Oil Revenues and Rentier States

How did Economic Sanctions and Subsidy Reforms Affect Iranian Lower-Middle Class During the Presidency of Ahmadinejad in Iran?

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INTRODUCTION

This study focuses on the "rentier" character of a state[1], and the effect of economic sanctions on the state's foreign policy and its economic infrastructures. The resource-dependent economic foundation of rentier states allows the allocation of welfare benefits to society in boom periods. However, a rentier state's high dependency on resource export revenues creates a risky economy that can collapse by international oil price fluctuations or oil sanctions. Thus, I argue that oil sanctions can cause economic deprivation and resource revenue cuts, which leads to a shift in a rentier state's policies in favor of the sender state. I also argue that resource sanctions can lead to democratic shifts in economic administrations within the rentier state.

To investigate this, first I review literature on the resource curse hypothesis, the rentier state's economy and its power structures, and on successful sanctions among adversaries. Secondly, I present Iran as a case study and its rentier economic character. I summarize the process of global sanctions on Iran and their effects on tax reforms and government expenditures. More specifically, I look into the effects of intensified international economic sanctions during the presidency of Mahmoud Ahmadinejad, which led to a tax and subsidy reform for the first time in Iran's history. Lastly, I explore how subsidy reforms affected the Iranian lower-middle class and the inequality ratio.

This paper aims to show that resource coercions on the Iranian case study with a rentier character were successful in shifting Iran's policy to comply with the senders' policies. Furthermore, I argue that resource revenue cuts on Iran led to rebuilding a more transparent tax administration, which is unorthodox for rentier states.

OIL RENTIER STATE ECONOMY

Countries with wealth derived from oil or other natural resources often fail to grow at the same pace as countries which lack natural resources. This phenomenon is known as the Natural Resource Curse.[2] Since oil rentier states are blessed with substantial oil revenues, they do not need to tax their population as much as other states. Consequently, they are less accountable to their populations than states without rent revenues.[3] The constant flow of resource rents allows the rentier state to enjoy substantial autonomy from its citizens, and to insulate itself against social and

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[1] The rentier state is a term used for a state that derives all or a substantial portion of its national revenues from the rent of its indigenous resources from the outside world on a regular basis. The common characteristics of rentier states are their independency from their society, unaccountability to their citizens, and autocratic nature. For example, countries such as Iran, the Gulf States, many African states like Nigeria or Gabon, with abundant resource wealth are classified as rentier. A rentier state and rentier economy contributes to a rentier mentality, which negatively affects a country's economy and infrastructures. For more information, see Michael Cook and Hussein Mahdavy, "The Pattern and Problems of Economic Development in Rentier States: The Case of Iran," *Studies in the Economic History of the Middle East: From the Rise of Islam to the Present Day* (London: Oxford University Press, 1970), 428-467.

[2] Jeffrey Frankel, "The Natural Resource Curse: A Survey," *National Bureau of Economic Research*, March 2010, accessed on April 13, 2017, http://www.nber.org/papers/w15836.

[3] Michael L. Ross, "Does Oil Hinder Democracy?" *World Politics* 53, no. 3 (2001): 332, accessed April 13, 2017, doi:10.1353/wp.2001.0011.

political pressures. Oil rentier states are based on a capital-intensive economy[4] and the petroleum industry, which largely disassociates the state from the larger economic spectrum.[5] With income flowing into the state and less economic vulnerabilities, rentier states are more likely to act unilaterally and develop authoritarianism. During economic shocks, the oil-rich states, already isolated from social forces, have few credible institutions for peaceful conflict resolution. As a result, oil-rich states are more prone to encourage military rule and implement authoritarian solutions to conflicts.[6]

Since oil rentier states are largely dependent on oil revenues, oil price fluctuations and Dutch disease distorts their economies. Overspending, debt, and fiscal crises are the central challenges for rentier states due to the volatility of international petroleum markets. Their resource-dependent economies dwindle domestic manufacturing and service exports, diminishing values of other tradable goods, real estate, and services. Since tumbling oil prices constantly threaten the political and economic stability of rentier states, their domestic economic atmospheres remain high-risk for investors.[7]

