to allow it to engage in redistributive policies to make up for the loss of purchasing power among those on low incomes. One such

redistributive policy is the increase in the cash handouts to lower income classes put in place in reaction to the recent increase in fuel prices.⁵⁷

It should be noted that a number of reforms of the budget structure have resulted in other sources of income, such as from privatization, being redefined and added to the specific budget allocated to state-owned companies. Figure 12 on the revenues allocated to government current expenditure underlines the growing dependence of the state treasury on tax revenues.

Figure 12: Sources of Government Revenue



The government's current five-year plan aims to reduce budget dependency on oil

export revenues to 22% by March 2021. This goal appears achievable within current

⁵⁷ Iran paying first round of cash handouts after fuel price hikes – Press TV
<http://french.presstv.com/Detail/2019/11/18/611503/Iran-cash-handouts-gasoline-price-hike>, accessed 5 March 2020.

⁵⁸ Sources: Statistical Center of Iran, <https://www.amar.org.ir/> دادها و اطلاعات آماری/پولی و-و, accessed 5 March 2020.

Mashreghnews, افزایش سهم نفت در بودجه ۹۷
<https://www.mashreghnews.ir/news/920696/>- افزایش
 سهم-نفت-در-بودجه-۹۷, accessed 5 March 2020.
 سهم نفت در بودجه ۹۸ به ۲۷ درصد رسید/ پرداخت یارانه‌ها ادامه
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 ها-ادامه-دارد8C2%80%E2%98-به-27درصد-رسید-پرداخت-یارانه
 accessed 5 March 2020.



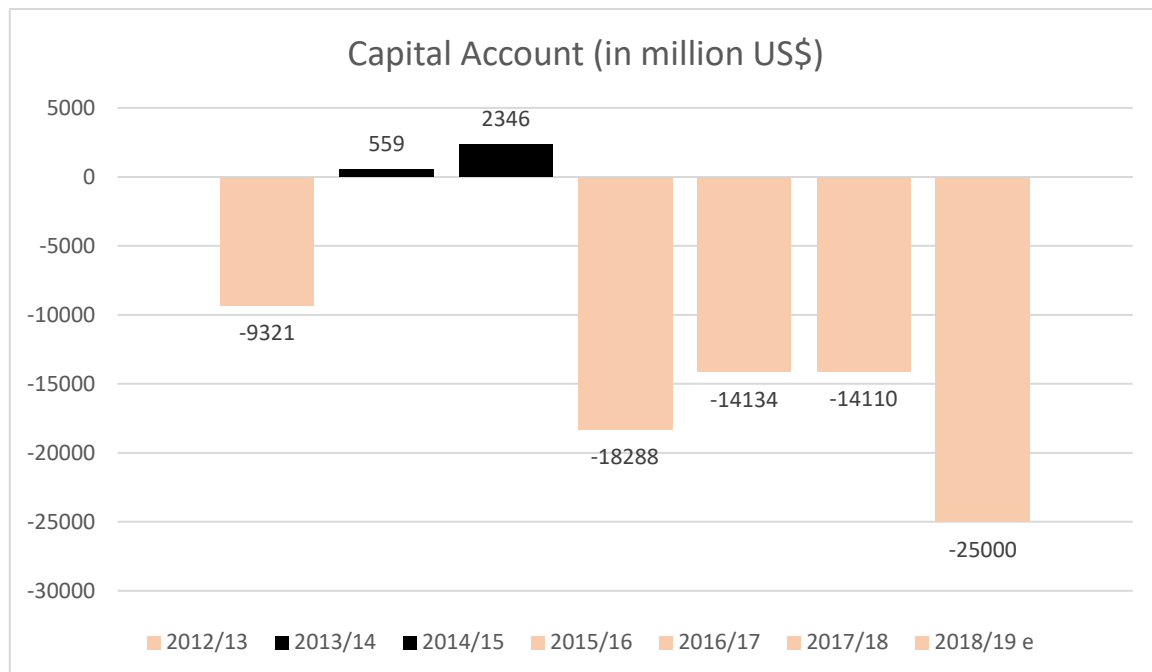
realities. It also plans to increase tax revenues to 11.5% of GDP by March 2021, an increase from the 9% in 2019 mentioned above, which also appears to be an achievable target. One objective that will not be achieved is the ratio of government expenditure to revenue, which was planned to reach 68.4% by March 2021. Large budget deficits can be expected in the light of the budgetary challenges presented by managing the fallout from COVID-19, even as the government announces a new wave of privatizations.⁵⁹

Capital Formation and the Brain Drain

Capital flight has plagued the Iranian economy for the past decade.⁶⁰ Factors such as exchange rate misalignment, political and economic instability, and corruption are likely to lead to a negative flow of capital in any economy. According to CBI data, in the year ending 20 March 2018 there was a net capital account deficit of more than US\$ 14 billion. Figure 13 depicts Iran's capital account over the past decade.

