



CHINA-IRAN: A LIMITED PARTNERSHIP

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SUMMARY

Over the past 30 years, China and Iran have developed an active but limited partnership, cooperating across a spectrum of political, security, and economic interests. They have travelled an uneven path together since the seminal year of 1979, which witnessed the revolutionary birth of Ayatollah Khomeini's Islamic Republic of Iran and the evolutionary unfolding of the Reform and Opening Policy of Deng Xiaoping's People's Republic of China (PRC). In 2012, as a broad coalition of concerned countries seeks to halt Iran's advance towards developing a nuclear weapon, the terms of the China-Iran partnership continue to adjust to changing regional and global environments and to differences in each country's economic and military imperatives.

Emerging out of very different tumultuous histories, the authoritarian governments centered in Beijing and Tehran share an animus towards "hegemonism" and a fear of internal instability. They pronounce support for developing nations' solidarity and position themselves as leaders of the non-aligned. In recent decades the United States, supported by regional allies and security partners, has represented the principal hegemonic threat to Iran and China in two different regional contexts: the Persian Gulf and the Western Pacific. US human rights policy and pro-democracy activism threaten to stimulate domestic instability in the eyes of concerned officials in both Tehran and Beijing, where at different times throngs of rebellious pro-democracy demonstrators have been beaten back by central government force. A keen sense of past national humiliation at the hands of foreigners—and more general anti-colonial and anti-imperial sentiment—color each country's historical narrative even as each also extols the wealth and power of past Persian and Chinese empires, connected by the ancient Silk Road.

China and Iran share another set of concerns, practical and economic, that have brought them into close cooperation over the past three decades. As China's modernizing defense industry was looking for export markets, Iran became a major purchaser of conventional Chinese-made weapons during the protracted Iran-Iraq War of the 1980s. In the 1980s and 1990s China's most advanced industrial and defense technology programs, in nuclear energy and missile production, provided direct assistance to the Islamic Republic. Chinese assistance during this period was an important factor in Iran's efforts to restart its nuclear program after the 1979 revolution. Reported Chinese sales to Iran of uranium hexafluoride feedstock for enriched uranium and indirect sales of HY-2 "Silkworm" antiship missiles symbolize that era of cooperation.

In the early 1990s more direct nuclear cooperation was in the works as China prepared to sell Iran two 300 megawatt (MW) nuclear power reactors. Even though, after a 1997 commitment to US President Clinton by PRC President Jiang Zemin, China ceased further assistance to the Iranian nuclear program—including its involvement in the civil nuclear power sector—and stopped sales of complete missiles, Iran is now reaping "returns" on China's earlier investments.

China has continued measured support to Iran's defense programs. For example, *Jane's Defence Weekly* reported in 2010 that there were cooperative tactical missile programs underway with Iran and China's design bureaus that have displayed several "export-only" weapons (such as the C-705 lightweight cruise missile) that would seem set to follow the established route into Iran. US Government sanctions of multiple Chinese companies over the past two years are further evidence that some technology transfers continue. With such a solid relationship established between the two countries it is not difficult to see why China has been reluctant to commit without exception to the Western push for sanctions against Iran.¹

Iran's oil and gas sector requires investment capital and technology, both in upstream development and downstream refining and distribution. China's national oil companies (NOCs) in the past decade have been scouring the world for development projects and offer Iran the possibility of filling a void left in Iran by departing international oil companies concerned about sanction penalties and adverse operating conditions. Iran relies on oil exports to fund most of its national budget. Constrained by sanctions, in 2010-2012 its global oil exports have declined.

China, a net oil importer since 1993, has become the world's second largest consumer and importer of oil after the United States and sees Iranian supply as an important component of its energy mix. Iran's share of China's total oil imports has remained fairly stable—between nine and 14 percent since 2000—but China's importance to the Iranian oil sector has grown substantially in the sanctions era, with exports to China rising from five percent of Iran's total oil exports in 2000 to 25 percent by 2011. Since China and Iran signed a 1997 comprehensive bilateral agreement, China's NOCs have committed to multi-billion dollar investments in Iran's oil and gas sector, notably in the South Pars gas field and Azadegan oil field. Sizeable amounts of actual Chinese investment in these projects have not yet materialized, however, to the concern of Iranian energy officials.

China's growing economic interdependence with its East Asian neighbors, Europe, and the United States has meant that it cannot ignore its major trade and investment partners' views on Iran. In the aftermath of International Atomic Energy Agency (IAEA) reports of additional advances in Iran's nuclear enrichment program, in June 2010 China joined the four other permanent members' consensus to vote for United Nations (UN) Security Council Resolution 1929, which imposed a fourth round of UN sanctions on Iran, expanding an existing arms embargo and tightening restrictions on financial and shipping enterprises related to proliferation-sensitive activities.

Especially since that significant 2010 vote, China, in its oil and gas relations with Iran, appears to be walking a fine line, asserting its right to ignore non-UN sanctions, but also showing some restraint, even at a cost to its economic interests. China generally argues in favor of settlement of disputes by negotiation. It also maintains that the right to peaceful uses of nuclear energy must be guaranteed. At the same time China has stated, in a foreign policy white paper, that "it is necessary to prevent any country from engaging in proliferation under the pretext of peaceful utilization."² Its voting pattern and public statements suggest China can support UN sanctions designed to halt Iran's pursuit of a program that could lead to acquisition of a nuclear weapons capability, while it generally will block actions it sees as constraining development of a peaceful, safeguarded, civil nuclear program.

In the past year or so, analysts in both Iran and China have questioned the strength of the two countries' mutual commitments and the value and risks of developing closer ties. Even though mainstream foreign policy analysts in Tehran regard Iran and China as natural allies, in some Iranian academic, media, and think-tank circles there has been recent public questioning of China's commitment to the partnership. In this line of analysis, US pressure on Beijing has limited China's engagement with Iran. Some see China as having "sold out" to the West. General public grumbling over increased penetration of the domestic market by Chinese consumer goods, some bartered for Iranian oil exports, has led to an Iranian import ban on certain classes of "inferior" products that China has been selling.

While the PRC Government praises the bilateral relationship and promotes a robust series of economic, educational, and cultural exchanges with Iran, some Chinese analysts are beginning to view a closer partnership with Iran as carrying too many risks for Beijing. Despite continuing suspicions of US

“imperialistic” policies in the Middle East, some Chinese analysts calculate that China has more to lose than gain in siding with Iran under current conditions.

These apparent shifts in attitude on both sides of the relationship speaks to the growing impression that as they become more comprehensive and more multilateral, the multi-layered international sanctions imposed on Iran have become increasingly effective—by raising the risk that foreign firms may suffer harsh penalties for engaging financially and commercially with key elements of the Iranian economy.¹

¹ This report incorporates information as available on or before October 1, 2012.

INTRODUCTION

China's evolving relationship with Iran presents the United States with significant challenges while offering opportunities to exercise influence on Iran through leverage with China. Interaction with Iran gives Chinese leaders the opportunity to further China's economic and strategic interests while posing the challenge of balancing those interests with China's responsibilities as a growing global power. China's rise has brought its multifaceted national interests to the fore and into competition with one another, including on the one hand securing stable and cooperative relationships with other major powers; developing peaceful relationships with neighbors and nearby states, including Iran; and on the other securing reliable energy supplies to sustain its economic growth. Some analysts contend China also may have a latent if not active strategic interest in Iran maintaining its challenge to US "hegemony" in the Persian Gulf.

CHINA'S RELATIONSHIP WITH IRAN

Sino-Iranian relations are a product of competing incentives and interests, which have evolved over time as policies and geostrategic orientations change. To understand the scope and course of Sino-Iranian relations, one must not only understand domestic political logics, but also place them in the context of the international milieu, particularly the trilateral relations among the United States, China, and Iran. At times, China has partnered with the United States and other international actors to curtail the proliferation threat from Iran, but at other times China has used its relations with Iran to balance against US interests and what it sees as hegemonic policies in the Middle East. For Iran's part, relations with China have been a natural and necessary outlet to counterbalance the international isolation imposed on the regime after the overthrow of the shah and the founding of the Islamic Republic. China's non-interventionist and anti-hegemonic foreign policy orientation, economic and technological vitality, and ability to provide diplomatic cover in the United Nations Security Council and other international forums have been attractive incentives to Iran for partnering with China.

Historically, China and Iran have enjoyed amicable relations, but the period immediately surrounding the establishment of the Islamic Republic proved to be a time of strain and wariness between the two powers. Both countries were involved in the conclusion of immense domestic upheaval. In China, Deng Xiaoping had just emerged from the last throes of the Cultural Revolution as paramount leader and had launched his "opening and reform" policy, which prioritized economic growth over ideological purity. In contrast in Iran, the swift overthrow of the Pahlavi dynasty and monarchical regime led to the return of the exiled leader Ayatollah Khomeini to become "imam," or supreme leader of an Islamic state. This meant a domestic shift toward ideological purity and denigration of foreign powers friendly to the previous regime. While such wrath was largely reserved for the superpowers of the era, Chinese Communist Party Chairman and PRC supreme leader Hua Guofeng had recently paid a visit to the shah in August 1978, which was largely remembered as deferential and sympathetic in tone.³ At the time, popular agitation against the monarchy was seen by China's leaders and foreign policy community as a plot that would benefit the Soviet Union, and so standing with a friend in a time of crisis was more important than hedging against the incumbent regime. A few short months later the shah was deposed and sent into exile, casting a shadow of doubt over Sino-Iranian relations at the outset of the Islamic Republic.

