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Discussion paper

Destructive competition: Factionalism and rent-seeking in Iran

BY **KJETIL BJORVATN** AND **KJETIL SELVIK**

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Destructive competition: Factionalism and rent-seeking in Iran

Kjetil Bjorvatn* Norwegian School of Economics and Business Administration

> Kjetil Selvik[†] Fafo AIS and University of Oslo

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Abstract

Empirical evidence shows that countries richly endowed with natural resources like oil and gas tend to have slower economic growth than resource poor countries. The present paper focuses on rent-seeking as a source of the "resource curse", using Iran as a case in point. Iran is an interesting case, both because it is a rentier economy in the oil rich Middle East, and because its political system is highly factionalized. The distortions from the factionalized political system are threefold. First, resources are wasted in the competition for rents. Second, the lack of property rights protection results in less (private) investment at the aggregate level. Third, imbalances in the distribution of political power between groups lead to a distortion in the allocation of investment funds.

Keywords: Resource curse, factionalization, rent seeking, oil revenues, Iran

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^{*}NHH, Department of Economics, Helleveien 30, N-5045 Bergen, Norway, Tel.: +47 55 95 95 85, Email: Kjetil.Bjorvatn@nhh.no.

 $^{^\}dagger Fafo$ AIS and the University of Oslo, Department of Culture Studies and Oriental Languages, Postbox 1030 Blindern, 0315 Oslo, Norway. Tel.: + 47 22 85 65 56. Email: Kjetil.Selvik@ikos.uio.no.

1 Introduction

The literature on the phenomenon known as the "resource curse" shows that countries rich in natural resources tend to have a slower economic growth than countries with a smaller endowment of natural resources (see, for instance, Sachs and Warner, 2001). The negative effect of natural resources on economic growth is particularly strong in countries with weak institutions (see Mehlum, Moene and Torvik, 2006a and b). Moreover, natural resources may negatively affect institutional quality (see Bulte et al, 2005). The curse also appears to be more severe for point source resources like oil than for more dispersed natural resources like farmland (see Busby et al, 2003).

When oil revenues are controlled by states with a limited degree of autonomy and property rights protection is weak, the result is often a destructive competition between interest groups to obtain a share of the country's rents. This is shown by Hodler (2006), who develops a theoretical model of rent-seeking and property rights protection, and finds empirical support for the prediction that resource wealth harms growth in fractionalized countries.

To illustrate the logic of rent-seeking, we have chosen to focus on Iran. Iran is interesting in this context firstly because it is a rentier economy in the oil rich Middle East, and secondly because its political system is highly factionalized. Oil revenues in Iran represent about 60 percent of government revenues and 34 percent of GDP. More than 80 percent of the country's foreign exchange earnings are due to oil exports. Politically, Iran is characterized by elite rivalry and fragmentation. From the outset, there were internal disagreements among the followers of Khomeini, the founder of the Islamic republic, and such internal conflicts have only grown with time. The institutional set-up of the republic – which juxtaposes different sources of authority and creates multiple power centers – has made political infighting endemic. Whereas the Shah was the undisputed leader of the Pahlavi monarchy, and was able to implement growth oriented economic policies, the autonomy of the Islamic Republic has been lost in power struggles.²

The factional political system has created room for discretion and arbitrariness in the design and implementation of rules and regulations. This lack of state autonomy has stimulated rent-seeking, favoring well connected public and quasi-public enterprises and hindering private investment. In-

¹Central Bank of the Islamic Republic of Iran, Annual Review, 1380 (2001/2002), Tehran, 2003.

²See Alizadeh (2000).

deed, there is a "mismatch" between investment rates and growth rates in Iran. While investment rates (and in particular public investment rates) on average have been relatively high in Iran, growth rates in GDP have been less impressive.

