

Iran Sanctions

Kenneth Katzman

Specialist in Middle Eastern Affairs

October 11, 2013

Congressional Research Service 7-5700 www.crs.gov RS20871

Summary

Increasingly strict sanctions on Iran—sanctions that primarily target Iran's key energy sector and its access the international financial system—have harmed Iran's economy to the point where Iran's public and some of its leaders appear willing to accept some international proposals to limit Iran's nuclear program to purely peaceful purposes. The June 14, 2013, election as president of Hassan Rouhani, who ran on a platform that included achieving an easing of sanctions, is an indication of the growing public pressure on the regime.

- Oil exports fund nearly half of Iran's government expenditures, and Iran's oil exports have declined to about 1.1 million barrels—less than half of the 2.5 million barrels per day Iran exported during 2011. The causes of the drop have been a European Union embargo on purchases of Iranian crude oil and decisions by other Iranian oil customers to obtain exemptions from U.S. sanctions by reducing purchases of Iranian oil. Twenty countries that buy Iranian oil have exemptions.
- The loss of revenues from oil, coupled with the cut-off of Iran from the international banking system, has caused a sharp drop in the value of Iran's currency, the rial; raised inflation to over 50%, reduced Iran's reserves of foreign exchange; and caused much of Iran's oil revenues to go unused in third-country accounts. Iran's economy shrank slightly from 2012 to 2013 and will likely do so again during 2013. There have also been unintended consequences, including a shortage of some advanced medicines.
- Iran has tried, with mixed success, to mitigate the effects of sanctions. Government-linked entities are creating front companies, and Iranian importers and exporters are increasingly using barter trade and informal banking exchange mechanisms. Iran is also increasing non-oil exports or exports of hydrocarbon products other than crude oil, such as gas condensates. Affluent Iranians have invested in—and driven up prices for—real estate and securities listed on the Tehran stock exchange.

Sanctions might also be slowing Iran's nuclear and missile programs by hampering Iran's ability to obtain needed foreign technology. But U.S. assessments indicate that sanctions have not stopped Iran from developing new conventional weaponry indigenously. Based largely on its provision of arms to the embattled Assad government in Syria, Iran is also judged as not complying with U.N. requirements that it halt any weapons shipments outside its borders. And sanctions do not appear to have altered Iran's repression of dissent or monitoring of the Internet.

Some in Congress believe that economic pressure on Iran needs to increase. In the 112th Congress, the Iran Threat Reduction and Syria Human Rights Act of 2012 (P.L. 112-158) made sanctionable the shipping of Iranian crude oil, and it enhanced human rights-related provisions of previous Iran-related laws. A provision of the FY2013 National Defense Authorization Act (P.L. 112-239) sanctions transactions with several key sectors of Iran's economy. A bill in the 113th Congress, H.R. 850, passed by the House on July 31, 2013, would, among other provisions, accelerate the oil purchase reductions required to maintain a sanctions exemption. However, some argue that new sanctions should not be imposed until Rouhani's diplomatic overtures on the nuclear issue are tested and that there be consideration of easing sanctions if a nuclear deal is reached. For a broader analysis of policy on Iran, see CRS Report RL32048, *Iran: U.S. Concerns and Policy Responses*, by Kenneth Katzman.

Contents

Overview and Objectives	1
Energy and Other Sector Sanctions: Iran Sanctions Act (ISA) and Related Laws and Executive Orders	1
The Iran Sanctions Act, Amendments, and Related Applications Key "Triggers"	
Mandate and Time Frame to Investigate ISA Violations	
Available Sanctions Under ISA	7
Clarification of Responsibilities: Executive Order 13574	
Interpretations and Administration of ISA and Related Laws	
Application to Energy Pipelines	
Application to Crude Oil Purchases	
Application to Natural Gas Purchases from Iran/Shah Deniz	
Application to Liquefied Natural Gas Development Application to Financing but Not Official Credit Guarantee Agencies	
Application to Financing but Not Official Credit Guarantee Agencies	
Sanctions Imposed Under ISA	
ISA Violation Determinations and Exemptions	
Sanctions on Oil and Other Payments to Iran's Central Bank	
Implementation: Exemptions Issued	
Sanctions on Paying Iran with Hard Currency	
Ban on U.S. Trade and Investment with Iran	17
Major Provisions of the Trade and Investment Ban: What Is Allowed or Prohibited	17
Non-application to Refined Oil with Iranian Content	
Application to Foreign Subsidiaries of U.S. Firms	20
Financial Sanctions	20
Early Efforts: Targeted Financial Measures	21
Sanctioning Foreign Banks That Do Business With Iran	21
Implementation of Section 104: Sanctions Imposed	
Iran Designated a Money-Laundering Jurisdiction	
Executive Order 13599 Impounding Iranian Assets	
Sanctions Against Iran's Support for International Terrorism and Regional Activities	23
Sanctions Triggered by Terrorism List Designation: Ban on U.S. Aid, Arms Sales,	
Dual-Use Exports, and Certain Programs for Iran	
No Ban on U.S. Humanitarian Aid	
Executive Order 13224: Sanctioning Terrorism Supporting Entities	
Sanctioning Iranian Involvement in the Region	
Proliferation-Related U.S. Sanctions	
Iran-Iraq Arms Nonproliferation Act and Iraq Sanctions Act	
Iran-North Korea-Syria Nonproliferation Act	
Executive Order 13382	
Foreign Aid Restrictions for Suppliers of Iran	
Promoting Divestment	
Laws Supporting Democratic Change in Iran	
Expanding Internet and Communications Freedoms	

Sanctions on Firms that Sell Censorship Gear to the Regime	
Sanctions Against Iran's Internet Censorship	
Measures to Sanction Human Rights Abuses and Promote the Opposition	
Iranian Human Rights Abusers	
Sales of Anti-Riot Equipment	
Iranian Broadcasting and Profiteers	
Separate Visa Ban	
Blocked Iranian Property and Assets	
U.N. Sanctions	
International Implementation and Compliance	
Europe	
Japan and Korean Peninsula	
North Korea	
India	
Pakistan	
China and Russia	
Turkey/South Caucasus	
Caucasus: Azerbaijan, Armenia, and Georgia	
Persian Gulf and Iraq	
Afghanistan	
Latin America	
Africa	
World Bank Loans	
Private-Sector Cooperation and Compliance	
Foreign Firms Reportedly Remaining in the Iran Market	
Effectiveness of Sanctions on Iran	
Effect on Iran's Nuclear Program Decisions and Capabilities	
Counter-Proliferation Effects	
Effects on Iran's Regional Political and Military Influence	50
General Political Effects	
Human Rights-Related Effects	
Economic Effects	51
Iran's Mitigation Efforts	
Effect on Energy Sector Long-Term Development	
Effect on Gasoline Availability and Importation	59
Humanitarian Effects/Air Safety	61
Possible Additional Sanctions.	
Other Possible U.S. and International Sanctions	
Sanctions Easing/Incentives	64

Tables

Table 1.ISA Sanctions Determinations	13
Table 2. Top Energy Buyers From Iran and Reductions	16
Table 3. Summary of Provisions of U.N. Resolutions on Iran Nuclear Program (1737,1747, 1803, and 1929)	
,,)	

Table 4. Comparison Between U.S., U.N., and EU and Allied Country Sanctions	43
Table 5. Post-1999 Major Investments/Major Development Projects in Iran's Energy Sector	55
Table 6. Firms That Sold or Are Selling Gasoline to Iran	60
Table 7. Entities Sanctioned Under U.N. Resolutions and U.S. Laws and Executive Orders	65

Contacts

Author Contact Information7	5	
-----------------------------	---	--

Overview and Objectives

U.S. sanctions have been a major feature of U.S. Iran policy since Iran's 1979 Islamic revolution, but U.N. and worldwide bilateral sanctions on Iran are a relatively recent (post-2006) development. Many of the U.S. sanctions reinforce U.N. and multilateral sanctions put in place in recent years by European and some Asian countries. Successive Administrations have sought to ensure that U.S. sanctions do not hamper cooperation with key international partners whose support is needed to isolate Iran.

The objectives of U.S. sanctions have evolved over time. In the mid-1980s, U.S. sanctions were intended to try to compel Iran to cease supporting acts of terrorism and to limit Iran's strategic power in the Middle East more generally. Since the mid-1990s, U.S. sanctions have focused increasingly on persuading or compelling Iran to limit the scope of its nuclear program to ensure purely civilian use. Since 2006, and particularly since 2010, the international community has joined U.S. sanctions in pursuit of that goal.

This report analyzes U.S. and international sanctions against Iran and, in so doing, provides examples, based on a wide range of open source reporting, of companies and countries that conduct business with Iran. CRS has no way to independently corroborate any of the reporting on which these examples are based and no mandate to assess whether any entity is complying with U.S. or international sanctions against Iran.

Implementation of some of the sanctions is subject to interpretation. On November 13, 2012, the Administration published in the *Federal Register* (Volume 77, Number 219) "Policy Guidance" explaining how it implements many of the sanctions discussed below.¹ The guidance also sets out examples of specific products and chemicals that are included in the definitions of such terms as "petroleum," "petroleum products," and "petrochemical products" that are used in the laws and executive orders discussed below.

Energy and Other Sector Sanctions: Iran Sanctions Act (ISA) and Related Laws and Executive Orders

Since 1996, Congress and successive Administrations have put in place steps to try to force foreign firms to choose between participating in the U.S. market and continuing to operate in or conduct various energy-related transactions with Iran.

The Iran Sanctions Act, Amendments, and Related Applications

The Iran Sanctions Act (ISA) has been a key component of U.S. sanctions against Iran's energy sector, and it has been expanded to sanction dealings with other Iranian economic sectors. ISA took advantage of Iran's opening of the sector to foreign investment in late 1995. To accommodate its insistence on retaining control of its national resources, Iran used a "buy-back" investment program in which foreign firms gradually recoup their investments as oil and gas is

¹ http://www.regulations.gov/#!documentDetail;D=DOS_FRDOC_0001-2175.

discovered and then produced. With input from the Administration, on September 8, 1995, Senator Alfonse D'Amato introduced a bill to sanction foreign firms' exports to Iran of energy technology. A revised version instead sanctioning *investment* in Iran's energy sector, and also applying all provisions to Libya passed the Senate. The Iran and Libya Sanctions Act (ILSA) was signed on August 5, 1996 (H.R. 3107, P.L. 104-172). It was later retitled the Iran Sanctions Act after it terminated with respect to Libya in 2006.

ISA is an "extra-territorial sanction"—it authorizes U.S. penalties against third country firms, many of which are incorporated in countries that are U.S. allies. ISA does not compel any foreign government to act against one of its firms. American firms are separately restricted from trading with or investing in Iran under separate U.S. executive orders, as discussed later in this paper. ISA's application has been further expanded by several laws enacted since 2010 that amend its provisions.

Centrality of the Energy Sector. The initial intent of ISA was to cause Iran's energy sector production capacity to eventually decline and thereby, over time, deny Iran the financial resources to further its nuclear program and to support terrorist organizations such as Hizbollah, Hamas, and Palestine Islamic Jihad. Iran's petroleum sector generates about 20% of Iran's GDP (which is about \$870 billion), about 80% of its foreign exchange earnings, and about 50% of its government revenue for 2012. Iran's oil sector is as old as the petroleum industry itself (early 20th century), and Iran's onshore oil fields are past peak production and in need of substantial investment. Iran has 136.3 billion barrels of proven oil reserves, the third largest after Saudi Arabia and Canada. With the exception of relatively small swap and barter arrangements with neighboring countries, virtually all of Iran's oil exports flow through the Strait of Hormuz, which carries about one-third of all internationally traded oil.

Iran's large natural gas resources (940 trillion cubic feet, exceeded only by Russia) were virtually undeveloped when ISA was first enacted. Its small gas exports are mainly to Armenia and Turkey; most of its gas is injected into its oil fields to boost their production.

Key "Triggers"

ISA consists of a number of "triggers"—transactions with Iran that would be considered violations of ISA and could cause a firm or entity to be sanctioned under ISA's provisions. When triggered, ISA provides for a number of different sanctions that could harm a foreign firm's business opportunities in the United States.

"Investment" To Develop Iran's Oil and Gas Fields

ISA requires the President to sanction companies (entities, persons) that make an "investment"² of more than \$20 million³ in one year in Iran's energy sector. ⁴ The definition of "investment" in ISA

² As amended by CISADA (P.L. 111-195), these definitions include pipelines to or through Iran, as well as contracts to lead the construction, upgrading, or expansions of energy projects. CISADA also changes the definition of investment to eliminate the exemption from sanctions for sales of energy-related equipment to Iran, if such sales are structured as investments or ongoing profit-earning ventures.

³ Under §4(d) of the original act, for Iran, the threshold dropped to \$20 million, from \$40 million, one year after enactment, when U.S. allies did not join a multilateral sanctions regime against Iran. However, P.L. 111-195 explicitly sets the threshold investment level at \$20 million. For Libya, the threshold was \$40 million, and sanctionable activity (continued...)

(§14 (9)) includes not only equity and royalty arrangements but any contract that includes "responsibility for the development of petroleum resources" of Iran. The definition includes additions to existing investment (added by P.L. 107-24) and pipelines to or through Iran and contracts to lead the construction, upgrading, or expansions of energy projects (added by the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 (CISADA; P.L. 111-195).

Implementation: Several firms have been sanctioned under ISA for investing in Iran's oil and gas fields, as discussed below.

Sales of Weapons Related Technology and Uranium Mining Ventures

The Iran Freedom Support Act (P.L. 109-293, signed September 30, 2006) amended ISA by adding Section 5(b)(1) subjecting to ISA sanctions: firms or persons determined to have sold to Iran (1) technology useful for weapons of mass destruction (WMD) or (2) "destabilizing numbers and types" of advanced conventional weapons. (Sanctions apply if the exporter knew or had cause to know that the final destination of the items sold would be Iran.)

Entities determined by the Administration to participate in a joint venture with Iran relating to the mining, production, or transportation of uranium are sanctionable under ISA. Under *Section* 5(b)(2) added by the Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158, signed August 10, 2012).

Implementation: No ISA sanctions have been imposed on any entities under these provisions.

Sales of Gasoline and Related Equipment and Services

The Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 (CISADA, signed on July 1, 2010, P.L. 111-195) amended ISA by making sanctionable:

- sales to Iran of over \$1 million worth (or \$5 million in a one year period) of gasoline and related aviation and other fuels. (Fuel oil, a petroleum by-product which is reportedly being sold to Iran by exporters in the Kurdish region of Iraq, is not included in the definition of refined petroleum.)
- sales to Iran of equipment or services (same dollar threshold as above) which would help Iran make or import gasoline. Examples of such sales include equipment and services that Iran can use to construct or maintain its oil refineries, or provision of services such as gasoline shipping or related port operations.

The sanction was enacted to exploit Iran's dependency on import for 40% of its gasoline needs. It followed legislation such as H.R. 2880 (110th Congress, not enacted); P.L. 111-85 that prohibited

^{(...}continued)

included export to Libya of technology banned by Pan Am 103-related Security Council Resolutions 748 (March 31, 1992) and 883 (November 11, 1993).

⁴ The original ISA definition of energy sector included oil and natural gas, and CISADA added to that definition: liquefied natural gas (LNG), oil or LNG tankers, and products to make or transport pipelines that transport oil or LNG.

the use of U.S. funds to fill the Strategic Petroleum Reserve with products from firms that sell gasoline to Iran; and P.L. 111-117 that denied Ex-Im Bank credits to any firm that sold gasoline and related equipment and services to Iran. These initiatives prompted a decision in December 2008 by Reliance Industries Ltd. of India to cease new sales of gasoline to Iran. (The Ex-Im Bank, in August 2008, had extended \$900 million in financing guarantees to Relianced.)

Implementation: Several firms, as discussed below, have been sanctioned under ISA for selling or shipping gasoline to Iran.

Termination: The termination requirements for the ISA provisions that were added by CISADA are slightly different than those for the remaining ISA provisions. See termination section below.

Sales of Energy Sector Equipment, Services, and Petrochemicals

An Executive Order, 13590 (November 21, 2011), was codified by Section 201 of the Iran Threat Reduction and Syria Human Rights Act of 2012 (P.L. 112-158). This provision added Section 5(a)(5 and 6) to ISA sanctioning firms that:

- provide to Iran \$1 million or more (or \$5 million in a one year period) worth of goods or services that Iran could use to maintain or enhance its oil and gas sector. This made sanctionable, for example, transactions with Iran by global oil services firms and the sale to Iran of energy industry gear such as drills, pumps, vacuums, oil rigs, and the like.
- provide to Iran \$250,000 (or \$1 million in a one year period) worth of goods or services that Iran could use to maintain or expand its production of petrochemical products.⁵

Implementation: No firms have been sanctioned under these provisions.

Purchasing of Iranian Crude Oil and Petrochemical Products

Executive Order 13622 (July 30, 2012) applies virtually all of the same sanctions as ISA—as well as restrictions on foreign banks (see below)—to entities that the Administration determines have:

- purchased oil or other petroleum products from Iran,⁶
- conducted transactions with the National Iranian Oil Company (NIOC) or Naftiran Intertrade Company (NICO), or
- purchased petrochemical products from Iran.

Under the Order, sanctions do not apply if the parent country of the entity has received an exemption under Section 1245 of P.L. 112-81—an exemption earned for "significantly reducing"

⁵ A definition of chemicals and products considered "petrochemical products" is found in a Policy Guidance statement. See, *Federal Register*, November 13, 2012, http://www.regulations.gov/#!documentDetail;D=DOS_FRDOC_0001-2175.

⁶ A definition of what chemicals and products are considered "petroleum products" for the purposes of the order are in the policy guidance issued November 13, 2012, http://www.regulations.gov/ #!documentDetail;D=DOS_FRDOC_0001-2175.

oil purchases from Iran. (See below for more information on the exemption process.) A law cannot be amended by executive order and E.O. 13622 does not amend ISA.

Implementation: Several firms were sanctioned under this order on May 31, 2013 for petrochemical sales to Iran.

Sanctions on transactions related to purchasing Iranian crude oil were codified by Section 201 of the Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158, signed August 10, 2012). It amends ISA by applying ISA sanctions to entities determined by the Administration to have:

- Owned a vessel that was used to transport Iranian crude oil. This sanction does not apply in cases of transporting oil to countries that have received exemptions under P.L. 112-81, discussed below. The section also *authorizes but does not require* the President, subject to regulations, to prohibit a ship from putting to port in the United States for two years, if it is owned by a person sanctioned under this provision. (*Adds Section 5(a)(7) to ISA.*)
- Participated in a joint oil and gas development venture with Iran, outside Iran, if that venture was established after January 1, 2002. The effective date exempts energy ventures in the Caspian Sea, such as the Shah Deniz oil field there. (Adds Section 5(a)(4 to ISA).)

Implementation. Some firms, as shown below, have been sanctioned for providing vessels for the shipment of crude oil to Iran.

Insurance for Iranian Oil Entities and Purchases of Iranian Bonds

Separate provisions of the Iran Threat Reduction and Syria Human Rights Act (Sections 212, 213, and 302) *do not specifically amend ISA*, but require the application of 5 out of 12 ISA sanctions on any company:

- that provides insurance or re-insurance for the National Iranian Oil Company (NIOC) or the National Iranian Tanker Company (NITC); or
- that purchases or facilitates the issuance of sovereign debt of the government of Iran, including Iranian government bonds; or

Dealings with Iran's Energy, Shipbuilding, and Shipping Sector

The National Defense Authorization Act for FY2013 (H.R. 4310, P.L. 112-239, signed January 2, 2013) Subtitle D, "The Iran Freedom and Counter-Proliferation Act" (IFCA) *does not amend ISA* but imposes at least five out the twelve ISA sanctions (as of July 1, 2013, 180 days after enactment) on entities determine to have:

• provided goods or services to the energy, shipbuilding, and shipping sectors of Iran, or to port operations there—or which provide insurance for such transactions. This is under Section 1244 of IFCA, which also blocks U.S.-based property and U.S.-based banking activity on violators. *The sanctions do not apply when such transactions involve purchases of Iranian oil by countries that have active exemptions under P.L. 112-81 or to the purchase of natural gas from Iran (or most transactions related to such gas purchases).*

- provided underwriting services, insurance, or reinsurance for a broad range of transactions with Iran, including those related to shipping oil, gasoline, or other goods for the energy, shipping, or shipbuilding sectors in Iran. This is under Section 1246 of IFCA. *There is no exception to this sanction for countries exempted under P.L. 112-81.*
- Section 1248 of IFCA sanctions Iran's state broadcasting establishment (Islamic Republic of Iran Broadcasting) as a human rights abuser, triggering sanctions under Section 105 of CISADA.

Dealings in Precious Metals

Section 1245 of IFCA imposes at least five out of 12 ISA sanctions on entities that provide precious metals to Iran (including gold) or semi-finished metals or software for integrating industrial processes. The section therefore affects foreign firms that transfer gold or other precious metals to Iran in exchange for oil or any other product. *There is no exception to this sanction for countries exempted under P.L. 112-81. The provision does not amend ISA.* This essentially codifies Section 5 of Executive Order 13622 that blocks U.S.-based property of individuals or firms determined to have helped Iran purchase U.S. bank notes or precious metals or to have provided financial support to NIOC, NICO, or the Central Bank of Iran. Executive Order 13645 of June 3, 2013 (Section 16) applies the restriction to transfers of stones or jewels.

The Automotive Sector and Rial Trading

Executive Order 13645 of June 3, 2013 (effective July 1, 2013):

- imposes ISA sanctions on firms that supply goods or services to Iran's automotive (cars, trucks, buses, motorcycles, and related parts) sector, and blocks foreign banks from the U.S. market if they finance transactions with Iran's automotive sector. (An executive order cannot amend a law, so the order does not amend ISA.)
- blocks U.S.-based property and prohibits U.S. bank accounts for foreign banks that conduct transactions in Iran's currency, the rial, or hold rial accounts. This provision most likely will affect banks in countries bordering or nearby Iran that sometimes have dealt in the rial.
- blocks U.S.-based property of any person that conducts transactions with any Iranian entity on the list of Specially Designated Nationals (SDNs) or Blocked Persons.

Mandate and Time Frame to Investigate ISA Violations

In the original version of ISA, there was no firm requirement, and no time limit, for the Administration to investigate potential violations and determine that a firm has violated ISA's provisions. CISADA, Section 102(g)(5), altered that by mandating that the Administration begin an investigation of potential ISA violations when there is "credible information" about a potential violation. The same section made mandatory the 180-day time limit for a determination of violation. Under Section 102(h)(5), the mandate to investigate gasoline related sales can be delayed an additional 180 days if an Administration report, submitted to Congress by June 1, 2011, asserts that its policies have produced a significant result in sales of gasoline to Iran. (No

such report was submitted.) Earlier, P.L. 109-293, the "Iran Freedom Support Act" (signed September 30, 2006) amended ISA by calling for, *but not requiring*, a 180-day time limit for a violation determination (there is no time limit in the original law).⁷

A subsequent law, the Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158)) contains a provision to define "credible information" to begin an investigation of a violation. The law defines credible information to include a corporate announcement or corporate filing to its shareholders that it has undertaken transactions with Iran that are potentially sanctionable under ISA. It also says the President *may* (not mandatory) use as credible information reports from the Government Accountability Office and the Congressional Research Service.

Oversight Mechanisms: Reports Required

The Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158) sets up several mechanisms for Congress to oversee whether the Administration is investigating ISA violations. Section 223 requires a Government Accountability Office report, within 120 days of enactment, and another such report a year later, on companies that have undertaken specified activities with Iran that might constitute violations of ISA. Section 224 amends a reporting requirement in Section 110(b) of CISADA by requiring an Administration report every 180 days on investment in Iran's energy sector, joint ventures with Iran, and estimates of Iran's imports and exports of petroleum products. *The GAO reports have been issued; there is no information available on whether the required Administration reports have been issued as well*.

Available Sanctions Under ISA

Once a firm is determined to be a violator, the original version of ISA required the imposition of *two* of a menu of six sanctions on that firm. CISADA added three new possible sanctions and required the imposition of at least three out of the nine against violators. H.R. 1905 amends ISA by adding three available sanctions and requiring imposition on *5 out of the 12* available sanctions. Executive Order 13590, and the July 30, 2012, executive order, discussed above, provide for exactly the same penalties as those in ISA. The 12 available sanctions against the sanctioned entity, from which the Secretary of State or the Treasury can select at least 5 (§6), include the following:

- 1. denial of Export-Import Bank loans, credits, or credit guarantees for U.S. exports to the sanctioned entity (original ISA);
- 2. denial of licenses for the U.S. export of military or militarily useful technology to the entity (original ISA);
- denial of U.S. bank loans exceeding \$10 million in one year to the entity (original ISA);
- 4. if the entity is a financial institution, a prohibition on its service as a primary dealer in U.S. government bonds; and/or a prohibition on its serving as a

⁷ Other ISA amendments under that law included recommending against U.S. nuclear agreements with countries that supply nuclear technology to Iran and expanding provisions of the USA Patriot Act (P.L. 107-56) to curb money-laundering for use to further WMD programs.

repository for U.S. government funds (each counts as one sanction) (original ISA);

- 5. prohibition on U.S. government procurement from the entity (original ISA);
- 6. prohibitions in transactions in foreign exchange by the entity (added by CISADA);
- 7. prohibition on any credit or payments between the entity and any U.S. financial institution (added by CISADA);
- prohibition of the sanctioned entity from acquiring, holding, using, or trading any U.S.-based property which the sanctioned entity has a (financial) interest in (added by CISADA);
- restriction on imports from the sanctioned entity, in accordance with the International Emergency Economic Powers Act (IEEPA; 50 U.S.C. 1701) (original ISA);
- a ban on a U.S. person from investing in or purchasing significant amounts of equity or debt instruments of a sanctioned person (added by Iran Threat Reduction and Syria Human Rights Act, P.L. 112-158);
- 11. exclusion from the United States of corporate officers or controlling shareholders of a sanctioned firm (added by P.L. 112-158); and
- 12. imposition of any of the ISA sanctions on principal offices of a sanctioned firm (added by P.L. 112-158).

Mandatory Sanction: Prohibition on Contracts with the U.S. Government

There is an additional *mandatory* sanction under ISA. CISADA (§102(b)) added a requirement in ISA that companies, as a condition of obtaining a U.S. government contract, certify to the relevant U.S. government agency, that the firm—*and any companies it owns or controls*—are not violating ISA. Regulations to implement this requirement were issued on September 29, 2010.

Waiver, Exemptions, and Sunset Provisions

Waiver Provisions

The President has the authority to waive sanctions on firms determined to have violated ISA provisions. Under the original version of ISA to waive sanctions if he certifies that doing so is *important* to the U.S. national interest ($\S9(c)$). CISADA ($\S102(c)$) changed the 9(c) ISA waiver standard to "necessary" to the national interest, and the Iran Threat Reduction Act modified the standard further to "essential to the national security interests" of the United States. For sanctionable transactions involving WMD equipment, the waiver standard, as modified by the Iran Threat Reduction Act, is "vital to the national security interests of the United States."