Rapprochement between China and Iran came gradually, borne out of wartime necessity and a progressive mutual understanding through repeated diplomatic visits. The ideological gulf between the

religiously zealous Islamic Republic and the officially atheist People's Republic was partially bridged by a common distrust of the USSR and the United States and a geostrategic worldview that tended toward anti-hegemony, multipolarity, and Third World solidarity. Both countries shunned or were shunned by some faction of the international community. After having balanced against the USSR with the United States for much of the previous decade, in the early 1980s China began moving toward a more independent foreign policy and away from US containment policy. At the same time, the new Islamic Republic of Iran, cut off from Western sources of technology and armament and wary of Soviet interference, sought alternative arms suppliers as the Iran-Iraq War (1980-88) turned into a drawn-out conflict of attrition. Happily for both parties, Deng Xiaoping's economic reforms had encouraged the People's Liberation Army (PLA) and its supporting defense industries to seek external sources of funding. Exports offered much needed hard currency, and Iran was a willing buyer of China's export catalogue of relatively cheap, low-technology arms.

These factors led to greater incentives on both sides for improving Sino-Iranian trade in arms and military technology. Iran and China signed several arms sales contracts valued in billions of dollars over the period of the Iran-Iraq War, including a contract that included the sale of Silkworm HY-2 antiship missiles in 1986. Throughout this period, China maintained that it did not sell arms to Iran—or Iraq—which was technically true, since the exchanges were carried out through third parties, including British-ruled Hong Kong and North Korea. Diplomatically, China continued to espouse non-interference and urged a negotiated settlement between the belligerents, while secretly supplying arms to both sides. Only when US-led measures to punish Iran's "tanker war" in the Persian Gulf threatened increased Western incursion into the region did China press Iran to end the conflict.

June 3-4, 1989 marked the end of two different eras for China and Iran. The Tiananmen Massacre coincided with the death of the Islamic Republic's inspiration, Ayatollah Khomeini. China suffered for a time under Western sanctions imposed in the aftermath of the Beijing regime's crackdown on dissent and in the face of other ongoing human rights abuses. Iran sought to further institutionalize its 10-year-old theocracy under a new Supreme Leader, Imam Ali Khamenei.

By the early 1990s, the imperative of the Iran-Iraq War had disappeared and other factors, domestic and international, caused the Sino-Iranian relationship to fluctuate in intensity and comity. Seeking to climb out of the international isolation and domestic uncertainties it had experienced after Tiananmen, China was ramping up a new phase of its decades-long domestic economic reforms, downsizing loss-making state-owned enterprises and ramping up dual-use and consumer export production under the leadership of new Premier Zhu Rongji. China's economy became much less dependent on arms sales as a source of foreign currency; by 1996 arms sales accounted for less than one percent of China's total exports.⁴ US-China relations were also in a period of flux in the 1990s; relations were particularly strained in the wake of Tiananmen. The 1991 Persian Gulf War—requiring China's acquiescence to UN-approved action, increased China's leverage vis-à-vis the United States and helped cement an "anti-hegemonic" alignment between Iran and China. Further, disputes between China and the United States over arms proliferation, human rights, and the granting of most-favored nation (MFN) trade status continued to stoke mutual suspicions into a show of military brinksmanship over the 1996 Taiwan presidential elections.

After that experience, CCP leadership undertook a significant and stark policy shift to avoid further antagonizing the United States, leading to a diplomatic rapprochement. Consequently for Iran, in the wake of commitments in 1997 made by PRC President Jiang Zemin to US President Bill Clinton, China terminated several cooperative nuclear projects and missile transfer contracts. Still, China did not entirely abandon supplying Iran with military technology. Instead of selling whole missiles, China sold

the means of production for missile components, including engines; trained technicians; and helped set up factories to assemble and produce indigenous variants of imported missile designs.⁵ These relations allowed China to operate within the letter of international proliferation norms, while demonstrating China's willingness to circumvent international will to support Iran.

The 2000s brought a further fluctuation in Sino-US and Sino-Iranian ties as China took on the role of a more responsible international power in the aftermath of the terrorist attacks of September 11, 2001 and as it moved toward formal integration into the world trading system through accession to the World Trade Organization (WTO). Still giving credence to its anti-hegemonic principles, China sought to repair relations with Iran, including by renewing military exchanges, offering diplomatic support, and signing new trade deals. When US President George W. Bush declared Iran part of the "axis of evil" in his January 2002 State of the Union address, China rebuked the choice of words, and PRC President Jiang Zemin visited Tehran two months after the speech in a show of solidarity with Iran. The 2003 Iraq War also provided an opportunity for China to demonstrate solidarity with Iran and others in the region to oppose the war. China ramped up cooperation with Iran in diplomatic circles and renewed military cooperation, but Chinese leaders also turned down Tehran's suggestion of forming a closer anti-US bloc and conducted its limited military exchanges with a low profile.⁶ Later in the decade, with sufficient evidence, China also relented to international pressure to bring a series of new multilateral nuclear-related sanctions against Iran. Delay and dilution of sanctions rather than outright obstruction seems to be the strategy of Chinese diplomats in dealing with Iran's nuclear intransigence. China and Russia have balked at certain provisions but have voted for UN Security Council resolutions targeting individuals, companies, and institutions suspected of facilitating Iran's nuclear and ballistic missile programs.

Sino-Iranian economic relations have similarly waxed and waned with shifting diplomatic stances. Taking advantage of the scarce presence of Western multinational oil concerns in Iran, Chinese state-backed oil producers, including Sinopec, China National Petroleum Corporation (CNPC), and the China National Offshore Oil Corporation (CNOOC), engaged in various investment projects in Iranian oil and gas fields worth billions of dollars.⁷ Yet, since at least mid-2010, many of these development contracts have been quietly cancelled or suspended by the Chinese, partly because of pressure from the United States and partly due to increasing difficulties of doing business in Iran.⁸ With a new series of UN and multilateral sanctions restricting financial dealings with Iran's central bank, China has curtailed its imports of oil and gas from Iran. The financial shackles have so impeded the regular flows of trade that China has even settled some of its outstanding \$4 billion debt to Iran in gold.⁹

Another rise and fall in Sino-Iranian relations was seen in Iran's admission into the Shanghai Cooperation Organization as an observer state in 2005 and application for full membership in 2008. In 2010, Chinese reports indicated that while Iran would not be directly rejected, Russia's Foreign Ministry had reservations about admitting a country under UN sanctions.¹⁰ In 2012, new rules on membership were adopted and Iran's application was effectively suspended until the UN sanctions against it are lifted.¹¹

China has largely kept to the role it promised the newly established Islamic Republic to be an "all weather friend," although sometimes the strength of the support given has attenuated in the face of other interests and pressures, particularly those involving the United States. In recent months, China has responded to US and international pressure by taking a harder line on Iran, especially on sanctions related to curbing its nuclear ambitions. Scholars in China may be helping to chart a new path in its dealings with Iran and the United States.

- One researcher at the respected foreign relations institution, the Shanghai Institute of International Studies, says that China should heed Deng Xiaoping's deathbed advice to "know

the score” in international relations. Applied to Iran, this means “actively expanding China’s circle, within international norms, to not only gain the benefit of overseas energy supplies, but also to protect China’s overseas financial interests in the United States and elsewhere.”¹² This reflects an apparent shift away from Iran and in greater alignment with the international community. China’s suspicions of US imperialistic policies in the Middle East remain, but the calculation that China has more to lose than gain in siding with Iran may be gaining traction in Beijing.

- The noted Chinese scholar of American policy, Shen Dingli, commented in June 2012 that Iran is now in a position where it must “sacrifice a pawn to save its rook,” meaning yield to Western demands to cease uranium enrichment at the 20 percent level in exchange for relief from oil and financial sanctions. Seeing as how Iran has not relented, and given that Iran “may be able to withstand a bout of sanctions, but would be hard pressed to persevere in the long-term,” China may have taken stock of Iran’s recalcitrance under sanctions and shifted its bets.¹³

CHINESE INVESTMENTS IN IRAN’S ENERGY SECTORS

IRAN’S ECONOMIC AND ENERGY CHALLENGES

The tightening economic sanctions are seriously worsening Iran’s economic situation, which was already battered by ongoing economic challenges. The Iranian economy is sputtering, as sanctions complicate development of a country with a variety of needs, including transportation and electric power infrastructure, oil and gas development, and a multitude of other challenges to support a growing population (75 million in 2011).