To illustrate this, compare the economic development of Iran and Malaysia from 1979 to 2003. In 1979, GDP per capita in purchasing parity terms stood at 3777 USD in Iran, more than 50% higher than that of Malaysia, namely 2457 USD.³ During the 25 years up to 2003, the average yearly investment rate, as a share of GDP per capita, was 30% in Iran and 25% in Malaysia. Yet, the yearly average growth rate in GDP per capita was less than 0.1% in Iran and more than 4% in Malaysia. By 2003, Malaysia's GDP per capita had reached 13318 USD, almost twice that of Iran's at 7206 USD. Figure 1 shows the development in GDP per capita in USD for the two countries between 1979 and 2003.⁴

Distortions in the allocation of capital caused by rent-seeking is one possible explanation for the low returns to investment in Iran. State banks control almost the entire market for saving and investment in the country. Recent deregulation has opened up for the entry of private banks, but these are small and heavily regulated by the government. Interest rates are set politically, and have generally been below the inflation rate for the last two decades, hence a negative real interest rate. A large share of credit is allocated to state-owned enterprises and politically influential institutions such as the religious foundations, the bonyads.⁵ In a report on the Iranian economy, the World Bank states that: "State-owned banks are notoriously liable to make bad loans, partly because it is very difficult for their managers to resist political pressures to lend at low interest rates to politically influential borrowers. It can also happen as a result of outright corruption, when managers accept bribes or other favors to make loans that are excessively risky or that they know will never be repaid." (World Bank, 2003, page 140).

Another indication of the distortions created by government intervention and rent distribution is energy inefficiency in the Iranian industry. According to the World Bank (2003, page ix), cement plants in Iran use 35% more energy than those in Japan and iron mills use 58% more. Large subsidies

³The data underlying the comparison between Iran and Malyasia are from the Penn World Table, see Heston, Summers and Aten (2006).

⁴See also Jalali-Naini (2005) and Esfahani (2002) for an overview over economic growth in Iran.

⁵More on the *bonyads* later in the paper, see Section 3.1.

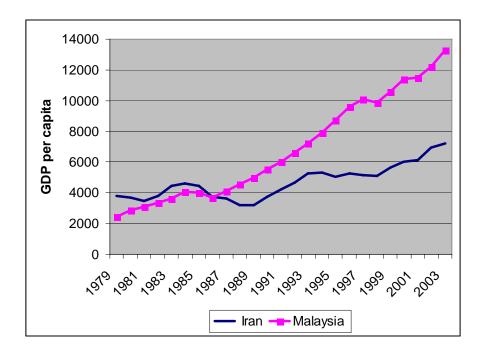


Figure 1: Economic development in Iran and Malaysia (1979-2003)

on domestic energy use is a prime candidate in explaining the high energy intensity in production: Oil sold on the domestic market is priced far below the world market price, with the implicit subsidy amounting to 10 percent of GDP, among the highest in the world. While such subsidies may be good politics, in terms of supporting key players in the political economy and appearing the general public, they are bad policies from the viewpoint of efficiency and equity. In fact, the World Bank (2003) has estimated that Iran could *eliminate* poverty by a more efficient use of its energy wealth.

Standard models of rent-seeking predict that rent dissipation is maximized when groups have equal rent-seeking efficiency.⁶ One implication from these models is that increased dominance of one interest group would improve economic efficiency by reducing the amount of resources wasted on rent-seeking. We develop a model demonstrating that this is not necessarily the case. In fact, for a country like Iran, increased dominance by one group

 $^{^6}$ See for instance Kohli and Singh (1999), and for an overview over rent-seeking models, Nitzan (1994).

may well lead to *lower* economic efficiency, contrary to the standard result of the rent-seeking literature. The reason for this result is that with asymmetries in political power, the allocation of capital is skewed in the favor of the more influential group. When capital (and other factors of production, like energy) is heavily subsidized, which is the case in Iran, the low efficiency of investment leads to large costs to society. The costs associated with increased distortions in the production process may thus dominate the reduction in costs related to rent-seeking following a larger imbalance in rent-seeking efficiency.

Income is created not only from natural sources like oil and gas, which can be seen as exogenous to the economy, but also from production decisions by economic agents in markets characterized by imperfect competition, responding to inter alia the institutional environment. We refer to the latter as "regulatory rents" or "man-made rents". When private property rights over income are not well defined and/or not well enforced, a common pool problem arises: Firms realize that a share of the income generated from their investments will be taxed away by bureaucratic intervention or "mafia-style" extortion, and the less influential firms respond by investing less. The distortions from the factionalized political system are therefore threefold. First, resources are wasted in the competition for rents. Second, the lack of property rights protection results in less (private) investment at the aggregate level. Third, imbalances in the distribution of political power between groups lead to a distortion in the allocation of capital between investors, depressing the average returns to investment. Resource rents in this model enter as subsidies to the factors of production, thus, everything else equal, increasing the profits in the economy.