The resource curse literature focuses on how rentier states receive a capricious flow of revenue from an economic reserve that is highly dependent on international market prices, and lacks substantial linkages with the rest of the economy. As a result of this resource income flow, rentier states can subsidize education, health care, and other social services without developing their tax administration or taxing their citizens. But this results in an inability to provide accurate information about enterprises and households, and since occupational specialization is discouraged, their educational system and labor economy remain largely disjointed.[8] This amounts to a typical case of Dutch disease, in which the resource dependency of oil rentier states not only distorts their economic infrastructures, but also creates a base to grow authoritarianism.

ECONOMIC SANCTIONS AND RENTIER STATES

The existing literature defines sanctions as foreign policy levers taken by *sender* countries to change the behavior of *target* states, either unilaterally or multilaterally.[9] Sanctions are assumed to inflict economic cost on their targets, with the intent to alter that state's behavior. The economic effectiveness of the sender government determines the pressure it places on the target state. Thus, the target's crippled domestic economy will create a new interest group that prefers complying with the sender state. Consequently, the sender state can expect that the economic deprivation it causes with sanctions will create modifications in power within the target state.[10]

States as rational unitary actors are constantly concerned about how their actions will affect their bargaining position during future interactions in material or reputation. Thus, decision makers, given a set of preferences, will make choices to obtain their most preferred outcome and to further their income and wealth.[11] Therefore in international political conflicts, decision makers care more

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[4] The oil industry is considered capital intensive because it employs few workers and its inter-industry demand is underdeveloped. Therefore, it lacks linkages to the broader economy. For more information, see Michael Cook and Hussein Mahdavy, "The Pattern and Problems of Economic Development in Rentier States: The Case of Iran," in *Studies in the Economic History of the Middle East: From the Rise of Islam to the Present Day* (London: Oxford University Press, 1970), 435-436.

[5] *Ibid.*, 435.

[6] Clement M. Henry, "Algeria's Agonies: Oil Rent Effects in a Bunker State," *Journal of North African Studies* 9, no. 2 (2004), 68-72, accessed April 13, 2017, doi:10.1080/1362938042000323347.

[7] Ibid., 70.

[8] Ross, Does Oil Hinder Democracy, 325-361.

[9] Daniel W. Drezner, *The Sanctions Paradox: Economic Statecraft and International Relations* (Cambridge: Cambridge University Press, 1999) 2.

[10] Susan Hannah Allen, "The Domestic Political Costs of Economic Sanctions," *Journal of Conflict Resolution 52, no. 6 (2008): 916, accessed April 13, 2017, doi:*10.1177/0022002708325044.

[11] Daniel W. Drezner, "The Sanctions Paradox," *The Journal of Politics* 63, no. 2 (2001): 27-29, accessed April 13, 2017, doi:10.1017/CBO9780511549366.

about the distribution of gains and payoffs, as well as maintaining a reputation for tough bargaining.[12]

When sanctions are imposed, economic interactions and increased trade escalate the target's cost of any coercion attempt. Therefore, when conflict expectations are the greatest among adversary states, threats to impose damaging sanctions will prevent the target state from financing long-run opportunity costs. For this reason, adversaries who anticipate more future conflicts will act to minimize their trade vulnerabilities.[13]

The sanction's outcome is primarily dependent on the economic and political atmosphere of the target country. Since the target's political and economic stability may fluctuate during sanction episodes, it is crucial for the sender state to update its sanction's effectiveness in pursuing foreign policy goals. In order to obtain the desired results, the sender state must assess the stability of the target properly and replenish its sanction measures.[14]

Studies show that sanctions have an average effect of a 2.4 percent decrease in GDP of the target, though failed sanctions have an impact of only 1.0 percent decrease.[15] Finally, for sanctions to be successful, the economic pressure must be sufficient to increase domestic political pressure; to either topple the target regime, or to engender the adoption of new policies in accordance with the norms of the sender state.[16]