Figure 13: Capital Account Trends, 2005–2018 (US\$ million)

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⁵⁹ Source: سهام شرکت‌های دولتی با تخفیف عرضه می‌شوند, Tejaratnews, <https://tejaratnews.com/-عرضه-سهام-شرکت‌های-دولتی-با-تخفیف>

⁶⁰ For a more detailed analysis of this topic, please read: What's behind Iran's massive capital flight? - Al-Monitor, <https://www.al-monitor.com/pulse/originals/2018/04/iran-capital-flight-hawala-foreign-exchange-jcpoa-nuclear.html>

⁶¹ انتشار جدیدترین گزارش حساب سرمایه ایران/حساب سرمایه در ۹۷ بهار – Tasnim News, <https://www.tasnimnews.com/fa/news/1397/07/20/1850106/-انتشار-جدیدترین-گزارش-حساب-سرمایه-ایران-حساب-سرمایه-در-۹۷-منفی-۵-میلیارد-دلار-شد-جدول>

انتشار جدیدترین گزارش حساب سرمایه ایران/حساب سرمایه در ۹۷ بهار – Tasnim News, <https://www.tasnimnews.com/fa/news/1397/07/20/1850106/-انتشار-جدیدترین-گزارش-حساب-سرمایه-ایران-حساب-سرمایه-در-۹۷-منفی-۵-میلیارد-دلار-شد-جدول>, accessed 9 March 2020 and Author's estimate for 2018–19.



There is no doubt that some of the capital flight from Iran is linked to corrupt practices that have been on the rise in recent years. At the same time, however, a growing number of Iranians are moving their assets outside the country due to the economic and political uncertainties, especially the loss of value of the national currency. Furthermore, a large segment of the capital outflow is related to a brain drain and the growing desire among the urban middle class to either emigrate or at least have a second residence outside Iran, preferably in a western state. Statistics on the number of Iranian families buying residences in Turkey in order to secure Turkish citizenship show that the flow of funds to Turkey was responsible for the flight of close to US\$ 1.5 billion of Iranian assets. Official data from Turkey indicates that 5743 Iranian families acquired a residence in Turkey in 2019, 50% more than in 2018.⁶² This is only a fragment of the volume of physical and human capital that is leaving the country.

Brain drain dynamics are also significant in other ways. According to official statements, 150,000–180,000 experts leave Iran annually.⁶³ The economic damage of this level of brain drain is in the tens of billions for an economy that is already losing out due to other economic ills. It is arguable that, in the long term, remittances from Iran's diaspora could become significant. For the foreseeable future,

however, the negative capital account balance and brain drain will further undermine Iran's economic performance.

Eroding Purchasing Power

The stagflation that Iranian society is currently experiencing is eroding the purchasing power of the average Iranian family. Prior to the most recent deterioration, there was a meaningful improvement in economic conditions that led to a growth in the purchasing power of lower and middle class families.⁶⁴

The World Bank estimates that poverty (defined as those living on US \$5.50 a day purchasing power parity in 2011) fell from 13.1% to 8.1% of adults between 2009 and 2013.⁶⁵ This was probably the result of a universal cash transfer programme in late 2010, which preceded the elimination of subsidies on energy and bread. The programme appears to have more than compensated for the likely increase in spending on energy in less well-off households, thereby contributing to positive consumption growth among the bottom 40% of the population, even though overall consumption growth between 2009 and 2013 was negative. Poverty increased in 2014, however, possibly due to a decline in social assistance in real terms linked to higher inflation. Looking ahead, the falling real value of cash transfers could

⁶² Entekhab, ایرانی ها چه تعداد خانه در ترکیه خریدند؟

, <https://www.entekhab.ir/fa/news/527667/%D8%A7%D8%B1%D8%A7%D9%86%D8%8C-%D9%87%D8%A7-%DA%86%D9%87-%D8%AA%D8%B9%D8%AF%D8%A7%D8%AF-%D8%AE%D8%A7%D9%86%D9%87-%D8%AF%D8%B1-%D8%AA%D8%B1%DA%A9%DB%8C%D9%87-%D8%AE%D8%B1%DB%8C%D8%AF%D9%87%E2%80%8C%D8%A7%D9%86%D8%AF>, accessed 30 January 2020.

⁶³ Source: ایران رتبه دوم فرار مغزها در جهان / مهاجرت سالانه ۱۸۰ هزار متخصص تحصیلکرده از کشور, YJC, <https://www.yjc.ir/fa/news/7034820/>, ایران-رتبه دوم-فرار مغزها-در-جهان-مهاجرت-سالانه-۱۸۰هزار-متخصص-تحصیلکرده-از-کشور

۱۸%DB%B0-کشور-تحصیلکرده-از-کشور, accessed 27 January 2020.

⁶⁴ For a detailed analysis of the economic conditions of the various social classes, please read: Djavad Salehi-Esfahani, Iran's Economy 40 Years after the Islamic Revolution, <https://www.belfercenter.org/publication/irans-economy-40-years-after-islamic-revolution>

⁶⁵ Source: World Bank, <https://www.worldbank.org/en/country/iran/overview>, accessed 27 January 2020.



counterbalance the positive impact on well-being of the economic growth experienced in 2016–17 and 2017–18, and exacerbate the impact of predicted negative growth after 2017–18.

With inflation at 30–40% and annual income adjustments at 10–15%, the average family in Iran will lose significant purchasing power every year. The planned increase in cash handouts for lower income families connected to the recent hike in energy prices will have a positive impact on those on lower incomes.⁶⁶ Overall, however, conditions will negatively affect the middle classes for the foreseeable future. The loss in purchasing power will have economic consequences by reducing domestic demand for a number of products and services, especially as many middle class families will no longer be considered consuming families. It will also have social, political and cultural consequences that will indirectly have a negative impact on Iran's overall economic performance.