Our model demonstrates that the qualitative effect of changes in the relative political influence between groups on overall economic efficiency depends on the level of subsidies on factors of production like credit and energy. With substantial subsidies, as in Iran today, a bias in the allocation of capital between the groups is the dominating source of inefficiency in the economy, and aggregate welfare is at its highest when groups are equally strong. When subsidies are relatively less important, rent-seeking is the most serious source of inefficiency, and a more imbalanced distribution of political power between the groups is likely to improve aggregate welfare.

The theme of our formal model is related to Tornell and Lane (1999), who analyze the "voracity effect". This effect refers to the possibility that a windfall gain, such as increased oil revenues, may lead to intensified rent-

seeking, a more than proportional increase in fiscal redistribution, and lower growth. Our paper is also related to Baland and Francois (2000) and Torvik (2002), who analyze how an increase in income from a natural resource may lead to a reallocation of human capital from productive entrepreneurship to rent-seeking. They demonstrate that, due to economies of scale in the productive sector, the external inflow of resources may actually lead to a lower income for the economy as a whole. The model presented here differs from these contributions primarily in that it focuses on the distribution of political strength between interest groups, and moreover, to capture an key feature of the Iranian economy, analyze rent-distribution from the government the private sector in the form of subsidies on factors of production.

The article is organized as follows. Section 2 presents a theoretical model of how the distribution of political influence and economic privileges between interest groups affect the intensity of rent-seeking. Section 3 studies rent-seeking in Iran, giving a background for the political factions in Iran and their relative strengths. This chapter also describes two cases where factional infighting between interest groups has led to wasteful outcomes. Section 4 concludes.

2 The model

Consider a country with two interest groups, a and b. The two groups have commercial interests, their actions being guided by an ambition to maximize profits. In this way, we can think of the groups as firms, and we will sometimes refer to them as such. The two groups make two sequential decisions. First, they make an investment decision. Second, they determine their amount of rent-seeking. An investment gives rise to income. Through various types of interventions, such as formal taxation and subsidies, and more informal redistributive activities like extortion and pressure for patronage employment, the income created is redistributed between the firms. Property rights over income from investment are thus not well defined. Indeed, each firm can be seen as contributing to a common pool of income. The taxation of income, in its various forms, reduces the profitability of investment. Economic inefficiency is aggravated by the fact that the firms use resources trying to influence the formal and informal taxes and subsidies in order to grab a larger share of the common pool of income.

The political economy modelled here captures central features of the

Iranian reality. In the words of Esfahani (2002, page 28-29): "Even private enterprises that belong to some elite factions may not be immune to rent extraction by rival factions. (. . .) The result has been substantial deterrence of private investment, except for projects controlled by entrepreneurs who had firm connections to the stronger factions of the ruling elite. This has meant a significant shortage of badly needed investments and has served as an impetus for the expansion of enterprises owned by the government or the bonyads."

Using the logic of backward induction, we start by describing the rentseeking contest. Let R(k) denote the size of the rent in the economy, determined by the total level of investment in the economy, $k = k_a + k_b$, to be endogenized later. Let q_i be the rent-seeking effort by group i and ρ_i be i's share of the total rent-seeking effort:

$$\rho_i = \frac{q_i}{q_a + q_b}. (1)$$

Let α_i represent group i's "influence technology", which we can think of as the quality of this group's political connections. The total influence available is normalized to unity; $\alpha_a + \alpha_b = 1$. The objective function guiding the rent-seeking effort of firm $i \in (a, b)$ is given by:

$$v_i = \alpha_i \rho_i R(k) - q_i. \tag{2}$$

The first term here is group i's income from the rent, its share of the rent being given by the product of its effort and quality of political connections. The second terms is the rent-seeking cost, the shadow price of rent-seeking efforts being normalized to unity. Maximizing v_i with respect to i, we get the first order condition:

$$\alpha_i \frac{q_j}{(q_a + q_b)^2} R(k) - 1 = 0.$$
 (3)