IRAN AND THE RENTIER STATE

The rentier structure of the Iranian state reflects its economy, which is highly dependent on oil domination.[17] For Iran, oil and gas revenues are the main source of foreign exchange earnings and fiscal revenues. Despite rapid non-oil export growth since the1960s, oil and gas receipts account for 72 percent of Iran's export revenues in the last decade. Oil and gas revenues also represent 65 percent of fiscal revenues, and will likely remain the main source of financing for development projects in the future.[18]

Iran is highly dependent on oil export revenues for its business cycle. From 2002-2008, Iran's fiscal spending and credit growth increased, as well as its export and oil revenues, resulting in high inflation. However, the government's tighter monetary policies, which coincided with the world recession of 2008-2009, led to a sharp decline in oil exports that decreased inflation and output.[19] Oil market price determines the Iranian government's monetary policies; thereby controlling its domestic inflation rate, business cycle, and social expenditures.

ECONOMIC SANCTIONS ON IRAN

After the 1979, Islamic revolution in Iran when 52 Americans were taken hostage in the American embassy in Tehran, the United States and Iran cut all diplomatic relations. With the growing hostile atmosphere between the two countries, the United States has led international

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[12] Daniel W. Drezner, "The Sanctions Paradox," *The Journal of Politics* 63, no. 2 (2001): 27-29, accessed April 13, 2017, doi:10.1017/CBO9780511549366, 53.
[13] Ibid., 310- 314.
[14] Hufbauer, Jeffrey J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered*, (Washington: Peter G. Peterson, 2009).
15 Allen, *The Domestic Political Costs of Economic Sanctions*, 917.
[16] Donald L. Losman, *International Economic Sanctions: The Cases of Cuba, Israel, and Rhodes* (New Mexico: University of New Mexico Press, 1979) 128.
[17] Cook and Mahdavy, *The Pattern and Problems of Economic Development in Rentier States: The Case of Iran*, 428-431.
[18] Dominique Guillaume, Roman Zytek, and Mohammad Reza Farzin, "Iran - The Chronicles of Subsidy Reform," *International Monetary Fund*, July 2011, accessed April 13, 2017, https://www.imf.org/external/pubs/ft/wp/2011/wp11167.pdf.
[19] Ibid., 4.

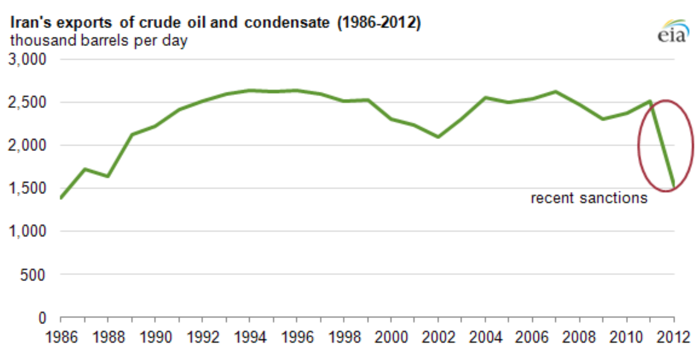
efforts to apply sanction measures on the Iranian missile, energy, shipping, transportation, and financial sectors in order to influence a change in Iranian policies.[20]

In 1996 when doubts regarding Iran's nuclear activity increased, the United States was the first to impose sanction measures on Iran. The new measures' objective was to persuade Tehran to address the international community's concerns about its nuclear program development. Consequently, in 2006 the United Nations Security Council, the European Union, and other countries joined the United States to enforce a strong pattern of sanctions relating to Iran's nuclear non-proliferation. The sanctions targeted economic sectors to persuade Iranian leaders to engage in positive discussions with other countries and fulfill its nonproliferation responsibilities. Moreover, the sanctions were expected to induce Iran to collaborate as a normal non-nuclear-weapon state under The Nonproliferation Treaty.[21]

INTENSIFIED COLLECTIVE SANCTIONS

In 2012, the Obama administration convinced the international community to impose sanctions on Iranian oil exports and to disconnect Iran from the global transaction network SWIFT.[22] Oil embargos massively restricted Iran's revenues because oil exports were the main income source for the Iranian government and accounted for one-fifth of the country's GDP at the time. Therefore, oil sanctions targeted foreign firms that provided services and investments related to the energy sector, and firms that participated in activities related to oil exports.