Long-Term Impact of Privatization

Privatization has been on the agenda of Iranian governments since 1989. Although a useful tool for reducing the economic uncertainties that can result from the overshadowing role of government in the economy, in the case of Iran, political and social concerns have hampered the application of sound economic policies in the context of privatization. The recurring themes of successive five-year development plans have been economic liberalization, giving more responsibility to the non-state

sector, reducing government intervention, restructuring the government finances, deregulation, privatization and empowering the private and cooperative sectors.⁶⁷ The continued absence of a strong private sector, however, is proof of the failure of these policies.

As argued above, the privatization process is changing the composition of ownership in the Iranian economy and the government is losing its position as the largest sector in terms of ownership. The semi-state sector is now the largest sector, although the boundaries between the government, semi-state and private sectors are extremely vague.

Various studies⁶⁸ have indicated that the genuine private sector has shied away from acquiring government entities, based on concerns about the lack of a competitive environment and legal and political stability, distorted market structures and legal barriers, and the lack of transparency in the government's conduct, especially with regard to tax and labour laws. In short, Iran's legal and business environments have not been conducive to private sector activity. Many business owners see labour laws as too pro-employee and an obstacle to growth in employment, although opportunistic solutions such as short-term employment contracts have been devised by businesses to reduce such risks. Tax laws and more importantly government licensing requirements are also impediments to a healthy growth of private sector engagement.⁶⁹ At the same time, the key obstacle to a healthy business climate

⁶⁶ For a comprehensive analysis of the latest cash transfers, please read: Djavad Salehi-Esfahani, *New Cash Transfers May Lift 2 Million Iranians Out of Poverty* – Bourse and Bazar, <https://www.bourseandbazaar.com/articles/2019/12/2/cash-transfers-increase-after-iran-protests-but-do-they-make-a-difference>

⁶⁷ A detailed account of the objectives of the various five year plans and of privatization performance can

be found on the official website of the Iran Privatization Organization at: <http://www.en.ipo.ir/>

⁶⁸ See e.g. ICCIMA Investigates Failure of Privatization Financial Tribune, <https://financialtribune.com/articles/economy-business-and-markets/71646/iccima-investigates-failure-of-privatization>, accessed 9 March 2020.

⁶⁹ Ibid.



remains the arbitrary application of laws and regulations and the prevalence of corrupt practices. While a number of these shortcomings have been addressed in legal and administrative reforms, significant obstacles remain.

The annual data on “doing business” produced by the World Bank underlines the fact that Iran is producing poor results in most categories, especially the protection of investors, securing permits and with regard to the tax regime.⁷⁰ Consequently, the main beneficiaries of the privatization process have been business networks close to the government and semi-state institutions with access to government assets. Ideology is rarely as significant among these business networks as vested economic or political interests, and political allegiances are based primarily on networks of patronage and mutual self-interest. However, these patronage links are structured not only around clerical networks, but also around military organizations, provincial interest groups and regional affiliations.

Given the fact that the government will have to offer more of its companies to the non-governmental sector in order to make up the financial gap caused by external sanctions, it should be expected that the significance of semi-state entities will grow further. This new situation means that semi-state companies will increasingly be the largest contractors in the country, replacing the government in that role. This will translate into a new and more complex set of stakeholder relations for various sectors. In addition, because the semi-state sector tends to keep its contracts and assets within its own networks, this could further weaken the private sector. In other words, the new semi-state networks are likely to

rely largely on traditional or new patronage structures, and on their affiliations with institutions such as the religious foundations, the IRGC and its Basij.⁷¹

Current corporate ownership structures in Iran undoubtedly influence economic performance. In future, semi-state and governmental entities will remain the largest players, but private sector SMEs have the potential to be key providers of jobs. Key facilitators of private sector activity will be appropriate government policies and a financial sector that is capable of providing SMEs with the financial services they need.

Reforms and Realities in the Financial Sector

One of the biggest malaises in the Iranian economy is the financial sector. Rather than engaging in financial lending, mainstream banks act more like business conglomerates. This leaves the sector subject to politicization, corruption and other problems. In addition, Iranian banks have faced major restrictions in their operations as a target of external sanctions.

At the same time, because banks are the sole source of capital in Iran’s money market, they can allow themselves to be inefficient. Plagued by corruption, mismanagement and government interference, the banks have faced major challenges and concerns have been raised about their possible collapse. The main victims of the current state of the banking sector are the Iranian enterprises that rely on their financial services. The biggest priority for the authorities is therefore to overhaul the banking system and to develop efficient financial markets.

⁷⁰ The World Bank, Doing Business in Iran, <http://www.doingbusiness.org/data/exploreeconomies/iran/>

⁷¹ A militia organization affiliated with the IRGC but structured around local mosques.



The CBI is engaged in reform aimed at improving conditions in the banking sector.⁷² One aspect of the current reform is the CBI's instruction to all banks to sell their non-core assets.⁷³ Although some of these assets may not find new buyers, it is an important step forward in persuading Iranian banks to focus on banking rather than other business activities. At the same time, however, it is likely that a number of these assets will be transferred to semi-state entities, further expanding their base in the economy. Another important CBI initiative has been the commencement of so-called Open Market Operations (OMO), which are discussed below.