Under the original version of ISA, there was also waiver authority (§4(c)) if the parent country of the violating firm joined a sanctions regime against Iran. This waiver provision was changed by the Iran Freedom Support Act (P.L. 109-293) to allow for a waiver determination based on U.S. vital national security interests. The Section 4(c) waiver was altered again, by CISADA, to provide for a six month (renewable) waiver if doing so is "vital to the national interest," and if the parent country of the violating entity is "closely cooperating" with U.S. efforts against Iran's WMD and advanced conventional weapons program. The criteria of "closely cooperating" is defined in the conference report as implementing all U.N. sanctions against Iran. It could be argued that using a Section 4 waiver, rather than a Section 9 waiver, would support U.S. diplomacy with the parent country of the offending entity.

ISA ($\S5(f)$) also contains several exceptions such that the President is not required to impose sanctions that prevent procurement of defense articles and services under existing contracts, in cases where a firm is the sole source supplier of a particular defense article or service. The President also is not required to prevent procurement of essential spare parts or component parts.

"Special Rule" Exempting Firms That End Their Business with Iran

Under a provision added by CISADA (§102(g)(5)), ISA provides a means—a so-called "special rule"—for firms to avoid ISA sanctions by pledging to verifiably end their business with Iran and to forgo any sanctionable business with Iran in the future. Under the special rule, the Administration is not required to make a determination of sanctionability against a firm that makes such pledges. The special rule has been invoked on several occasions, as discussed below. However, there is some imprecision in the time frame under which countries can wind down their Iran business, and some firms could yet be working in Iran for several more years under their pledges. Energy firms insist they needed time to wind down their investments in Iran because, under the buy-back program used by Iran, the energy firms are paid back their investment over time, making it highly costly for them to suddenly end operations in Iran.

Termination Process and Requirements

In its entirety, ISA application to Iran would terminate if the Administration certifies that three requirements are met:

(1) that Iran has ceased its efforts to acquire WMD; (2) that Iran has been removed from the U.S. list of state sponsors of terrorism; *and* (3) that Iran no longer "poses a significant threat" to U.S. national security and U.S. allies.⁸

The amendments by CISADA (sanctions for selling gasoline and related equipment) would terminate if the first two criteria are met.

This termination provision, and the sunset provision discussed below, do not apply to those laws that apply ISA sanctions without specifically amending ISA. The Executive orders and laws that apply ISA sanctions to specified violators but without amending ISA itself can be revoked by a superseding Executive Order or congressional action that amends or repeals the provisions involved.

Sunset Provisions

ISA is currently scheduled to sunset on December 31, 2016, as provided for by CISADA. This followed prior sunset extensions to December 31, 2011 (by P.L. 109-293), and to December 31, 2006 (P.L. 107-24, August 3, 2001). The original law provided for a sunset date of August 5, 2001. P.L. 107-24 also required an Administration report on ISA's effectiveness within 24 to 30 months of enactment; that report was submitted to Congress in January 2004 and did not recommend that ISA be repealed.

⁸ This latter termination requirement added by P.L. 109-293. This law also removed Libya from the act, although application to Libya effectively terminated when the President determined on April 23, 2004, that Libya had fulfilled the requirements of all U.N. resolutions on Pan Am 103.

Clarification of Responsibilities: Executive Order 13574

On May 23, 2011, President Obama issued Executive Order 13574 clarifying that it is the responsibility of the Treasury Department to implement those ISA sanctions that involve the financial sector, including bans on loans, credits, and foreign exchange for, or imports from the sanctioned entity, as well as blockage of property of the sanctioned entity (if these sanctions are selected by the Secretary of State, who makes the decision which penalties to impose on sanctioned entities).

Interpretations and Administration of ISA and Related Laws

The sections below analyze how ISA, as amended by related laws, have been interpreted and implemented through real-world cases and examples.

Application to Energy Pipelines

ISA's definition of sanctionable "investment" has been consistently interpreted by successive administrations to include construction of energy pipelines to or through Iran. Such pipelines are deemed to help Iran develop its petroleum (oil and natural gas) sector. This interpretation was reinforced by amendments to ISA in CISADA, which specifically included in the definition of petroleum resources "products used to construct or maintain pipelines used to transport oil or liquefied natural gas." In March 2012, then Secretary of State Clinton made clear that the Obama Administration interprets the provision to be applicable from the beginning of pipeline construction, and not from the start of oil or gas flow through a finished project.⁹

Implementation. No gas pipelines built linking Iran to neighboring countries have been sanctioned under ISA. Specific pipeline projects, such as those linking Iran and Turkey, Iran and Armenia, and two that are under construction (linking Iran and Pakistan and Iran and Iraq) are discussed in the international compliance section below.

Application to Crude Oil Purchases

The original version of ISA did not make sanctionable purchases of oil from Iran. Executive Order 13622 and P.L. 112-158 essentially render purchasing Iranian oil sanctionable—if the parent country of the energy buyer or shipper has not received a sanctions exemption under P.L. 112-81, which is discussed below. New customers for Iranian oil are automatically sanctionable under the order and P.L. 112-81; only customers that were buying Iranian oil prior to the effective date of the order or of P.L. 112-81 are eligible for the exemption.

Application to Natural Gas Purchases from Iran/Shah Deniz

The FY2013 National Defense Authorization Act (P.L. 112-239) bars dealings with Iran's energy sector broadly—*but specifically excludes from sanctionability purchases of natural gas from Iran*. Still, payments for the natural gas might be subject to sanctions as discussed above and elsewhere

⁹ http://dawn.com/2012/03/01/tough-us-warning-on-iran-gas-pipeline/.

in this paper. *Purchases* of Iranian gas are distinguishable from the *construction of natural gas pipelines* involving Iran which, as discussed, does constitute potentially sanctionable activity.

The effective dates of U.S. sanctions laws also excludes longstanding joint natural gas projects that involve some Iranian firms—particularly the Shah Deniz gas project, a natural gas project in the Caspian Sea. The project is run by a consortium in which Iran's Naftiran Intertrade Copmany (NICO) holds a passive 10% share. The other partners in the venture are BP, Azerbaijan's natural gas firm SOCAR, Russia's Lukoil, and other firms. NICO has been sanctioned under ISA, as discussed below. However, an OFAC factsheet updated on November 28, 2012 states that the Shah Deniz consortium, as a whole, is not determined to be "a person owned or controlled by" the government of Iran, as defined in Executive Order 13599. According to the factsheet, transactions with the consortium would not violate U.S. trade regulations on Iran nor require a license from OFAC. That appears to apply to the second phase of the project that is now under way, which involves NICO at the same level of ownership and will carry gas to Europe.

Application to Liquefied Natural Gas Development

The original version of ISA did not apply to the development by Iran of a liquefied natural gas (LNG) export capability. Iran has no LNG export terminals, in part because the technology for such terminals is patented by U.S. firms and unavailable for sale to Iran. However, CISADA specifically includes LNG in the definition of petroleum resources and therefore made LNG investment in Iran—or supply of LNG tankers or pipelines to Iran—sanctionable.

Application to Financing but Not Official Credit Guarantee Agencies

The definitions of investment and other provisions of ISA make clear that financing for investment in Iran's energy sector, or for sales of gasoline and refinery-related equipment and services, constitute sanctionable activity. Therefore, banks and other financial institutions that assist energy investment and refining and gasoline procurement activities could be sanctioned under ISA.

However, these definitions—including those in Executive Order 13622 and in P.L. 112-158—are not interpreted to apply to official credit guarantee agencies—such as France's COFACE and Germany's Hermes. These credit guarantee agencies are arms of their parent governments, and ISA does not provide for sanctioning governments or their agencies. Early versions of CISADA would have made these entities sanctionable but this was not included in the final law, out of concern for alienating U.S. allies.

Application to Iranian Energy Institutions/NIOC and NITC

As noted above, provisions of P.L. 112-158 and Executive Order 13622—*although they do not amend ISA*—apply ISA sanctions to dealings with the National Iranian Oil Company (NIOC), which is supervised by the Oil Ministry, the National Iranian Tanker Company (NITC), and a previously sanctioned firm, Naftiran Intertrade Company (NICO), which is a subsidiary of NIOC.

Under Section 302 of the Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158), any person who engages in a significant transaction with NIOC and NITC is subject to the imposition of 5 out of 12 ISA sanctions. Section 312 of that law required an Administration determination, within 45 days of enactment (by September 24, 2012) whether NIOC and NITC are IRGC agents

or affiliates. If such a determination is made, financial transactions with NIOC and NITC would be sanctionable under CISADA (prohibition on opening U.S.-based accounts).

Implementation. On September 24, 2012, the Department of the Treasury informed Congress that it had determined that NIOC and NITC are agents or affiliates of the IRGC. As noted below, on November 8, 2012, the Treasury Department named NIOC as a proliferation entity under Executive Order 13382. In accordance with Section 104 of CISADA, that designation bars any foreign bank determined to have dealt directly with NIOC (including with a NIOC bank account in a foreign country) from opening a U.S.-based account.

Some major components of NIOC have not been sanctioned, including

- the Iranian Offshore Oil Company;
- the National Iranian Gas Export Co.; and
- Petroleum Engineering and Development Co.

There are also independent Iranian energy firms, such as Pasargad Oil Co, Zagros Petrochem Co, Sazeh Consultants, Qeshm Energy, and Sadid Industrial Group. Their relations with NIOC or the Revolutionary Guard (see below), are unclear, and none of these independent firms has been sanctioned under any U.S. law or executive order.

Sanctions Imposed Under ISA

The European Union (EU) opposed ISA as an extraterritorial application of U.S. law. In April 1997, the United States and the EU agreed to avoid a trade confrontation over ISA and a separate Cuba sanctions law (P.L. 104-114). The agreement involved the promise by the EU not to file any complaint with the World Trade Organization (WTO) over this issue, in exchange for the eventual May 18, 1998, announcement by the Clinton Administration to waive ISA sanctions ("national interest"—§9c—waiver) on the first project determined to be in violation - a \$2 billion¹⁰ contract, signed in September 1997, for Total SA of France and its partners, Gazprom of Russia and Petronas of Malaysia, to develop phases 2 and 3 of the 25+ phase South Pars gas field. The EU, for its part, pledged to increase cooperation with the United States on nonproliferation and counterterrorism. Then-Secretary of State Albright, in the May 18, 1998, waiver announcement, indicated that similar future such projects by EU firms in Iran would not be sanctioned, provided overall EU cooperation against Iranian terrorism and proliferation continued.¹¹ The EU sanctions against Iran imposed since 2010 have largely rendered this understanding moot because EU firms are barred from investing in Iran's energy sector.

ISA Violation Determinations and Exemptions

The Obama Administration has used ISA authorities to discourage companies from continuing their business with Iran. This is a contrast from the first 14 years after ISA's passage, in which successive Administrations hesitated to confront companies of partner countries. State

¹⁰ Dollar figures for investments in Iran represent public estimates of the amounts investing firms are expected to spend over the life of a project, which might in some cases be several decades.

¹¹ Text of announcement of waiver decision by then Secretary of State Madeleine Albright, containing expectation of similar waivers in the future, at http://www.parstimes.com/law/albright_southpars.html.

Department reports to Congress on ISA, required every six months, do not specifically state which foreign companies, if any, are still being investigated for ISA violations. No publication of such deals has been placed in the *Federal Register*, as required by Section 5e of ISA.

Date	Companies/Country	Status/Comment
May 18, 1998	Total SA (France); Gazprom (Russia); and Petronas (Malaysia)	Waived. ISA Violation determined but sanctions waived in line with U.SEU agreement discussed in text above.
Sept. 30, 2010	Naftiran Intertrade Co. (NICO) Switzerland, Iran	Sanctioned. For activities to develop Iran's energy sector
Sept. 30, 2010	Total (France); Statoil (Norway); ENI (Italy); and Royal Dutch Shell (Britain, Netherlands)	Exempted. Under from sanctions under ISA "special rule" for pledging to wind down work on Iran energy fields.
Nov. 17, 2010	Inpex (Japan)	Exempted. Special rule applied for announcement one month earlier that it divested its remaining 10% stake in Azadegan oil field development.
March 29, 2011	Belarusneft (Belarus, subsidiary of Belneftekhim)	Sanctioned. For \$500 million contract with NICO (see above) to develop Jofeir oil field. Other subsidiaries of Belneftekhim were sanctioned in 2007 under E.O. 13405 related to policy on Belarus.
May 24, 2011	Petrochemical Commercial Company International (PCCI) of Bailiwick of Jersey and Iran; Royal Oyster Group (UAE); Tanker Pacific (Singapore); Allvale Maritime (Liberia); Societie Anonyme Monegasque Et Aerienne (SAMAMA, Monaco); Speedy Ship (UAE/Iran); Associated Shipbroking (Monaco); and Petroleos de Venezuela (PDVSA, Venezuela).	Sanctioned. Under CISADA amendment to ISA imposing sanctions for selling gasoline to Iran or helping Iran import gasoline. Allvale Maritime and SAMAMA determinations were issued on September 13, 2011, to "clarify" the May 24 determinations that had named Ofer Brothers Group. The two, as well as Tanker Pacific, are affiiliated with a Europe- based trust linked to deceased Ofer brother Sami Ofer, and not Ofer Brothers Group based in Israel. The firms named were subjected primarily to the financial-related sanctions provided in ISA. U.Sbased subsidiaries of PDVSA, such as Citgo, were not sanctioned and U.S. purchases of Venezuelan oil were not affected.
Jan. 12, 2012	Zhuhai Zhenrong Co. (China); Kuo Oil Pte Ltd. (Singapore); FAL Oil Co. (UAE)	Sanctioned. For brokering sales or making sales to Iran of gasoline.
Aug. 12, 2012	Sytrol (Syria)	Sanctioned. For sales of gasoline to Iran.
Mar. 14, 2013	Dr. Dimitris Cambis; Impire Shipping; Kish Protection and Indemnity (Iran); and Bimeh Markasi-Central Insurance of Iran (CII, Iran)	Sanctioned. Under amendments to ISA by Iran Threat Reduction Act sanctioning owning vessels that transport Iranian oil or providing insurance for the shipments. Treasury sanctions also imposed on these and eight UAE- based oil graders that concealed the transactions.
April 12, 2013	Tanker Pacific; SAMAMA; and Allvale Maritime	Sanctions lifted. Special rule applied after firms provided to the U.S. "reliable assurances" they will not engage in sanctionable activities in the future.
May 31, 2013	Ferland Co. Ltd. (Cyprus and Ukraine)	Sanctioned. For cooperating with National Iranian Tanker Co. to illicitly sell Iranian crude oil. Sanctions also imposed by Treasury under E.O. 13608.

Table 1.ISA Sanctions Determinations

Source: State Department announcements.

Sanctions on Oil and Other Payments to Iran's Central Bank

In late 2011, some in Congress believed that action was needed to cut off the mechanisms oil importers use to pay Iran hard currency for oil. Proposals to cut Iran's Central Bank from the international financial system were based on that objective, as well as on the view that the Central Bank helps other Iranian banks circumvent the U.S. and U.N. banking pressure. Some argued the Treasury Department should designate the Central Bank as a proliferation entity under Executive Order 13382 or a terrorism supporting entity under Executive Order 13224, but the Administration did not do so.

In November 2011, provisions to sanction foreign banks that deal with Iran's Central Bank were incorporated a FY2012 national defense authorization bill (H.R. 1540). The provision was modified slightly in conference action on the latter bill, enacted and signed on December 31, 2011 (P.L. 112-81). Section 1245 of P.L. 112-81, provides for the following:

- Requires the President to prevent a foreign bank from opening an account in the United States—or impose strict limitations on existing U.S. accounts—if that bank processes payments through Iran's Central Bank.
- *Exemption Provision.* Foreign banks can be granted an exemption from sanctions (for any transactions with the Central Bank, not just for oil) if the President certifies that the parent country of the bank has *significantly reduced* its purchases of oil from Iran. That determination is to be reviewed every 180 days, therefore countries must continue to reduce their oil buys from Iran—relative to the previous 180-day period—to retain the exemption. For countries whose banks receive an exemption, the 180-day time frame begins from the time that parent country last received an exemption.
- *Effective Dates.* The provision applied to *non-oil related* transactions with the Central Bank of Iran 60 days after enactment (by February 29, 2012). The provision applied to transactions with the Central Bank for *oil purchases* only after 180 days (as of June 28, 2012).
- The provision applies to a foreign central bank only if the transaction with Iran's Central Bank is for oil purchases.
- Sanctions on transactions for oil apply only if the President certifies to Congress—90 days after enactment (by March 30, 2012), based on a report by the Energy Information Administration to be completed 60 days after enactment (by February 29, 2012)—that the oil market *is* adequately supplied. The EIA report and Administration certification are required every 90 days thereafter.

Although Treasury Under Secretary David Cohen told the Senate Foreign Relations Committee on December 2, 2011, that the provision could lead to a rise in oil prices that would benefit Iran, the Administration later saw value in using the provision to pressure Iran. In the signing statement on the overall bill, President Obama indicated he would implement the provision so as not to damage U.S. relations with partner countries.

Waiver and Termination Provisions

The law provides for the President to waive the sanctions for 120 days, renewable for successive 120 day periods, if the President determines that doing so is in the national security interest.

The Administration has the authority to grant exceptions, as stipulated, but outright repeal or amendment of this law would require congressional action.

Implementation: Exemptions Issued

On February 27, 2012, the Department of the Treasury announced regulations to implement Section 1245. The first required EIA report was issued on February 29, 2012, and, on March 30, 2012, President Obama determined that there was a sufficient supply of oil worldwide to permit countries to reduce oil purchases from Iran. An EIA report of April 27, 2012, and Administration determination of June 11, 2012, made similar findings and certifications, triggering potential sanctions as of June 28, 2012. Subsequent EIA reports and Administration determinations of the state of the oil market have kept the sanctions triggers in place.

The lack of precise definition of "significant reduction" in oil purchases gives the Administration flexibility in applying the exemption provision. On January 19, 2012, several Senators wrote to Treasury Secretary Geithner agreeing with outside experts that the Treasury Department should define "significant reduction" as an 18% purchase reduction based on total price paid (not just volumes).¹² Administration officials said they largely adopted that standard. Retaining the exemption has become crucial to continuing oil-related commerce with Iran, because Executive Order 13622 and P.L. 112-158 sanctions a broad range of oil dealings with Iran unless a parent country has a current exemption. P.L. 112-158 also amended Section 1245 such that any country that has received an exemption would retain that exemption if it completely ceases purchasing oil from Iran. The EU embargo on purchases of Iranian oil, announced January 23, 2012, and which took full effect by July 1, 2012, implied that virtually all EU oil customers of Iran would obtain exemptions. The table below on major Iranian oil customers indicates cuts made by major customers compared to 2011.

Exemptions Issued¹³

- On March 20, 2012, the Secretary of State announced the first group of 11 countries that had achieved an exemption for significantly reducing oil purchases from Iran: Belgium, the Czech Republic, France, Germany, Greece, Italy, Japan, the Netherlands, Poland, Spain, and Britain. The exemptions for these 11 countries were all renewed (for 180 days) on September 14, 2012, on March 13, 2013, and again on September 6, 2013.
- On June 11, 2012, the Administration granted seven more exemptions based on reductions of oil purchases from Iran of about 20% in each case: India, Korea, Turkey, Malaysia, South Africa, Sri Lanka, and Taiwan. All seven exemptions were renewed on December 7, 2012 (for another 180 days) and again on June 5, 2013.

¹² Text of letter from Senators Mark Kirk and Robert Menendez to Secretary Geithner, January 19, 2012.

¹³ Announcements by the Department of State, March 20, 2012, June 11, 2012, and June 28, 2012.

• On June 28, 2012, the Administration granted exemptions to China and Singapore, two remaining major Iran oil customers, with China the single largest buyer (about 550,000 barrels per day in 2011). Both exemptions were renewed on December 7, 2012 and again on June 5, 2013.

Seventeen EU countries have not been granted exemptions. Some of them were not customers for Iran's oil and cannot therefore "significantly reduce" their buys from Iran any further. Some of these countries say that the provision amounts to a de facto U.S. effort to enforce a total ban on EU trade with Iran.

Sanctions on Paying Iran with Hard Currency

The ability of Iran to acquire hard currency has been further impeded by a provision of the Iran Threat Reduction Act (P.L. 112-158), which went into effect on February 6, 2013 - 180 days after enactment. Section 504 of the Iran Threat Reduction Act amended P.L. 112-81 (adding "clause ii" to Paragraph D(1)) by requiring that any funds owed to Iran as a result of exempted transactions (oil purchases, for example) be credited to an account located in the country with primary jurisdiction over the foreign bank making the transaction. This has the net effect of preventing Iran from bringing earned hard currency back to Iran and compelling it to buy the products of the oil customer countries.

Waiver Provision

The waiver provision that applies to the sanctions to be imposed under P.L. 112-81 applies to this hard currency "lock-up" provision.

Table 2. Top Energy Buyers From Iran and Reductions

Country/Bloc	2011 Average	Current Average
European Union (particularly Italy, Spain, and Greece)	600,000	Negligible
China	550,000	420,000
Japan	325,000	210,000
India	320,000	200,000
South Korea	230,000	I 50,000
Turkey	200,000	I 20,000
South Africa	80,000	0
Malaysia	55,000	Negligible
Sri Lanka	35,000	Negligible
Taiwan	35,000	Negligible
Singapore	20,000	Negligible
Other	55,000	Negligible
Total	2.5 mbd	I.I mbd

(amounts in barrels per day, bpd)

Source: International Energy Agency and rough estimates based on CRS conversations with foreign diplomats and press reports.

Note: Actual volumes might differ, and import volumes may fluctuate dramatically over short periods of time as actual tanker deliveries occur.

Ban on U.S. Trade and Investment with Iran

The United States has long had a wide-ranging ban on U.S. trade with and investment in Iran. That ban was imposed on May 6, 1995, by President Clinton, through Executive Order 12959, under the authority primarily of the International Emergency Economic Powers Act (IEEPA, 50 U.S.C. 1701 et seq.).¹⁴ IEEPA gives the President wide powers to regulate commerce with a foreign country when a state of emergency is declared in relations with that country. Executive Order 12959 followed an earlier March 1995 executive order barring U.S. investment in Iran's energy sector, which was imposed when President Clinton that month declared that a state of emergency exists with respect to Iran. A subsequent executive order, 13059 (August 19, 1997), prevented U.S. companies from knowingly exporting goods to a third country for incorporation into products destined for Iran.

Each March since 1995, the U.S. Administration has renewed a declaration of a state of emergency that triggers the President's trade regulation authority under IEEPA. The operation of the trade regulations is stipulated in Section 560 of the Code of Federal Regulations (Iranian Transactions Regulations, ITRs).

Codification of the Trade Ban. Section 103 of the CISADA law (P.L. 111-195) codified the ban on U.S trade with Iran. The section carves out certain exemptions to the ban on U.S. exports. For example, the section permits U.S. exports not only of food and medical goods, but also information technology to support personal communications among the Iranian people, goods to allow civilian aircraft to fly safely, and goods related to supporting democracy in Iran.

Major Provisions of the Trade and Investment Ban: What Is Allowed or Prohibited

The following conditions, as administered by the Office of Foreign Assets Control (OFAC) of the Treasury Department, apply to the U.S. trade ban on Iran ("Iran Transaction Regulations," ITRs):

- Oil Dealings. The 1995 trade ban greatly expanded a 1987 ban on imports from Iran under Executive Order 12613 (October 29, 1987). That 1987 ban was imposed under authorities provided in Section 505 of the International Security and Development Cooperation Act of 1985 (22 U.S.C. 2349aa-9). The import ban barred U.S. oil companies from importing Iranian oil but did not ban them from buying Iranian oil and trading it overseas. The 1995 ban prohibits such trading of Iranian oil overseas. The 1995 trade ban does allow U.S. companies to apply for licenses to conduct "swaps" of Caspian Sea oil with Iran. However, these swaps have been prohibited in practice; a Mobil Corporation application to do so was denied in April 1999, and no known applications have been submitted since.
- *Transshipment and Brokering*. The regulations that implement the trade ban prohibit transshipment of goods across Iran. They also ban any activities by U.S. persons to broker commercial transactions involving Iran.

¹⁴ The executive order was issued not only under the authority of IEEPA but also: the National Emergencies Act (50 U.S.C. 1601 et seq.; §505 of the International Security and Development Cooperation Act of 1985 (22 U.S.C. 2349aa-9) and §301 of Title 3, *United States Code*.

- *Civilian Airline Parts.* Goods related to the safe operation of civilian aircraft may be licensed for export to Iran (§560.528 of Title 31, C.F.R.). In 2006, in the interests of safe operations of civilian aircraft, a sale by General Electric of Airbus engine spare parts to be installed on several Iran Air passenger aircraft (by European airline contractors) was licensed. The Obama Administration licensed the sale to Iran of data to repair certain GE engines for its legacy American-made aircraft in March 16, 2011. On June 23, 2011, the Administration sanctioned Iran Air as a proliferation entity under Executive Order 13382, rendering any future licensing of parts or repairs for Iran Air unclear.
- *Personal Communications and Remittances*. The restrictions do not apply to personal communications (phone calls, e-mails) or to personal remittances. In February 2012, OFAC clarified guidance for personal remittances to relatives in Iran as allowing U.S. banks to process remittances to family members resident in Iran as long as the remittance is routed through a third country bank and the receiving Iranian bank is not under U.S. sanction. On May 30, 2013, OFAC issued a general license for the exportation to Iran of goods (such as cellphones) and services, on a fee basis, that enhance the ability of the Iranian people to access communication technology (see below under sanctions relating to promoting democracy and free expression in Iran).
- *Food and Medical Exports*. Since April 1999, commercial sales of food and medical products to Iran have been allowed, on a case-by-case basis and subject to OFAC licensing. On October 22, 2012, OFAC attempted to facilitate medical sales by issuing a list of medical products, such as scapels, prosethetics, canes, burn dressings, and other products that could be sold to Iran under "general license"—no export license requirement. That list was updated on July 25, 2013 to include electrocardiagram, electro-encephalogram, and dialysis machines and other medical products. According to OFAC, licenses for exports of medical products not on the list are routinely expedited for sale to Iran, and the U.S. government has been informing foreign banks that financing such transactions is not sanctionable.

OFAC regulations now have a specific definition of "food" that can be licensed for sale to Iran, and that definition excludes alcohol, cigarettes, gum, or fertilizer.¹⁵ This definition might have been a reaction to a press account on December 24, 2010,¹⁶ that said that OFAC had approved exports to Iran of such condiments as ice cream sprinkles, chewing gum, food additives, hot sauces, body-building supplements, and other goods that appear to have uses other than those that are purely humanitarian or nutritive. U.S. exporters widely mentioned include Mars Co. (candy manufacturer); Kraft Foods; Wrigley's (gum); and McCormick and Co. (spices). Some previously licensed U.S. goods have been sold through a Revolutionary Guard-owned chain of stores in Iran called Qods; as well as a government-owned Shahrvand store and a chain called Refah. OFAC officials indicated in the press accounts that such licenses were not in contradiction with U.S. law or policy, although there might have been less than

¹⁵ http://www.treasury.gov/resource-center/sanctions/Programs/Documents/gl_food_exports.pdf.

¹⁶ The information in this bullet is taken from: Jo Becker, "With U.S. Leave, Companies Skirt Iran Sanctions," *New York Times*, December 24, 2010.

full scrutiny of some Iranian end users and that such scrutiny would be increased in future licensing decisions.