- Iran has been facing chronic double-digit inflation since the late 1980s,¹⁴ and the situation has worsened in 2012. In early September the official inflation rate was 23.5 percent although economists estimated that the real inflation rate was higher—possibly double that¹⁵—with food and imported goods becoming much more expensive, according to press reporting.¹⁶ Iran’s falling currency has compounded the inflation problem for Iranian consumers (see page 46).
- Official unemployment averaged about 15 percent in 2010 and 2011,¹⁷ and it appears to be continuing to worsen. According to an international Iranian businessman, as of mid-September 2012, “We’re close to seeing mass unemployment in cities and queues for social handouts.”¹⁸ In the industrial areas, dependent in part on imports, unemployment hit 35 percent in August, according to internet press reporting.¹⁹
- The broader economic challenges are intensified by a population that continues to grow by nearly one million people each year, according to US Census Bureau estimates, with the largest population bulge among those between 20 and 30 years old.²⁰ A growing trend in urbanization—over 90 percent of the population increase expected between 1990 and 2025 will be in Iranian cities, according to UN estimates²¹—is already straining the urban infrastructure, according to a 2011 academic study.²² Moreover, nearly all of this urban growth is projected to occur in smaller cities outside of Tehran,²³ which will presumably require substantial additional infrastructure.

Energy problems exacerbate the economic challenges, affecting revenue and domestic energy consumption. In June 2012, Iran announced that oil exports had fallen well below the 2010 level of nearly 2.6 million barrels per day (bpd),²⁴ to 2.2 million bpd in 2011²⁵ and to just below 2 million bpd earlier this year, according to the International Energy Agency.²⁶ By August of this year, it had slumped further to 1.1 million bpd in August, which is up slightly from July's rate, according to IEA.²⁷

- The decline in oil exports, which traditionally have accounted for about 80 percent of Iran's budget, according to some Western estimates,²⁸ has put a deep gouge in Iran's ability to fund its national needs.
- Gasoline has been a widely-reported shortage in Iran for years, caused by a combination of consumer subsidies that inflated demand and an oil refining industry that has had limited capacity to produce gasoline.²⁹ In 2010, Iran imported some 78,000 bpd of gasoline—about 20 percent of its total gasoline consumption—according to the US Energy Information Administration.³⁰ Shortages appear to be easing—the combined result of the end of gasoline subsidies in December 2010, which is curbing demand and a reported small expansion in refinery capacity, with some reports of small amounts of gasoline exports earlier in 2012, according to industry press.³¹ A new gasoline unit, scheduled to open at the Shazand refinery in September 2012, combined with other refinery developments reported by the Western business press,³² should end Iran's near-term need for large gasoline imports.
- Many of the large foreign-assisted oil and gas projects are on hold, along with the near-term revenue they were expected to produce. Although Iran has huge oil reserves—137 billion barrels at the start of 2011, fourth largest in the world, according to a Western oil journal³³—Iran lacks the technology to slow the decline in production in many of the fields, according to the same journal.³⁴
- Iran is sitting on the world's second largest gas reserves, but they remain a net importer of gas, as imports from Turkmenistan exceed exports (786 million cubic feet per day in 2010) to Turkey and Armenia,³⁵ in part because of the lack of pipelines to Pakistan and India, where Pakistan has been slow to mobilize its efforts; and in part because LNG exports are dependent on Western technological assistance.³⁶

Iran faces some electric power challenges, although Iran's per capita power consumption is comparable to that of Brazil and Romania, and over 98 percent of the population has access to electricity, according to World Bank data.³⁷

- Many of Iran's power plants operate at a small fraction of nameplate capacity, because of deterioration of the infrastructure, and problems with the power grid caused losses in 2011 of about 18.5 percent of generated power (more than double the losses in a typical OECD grid), according to a Western business research firm.³⁸
- Because of power plant and grid deterioration and limited recent new construction, Iran is hit regularly with rolling blackouts and outages in the summer months, according to EIA.³⁹

- Iran plans to increase its electric power generation over the next 10 years at an annual rate of 2.75 percent, primarily through additional gas and hydroelectric generation capacity, according to the same business firm.⁴⁰

CHINA'S ENERGY CHALLENGE

Over the past decade, China has emerged as the world's fastest growing major consumer of energy. China consumed 64 percent of the increase in the world's energy supply between 2005 and 2011, according to the EIA—fueled by rapid and sustained economic growth, rising urbanization, and a large and growing population seeking higher standards of living. The EIA predicts, in its 2011 base case, that China's share of the world's energy consumption will continue to grow, although at a slower rate (see figures 1 and 2).⁴¹ Much of the increased supply will come from energy imports.

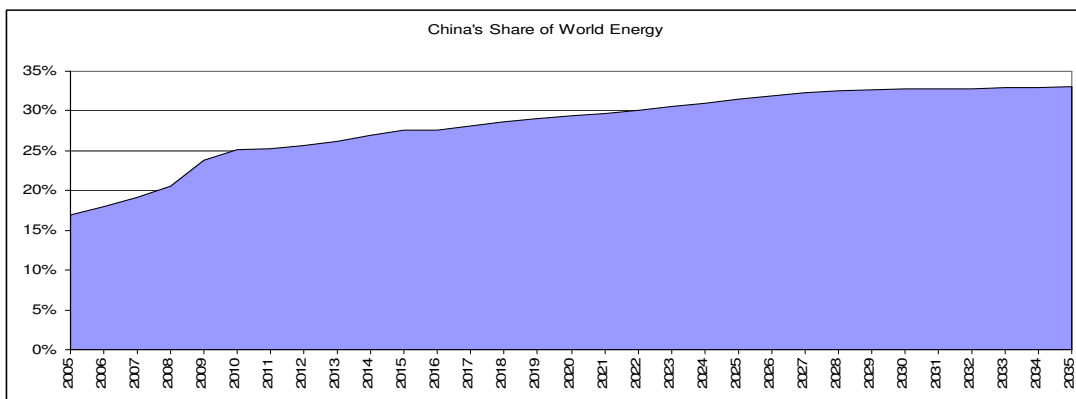


Figure 1. China's Share of World Energy.

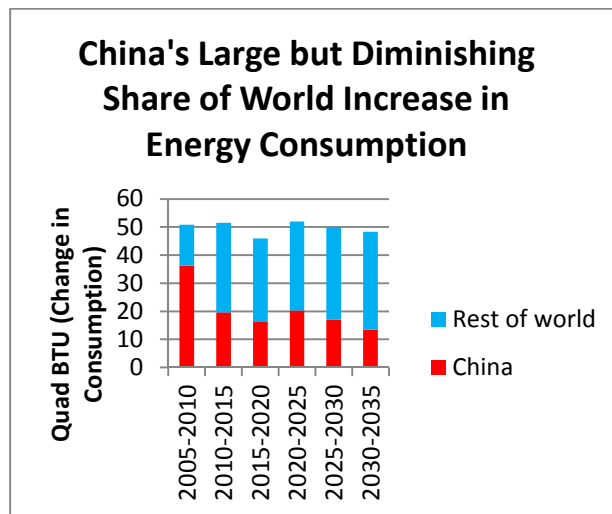


Figure 2. China's Large but Diminishing Share of World Increase in Energy Consumption.

China transitioned from being an energy exporter to an importer over the past decade, with major implications on the world energy markets, particularly the oil and coal trade.

- China transitioned from being an oil exporter in the early 1990s to a major importer—importing over five million bpd last year, with import requirements projected by the EIA to grow to nearly 12 million bpd by 2035 (see figure 3). This import growth represents about 30 percent of the EIA’s projected growth in world oil consumption over that period. China’s other energy needs are also growing, but with a smaller impact on world supply.
- Coal is—and will remain—China’s main fuel over the next twenty years. As with oil and gas, China recently emerged as a significant coal importer. According to EIA, the expected increase in China’s coal consumption—primarily to generate electric power—will represent two-thirds of the world’s increased coal consumption through 2035. EIA projects China’s coal imports will increase substantially between 2010 and 2035—from 1.2 to 7 Quadrillion BTU,⁴² although uncertainty is high due to the unknown impact of any slowdown in growth and China’s various domestic coal production options, according to the EIA.⁴³
- China has imported limited amounts of natural gas (as liquefied natural gas) since 2006, but import needs are expected to grow rapidly over the next two decades, exceeding four trillion cubic feet (tcf) by 2035 (see figure 4), according to EIA. This growth, however, represents only about 10 percent of the EIA’s projected growth of world gas supply.⁴⁴
- China continues on an intensive campaign to construct electric power, adding an average annual net of 89.6 gigawatts of capacity over the last five years, according to EIA⁴⁵—the equivalent of the UK’s total power generating capacity in 2011 (see figure 5).⁴⁶