In equilibrium, we find that:

$$\frac{q_j}{q_i} = \frac{\alpha_j}{\alpha_i}. (4)$$

Using this information in (3), we find the equilibrium rent-seeking effort of group i as:

$$q_i = \alpha_i^2 (1 - \alpha_i) R(k), \qquad (5)$$

and that total rent-seeking effort as:

$$q_a + q_b = \alpha_a \alpha_b R(k). \tag{6}$$

Clearly, total rent-seeking effort is the highest when the political connections of the two groups are equally strong, i.e., for $\alpha_a = \alpha_b = 0.5$. Using (5) in (2), the equilibrium payoff to firm i at the rent-seeking stage of the game reduces to:

$$v_i^* = \alpha_i^3 R(k). \tag{7}$$

We now turn to the investment stage of the game, which determines R(k). For concreteness, assume the following production function:

$$R_i(k_i) = \beta \ln (1 + k_i), \qquad (8)$$

which has the standard property of a positive, but decreasing, return to capital. The parameter β captures the level of technology in production. Let $R(k) = R_a(k_a) + R_b(k_b)$. The objective of firm i at this stage of the game is to choose investment so as to maximize profits, given by:

$$\pi_i = v_i^* - rk_i = \alpha_i^3 R(k) - rk_i, \tag{9}$$

where r is the cost per unit of capital facing the firm. We shall open up for the use of investment subsidies, where the international price of capital is given by $\hat{r} \geq r$. Total subsidies are thus given by:

$$s = (\hat{r} - r)(k_a + k_b). \tag{10}$$

Maximizing (9) with respect to k_i , using (8), we find that the optimal investment by group i is given by:

$$k_i^* = \max\left(\frac{\beta\alpha_i^3 - r}{r}, 0\right). \tag{11}$$

We observe that group i's investment increases in the investment technology parameter β , falls in the cost of capital r and increases in its political

⁷Other types of subsidies, such as energy subsidies, could also be included. We can think of a production technology where energy and capital enter in fixed proportions. In this case, r represents the domestic price per unit of input, and $\hat{r} - r$ can be interpreted as the total subidies per unit of input, including both capital and energy subsidies.

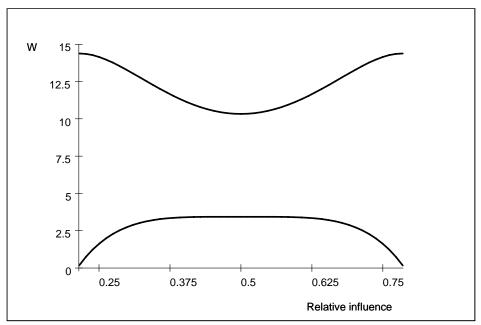
influence, α_i . The equilibrium value added of firm i, net of investment costs and rent-seeking costs, is therefore:

$$\pi_i^* = \alpha_i^3 \beta \left[\ln \left(1 + k_a^* \right) + \ln \left(1 + k_b^* \right) \right] - r k_i^*. \tag{12}$$

The total value added, or "welfare", in the economy, net of subsidies, is given by

$$W = \pi_a^* + \pi_b^* - s^*, \tag{13}$$

where $s^* = (\hat{r} - r)(k_a^* + k_b^*)$. Figure 2 illustrates welfare (W) as a function of relative influence (α_i) for high (solid, lower curve) and low (dashed, upper curve) levels of subsidies.⁸



Relative influence and welfare

We observe that with a low level of subsidies, welfare reaches a minimum at $\alpha_i = 0.5$, i.e., with equal distribution of political influence. This is because the aggregate rent-seeking effort at this point reaches its maximum, as can be

⁸The parameter values used in Figure 2 are: $\beta = 10$, r = 0.1, the low level of subsidy $\hat{r}_{low} = 0.2$, and the high level of subsidy $\hat{r}_{high} = 0.5$. Note that with these parameter values, $k_i, k_j > 0$ is true for $\alpha_i \in (0.2154, 0.7846)$, which also defines the interval of relative influence on the horizontal axis in Figure 2.

seen from (6). A more unequal distribution of power would lead to increased economic efficiency by reducing rent-seeking in the economy.

With high levels of subsidies, on the other hand, equal political influence represents a point of maximum welfare. While rent-seeking is still at its most intense here, there is another effect that dominates, namely investment efficiency. The amount of capital per unit of output, $(k_a + k_b)/R(k)$, which captures the degree of investment inefficiency, is a U-shaped function of α_i , reaching its lowest level for $\alpha_i = 0.5$. Hence, returns per unit of investment is highest when influence is balanced. The more unbalanced is the distribution of political power, the less efficient is the country in its use of capital. Indeed, as illustrated in Figure 2, with a high level of subsidization of capital (and other complementary inputs like energy), the investment inefficiency can dominate the rent-seeking inefficiency.