- Humanitarian and Related Services. Private non-financial donations by U.S. residents to Iranian victims of natural disasters (such as mailed packages of food, toys, clothes, etc.) were not prohibited at any time. Financial donations to relief organizations require a specific OFAC license, because such transfers generally require use of the international banking system. Prior to September 2013, all NGOs that sought to perform relief efforts in Iran required a specific license to do so, and some NGOs said the licensing requirements made work in Iran impractical by restricting how a U.S. NGO may expend funds in Iran. On September 10, 2013, the Treasury Department attempted to address the complaints by eliminating specific licensing requirements for the provision to Iran of services for health projects, disaster relief, wildlife conservation, human rights projects, and activities related to sports matches and events. The amended regulation also allows importation from Iran of services related to sporting activities, including sponsorship of players, coaching, referees, and training. In some cases, such as the earthquake in Bam in 2003 and the earthquake in northwestern Iran in August 2012, OFAC has issued blanket temporary general licensing for relief organizations to perform relief efforts in Iran. The latest temporary license that responded to the August 2012 earthquake in Iran was issued on August 21, 2012, for a period of 45 days (until October 5), and then extended until November 19, 2012. Under this temporary general license, an NGO can transfer up to \$300,000 for efforts in Iran under general license (no license application needed). Transferring larger amounts is possible, but would require specific license. In the Bam case, the blanket licensing was extended several times but expired in March 2004.
- *Export Financing*. As far as financing of approved U.S. sales to Iran, private letters of credit can be used to finance approved transactions. But, no U.S. government credit guarantees are available and U.S. exporters are not permitted to deal directly with Iranian banks. Title IX of the FY2001 agriculture appropriations law (P.L. 106-387)¹⁷ contained a provision banning the use of official credit guarantees for food and medical sales to Iran and other countries on the U.S. terrorism list, except Cuba, although allowing for a presidential waiver to permit such credit guarantees. No U.S. Administration has authorized credit guarantees, to date. In December 2004, the trade ban was further modified to allow Americans to engage in ordinary publishing activities with entities in Iran (and Cuba and Sudan).

Some relaxations to the trade ban during 1999-2010 account for the fact that U.S. trade with Iran expanded during that period. In April 2000, the regulations were eased to allow U.S. importation of Iranian nuts, fruit products (such as pomegranate juice), carpets, and caviar. Trade financing was permitted for U.S. importers of these goods. CISADA, as noted, restored the import ban as of September 29, 2010, explaining why U.S. imports from Iran since that time have been negligible (a total of about \$2 million for all of 2012). The U.S. imports from Iran consist primarily of artwork for exhibitions around the United States (and count as imports even though the works

¹⁷ The title is called the "Trade Sanctions Reform and Export Enhancement Act of 2000."

return to Iran after the exhibitions conclude). For all of 2012, U.S. exporters sold about \$250 million in goods to Iran, mostly grain sales. That is up about 10% from 2011.

Non-application to Refined Oil with Iranian Content

The ban on trade with Iran targets items produced in and originating from Iran itself. Existing regulations do not ban the importation, from foreign refiners, of gasoline or other energy products in which Iranian oil is contained and mixed with oil from other producers. The product of a refinery is considered a product of the country where that refinery is located, and not a product of Iran, even if the refined product has some Iran-origin crude oil. Much of the Iranian oil that is mixed and imported into the United States was imported from EU countries, such as the Netherlands, which has major refineries in Rotterdam, in particular. However, the EU ban on purchases of Iranian oil has largely mooted this issue, since no EU refineries are importing any Iranian oil as of July 1, 2012. Only a few other refineries worldwide both continue to receive Iranian oil and export gasoline to the United States—and U.S. gasoline imports from those refineries are minor. Some experts say that it would be feasible to exclude Iranian content from any refinery, if there were a decision to ban U.S. imports of products with any Iranian content.

Application to Foreign Subsidiaries of U.S. Firms

The U.S. trade ban does not bar subsidiaries of U.S. firms from dealing with Iran, as long as the subsidiary has no operational relationship to—or control by—the parent company. For legal and policy purposes, foreign subsidiaries are considered foreign persons, not U.S. persons, and are subject to the laws of the country in which the subsidiaries are incorporated. Section 218 of the Iran Threat Reduction and Syrian Human Rights Act (P.L. 112-158) applies the U.S. trade ban to foreign subsidiaries if (1) the subsidiary is more than 50% owned by the U.S. parent; (2) the parent firm holds a majority on the Board of Directors; or (3) the parent firm directs the operations of the subsidiary. However, many subsidiaries operate entirely autonomously and might not meet the criteria for sanctionability stipulated in that law.

Trade Ban Easing and Termination

The trade ban has been codified by CISADA, as noted. Terminating the trade ban outright would require congressional action to repeal or amend Section 103 of CISADA, as well as Administration repeal or amendment of the Executive orders that imposed the ban. Section 103(b)(vi) of CISADA allows the President to license exports to Iran if he determines that doing so is in the national interest of the United States. This gives the President flexibility to ease the ban on U.S. exports through executive action.

There is no similar provision in CISADA to ease the ban on U.S. imports from Iran. Easing the import ban, therefore, would require congressional action.

Financial Sanctions

U.S. efforts to shut Iran out of the international banking system have gained strength as other countries have joined the effort. These efforts have been implemented by the Treasury Department through progressively strong actions discussed below, particularly with legislation in late 2011 to cut off Iran's Central Bank from the international financial system.

Early Efforts: Targeted Financial Measures

Since 2006, the Treasury Department has used its own authorities to persuade foreign banks to cease dealing with Iran by attempting to convince the banks that Iran is using the international financial system to fund terrorist groups and acquire weapons-related technology. According to a GAO report of February 2013, the Treasury Department made overtures to 145 banks in 60 countries, including several visits to banks and officials in the UAE, where Iran seeks to route much of its banking. The program convinced at least 80 foreign banks to cease handling financial transactions with Iranian banks. Levey left office in April 2011 and was replaced by David Cohen. As of November 6, 2008, the Treasury Department has barred U.S. banks from handling any indirect transactions ("U-turn transactions," meaning transactions with non-Iranian foreign banks that are handling transactions on behalf of an Iranian bank) with all Iranian banks.

The Treasury Department also used punishments against banks that have helped Iran violate U.S. financial restrictions. In 2004, the Treasury Department fined UBS \$100 million for the unauthorized movement of U.S. dollars to Iran and other sanctioned countries, and in December 2005, the Treasury Department fined Dutch bank ABN Amro \$80 million for failing to fully report the processing of financial transactions involving Iran's Bank Melli (and another bank partially owned by Libya). In the biggest such instance, on December 16, 2009, the Treasury Department announced that Credit Suisse would pay a \$536 million settlement to the United States for illicitly processing Iranian transactions with U.S. banks. In June 2012, Dutch bank IMG agreed to pay a \$619 million penalty for moving billions of dollars through the U.S. financial system, using falsified records, on behalf of Iranian and Cuban clients. Standard Chartered agreed in August 2012 to a \$340 million settlement with New York State regulators for allegedly processing transactions with Iran in contravention of U.S. regulations.¹⁹

In late 2009, the U.S. Attorney for the Southern District of New York seized the assets of the Assa Company, a UK-chartered entity. Assa allegedly was maintaining the interests of Bank Melli in an office building in New York City. An Iranian foundation, the Alavi Foundation, allegedly is an investor in the building.

Sanctioning Foreign Banks That Do Business With Iran

The Treasury Department efforts were enhanced substantially by the authorities of Section 104 of CISADA (P.L. 111-195) and U.N. and EU sanctions. The intent of Section 104 is to weaken Iran's economy by preventing Iranian traders from obtaining letters of credit to buy or sell goods. The binding provisions of Section 104 of CISADA require the Secretary of the Treasury to prescribe several sets of regulations to forbid U.S. banks from opening new "correspondent accounts" or "payable-through accounts" (or force the cancellation of existing such accounts) for foreign banks that process "significant transactions" with

• Any foreign entity that is sanctioned by Executive Order 13224 (terrorism activities) or 13382 (proliferation activities). These orders are discussed later in this report. To date, several hundred entities (including individuals), many of

¹⁸ Glenn Kessler, "U.S. Moves to Isolate Iranian Banks," *Washington Post*, September 9, 2006.

¹⁹ Jessica Silver-Greenberg, "Regulator Says Bank Helped Iran Hide Deals," New York Times, August 7, 2012.

them Iran-based or of Iranian origin, have been sanctioned under 13224 or 13382. A full list of sanctioned entities is at the end of this report.

- Any entity designated under the various U.N. Security Council resolutions adopted to impose sanctions on Iran.
- Iran's energy, shipping, and shipbuilding sectors, including with NIOC, NITC, and IRISL. This provision was added by Section 1244(d) of the FY2013 National Defense Authorization Act (P.L. 112-239) *but it does not specifically amend CISADA*.

Foreign banks that do not have operations in the United States typically establish correspondent accounts or payable-through accounts with U.S. banks as a means of accessing the U.S. financial system and financial industry. The provision enables the Treasury Department to determine what constitutes a "significant" financial transaction.

Implementation of Section 104: Sanctions Imposed

On July 31, 2012, the Administration announced the first sanctions under Section 104 of CISADA. Sanctioned were: the Bank of Kunlun in China and the Elaf Islamic Bank in Iraq. However, on May 17, 2013, the Treasury Department lifted sanctions on Elaf Islamic Bank in Iraq, asserting that the bank had reduced its exposure to the Iranian financial sector and stopped providing services to an Iranian bank sanctioned by the EU (Export Development Bank of Iran).

Waiver and Termination

The Secretary of the Treasury may waive sanctions under Section 104, with the waiver taking effect 30 days after the Secretary determines that a waiver is necessary to the national interest and submits a report to Congress describing the reason for that determination.

Section 104 contains no specific termination provisions or sunsets. Termination would require congressional action.

Iran Designated a Money-Laundering Jurisdiction

On November 21, 2011, the Administration took further steps to isolate Iran's banking system by identifying Iran as a "jurisdiction of primary money laundering concern"²⁰under Section 311 of the USA Patriot Act (31 U.S.C. 5318A). The Treasury Department determined that Iran's financial system, including the Central Bank, constitutes a threat to governments or financial institutions that do business with these banks. The designation carried no immediate penalty, but it imposed additional requirements on U.S. banks to ensure against improper Iranian access to the U.S. financial system.

Executive Order 13599 Impounding Iranian Assets

In part to address congressional sentiment for extensive sanctions on the Central Bank, on February 5, 2012, the President issued Executive Order 13599, imposing sanctions on the Central Bank and on other entities determined to be owned or controlled by the Iranian government ("government of Iran"). The order requires that any U.S.-based assets of the Central Bank of Iran,

²⁰ http://www.treasury.gov/press-center/press-releases/Pages/tg1367.aspx.

or of any Iranian government-controlled entity, be impounded by U.S. financial institutions. U.S. persons are prohibited from any dealings with such entities. U.S. financial institutions previously were required to merely refuse such transactions with the Central Bank, or return funds to it. Several designations have been made under order, as shown in **Table 5**; on June 21, 2013, OFAC published the names of 38 entities, mostly including oil, petrochemical, and investment companies, determined to meet the definition of "government of Iran."²¹

Sanctions Against Iran's Support for International Terrorism and Regional Activities

Iran was designated a "state sponsor of terrorism" on January 23, 1984, following the October 1983 bombing of the U.S. Marine barracks in Lebanon perpetrated by elements that later became Hezbollah. This designation triggers substantial sanctions on any nation so designated.

Sanctions Triggered by Terrorism List Designation: Ban on U.S. Aid, Arms Sales, Dual-Use Exports, and Certain Programs for Iran

The U.S. naming of Iran as a "state sponsor of terrorism," commonly referred to as Iran's placement on the U.S. "terrorism list," triggers several sanctions. Terrorism list designations are made under the authority of Section 6(j) of the Export Administration Act of 1979 (P.L. 96-72, as amended), sanctioning countries determined to have provided repeated support for acts of international terrorism. The sanctions triggered by Iran's continued listing are

- Restrictions on sales of U.S. dual use items (Export Administration Act, as continued through presidential authorities under the International Emergency Economic Powers Act, IEEPA, as implemented by executive orders). Under other laws, the designation bans direct U.S. financial assistance to Iran (§620A of the Foreign Assistance Act, FAA, P.L. 87-195) and arms sales to Iran (§40 of the Arms Export Control Act, P.L. 95-92, as amended), and requires the United States to vote to oppose multilateral lending to the designated countries (§327 of the Anti-Terrorism and Effective Death Penalty Act of 1996, P.L. 104-132). Waivers are provided under these laws. In addition, successive foreign aid appropriations laws since the late 1980s have banned direct assistance to Iran (loans, credits, insurance, Ex-Im Bank credits) without providing for a waiver.
- Under the Anti-Terrorism and Effective Death Penalty Act (§§325 and 326 of P.L. 104-132), a requirement that the President withhold U.S. foreign assistance to any country that provides to a terrorism list country foreign assistance or arms. Waivers are provided. Section 321 of that act also makes it a criminal offense for U.S. persons to conduct financial transactions with terrorism list governments.

Aside from the terrorism list designation, Section 307 of the FAA (added in 1985) names Iran as unable to benefit from U.S. contributions to international organizations, and require proportionate cuts if these institutions work in Iran. For example, if an international organization spends 3% of

²¹ http://global.factiva.com/hp/printsavews.aspx?pp=Print&hc=Publication.

its budget for programs in Iran, then the United States is required to withhold 3% of its contribution to that international organization. No waiver is provided for.

No Ban on U.S. Humanitarian Aid

The terrorism list designation, and other U.S. sanctions laws, do not bar disaster aid. The United States donated \$125,000, through relief agencies, to help victims of two earthquakes in Iran (February and May 1997); \$350,000 worth of aid to the victims of a June 22, 2002, earthquake; and \$5.7 million in assistance (out of total governmental pledges of about \$32 million) for the victims of the December 2003 earthquake in Bam, Iran, which killed as many as 40,000 people. The U.S. military flew in 68,000 kilograms of supplies to Bam.

Removal From Terrorism List/Sanctions Termination

Terminating the sanctions triggered by Iran's terrorism list designation would require Iran's removal from the terrorism list. The Arms Export Control Act spells out two different requirements for a President to remove a country from the list, depending on whether the country's regime has changed. If the regime has changed, the President can remove a country from the list immediately by certifying that change in a report to Congress. *If the country's regime has not changed*, the President must report to Congress 45 days in advance of the effective date of removal. The President must certify that: (1) the country has not supported international terrorism within the preceding six months, and (2) the country has provided assurances it will not do so in the future. In this latter circumstance, Congress has the opportunity to block the removal by enacting a joint resolution to that effect. The President has the option of vetoing the joint resolution, in which case blocking the removal would require a congressional veto override vote.

Executive Order 13224: Sanctioning Terrorism Supporting Entities

Executive Order 13324 (September 23, 2001) authorizes the President to freeze the assets of and bar U.S. transactions with entities determined to be supporting international terrorism. This order was issued two weeks after the September 11, 2001 attacks on the United States, under the authority of the IEEPA, the National Emergencies Act, the U.N. Participation Act of 1945, and Section 301 of the U.S. Code, and initially targeted Al Qaeda-related entities. In recent years, the order has increasingly been applied to Iranian entities. Such Iran-related entities named and sanctioned under this order are in **Table 5**.

Implementation: Iran-related entities sanctioned under the order for terrorism-related activities are listed in the table at the end of this paper.

Sanctioning Iranian Involvement in the Region

Some sanctions have been imposed to try to curtail Iran's influence in the region:

- *Executive Order 13438.* On July 7, 2007, President Bush issued Executive Order 13438. The order sanctions Iranian persons who are posing a threat to Iraqi stability, presumably by providing arms or funds to Shiite militias there. As shown in the tables at the end of this paper, some persons sanctioned under the order have been Qods Force officers, some have been Iraqi Shiite militia-linked figures, and some entities have been sanctioned as well.
- *Executive Order 13572.* Issued on April 29, 2011, the order targets those responsible for human rights abuses and repression of the Syrian people. The

Qods Force and a number of Iranian Qods Force officers, including its overall commander Qasem Soleimani, have been sanctioned under this order and related executive orders for allegedly helped Syria commit abuses against protesters and repress its domestic opposition. In September 2011, the EU sanctioned the Qods Force for its purported assistance to Syria's repression.

Proliferation-Related U.S. Sanctions

The state sponsor of terrorism designation, discussed above, bars Iran from U.S. exports of technology that can be used for weapons of mass destruction programs (WMD). Iran-specific anti-proliferation laws, discussed below,²² and Executive Order 13382 (June 28, 2005) also seek to prevent Iran from receiving advanced technology from the United States. Some of these laws and executive measures seek to penalize foreign firms and countries that provide equipment to Iran's WMD programs.

Iran-Iraq Arms Nonproliferation Act and Iraq Sanctions Act

The Iran-Iraq Arms Nonproliferation Act (P.L. 102-484) imposes a number of sanctions on foreign entities that supply Iran with WMD technology or "destabilizing numbers and types of conventional weapons." Sanctions imposed on violating entities include a ban, for two years, on U.S. government procurement from that entity, and a two-year ban on licensing U.S. exports to that entity. A sanction to ban imports to the United States from the entity is authorized.

If the violator is determined to be a foreign country, sanctions to be imposed are a one-year ban on U.S. assistance to that country; a one-year requirement that the United States vote against international lending to it; a one-year suspension of U.S. co-production agreements with the country; a one-year suspension of technical exchanges with the country in military or dual use technology; and a one-year ban on sales of U.S. arms to the country. The President is also authorized to deny the country most-favored-nation trade status; and to impose a ban on U.S. trade with the country.

Section 1603 of the act amends an earlier law, the Iraq Sanctions Act of 1990 (Section 586G(a) of P.L. 101-513) also provides for a "presumption of denial" for all dual use exports to Iran (which would include computer software).

Waiver and Termination

Section 1606 of the act authorizes a presidential waiver for the provisions of the act, and for those imposed pursuant to the Iraq Sanctions Act of 1990, if the President determines a waiver is "essential to the national interest."

There are no specific provisions in the act for its termination. Doing so would require congressional action.

²² Such laws include the Atomic Energy Act of 1954 and the Energy Policy Act of 2005 (P.L. 109-58).

Iran-North Korea-Syria Nonproliferation Act

The Iran Nonproliferation Act (P.L. 106-178), now called the Iran-North Korea-Syria Non-Proliferation Act (INKSNA), authorizes sanctions on foreign *persons* (individuals or corporations, not countries or governments) that are determined by the Administration to have assisted Iran's WMD programs. Sanctions imposed include (1) a prohibition on U.S. exportation of arms and dual use items to the sanctioned entity; and, under Executive Order 12938 (of November 14, 1994), a ban on U.S. government procurement and of imports to the United States from the sanctioned entity. The law also bans U.S. extraordinary payments to the Russian Aviation and Space Agency in connection with the international space station unless the President can certify that the agency or entities under its control had not transferred any WMD or missile technology to Iran within the year prior.²³ (A continuing resolution for FY2009, which funded the U.S. government through March 2009, waived this law to allow NASA to continue to use Russian vehicles to access the International Space Station.)

Implementation: Entities sanctioned under this law are listed in the tables at the end of the paper.

Waiver and Termination

Section 4 gives the President the authority to not impose sanctions if he justifies that decision to Congress. Section 5 provides for exemptions from sanctions if certain conditions are met, primarily related to the government with jurisdiction over the entity cooperating to stop future such transfers to Iran.

There are no specific provisions providing for termination of this law. Termination is subject to congressional action.

Executive Order 13382

Executive Order 13382 (June 28, 2005) allows the President to block the assets of proliferators of weapons of mass destruction (WMD) and their supporters under the authority granted by the International Emergency Economic Powers Act (IEEPA; 50 U.S.C. 1701 et seq.), the National Emergencies Act (50 U.S.C. 1601 et seq.), and Section 301 of Title 3, *United States Code*.

Implementation. The numerous entities sanctioned under the order for dealings with Iran are listed in the tables at the end of this paper.

Foreign Aid Restrictions for Suppliers of Iran

Successive foreign aid appropriations withheld 60% of any U.S. assistance to the Russian Federation unless it terminates technical assistance to Iran's nuclear and ballistic missiles programs. Because U.S. aid to Russia generally goes directly to programs in Russia and not to the Russian government, little or no funding has been withheld as a result of the provision.

²³ The provision contains certain exceptions to ensure the safety of astronauts, but it nonetheless threatened to limit U.S. access to the international space station after April 2006, when Russia started charging the United States for transportation on its Soyuz spacecraft. Legislation in the 109th Congress (S. 1713, P.L. 109-112) amended the provision in order to facilitate continued U.S. access and extended INA sanctions provisions to Syria.

Sanctions on the Islamic Revolutionary Guard Corps (IRGC)

Numerous sanctions discussed in this paper target Iran's Islamic Revolutionary Guard Corps (IRGC), which plays a role in repressing domestic dissent, developing Iran's energy sector, developing Iran's WMD programs particularly by procuring technology abroad, and supporting pro-Iranian militant movements and governments in the Middle East region. Much of the work on Iran's oil and gas fields is done through a series of contractors. Some of them, such as Khatam ol-Anbia and Oriental Kish, have been identified by the U.S. government as controlled by the IRGC and have been sanctioned under various executive orders, discussed below. The August 2011 confirmation of Khatam ol-Anbia's chief, Rostam Ghasemi, as oil minister, caused the U.S. government and many experts to assess that the IRGC role in Iran's energy sector was large and growing. He has been replaced by President Hassan Rouhani with a former Oil Minister and oil industry professional, but the IRGC involvement in Iran's energy sector might not necessarily be reduced in the short term. Sanctions targeting the IRGC are discussed below:

- Section 311 of the Iran Threat Reduction Act requires a certification by a contractor to the U.S. government that it is not knowingly engaging in a significant transaction with Iran's Islamic Revolutionary Guard Corps (IRGC), or any of its agents or affiliates that have been sanctioned under several executive orders discussed below. A contract may be terminated if it is determined that the company's certification of compliance was false.
- Section 302 of the Iran Threat Reduction Act imposes at least five out 12 ISA sanctions on persons that materially assist, with financing or technology, the IRGC, or assist or engage in "significant" transactions with any of its affiliates that are sanctioned under Executive Order 13382, 13224, or similar executive orders discussed below—or which are determined to be affiliates of the IRGC. Section 302 did not amend ISA.
- Section 301 of the Iran Threat Reduction Act requires the President, within 90 days of enactment (by November 9, 2012), to identify "officials, agents, or affiliates" of the IRGC and to impose sanctions in accordance with Executive Order 13382 or 13224, including blocking any such designee's U.S.-based assets or property. Some of these designations, including of National Iranian Oil Company (NIOC), were made by Treasury Department on November 8, 2012.
- Section 303 of the Iran Threat Reduction Act requires the imposition of sanctions on agencies of foreign governments that provide technical or financial support, or goods and services to sanctioned (under U.S. executive orders or U.N. resolutions) members or affiliates of the IRGC. Sanctions include a ban on U.S. assistance or credits for that foreign government agency, a ban on defense sales to it, a ban on U.S. arms sales to it, and a ban on exports to it of controlled U.S. technology.
- Section 104 of CISADA sanctions foreign banks that conduct significant transactions with the IRGC or any of its agents or affiliates that are sanctioned under any Executive Order. It also sanctions any entity that assists Iran's Central Bank efforts to help the IRGC acquire WMD or support international terrorism.
- The IRGC is named as a proliferation supporting entity under Executive Order 13382, and the Qods Force, the unit of the IRGC that assists pro-Iranian movements and countries abroad, is named as a terrorism supporting entity under Executive Order 13324. Several Iranian firms linked to the IRGC are sanctioned, as noted in the tables at the end of this paper. Several IRGC commanders are named under other Executive Orders, discussed below, sanctioning Iranian human rights abusers, abusers of Syrian human rights, and entities undermining stability in Iraq.

Promoting Divestment

A recent trend in Congress and in several states has been to require or call for divestment of shares of firms that have invested in Iran's energy sector at the levels sanctionable under ISA.²⁴ The intent of doing so is to express the view of Western and other democracies that Iran is an outcast internationally. A divestment provision was contained in CISADA (P.L. 111-195)—in particular providing a "safe harbor" for investment managers who sell shares of firms that invest in Iran's energy sector.

²⁴ For information on the steps taken by individual states, see National Conference of State Legislatures, "State Divestment Legislation."

Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 requires companies, in their reports to the Securities and Exchange Commission, to disclose whether it or any corporate affiliate has engaged in any sanctionable transactions with Iran under ISA, CISADA, and other applicable laws.

Laws Supporting Democratic Change in Iran

A trend in U.S. policy and legislation since the June 12, 2009 election-related uprising in Iran has been to support the ability of the domestic opposition in Iran to communicate, to reduce the regime's ability to monitor or censor Internet communications, and to sanction Iranian officials that commit human rights abuses. Proposals to sanction the IRGC represent one facet of that trend because the IRGC is not only involved in Iran's WMD programs but it is also the key instrument through which the regime has suppressed the pro-democracy movement. Earlier, the Iran Freedom Support Act (IFSA; P.L. 109-293), authorized "sums as may be necessary" to assist Iranians who are "dedicated" to "democratic values … and the adoption of a democratic form of government in Iran"; and "advocates the adherence by Iran to nonproliferation regimes."

Expanding Internet and Communications Freedoms

Some laws and Administration action focus on expanding Internet freedom in Iran or preventing the Iranian government from using the Internet to identify opponents. Subtitle D of the FY2010 Defense Authorization Act (P.L. 111-84), called the "VOICE" (Victims of Iranian Censorship) Act contained several provisions to increase U.S. broadcasting to Iran and to identify (in a report to be submitted 180 days after enactment) companies that are selling Iran technology equipment that it can use to suppress or monitor the Internet usage of Iranians. The act authorized funds to document Iranian human rights abuses since the June 2009 presidential election. Section 1241 of the act also required an Administration report by January 31, 2010, on U.S. enforcement of sanctions against Iran, and the effect of those sanctions on Iran.

Sanctions on Firms that Sell Censorship Gear to the Regime

In the 111th Congress, the Reduce Iranian Cyber-Suppression Act, (S. 1475 and H.R. 3284) was incorporated into CISADA as Section 106. The section prohibits U.S. government contracts with foreign companies that sell technology that Iran could use to monitor or control Iranian usage of the Internet. The provisions were directed, in part, against firms, including a joint venture between Nokia (Finland) and Siemens (Germany), reportedly sold Internet monitoring and censorship technology to Iran in 2008.²⁵ Section 103(b)(2) of CISADA exempts from the U.S. export ban on Iran equipment to help Iranians communicate and use the Internet.

Implementation

On March 8, 2010, even before CISADA was enacted, OFAC amended the Iran Transactions Regulations that implement the U.S.-Iran trade ban to provide for a general license for providing to Iranians free mass market software in order to facilitate Internet communications. The ruling

²⁵ Christopher Rhoads, "Iran's Web Spying Aided by Western Technology," Wall Street Journal, June 22, 2009.

incorporated major features of a bill in the 111th Congress, the Iran Digital Empowerment Act (H.R. 4301). The OFAC determination required a waiver of the provision of the Iran-Iraq Arms Nonproliferation Act (Section 1606 waiver provision) discussed above.

After CISADA was enacted, on March 20, 2012 the Administration announced a licensing policy to promote Internet freedom in Iran. The Treasury Department announced that several additional types of software and information technology products would be able to be exported to Iran under general license, including personal communications, personal data storage, browsers, plug-ins, document readers, and free mobile applications related to personal communications. The exports could proceed provided the products were available at no cost to the user.²⁶ On May 30, 2013, the Treasury Department further amended its policies to allow for the sale, *on a cash basis* (no U.S. financing), to Iran of equipment (e.g., cellphones, laptops, satellite Internet, website hosting, and related products and services) that Iranians can use to communicate.