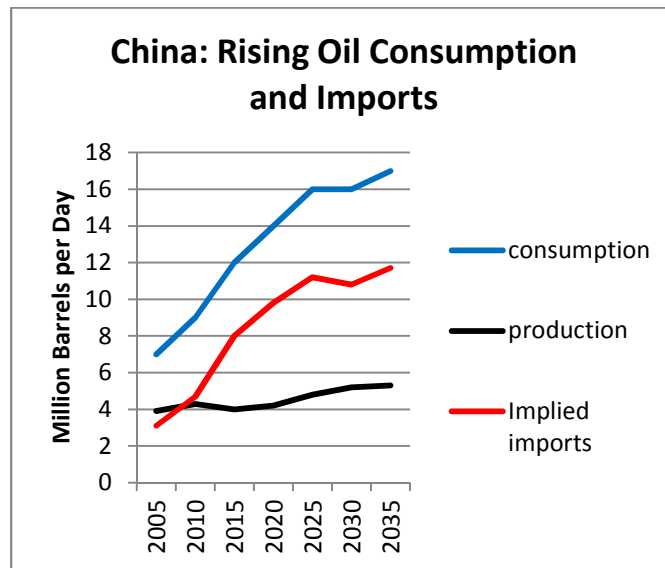


Figure 3. China: Rising Oil Consumption and Imports

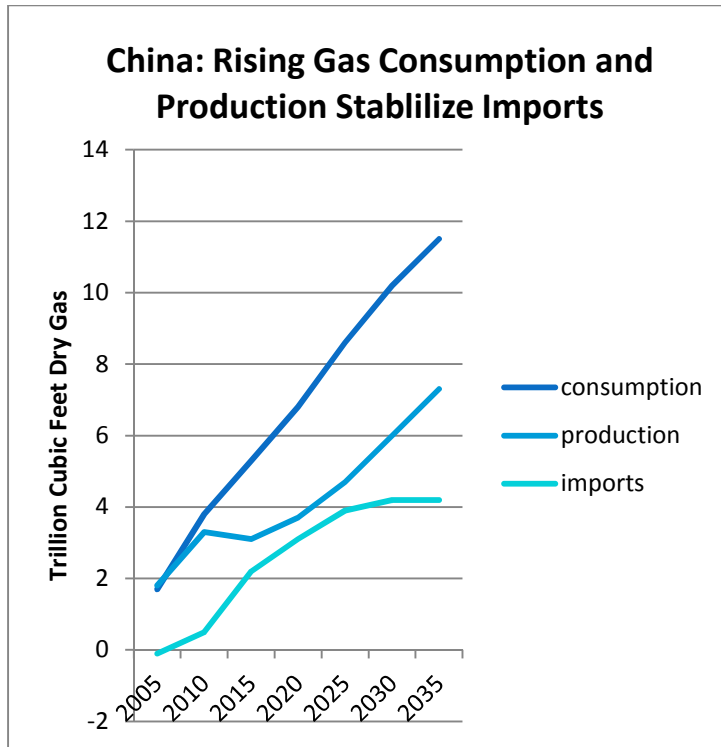


Figure 4. China: Rising Gas Consumption and Production Stabilize Imports.

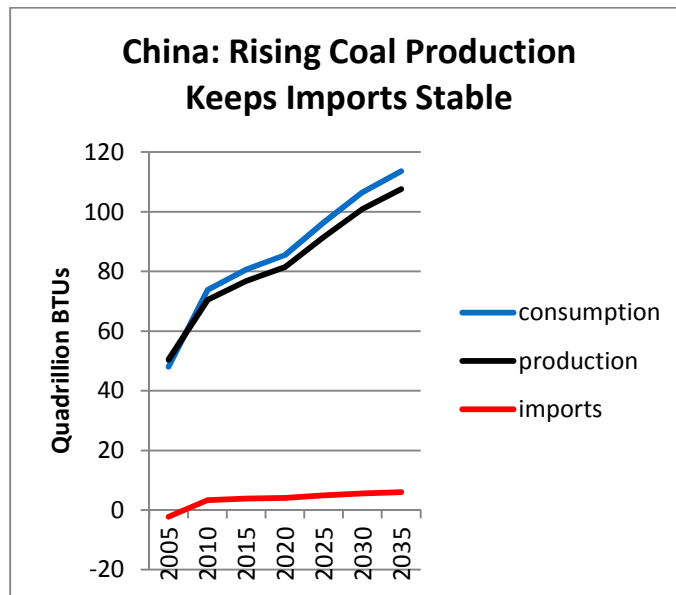


Figure 5: China: Rising Coal Production Keeps Imports Stable.

CHINA'S SEARCH FOR OIL AND GAS ABROAD

To help support its anticipated oil and gas import needs, Chinese companies, notably CNPC, PetroChina (a publicly listed subsidiary), and CNOOC have sought to secure and develop overseas oil and gas supplies, with CNPC taking the lead. Since the 1990s, but particularly since 2009, these companies have initiated exploration and production contracts in many countries overseas (see table 1 and figure 7).

- By late 2010, Chinese oil companies were operating in 31 countries, with equity production in 20 of them, primarily Angola, Kazakhstan, Sudan, and Venezuela, according to the IEA, spending at least \$47.59 billion between January 2009 and December 2010.⁴⁷
- Chinese National Oil Companies also invested in oil pipelines in North, Central, and Southeast Asia, and a gas pipeline in Burma.⁴⁸
- China's banks, particularly the China Development Bank and the China Export-Import Bank, are the primary sources of capital for these overseas operations with long-term, low-interest loans; Chinese banks have also lent about \$77 billion in loans to resource-rich countries in 2009, in return for long-term oil and gas supplies, according to IEA.⁴⁹

Table 1. Major Chinese Investment/Development Projects in Iran's Energy Sector⁵⁰

Date	Field/Project	Company or Companies	Value
May 2002	Masjid-e-Soleyman (oil)	Sheer Energy (Canada), China National Petroleum Company	\$80 million
January 2004	Azadegan (oil)	Inpex (Japan), CNPC agreed to develop North Azadegan Jan. 2009	\$200 million (Inpex) \$1.76 billion (CNPC)
October 2004	Yadaravan (oil)	Sinopec (China), deal finalized Dec 9, 2007	\$2 billion
June 2006	Garmsar bloc (oil)	Sinopec (China), deal finalized in 2009	\$20 million
July 2006	Arak Refinery Expansion	Sinopec, JGC (Japan). Work may have been taken over by Hyundai Heavy Industries (South Korea)	\$959 million (initial work; extent of Hyundai project unknown)
December 2006	North Pars Gas Field (offshore gas, includes gas purchases)	China National Offshore Oil Co.	\$16 billion
January 2009	North Azadegan	CNPC	\$1.75 billion
February 2010	South Pars: Phase 11	CNPC (drilling was to have begun in March 2010, still delayed)	\$4.7 billion

China, through its NOCs, has pursued oil and gas investment in countries where other national oil companies do not invest, because of national restrictions, principally in Burma, Iran, and Sudan. In Burma and Sudan, where the Chinese companies were competing with Indian NOCs, the Chinese NOCs added additional investment to sweeten the deal.

- In Burma, CNPC stated that it has invested and pledged millions of dollars in the construction of electric power infrastructure, water supply, fertilizer plants, and local schools, in support of the joint oil and gas pipelines being built.⁵¹

- In Sudan, where CNPC has projects in four oil and gas fields and one oil refinery, the company has provided funds; helped construct hospitals, water supply infrastructure, and schools; or provided poverty relief, according to the company's website.⁵²

CHINA'S SEARCH FOR OIL AND GAS IN IRAN

In Iran, by contrast, China's NOCs appear to be striking a harder deal, taking advantage of their dominant position as Iran's major current oil investor, and looking for discounts on Iranian oil.

- In contrast to Burma and Sudan, CNPC's website has no indication of additional support to Iran,⁵³ although press reporting indicates Chinese companies, presumably for payment, are investing in Iran's infrastructure, including a \$328 million contract to expand Tehran's subway system.⁵⁴
- The Iranian media frequently complain that China floods Iran with cheaply-produced goods that are undercutting Iranian merchants, according to a 2011 Brookings report.⁵⁵ The sanctions, particularly the currency restrictions, which have increased Iran's use of other currencies and imported goods as payment, have probably worsened the situation for Iranian merchants, as a September 2012 article from Bloomberg, "Junk for Oil," suggests.⁵⁶
- Most analysts conclude that China's reduction in Iranian imports in the first quarter of 2012 was largely caused by a contract price dispute between Sinopec, China's largest oil importer, and Iran.^{57 58}
- Although Iran recently has denied that China is receiving discounted oil,⁵⁹ press reports in early 2012 pointed to such discounts, although the level of discount was unclear.⁶⁰

CHINA AND IRANIAN ENERGY RELATIONSHIP

Although China has been importing oil from Iran since 1974, the PRC's active involvement in Iran's oil and gas industry really began with a 1997 agreement for cooperation in oil and gas exploration in Iran. Over the past decade, China's involvement in Iran's oil and gas has increased, benefitting in part from sanctions against Iran since 1980. China's energy connection with Iran has centered on specific oil and gas projects.