In the midst of an underperforming financial sector, there is the phenomenon that is Iran's main capital market, the Tehran Stock Exchange (TSE). TSE performance stands in sharp contrast to overall economic trends in Iran. In 2019, while the economy contracted by about 6%, stock market capitalization grew by 99% in US dollar terms – the highest performing stock market in the world. At the end of 2019, market capitalization was US\$ 202 billion.⁷⁴ While there is some foreign investment activity in the market, this incredible growth is mainly derived from domestic investment. Analysts view stock market growth as a function of shifts in domestic investments from traditional platforms such

as property and gold to the stock market. Furthermore, a growing number of Iranian companies listed on the TSE have moved from a focus on the domestic market alone to export activity, making them more profitable investment targets on the domestic market. Some analysts argue that the TSE is a bubble waiting to burst.⁷⁵ Others believe that the market had been undervalued for many years and is now adjusting to a new cycle of economic activity.

Liquidity Growth and Inflation

Iran continues to have a cash-dominated, bank-based economy. Despite a number of attempts to contain the seemingly uncontrollable growth in liquidity, the money supply continues to increase, leading to inflationary pressures in the economy. Based on the most recent official statistics, Iran's liquidity stood at close to rial 20,000 trillion (about \$476 billion at the official exchange rate) in August 2019.⁷⁶ The same indicator stood at rial 700 trillion in 2005 and at rial 4,920 trillion in 2013. Figure 14 shows the growth in liquidity since 2005. Even in hard currency terms at the free market exchange rate, liquidity has grown from about \$87 billion in 2005 to \$167 billion in 2019.

⁷² For a detailed analysis of the proposed reforms see Iranian banking reforms gain steam after long delay - Al-Monitor, <https://www.al-monitor.com/pulse/originals/2018/04/iran-twin-banking-bills-central-bank-cbi-reforms-rouhani.html>

⁷³ Source: آغاز موج جدید واگذاری دارایی‌های مازاد بانک‌ها - Eghtessad Online

- <http://www.eghtesadonline.com/بخش-بانک-249045/5>, accessed 27 January 2020.

⁷⁴ Iran Market Capitalization, <https://www.ceicdata.com/en/iran/tehran-stock->

[exchange-market-capitalization/market-capitalization-tehran-stock-exchange-tse](https://www.ceicdata.com/en/iran/tehran-stock-exchange-market-capitalization/market-capitalization-tehran-stock-exchange-tse), accessed 9 March 2020.

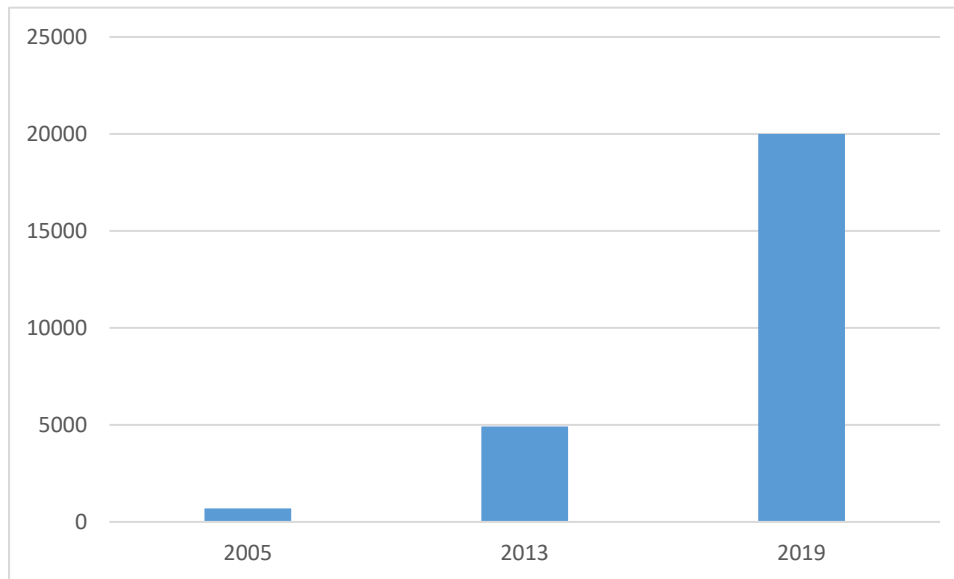
⁷⁵ For example, look at the comment by economist Adnan Mazarei in Iran's Economy Is Bleak. Its Stock Market Is Soaring., The New York Times, <https://www.nytimes.com/2020/02/13/business/iran-stock-market.html>, accessed 25 March 2020

⁷⁶ Source: جهش ۳۰۷ درصدی طی ۶ سال؛ حجم نقدینگی ایران به ۲ میلیون میلیارد تومان رسید

, Euronews, <https://farsi.euronews.com/2019/08/29/iran-central-bank-report-liquidity-volume>, accessed 27 January 2020.