Oil revenues in the present model stimulate investment by financing subsidies on capital (and energy). While this is likely to stimulate investment, part of the positive effect on the economy is crowded out by increased rent-seeking. In addition, with asymmetries in the political influence between groups, part of the subsides will be used to subsidize lower-productive investment by the politically more influential group. In this way, the model can shed light on the mismatch between high investment rates and low growth in Iran, noted in the introduction to the paper.

The model also predicts that with a more unbalanced distribution of political influence in a country like Iran, we would expect to see less rent-seeking but also a more inefficient allocation of capital, in favor of the politically more influential group. Since the marginal return to investment for this group is low, and since important inputs like credit and capital are heavily subsidized in Iran, economic efficiency in the country as a whole may well suffer from such a political development.

Given the high level of subsidies in Iran on key factors of production such as capital and energy, it seems plausible that a political development which tilts the balance of power in favor of one group, is likely to lower the overall efficiency of the economy. While such a development might well reduce the intensity of the rent-seeking contest, this effect is likely to be dominated by increased distortion in the allocation of capital and the associated "waste" of subsidies on low-return investments. In what now follows, we describe in more detail the emergence of factions in Iran and analyze their relative strengths.

3 Rent-seeking in Iran

3.1 Political factions

The political factions dominating the political and economic life in Iran today grew out of the 1979 Islamic revolution. Control over state institutions and political decisions is the prerogative of those who supported Khomeini during the revolution and their affiliates. The common ground for these politicians was their agreement that Iran's political system should be based on Khomeini's doctrine of velayat-e faqih (government of the jurisconsult). Beyond this initial agreement, the followers of Khomeini had differing ideological views and political interests. Though the Islamic Republic curtailed the liberty of Iranian society and especially its political opponents, the internal culture of the political elite was sufficiently free to allow different opinions to be played against each others. Combined with a constitutional framework that counterbalances mutually independent institutions, this "culture of disagreement" has led to emergence of four main political factions.

During the 1980s, the conflict line within the Islamic Republic was mostly bipolar. On the one side, the "radicals" called for a "classless society", export of the Islamic revolution and a socially and economically interventionist state. On the other, the "conservatives" favored private property rights, "revolution in one country" and traditional Islamic jurisprudence over stateled remaking of society. While the radicals had the support of the majority of voters and therefore dominated popular-based institutions like the government and the Parliament, the conservatives had their stronghold in the Guardian Council. At the end of the decade, the radicals started losing grip on the government and the contour of a third political faction emerged. Its gravity center was Ali Akbar Hashemi Rafsanjani who was elected president in 1989. At the time, the faction was called "reformist" as it called for liberalization of Iran's economic and social policies. With the appearance of a politically oriented reform movement under Muhammad Khatami's presidency, however, the Rafsandjani-led technocrat faction was dubbed "pragmatic conservatives".

Khatami's election in 1997 was the breakthrough of what is currently called the "reformists". The label was in fact a new name for the old-time radical faction, which had gone through an ideological transformation and

⁹For a more complete description of political developments in post-revolutionary Iran, see Baktiari (1996), Brumberg (2001), and Moslem (2002).

rethought its political creed. Having been marginalized politically in the early 1990s, the once so ardent defenders of velayat-e faqih and draconian state Islamism had gradually come to embrace a much more liberal approach. The intellectual criticism of politicized religion formulated by Abdolkarim Soroush and others had a strong impact on the reformists. In Soroush' view, the Islamic Republic had lost its support in the population and tarnished religion by associating Islam so tightly with the state and forcing it on people. The only way the Islamic Republic could survive as a popularly based and genuinely religious movement, according to the reformists, was to install a state of law and increase democratic practices. For four years after their victory in the 2000 parliamentary elections, the reformists controlled both the government and the parliament in Iran.