- **South Pars (Phase 11).** In 2009 China's CNPC oil company took over from Total as one of the foreign partners in this portion of Iran's major gas field that it shares with Qatar, including a commitment to invest \$4.7 billion,⁶¹ and CNPC is the last remaining foreign partner in this project. China has been slow to invest in this field, and in late July, Iranian and Western media reported that CNPC was pulling out of the project.⁶² However Iran's ultimatum to CNPC, reported June 28, 2012, called for CNPC to start work on parts of the South Pars field by 20 March 2013,⁶³ and thus it is not clear if CNPC's reported withdrawal from the South Pars project is final.
- **Azadegan Oilfield (north and south).** This large oilfield (with 26 billion barrels of proven oil reserves), is difficult to develop, because of its complex geology, according to EIA.⁶⁴ As of August 2011, CNPC had invested \$6 million of the planned \$8.4 billion; this total gives CNPC a 70 percent share of the field's estimated 600,000 bpd of oil.⁶⁵ According to the Iranian press in July

2012, rigs have been installed in the field, but the work status is yet unclear.⁶⁶ CNPC is developing north Azadegan; and a CNPC subsidiary, CNPC International Limited (CNPCI), signed a memorandum of understanding in September 2009 to work with Iran to develop South Azadegan.⁶⁷

- **Yadavaran Oilfield.** Sinopec signed a memorandum of understanding with the National Iranian Oil Company (NIOC) in 2004 and an agreement in 2007 to develop the field⁶⁸ in two phases—first to 85,000 bpd of oil by 2014 with a second phase boosting output to 185,000 bpd by 2016.⁶⁹ In April of 2012, as Iran’s Oil Ministry said production start-up was imminent, a third stage, boosting production to 300,000 bpd, was also discussed (see table 1 for major Chinese investment projects since 2002 and figure 7 for a map of those projects).⁷⁰

China has been involved in three other Iranian oilfields, which have shown some promise, but have not yet been developed.

- In January 2001, Sinopec signed an agreement to explore the **Zavereh Kasha Block** in central Iran;⁷¹ although no oil has been discovered after four wells were drilled, in February 2007 China renewed its rights to the Block, according to oil industry press.⁷² There have been no public reports of oil or gas finds since then.
- In May 2004, CNPC took over exploration and development of the **Masjede Suleman Oilfield** from a Canadian company, with two exploration wells drilled in 2007 and 2009, according to CNPC.⁷³
- In May 2005, CNPC won the bid to explore and develop the **Kuhdasht Block** in southern Iran. Two exploration wells confirmed oil, and by 2009 a development plan was made, according to CNPC’s website.⁷⁴ The website does not indicate any development since, nor could any other indication be found.



Figure 6. EIA map of Iranian energy projects.

China, in its oil and gas relations with Iran, appears to be walking a fine line, asserting its right to ignore the non-UN sanctions, but also showing some restraint, even at a cost to its interests. These indications of restraint can be seen in China's slowdown in participation in Iranian projects and in its official statistics on oil imports from Iran—a move which could be driven by China's unwillingness to risk US banking relations and not a desire to play a more responsible international role.

- China has repeatedly rejected the binding nature of US and EU sanctions against Iran, and in late June a foreign ministry spokesman stated that China's oil imports from Iran were "fully reasonable and legitimate," and do not violate any relevant UN Security Council resolutions.⁷⁵
- In October 2010 and the summer of 2011 China slowed its oil and gas work in Iran, according to press reports. In 2010, the Chinese government informally instructed firms to slow down after the United States imposed unilateral sanctions on Iran,⁷⁶ while in September 2011 four Beijing energy executives described "retreats and slowdowns," in Chinese energy investments in recent months, according to press reporting.⁷⁷

- Iran has shown its impatience with the Chinese delays, giving China’s CNPC initially a one-month deadline to make some progress on phase 11 of the South Pars field⁷⁸—a deadline that was apparently extended to March 20, 2013.⁷⁹ Similarly, in July 2012, according to Iranian press, Iran’s Oil Minister Rostam Qassemi said that “explicit and forceful talks” were held with CNPC to accelerate development of Azadegan field.⁸⁰

China’s Oil Import Pattern: A General Diversification Away from Iran. China’s oil import pattern actually shows a move away from Iran, with the exception of 2010 (see figures 7 and 8). Between 2009 and the first six months of 2012, China was never dependent on Iran for more than 11.4 percent of its oil imports. In 2011 and 2012, the number of China’s sources of imported oil (over 100,000 bpd) increased, and the volume of China’s oil imports from Iran decreased in 2010 and 2012.⁸¹

- While the share of Iranian oil in China’s total mix of oil imports has remained fairly stable between nine and 14 percent since 2000, China’s importance to the Iranian oil sector has grown substantially, with exports to China rising from five to 25 percent by 2011 (see figure 9).
- There have been no indications that China is skirting the sanctions on importing Iranian oil, although in late July 2012, the United States sanctioned the Chinese Bank of Kunlun for “facilitating transactions” for sanctioned Iranian banks.⁸² It is unclear if these actions involved oil trade.

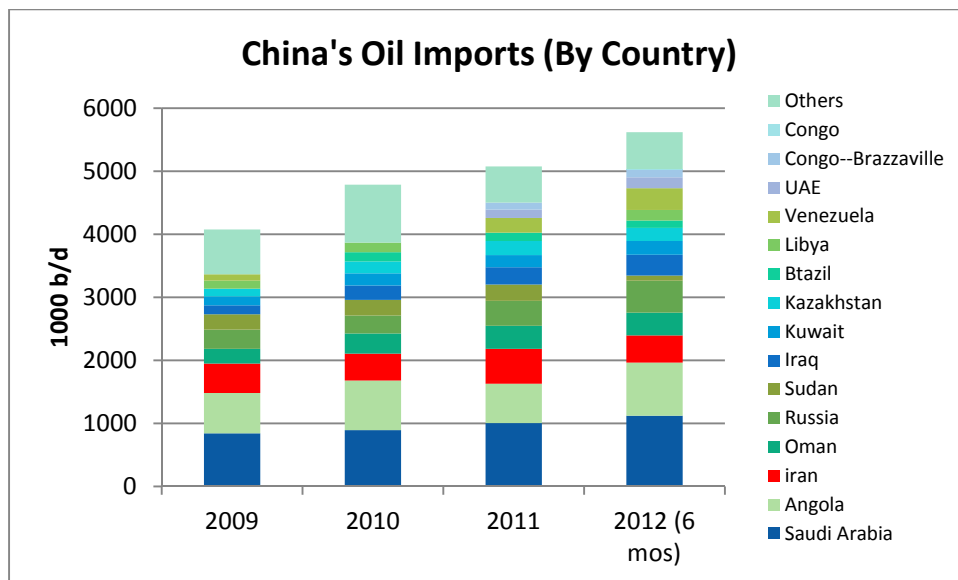


Figure 7. China’s Oil Imports (By Country)

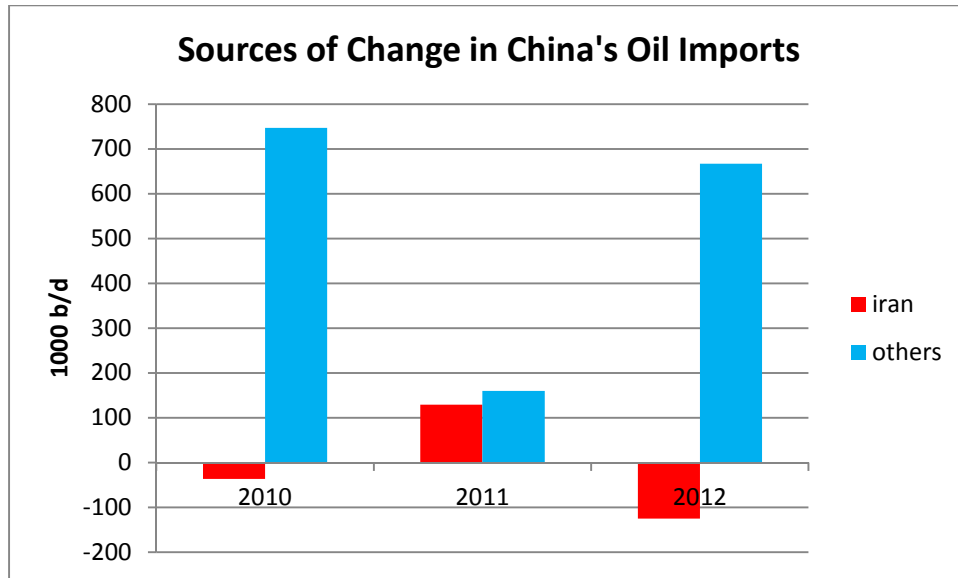


Figure 8. Sources of Change in China's Oil Imports.

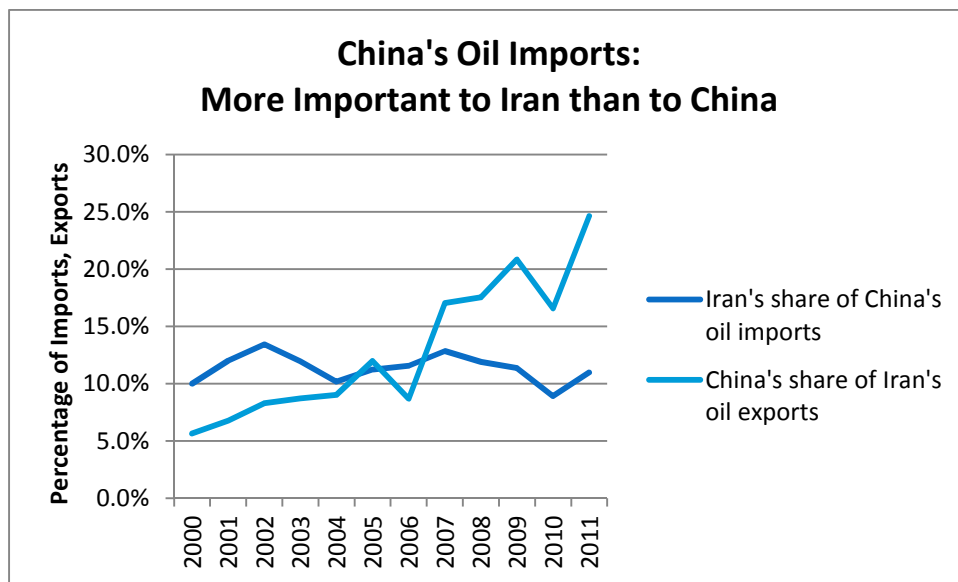


Figure 9. China's Oil Imports: More Important to Iran than to China.