Figure 14: Growth of Liquidity, 2005–2019 (trillion rial)



Source: Central Bank of Iran (www.cbi.ir)

High liquidity in a national economy leads to inflationary pressures, especially if there is a mismatch between the goods and services available in an economy and the supply of money. This leads to an artificial rise in the value of available assets such as land, property and hard currency, which in turn pushes inflation up still further. In the case of Iran, there are diverse reasons why it has been difficult to contain liquidity growth, but the main factors contributing to this economic malaise are the prevalence of the informal economy, the weaknesses of the financial sector and a structural deficit in the government's finances. As a new tool for containing liquidity, CBI governor Abdolnasser Hemmati announced the commencement of OMO in mid-January 2020.⁷⁷ Central banks use OMO to control liquidity and to have a positive impact on the cost of capital. OMO constitute buying and selling government bonds on the open

capital markets and are a completely new tool for Iran's authorities to deploy in an attempt to control the money supply in the economy. OMO are dependent on three stakeholders: the government, the CBI and Iran's commercial banks. Through OMO, the liquidity deficits or surpluses of banks are regulated by the acquisition or sale of government bonds on the capital markets. The ultimate goal is to manage the money supply, or liquidity, in order to reduce its inflationary impact on the economy. Historically, inflation and the money supply have formed an uncontrollable vicious circle in Iran, as each reinforced the other, complicating the process of containing inflation. One of the by-products of that vicious circle has been that high bank interest rates have also pushed up the cost of capital, once again feeding inflation.

⁷⁷ Source: همتی: ایران از شکل‌گیری آبر-تورم نجات یافت <https://www.khabaronline.ir/news/1342856/>-همتی, accessed 27 January 2020.



If implemented well, OMO can shift the process of balancing liquidity among various banks away from inter-bank transactions towards the sale and purchase of government bonds. In the past, Iranian banks that needed liquidity would secure it from other banks or from their reserves at the CBI.

Whether these latest reforms of the financial sector will pave the way for more efficient management of the financial sector remains to be seen. The government has also presented a plan to introduce a new national currency in a bid to contain inflation and increase efficiency in the currency sector. It is crucial that these multiple processes contain the inflationary impact of increased liquidity. To achieve that goal, the reforms will have to be accompanied by reforms in the banking and administrative sectors, most notably a clampdown on the informal economy which will continue to thrive as long as Iran remains the subject of international sanctions.

Corruption, Mismanagement and the Business Climate

As noted above, the most urgent need in the Iranian economy is employment creation, which will require new investment, preferably by the private sector. To achieve this, the country will need a business climate that is welcoming to investors, something that does not yet exist.

Iran's state bureaucracy has always been tinged with administrative and financial

corruption, but experts agree that corruption and mismanagement have grown to new levels in the past decade. Transparency International currently ranks Iran 146 out of 180 countries in its corruption index.⁷⁸ The trend has been negative in recent years. According to the current five-year plan, the Iranian authorities were hoping to achieve a Doing Business Ranking of 70th by 2021, up from 118th in 2016. At present, however, Iran is moving in the wrong direction. Another problem undermining the investment climate is mismanagement. Short-term orientations, unprofessional approaches to economic projects, including nepotism, and a trial and error mentality all undermine the development of a healthy business environment. In addition, a number of high-profile embezzlement cases and public accusations by high-level politicians against other high-level politicians,⁷⁹ as well as the arrest of former vice-presidents, ministers and deputy ministers, all indicate the existence of corrupt dealings in government and administrative circles. Officials as senior as Ebrahim Raisi, the head of the judiciary, have acknowledged that there is systemic corruption in Iran.⁸⁰

In his first term in office, President Rouhani went so far as to declare corruption a national security threat, stating that "the continuation, deepening and expansion of corruption are endangering...the Islamic Revolution".⁸¹ To be fair to the Rouhani administration, its officials have identified the main factors facilitating corruption in the state, such as a lack of transparency,

⁷⁸ See Transparency International, <http://www.transparency.org/country#IRN>

⁷⁹ One of the most embarrassing embezzlement cases took place in 2011, when the managing directors of Bank Melli and Bank Saderat – Iran's two largest state banks – were involved in the embezzlement of around \$3 billion.

⁸⁰ Source: Iran's conservatives are saying it: Corruption is 'systemic' – Middle East Eye,

<https://www.middleeasteye.net/opinion/whats-behind-irans-crackdown-corruption>, accessed 30 January 2020.

⁸¹ President's speech at the Conference on Combatting Corruption on 7 December 2013 in Tehran – Persian text at جمهوری در همایش ملی متن سخنان رئیس – ارتقاء سلامت اداری و مبارزه با فساد, <http://president.ir/fa/>



inappropriate laws and regulations, and the concentration of power in the hands of certain entities. To address these challenges, the government has engaged in initiatives such as increasing transparency through e-governance, breaking up monopolies, reforming relevant laws and regulations, and the engagement of civil society and the media. However, the main shortcoming has always been that Iran does not have the bureaucratic and executive capacities required to implement the various campaigns. Therefore, in the absence of a comprehensive set of governance, legal, political and structural reforms, Iran's business climate will continue to suffer from corruption, incompetence and mismanagement.

Conclusions and Future Outlook

Iran's economy can be described as underutilized for political, cultural and external reasons. At the same time, the economy has endured abnormal circumstances for so long that it might not be able to function properly in a pressure-free environment. In other words, the interdependence of economic developments and political processes makes it extremely difficult for the business community to develop a long-term strategy. The short-termism caused by political, legal and operational uncertainties will continue to impede the realization of Iran's economic potential. That said, the crisis-ridden economy has the ability to adapt to new realities fast, which could be an advantage in the economic adjustments that will be required following the current coronavirus crisis. Consequently, the future

outlook for Iran's economy will depend on various internal and external dynamics.