The heydays of the reform movement were also a time of reorganization within the conservative faction. Through confrontations with the reformists, a "neo-conservative" faction emerged. It consisted to a large degree of young conservative recruits who had served as the Islamic Republic's bulwark in armed units like the Bassij-militia, the Ansar-e Hezbollah and the Revolutionary Guard. Having fought the "enemies of the Islamic Republic" on the ground, these "foot soldiers" found their influence inside the conservative faction unequal to their effort. They criticized the "old guard" of leniency and demanded an ideological return to the "original values" of the Islamic revolution, meaning strict moral enforcement, social justice and anti-imperialism. The neo-conservative Abadgaran-list won the majority in Teheran's municipal elections in 2003 and the national parliamentary elections of 2004. Mahmud Ahmadinejad's victory in the 2005 presidential elections broke the last reformist stronghold, and put the neo-conservatives in charge of the government.

Besides their ideological disagreements, Iran's political factions also represent different social interests. This is both the case on a grand level and in terms of small-scale patronage networks. In broad terms, the reformists appeal to intellectuals and students, the pragmatic conservatives voice concerns of technocrats and businessmen, the conservatives defend the bazaar and the clergy and the neo-conservatives speak the cause of the socially deprived. Of more immediate importance for the rent-seeking economy, however, are the informal networks of the elite groups. Each faction has built up its own patronage network, through friendships and years in power. With govern-

¹⁰See Jahanbakhsh (2001).

ment control being key to business opportunities, profit-seekers curry favor with politicians and decision-makers give contracts to "their" entrepreneurs. Businessmen who are known to have received preferential treatment by one political faction may not be given equal trust and favors by the next government. Changes on the political level thus usually affect the strength of economic actors.

The religious foundations (bonyads) represent a clear link between political and economic interest groups. These foundations, springing out of the Islamic revolution, have developed into economic conglomerates with activities in sectors like finance, tourism, imports/exports and manufacturing. To promote their "revolutionary" and "altruistic" mission, the bonyads are exempted from taxes and government control. They also receive direct transfers through the budget. The bonyads are dominating actors in the non-oil economy. For example, the most prominent of them, the Foundation for the Oppressed (Bonyad-e Mostazafan), controls some 20% of the country's production of textiles, 40% of soft drinks, two-thirds of all glass products and a dominant share also in tiles, chemicals, tires and foodstuffs (see Maloney, 2000 and Behdad, 2000). The bonyads are key players in the political economic landscape of Iran. In the words of Maloney (2000, page 148): "In conjuncture with their financial muscle has come political influence; by virtue of intricate personal and institutional ties with the government, the bonyads have become pivotal actors in the enduring rivalry among the ideologically oriented factions within the clerical establishment."

Due to "checks and balances" in the Iranian political system, a political faction rarely obtain a hegemony or completely marginalize the others. For one, a well-established political practice accept all historic followers of Khomeini as legitimate political actors and, by extension, as legitimate political opposition when they lose elections. Second, the institutional set-up of the 1989 Constitution include non-elected power centers whose officials are personally appointed by the Supreme Leader (rahbar-e enqelab). Such institutions include the Guardian Council, the Expediency Council, the Leader's office, and the Revolutionary Guard, which all play crucial roles within the system and sometimes wield more power than the government itself. The heads of the religious foundations are also appointed by the leader.

By making sure that politicians from different factions are appointed to different institutions, the Leader undermines challenges to his own predominant position and especially counterbalances the power of the system's number two – the president. While reformists and neo-conservatives controlled

the government and the parliament in recent years, the conservatives (and to a certain extent pragmatic conservatives) have dominated non-elected bastions like the Guardian Council and the Expediency Council.

3.2 Rent-seeking in action

There are several channels for rent-seeking in Iran. Not all of these are related to oil. According to the World Bank (2003), Iran has one of the most concentrated industry structures in the world. There are also pervasive price distortions in the economy. Both of these factors create regulatory rents.

The most important channels for distributing oil rents are development projects and subsidized loans. One way to create rents from development projects such as dams, roads, and hospitals, is for the bureaucrats running the project to make a generous estimation of the project's costs. The difference between the official cost of the project and the actual cost may then be split between the contractor and the bureaucrats.

Concerning subsidized loans, these are typically administered by state development banks to promote investment projects in peripheral regions. Well-connected entrepreneurs can get access to such loans, and use the money for completely other purposes than those intended. Thus, subsidized loans for raising chicken in the remote region of Baluchistan, for instance, may well end up as property investments in Tehran.