CHINA AND IRANIAN OIL REFINING

Iran's oil refining industry has long been very inflexible, and its lack of secondary capacity has limited its production of the fuels most in demand—gasoline and diesel fuel. The industry has ambitious plans to increase refinery capacity in general and gasoline production specifically by nearly doubling its refinery capacity, according to EIA.⁸³ In 2006 Iran's National Iranian Oil Refining and Distribution Company (NIORDC) announced a \$16 billion expansion program, which has been delayed because of financial constraints and international sanctions.⁸⁴ Chinese companies have agreements to participate in this expansion.

- NIORDC has identified specific projects at seven Iranian new refineries and 11 refinery expansion projects. Chinese companies are involved in two of the 18 total projects:
 - The RIPI Company is building an isomerization unit at the Shazand Arak Refinery, one of 11 new components that four foreign contractors are building to expand gasoline production at the refinery by about 70,000 bpd; they will also enact a smaller increase in the output of kerosene and other lighter oil products, according to the NIORDC website.⁸⁵ The project is scheduled to open by the end of 2012, according to press reporting.⁸⁶
 - Sinopec Engineering, along with two Iranian companies, is adding a heavy naptha hydrotreater and a catalytic reformer to boost gasoline production at the Tabriz Refinery by 4,500 bpd, also according to the website.⁸⁷ According to an Azerbaijani news agency report in early July 2012, this project was nearly complete early in 2012 and was expected to come on stream this year.⁸⁸
- In November 2009, Sinopec signed a memorandum of understanding with NIORDC, which manages Iran’s oil refineries, to invest \$6.5 billion to build refineries in Iran, according to Iranian press reporting.⁸⁹

CHINA AND IRANIAN ELECTRIC POWER

Iran, as noted above, has significant problems with its current electric power grid and generation system, and planned population and urban growth suggest that these problems will intensify. Generally these problems will be handled by Iran’s domestic power industry. Foreign investment in this sector is unlikely, except for the export market, without an established, paying electricity market. Although China may continue to seek entry into this sector, a recent Iranian rebuff of a Chinese company may limit Chinese companies’ interest. In June 2012, Iran’s major hydropower group cancelled a \$2 billion hydroelectric project agreement it made with China’s Sinohydro Group in 2011 for a 1500 MW hydroelectric dam, citing problems with China’s financial offer, according to an international energy website.⁹⁰

IS IRAN SKIRTING THE EMBARGO?

Iran, even with oil production at a 22-year low—2.75 million bpd in August 2012, down from 3.59 million bpd in August 2011^{91 92}—produces more than it can consume or export under sanctions. Iran continues to store the excess oil offshore in tankers and is attempting to find buyers, through renaming and reflagging its ships, according to multiple press reports.⁹³ Reflagging options appear to be shrinking, but Asian consumers are discussing resuming imports of Iranian oil. The combination of Iran’s need for income and Asia’s need for oil, particularly in refineries set up to process Iranian crude, creates a pressure that will make it difficult to contain Iranian oil sales at sharply reduced rates over many months.

- In early July, Iran was using about 65 tankers—two-thirds of its tanker fleet—to store up to 40 million barrels, or roughly two weeks of production, of excess crude oil; an additional 10 million barrels were stored in on-shore storage tanks, according to international oil experts.⁹⁴ To

conceal their positions, Iran tankers frequently turn off their GPS tracking devices, according to IHS Fairplay, a London-based ship-tracking data company.⁹⁵

- Over the summer Iran renamed and replaced the flags of more than half of its very large crude carriers, each capable of transporting two million barrels of oil, under Tanzanian and Tuvalu flags, according to the Financial Times. By mid-August, however, Iran was searching for new partners, as both Tanzania and Tuvalu were deregistering the Iranian vessels.⁹⁶
- An Iranian supertanker owned by the Iranian company NITC transferred 270,000 metric tons of fuel oil to a floating storage unit in the Malaysian port of Tanjung Pelepas in mid-September, according to Bloomberg press.⁹⁷
- In late August, China, India, and South Korea, three of Iran's top oil customers, decided to resume Iranian oil imports, although at a lower level than in the past, according to international business press reporting.⁹⁸

Iran Looks for Financial Outlets. Several sources also report that with international sanctions squeezing Iran, the Islamic Republic is seeking to expand its banking foothold in the Caucasus nation of Armenia to make up for difficulties in countries it used to rely on to do business, according to an August 2012 Reuters report.⁹⁹ Iran's growing interest in its neighbor Armenia comes at a time of rising international isolation for Tehran and increasing scrutiny by Western governments and intelligence agencies of Iranian banking ties worldwide. An expanded local-currency foothold in a neighbor like Armenia, a former Soviet republic which has close trade ties to Iran and is working hard to forge closer links to the European Union, could make it easier for Tehran to obfuscate payments to and from foreign clients and deceive Western intelligence agencies trying to prevent it from expanding its nuclear and missile programs. Armenian officials denied illicit banking links to Iran,¹⁰⁰ but other evidence suggests a link.

- A UN panel of experts that monitors compliance with the sanctions against Tehran recently submitted a report to the UN Security Council's Iran sanctions committee that concluded Iran was constantly searching for ways to skirt restrictions on its banking sector. "One state bordering Iran informed the Panel of requests from Iran to open new financial institutions," the report said. "The requests were not pursued apparently because of that country's burdensome legislation." Several UN diplomats familiar with the panel's work confirmed that the unnamed state was Armenia, where Iran already has banking ties. Despite Armenia's denials of illegal banking arrangements, Iran has not given up trying to expand in the country, the diplomats said, and US officials have repeatedly cautioned Armenian colleagues to tighten financial controls.¹⁰¹
- A May 2012 Western intelligence report shown to *Reuters* cited Armenian bank ACBA Credit Agricole Bank, a full-service institution that does business with individuals and companies and had some \$574 million in assets last year, as one of Iran's principal targets. A Western UN diplomat who closely follows the sanctions on Tehran confirmed that ACBA was "a bank that has come up in connection with Iran." He declined to provide details of any potentially illicit ACBA transactions linked to Iran. Ashot Osipyan, chairman of the Union of Armenia's Banks, said it was impossible ACBA had any ties with Iran. "Armenian banks are financing only Armenia's economy," he said.¹⁰²
- The same Western intelligence report said that Iran was searching for "convenient" locations to develop alternative banking relationships away from spy agencies and other international monitoring bodies. It said an expanded presence in Armenia was one of Iran's goals. "The

Central Bank of Iran (CBI) has been operating for years to establish and develop concealed infrastructures to enable Iran to continue trading with foreign countries, particularly in countries convenient for Iranian activity, such as the UAE (United Arab Emirates) and Turkey," the report said. "The increasing pressure on the banks in some of these countries has forced CBI economists to seek financial alternatives in countries that do not work according to the dictates of the West," it said, naming Armenia as a target. In addition to Turkey and UAE, diplomats say Iran has been trying to develop financial channels elsewhere to avoid sanctions, focusing on countries like Brazil, China, India, and Malaysia.

- According to an August 2012 report in the *New York Times*, Iran has used Iraqi banks to move large amounts of cash into the international banking system, prompting private US protests to Baghdad. The little-known bank singled out by the United States, the Elaf Islamic Bank, is only part of a network of financial institutions and oil-smuggling operations that, according to current and former American and Iraqi government officials and experts on the Iraqi banking sector, has provided Iran with a crucial flow of dollars at a time when sanctions are squeezing its economy.¹⁰³

Diplomats and intelligence officials told Reuters that Turkey and the UAE remain Iran's principal banking connections, while China and India are becoming areas of concern as Tehran now finds it difficult to conduct transactions in US dollars and euros. As a result, Iran has turned increasingly to doing business in less-traceable local currencies. Armenia has become a more attractive financial link as sanctions tighten.¹⁰⁴

Turkey and the UAE, they say, are not as welcoming these days. The two countries are under intense pressure from Washington and the European Union to clamp down on illicit Iranian commerce connected to a nuclear program that the Western powers and their allies suspect is for producing weapons—a charge Iran denies.¹⁰⁵

One bank in particular that has long concerned Western powers is the Armenian branch of Iran's Bank Mellat, which has been under US sanctions since 2007. The Security Council cited it as a problematic bank in the text of its fourth sanctions resolution, passed in June 2010.