Sanctions Against Iran's Internet Censorship

On April 23, 2012, President Obama issued an executive order (13606) directly addressing the issue by sanctioning persons who commit "Grave Human Rights Abuses by the Governments of Iran and Syria Via Information Technology (GHRAVITY)." The order blocks the U.S.-based property and essentially bars U.S. entry and bans any U.S. trade with persons and entities listed in an Annex and persons or entities subsequently determined to be

- Operating any technology that allows the Iranian (or Syrian) government to disrupt, monitor, or track computer usage by citizens of those countries or assisting the two governments in such disruptions or monitoring.
- Selling to Iran (or Syria) any technology that enables those governments to carry out such disruptions or monitoring.

Section 403 of the Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158) sanctions (visa ban, U.S.-based property blocked) persons/firms determined to have engaged in censorship in Iran, limited access to media, or—for example a foreign satellite service provider—supported Iranian government jamming or frequency manipulation. Executive Order 13628 of October 9, 2012, reinforces Section 403 by blocking the property of persons/firms determined to have committed the censorship, limited free expression, or assisted in jamming communications. The The Order also specifies the authorities of the Department of State and the Department of the Treasury to impose sanctions.

Implementation

The order named as violators and imposed sanctions on Iran's Ministry of Intelligence and Security (MOIS); the Islamic Revolutionary Guard Corps (IRGC); the Law Enforcement Forces (LEF); and Iranian Internet service provider Datak Telecom.²⁷ Several of these entities had previously been sanctioned under other executive orders discussed above. Various entities have

²⁶ Fact Sheet: Treasury Issues Interpretive Guidance and Statement of Licensing Policy on Internet Freedom in Iran, March 20, 2012.

²⁷ Department of Treasury Documents, *Fact Sheet: New Executive Order Targeting Human Rights Abuses Via Information Technology*, April 23, 2012.

been designated under Executive Order 13628 on November 8, 2012,²⁸ and since, as shown in the tables at the end of the paper.

Measures to Sanction Human Rights Abuses and Promote the Opposition

Another part of the effort to help Iran's opposition has been legislation to sanction regime officials involved in suppressing the domestic opposition in Iran. The following sections discuss sanctions against Iran's human rights abuses.

Iranian Human Rights Abusers

A Senate bill, S. 3022, the Iran Human Rights Sanctions Act, was incorporated into CISADA as Section 105. The section bans travel and freezing assets of those Iranians determined to be human rights abusers. On September 29, 2010, pursuant to Section 105, President Obama signed an Executive Order (13553) providing for the CISADA sanctions against Iranians determined to be responsible for or complicit in post-2009 Iran election human rights abuses.

Sales of Anti-Riot Equipment

Section 402 of the Iran Threat Reduction and Syria Human Rights Act of 2012 (P.L. 112-158) amended Section 105 by adding provisions that sanctions (visa ban, U.S. property blocked) for any person or company that sells the Iranian government goods or technologies that it can use to commit human rights abuses against its people. Such goods include firearms, rubber bullets, police batons, chemical or pepper sprays, stun grenades, tear gas, water cannons, and like goods. Under that section, ISA sanctions are additionally to be imposed on any person determined to be selling such equipment to the IRGC.

Implementation

When Executive Order 13553 was issued, an initial group of eight Iranian officials was penalized, including Mohammad Ali Jafari, the commander-in-chief of the IRGC and other officials who were in key security or judicial positions at the time of the June 2009 election. Additional officials and security force entities have been sanctioned since, as shown in **Table 5**. Under State Department interpretations of the executive order, if an entity is designated, all members of that entity are ineligible for visas to enter the United States.²⁹ Similar sanctions against many of these same officials—as well as several others—have been imposed by the European Union.

²⁸ http://www.state.gov/r/pa/prs/ps/2012/11/200338.htm.

²⁹ U.S. Department of the Treasury, Office of Public Affairs, *Treasury Sanctions Iranian Security Forces for Human Rights Abuses*, June 9, 2011.

Iranian Broadcasting and Profiteers

IFCA (Subtitle D of P.L. 112-239), Section 1248, mandates inclusion of the Islamic Republic of Iran Broadcasting (IRIB), the state broadcasting umbrella group, as a human rights abuser, thereby imposing CISADA Section 105 sanctions (travel ban, asset freeze) on that entity.

Section 1249 amends CISADA by making sanctionable under Section 105 any person determined to have engaged in corruption or to have diverted or misappropriated humanitarian goods or funds for such goods for the Iranian people. The measure is intended to sanction Iranian profiteers who are, for example, using official connections to corner the market for vital medicines. This essentially codifies a similar provision of Executive Order 13645.

Separate Visa Ban

On July 8, 2011, in conjunction with Britain, the United States imposed visa restrictions on more than 50 Iranian officials for participating in political repression in Iran. The State Department announcement stated that the names of those subject to the ban would not be released because visa records are confidential. The action was taken under the authorities of Section 212(a)(3)(C) of the Immigration and Nationality Act, which renders inadmissible to the United States a foreign person whose activities could have serious consequences for the United States. On May 30, 2013, the State Department announced it had imposed visa restrictions on an additional 60 Iranian officials and other individuals who participated in human rights abuses related to political repression in Iran.³⁰

There are certain exemptions in the case of high level Iranian visits to attend the United Nations. Under the U.N. Participation Act (P.L. 79-264) that provides for U.S. participation in the United Nations and as host nation of U.N. headquarters in New York, visas are routinely issued to heads of state and members of their entourage attending these meetings. In September 2012, however, the State Department refused visas for 20 members of Iranian President Ahmadinejad's traveling party on the grounds of past involvement in terrorism or human rights abuses. Still, in line with U.S. obligations under the act, Ahmadinejad was allowed to fly to the United States on Iran Air, even though Iran Air is a U.S.-sanctioned entity, and his plane reportedly was allowed to stay at Andrews Air Force base for the duration of his visit.

Blocked Iranian Property and Assets

Iranian leaders continue to assert that the United States is holding Iranian assets, and that this is an impediment to improved relations. A U.S.-Iran Claims Tribunal at the Hague continues to arbitrate cases resulting from the 1980 break in relations and freezing of some of Iran's assets. Major cases yet to be decided center on hundreds of Foreign Military Sales (FMS) cases between the United States and the shah's regime, which Iran claims it paid for but were unfulfilled. A reported \$400 million in proceeds from the resale of that equipment was placed in a DOD FMS account and may remain in this escrow account, although DOD has not provided CRS with a precise balance. In addition, according to the Treasury Department "Terrorist Assets report" for 2010, about \$48 million in Iranian diplomatic property and accounts remains blocked—this

³⁰ http://www.state.gov/r/pa/prs/ps/2013/05/210102.htm.

amount includes proceeds from rents received on the former Iranian embassy in Washington, DC, and 10 other properties in several states, along with 6 related bank accounts.³¹

Other past disputes include the mistaken U.S. shoot-down on July 3, 1988, of an Iranian Airbus passenger jet (Iran Air flight 655), for which the United States paid Iran \$61.8 million in compensation (\$300,000 per wage earning victim, \$150,000 per nonwage earner) for the 248 Iranians killed. The United States did not compensate Iran for the airplane itself, although officials involved in the negotiations told CRS in November 2012 that the United States later provided a substitute, used aircraft to Iran.

In another case, there are reportedly about \$2 billion in securities-related assets held by Citigroup, deposited there by Luxembourg-based Clearstream Banking SA, a payments-clearing organization. The assets reputedly belong to Iran and have been frozen and held against terrorism judgments against Iran, although it is not clear whether such assets fall under existing authorities to impound Iranian assets to pay terrorism or other judgments against Iran. Iran's Central Bank reportedly plans to file a motion in U.S. court to unfreeze the assets. Pending legislation in the 112th Congress, discussed below, would consider those assets to be Iranian assets subject to seizure and use to pay judgments against Iran in various terrorism-related cases. In a recent judgement, on July 6, 2012, a U.S. federal judge ordered Iran to pay \$813 million to the families of the 241 U.S. soldiers killed in the October 23, 1983, bombing of the U.S. Marine barracks in Beirut. That brings to \$8.8 billion the total amount awarded, in eight judgments against Iran, for that bombing, which was perpetrated by Islamist elements that formed Lebanese Hezbollah.

U.N. Sanctions

U.N. sanctions apply to all U.N. member states. As part of a multilateral process of attempting to convince Iran to choose the path of negotiations or face further penalty, during 2006-2008, three U.N. Security Council resolutions—1737, 1747, and 1803—imposed sanctions primarily on Iran's weapons of mass destruction (WMD) infrastructure. Resolution 1929 was adopted on June 9, 2010, by a vote of 12-2 (Turkey and Brazil), with one abstention (Lebanon). (Iranian entities and persons under U.N. sanctions are in **Table 5**.) A summary of the major provisions of the all four of these resolutions is contained in the table below.

³¹ http://www.treasury.gov/resource-center/sanctions/Documents/tar2010.pdf.

Table 3. Summary of Provisions of U.N. Resolutions on Iran Nuclear Program (1737, 1747, 1803, and 1929)

Requires Iran to suspend uranium enrichment, to suspend construction of the heavy-water reactor at Arak, ratify the "Additional Protocol" to Iran's IAEA Safeguards Agreement. (1737)

Freezes the assets of Iranian persons and entities named in annexes to the Resolutions, and require that countries ban the travel of named Iranians. (1737, 1747, 1803, and 1929)

Prohibit transfer to Iran of nuclear, missile, and dual use items to Iran, except for use in light-water reactors. (1737, and 1747)

Prohibit Iran from exporting arms or WMD-useful technology (1747)

Prohibit Iran from investing abroad in uranium mining, related nuclear technologies or nuclear capable ballistic missile technology, and prohibits Iran from launching ballistic missiles (including on its territory). (1929)

Requires Iran to refrain from any development of ballistic missiles that are nuclear capable. (1929)

Mandates that countries not export major combat systems to Iran, but does not bar sales of missiles that are not on the U.N. Registry of Conventional Arms. (1929)

Calls for "vigilance" (voluntary restraint) with respect to all Iranian banks, particularly Bank Melli and Bank Saderat. (1929)

Calls for vigilance on international lending to Iran and providing trade credits and other financing. (1929)

Calls on countries to inspect cargoes carried by Iran Air Cargo and Islamic Republic of Iran Shipping Lines—or by any ships in national or international waters—if there are indications they carry cargo banned for carriage to Iran. Searches in international waters would require concurrence of the country where the ship is registered. (1929)

A Sanctions Committee, composed of the 15 members of the Security Council, monitors implementation of all Iran sanctions and collects and disseminates information on Iranian violations and other entities involved in banned activities. A "panel of experts" is empowered by 1929 to assist the U.N. sanctions committee in implementing the Resolution and previous Iran resolutions, and to suggest ways of more effective implementation.

Source: Text of U.N. Security Council resolutions 1737, 1747, 1803, and 1929. http://www.un.org. More information on specific provisions of each of these resolutions and the nuclear negotiations with Iran is in CRS Report RL32048, *Iran: U.S. Concerns and Policy Responses*, by Kenneth Katzman.

International Implementation and Compliance³²

Since 2010, converging international views on Iran have produced an unprecedented degree of global cooperation in pressuring Iran with sanctions. Increasingly, Iran's neighbors—always reluctant to antagonize Iran—are joining the effort. Some countries have joined the sanctions regime primarily as a means of perhaps heading off unwanted military action against Iran by the United States or by Israel. A comparison between U.S., U.N., and EU sanctions against Iran is contained in **Table 4** below. To increase international compliance with all applicable sanctions, on May 1, 2012, President Obama issued Executive Order 13608, giving the Treasury Department the ability to identify and sanction (cutting them off from the U.S. market) foreign persons who help Iran or Syria evade U.S. and multilateral sanctions.

The United States and its partners have also sought to stop Iran from using traditional trading patterns common to its neighborhood to evade sanctions. On January 10, 2013, the Treasury

³² Note: CRS has no mandate or capability to "judge" compliance of any country with U.S., multilateral, or international sanctions against Iran. This section is intended to analyze some major trends in third country cooperation with U.S. policy toward Iran. These assessments bear in mind that there are many other issues and considerations in U.S. relations with the countries discussed here.

Department's Office of Foreign Assets Control issued an Advisory to highlight Iran's use of *hawalas* (traditional informal banking and money exchanges) in the Middle East and South Asia region to circumvent the sanctions against financial transactions with Iran. U.S. and other banks sometimes process transactions with the *hawalas* that involve Iranian entities because the *hawalas* are able to conceal the Iranian involvement. Iran's use of these and other evasion methods are discussed further in the sections below.

Europe

U.S. and European approaches have converged on Iran since 2002, when the nuclear issue came to the fore. Previously, European and other countries had appeared less concerned than is the United States about Iran's support for militant movements in the Middle East or Iran's strategic power in the Persian Gulf and were reluctant to sanction Iran. Since the passage of Resolution 1929 in June 2010, European Union (EU) sanctions on Iran have become nearly as extensive as those of the United States. On November 21, 2011, Britain and Canada announced they would no longer do business with Iran's financial institutions, including Iran's Central Bank. Eight days later, pro-government students backed by regime security forces overran the British Embassy in Tehran, prompting Britain to give all Iranian diplomats 48 hours to leave Britain. Canada closed its embassy in Tehran in September 2012. Still, some EU diplomats criticize some U.S. sanctions against Iran as a U.S. unilateral attempt to impose a ban on all civilian trade with Iran.

Oil Embargo. On January 23, 2012, the EU decided to

- Refrain from new contracts to purchase Iranian oil and to wind down existing contracts by July 1, 2012, after which all EU purchases of Iranian oil were to cease. Collectively, the EU bought about 600,000 barrels per day of Iranian oil in 2011, about a quarter of Iran's total oil exports. The embargo was imposed despite the fact that the most vulnerable EU economies Spain, Italy, and Greece were each buying more than 10% of their oil from Iran. Britain and Germany only got about 1% of their oil from Iran, and France about 4%. As a consequence of the EU decision, as noted above, 10 EU countries were granted and have maintained exemptions from sanctions under (P.L. 112-81) discussed above.
- Ban insurance for shipping oil or petrochemicals from Iran. Even before this took full effect on July 1, 2012, some EU-based insurers closed their offices in Iran.
- Stop all trade with Iran in gold, precious metals, diamonds, and petrochemical products.
- Freeze the assets of Iran's Central Bank, although transactions would still be permitted for approved legitimate trade.
- Freeze the assets of several Iranian firms involved in shipping arms to Syria or which support shipping by IRISL, and cease doing business with port operator Tidewater (see above).

SWIFT Cutoff. Section 220 of P.L. 112-158 requires reports on electronic payments systems such as the Brussels-based SWIFT (Society of Worldwide Interbank Financial Telecommunications) that might be doing business with Iran, but does not mandate sanctions against such systems. The EU reacted to that legislation by requesting that SWIFT cut off sanctioned Iranian banks from the network. SWIFT acceded to that request on March 17, 2012, denying access to 14 Iranian banks blacklisted by the EU. The United States has sanctioned about 50 Iranian banks, but those not

sanctioned by the EU apparently can still access the SWIFT system.³³ And, some experts report that Iranian banks are still able to conduct electronic transactions with the European Central Bank via an electronic payments system called "Target II."

Additional EU Sanctions Adopted October 15, 2012. In response to a lack of progress in nuclear negotiations with Iran, the EU adopted the following additional measures:

- A ban on transactions between European and all Iranian banks, unless specifically authorized.
- A ban on provision of short-term export credits, guarantees, and insurance.
- A ban on imports of natural gas from Iran. Although Iran gas export volumes went mainly to Bulgaria and Greece, via Turkey, this sanction was intended to stall Iran's attempt to expand gas exports to Europe.
- A ban on exports of graphite, semi-finished metals such as aluminum and steel, and industrial software.
- A ban on providing shipbuilding technology, oil storage capabilities, and flagging or classification services for Iranian tankers and cargo vessels.

Among major tests of European implementation, in April 2013, the British government denied permission to Royal Dutch Shell to settle a \$2.3 billion payment to Iran for past oil purchases by funding shipments to Iran of an equivalent value of foodstuffs and medicines. It was not clear on what basis the British government denied the exchange, because the oil was purchased well before the EU oil import ban was imposed, and food and medical sales to Iran are permissible under U.N. and EU sanctions provisions.

Despite the implementation of sanctions, Europe offers some opportunity for illicit Iranian commerce. The Islamic Republic of Iran Shipping Lines (IRISL) has reportedly sought to use the port facilities of Malta and Hamburg, Germany in support of proliferation activities. The U.N. panel of experts reportedly has determined that sales of alumina to Iran by Swiss commodities firms Glencore Xstrata and Tafigura could have violated U.N. sanctions on Iran. The panel of experts report also purportedly listed other ongoing potential sanctions violations including export of machine tools to Iran by Spain and satellite equipment sales to Iran by Germany.³⁴ On September 6, 2013, the EU's second-highest court, the General Court in Brussels, appeared to set back EU efforts to close front company outlets by lifting EU sanctions on seven Iranian companies, including four banks. The court rejected arguments that they were acting as front companies. The companies whose accounts were unfrozen included the Export Development Bank of Iran and Post Bank.³⁵

The harmonization of U.S. and European sanctions on Iran differs from early periods. During 2002-2005, there were active negotiations between the European Union and Iran on a "Trade and Cooperation Agreement" (TCA). Such an agreement would have lowered the tariffs or increased quotas for Iranian exports to the EU countries.³⁶ However, negotiations were discontinued after

³³ Avi Jorish, "Despite Sanctions, Iran's Money Flow Continues," Wall Street Journal, June 25, 2013.

³⁴ Louis Charbonneau and Michelle Nichols, "Exclusive: Glencore, Trafigura Deals with Iran May Have Skirted Sanctions—U.N.," *Reuters*, May 22, 2013.

³⁵ James Kanter, "Iran Ruling in Europe Draws Anger from U.S.," New York Times, September 7, 2013.

³⁶ During the active period of talks, which began in December 2002, there were working groups focused not only on the (continued...)

the Iran, in late 2005, abrogated an agreement to suspend uranium enrichment. Similarly, there is insufficient international support to grant Iran membership in the World Trade Organization (WTO) until there is major progress on the nuclear issue. Iran first attempted to apply to join the WTO in July 1996, but U.S. Administrations blocked Iran from applying until May 2005, when the United States dropped its objections and Iran began accession talks.

During the 1990s, EU countries maintained a policy of "critical dialogue" with Iran, and the EU and Japan refused to join the 1995 U.S. trade and investment ban on Iran. The European dialogue with Iran was suspended in April 1997 in response to the German terrorism trial ("Mykonos trial") that found high-level Iranian involvement in killing Iranian dissidents in Germany, but resumed in May 1998 during Mohammad Khatemi's presidency of Iran. In the 1990s, European and Japanese creditors—over U.S. objections—rescheduled about \$16 billion in Iranian debt. These countries (governments and private creditors) rescheduled the debt bilaterally, in spite of Paris Club rules that call for multilateral rescheduling. In July 2002, Iran tapped international capital markets for the first time since the Islamic revolution, selling \$500 million in bonds to European banks.

Japan and Korean Peninsula

Japan and South Korea have adopted significant Iran sanctions, at least in part to avoid U.S. sanctions on their firms or friction with their close ally, the United States. In September 2010, Japan and South Korea announced trade, banking, and energy Iran sanctions similar to those of the European Union. On December 16, 2011, South Korea banned sales to Iran of energy sector equipment; as both countries have set up new insurance mechanisms to be able to continue buying Iranian oil despite the effects of the EU ban on insuring ships carrying Iranian oil. Japan and South Korea's oil imports from Iran are at levels far below those of 2011 and, as a result, both have obtained and maintained sanctions exemptions under P.L. 112-81. In late June 2013, it was reported that South Korea will cut imports from Iran a further 15% over the coming six months in order to maintain that exemption, which could bring South Korea's imports to about 125,000 bpd. The main South Korea refiners that import Iranian crude are SK Energy and Hyundai Oilbank.

The requirement that oil buyers pay Iran in local accounts to avoid U.S. sanctions—a requirement that took effect on February 6, 2013—is not likely to affect Japan and South Korea's trading patterns with Iran significantly. South Korea pays Iran's Central Bank through local currency accounts at its Industrial Bank of Korea and Woori Bank, and its main exports to Iran have been iron and steel, as well as consumer electronics and appliances made by companies such as Samsung and LG. Japan exports to Iran significant amounts of chemical and rubber products, as well as consumer electronics. These exports are likely to continue at or close to prior levels using local currency accounts.

North Korea

South Korea is an ally of the United States. North Korea is an ally of Iran and, like Iran, is a subject of international sanctions. North Korea generally does not comply with international

^{(...}continued)

TCA terms and proliferation issues but also on Iran's human rights record, Iran's efforts to derail the Middle East peace process, Iranian-sponsored terrorism, counter-narcotics, refugees, migration issues, and the Iranian opposition PMOI.

sanctions against Iran, and reportedly cooperates with Iran on a wide range of WMD-related ventures. Press reports in April 2013 said that Iran might begin supplying oil to North Korea, although financial terms are not known. It has not been reported that deliveries had begun.

India

India is implementing international sanctions against Iran but its cultural, economic, and historic ties—as well as its strategic need for access to Afghanistan—have made the Indian government hesitant to adopt all aspects of U.S. and EU sanctions on Iran. India's private sector increasingly views Iran as a "controversial market"—a term used by Japan and South Korea to describe markets that entail significant reputational and financial risks and should be avoided. On the other hand, the weakening of India's economy in 2013 could affect its implementation of Iran sanctions.

India began reducing economic ties to Iran in 2010 when its central bank ceased using a Tehranbased regional body, the Asian Clearing Union, to handle transactions with Iran. India and Iran agreed to the alternative use of an Iranian bank, Europaisch-Iranische Handelsbank (EIH), to clear the payments, but the two countries turned to Turkey's Halkbank instead in May 2011 when the EU blacklisted EIH. The U.S. law sanctioning dealings with Iran's Central Bank (Section 1245 of P.L. 112-81) led Halkbank in January 2012 to withdraw from the arrangement, and for Iran to agree to accept India's local currency, the rupee, to settle 45% of its sales to India. Rupee accounts facilitate the settlement of payments for oil as sales to Iran of Indian products, including wheat, pharmaceuticals, rice, sugar, soybeans, auto parts, and other products. Still, there is a large trade imbalance, because the oil Iran exports to India is worth far more than the value of the exports that India sells to Iran.

In part because of the trade imbalance, and in cooperation with U.S. policy, India also has reduced its dependence on and imports of Iranian oil substantially. Since 2008, India has reduced its imports of Iranian oil by volume and as a percentage of India's total oil imports, to the point where, by the end of 2012, Iran was only supplying about 10% of India's oil imports (down from over 16% in 2008). That percentage declined further to about 6% by mid-2013, despite the requirement of significant investment to switch over refineries that handle Iranian crude. India's cut of Iranian imports of about 27% over a one-year period was at least as steep as the cuts pledged by Indian officials. Based on these reductions, Under Secretary of State for Political Affairs Wendy Sherman said on May 24, 3013, during a visit to India, that India had made "tremendous progress" reducing imports of oil from Iran." During a visit to India on June 24, 2013, Secretary of State John Kerry praised India's Iranian oil import cuts as an "important step" in bringing pressure on Iran over its nuclear program. India has received and maintained an exemption from P.L. 112-81, as discussed above.

Yet, India's weakening economy could cause U.S.-India differences on sanctions. In mid-August 2013, India's finance minister said that India wants to increase oil imports from Iran.³⁷ Because Indian firms can pay for Iranian oil partly with rupees, there is economic incentive to do so. Paying with rupees helps India conserve its supply of dollars at a time when the value of the rupee has been weakening. Some Indian officials say that, based on cuts in Iranian oil purchases

³⁷ Prasanta Sahu and Biman Mukherji, "New Delhi Looks to Buy More Iran Oil, Risks U.S. Ire," *Wall Street Journal*, August 13, 2013. p. 8.

already made, India could buy as much as 260,000 barrels per day and still argue that it is complying with U.S. sanctions.³⁸

In 2009, India dissociated itself from an Iran-Pakistan gas pipeline project, discussed below, over concerns about the security of the pipeline, the location at which the gas would be transferred to India, pricing of the gas, and tariffs. During economic talks in early July 2010, Iranian and Indian officials reportedly raised the issue of constructing an underwater natural gas pipeline, which would avoid going through Pakistani territory. However, such a route would be much more expensive to construct than would be an overland route.

Pakistan

A test of Pakistan's compliance with sanctions is a pipeline project intended to carry Iranian gas to Pakistan. Agreement on the \$7 billion project was finalized on June 12, 2010, and construction was formally inaugurated formally in a ceremony attended by the presidents of both countries on March 11, 2013. With an intended completion date of mid-2014, Iran reportedly has already completed the pipeline on its side of the border. Potentially complicating the construction on the Pakistani side of the border is that Pakistan has had difficulty arranging about \$1 billion in financing for the project. The day of the ceremony, the State Department reiterated comments during the Bush and Obama Administrations that the project might be sanctioned under ISA.

China and Russia

The position of Russia and China, two permanent members of the U.N. Security Council, is that they will impose only those sanctions required by U.N. Security Council resolutions. Russia is an oil exporter and a need to preserve oil imports from Iran is not a factor in its Iran policy calculations. However, Russia has earned hard currency from large projects in Iran, such as the Bushehr nuclear reactor, and it also seeks not to provoke Iran into supporting Islamist movements in the Muslim regions of Russia and the Central Asian states.

China has been of concern to U.S. officials because it is Iran's largest oil customer, and therefore its cooperation is pivotal to U.S. strategy of reducing Iran's revenue from oil sales. U.S.-China negotiations in mid-2012 led to an agreement for China to cut Iranian oil purchases by about 18% from its 2011 average of about 550,000 barrels per day to about 450,000 barrels per day. U.S. officials testified (Undersecretary of State Wendy Sherman and Undersecretary of the Treasury David Cohen before the House Foreign Affairs Committee and Senate Foreign Relations Committee) on May 15, 2013, that China had cut its buys of oil from Iran by 21% from 2011 2012 (to about 435,000 barrels per day). Iran's overall oil exports have fallen since, and it is likely that much of that reduction is due to reductions of exports to China—because China is the largest buyer of Iranian oil, percentage cuts by China have a large impact in reducing Iran's oil sales by volume. China has received and maintained a P.L. 112-81, as discussed above. Administration officials have said they also do not see a large move by Chinese firms to "backfill" Iran energy projects that Western majors have abandoned; China has put most of its investments in Iran's energy sector "on hold."

³⁸ "India Should Import More Iran Oil- Ministry Before Barack Obama Meeting," *Reuters*, September 24, 2013.

Well before the February 6, 2013, U.S. requirement that Iran be paid in local accounts, China had begun to settle its trade balance with Iran with additional Chinese exports of goods. As an example, two Chinese companies, Geelran and Chery, reportedly are increasing their production of cars in Iran, although Iranian buyers consider them inferior to European or other Asian brands. The February 6, 2013, requirement could mean that Iran will need to purchase even more of its imports from China. Some reports in late August 2013 indicated that China was settling some of its Iran oil bill by providing 315 subway cars for the Tehran metro.³⁹

A more significant concern is that China may be refusing or failing to prevent Iran from acquiring weapons and WMD technology. Then-Secretary of State Clinton singled out China on January 19, 2011, as not enforcing all aspects of international sanctions that bar sales of most nuclear-related equipment to Iran. A press report of February 14, 2013, (*Washington Post*), stated that Iran had attempted to order sophisticated material for centrifuges from China, although it is not clear that the attempted buy was completed.