The regulatory rents are a reflection of the extent of state intervention in the economy. Due to a lack of transparency, taxes can be avoided and regulations bypassed. For instance, in Tehran, the Mayor's office has been reported selling permissions to exceed the legal number of floors in housing projects. Competition for positions in the Mayor's office and similar jobs in the bureaucracy, is fierce. Similarly, firms spend resources to court bureaucrats in order to obtain privileges and favors.

Another regulatory rent is derived from trade barriers. Tariffs create a wedge between world prices and domestic prices, and thus a premium for those who can avoid the tariff. Avoiding tariffs can be achieved through lobbying or through smuggling. Thirdly, there are monopolies in the imports and distribution of basic consumer goods such as sugar, tea, rice, and tobacco. While there is no legal foundation for these monopolies, they are held by quasi-statal actors, and de facto sanctioned by the state, and can thus reasonably be considered as regulatory rents.

The negative impacts of rent-seeking on the economy are obvious. Costs

and prices are higher than necessary, delays are frequent, and quality is often poor. As way of illustration, consider the following case.

3.2.1 The airport

The construction of a new international airport in Tehran started in the Pahlavi era and – though temporarily interrupted by the revolution – was continued by the Islamic Republic. With capacity, noise and pollution problems in the old Mehrabad airport, the "Imam Khomeini airport", as the project was called in 1990, is meant to service international flights. Officially inaugurated on May 8 2004, in the presence of the President and other government officials, the celebration came to an end when divisions from the Revolutionary Guard interfered. After the first flight had arrived, they blocked the runway with 30 minibuses, forcing an Iran Air flight from Dubai to pull up and return. The airplane later landed in Isfahan.¹¹ The airport has since been closed.

The background for the interference by the Revolutionary Guards was as follows. A Turkish-led consortium, Tepe-Akfen-Vie (TAV), had won the tender for running the airport. A company headed by the Revolutionary Guards had also participated in this tender, but lost. Protesting against the government's decision, they claimed that the Turkish presence at the airport represented a security risk. The real motive behind their reaction, however, appears to have been different. At Mehrabad airport, the Revolutionary Guards have their own terminal, where smuggled goods can be brought into the country. With international flights now moving to the new airport, they demand similar facilities there. The government, being dominated by reformists, opposed their demands and chose the Turkish company. This is when the Revolutionary Guards decided to react.

The Revolutionary Guards is an actor with great economic and political power in Iran. They form the core of the country's security system, and are heavily armed. Economically, they are engaged in various large scale development projects, like building roads, dams, etc. The weapon industry is under their control. In addition, they control much of the country's illegal trade.

The struggle for control over the airport illustrates in a clear way the losses from rent-seeking. A large airport has been built and is ready for use.

¹¹See www.iran-press-service.com, May 8, 2004, "Tehran new international airport shut by the army".

3.2.2 The oil stabilization fund

Another illustration of rent dissipation in Iran is given by the fate of the so-called Oil Stabilization Fund (OSF). Since the debt crisis in 1993, stabilizing the flow of oil revenues to the economy has been a major policy concern. Iranian development planners in the second Rafsanjani government (1993-1997) thought the solution might be establishing a petroleum fond for investment in international capital markets to protect the economy from fluctuations in the oil price. Due to low oil prices in the second half of the 1990s, the project did not materialize, but with the rise in oil prices from 1999, savings picked up. The Third Five-Years Development Plan (2000-2005) called for the establishment of a "foreign exchange reserve account" (hesab-e zakhire-ye arzi) to stabilize the government's budgets. Higher incomes from crude oil exports than foreseen in the budget were to be deposited at the Central Bank. Contrary to the original idea, however, the OSF's investments were not confined to international markets. In fact, a November 2000 amendment to the plan explicitly stipulated that 50% of the fund's reserves should be spent on private investment projects inside the country.