- "Over the last seven years, Bank Mellat has facilitated hundreds of millions of dollars in transactions for Iranian nuclear, missile, and defense entities," the resolution said. Mellat is still functioning in Yerevan, though its activities have drastically decreased due to US and EU sanctions, according to Arakel Meliksetyan, deputy head of the financial intelligence unit at Armenia's central bank.¹⁰⁶
- Meliksetyan, citing the bank's annual published reports, said its Armenian assets decreased more than 50 percent from December 31, 2010 to July 1, 2012. Mellat is cut off from US, European, and other financial markets and has virtually no business with other Armenian banks, Meliksetyan said. Since it was disconnected from the SWIFT system earlier this year, Mellat Armenia is no longer able to send or receive international wire transfers, he added. He said the bank's small customers were mainly Iranians doing business in Armenia, Armenians exporting to Iran, Iranians with Armenian backgrounds, and students.

University Ties May Provide Avenue for Off-the-Record Investment. On November 5, 2011 in Beijing, officials from the Iranian and Chinese petroleum industry universities signed an agreement to conduct joint research on oil and gas issues. In discussing the agreement with reporters, Oil Industry University of Iran director Dr. Gholam-Reza Rashed said, "We have reached agreements with Chinese of this university over research works conducted in oil and gas fields. ... [T]he two universities would also cooperate in presentation of PhD courses in their oil and gas faculties." The agreement was signed by Rashed and the Chinese University of Petroleum President Zhang Laibin.¹⁰⁷

A month later, the China University of Petroleum hosted an "International Forum on China's Energy Strategy" at which current and former Chinese officials discussed the Chinese NOCs' "going-out strategy" and the challenges encountered. In attendance was a representative of Future Trends International Group, which purports to represent Iranian energy interests in China, among other Middle East and African countries.^{108 109}

This follows a history of cooperative initiatives undertaken by the China University of Petroleum and its dean, Zhang Laibin. In 2010, Mr. Zhang led a university delegation to Iran at the invitation of the Iranian Presidential Palace Office of Science and Technology Cooperation. During the visit, the Chinese delegation met with government, academic, and commercial organizations and signed memoranda with Iran's National Petroleum Industry Research Institute and Iran's National Petroleum Company to establish cooperative relations.¹¹⁰



Figure 10. CUP Dean Zhang Laibin signs cooperation agreement with Iranian partners in 2010.

Photo: Xia Shaoqing (夏少清)¹¹¹

CHINESE ASSISTANCE TO IRAN'S NUCLEAR PROGRAM

ORIGINS OF THE RELATIONSHIP AND CONTEXT FOR CONCERNS

In 1985, China signed an agreement with Iran that marked the beginning of 12 years of significant nuclear cooperation. Iran was trying to restart its nuclear program (suspended after the 1979 revolution) but had made little headway. China, still in the early phases of economic reform, was looking for opportunities to gain commercial benefit from its extensive military nuclear capacity. Beijing's commitment to aid Iran's nuclear program was also an important element in a broader strengthening of relations between the two countries during this period. In keeping with Supreme Leader Khomeini's revolutionary ideology, Iran was hopeful that it could persuade China to join a mutual effort to "remove the cancerous tumors of imperialism in their regions."¹¹² For its part, China shared Iran's opposition to Western "hegemonism" and emphasized the bond between two ancient civilizations that had suffered from Western oppression. However, as subsequent events were to demonstrate, China's post-Mao turn to focus on development and economic advancement required a degree of accommodation with Washington. According to the analysis of John Garver,¹¹³ China ultimately decided to end nuclear assistance to Iran largely to protect its relationship with Washington and avoid international isolation that could jeopardize its economic progress.

Beijing concluded a second agreement for nuclear cooperation with Iran in January 1990. Although the 1985 agreement had been kept secret, China's Xinhua news agency announced and defended the 1990 accord, describing it as a program to gain economic benefit from the export of nuclear fuel and fuel technology.¹¹⁴ However, Beijing provided few specifics about its nuclear assistance to Tehran until November 1991. Responding to a series of press reports alleging that China was aiding a weapons program in Iran, Beijing acknowledged providing a 27 kilowatt thermal (kWt) miniature neutron source reactor (MNSR) and defended the cooperation as entirely for non-military purposes.¹¹⁵ China also admitted providing Iran with a small calutron—an electromagnetic isotope separation (EMIS) device.¹¹⁶ Reports of the calutron transfer had aroused particular concern because Iraq had used similar technology in its large scale uranium enrichment effort that had been revealed only a few months previously, in the aftermath of the first Gulf War. When the IAEA visited the site in February 1992, they found that the Chinese-provided calutron was too small to be of concern by itself.¹¹⁷ Nonetheless, the device could be used to gain insight into EMIS technology that could potentially be applied to a larger scale, indigenous uranium enrichment program.

China's Early Moves to Accept Safeguards and Export Controls

At the time of its initial 1985 nuclear cooperation agreement with Iran, China was also in the early stages of revisiting its long-held opposition to applying international nuclear safeguards and technology controls to nuclear exports. A few years earlier, Beijing's interest in nuclear power led to discussions with the United States aimed at concluding a nuclear cooperation agreement (NCA)—required by the United States for any nuclear sale or technology transfer. Talks initially foundered because of concern about China's unsafeguarded exports (including uranium hexafluoride, 20 percent enriched uranium and heavy water) to Argentina, Brazil, India, and South Africa. In discussions with Beijing, the United States made it clear that change in China's policy was a fundamental precondition for conclusion of an NCA.¹¹⁸ China joined the International Atomic Energy Agency in January 1984. During a visit to the United States the same month, Premier Zhao Ziyang said that although China remained critical of the discriminatory nature of the Treaty on the Nonproliferation of Nuclear Weapons (NPT), "we do not advocate or encourage nuclear proliferation. We do not engage in it ourselves, nor do we help other countries to develop nuclear weapons."¹¹⁹

Premier Zhao's statement that China opposed nuclear proliferation, together with a public commitment to apply International Atomic Energy Agency (IAEA) safeguards to nuclear exports and additional private assurances, contributed to a lessening of US concerns that led to the initialing of a US-China NCA in April 1984.¹²⁰ However, almost immediately, press reports surfaced that contrary to its pledges, China was providing direct assistance to Pakistan's unsafeguarded nuclear program.¹²¹ Concerns about assistance to Pakistan were the most important factor in continuing US efforts over the next year to gain additional commitments from China. During a June 1985 meeting in Beijing, China provided additional oral assurances and clarifications of its policy.¹²² The NCA was signed on July 23, 1985—during the visit to the United States of Chinese President Li Xiannian—and transmitted to Congress the following day.¹²³

Congress approved the NCA in December 1985, but attached several conditions. Before the NCA could be implemented, the President was required to certify—among other things—that China's nonproliferation policy and practices were fully in conformity with US law. Although Pakistan remained the key concern, Iran also became an issue as the first reports of Chinese assistance to Tehran became public in late 1985.¹²⁴ Iran was a party to the NPT, but the reports raised a red flag because Tehran was already suspected of harboring nuclear weapons ambitions. Continued concerns about China's assistance to Pakistan and Iran, as well as other factors such as assuring that any US exports were used solely peaceful purposes, led to a 12-year delay in providing the Presidential certifications required by Congress.

Additional details about Chinese assistance to Iran emerged in the following years. According to the 1998 Presidential report to Congress on the US-China NCA, the 1985 agreement included "cooperation on uranium geology and exploration, training for Iranian personnel, and supply of several small research reactors and related laboratory facilities."¹²⁵ Most of this activity took place at the Esfahan nuclear center, which was originally established with French assistance during the Shah's regime.¹²⁶ In addition to the MNSR, China provided two sub-critical assemblies (each moderated by light water and graphite) and a heavy water-moderated zero-power reactor. According to the IAEA, construction of these facilities began between 1988 and 1990 and was completed between 1992 and 1995.¹²⁷ All of these facilities were declared to the IAEA, safeguarded, and subject to regular inspections. They contain small amounts of highly enriched uranium (less than 1 kilogram in the MNSR) and heavy water, but are not capable of

producing significant quantities of fissile material. The 1998 Presidential Communication to Congress judged that these facilities did not pose a direct proliferation threat, but could be used for training and to learn about reactor design principles.¹²⁸



Figure 11. Iran's uranium conversion facility at Esfahan.
Photo: Photograph: Caren Firouz/Reuters¹²⁹

1990S: BALANCING A RESPONSE TO US CONCERNS WITH CONTINUED "PEACEFUL" ASSISTANCE

China's accession to the NPT in January 1992 was a key event in China's evolving attitude towards the international nonproliferation regime. According to the analysis of Evan Medeiros, this development was largely a product of China's internal deliberations. Among the factors influencing the decision was the end of the cold war and a desire to break out of the international isolation that followed the Tiananmen massacre in 1989.¹³⁰ Beijing may have also thought that accession to the NPT would smooth the way for an expansion of safeguarded nuclear exports. However, with respect to Iran, Beijing again quickly ran up against US concern that despite Iran's status as an NPT party, Tehran could not be trusted with any nuclear technology, even if exported under IAEA safeguards.