Turkey/South Caucasus

Turkey is a significant buyer of Iranian oil; in 2011, it averaged nearly 200,000 bpd. In March 2012, Turkey said it would cut its buys from Iran by 10%-20% and Turkey received a P.L. 112-81 sanctions exemption on June 11, 2012, renewed on December 7, 2012, and again on June 5, 2013. Some press reports have accused Turkey's Halkbank of settling much of Turkey's payments to Iran for oil or natural gas with shipments to Iran of gold. That form of payment by Turkey is sanctionable under Executive Order 13622 (see above) and will also be sanctionable as of July 1, 2013, under P.L. 112-239. No U.S. sanctions have been imposed on any Turkish firms under Executive Order 135622 and U.S. officials testified on May 15, 2013, that Turkey is not paying for its gas imports from Iran with gold. Undersecretary of the Treasury Cohen testified that there is gold going from Turkey to Iran but it is mostly accounted for by Iranian private citizens' purchases of gold in Turkey to insulate themselves from the declining value of the rial.

Turkey buys natural gas from Iran via a pipeline built in 1997. Turkey is Iran's main gas customer because Iran has not developed a liquefied natural gas (LNG) export capability. During the pipeline's construction, the State Department testified that Turkey would be importing gas originating in Turkmenistan, not Iran, under a swap arrangement, and the State Department did not determine that the project was a violation of ISA. In 2001, direct Iranian gas exports to Turkey through the line began, but still no ISA sanctions were imposed. Many experts assert that the State Department views the line as crucial to the energy security of Turkey, a key U.S. ally. Prior to the EU decision on October 15, 2012, to bar sales of Iranian gas to Europe, Turkey was also the main conduit for Iranian gas exports to Europe (primarily Bulgaria and Greece). Turkey said in December 2012 that it is constructing a second Iran-Turkey gas pipeline (the work is being performed by Som Petrol). No determination of sanctions violation has been announced.⁴⁰

Turkey has, on several occasions, blocked or impounded Iranian arms and other contraband shipments bound for Syria or Lebanese Hezbollah. This was discussed in the June 12, 2012, report on sanctions implementation by the U.N. panel of experts chartered by Resolution 1929.

³⁹ Author conversation with journalists in China, September 1, 2013.

⁴⁰ Information provided to the author by the New York State government, July 2012.

Caucasus: Azerbaijan, Armenia, and Georgia

The Clinton and George W. Bush Administrations used the threat of ISA sanctions to deter oil pipeline routes involving Iran and thereby successfully promoted an alternate route from Azerbaijan (Baku) to Turkey (Ceyhan). The route became operational in 2005. Section 6 of Executive Order 13622 exempts from sanctions under Section 5 of the order any pipelines that bring gas from Azerbaijan to Europe and Turkey.

In May 2009, Iran and Armenia inaugurated a natural gas pipeline between the two, built by Gazprom of Russia. Armenia is Iran's other main gas customer, aside from Turkey. No determination of sanctionability has been announced. Armenia has said its banking controls are strong and that Iran is unable to process transactions illicitly through Armenia's banks.⁴¹

Some press reports say that Iran might be using another Caucasian state, Georgia, to circumvent international sanctions. IRGC companies reportedly have established 150 front companies in Georgia for the purpose of importing dual-use items, but also to boost Iran's non-oil exports with sales to Georgia of Iranian products such as roofing materials and jams. Iranian firms reportedly are investing in Georgian companies and buying Georgian land.⁴²

Persian Gulf and Iraq

The Persian Gulf countries are oil exporters and close allies of the United States. Those Gulf states with spare oil production capacity, particularly Saudi Arabia, have been willing to fully supply the global oil market, which has helped keep world prices steady despite the drop in Iranian oil exports. The Gulf states also have generally sought to prevent the re-exportation to Iran of U.S. technology, and curtailed banking relationships with Iran. On the other hand, in order not to antagonize Iran, some oil refiners in the Gulf are selling Iran gasoline, Gulf-based shipping companies such as United Arab Shipping Company are paying port loading fees to such IRGC-controlled port operators as Tidewater,⁴³ and the Gulf countries generally allow sanctioned Iranian banks to continue operating in the Gulf states. CRS Report RL32048, *Iran: U.S. Concerns and Policy Responses*, by Kenneth Katzman, discusses the relations between Iran and other Middle Eastern states.

The UAE is particularly closely watched by U.S. officials because of its historic extensive business dealings with Iran, and the apparent ability of Iranian firms to operate there to try to circumvent U.S. sanctions. Several UAE-based firms owned by Iranians have been sanctioned for efforts to evade sanctions, as noted in the tables at the end of the paper. U.S. officials offered substantial praise for the decision announced March 1, 2012, by Dubai-based Noor Islamic Bank to end transactions with Iran. Iran reportedly used the bank to process a substantial portion of its oil payments. UAE representatives say that Iranian banks still operating in UAE conduct transactions only in cash, rendering them inactive. Some Iranian gas condensate (120,000 barrels per day) reportedly has been imported by Emirates National Oil Company (ENOC) and refined into jet fuel, gasoline, and other petroleum products. However, because such purchases could be

⁴¹ Louis Charbonneau, "Iran Looks to Armenia to Skirt Banking Sanctions," *Reuters*, August 21, 2012.

⁴² "As Sanctions Bite, Iran Invests Big in Georgia," Wall Street Journal, June 20, 2013.

⁴³ Mark Wallace, "Closing U.S. Ports to Iran-Tainted Shipping. Op-ed," Wall Street Journal, March 15, 2013.

subject to U.S. sanctions, ENOC reportedly has begun to purchase condensates from a Qatari supplier, while still buying 100,000 barrels per day from Iran.

Iran and Kuwait have held talks on the construction of a 350-mile pipeline that would bring Iranian gas to Kuwait. The two sides have apparently reached agreement on volumes (8.5 million cubic meters of gas would go to Kuwait each day) but not on price.⁴⁴

Iran has sought to use its close relations with Iraq to evade banking and energy sanctions. As noted above, the United States has sanctioned an Iraqi bank that has cooperated with Iran's efforts, and then lifted those sanctions when the bank reduced that business with Iran. The United States has pressed Iraq, with limited success, to inspect flights from Iran to Syria to enforce cooperation with U.N. sanctions that ban Iran from exporting arms. Iraq presented the United States with a more significant Iran sanctions-related dilemma on July 23, 2013, when it signed an agreement with Iran to buy 850 million cubic feet per day of natural gas through a joint pipeline that reportedly is nearing construction. The pipeline will enter Iraq at Diyala province and feed several power plants. The two countries signed a contract for the pipeline construction in July 2011, and it reportedly is close to completion on both sides of the border; its construction costs are estimated at about \$365 million.⁴⁵

Afghanistan

Some reports say that Iranian currency traders are using Afghanistan to acquire dollars that are in short supply in Iran. In Afghanistan, where donor spending is high, the dollar operates as a second national currency. Iranian traders—acting on behalf of wealthy Iranians seeking to preserve the value of their savings—are said to be carrying local currency to Afghanistan to buy up some of the dollars available there. There are also allegations that Iran is using an Iran-owned bank in Afghanistan, Arian Bank, to move funds in and out of Afghanistan. The U.S. Treasury Department has warned Afghan traders not to process dollar transactions for Iran. The Special Inspector General for Afghanistan Reconstruction reported in late January 2013 that Afghan security forces might have used some of U.S. aid funds to purchase fuel from Iran. In September 2013, it was reported that Anham FZCO, a U.S. contractor building food storage shelters for U.S. troops in Afghanistan, might have violated U.S. sanctions by transshipping building materials through Iran.⁴⁶

Latin America

Iran, during the term of president Ahmadinejad, looked to several Latin American countries, particularly Venezuela, to try to avoid or reduce the effects of international sanctions. For the most part, however, Iran's trade and other business dealings with Latin America remain modest and likely to reduce the effect of sanctions on Iran only marginally. And, Iran has lost a key Latin American ally with the March 2013 death of Venezuelan President Hugo Chavez. As noted earlier and in the tables at the end of the paper, several Venezuelan firms have been sanctioned for dealings with Iran.

⁴⁴ http://www.kuwaittimes.net/read_news.php?newsid=NDQ0OTY1NTU4; http://english.farsnews.com/newstext.php? nn=8901181055.

⁴⁵ Ben Lando, "Iraq Inks Gas Supply Deal with Iran," Iraq Oil Report, July 23, 2013.

⁴⁶ "Pentagon Contractor Used Iran for Project," Wall Street Journal, September 26, 2013.

Africa

During the term of Ahmadinejad, Iran sought to cultivate relations with some African countries to try to circumvent sanctions. However, African countries have tended to avoid dealings with Iran in order to avoid pressure from the United States. South Africa has ended its buys of Iranian oil. In June 2012, Kenya contracted to buy about 30 million barrels of Iranian oil, but cancelled the contract the following month after the United States warned that going ahead with the purchase could hurt U.S.-Kenya relations. In June 2012, then-Representative Howard Berman sent a letter to Tanzania's president warning that Tanzania could face aid cuts or other punishments if it continued to "re-flag" Iranian oil tankers.⁴⁷ Tanzania has re-flagged about 6-10 Iranian tankers. Perhaps fearing similar criticism, in September 2012 Sierra Leone removed nine vessels from its shipping register after determining they belonged to IRISL.

World Bank Loans

The July 27, 2010, EU measures narrowed substantially the prior differences between the EU and the United States over international lending to Iran. As noted above, the United States representative to international financial institutions is required to vote against international lending, but that vote, although weighted, is not sufficient to block international lending. In 1993, the United States voted its 16.5% share of the World Bank against loans to Iran of \$460 million for electricity, health, and irrigation projects, but the loans were approved. To block that lending, the FY1994-FY1996 foreign aid appropriations (P.L. 103-87, P.L. 103-306, and P.L. 104-107) cut the amount appropriated for the U.S. contribution to the bank by the amount of those loans. The legislation contributed to a temporary halt in new bank lending to Iran. (In the 111th Congress, a provision of H.R. 6296—Title VII—cut off U.S. contributions to the World Bank, International Finance Corp., and the Multilateral Investment Guarantee Corp. if the World Bank approves a new Country Assistance Strategy for Iran or makes a loan to Iran.)

During 1999-2005, Iran's moderating image had led the World Bank to consider new loans over U.S. opposition. In May 2000, the United States' allies outvoted the United States to approve \$232 million in loans for health and sewage projects. During April 2003-May 2005, a total of \$725 million in loans were approved for environmental management, housing reform, water and sanitation projects, and land management projects, in addition to \$400 million in loans for earthquake relief.

⁴⁷ "Tanzania Must Stop Re-Flagging Iran Tankers: U.S. Lawmaker," *Reuters*, June 29, 2012.

U.S. Sanctions	U.N. Sanctions	Implementation by EU and Some Allied Countries
General Observation: Most sweeping sanctions on Iran of virtually any country in the world	Increasingly sweeping, but still intended to primarily target Iran's nuclear and other WMD programs. No mandatory sanctions on Iran's energy sector.	EU abides by all U.N. sanctions on Iran, and new sanctions imposed b EU countries since July 27, 2010, closely aligns EU sanctions with those of the U.S.
		Japan and South Korean sanctions also increasingly extensive.
Ban on U.S. Trade with and Investment in Iran:	U.N. sanctions do not ban civilian trade with Iran or general civilian	No general EU ban on trade in civilian goods with Iran but, as a
Executive Order 12959 bans (with limited exceptions) U.S. firms from exporting to Iran, importing from Iran, or investing in Iran.	sector investment in Iran. Nor do U.N. sanctions mandate restrictions on provision of trade financing or financing guarantees by national export credit guarantee agencies.	consequence of EU oil embargo from Iran and other decisions, EU sanctions are now nearly as extensive as the United States. All trade credits and credit guarantees
There is an exemption for sales to Iran of food and medical products,		now banned as result of October 15, 2012, EU announcement.
but no trade financing or financing guarantees are permitted.		Japan and South Korea have banne medium- and long-term trade financing and financing guarantees. Short-term credit still allowed.
Sanctions on Foreign Firms that Do Business with Iran's Energy Sector:	No U.N. equivalent exists. However, preambular language in Resolution 1929 "not[es] the potential connection between Iran's revenues derived from its energy sector and the funding of Iran's proliferation- sensitive nuclear activities." This wording is interpreted by most observers as providing U.N. support for countries who want to ban their companies from investing in Iran's energy sector.	EU now bans almost all dealings with Iran's energy sector, including purchases of Iranian oil and gas, shipping insurance, and sales of
The Iran Sanctions Act, P.L. 104-172, and subsequent laws and executive orders, discussed throughout the paper, mandate sanctions on virtually any type of transaction with/in Iran's energy sector. Some exemptions are permitted for firms of countries that have "significantly reduced" purchases of Iranian oil each 180 days.		energy sector equipment. Japanese and South Korean measures ban new energy projects in Iran and call for restraint on ongoing projects. South Korea in December 2011 cautioned its firm not to sell energy or petrochemica equipment to Iran. Both have cut of purchases from Iran sharply.
Ban on Foreign Assistance:	No U.N. equivalent	EU measures of July 27, 2010, ban
U.S. foreign assistance to Iran— other than purely humanitarian aid— is banned under §620A of the Foreign Assistance Act, which bans		grants, aid, and concessional loans to Iran. Also prohibit financing of enterprises involved in Iran's energy sector.
U.S. assistance to countries on the U.S. list of "state sponsors of terrorism." Iran is also routinely denied direct U.S. foreign aid under the annual foreign operations appropriations acts (most recently in §7007 of division H of P.L. 111-8).		Japan and South Korea measures of not specifically ban aid or lending t Iran, but no such lending by these countries is under way.

Table 4. Comparison Between U.S., U.N., and EU and Allied Country Sanctions

U.S. Sanctions	U.N. Sanctions	Implementation by EU and Some Allied Countries
Ban on Arms Exports to Iran: ran is ineligible for U.S. arms exports under several laws, as discussed in the report. Resolution 1929 (operative paragraph 8) bans all U.N. member states from selling or supplying to Iran major weapons systems, including tanks, armored upbicles, combat singers		EU sanctions include a comprehensive ban on sale to Iran of all types of military equipment, not just major combat systems.
	armored vehicles, combat aircraft, warships, and most missile systems, or related spare parts or advisory services for such weapons systems.	No similar Japan and South Korean measures announced, but neither has exported arms to Iran.
Restriction on Exports to Iran of "Dual Use Items": Primarily under §6(j) of the Export	The U.N. Resolutions on Iran, cumulatively, ban the export of almost all dual-use items to Iran.	EU bans the sales of dual use items to Iran, in line with U.N. resolutions. Oct. 2012 measures ban graphite and finished metal sale
Administration Act (P.L. 96-72) and §38 of the Arms Export Control Act, there is a denial of license applications to sell Iran goods that could have military applications.		to Iran. Japan and S. Korea have announced full adherence to strict export control regimes when evaluating sales to Iran.
Sanctions Against International Lending to Iran:	Resolution 1747 (oper. paragraph 7) requests, but does not mandate, that countries and international financial institutions refrain from making grants or loans to Iran, except for development and humanitarian	The July 27, 2010, measures prohibit EU members from
Under §1621 of the International Financial Institutions Act (P.L. 95- 118), U.S. representatives to nternational financial institutions.		providing grants, aid, and concessional loans to Iran, includin through international financial institutions.
such as the World Bank, are required to vote against loans to Iran by those institutions.	purposes.	No specific similar Japan or South Korea measures announced.
Sanctions Against Foreign Firms that Sell Weapons of Mass Destruction-Related Technology to Iran: As discussed in this report, several	Resolution 1737 (oper. paragraph 12) imposes a worldwide freeze on the assets and property of Iranian entities named in an Annex to the Resolution. Each subsequent	The EU measures imposed July 27, 2010, commit the EU to freezing the assets of entities named in the U.N. resolutions, as well as numerous other named Iranian
aws and regulations provide for sanctions against entities, Iranian or otherwise, that are determined to be nvolved in or supplying Iran's WMD programs (asset freezing, ban on cransaction with the entity).	Resolution has expanded the list of Iranian entities subject to these sanctions.	entities. Japan and South Korea froze assets of U.Nsanctioned entities.
Ban on Transactions with Terrorism Supporting Entities:	No direct equivalent, but Resolution 1747 (oper. paragraph 5) bans Iran	No direct equivalent, but many of the Iranian entities named as
Executive Order 13224 bans cransactions with entities determined by the Administration to be supporting international terrorism. Numerous entities, including some of ranian origin, have been so designated.	from exporting any arms—a provision widely interpreted as trying to reduce Iran's material support to groups such as Lebanese Hizbollah, Hamas, Shiite militias in Iraq, and insurgents in Afghanistan.	blocked by the EU, Japan, and Sout Korea overlap or complement Iranian entities named as terrorism supporting by the United States.

U.S. Sanctions

U.N. Sanctions

Resolution, Resolution 1929

extended that ban to additional

Resolution 1803 imposed a binding

Iranians named in an Annex to the

Iranians, and forty Iranians are now

Iranians subject to the travel ban are

involvement in human rights abuses.

Resolution 1803 and 1929 authorize

countries to inspect cargoes carried

by Iran Air and Islamic Republic of

Iran Shipping Lines (IRISL)—or any

waters-if there is an indication that

the shipments include goods whose

ships in national or international

However, two Iranian banks are

the U.N. Security Council

named as sanctioned entities under

export to Iran is banned.

No direct equivalent

resolutions.

subject to the ban. However, the

so subjected because of their

involvement in Iran's WMD

programs, not because of

ban on international travel by several

Travel Ban on Named Iranians:

CISADA and H.R. 1905 provide for a prohibition on travel to the U.S., blocking of U.S.-based property, and ban on transactions with Iranians determined to be involved in serious human rights abuses against Iranians since the June 12, 2009, presidential election there, or with persons selling Iran equipment to commit such abuses.

Restrictions on Iranian Shipping:

Under Executive Order 13382, the U.S. Treasury Department has named Islamic Republic of Iran Shipping Lines and several affiliated entities as entities whose U.S.-based property is to be frozen.

Banking Sanctions:

During 2006-2011, several Iranian banks have been named as proliferation or terrorism supporting entities under Executive Orders 13382 and 13224, respectively (see **Table 5** at end of report).

CISADA prohibits banking relationships with U.S. banks for any foreign bank that conducts transactions with Iran's Revolutionary Guard or with Iranian entities sanctioned under the various U.N. resolutions.

FY2012 Defense Authorization (P.L. 112-81) prevents U.S. accounts with foreign banks that process transactions with Iran's Central Bank (with specified exemptions).

No direct equivalent, although, as discussed above, U.S. proliferations laws provide for sanctions against foreign entities that help Iran with its nuclear and ballistic missile programs. Resolution 1929 (oper. paragraph 7) prohibits Iran from acquiring an interest in any country involving uranium mining, production, or use of nuclear materials, or technology related to nuclear-capable ballistic missiles. Paragraph 9 prohibits Iran from undertaking "any activity" related to ballistic missiles capable of delivering a nuclear weapon.

Implementation by EU and Some Allied Countries

The EU sanctions announced July 27, 2010, contains an Annex of named Iranians subject to a ban on travel to the EU countries. An additional 60+ Iranians involved in human rights abuses were subjected to EU sanctions since.

Japan and South Korea have announced bans on named Iranians.

The EU measures announced July 27, 2010, bans Iran Air Cargo from access to EU airports. The measures also freeze the EU-based assets of IRISL and its affiliates. Insurance and re-insurance for Iranian firms is banned.

Japan and South Korean measures took similar actions against IRISL and Iran Air.

The EU froze Iran Central Bank assets January 23, 2012, and banned all transactions with Iranian banks unless authorized on October 15, 2012.

November 21, 2011: Britain and Canada bar their banks from any transactions with Iran Central Bank.

March 2012: Brussels-based SWIFT says expelled sanctioned Iranian banks from the electronic payment transfer system.

Japan and South Korea measures similar to the 2010 EU sanctions, with South Korea adhering to the same 40,000 Euro authorization requirement. Japan and S. Korea froze the assets of 15 Iranian banks; South Korea targeted Bank Mellat for freeze.

EU measures on July 27, 2010, require adherence to this provision of Resolution 1929.

Private-Sector Cooperation and Compliance

The multiplicity of sanctions have caused Iran to be viewed by third country corporations as a "controversial market"—a market that carries political and reputational risks even if some business in that market is not sanctionable. On the other hand, travelers to Iran say many foreign products, including U.S. products, are readily available in Iran, suggesting that such products are being re-exported to Iran from neighboring countries. Examples of major non-U.S. companies discontinuing business with Iran include the following:

- ABB of Switzerland said in January 2010 it would cease doing business with Iran. Siemens of Germany followed suit in February 2010. Finemeccanica, a defense and transportation conglomerate of Italy, and Thyssen-Krupp, a German steelmaker, subsequently left the Iran market as well. Indian conglomerate Tata is ending its Iran business.
- Several firms have ceased selling automotive products to Iran. Germany's Daimler (Mercedes-Benz maker) and Porsche have ceased exports to Iran of cars and trucks to Iran. In August-September 2010, Japanese and South Korean automakers Toyota, Hyundai, and Kia Motors ceased selling cars to Iran.
- Manufacturing operations in Iran—or sales of equipment to—Iran's automotive sector are sanctionable under Executive Order 13645. French carmaker Peugeot, which produces cars locally in partnership with Iran's Khodro Group, suspended operations in Iran as of July 1, 2012. Peugeot is 7% owned by General Motors, but GM is not known to have any involvement in or to supply any GM content to the Peugeot Iran activities. Italian carmaker Fiat reportedly has pulled out of the Iran market as well. In July 2013, United Against Nuclear Iran reportedly wrote to Renault Motors of France to warn it that its manufacturing activities in Iran could be sanctioned.
- Attorneys for BNP Paribas of France told the author in July 2011 that, as of 2007, the firm was pursuing no new business in Iran, although it was fulfilling existing obligations in that market.
- The State Department reported on September 30, 2010, that Hong Kong company NYK Line Ltd. had ended shipping business with Iran on any goods. On June 30, 2011, according to press reports, the Danish shipping giant Maersk told Iran that it would no longer operate out of Iran's three largest ports. The firm's decision reportedly was based on the U.S. announcement on June 23, 2011, that it was sanctioning the operator of those ports, Tidewater Middle East Co., as a proliferation entity under Executive Order 13382.
- Well before Executive Order 13590 was issued (see above), one large oil services firm, Schlumberger, which in incorporated in the Netherlands Antilles, said it would wind down its business with Iran, although some of those contracts might still be in the process of winding down.⁴⁸
- Finnish mobile phone maker Nokia reportedly has stopped selling phones in Iran.

⁴⁸ Farah Stockman, "Oil Firm Says It Will Withdraw From Iran," *Boston Globe*, November 12, 2010.

Foreign Subsidiaries of U.S. Firms That Have Exited the Iran Market

Even before their activities became sanctionable as a consequence of post-2010 legislation and executive orders, many foreign subsidiaries of U.S. firms had exited the Iran market voluntarily.

- Chemical manufacturer Huntsman announced in January 2010 its subsidiaries would halt sales to Iran.
- On January 11, 2005, Iran said it had contracted with U.S. company Halliburton, and an Iranian company, Oriental Kish, to drill for gas in Phases 9 and 10 of South Pars. Halliburton reportedly provided \$30 million to \$35 million worth of services per year through Oriental Kish, leaving unclear whether Halliburton would be considered in violation of the U.S. trade and investment ban or the Iran Sanctions Act (ISA),⁴⁹ because the deals involved a subsidiary of Halliburton (Cayman Islands-registered Halliburton Products and Service, Ltd., based in Dubai). On April 10, 2007, Halliburton announced that its subsidiaries were no longer operating in Iran, as promised in January 2005.
- General Electric (GE) announced in February 2005 that it would seek no new business in Iran, and it reportedly wound down preexisting contracts by July 2008. GE was selling Iran equipment and services for hydroelectric, oil and gas services. However, GE subsidiary sales of medical diagnostic products such as MRI machines, sold through Italian, Canadian, and French subsidiaries, are not generally sanctionable and are believed to be continuing.
- On March 1, 2010, Caterpillar Corp. said it had altered its policies to prevent foreign subsidiaries from selling equipment to independent dealers that have been reselling the equipment to Iran.⁵⁰ Ingersoll Rand, maker of air compressors and cooling systems, followed suit.⁵¹
- In April 2010, it was reported that foreign partners of several U.S. or other multinational accounting firms had cut their ties with Iran, including KPMG of the Netherlands, and local affiliates of U.S. firms PricewaterhouseCoopers and Ernst and Young.⁵²
- Oilfield services firm Smith International said on March 1, 2010, it would stop sales to Iran by its subsidiaries. Another oil services firm, Flowserve, said its subsidiaries have voluntarily ceased new business with Iran as of 2006.⁵³ FMC Technologies took similar action in 2009, as did Weatherford⁵⁴ in 2008.

⁴⁹ "Iran Says Halliburton Won Drilling Contract," Washington Times, January 11, 2005.

⁵⁰ "Caterpillar Says Tightens 'No-Iran' Business Policy," *Reuters*, March 1, 2010.

⁵¹ Ron Nixon, "2 Corporations Say Business With Tehran Will Be Curbed," New York Times, March 11, 2010.

⁵² Peter Baker, "U.S. and Foreign Companies Feeling Pressure to Sever Ties With Iran," *New York Times*, April 24, 2010.

⁵³ In September 2011, the Commerce Department fined Flowserve \$2.5 million to settle 288 charges of unlicensed exports and reexports of oil industry equipment to Iran, Syria, and other countries.

⁵⁴ Form 10-K for Fiscal year ended December 31, 2008, claims firm directed its subsidiaries to cease new business in Iran and Cuba, Syria, and Sudan as of September 2007.

Foreign Firms Reportedly Remaining in the Iran Market

Still, many major firms continue to run the financial risk of doing business with Iran. They include most of the major consumer products companies of Europe and Asia. Some of the foreign firms that trade with Iran, such as Mitsui and Co. of Japan, Alstom of France, and Schneider Electric of France, are discussed in a March 7, 2010, *New York Times* article on foreign firms that do business with Iran and also receive U.S. contracts or financing. The *Times* article does not claim that these firms have violated any U.S. sanctions laws. Internet and communications-related foreign firms remaining in or having departed the Iranian market are discussed in the section below on human rights effects of sanctions.