Immediately after the amplification of oil embargos in 2012, the value of Iranian rial[23] collapsed and the inflation and unemployment rates tremendously rose. According to the Congressional Research Service, the intensified international sanctions from 2012 to 2014 decreased the value of the rial to 56 percent, and increased its inflation rates to more than 50 percent.[24] The same report says that the unemployment rate rose to as high as 20 percent in 2012 and 2013. Eventually, the effects of the new sanctions on the Iranian economy convinced the Iranian government to shift its policies to maintain stability.



Source: U.S. Energy Information Administration, International Energy Statistics Database and Iran Country Analysis Brief[25]

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[20] Robert Carswell, "Economic Sanctions and the Iran Experience," *Foreign Affairs* 60, no. 2 (1981): 247, accessed April 13, 2017, doi:10.2307/20041079.

[21] "Timeline: Sanctions on Iran," *Al Jazeera*, October 16, 2012, accessed on April 13, 2017, http://www.aljazeera.com/news/middleeast/2012/10/20121016132757857588.html.

[22] Society for Worldwide Interbank Financial Telecommunication (SWIFT) code is the global provider of secure financial messaging services. It is an internationally-recognized identification code for banks around the world.

[23] Iranian Currency

[24] Kenneth Katzman, "Iran Sanctions," *Congressional Research Service*, March 31, 2017, accessed on April 13, 2017, https://fas.org/sgp/crs/mideast/RS20871.pdf.

[25] "Total Primary Energy Production 2014," *International Energy Statistics*, accessed April 13, 2017, https://www.eia.gov/beta/international/data/browser/#/?vo=0&v=H&start=1980&end=2014.

THE IRANIAN SUBSIDY REFORM PLAN

In 2007, the European Union joined the United Nations and the United States to impose new sanctions on the Iranian economy. Highly dependent on its oil export revenues, the Iranian regime started to apply various economic measures to survive future budget deficits.

Historically, like the majority of oil-rentier states, domestic energy prices in Iran have been set high enough to cover production costs. This was only convenient with stable and relatively low international oil prices. However, after 2002, with the increase of international prices, the market value of oil could no longer compensate for the low domestic energy prices. In addition, high domestic rates of inflation due to exchange rate depreciations led to the growing disparity between domestic and international energy prices. Cheap energy stimulated demand, making Iran the country with the highest level of energy subsidies and the most energy-intensive economy in the world.[26]

In 2008, the significant increase of international oil prices to $150 per barrel resulted in massive revenues for the Iranian government. However, continuing to provide low domestic prices for energy was unjustifiable by any economic theory. A systematic management of revenues and expenditures is crucial for a country under severe pressure of economic sanctions to maintain its stability. In a world of scarce energy, no government supported paying high production costs for energy and subsidizing it for domestic use at the lowest price level any longer. The 2008 world recession reduced Iranian oil export revenues and the threat of sanctions intensified. The Iranian government aimed to gain more revenue through subsidy and tax reforms.[27]

Consequently, in 2010, the parliament passed the Iranian Subsidy Reform Plan. The reform cut a wide range of subsidies on water, electricity, and staple foods, resulting in a 4 to 20 times price increase in energy products. Although the government was harshly criticized, president Mahmoud Ahmadinejad called it an achievement and the most important economic plan of the past 50 years.[28]

According to the Iranian government, the reform plan's objectives were to reduce waste and rationalize consumption. However, the plan would replace subsidies on food and energy with targeted social assistance and cash compensations for citizens. Moreover, the government announced that the revenues from the subsidies would be distributed as free loans to investors, and as energy subsidies to producers.[29] According to the World Bank, the overall indirect subsidies estimated to be equivalent to 27 percent of GDP in 2007-2008, were replaced with a direct cash transfer program to the Iranian households.[30]

The reform plan also aimed to improve social equity in the distribution of oil wealth by understanding how individuals and families allocate their incomes. Thus, for the poor who benefited little from cheap domestic energy prices, the compensation of $12 per person would represent a large portion of their income, intended to lift every Iranian out of poverty. The government used such arguments in support of the reform plan despite harsh critiques from opposition groups.