Iran's officials describe the current situation as "economic warfare".⁸² Sanctions and other pressure tools are seen as an "economic bombardment" that will continue for as long as Iranian-US tensions remain high. It is obvious that the short-term economic impacts have been disastrous. Accompanied by appropriate policies, however, the Iranian economy has the potential to gain a new balance and start growing again.

Various events and developments have the capacity to either disrupt or accelerate the process of Iran realizing its vast potential. The COVID-19 epidemic is one phenomenon that will severely disrupt the process, and it is currently difficult to predict when the Iranian, or indeed the global, economy will be able to rid itself of its consequences.

It is reasonable to expect new economic and trade dynamics as a result of the current maximum pressure on Iran. At the same time, the top priority will remain job creation. It is also certain that the government will continue to use its hard currency reserves to invest in labour-intensive sectors such as agriculture and construction. The expected expansion in these sectors will help Iran return to positive GDP growth in the next two years.⁸³ Given that the agricultural sector is free of sanctions, there is huge potential for this and the related food sector, which is also enjoying growing regional export markets. Fields such as agriculture, food, water and the energy used in the agricultural sector offer plenty of potential for international

⁸² Iran's Rouhani calls for unity to overcome US 'economic war', Reuters, <https://www.reuters.com/article/us-mideast-iran-usa/irans-rouhani-calls-for-unity-to-overcome-u-s->

[economic-war-idUSKCN1VI1O5](https://www.reuters.com/article/us-mideast-iran-usa/irans-rouhani-calls-for-unity-to-overcome-u-s-), accessed 30 January 2020.

⁸³ The agricultural sector has also been boosted by above average rainfall in the past year.



involvement and investment, even in the current political circumstances.

A negative medium-term phenomenon will be the mutual reinforcement of inflation, budget deficits, devaluation of the national currency and loss of purchasing power. From an economic point of view, there is no doubt that the inflationary pressures of the past two years will have an impact on the exchange rates. While the government and the CBI will try to sustain a degree of stability in the market, the national currency will be under pressure which then will unleash the above-mentioned vicious circle. The only remedy that can address this is fiscal discipline and appropriate economic and legal reforms such as the FATF-related legislation. The fate of FATF-related legislation in Iran will set the tone for the next few years. Even if such legislation is enacted, the government could still be overwhelmed by the task of containing the negative impacts of sanctions and providing the impetus needed to create jobs and economic growth. Preventing further budget deficits will also prove challenging as government infrastructure investments

will need to be protected in order to create employment opportunities. One factor that may change the equation will be the discipline of not using oil export revenues for current expenditure, thereby building up a strong national fund that can help the economy with long-term investments.

While medium-term developments will certainly move Iran towards a more diversified, modern economy with the ambition to become a larger exporting nation, it is also valid to argue that the empowerment of semi-state institutions, and military organizations in particular, will push economic policy towards “security agendas”. This mindset will undermine Iran’s business climate and limit genuine private sector and international investment in the economy. It remains to be seen whether the semi-state institutions will shift towards a more pragmatic outlook over time. What is certain at this stage is that they will continue to dominate the Iranian economy, which in turn will continue to suffer from a lack of appropriate investment.



Additional Data Sources

<https://www.focus-economics.com/countries/iran>

<https://www.amar.org.ir>

<https://www.cbi.ir/section/1378.aspx>



Appendix: Changes in Refining and Petrochemical Capacities in Iran

The tables below summarize the expansion of the Iranian refining and petrochemical sectors as an indication of Iran's seriousness about value creation in domestic capacities being a tool for making the economy more resilient.

Refining Capacities and Plans

| | Capacity | Actual Production | Exports | Development Plans |
|----------------|---------------------|---------------------|--------------------|--|
| Abadan | 399,000 bpd | 350,000 bpd | 100,000 bpd | <ul style="list-style-type: none"> - Construction of a new train of 210,000 bpd and replacing old units, maximizing gasoline production, producing products with specifications and quality according to Euro 5 standard, reducing environmental pollutants, supplying downstream industries (petrochemicals) Port of Imam, lubrication and asphalt factory), collecting old worn out ones. Operation Date 2021. - Capacity Building and Quality Improvement Plan by 2020. - Increased diesel / gasoline production by improving production technology. - Decrease mazut production. - The quality of the products will be at least upgraded to the Euro 4 standard and the production of the mazut will be significantly reduced. |
| | 23,154 tcm per year | 20,000 tcm per year | 6,000 tcm per year | |
| Esfahan | 375,000 bpd | 333,000 bpd | 95,000 bpd | <ul style="list-style-type: none"> - Remove octane enhancers, the possibility of producing premium gasoline. - Gasoline production (2 times of the capacity), capacity improvement and optimization by 2019. - Increasing the quality of kerosene. - Eliminating operational bottlenecks and reducing energy consumption. - Reducing environmental pollutants. - Construction of third distillation units and liquid gas. - Construction of hydro treating units for diesel, utility units, sulfur recovery, sour water purification, sour gas purification and hydrogen production - Construction of the third distillation unit of Isfahan oil refinery with a refinery capacity of 60-70 thousand barrels. (Launching). - Project for the construction of RHU Units (RFC) and Recycling of Propylene. Date of Operation: 1404 (2025). - Increases the efficiency of H-633 and H2 633 furnaces using Air Preheater - Improve the efficiency of H-251/4 and H2-251 / 4 furnaces using WHB or replacement or new furnaces. - Increase the efficiency of six boilers using the Economizer. - Reconstitution of distilled water collection system. - Use a vacuum pump instead of an aqueous vacuum distillation unit. - Replacing and strengthening the furnace body insulation. - Improvement Process and Optimization of Isfahan Refinery to reduce production of furnace oil and sulfurization of manufactured products. |
| | 21,761 tcm per year | 19,316 tcm per year | 530 tcm per year | |
| Arak | 250,000 bpd | 200,000 bpd | 60,000 bpd | -Increase capacity and improve quality. |