Foreign Subsidiaries of U.S. Firms Still in the Iran Market

Some foreign subsidiaries of U.S. firms reportedly still trade with Iran. Some of them also received U.S. government contracts, grants, loans, or loan guarantees, according to a March 7, 2010, *New York Times* article. The subsidiaries believed still involved in Iran include

- An Irish subsidiary of the Coca Cola Company, which provides syrup for the U.S.-brand soft drink to an Iranian distributor, Khoshgovar. Local versions of both Coke and of Pepsi (with Iranian-made syrups) are also marketed in Iran by distributors who licensed the recipes for those soft drinks before the Islamic revolution and before the trade ban was imposed on Iran.
- Transammonia Corp. which, via a Swiss-based subsidiary, conducts business with Iran to help it export ammonia, a growth export for Iran.
- Press reports in early October 2011 indicated that subsidiaries of Kansas-based Koch Industries may have sold equipment to Iran to be used in petrochemical plants (making methanol) and possibly oil refineries, among other equipment. However, the reports say the sales ended as of 2007, a time at which foreign sales of refinery equipment to Iran were not sanctionable under ISA.⁵⁵
- Some subsidiaries of U.S. energy equipment and energy-related shipping firms were in the Iranian market as late as 2010, according to their "10-K" filings with the Securities and Exchange Commission. However, most such energy sector-related sales to Iran are now sanctionable and these companies have most likely exited the Iranian market. Those still in the Iran market as of 2010 included Natco Group,⁵⁶ Overseas Shipholding Group,⁵⁷ UOP (United Oil Products, a Honeywell subsidiary based in Britain),⁵⁸ Itron,⁵⁹ Fluor,⁶⁰ Parker Drilling,

⁵⁵ Asjylyn Loder and David Evans, "Koch Brothers Flout Law Getting Richer With Iran Sales," *Bloomberg News*, October 3, 2011.

⁵⁶ Form 10-K Filed for fiscal year ended December 31, 2008.

⁵⁷ Paulo Prada and Betsy McKay, "Trading Outcry Intensifies," *Wall Street Journal*, March 27, 2007; Michael Brush, "Are You Investing in Terrorism?," *MSN Money*, July 9, 2007.

⁵⁸ New York Times, March 7, 2010, cited previously.

⁵⁹ "Subsidiaries of the Registrant at December 31, 2009," http://www.sec.gov/Archives/edgar/data/780571/000078057110000007/ex_21-1.htm.

⁶⁰ "Exhibit to 10-K Filed February 25, 2009." Officials of Fluor claim that their only dealings with Iran involve property in Iran owned by a Fluor subsidiary, which the subsidiary has been unable to dispose of. CRS conversation with Fluor, December 2009.

Vantage Energy Services,⁶¹ PMFG, Ceradyne, Colfax, Fuel Systems Solutions, General Maritime Company, Ameron International Corporation, and World Fuel Services Corp. UOP reportedly sold refinery gear to Iran.

Effectiveness of Sanctions on Iran

There may not be one single answer to the question "Are sanctions working?" on Iran. The following sections examine the effectiveness of sanctions on a variety of criteria and goals.

Effect on Iran's Nuclear Program Decisions and Capabilities

During the term of former president Mahmoud Ahmadinejad, there was a consensus that U.S. and U.N. sanctions had not accomplished their core strategic objective of compelling Iran to verifiably limit its nuclear development to purely peaceful purposes. By all accounts—the United States, the P5+1, the United Nations, the International Atomic Energy Agency (IAEA)—Iran has not complied with the applicable provisions of the U.N. Security Council resolutions requiring that outcome. Five rounds of P5+1—Iran talks during 2012 and thus far in 2013, the latest of which took place in Almaty, Kazakhstan during April 5-6, 2013, produced no breakthroughs.

Some experts are adopting the view that sanctions might have compelled a change in Iran's nuclear approach. On June 14, 2013, Iranians elected the relatively moderate mid-ranking cleric Hassan Rouhani as President; he ran on a platform of achieving an easing of sanctions, and outcome likely only in the event there is a nuclear compromise. Since his election—and particularly during his September 23-27, 2013, visit to the U.N. General Assembly meetings in New York—Rouhani has stressed that Iran seeks a nuclear settlement, possibly within six months. He accepted a phone call from President Obama on September 27, 2013, in which the two countries agreed to direct their teams to seek a settlement of that issue. On September 26, 2013, the P5+1 countries and Iran—with the United States represented by Secretary of State Kerry and Iran represented by Foreign Minister and chief nuclear negotiator Mohammad Javad Zarif—decided that the next formal nuclear talks would take place on October 15-16, 2013, in Geneva. The nuclear talks are discussed in greater detail in CRS Report RL32048, *Iran: U.S. Concerns and Policy Responses*, by Kenneth Katzman.

Counter-Proliferation Effects

A related issue is whether the cumulative sanctions have directly set back Iran's nuclear efforts by making it difficult for Iran to import needed materials or skills. Some U.S. officials have asserted that, coupled with mistakes and difficulties in Iran, sanctions have slowed Iran's nuclear efforts by making it more difficult and costly for Iran to acquire key materials and equipment for its enrichment program.⁶² However, International Atomic Energy Agency (IAEA) reports have said that Iran's capacity to enrich uranium more rapidly continues to expand, as does its stockpile of 20% enriched uranium. And, Director of National Intelligence James Clapper testified on March 12, 2013, that Iran "is expanding the scale, reach, and sophistication of its ballistic missile arsenal."

⁶¹ Form 10-K for Fiscal year ended December 31, 2007.

⁶² Speech by National Security Adviser Tom Donilon at the Brookings Institution, November 22, 2011.

Effects on Iran's Regional Political and Military Influence

Sanctions do not appear to have materially reduced Iran's capability to finance and provide arms to militant movements in the Middle East and to Syria. Extensive Iranian support to Syrian President Bashar Al Assad appears is continuing, by all accounts. Some press reports, quoting the U.N. panel of experts, say Iran has been exporting arms to factions in Yemen and Somalia. Iran's arms exports contravene Resolution 1747, which bans Iran's exportation of arms.⁶³ These issues are discussed in greater detail in CRS Report RL32048, *Iran: U.S. Concerns and Policy Responses*, by Kenneth Katzman.

A congressionally mandated Defense Department report of April 2012 called into question whether sanctions would erode Iran's conventional military capabilities. The report discusses Iran's increasing capabilities in short range ballistic missiles and other weaponry, as well as acquisition of new ships and submarines.⁶⁴ It is not clear if any country violated Resolution 1929 by selling Iran major combat systems, whether such shipments were made before the Resolution took effect in June 2010, or whether Iran made these systems itself. The report also assessed that Iran's continues to develop medium-range ballistic missiles, although Iran's development of such systems might not require as much foreign help as do Iran's longer range missile programs. On the other hand, there have been no reported sales of major combat systems in recent years, and military experts argue that Iran's conventional military capability relative to its neighbors or potential adversaries will erode if it is not modernized.

General Political Effects

Some experts assert that sanctions could accomplish their core goals if they spark dissension within the senior Iranian leadership or major public unrest. During 2011-2013, there was a split between then President Ahmadinejad and Supreme Leader Ali Khamene'i, but the rift was driven primarily by institutional competition and differences over the relative weight to attach to Islam or to Iranian nationalism—not sanctions.

Most of the candidates permitted by the regime to run for president in June 2014 were conservative allies of Khamene'i, but the support of Iranians who want significant change powered the most moderate candidate in the race, Rouhani, to a first round victory. The Supreme Leader welcomed Rouhani's election and has publicly affirmed that he backs, at least for now, Rouhani's approach to settling the nuclear issue. However, it is possible that differences between Rouhani and the Supreme Leader will emerge over potential compromises with the P5+1 and possibly on other issues such as the potential easing of domestic social restrictions.

At the popular level, since 2012, there has been labor and public unrest over escalating food prices and the dramatic fall of the value of Iran's currency. However, public strikes and demonstrations have been sporadic and do not appear to threaten the regime.

⁶³ Louis Charbonneau, "U.N. Monitors See Arms Reaching Somalia From Yemen, Iran," *Reuters*, February 10, 2013.

⁶⁴ Department of Defense, Annual Report of Military Power of Iran, April 2012.

Human Rights-Related Effects

U.S. and international sanctions have not, to date, had a measurable effect on human rights practices in Iran. Executions increased significantly in 2012, according to the State Department (human rights report for 2012, released April 19, 2013), but that is likely a result of a continued crackdown against opposition activity. Nor has the regime's ability to monitor and censor use of the Internet and other media been evidently affected to date, even though sanctions have caused several major firms to stop selling Iran equipment that it could use to for those purposes.

German telecommunications firm Siemens, accused by Iranian and outside activists in 2009 of selling technology that Iran used to monitor the Internet, announced on January 27, 2010, that it would stop signing new business deals in Iran as of mid-2010.⁶⁵ A Chinese Internet infrastructure firm, Huawei, announced in December 2011 that it was no longer seeking new business in Iran and was withdrawing its sales staff. A South African firm, MTN Group, owns 49% of a private cellular phone network, Irancell, and was accused by some groups of helping the Iranian government shut down some social network services during times of protest in Iran.⁶⁶ On August 8, 2012, MTN announced it plans to move its assets out of Iran. On October 11, 2012, Eutelsat, a significant provider of satellite service to Iran's state broadcasting establishment, ended that relationship following EU sanctioning in March 2012 of the head of the Islamic Republic of Iran Broadcasting (IRIB) Ezzatollah Zarghami. A GAO report to Congress of February 25, 2013, did not identify any foreign firms that exported technology to Iran for monitoring, filtering, or disrupting information and communications flow from June 2011-December 15, 2012.⁶⁷

Some major telecommunications firms have remained in the Iran market, although it is not clear whether their products help either the regime or the opposition. They include Deutsche Telekom, Ericsson, Emirates Telecom, LG Group, NEC Corporation, and Asiasat. In mid-October 2012, Israeli news sources asserted that Sweden opposed additional sanctions against Iran in order to preserve a pending deal for Ericsson to help build a network for Irancell.

Economic Effects

Many experts attribute Rouhani's attempts to settle the nuclear issue to the dramatic toll sanctions have taken on Iran's economy. Before taking office, president Rouhani received briefings on the Iranian economy from the outgoing Ahmadinejad economic team, and said that the economy was in worse shape than that portrayed by the outgoing administration. However, analysis by some U.S. experts, and assertions by some Iranian officials, suggest that Iran may be adjusting to the sanctions and mitigating their economic effects more successfully than has been thought by experts.⁶⁸ Indicators of the effect of sanctions and mismanagement on Iran's economy include

• *Oil Export Declines*. Oil sales have accounted for about 80% of Iran's hard currency earnings and about 50% of government revenues. As noted in **Table 2**, sanctions have driven Iran's oil sales down nearly 60% from the 2.5 mbd of sales

⁶⁵ Aurelia End, "Siemens Quits Iran Amid Mounting Diplomatic Tensions," Agence France Press, January 27, 2010.

⁶⁶ http://www.examiner.com/article/obama-adviser-plouffe-received-100-000-from-iranian-associated-firm.

⁶⁷ GAO-13-344R Iran, February 25, 2013.

⁶⁸ Patrick Clawson, "Iran Beyond Oil," Washington Institute for Near East Policy Policywatch 2062, April 3, 2013; Jay Solomon, "Iran Curbs Spark Trade Shift," *Wall Street Journal*, April 21, 2013; Thomas Erdbink and Rick Gladstone, "Fearing Price Increases, Iranians Hoard Goods," *New York Times*, April 24, 2013.

in 2011. This drop is expected to reduce Iran's revenue from crude oil to about \$35 billion in 2013, down from over \$100 billion in 2011.

- *Falling Oil Production*. To try to adjust to lost oil sales, Iran has been storing unsold oil on tankers in the Persian Gulf and it is building additional storage tanks on shore. Industry reports in June 2013 indicated Iran might have as much as 30 million barrels of crude oil in floating storage. The storage represents an attempt to keep up oil production because shutting down wells risks harming them and it is costly to resume production at a shut well. However, Iran's oil production has fallen to about 2.6 2.8 mbd from the level of nearly 4.0 mbd at the end of 2011.⁶⁹
- *Hard Currency Depletion*. Not only have Iran's oil exports fallen by volume, but it is no longer receiving easily usable and transferrable hard currency for its oil. As of February 2013, as noted, oil customers must pay Iran in local currency—a sanction that is reportedly causing about \$1.5 billion per month to pile up in foreign accounts (out of about \$3.4 billion in the value of oil sales).⁷⁰ Iran is unable to repatriate those funds, and it reportedly is having trouble identifying a sufficient amount of goods in those countries to import to make use of that balance. The IMF estimated Iran's hard currency reserves to be about \$101 billion as of the end of 2011, but estimates indicate the reserves have fallen to \$60 billion to \$80 billion as of October 2013.⁷¹
- *GDP Decline*. Sanctions have caused Iran to suffer its first gross domestic product contraction in two decades. Many businesses are failing and there are a large number of non-performing loans. An IMF global report issued in April 2013 said that Iran's economy shrank 1.9% from March 2012-March 2013, and will likely shrink another 1.3% in the subsequent one year period. U.S. officials testified on May 15, 2013 that GDP 2012-2013 would drop even more—about 5% 8%. The IMF report predicted the economy would return to growth, at about 1%, for the one year after that (March 2014-March 2015). As a consequence of the downturn, the unemployment rate has risen to about 20%, although the Iranian government reports that the rate is 13%.
- *Currency Decline*. The regime has been working to contain the effects of a currency drop, which took the value of the rial on unofficial markets from about 28,000 to one U.S. dollar to about 40,000 during September-October 2012. Prior to that, the rial's value had fallen from 13,000 to the dollar in September 2011 to 28,000 to the dollar in mid-September 2012. The unofficial rate was about 37,000 to the dollar in May 2013, but optimism over Rouhani's presidency caused the rial to appreciate to about 30,000 to the dollar by October 2013.
- *Inflation*. The drop in value of the currency has caused inflation to accelerate. collapse. An April 22, 2013, government attempt to unify the exchange rate set off a wave of hoarding of key foodstuffs by Iranians who are expecting the prices of those goods to rise sharply. The Iranian Central Bank acknowledged an

⁶⁹ Rick Gladstone, "Data on Iran Dims Outlook for Economy," New York Times, October 13, 2012.

⁷⁰ Marjorie Olster, "Report: U.S. Sanctions Make Half Iran's Oil Income Out of its Reach," *Associated Press*, August 30, 2013.

⁷¹ Thomas Erdbink, "Iran Staggers As Sanctions Hit Economy," New York Times, October 1, 2013.

inflation rate of 31% rate in April 2013, and a 45% rate in late July 2013. Many economists assert that these official figures understate the actual inflation rate substantially, and that is between 50% and 70%. Some assert that inflation has been fed by the policies of Ahmadinejad, particularly the substitution of subsidies with cash payments.

- *Industrial Production*. Almost all Iranian factories depend on imports and the currency decline and financing restrictions have made it difficult for Iranian manufacturing to operate. Iranian manufacturers are largely unable to obtain credit and must pre-pay, often through time consuming and circuitous mechanisms, to obtain the parts from abroad. This difficulty is particularly acute in the automotive sector; Iran's production of automobiles has fallen by about 40% from 2011 levels, and will likely fall further as a consequence of Executive Order 13645 of June 3, 2013, discussed earlier. Iran produces cars for the domestic market, such as the Khodro, based on licenses from European auto makers such as Renault and Peugeot.
- Domestic Payments Difficulties/Subsidy Reductions. Some reports say the government is in arrears in salary payments to military personnel and other government workers. In order to conserve funds, in late 2012, Iran's parliament—against then president Ahmadinejad's urgings—postponed phase two of an effort to wean the population off subsidies. That effort provides for cash payments to about 60 million Iranians of about \$40 per month to 60 million Iranians to compensate them for ending subsidies for commodities such as gasoline. Gasoline prices now run on a tiered system in which a small increment is available at the subsidized price of about \$1.60 per gallon, but amounts above that threshold are available only at a price of about \$2.60 per gallon. Before the subsidy phase-out, gasoline was sold for about 40 cents per gallon.
- *Flights Curtailed*. Because of the decline in Iran's trade with European countries, KLM and Austria Airlines announced in January 2013 that they would end flights to Iran. However, Lufthansa, some other European airlines, and most airlines in the Persian Gulf, Middle East, and South Asia region still fly to Iran regularly.

Iran's Mitigation Efforts

Iran has attempted, although with limited success, to mitigate the economic effect of sanctions. Iran's 2013-2014 budget relies far less on oil exports than have previous budgets, and its exports of minerals, cement, urea fertilizer, and other agricultural and basic industrial goods are increasing substantially. Iran's exports of natural gas condensates, such as is used to refine into jet fuel, have doubled in 2013 from previous years, although the \$1.2 billion increase in the value of those exports does not nearly compensate for the loss of crude oil revenues. Iran's economy minister, in April 2013 interviews, said non-oil exports grew 20% in 2012 from the prior year. Iran's goods are relatively less expensive than previously because of the decline in value of its currency. The main customers for Iran's non-oil exports reportedly are countries in the immediate neighborhood, including Iraq, Afghanistan, Azerbaijan, Armenia, and others. Some argue that Iran might even benefit from sanctions over the long term by being compelled to diversify its economy and reduce dependence on oil revenues.

Iranian manufacturers have increased production of some goods that Iranians are buying as they cut back on purchases of imported goods. Some private funds are going into the Tehran stock

exchange and hard assets, such as property. However, many of these trends generally benefit the urban elite.

To conserve hard currency, Iran has reduced the supply of hard currency to importers of luxury goods, such as cars or cellphones (the last two of the government's 10 categories of imports, ranked by importance)—conserving its supply for the purchase of essential imports. Iranian importers of essential goods were able to obtain dollars at the official "reference" rate of 12,260 to the dollar, although the regime reportedly raised that rate to about 28,000 to the dollar in late June 2013—closer to the free market rate.

Effect on Energy Sector Long-Term Development

The United States and its partners are focused on sanctioning Iran's energy sector because it is still a pillar of Iran's economy. Even before U.N. and multilateral sanctions began to be imposed on Iran in 2006, Iran was having trouble maintaining production at a level of 4 mbd. Without foreign help, Iranian energy firms are unable to derive maximum yield from existing fields or efficiently and effectively develop new fields.

U.S. officials estimated in 2011 said that Iran has lost \$60 billion in investment in the sector as numerous major firms have either announced pullouts from some of their Iran projects, declined to make further investments, or resold their investments to other companies. It is therefore highly unlikely that Iran will attract the \$130 billion - \$145 billion in new investment by 2020 that Iran is estimated to need to keep oil production capacity from falling.⁷² Observers at key energy fields in Iran say there is little evidence of foreign investment activity and little new development activity sighted, as discussed in **Table 5**. However, the table also shows that some international firms remain invested in Iran's energy sector. Some of them have not been determined to have violated ISA and may still be under investigation by the State Department. As discussed above, some firms have been sanctioned, and others have avoided sanctions either through Administration waivers or invocation of the "special rule."

Others maintain that Iran's gas sector can compensate for declining oil exports, although Iran has used its gas development primarily to reinject into its oil fields rather than to export. Iran exports about 3.6 trillion cubic feet of gas, primarily to Turkey and Armenia. On the other hand, sanctions have rendered Iran unable to develop a liquefied natural gas (LNG) export business. EU sanctions have also derailed several gas ventures, including BP-NIOC joint venture in the Rhum gas field, 200 miles off the Scotland coast, and inclusion of Iran in planned gas pipeline projects to Europe.

There has been a concern that some of the investment void might be "backfilled," at least partly, by Asian firms such as those from China, Malaysia, Vietnam, and countries in Eastern Europe. However, as shown in **Table 5**, many such "backfilled" deals remain in preliminary stages or themselves stalled as investors reconsidered whether to risk U.S. sanctions. Some of the backfill that has occurred has been conducted by domestic companies, particularly those controlled or linked to the Revolutionary Guard (IRGC). Foreign firms are reluctant to partner with IRGC firms as international sanctions have increasingly targeted the IRGC. The energy companies still active in Iran, particularly the Iranian firms, are not as technically capable as the international firms that have withdrawn from Iran.

⁷² Khajehpour presentation at CSIS. Op. cit.

Date	Field/Project	Company(ies)/Status (If Known)	Value	Output/Goal
Feb.	Doroud (oil)	Total (France)/ENI (Italy)	\$1 billion	205,000 bpd
1999	(Energy Information Agency, Department of Energy, August 2006.)			
	Total and ENI exempted from sanctions on September 30 because of pledge to exit Iran market			
April	Balal (oil)	Total/ Bow Valley	\$300 million	40,000 bpd
1999	("Balal Field Development in Iran Completed," World Market Research Centre, May 17, 2004.)	(Canada)/ENI		
Nov.	Soroush and Nowruz (oil)	Royal Dutch Shell	\$800 million	190,000 bpd
1999	("News in Brief: Iran." <i>Middle East Economic</i> Digest, (MEED) January 24, 2003.)	(Netherlands)/Japex (Japan)		
	Royal Dutch exempted from sanctions on 9/30 because of pledge to exit Iran market			
April 2000		Norsk Hydro and Statoil	\$105 million	65,000
2000	Anaran bloc (oil)	(Norway) and Gazprom and Lukoil (Russia)		
	(MEED Special Report, December 16, 2005, pp. 48-50.)	No production to date; Statoil and Norsk have left project.		
July 2000	Phase 4 and 5, South Pars (gas)	ENI	\$1.9 billion	2 billion cu.
	(Petroleum Economist, December 1, 2004.)	Gas onstream as of Dec.		ft./day (cfd)
	ENI exempted 9/30 based on pledge to exit Iran market	2004		
March 2001	Caspian Sea oil exploration —construction of submersible drilling rig for Iranian partner	GVA Consultants (Sweden)	\$225 million	NA
	(IPR Strategic Business Information Database, March 11, 2001.)			
June	Darkhovin (oil)	ENI	\$1 billion	100,000 bpd
2001	("Darkhovin Production Doubles." Gulf Daily News, May I, 2008.) ENI told CRS in April 2010 it would close out all Iran operations by 2013.	Field in production		
	ENI exempted from sanctions on 9/30, as discussed above			
May 2002	Masjid-e-Soleyman (oil)	Sheer Energy (Canada)/China National Petroleum	\$80 million	25,000 bpd
	("CNPC Gains Upstream Foothold." MEED, September 3, 2004.)	Company (CNPC). Local partner is Naftgaran Engineering		
Sept.	Phase 9 + 10, South Pars (gas)	LG Engineering and	\$1.6 billion	2 billion cfd
2002	("OIEC Surpasses South Korean Company in South Pars." IPR Strategic Business Information Database, November 15, 2004.)	Construction Corp. (now known as GS Engineering and Construction Corp., South Korea)		

Table 5. Post-1999 Major Investments/Major Development Projectsin Iran's Energy Sector

Field/Project	Company(ies)/Status (If Known)	Value	Output/Goa
	On stream as of early 2009		
Phase 6, 7, 8, South Pars (gas)	Statoil (Norway)	\$750 million	3 billion cfd
(Source: Statoil, May 2011)			
Field began producing late 2008; operational control handed to NIOC in 2009. Statoil exempted from sanctions on 9/30/2010 after pledge to exit Iran market.			
Azadegan (oil)	Inpex (Japan) 10% stake.	\$200 million	260,000 bpd
("Japan Mulls Azadegan Options." APS Review Oil Market Trends, November 27, 2006.)	"north Azadegan" in Jan.	China \$1.76	
October 15, 2010: Inpex announced it would exit the project by selling its stake; "special rule" exempting it from ISA investigation invoked November 17, 2010.			
Tusan Block	Petrobras (Brazil)	\$178 million	No production
Oil found in block in Feb. 2009, but not in commercial quantity, according to the firm. ("Iran-Petrobras Operations." APS Review Gas Market Trends, April 6, 2009; "Brazil's Petrobras Sees Few Prospects for Iran Oil," (http://www.reuters.com/article/ idUSN0317110720090703.)			
Yadavaran (oil)	Sinopec (China), deal finalized Dec. 9, 2007	\$2 billion	300,000 bpd
Formal start of development of the field delayed. ("China Curbs Iran Energy Work," Reuters, September 2, 2011)			
Saveh bloc (oil)	PTT (Thailand)	?	?
GAO report, cited below			
Garmsar bloc (oil)	Sinopec (China)	\$20 million	?
Deal finalized in June 2009			
("China's Sinopec signs a deal to develop oil block in Iran—report," Forbes, 20 June 2009, http://www.forbes.com/feeds/afx/2006/06/20/ afx2829188.html.)			
Arak Refinery expansion	Sinopec (China); JGC (Japan). Work may have been taken	\$959 million (major initial	Expansion to produce
(GAO reports; Fimco FZE Machinery website; http://www.fimco.org/index.php?option= com_content&task=view&id=70&Itemid=78.)	over or continued by Hyundai Heavy Industries (S. Korea)	expansion; extent of Hyundai work unknown)	250,000 bpd
Khorramabad block (oil)	Norsk Hydro and Statoil	\$49 million	?
Seismic data gathered, but no production is planned. (Statoil factsheet, May 2011)	(Norway).		
North Pars Gas Field (offshore gas). Includes gas purchases	China National Offshore Oil Co.	\$16 billion	3.6 billion cfd
	 Phase 6, 7, 8, South Pars (gas) (Source: Statoil, May 2011) Field began producing late 2008; operational control handed to NIOC in 2009. Statoil exempted from sanctions on 9/30/2010 after pledge to exit Iran market. Azadegan (oil) ("Japan Mulls Azadegan Options." APS Review Oil Market Trends, November 27, 2006.) October 15, 2010: Inpex announced it would exit the project by selling its stake; "special rule" exempting it from ISA investigation invoked November 17, 2010. Tusan Block Oil found in block in Feb. 2009, but not in commercial quantity, according to the firm. ("Iran-Petrobras Operations." APS Review Gas Market Trends, April 6, 2009; "Brazil's Petrobras Sees Few Prospects for Iran Oil," (http://www.reuters.com/article/ idUSN0317110720090703.) Yadavaran (oil) Formal start of development of the field delayed. ("China Curbs Iran Energy Work," Reuters, September 2, 2011) Saveh bloc (oil) GAO report, cited below Garmsar bloc (oil) Deal finalized in June 2009 ("China's Sinopec signs a deal to develop oil block in Iran—report," Forbes, 20 June 2009, http://www.forbes.com/feeds/afx/2006/06/20/ afx2829188.html.) Arak Refinery expansion (GAO reports; Finco FZE Machinery website; http://www.finco.org/index.php?option=com_content&task=view&id=70&ltemid=78.) Khorramabad block (oil) Seismic data gathered, but no production is planned. (Statoil factsheet, May 2011) North Pars Gas Field (offshore gas). Includes 	Field/Project(If Known)Phase 6, 7, 8, South Pars (gas)On stream as of early 2009(Source: Statoil, May 2011)Statoil (Norway)Field began producing late 2008; operational control handed to NIOC in 2009. Statoil exempted from sanctions on 9/30/2010 after pledge to exit Iran market.Inpex (japan) 10% stake. CNPC agreed to develop "north Azadegan" in Jan. 2009Azadegan (oil)(''Japan Mulis Azadegan Options." APS Review Oil Market Trends, November 27, 2006.)Inpex (japan) 10% stake. CNPC agreed to develop "north Azadegan" in Jan. 2009October 15, 2010: Inpex announced it would exit the project by selling its stake: "special rule" exempting it from ISA investigation invoked November 17, 2010.Petrobras (Brazil)Tusan BlockPetrobras (Brazil)Oil found in block in Feb. 2009; but not in commercial quantity, according to the firm. ("Iran-Petrobras Operations." APS Review Gas Market Trends, April 6, 2009; "Brazil's Petrobras Sees Few Prospects for Iran Oil," (Ittp://www.reuters.com/article/ idUSN0317110720090703.)Sinopec (China), deal finalized Dec. 9, 2007Yadavaran (oil)Sinopec (China), deal finalized Dec. 9, 2007Gormsar bloc (oil)PTT (Thailand)GAO report, cited belowSinopec (China)Garmsar bloc (oil)Sinopec (China): JGC (japan). Work may have been taken over or continued by Hyundai Heavy Industries (S. Korea)Arak Refinery expansion (GAO reports; Fimco FZE Machinery website; http://www.fimco.org/index.php2ption= com_content&task-view&id=70<emid=78.)Sinopec (China): JGC (japan). Work may have been taken over or continued by Hyundai Heavy Industries (S. K	Field/Project(ff Known)ValuePhase 6, 7, 8, South Pars (gas) (Source: Statoil, May 2011)On stream as of early 2009 Statoil (Norway)\$750 millionField began producing late 2008; operational cortor handed to NIVCC in 2009, Statoil exempted from sanctions on 9/30/2010 after pledge to exit Iran market.Inpex (Japan) 10% stake. CNPC agreed to develop "north Pars Gas Topions." APS Review Oil Market Trends, November 27, 2006.)Inpex (Japan) 10% stake. CNPC agreed to develop "north Pars Gas Field (offshore gas).\$200 million (Inpex stake); China \$1.76 billionOctober 15, 2010; Inpex announced it would exit the project by selling its stake. "special rule" exempting if from ISA investigation invoked November 17, 2010.Petrobras (Brazil)\$178 millionOil found in block in Feb. 2009, but not in commercial quantity, according to the firm. ("Iran-Pertobras Operations." APS Review Gas Market Trends, April 6, 2009; "Brazil's Petrobras Sees Few Prospects for Iran OIL" (Intp://www.netures.com/article/ idUSN0317110720090703.)Sinopec (China), deal finalized Dec. 9, 2007\$2 billionFormal start of development of the field delayed. ("China Sinopec signs a deal to develop oil block in Iran-rept." Forbes, 20 June 2009, http://www.forbes.com/feeds/afx/2006/06/20/ afx2829188.html.)Sinopec (China); JGC (Japan). Work may have been taken over or continuelly Hyundai Work may have been taken or or continuelly Hyundai Work may have been taken or or continuelly Hyundai Work may have been taken or or continuelly Hyundai Work Mork may have been taken (Korea)\$959 millionGAO reports; Firmco FZE Machinery website; http://www.firmco.org/index.php?option= com_content&