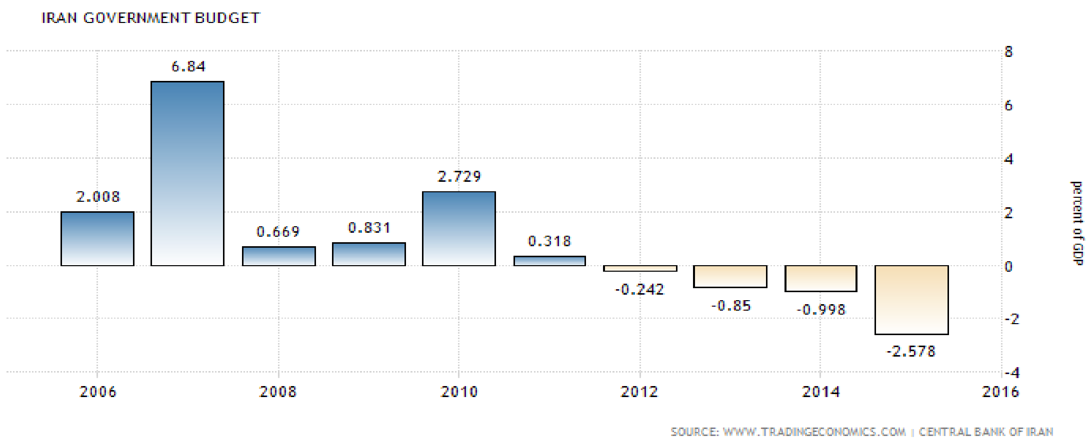
The government envisioned that households would receive at least 50 percent of the increase in revenues from the reform. In the first phase, the benefits were to be paid in cash. In the second phase, some of the additional gains would support higher social benefits and public goods. Moreover, 30 percent of the additional revenues were to be used to assist Iranian companies in adjusting to the higher energy costs. The government would use the remaining 20 percent of the

[26] Guillaume, *Iran - The Chronicles of Subsidy Reform*, 5.
[27] Maaike Warnaar, *Iranian Foreign Policy During Ahmadinejad Ideology and Actions* (New York: Palgrave Macmillan, 2013), 55-56.
[28] Ibid., 57.
[29] Guillaume, *Iran - The Chronicles of Subsidy Reform*, 7.
[30] "Iran Overview," *World Bank*, October 1, 2016, accessed April 13, 2017, http://www.worldbank.org/en/country/iran/overview.

additional revenues to cover its own higher energy bill.[31]

The Iranian authorities targeted the poorer segments of society in the distribution of revenues from the reform. However, due to inefficient tax administrations, they were faced with a lack of accurate household income data. In 2010, the statistical center of Iran began collecting information regarding the economic situation of individual households. The government announced the target of revenue recipients as first, the bottom 30-50th percentile of income groups, and second, the lower 70th percentile. Nevertheless, declining support to the upper income groups who inhabited larger cities and were the biggest energy consumers, would risk provoking public discontent and domestic conflict. Therefore, everyone was allowed to apply for the compensatory cash transfers, but the richest households were encouraged to renounce from applying.[32]

The revenues gained from the subsidies compensated for parts of the government's budget deficits, which were caused by export decline and world recession. However, with the exacerbation of sanctions on oil and SWIFT in 2012, the government went through a new phase of chronic economic and political instability. Consequently, new sanctions on oil and SWIFT played a crucial role in shifting the Iranian government's diplomacy to comply with the policies of the sender state. [33]



In 2013, with a new administration in power, Iran agreed to negotiate its nuclear objectives with the P5+1 countries,[34] and signed an agreement pact in Geneva. In 2015, The Joint Comprehensive Plan of Action, required Iran to have an exclusively peaceful nuclear program. The US and the EU have lifted nuclear-related sanctions on Iran as a result of Iran verifiably meeting its nuclear commitments.[35]

INEQUALITY RATIO

The reform plan described above stipulated to improve the distribution of wealth among the population, and aimed to prioritize the bottom income households. However, the government distributed cash to everyone in order to reduce the shock from the major increase of energy prices among the middle-class population.