| | | | | |
|---------------------------|---------------------------|------------------------|-----------------------|--|
| | 14,043 tcm per year | 13,000 tcm per year | 4,000 tcm per year | <ul style="list-style-type: none"> - Increase gasoline production in exchange for reduction of mazut production. - Reducing contaminants. |
| Tehran | 250,000 bpd | 244,000 bpd | 65,000 bpd | <ul style="list-style-type: none"> - Reduce Mazut production by 2020 - Optimization of Furnaces of catalytic conversion units by installing heat recovery boilers (WHB) - Install Packinox Converters in Catalytic Conversion Units - Replacing existing Lime Softening Water Treatment System with DM System - Replacing Gas Blanket Tanks from natural gas to Nitrogen gas - Design of Light Naphtha Filtration Units and Isomerization of Tehran Refinery - The plan to reduce the production of furnace by using new technology and the participation of foreign companies in the study, feasibility studies and financing. |
| | 14,217 tcm per year | 14,149 tcm per year | 4,000 tcm per year | |
| Bandar-e Abbas | 320,000 bpd | 306,000 bpd | 84,000 bpd | <ul style="list-style-type: none"> - The plan to increase gasoline production in Bandar Abbas refinery, as well as improve the quality of diesel in accordance with the Euro 5 standard with the construction of new units. - Burner Gas Recycling (FGR) - Construction of Isomerization Units and Purification of Gasoline Hydrogen at Bandar Abbas Oil Refinery. (Launching) |
| | 16,481 tcm per year | 17,761 tcm per year | 5,000 tcm per year | |
| Tabriz | 110,000 bpd | 110,000 bpd | 30,000 bpd | <ul style="list-style-type: none"> - The plan to increase production capacity - Quality Improvement by 2019 - Tabriz Refinery Optimization Project - Financing and implementation of the project on improving the technology and quality of Tabriz refinery products and improving the quality of Tabriz refinery products, including gasoline, diesel, desulphurization plants and other facilities. - Maintain capacity and improve company operations |
| | 6,363 tcm per year | 6,389 tcm per year | 2,000 tcm per year | |
| Kermanshah | 22,000 bpd | 21,000 bpd | 5,500 bpd | <ul style="list-style-type: none"> - Replacement of refinery burners with high efficiency ones. - Changing the control system of circulating gas compressors. |
| | 1,277 tcm per year | 1,000 tcm per year | 270 tcm per year | |
| Shiraz | 56,000 bpd | 54,000 bpd | 15,000 bpd | <ul style="list-style-type: none"> - Reducing energy consumption by applying the Isomax unit's circulation gas oil. - Reduced energy consumption by applying ceramic coatings in furnaces - Increased preheat of crude oil - Reducing the gases sent to the refinery burner - Use air preheater for refinishing furnaces |
| | 3,250 tcm per year | 3,120 tcm per year | 850 tcm per year | |
| Lavan | 60,000 bpd | 45,000 bpd | 15,000 bpd | <ul style="list-style-type: none"> - Capacity building and optimization plan for Lavan Refinery. (Increasing the refining capacity to 50,000 barrels per day, increasing gasoline production, improving the quality of petroleum products with Euro 4 standard, meeting environmental standards). - Increasing gasoline production, improving the quality of petroleum products with standard Euro 4, - Compliance with environmental standards. - Launch of an isomerization unit. - Back Pressure Turbine Project. - Refinery waste reduction plan. - Steam traps management |
| | 2,785 tcm per year | 2,793 tcm per year | 780 tcm per year | |



| | | | | |
|--------------------------|--------------------|--------------------|--------------------|--|
| Persian Gulf Star | 120,000 bpd | 115,000 bpd | 34,000 bpd | - Designing a Persian Gulf gas condensate refinery (refining 360,000 barrels per day of South Pars gas condensate, producing products in line with European quality standards, creating more value added on gas condensate produced in South Pars gas refineries, preventing the export of raw materials and conversion It is for more valuable products, more job creation in the country). |
| | 6,964 tcm per year | 6,400 tcm per year | 1,900 tcm per year | |

Source: National Iranian Oil Refining, Production and Distribution Company (NIORDC)