Date	Field/Project	Company(ies)/Status (If Known)	Value	Output/Goa
	early-mid 2011. ("China Curbs Iran Energy Work" Reuters, September 2, 2011)			
Feb.	LNG Tanks at Tombak Port	Daelim (S. Korea)	\$320 million	200,000 ton
2007	Contract to build three LNG tanks at Tombak, 30 miles north of Assaluyeh Port.			capacity
	(May not constitute "investment" as defined in pre-2010 version of ISA, because that definition did not specify LNG as "petroleum resource" of Iran.)			
	"Central Bank Approves \$900 Million for Iran LNG Project." Tehran Times, June 13, 2009.			
Feb.	Phase 13, 14—South Pars (gas)	Royal Dutch Shell, Repsol	\$4.3 billion	?
2007	Deadline to finalize as May 20, 2009, apparently not met; firms submitted revised proposals to Iran in June 2009. (http://www.rigzone.com/news/ article.asp?a_id=77040&hmpn=1.)	(Spain)		
	State Department said on September 30, 2010, that Royal Dutch Shell and Repsol will not pursue this project any further			
March	Esfahan refinery upgrade	Daelim (S. Korea)		NA
2007	("Daelim, Others to Upgrade Iran's Esfahan Refinery." <i>Chemical News and Intelligenc</i> e, March 19, 2007.)			
July 2007	Phase 22, 23, 24—South Pars (gas)	Turkish Petroleum Company	\$12. billion	2 billion cfd
	Pipeline to transport Iranian gas to Turkey, and on to Europe and building three power plants in Iran. Contract not finalized to date.	(TPAO)		
Dec. 2007	Golshan and Ferdowsi onshore and offshore gas and oil fields and LNG plant	Petrofield Subsidiary of SKS Ventures (Malaysia)	\$15 billion	3.4 billion cfd of gas/250,000
	contract modified but reaffirmed December 2008			bpd of oil
	(GAO report; Oil Daily, January 14, 2008.)			
2007	Jofeir Field (oil)	Belarusneft (Belarus) under	\$500 million	40,000 bpd
(unspec.)	GAO report cited below. Belarusneft, a subsidiary of Belneftekhim, sanctioned under ISA on March 29, 2011. Naftiran sanctioned on September 29, 2010, for this and other activities.	contract to Naftiran. No production to date		
2008	Dayyer Bloc (Persian Gulf, offshore, oil)	Edison (Italy)	\$44 million	?
	GAO report cited below			
Feb.	Lavan field (offshore natural gas)	PGNiG (Polish Oil and Gas	\$2 billion	
2008	GAO report cited below invested. PGNiG invested, but delays caused Iran to void PGNiG contract in December 2011. Project to be implemented by Iranian firms. (Fars News, December 20, 2011)	Company, Poland)		

Date	Field/Project	Company(ies)/Status (If Known)	Value	Output/Goal
March	Danan Field (on-shore oil)	Petro Vietnam Exploration	?	?
2008	"PVEP Wins Bid to Develop Danan Field." Iran Press TV, March 11, 2008	and Production Co. (Vietnam)		
April	Iran's Kish gas field	Oman (co-financing of	\$7 billion	I billion cfd
2008	Includes pipeline from Iran to Oman	project)		
	(http://www.presstv.ir/detail.aspx?id=112062& sectionid=351020103.)			
April 2008	Moghan 2 (onshore oil and gas, Ardebil province)	INA (Croatia)	\$40-\$140 million	?
	GAO report cited below		(dispute over size)	
-	Kermanshah petrochemical plant (new construction)	Uhde (Germany)		300,000 metric tons/yr
	GAO report cited below			
June	Resalat Oilfield	Amona (Malaysia). Joined in	\$1.5 billion	47,000 bpd
2008	(Fars News Agency, June 16, 2008)	June 2009 by CNOOC and another China firm, COSL.		
	Status of work unclear			
January	"North Azadegan"	CNPC (China)	\$1.75 billion	75,000 bpd
2009	(Chinadaily.com. "CNPC to Develop Azadegan Oilfield," http://www.chinadaily.com.cn/bizchina/ 2009-01/16/content_7403699.htm.)			
January	Bushehr Polymer Plants	Sasol (South Africa)	?	Capacity is one million tons per year. Products are
2009	Production of polyethelene at two polymer plants in Bushehr Province.			
	Sasol reported by GAO in December 2012 to be divesting the venture.			exported from Iran.
March 2009	Phase 12 South Pars (gas) —Incl. LNG terminal construction and Farsi Block gas field/Farzad-B bloc.	Taken over by Indian firms (ONGC Videsh, Oil India Ltd., India Oil Corp. Ltd. in	\$8 billion from Indian firms/\$1.5	20 million tonnes of LNG annually by
	Project stalled due to sanctions; Indian firms have told GAO that no agreements were reached and no work is being pursued.	2007); may also include minor stakes by Sonanagol (Angola) and PDVSA (Venezuela)	billion Sonangol/\$780 million PDVSA	2012
	("Noose Tightens Around Iran Oil." Washington Post, March 6, 2012; GAO-13-173R Iran Energy Sector.)			
August	Abadan refinery	Sinopec	up to \$6	
2009	Upgrade and expansion; building a new refinery at Hormuz on the Persian Gulf coast		billion if new refinery is built	

Date	Field/Project	Company(ies)/Status (If Known)	Value	Output/Goal
Oct. 2009	South Pars Gas Field—Phases 6-8, Gas Sweetening Plant	G and S Engineering and Construction (South Korea)	\$1.4 billion	
	CRS conversation with Embassy of S. Korea in Washington, D.C, July 2010			
	Contract signed but then abrogated by S. Korean firm			
Nov.	South Pars: Phase I2—Part 2 and Part 3	Daelim (S. Korea)—Part 2; Tecnimont (Italy)—Part 3	\$4 billion (\$2	
2009	("Italy, South Korea To Develop South Pars Phase 12." Press TV (Iran), November 3, 2009, http://www.presstv.com/pop/Print/?id=110308.)		bn each part)	
Feb.	South Pars: Phase I I	CNPC (China)	\$4.7 billion	
2010	Drilling was to begin in March 2010, but CNPC pulled out in October 2012. (Economist Intelligence Unit "Oil Sanctions on Iran: Cracking Under Pressure." 2012)			
2011	Azar Gas Field	Gazprom (Russia)		
	Gazprom contract voided in late 2011 by Iran due to Gazprom's unspecified failure to fulfill its commitments.			
Dec.	Zagheh Oil Field	Tatneft (Russia)	\$1 billion	55,000 barrels
2011	Preliminary deal signed December 18, 2011(Associated Press, December 18, 2011)			per day within five years

Sources: As noted in table, as well as CRS conversations with officials of the State Department Bureau of Economics, and officials of embassies of the parent government of some of the listed companies (2005-2009). Some information comes from various GAO reports, the latest of which was updated on December 7, 2012, in GAO-13-173R. "Iran Energy Sector"

Note: CRS has neither the mandate, the authority, nor the means to determine which of these projects, if any, might constitute a violation of the Iran Sanctions Act. CRS has no way to confirm the precise status of any of the announced investments; some investments may have been resold to other firms or terms altered since agreement. In virtually all cases, such investments and contracts represent private agreements between Iran and its instruments and the investing firms, and firms are not necessarily required to confirm or publicly release the terms of their arrangements with Iran. Reported \$20 million+ investments in oil and gas fields, refinery upgrades, and major project leadership are included in this table. Responsibility for a project to develop Iran's energy sector is part of ISA investment definition.

Effect on Gasoline Availability and Importation

In March 2010, well before the enactment of CISADA on July 1, 2010, several gas suppliers to Iran, anticipating this legislation, announced that they had stopped or would stop supplying gasoline to Iran.⁷³ Others have ceased since the enactment of CISADA. Some observers say that gasoline deliveries to Iran fell from about 120,000 barrels per day before CISADA to about 30,000 barrels per day immediately thereafter, although importation later increased to about 50,000 barrels per day. Some gasoline sellers who were already sanctioned for this activity (see above), as well as others, appear to be selling to Iran. There have been no significant gasoline

⁷³ Information in this section derived from Javier Blas, "Traders Cut Iran Petrol Line," *Financial Times*, March 8, 2010.

shortages, either before or after CISADA was enacted. The phaseout of gasoline subsidies discussed above has further reduced demand for gasoline. Iran has also increased domestic production by converting at least two petrochemical plants to gasoline production, and it is accelerating renovations and other improvements to existing gasoline refineries.

The main suppliers to Iran prior to the CISADA sanctions, according to the GAO, are listed below, and most have stopped such sales, although some reports say that partners or affiliates of these firms may still sell to Iran in cases where the corporate headquarters have announced a halt. As noted in a *New York Times* report of March 7, 2010,⁷⁴ and a Government Accountability Office study released September 3, 2010,⁷⁵ some firms that have supplied Iran have received U.S. credit guarantees or contracts.

Table 6. Firms That Sold or Are Selling Gasoline to Iran

Vitol of Switzerland (notified GAO it stopped selling to Iran in early 2010)

Trafigura of Switzerland (notified GAO it stopped selling to Iran in November 2009)

Glencore of Switzerland (notified GAO it stopped selling in September 2009)

Total of France (notified GAO it stopped sales to Iran in May 2010)

Reliance Industries of India (notified GAO it stopped sales to Iran in May 2009)

Petronas of Malaysia (said on April 15, 2010, it had stopped sales to Iran)⁷⁶

Lukoil of Russia (reported to have ended sales to Iran in April 2010,⁷⁷ although some reports continue that Lukoil affiliates are supplying Iran)

Royal Dutch Shell of the Netherlands (notified GAO it stopped sales in October 2009)

Kuwait's Independent Petroleum Group (told U.S. officials it stopped selling gasoline to Iran as of September 2010)⁷⁸

Tupras of Turkey (stopped selling to Iran as of May 2011, according to the State Department)

British Petroleum of United Kingdom, Shell, Q8, Total, and OMV are no longer selling aviation fuel to Iran Air, according to U.S. State Department officials on May 24, 2011

A UAE firm, Golden Crown Petroleum FZE, told the author in April 2011 that, as of June 29, 2010, it no longer leases vessels for the purpose of shipping petroleum products from or through Iran

Munich Re, Allianz, Hannover Re (Germany) were providing insurance and re-insurance for gasoline shipments to Iran. However, they reportedly have exited the market for insuring gasoline shipments for Iran⁷⁹

Lloyd's (Britain). The major insurer had been the main company insuring Iranian gas (and other) shipping, but reportedly ended that business in July 2010. According to the State Department, key shipping associations have created clauses in their contracts that enable ship owners to refuse to deliver gasoline to Iran.

According to the State Department on May 24, 2011, Linde of Germany said it had stopped supplying gas liquefaction technology to Iran, contributing to Iran's decision to suspend its LNG program.

⁷⁴ Jo Becker and Ron Nixon, "U.S. Enriches Companies Defying Its Policy on Iran," New York Times, March 7, 2010.

⁷⁵ GAO-10-967R, Exporters of Refined Petroleum Products to Iran, September 3, 2010.

⁷⁶ http://www.ft.com/cms/s/0/009370f0-486e-11df-9a5d-00144feab49a.html.

⁷⁷ http://www.defenddemocracy.org/index.php?option=com_content&task=view&id=11788115&Itemid=105.

⁷⁸ http://www.defenddemocracy.org/index.php?option=com_content&task=view&id=11788115&Itemid=105.

⁷⁹ http://www.defenddemocracy.org/index.php?option=com_content&task=view&id=11788115&Itemid=105.

Some of the firms sanctioned by the Administration on May 24, 2011 (discussed above), may still be providing service to Iran, including: PCCI (Jersey/Iran); Associated Shipbroking (Monaco); and Petroleos de Venezuela (Venezuela). Tanker Pacific representatives told the author in January 2013 that the firm had stopped dealing with Iran in April 2010 but may have been deceived by IRISL into a transaction with Iran after that time.

Zhuhai Zhenrong, Unipec, and China Oil of China. Zhuhai Zhenrong may still be selling gasoline to Iran despite being sanctioned, according to the GAO report of December 7, 2012. (GAO-13-173R Iran Energy Sector/

Emirates National Oil Company of UAE has been reported by GAO to still be selling to Iran. Three other UAE energy traders, FAL, Royal Oyster Group, and Speedy Ship (UAE/Iran) may still be selling even though they were sanctioned as discussed above.

Hin Leong Trading of Singapore may still be selling gasoline to Iran, as might Kuo Oil of Singapore even though it was sanctioned as discussed earlier.

Some refiners in Bahrain reportedly may still be selling gasoline to Iran.

Source: CRS conversations with various firms, GAO reports, various press reports.

Humanitarian Effects/Air Safety

The effects of sanctions on the population's living standards were discussed above. Some Iranian pilots have begun to complain publicly and stridently that U.S. sanctions are causing Iran's passenger airline fleet to deteriorate to the point of jeopardizing safety. Since the U.S. trade ban was imposed in 1995, 1,700 passengers and crew of Iranian aircraft have been killed in air accidents, although it is not clear how many of the crashes, if any, were due specifically to the difficultly in providing U.S. spare parts to Iran's fleet.⁸⁰ Some reports in early January 2013 indicate that Iran's domestic airlines were compelled to cancel flights because fuel suppliers began demanding cash rather than credit—although this development is not necessarily a threat to air safety. Other reports say that pollution in Tehran and other big cities has worsened because Iran is making gasoline itself with methods that cause more impurities than imported gasoline.

Press reports have mounted since mid-2012 that sanctions are hurting the population's ability to obtain Western-made medicines, such as expensive chemo-therapy medicines, and other critical goods. Some of the scarcity is caused by banks' refusal to finance such sales, even though doing so is technically allowed under all applicable sanctions. Some believe that a proliferation of press reports about such deprivations is changing the focus about Iran sanctions from Iran's non-compliance to the suffering of the Iranian public, and thereby causing growing opposition in Europe and elsewhere to increasing sanctions on Iran. Iran's only female minister, Minister of Health Marzieh Vahid Dastjerdi, was dismissed in December 2012 for openly criticizing the government for failing to provide her ministry with sufficient hard currency to buy needed medicines abroad.

Some observers say the Iranian government is exaggerating reports of medicine shortages to generate opposition to the sanctions. Other accounts say that Iranians, particularly those with connections to the government, are taking advantage of medicine shortages by cornering the market for importing key medicines. Some human rights and other groups are attempting to formulate potential solutions that would ease the medicine import situation.

⁸⁰ Thomas Erdbink, "Iran's Aging Airliner Fleet Seen As Faltering Under U.S. Sanctions," July 14, 2012.

Possible Additional Sanctions

Even though international sanctions are now comprehensive, some experts believe that additional pressure is needed to convince Iranian leaders that they must negotiate curbs on Iran's nuclear enrichment program. The Iran sanctions legislation and executive orders during the 112th Congress were discussed above. On February 27, 2013, H.R. 850, the Nuclear Iran Prevention Act of 2013 was introduced by the chairman and ranking Member of the House Foreign Affairs Committee. An amended version was marked up by the committee on May 22, 2013, and the bill passed the House by a vote of 400-20 (1 present) on July 31, 2013. Its major provisions are the following:

- It expands the proportion of the Iranian economy for which transactions are sanctionable (under IFCA; P.L. 112-239) to include the automotive and mining sectors.
- It would require those countries that have exemptions allowing them to pay Iran's Central Bank for oil to accelerate their Iran oil import reductions to an aggregate cut of an additional 1 million barrels per day within one year of enactment. Countries that do not "dramatically reduce" their Iran oil buys would lose their exemptions.
- It authorizes, but does not a mandate, sanctions for conducting financial transaction with Iran's Central Bank or other sanctioned Iranian banks for trade with Iran in any goods.
- It would sanction foreign banks that help Iran exchange its foreign currency abroad—a provision identical to S. 892 (introduced on May 8, 2013)
- It would require the Administration to determine whether the Revolutionary Guard should be named a Foreign Terrorist Organization.

Another bill, H.R. 893, the Iran, North Korea, and Syria Non-Proliferation Act, has been introduced in the 113th Congress; it is primarily an update of an earlier law, discussed above, of virtually the same name. It contains a new provision that would mandate barring ships from porting in the United States if they had ported in Iran recently. During testimony before the Senate Foreign Relations Committee on April 18, 2013, Secretary of State John Kerry appealed for maximum flexibility from Congress to allow the Administration to pursue a nuclear deal with Iran—a statement that appeared to signal concerns about new Iran sanctions legislation. A total of 118 House members signed a bipartisan letter to President Obama in mid-July that appeared to suggest postponing any new sanctions on Iran until the professed moderation of Hassan Rouhani could be assessed. However, even most Members who signed still voted for H.R. 850. And, 76 Senators signed an August 2, 2013, letter to President Obama urging a strengthening of sanctions at the same time as the United States explores diplomacy with Rouhani on the nuclear issue. Some press reports indicate that the Senate might delay considering a version of H.R. 850 in order not to risk undermining Rouhani's asserted willingness to resolve the nuclear issue.

Other Possible U.S. and International Sanctions

There are a number of other possible sanctions that might possibly receive consideration—either in a global or multilateral framework—by the 113th Congress.

- Sanctioning All Trade with Iran. Some organizations, such as United Against Nuclear Iran, advocate sanctions against virtually all trade with Iran, with exceptions for food and medical products. The concept of a global trade ban on Iran has virtually no support in the United Nations Security Council, and U.S. allies strongly oppose U.S. measures that would compel allied firms to end commerce with Iran in purely civilian, non-strategic goods.
- Comprehensive Ban on Energy Transactions with Iran. Many experts believe that a highly effective sanction would be a U.N.-mandated, worldwide embargo on the purchase of any Iranian crude oil. There are no indications that such a concept has enough support in the U.N. Security Council to achieve adoption. U.S. laws and executive orders discussed above come close to constituting a U.S. unilateral move to compel a ban on Iranian oil buys, but they allow exceptions, as noted. Some advocate a U.N. Security Council ban on all investment in and equipment sales to Iran's energy sector so that countries such as China would be compelled to end all dealings with that Iranian sector. During the 1990s, U.N. sanctions against Libya for the Pan Am 103 bombing banned the sale of energy equipment to Libya.
- *Iran Oil Free Zone.* Prior to the EU oil embargo on Iran, there was discussion of forcing a similar result by closing the loophole in the U.S. trade ban under which Iranian crude oil, when mixed with other countries' oils at foreign refineries in Europe and elsewhere, can be imported as refined product. Some argue this concept has been mooted by the EU oil embargo, while others say the step still has value in making sure the EU oil embargo on Iran is not lifted or modified.
- *Mandating Reductions in Diplomatic Exchanges with Iran or Prohibiting Travel by Iranian Officials.* Some have suggested that the United States organize a worldwide ban on travel by senior Iranian civilian officials, a pullout of all diplomatic missions in Tehran, and explusion of Iranian diplomats worldwide. The EU came one close to adopting this option after the November 29, 2011 attack on the British Embassy in Tehran. Canada closed its embassy in Tehran in September 2012.
- *Barring Iran from International Sporting Events*. A further option is to limit sports or cultural exchanges with Iran, such as Iran's participation in the World Cup soccer tournament. However, many experts oppose using sporting events to accomplish political goals.
- Sanctioning Iranian Profiteers and Corruption. Some experts believe that, despite the provision of P.L. 112-239 discussed earlier, the United States and international community has not effectively targeted for sanctions Iranians who are exercising special rights, monopolies, or political contacts for personal gain, and depriving average Iranians of economic opportunity and of goods at reasonable prices. Others believe that human rights sanctions should be extended to Iranian officials who are responsible for depriving Iranian women and other groups of internationally-accepted rights.
- *Banning Passenger Flights to and from Iran.* Bans on flights to and from Libya were imposed on that country in response to the finding that its agents were responsible for the December 21, 1988, bombing of Pan Am 103 (now lifted). There are no indications that a passenger aircraft flight ban is under consideration among the P5+1. A variation of this idea could be the imposition of sanctions

against airlines that are in joint ventures or codeshare arrangements with Iranian airlines.

- *Limiting Lending to Iran by International Financial Institutions*. Resolution 1747 calls for restraint on but does not outright ban international lending to Iran. An option is to make a ban on such lending mandatory. Some U.S. groups have called for the International Monetary Fund (IMF) to withdraw all its holdings in Iran's Central Bank and suspend Iran's membership in the body.
- *Banning Trade Financing or Official Insurance for Trade Financing*. Another option is to mandate a worldwide ban on official trade credit guarantees. This was not mandated by Resolution 1929, but several countries imposed this sanction subsequently. A ban on investment in Iranian bonds reportedly was considered but deleted to attract China and Russia's support.
- *Restricting Operations of and Insurance for Iranian Shipping.* One option, reportedly long under consideration, has been a worldwide ban on provision of insurance or reinsurance for any shipping to or from Iran. A call for restraint is in Resolution 1929, but is not mandatory. As of July 1, 2012, the EU has banned such insurance, and many of the world's major insurers are in Europe.

Sanctions Easing/Incentives

Some believe that the United States and its international partners need to prepare for possibly easing sanctions if a deal on the Iran nuclear issue is reached. During the rounds of talks with Iran in 2012 the P5+1 have offered, in exchange for proposed curbs on Iranian uranium enrichment, steps to ease sanctions that fall well short of Iranian demands. Rouhani has not dropped Iran's demands for sanctions easing, although he appears more willing than his predecessor to offer significant concessions to obtain that easing. Some U.S. sanctions have been enacted into law and, as noted throughout this paper, almost all U.S. sanctions provisions provide the President with waiver authority. Some laws have specific termination criteria, but most do not. Those sanctions that have been imposed by executive order (under the International Emergency Economic Powers Act, IEEPA, and other authorities) could be eased by a superseding order. As noted, most sanctions laws give the Administration flexibility to determinations sanctions violations.

Some observers believe Congress, in legislation, should spell out specific sanctions laws that would be altered if Iran were to meet international nuclear demands. Other observers believe that the international community should offer incentives—such as promises of aid, investment, trade preferences, and other benefits—if Iran were to completely abandon uranium enrichment in Iran or were there to be a new regime formed in Iran. Still others believe that the United States should take steps to identify sources of funds for humanitarian shipments to Iran of needed medicines that reportedly are in short supply.

Table 7. Entities Sanctioned Under U.N. Resolutions andU.S. Laws and Executive Orders

(Persons listed are identified by the positions they held when designated; some have since changed.)

Entities Named for Sanctions Under Resolution 1737

Atomic Energy Organization of Iran (AEIO) Mesbah Energy Company (Arak supplier); Kalaye Electric (Natanz supplier); Pars Trash Company (centrifuge program); Farayand Technique (centrifuge program); Defense Industries Organization (DIO); 7th of Tir (DIO subordinate); Shahid Hemmat Industrial Group (SHIG)—missile program; Shahid Bagheri Industrial Group (SBIG)—missile program; Fajr Industrial Group (missile program); Mohammad Qanadi, AEIO Vice President; Behman Asgarpour (Arak manager); Ehsan Monajemi (Natanz construction manager); Jafar Mohammadi (Adviser to AEIO); Gen. Hosein Salimi (Commander, IRGC Air Force); Dawood Agha Jani (Natanz official); Ali Hajinia Leilabadi (director of Mesbah Energy) ; Lt. Gen. Mohammad Mehdi Nejad Nouri (Malak Ashtar University of Defence Technology rector); Bahmanyar Morteza Bahmanyar (AIO official); Reza Gholi Esmaeli (AIO official); Ahmad Vahid Dastjerdi (head of Aerospace Industries Org., AIO); Maj. Gen. Yahya Rahim Safavi (Commander in Chief, IRGC)

Entities/Persons Added by Resolution 1747

Ammunition and Metallurgy Industries Group (controls 7th of Tir); Parchin Chemical Industries (branch of DIO); Karaj Nuclear Research Center; Novin Energy Company; Cruise Missile Industry Group; Sanam Industrial Group (subordinate to AIO); Ya Mahdi Industries Group; Kavoshyar Company (subsidiary of AEIO); Sho'a Aviation (produces IRGC light aircraft for asymmetric warfare); Bank Sepah (funds AIO and subordinate entities); Esfahan Nuclear Fuel Research and Production Center and Esfahan Nuclear Technology Center; Qods Aeronautics Industries (produces UAV's, para-gliders for IRGC asymmetric warfare); Pars Aviation Services Company (maintains IRGC Air Force equipment); Gen. Mohammad Baqr Zolqadr (IRGC officer serving as deputy Interior Minister; Brig. Gen. Qasem Soleimani (Qods Force commander); Fereidoun Abbasi-Davani (senior defense scientist); Mohasen Fakrizadeh-Mahabai (defense scientist); Seyed Jaber Safdari (Natanz manager); Mohsen Hojati (head of Fajr Industrial Group); Ahmad Derakshandeh (head of Bank Sepah); Brig. Gen. Mohammad Reza Zahedi (IRGC ground forces commander); Amir Rahimi (head of Esfahan nuclear facilities); Mehrdada Akhlaghi Ketabachi (head of SBIG); Naser Maleki (head of SHIG); Brig. Gen. Morteza Reza'i (Deputy commander-in-chief, IRGC); Vice Admiral Ali Akbar Ahmadiyan (chief of IRGC Joint Staff); Brig. Gen. Mohammad Hejazi (Basij commander)

Entities Added by Resolution 1803

Thirteen Iranians named in Annex I to Resolution 1803; all reputedly involved in various aspects of nuclear program. Bans travel for five named Iranians.