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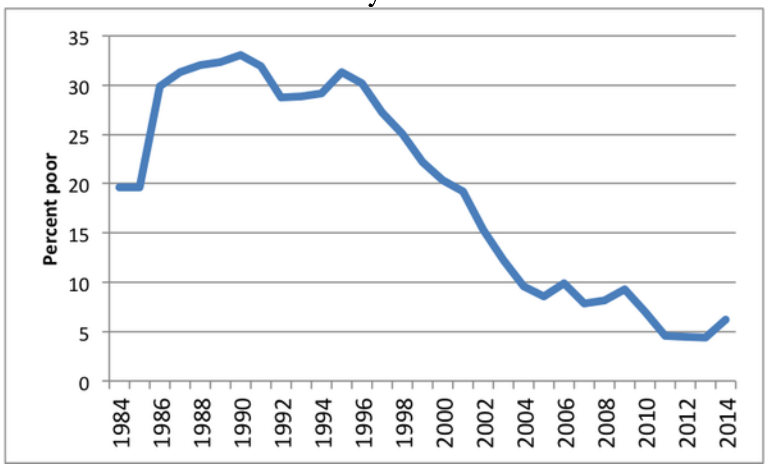
[31] Guillaume, *Iran - The Chronicles of Subsidy Reform*, 10.
[32] Ibid., 14.
[33] Katzman, *Iran Sanctions*, 55.
[34] The P5+1 refers to the UN Security Council's five permanent members (the P5); namely China, France, Russia, the United Kingdom, and the United States, plus Germany. The P5+1 is often referred to as the E3+3 by European countries.
[35] "Joint Comprehensive Plan of Action," *US Department of State*, accessed April 13, 2017, http://www.state.gov/e/eb/tfs/spi/iran/jcpoa/.

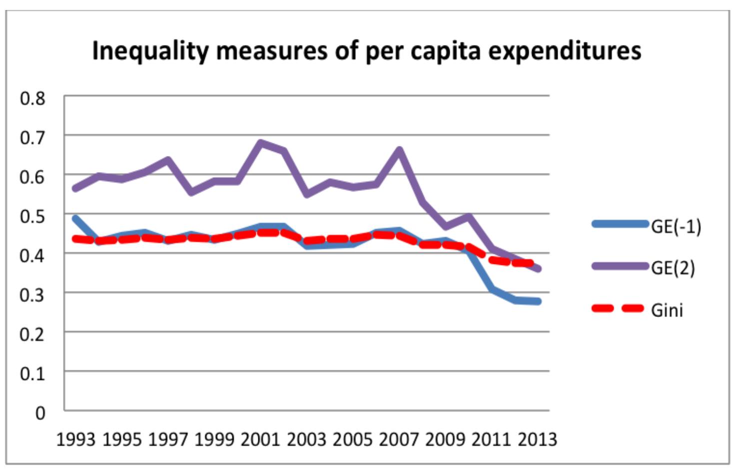
In order to estimate the effects of the reform plan on different classes of the Iranian society, this paper reviews poverty rates and the Gini coefficient index[36]before and after the reform. A view of the poverty lines for 2004 shows $2.70 per day for a rural individual and $3.80 per day for an urban resident. Similarly, the nationwide minimum wage level in 2004 was about $12 per day, which seems to be set to keep a family of four above a $3 poverty line.[37]

The Poverty Line in Iran



Source: www.djavadsalehi.com

This poverty diagram demonstrates a significant decline in poverty rates to below 5 percent during 2011-2013, when inflation rose and international sanctions intensified. The government's significant subsidy cash distribution among the poor is part of the explanation. Moreover, the Gini index shows remarkable stability in the 45 percent range before the reform plan period. However, during 2012-2014, the index rises from 37.4 percent to 38.8 percent in line with poverty after the redistribution policies of Ahmadinejad were taking effect.[38]



Source: www.djavadsalehi.com using HEIS data files, various years

[36] Gini coefficient index is sensitive to the middle-income range.