The responsibility of administrating this activity was given to a sevenmember Board of Trustees composed of senior government officials under the chairmanship of the head of the Plan and Budget Organization (sazmane barname va budje), later renamed to The Plan and Management Organization (sazman-e barname va mudiriat). Both the size of the account administered by this organization and the guidelines for allocating subsidized credit to private investment projects are unclear. The OSF is managed outside the framework of the national budget, and its balance sheet has never been submitted to the Parliament (Majlis). Hence, the possibilities of abuse are significant.¹³

In the elections of February 2004, the reformists lost their majority in the Majlis. Knowing that their neo-conservative rivals would take over control over the Parliament by June 2004, they started emptying the remaining fifty percent of the foreign exchange reserve. It should be noted that the emptying

¹²According to the Chairman of the State Aviation Organization, Hassan Hajalifard, about 244 billion toman has been spent on the project, see Iran International Monthly Magazine no. 29, May 2004, pages 96-99, www.netiran.com

¹³For a critical review of the Oil Stabilization Fund, see Amuzegar (2005).

of the oil fund came at a time when the oil prices were historically high. Under normal circumstances, this should imply an accumulation of funds, not their depletion.

The neo-conservative 7th Majlis (2004-2008) has continued spending from the OSF to finance off-budget items. Following up on Ahmadinejad's pledge to "put oil revenues on the people's table", the Parliament has used its legislative power to by-pass the fund's original purpose. Among the beneficiaries of such extra-budgetary funding were the Bassij militia, war veterans, Imam Khomeini's Relief Committee and the police – all traditional supporters of the conservative factions.

The experience with the OSF illustrates the problem of sheltering oil revenues from populist pressures and political infighting. Eager to promote their own interests and opposing those of rival groups, the different factions have strong incentives to spend the oil revenues. The OSF was initially established to stabilize the budget if the oil price dropped below \$20/barrel. But with oil pricing comfortably in the range of \$50-\$60/barrel in 2005-2006, the Parliament was still authorizing lavish spending. Needless to say, the effect was not to stabilize the economy.

4 Concluding comments

Countries richly endowed with natural resources often have low growth rates. This is particularly true for oil rich countries with weak political and legal institutions. One explanation to this "natural resource curse" is rent-seeking. The present article has analyzed rent-seeking both from a theoretical angle and from an applied angle, using Iran as a case. Oil revenues in Iran have been used to finance major public construction projects like the new airport in Tehran, to build the Oil Stabilization Fund, and to promote the private sector through subsidized credit and energy. We have argued that rent-seeking has reduced the benefit to society of these policies and projects. One indication of this is that while investment rates in Iran have been high, fuelled by oil revenues, economic growth has been relatively modest. Our theoretical model emphasizes that the low returns to investment are likely to be due to both the direct costs of rent-seeking and the suboptimal allocation of capital between investors.

The model also shows that while increased dominance by one group is likely to reduce intensity of the rent-seeking competition, and thereby reduce associated economic waste, such a development is likely to increase other distortions in the economy. In particular, the reallocation of power will lead to a reallocation of factors of production in favor of the stronger group. The allocation of scarce resources according to political strength rather than economic productivity leads to inefficiencies. The model shows that when the factors of production are heavily subsidized, which is the case in Iran, increased imbalance in the political power may well lead to an efficiency loss for the economy as a whole.

An interesting implication of the model is that in an environment of intense rent seeking, like Iran, institutional reforms that provide greater security for firms' investments may be more productive than policy reforms that seek to stimulate the income potential of the economy, like capital market deregulation. Indeed, much of the potential gain from deregulation can be expected to disappear through intensified destructive competition.

According to the logic of our model, there are two ways of reducing rent-seeking in the economy. Firstly, by one of the competing groups gaining full control over the state apparatus. In this case, there will no longer be room for destructive competition over rents. Such a solution would replicate the situation in Indonesia under Suharto, where an omnipotent leader monopolized corruption and generated economic growth. However, the likelihood of such a scenario in the Iranian case is low. The Islamic Republic has been haunted by internal power struggles since its creation in 1979. No single leader or faction seems to have the strength to take complete control. Moreover, as shown by our model, in the absence of clearly defined and enforced property rights, such a monopolization of political power will lead to a sharp reduction in investment by the marginalized groups, thus leading to low returns on capital in aggregate. Hence, in the long run, at least, such a political hegemony is not likely to be compatible with economic development.

The second way of removing rent-seeking is by eliminating the power of rent-seeking groups and establishing an autonomous state. This can take place through a process of democratization, where greater transparency and accountability reduce the scope for rent-seeking. An important lesson from the growth literature is that sound institutions are essential for economic development. By professionally managing the oil rent and creating opportunities for all, the destructive competition that has plagued the Iranian economy for decades can turn constructive.

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