Petrochemical Capacities and Plans

| | Capacity (thousand tons per year) | Actual Production (thousand tons per year) | Exports (thousand tons per year) | Development Plans |
|-------------------------|-----------------------------------|--|----------------------------------|--|
| Arvand | 2,834 | 1,510 | 322 | - The production of PVC and ethylene glycol materials and other products to meet the domestic needs in addition to exports. |
| Amir Kabir | 1,759 | 1,005 | 186 | - Catalysts for linear polyethylene and high-density polyethylene units. - Investigation and feasibility and innovation in the production of new polyethylene products. - Research and investigation to provide a solution to reduce energy consumption and improve production processes in production units. - Research and study to create added value on the gasoline byproduct pyrolysis unit of the Olefin unit. |
| Bandar Imam | 6,856 | 5,207 | 1,895 | - The project for the construction of a central refinery with a capacity of 40 thousand cubic meters. - New paraxillin designs and M.T.B.E |
| Bu-Ali Sina | 1,740 | 1,336 | 463 | - LTE (Low Temperature Evaporation) Desalination. - Run the 12-inch naphtha line from the storage tanks of site 5 to the complex. - Upgrade the FCS of DCS control system. - Install a Moisture Analyzer. - Install DPG on absorbent tower platforms. - Designing, manufacturing, purchasing and installing chlorine adsorbent on the fluid path at 400 units in the input current to the R-4005. - Improved integrated online analysers from GCX models to better performance models with a better performance. - Design, construction, purchase and installation of LPC control system E-5005 converter. - TSR automation, project requests and incident reports. - Development of CCTV system by replacing digital cameras. - Construction of a workshop for the construction of a catalyst base. - Equipment for loading arms from the top and VRU for discharge and loading. |
| Shahid Tondguyan | 1,376 | 833 | 25 | - POLY H optimization and upgrade project. - POLY F and POLY G Capacity Building Projects. - Trial and semi-industrial anti UV grid. |
| Khuzestan | 65 | 38 | NA | NA |
| Razi | 3,336 | 1,604 | 868 | NA |



| | | | | |
|-------------------|-------|-------|-------|--|
| Fanavar | 1,290 | 1,217 | 852 | <ul style="list-style-type: none"> - Studies on the construction of a mono-chloroacetic acid production unit. - Planned corrective projects to increase methanol unit capacity. - Petro Olefin production project. |
| Karun | 350 | 80 | NA | <ul style="list-style-type: none"> - The purchase and replacement of an acid catalyst is underway. <p>The use of this catalyst is environmentally friendly, and it purifies the exhaust air from the complex.</p> |
| Laleh | 300 | 350 | 270 | NA |
| Marun | 4,494 | 2,310 | 670 | NA |
| Ghadir | 270 | 227 | 26 | NA |
| Farabi | 90 | 25 | 8 | <ul style="list-style-type: none"> - Methanol conversion scheme to olefin - Propylene conversion to propylene oxide and polyethylene conversion - Propylene Conversion to Acrylic Acid - Vinyl acetate monomer conversion to polyvinyl |
| Shahid Rasouli | 66 | 49 | NA | NA |
| Pars | 4,481 | 3,706 | 1,630 | NA |
| Pardis | 3,510 | 3,281 | 1,920 | - Third phase of ammonia and urea plan at Pardis. |
| Arya Sasol | 1,690 | 1,663 | 1,000 | NA |
| Jam | 3,071 | 2,404 | 540 | <ul style="list-style-type: none"> - Increasing the production capacity of the units being produced, including the unit of olefin and the polymeric units to increase the production capacity. - Design and construction of a new PDH / PP unit Optimization plans and capacity increase available units: - Increase HDPE unit capacity. - Investigating participation in other projects or buying shares in petrochemical companies. |
| Zagros | 3,300 | 2,899 | 2,000 | NA |
| Kavian | 2,175 | 1,600 | 450 | - The second phase of the eleventh olefin plan. |
| Morvarid | 544 | 450 | 430 | - Design of ethylene glycols in Assaluyeh. |
| Mehr | 300 | 327 | 148 | NA |
| Nouri (Borzouyeh) | 4,479 | 4,080 | 3,000 | - Plan of LTE Splitting Petrochemicals - Current under construction. |
| Arak (Shazand) | 1,468 | 1,457 | 408 | - 330 thousand tons development of all products |
| Orumiyeh | 330 | 248 | 185 | <ul style="list-style-type: none"> - Secondary sulfuric acid production of 50,000 tonnes per year - Polyvinyl chloride production 43500 tonnes per year |
| Isfahan | 472 | 333 | 173 | NA |



| | | | | |
|-------------------|-------|-------|-----|--|
| Ilam | 300 | 140 | 3 | <ul style="list-style-type: none"> - Introduction of the second phase, i.e. production of Olefin, with a capacity of 460 (2020). - Optimize feed consumption. - Saving plans to increase the efficiency of the project implementation for the use of industrial and sanitary wastewater for use in the cooling water unit and water needed for greening to reduce water consumption. - Launching and operating the SRU unit for desalination C₃+ and C₅+ from the refinery and creating value added. |
| Bistoon | 57 | 32 | 3 | NA |
| Tabriz | 818 | 740 | 200 | - Pond Coverage Project and VOC gathering and disposal in industrial wastewater treatment unit. |
| Kharg | 1,135 | 1,099 | 758 | - Increasing the production capacity of olefin and aromatic plans (5.8 million tons per year by 2021) |
| Khorasan | 845 | 750 | 155 | - Reduction of water consumption in cooling system. |
| Shiraz | 3,280 | 1,947 | 156 | - Increasing production system. |
| Kermanshah | 1,056 | 983 | 300 | - Creating more ammonia / urea production capacity (1.6 million tons per year by 2021). |
| Abadan | 149 | 53 | 7 | - Increase polyethylene production capacity. |
| Lorestan | 330 | 86 | 48 | - Capacity increase in heavy / linear polyethylene design. |

Source: National Petrochemical Company of Iran (NPC)





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