[37] See the monthly minimum wage of 1,066,000 rials for 1384 (2004/2005) reported in the Central Bank of Iran, Annual Report 1384, Table 44, and the PPP exchange rate of 2780 rials per dollar reported by World Bank. "World Development Indicators," *World Bank*, accessed April 13, 2017, http://databank.worldbank.org/data/reports.aspx?source=2&country=IRN.

[38] Djavad Salehi-Isfahani, "Poverty, Inequality, and Populist Politics in Iran," *Journal of Economic Inequality* 7, no. 1 (2008), 25, accessed April 13, 2017, doi:10.1007/s10888-007-9071-y.

In addition to the Gini index with a sharp decline after the 2006 aggregated international sanctions, the general entropy index with parameters GE(2)[39] and GE(-1),[40] equally shows a major drop among the top incomes. The small but significant increase in inequality during the 2008- 2009 period of rising oil revenues demonstrates an increase of inequality among the rich and among the poor. Additionally, the 2010 government subsidy spending indicates a short-term rise in revenues among the bottom poor, and a decline in revenues of the top bottom incomes.[41] In other words, the 2010 reform plan and the cash distribution among the Iranian citizens led to a decline in inequality rates. The top rich incomes decreased due to higher costs of energy products and inflation. However, the bottom low incomes gained more revenue because they were not benefiting from the government's previous subsidies on energy as much.

CONCLUSION

The oil rentier state's economy is dependent on the collection of economic rent associated with the production of a single commodity: oil. The oil rentier state's revenue is based on oil export prices determined by the oil market fluctuations. Hence, during oil boom periods, government spending will increase; however, during market stagnations or economic sanctions, the oil-rentier government will face a massive budget deficit. Therefore, economic coercion can successfully shift rentier state policies in favor of the sender state.

Iran had most of the characteristics of an oil rentier state. Dependent on oil price fluctuations and infected by Dutch disease, Iran's domestic labor economy and tax administration were distorted and remained high-risk for investors. As rentier states are dependent on oil wealth for state revenues rather than their citizens, Iran did not need to develop its tax administrations and economic infrastructures. Financially independent from its citizens, Iran became an autonomous state with growing authoritarian economic structures.

The increased threat of international economic sanctions, and the decline in government oil export revenues, led the Ahmadinejad administration to implement the 2010 reform plan. The objectives of the reform plan were to rationalize consumption and decrease inequality. The revenues from subsidies were distributed in cash among all citizens in order to prevent social discontent. The increased inflation caused by the rise in the cost of energy led to a decrease of income among the upper-middle and middle classes, who inhabited big cities with major energy consumption. Nevertheless, shortly after the cash distribution, poverty in the bottom lower income citizens reduced despite higher costs of energy and inflation.

The increased economic sanctions and the world recession threatened the Iranian government with budget deficits. This led to major economic infrastructural changes for the first time in Iranian history. Unlike other rentier states with no need for tax administration, the Iranian government was forced to create a transparent tax and data administration system to survive the collective economic sanctions placed upon Iran's economy.

Ultimately, the international economic sanctions were successful in shifting Iranian policy into compliance with the sender state's policies. By cutting off the government's main revenue, the economic sanctions were effective in the creation of new economic administration in line with democratic standards.

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[39] GE(2) parameter is sensitive to changes in income in the top range.
[40] GE(-1) parameters is sensitive to changes in income in the bottom range.
[41] Djavad, *Poverty, Inequality, and Populist Politics in Iran*, 27.