Electro Sanam Co.; Abzar Boresh Kaveh Co. (centrifuge production) ; Barzaganin Tejaral Tavanmad Saccal; Jabber Ibn Hayan; Khorasan Metallurgy Industries; Niru Battery Manufacturing Co. (Makes batteries for Iranian military and missile systems); Ettehad Technical Group (AIO front co.); Industrial Factories of Precision; Joza Industrial Co.; Pshgam (Pioneer) Energy Industries; Tamas Co. (involved in uranium enrichment); Safety Equipment Procurement (AIO front, involved in missiles)

Entities Added by Resolution 1929

Over 40 entities added; makes mandatory a previously nonbinding travel ban on most named Iranians of previous resolutions. Adds one individual banned for travel—AEIO head Javad Rahiqi

Amin Industrial Complex; Armament Industries Group; Defense Technology and Science Research Center (owned or controlled by Ministry of Defense); Doostan International Company; Farasakht Industries; First East Export Bank, PLC (only bank added by Resolution 1929); Kaveh Cutting Tools Company; M. Babaie Industries; Malek Ashtar University (subordinate of Defense Technology and Science Research Center, above); Ministry of Defense Logistics Export (sells Iranian made arms to customers worldwide); Mizan Machinery Manufacturing; Modern Industries Technique Company; Nuclear Research Center for Agriculture and Medicine (research component of the AEIO); Pejman Industrial Services Corp.; Sabalan Company; Sahand Aluminum Parts Industrial Company; Shahid Karrazi Industries; Shahid Sattari Industries; Shahid Sayyade Shirazi Industries (acts on behalf of the DIO); Special Industries Group (another subordinate of DIO); Tiz Pars (cover name for SHIG); Yazd Metallurgy Industries

The following Revolutionary Guard affiliated firms (several are subsidiaries of Khatam ol-Anbiya, the main Guard construction affiliate): Fater Institute; Garaghe Sazendegi Ghaem; Gorb Karbala; Gorb Nooh ; Hara Company; Imensazan Consultant Engineers Institute; Khatam ol-Anbiya; Makin; Omran Sahel; Oriental Oil Kish; Rah Sahel; Rahab Engineering Institute; Sahel Consultant Engineers; Sepanir; Sepasad Engineering Company

The following entities owned or controlled by Islamic Republic of Iran Shipping Lines (IRISL): Irano Hind Shipping

Entities Designated Under U.S. Executive Order 13382 (many designations coincident with designations under U.N. resolutions)

Entity	Date Named
Shahid Hemmat Industrial Group (Iran)	June 2005, September 2007
Shahid Bakeri Industrial Group (Iran)	June 2005, February 2009
Atomic Energy Organization of Iran	June 2005
Novin Energy Company (Iran) and Mesbah Energy Company (Iran)	January 2006
Four Chinese entities: Beijing Alite Technologies, LIMMT Economic and Trading Company, China Great Wall Industry Corp, and China National Precision Machinery Import/Export Corp.	June 2006
Sanam Industrial Group (Iran) and Ya Mahdi Industries Group (Iran)	July 2006
Bank Sepah (Iran)	January 2007
Defense Industries Organization (Iran)	March 2007
June 2007	

Pars Trash (Iran, nuclear program); Farayand Technique (Iran, nuclear program); Fajr Industries Group (Iran, missile program); Mizan Machine Manufacturing Group (Iran, missile prog.)

Aerospace Industries Organization (AIO) (Iran)	September 2007
Korea Mining and Development Corp. (N. Korea)	September 2007

October 21, 2007

Islamic Revolutionary Guard Corps (IRGC)

Ministry of Defense and Armed Forces Logistics

Bank Melli (Iran's largest bank, widely used by Guard); Bank Melli Iran Zao (Moscow); Melli Bank PC (U.K.)

Bank Kargoshaee

Arian Bank (joint venture between Melli and Bank Saderat). Based in Afghanistan

Bank Mellat (provides banking services to Iran's nuclear sector); Mellat Bank SB CJSC (Armenia). Reportedly has \$1.4 billion in assets in UAE

Persia International Bank PLC (U.K.)

Khatam ol Anbiya Gharargah Sazendegi Nooh (main IRGC construction and contracting arm, with \$7 billion in oil, gas deals)

Oriental Oil Kish (Iranian oil exploration firm)

Ghorb Karbala; Ghorb Nooh (synonymous with Khatam ol Anbiya)

Sepasad Engineering Company (Guard construction affiliate)

Omran Sahel (Guard construction affiliate)

Sahel Consultant Engineering (Guard construction affiliate)

Hara Company

Gharargahe Sazandegi Ghaem

Bahmanyar Morteza Bahmanyar (AIO, Iran missile official, see above under Resolution 1737)

Ahmad Vahid Dastjerdi (AIO head, Iran missile program)

Reza Gholi Esmaeli (AIO, see under Resolution 1737)

Morteza Reza'i (deputy commander, IRGC) See also Resolution 1747

Mohammad Hejazi (Basij commander). Also, Resolution 1747

Ali Akbar Ahmadian (Chief of IRGC Joint Staff). Resolution 1747

Hosein Salimi (IRGC Air Force commander). Resolution 1737

Qasem Soleimani (Qods Force commander). Resolution 1747

Future Bank (Bahrain-based but allegedly controlled by Bank Melli)

March 12, 2008

July 8, 2008

Yahya Rahim Safavi (former IRGC Commander in Chief); Mohsen Fakrizadeh-Mahabadi (senior Defense Ministry scientist); Dawood Agha-Jani (head of Natanz enrichment site); Mohsen Hojati (head of Fajr Industries, involved in missile program); Mehrdada Akhlaghi Ketabachi (heads Shahid Bakeri Industrial Group); Naser Maliki (heads Shahid Hemmat Industrial Group); Tamas Company (involved in uranium enrichment); Shahid Sattari Industries (makes equipment for Shahid Bakeri); 7th of Tir (involved in developing centrifuge technology); Ammunition and Metallurgy Industries Group (partner of 7th of Tir); Parchin Chemical Industries (deals in chemicals used in ballistic missile programs)

August 12, 2008

Karaj Nuclear Research Center; Esfahan Nuclear Fuel Research and Production Center (NFRPC) ; Jabber Ibn Hayyan (reports to Atomic Energy Org. of Iran, AEIO); Safety Equipment Procurement Company; Joza Industrial Company (front company for Shahid Hemmat Industrial Group, SHIG)

September 10, 2008

Islamic Republic of Iran Shipping Lines (IRISL) and 18 affiliates, including Val Fajr 8; Kazar; Irinvestship; Shipping Computer Services; Iran o Misr Shipping; Iran o Hind; IRISL Marine Services; Iriatal Shipping; South Shipping; IRISL Multimodal; Oasis; IRISL Europe; IRISL Benelux; IRISL China; Asia Marine Network; CISCO Shipping; and IRISL Malta

September 17, 2008

Firms affiliated to the Ministry of Defense, including Armament Industries Group; Farasakht Industries; Iran Aircraft Manufacturing Industrial Co.; Iran Communications Industries; Iran Electronics Industries; and Shiraz Electronics Industries

October 22, 2008

Export Development Bank of Iran (EDBI). Provides financial services to Iran's Ministry of Defense and Armed Forces Logistics

Banco Internacional de Desarollo, C.A., Venezuelan-based Iranian bank, sanctioned as an affiliate of the Export Development Bank

Assa Corporation (alleged front for Bank Melli involved in managing property in December 17, 2008 New York City on behalf of Iran)

March 3, 2009

I I Entities Tied to Bank Melli: Bank Melli Iran Investment (BMIIC); Bank Melli Printing and Publishing; Melli Investment Holding; Mehr Cayman Ltd.; Cement Investment and Development; Mazandaran Cement Co.; Shomal Cement; Mazandaran Textile; Melli Agrochemical; First Persian Equity Fund; BMIIC Intel. General Trading

February 10, 2010

IRGC General Rostam Qasemi, head of Khatem ol-Anbiya Construction Headquarters (main IRGC corporate arm) and several entities linked to Khatem ol-Anbiya, including: Fater Engineering Institute, Imensazen Consultant Engineers Institute, Makin Institute, and Rahab Institute

June 16, 2010

- Post Bank of Iran
- IRGC Air Force
- IRGC Missile Command
- Rah Sahel and Sepanir Oil and Gas Engineering (for ties to Khatem ol-Anibya IRGC construction affiliate)
- Mohammad Ali Jafari—IRGC Commander-in-Chief since September 2007
- Mohammad Reza Naqdi—Head of the IRGC's Basij militia force that suppresses dissent (since October 2009)
- Ahmad Vahedi—Defense Minister
- Javedan Mehr Toos, Javad Karimi Sabet (procurement brokers or atomic energy managers)

- Naval Defense Missile Industry Group (controlled by the Aircraft Industries Org that manages Iran's missile programs)

- Five front companies for IRISL: Hafiz Darya Shipping Co.; Soroush Sarzamin Asatir Ship Management Co.; Safiran Payam Darya; and Hong Kong-based Seibow Limited and Seibow Logistics.

Also identified on June 16 were 27 vessels linked to IRISKL and 71 new names of already designated IRISL ships.

Several Iranian entities were also designated as owned or controlled by Iran for purposes of the ban on U.S. trade with Iran.

November 30, 2010

- Pearl Energy Company (formed by First East Export Bank, a subsidiary of Bank Mellat
- Pearl Energy Services, SA
- Ali Afzali (high official of First East Export Bank)

- IRISL front companies: Ashtead Shipping, Byfleet Shipping, Cobham Shipping, Dorking Shipping, Effingham Shipping, Farnham Shipping, Gomshall Shipping, and Horsham Shipping (all located in the Isle of Man).

- IRISL and affiliate officials: Mohammad Hosein Dajmar, Gholamhossein Golpavar, Hassan Jalil Zadeh, and Mohammad Haji Pajand.

May 17, 2011

December 21, 2010

- Bonyad (foundation) Taavon Sepah, for providing services to the IRGC
- Ansar Bank (for providing financial services to the IRGC)
- Mehr Bank (same justification as above)
- Moallem Insurance Company (for providing marine insurance to IRISL, Islamic Republic of Iran Shipping Lines)
- Bank of Industry and Mine (BIM)
- Tidewater Middle East Company June 23, 2011
- Iran Air
- Mehr-e Eqtesad Iranian Investment Co.

March 28, 2012

Iran Maritime Industrial Company SADRA (owned by IRGC engineering firm Khatem-ol-Anbiya, has offices in Venezuela)

Deep Offshore Technology PJS (subsidiary of the above)

Malship Shipping Agency and Modality Ltd (both Malta-based affiliates of IRISL)

Seyed Alaeddin Sadat Rasool (IRISL legal adviser)

Ali Ezati (IRISL strategic planning and public affairs manager)

July 12, 2012

- Electronic Components Industries Co. (ECI) and Information Systems Iran (ISIRAN)

- Advanced Information and Communication Technology Center (AICTC) and Hamid Reza Rabiee (software engineer for AICTC)

- Digital Medial Lab (DML) and Value Laboratory (owned or controlled by Rabiee or AICTC)
- Ministry of Defense Logistics Export (MODLEX)

Daniel Frosh (Austria) and International General Resourcing FZE)—person and his UAE-based firm allegedly supply Iran's missile industry.

November 8, 2012

- National Iranian Oil Company

- -Tehran Gostaresh, company owned by Bonyad Taavon Sepah
- Imam Hossein University, owned by IRGC

-Baghyatollah Medical Sciences University, owned by IRGC or providing services to it.

December 13, 2012

Atomic Energy Organization of Iran (AEOI) chief Fereidoun Abbasi Davain

Seyed Jaber Safdari of Novin Energy, a designated affiliate of AEOI

Morteza Ahmadi Behazad, provider of services to AEOI (centrifuges)

Pouya Control-provides goods and services for uranium enrichment

Iran Pooya—provides materials for manufacture of IR-1 and IR-2 centrifuges

Aria Nikan Marine Industry—source of goods for Iranian nuclear program

Amir Hossein Rahimyar—procurer for Iran nuclear program

Mohammad Reza Rezvanianzadeh—involved in various aspects of nuclear program

Faratech—involved in Iran heavy water reactor project

Neda Industrial Group-manufacturer of equipment for Natanz enrichment facility

Tarh O Palayesh—designer of elements of heavy water research reator

Towlid Abzar Boreshi Iran-manufacturer for entities affiliated with the nuclear program.

December 21, 2012

SAD Import Export Company (also designated by U.N. Sanctions Committee a few days earlier for violating Resolution 1747 ban on Iran arms exports, along with Yas Air) for shipping arms and other goods to Syria's armed forces

Marine Industries Organization—designated for affiliation with Iran Ministry of Defense and Armed Forces Logistics

Mustafa Esbati-acts on behalf of Marine Industries

Chemical Industries and Development of Materials Group-designated as affiliate of Defense Industries Org.

Doostan International Company—designated for providing services to Iran Aerospace Industries Org, which oversees Iran missile industries.

April 11, 2013

Babak Morteza Zanjani-chairmen of Sorinet Group that Iran uses to finance oil sales abroad.

International Safe Oil-provides support to NIOC and NICO

Sorinet Commercial Trust Bankers (Dubai) and First Islamic Investment Bank (Malaysia)—finance NIOC and NICO

Kont Kosmetik and Kont Investment Bank—controlled by Babak Zanjani

Naftiran Intertrade Company Ltd.—owned by NIOC

May 9, 2013

Iranian-Venezuelan Bi-National Bank (IVBB), for activities on behalf of the Export Development Bank of Iran that was sanctioned on October 22, 2008, (see above). EDBI was sanctioned for providing financial services to Iran's Ministry of Defense.

May 31, 2013

Bukovnya AE (Ukraine) for leasing aircraft to Iran Air.

Iran-Related Entities Sanctioned Under Executive Order 13224 (Terrorism Entities)

July 25, 2007

Martyr's Foundation (Bonyad Shahid), a major Iranian foundation (bonyad)—for providing financial support to Hezbollah and PIJ

Goodwill Charitable Organization, a Martyr's Foundation office in Dearborn, Michigan

Al Qard Al Hassan—part of Hezbollah's financial infrastructure (and associated with previously designated Hezbollah entities Husayn al-Shami, Bayt al-Mal, and Yousser Company for Finance and Investment.

Qasem Aliq—Hezbollah official, director of Martyr's Foundation Lebanon branch, and head of Jihad al-Bina, a previously designated Lebanese construction company run by Hezbollah.

Ahmad al-Shami—financial liaison between Hezbollah in Lebanon and Martyf's Foundation chapter in Michigan

Qods Force and Bank Saderat (allegedly used to funnel Iranian money to	October 21, 2007
Hezbollah, Hamas, PIJ, and other Iranian supported terrorist groups)	

Al Qaeda Operatives in Iran: Saad bin Laden; Mustafa Hamid; Muhammad Rab'a al- January 16, 2009 Bahtiyti; Alis Saleh Husain

August 3, 2010

Qods Force senior officers: Hushang Allahdad, Hossein Musavi, Hasan Mortezavi, and Mohammad Reza Zahedi

Iranian Committee for the Reconstruction of Lebanon, and its director Hesam Khoshnevis, for supporting Lebanese Hizballah

Imam Khomeini Relief Committee Lebanon branch, and its director Ali Zuraik, for providing support to Hizballah

Razi Musavi, a Syrian based Iranian official allegedly providing support to Hizballah

Liner Transport Kish (for providing shipping services to transport weapons to Lebanese Hizballah)	December 21, 2010
For alleged plot against Saudi Ambassador to the U.S.:	October 11, 2011
Qasem Soleimani (Qods Force commander); Hamid Abdollahi (Qods force); Abdul Reza Shahlai (Qods Force); Ali Gholam Shakuri (Qods Force); Manssor Arbabsiar (alleged plotter)	
Mahan Air (for transportation services to Qods Force)	October 12, 2011
Ministry of Intelligence and Security of Iran (MOIS)	February 16, 2012
Yas Air (successor to Pars Air); Behineh Air (Iranian trading company); Ali Abbas Usman Jega (Nigerian shipping agent); Qods Force officers: Esmail Ghani, Sayyid Ali Tabatabaei, and Hosein Aghajani	March 27, 2012
These entities and persons were sanctioned for weapons shipments to Syria and an October 2011 shipment bound for Gambia, intercepted in Nigeria.	
Ukraine-Mediterranean Airlines (Um Air, Ukraine) for helping Mahan Air and Iran Air conduct illicit activities	May 31, 2013
Rodrigue Elias Merhej (owner of Um Air)	
Kyrgyz Trans Avia (KTA, Kyrgyzstan) for leasing aircraft to Mahan Air	
Lidia Kim, director of KTA	
Sirjanco (UAE) for serving as a front for Mahan Air acquisition of aircraft	
Hamid Arabnejad, managing director of Mahan Air.	
Entities Sanctioned Under the Iran North Korea Syria Non-Pr Executive Order 12938	oliferation Act or
The designations are under the Iran, North Korea, Syria Non-Proliferation Act (IN designations expire after two years, unless re-designat	<i>i</i>
Baltic State Technical University and Glavkosmos, both of Russia	July 30, 1998 (E.O. 12938). Both removed in 2010—Baltic on January 29, 2010, and Glavkosmos on March 4, 2010
D. Mendeleyev University of Chemical Technology of Russia and Moscow Aviation Institute	January 8, 1999 (E.O. 12938). Both removed on May 21, 2010
Norinco (China). For alleged missile technology sale to Iran.	May 2003
Taiwan Foreign Trade General Corporation (Taiwan)	July 4, 2003
Tula Instrument Design Bureau (Russia). For alleged sales of laser-guided artillery shells to Iran.	September 17, 2003 (also designated under Executive Order 12938), removed May 21, 2010
13 entities sanctioned including companies from Russia, China, Belarus, Macedonia, North Korea, UAE, and Taiwan.	April 7, 2004

14 entities from China, North Korea, Belarus, India (two nuclear scientists, Dr. Surendar and Dr. Y.S.R. Prasad), Russia, Spain, and Ukraine.	September 29, 2004
14 entities, mostly from China, for alleged supplying of Iran's missile program. Many, such as North Korea's Changgwang Sinyong and China's Norinco and Great Wall Industry Corp, have been sanctioned several times previously. Newly sanctioned entities included North Korea's Paeksan Associated Corporation, and Taiwan's Ecoma Enterprise Co.	December 2004 and January 2005
9 entities, including those from China (Norinco yet again), India (two chemical companies), and Austria. Sanctions against Dr. Surendar of India (see September 29, 2004) were ended, presumably because of information exonerating him.	December 26, 2005
7 entities. Two Indian chemical companies (Balaji Amines and Prachi Poly Products); two Russian firms (Rosobornexport and aircraft manufacturer Sukhoi); two North Korean entities (Korean Mining and Industrial Development, and Korea Pugang Trading); and one Cuban entity (Center for Genetic Engineering and Biotechnology).	August 4, 2006 (see below for Rosobornexport removal)
9 entities. Rosobornexport, Tula Design, and Komna Design Office of Machine Building, and Alexei Safonov (Russia); Zibo Chemical, China National Aerotechnology, and China National Electrical (China). Korean Mining and Industrial Development (North Korea) for WMD or advanced weapons sales to Iran (and Syria).	January 2007 (see below for Tula and Rosoboronexport removal)
14 entities, including Lebanese Hezbollah. Some were penalized for transactions with Syria. Among the new entities sanctioned for assisting Iran were Shanghai Non-Ferrous Metals Pudong Development Trade Company (China); Iran's Defense Industries Organization; Sokkia Company (Singapore); Challenger Corporation (Malaysia); Target Airfreight (Malaysia); Aerospace Logistics Services (Mexico); and Arif Durrani (Pakistani national).	April 23, 2007
13 entities: China Xinshidai Co.; China Shipbuilding and Offshore International Corp.; Huazhong CNC (China); IRGC; Korea Mining Development Corp. (North Korea); Korea Taesong Trading Co. (NK); Yolin/Yullin Tech, Inc. (South Korea); Rosoboronexport (Russia sate arms export agency); Sudan Master Technology; Sudan Technical Center Co; Army Supply Bureau (Syria); R and M International FZCO (UAE); Venezuelan Military Industries Co. (CAVIM);	October 23, 2008. Rosoboronexport removed May 21, 2010.
16 entities: Belarus: Belarusian Optical Mechanical Association; Beltech Export; China: Karl Lee; Dalian Sunny Industries; Dalian Zhongbang Chemical Industries Co.; Xian Junyun Electronic; Iran: Milad Jafari; DIO; IRISL; Qods Force; SAD Import-Export; SBIG; North Korea: Tangun Trading; Syria: Industrial Establishment of Defense; Scientific Studies and Research Center; Venezuela: CAVIM.	May 23, 2011
Mohammad Minai, senior Qods Force member involved in Iraq; Karim Muhsin al- Ghanimi, leader of Kata'ib Hezbollah (KH) militia in Iraq; Sayiid Salah Hantush al- Maksusi, senior KH member; and Riyad Jasim al-Hamidawi, Iran based KH member	November 8, 2012
Entities Designated as Threats to Iraqi Stability under Execu	itive Order 13438
Ahmad Forouzandeh. Commander of the Qods Force Ramazan Headquarters, accused of fomenting sectarian violence in Iraq and of organizing training in Iran for Iraqi Shiite militia fighters	January 9, 2008
Abu Mustafa al-Sheibani. Iran based leader of network that funnels Iranian arms to Shiite militias in Iraq.	January 9, 2008
Isma'il al-Lami (Abu Dura). Shiite militia leader, breakaway from Sadr Mahdi Army, alleged to have committed mass kidnapings and planned assassination attempts against Iraqi Sunni politicians	January 9, 2008
Mishan al-Jabburi. Financier of Sunni insurgents, owner of pro-insurgent Al-Zawra television, now banned	January 9, 2008
Al Zawra Television Station	January 9, 2008

Khata'ib Hezbollah (pro-Iranian Mahdi splinter group)	July 2, 2009
Abu Mahdi al-Muhandis	July 2, 2009
Iranians Sanctioned Under September 29, 2010, Executive Order 13553 on Human Rights Abusers	
I. IRGC Commander Mohammad Ali Jafari	September 29, 2010
2. Minister of Interior at time of June 2009 elections Sadeq Mahsouli	
3. Minister of Intelligence at time of elections Qolam Hossein Mohseni-Ejei	
4. Tehran Prosecutor General at time of elections Saeed Mortazavi	
5. Minister of Intelligence Heydar Moslehi	
6. Former Defense Minister Mostafa Mohammad Najjar	
7. Deputy National Police Chief Ahmad Reza Radan	
8. Basij (security militia) Commander at time of elections Hossein Taeb	
9. Tehran Prosecutor General Abbas Dowlatabadi (appointed August 2009). Has indicted large numbers of Green movement protesters.	February 23, 2011
10. Basij forces commander (since October 2009) Mohammad Reza Naqdi (was head of Basij intelligence during post 2009 election crackdown)	
I I. Islamic Revolutionary Guard Corps (IRGC)	June 9, 2011.
12. Basij Resistance Force	
13. Law Enforcement Forces (LEF)	
14. LEF Commander Ismail Ahmad Moghadam	
15. Ministry of Intelligence and Security of Iran (MOIS)	February 16, 2012
16. Ashgar Mir-Hejazi for human rights abuses on/after June 12, 2009 and for providing material support to the IRGC and MOIS.	May 30, 2013
Iranians Sanctioned Under Executive Order 13572 (April 29, 2011) for Repression of the Syrian People	
Revolutionary Guard—Qods Force	April 29, 2011
Qasem Soleimani (Qods Force Commander)	May 18, 2011
Mohsen Chizari (Commander of Qods Force operations and training)	Same as above
Iranian Entities Sanctioned Under Executive Order 13606 (GHRAVITY)	

- Ministry of Intelligence and Security (MOIS); IRGC (Guard Cyber Defense Command); Law Enforcement Forces; Datak Telecom

Entities Sanctioned Under Executive Order 13608 Targeting Sanctions Evaders

- Ferland Company Ltd. for helping NITC deceptively sell Iranian crude oil

Entities Names as Iranian Government Entities Under Executive Order 13599

Designations made July 12, 2012:

- Petro Suisse Intertrade Company (Switzerland); Hong Kong Intertrade Company (Hong Kong); Noor Energy (Malaysia); Petro Energy Intertrade (Dubai, UAE) (all four named as front companies for NIOV, Naftiran Intertrade Company, Ltd (NICO), or NICO Sarl)

- 20 Iranian financial institutions (names not released but available from Treasury Dept.)
- 58 vessels of National Iranian Tanker Company (NITC)

Designations on March 14, 2013:

- Dimitris Cambis and several affiliated firms named in Treasury Dept. press release.

Designation on May 9, 2013:

- Sambouk Shipping FZC, which is tied to Dr. Dimitris Cambis and his network of front companies.

Designations on May 31, 2013:

- Eight petrochemicals companies were designated as Iranian government entities, including Bandar Imam; Bou Ali Sina; Mobin; Nouri; Pars; Shahid Tondgooyan; Shazand; and Tabriz.

Designations on September 6, 2013:

- Six individuals including Seyed Nasser Mohammad Seyyedi, director of Sima General Trading who is also associated with NIOC and NICO. The other 5 persons sanctioned manage firms associated with NIOC and NICO.

- Four businesses used by Seyyedi to assist NIOC and NICO front companies. Three are based in UAE: AA Energy FZCO; Petro Royal FZE; and KASB International LLC. The other firm is Swiss Management Services Sari.

Entities Sanctioned Under Executive Order 13622 (For Oil and Petrochemical Purchases from Iran and Precious Metal Transactions with Iran)

May 31, 2013:

- Jam Petrochemical Company for purchasing petrochemical products from Iran.

- Niksima Food and Beverage JLT for receiving payments on behalf of Jam Petrochemical

Entities Designated as Human Rights Abusers or Limiting Free Expression Under Executive Order 13628 (Exec. order pursuant to Iran Threat Reduction and Syria Human Rights Act)

Designations made on November 8, 2012:

- Ali Fazli, deputy commander of the Basij

- Reza Taghipour, Minister of Communications and Information Technology

- LEF Commander Moghaddam (see above)
- Center to Investigate Organized Crime (established by the IRGC to protect the government from cyber attacks
- Press Supervisory Board, established in 1986 to issue licenses to publications and oversee news agencies
- Ministry of Culture and Islamic Guidance
- Rasool Jalili, active in assisting the government's Internet censorship activities.
- Anm Afzar Goster-e-Sharif, company owned by Jalili, above, to provide web monitoring and censorship gear.
- PekyAsa, another company owned by Jalili, to develop telecom software.

Designations made on February 6, 2013:

- Islamic Republic of Iran Broadcasting (IRIB) and Ezzatollah Zarghami (director and head of IRIB)
- Iranian Cyber Police (filters websites and hacks email accounts of political activists)
- Communications Regulatory Authority (filters Internet content)
- Iran Electronics Industries (producer of electronic systems and products including those for jamming, eavesdropping

Designations on May 30, 2013:

- Committee to Determine Instances of Criminal Content for engaging in censorship activities on/after June 12, 2009.

- Ofogh Saberin Engineering Development Company for providing services to the IRGC and Ministry of Communications to override Western satellite communications.

Author Contact Information

Kenneth Katzman Specialist in Middle Eastern Affairs kkatzman@crs.loc.gov, 7-7612