Despite China's accession to the NPT, concern about Iran's nuclear program—and thus about Beijing's assistance—was increasing rapidly. In the aftermath of the Iran-Iraq War and Iraq's use of chemical weapons, senior Iranian officials stressed the need for Iran to develop its own non-conventional capabilities.¹³¹ In the light of these statements and increased concerns about nuclear proliferation after the first Gulf War, Western press reports alleged that Chinese assistance was aiding a nuclear weapons program in Iran. Beijing reacted strongly, insisting that its assistance was legitimate and solely peaceful. During a visit to Beijing in November 1991, US Secretary of State James Baker pressed China to halt its transfers of nuclear technology to Iran. China responded by committing itself to sign the NPT, but at the same time reiterated its right to export nuclear technologies as long as they were safeguarded and intended for peaceful uses.¹³²

In the early 1990s, China's cooperation with Iran was expanding to include discussion of more capable research reactors as well as commercial reactors for the generation of nuclear power. Implementation of China's 1990 nuclear cooperation agreement with Iran was the responsibility of the China National Nuclear Company (CNNC). In addition to the smaller reactors and research facilities described earlier, CNNC apparently agreed to provide a much larger, 27 megawatt (MW) research reactor for the Esfahan Nuclear Technology Center.¹³³ Reports of this sale aroused particular concern because a reactor of this size could produce several kilograms of plutonium per year. While presumably the reactor would be safeguarded, the spent fuel from the reactor could theoretically have been diverted, or the reactor could figure in a scenario under which Iran "broke out" of the NPT.



Figure 12. The reactor building of Iran's Bushehr nuclear power plant is located about 750 miles south of Tehran.¹³⁴

During a visit to Iran in July 1991, Premier Li Peng indicated that China was willing to step in to complete the reactor at Bushehr that Germany had started but left unfinished after the 1979 revolution. President Yang Shangkun visited a number of Iranian nuclear facilities in October 1991 and reiterated China's commitment to Bushehr, although China never followed through with this project.¹³⁵ During a visit to Beijing in September 1992, Iranian President Rafsanjani announced a 10-year nuclear cooperation agreement with China. During this period, Beijing was to build two 300 megawatt power reactors at a site near Darkhovin in Iran.¹³⁶ The deal was to include associated technology, including equipment to manufacture fuel rods.¹³⁷ At a news conference after the announcement, Rafsanjani noted that "our cooperation with China has constantly been increasing" and would become "more comprehensive in many new areas."¹³⁸ These developments contributed to a widespread impression that China had agreed to be Iran's principal supplier as Tehran sought to develop its nuclear infrastructure.

Despite its continued strong defense of “peaceful uses” of nuclear energy, China’s agreement to build the two 300 MW power reactors was quickly followed by its first concrete concession to US pressure. Only a few days after the power reactor deal was announced in September 1992, a Chinese official told the US publication *Nucleonics Week* that Beijing would not sell Iran the 27 MW research reactor because of “technical difficulties.”¹³⁹ Observers have speculated that the cancellation may have been intended to take the edge off of US concern about the power reactor deal on the eve of a controversial congressional vote for most-favored-nation status for China.¹⁴⁰ The dynamic between the two decisions may also have been affected by China’s calculus in responding to President’s Bush’s decision earlier the same month to sell F-16s to Taiwan. John Garver speculates that the decision to cancel the research reactor deal so soon after the F-16 deal might be one of the reasons why Foreign Minister Qian Qichen was later criticized by hard liners for an inadequate response to US moves on Taiwan.¹⁴¹

The United States pushed for the cancellation of the power reactor deal as well, but China continued to push back, citing the right of NPT parties to gain access to safeguarded peaceful nuclear technology. As late as May 1995, Qian Qichen insisted publicly that “there is no international law or international regulation that prohibits such cooperation on the peaceful uses of nuclear energy.”¹⁴² Nevertheless, the US continued to emphasize the issue, stressing Iran’s interest in nuclear weapons. Finally, in September 1995 Qian told the United States that the deal was “suspended for the time being.”¹⁴³ Although issues related to siting and financing were likely involved, US pressure was probably also a factor.

While suspension of the reactor project was a positive development, an additional Chinese project surfaced in 1996 that raised even greater and more direct concerns. Uranium hexafluoride (UF₆) is the compound normally used as feed material for centrifuge uranium enrichment and has few other uses. For this reason, the United States was particularly concerned when it became evident that China had agreed to provide a uranium conversion plant at the Isfahan nuclear research center that could produce significant quantities of this material. Iran informed the IAEA of its plans to build the facility during an Agency visit to Isfahan in November 1996. Chinese nuclear experts had apparently been working at the Esfahan Center since 1995 in preparation for construction of the plant, which was then scheduled to become operational sometime after 2000.¹⁴⁴

Another key aspect of China’s early assistance to Iran was kept secret until 2003, when it emerged during a period of increased Iranian cooperation with the IAEA. The IAEA learned that in 1991 Iran secretly imported from China 1.6 metric tons of uranium products, including approximately one metric ton of uranium hexafluoride (UF₆). According to David Albright, neither country reported the transfer to the IAEA at the time (China was not yet a member of the NPT and thus technically not obligated to report the sale).¹⁴⁵ The Chinese uranium provided the raw material for a number of covert uranium processing and enrichment experiments over the next decade.¹⁴⁶

IAEA reporting in 2003 and later, as well as other sources, describe a number of other areas of Chinese involvement in Iran’s program in the 1990s. China provided a copper vapor laser to the Tehran Nuclear Research Center in 1994, where it was used to research the separation of uranium isotopes. China also aided Iran with zirconium tube production, a technology used in the fabrication of nuclear fuel for reactors. In 1992, the CNNC reportedly negotiated with Iran for the construction of a 25-30 MW heavy water reactor, but the deal was stopped after the US raised the matter with the Chinese government. While declining to follow through with this reactor, China reportedly did sell substantial quantities of heavy water to Iran in the early 1990s.¹⁴⁷

CHINA'S 1997 COMMITMENTS TO END NUCLEAR ASSISTANCE TO IRAN

Ten years after its signing, the 1985 NCA between China and the United States had not taken effect because neither President Reagan nor President Clinton had found it possible to make the certifications required to bring it into effect. In December 1985, Congress had passed legislation authorizing implementation of the NCA but only on the condition that the President certify that China was not assisting any non-nuclear weapons state to develop nuclear weapons. (Two other conditions dealt with the handling of US exports).¹⁴⁸ By 1995, China had agreed to suspend reactor sales to Iran but was still engaged in other cooperation, including provision of the uranium conversion facility.

In mid-1996, the prospective visit to the United States by President Jiang Zemin provided the impetus to revive the NCA. In an effort to meet the requirements for implementation, the United States and China held several rounds of negotiations between June 1996 and October 1997. The negotiations followed the successful resolution of a controversy over Chinese sale of ring magnets to Pakistan's Khan Research Laboratories. On May 11, 1996, China avoided US sanctions on the issue by issuing a pledge not to provide any assistance to unsafeguarded nuclear facilities.¹⁴⁹ Building on this success, the United States sought China's agreement to additional measures judged necessary for gaining NCA implementation, including joining a multilateral export-control organization, establishing an effective export control system for nuclear and dual use goods, and ending its nuclear cooperation with Iran.¹⁵⁰

Beijing eventually agreed to all three conditions sought by the United States. China began to strengthen its export control procedures in May 1997 and joined the NPT's Zangger Committee export control organization in October. During the summit the same month between President Clinton and President Jiang Zemin, China agreed to cancel the already-suspended sale of two 300 MWe power reactors as well as the sale to Iran of the uranium conversion plant. The Chinese foreign minister also provided assurances in writing that China would not engage in any new nuclear cooperation with Iran.¹⁵¹

EVOLUTION OF SAFEGUARDS AND EXPORT CONTROLS

When China joined the IAEA in 1983, it committed only to limited-scope safeguards on specific nuclear exports. Adherence to the NPT in 1992 did not change China's obligations in this regard. Accordingly, during the 1980s and early 1990s, responsibility for safeguards and control of civil nuclear materials was vested with organizations responsible for development of commercial nuclear power—initially the Ministry of Nuclear Industry (MNI), created in 1979. Official regulations and procedures for licensing and control of nuclear materials were issued in 1987.¹⁵² In 1988, MNI was reorganized as the China National Nuclear Corporation (CNNC). Officials from this organization—which was known as the China Atomic Energy Agency (CAEA) in its dealings with the IAEA—continued to be responsible for the relatively narrow scope of nuclear material control and the safeguards obligations required by Beijing's IAEA commitments.¹⁵³

Fulfillment of the promises China made at the 1997 summit required a broader perspective on export controls as well as safeguards. In addition to enforcing controls on nuclear-specific exports, Beijing was now committed to controlling the export of dual-use items and developing an effective system to monitor, license, and/or act to halt all relevant exports across the Chinese economy. In September 1997,

China issued new export control regulations that required State Council approval for all nuclear-related sales. In June 1998, a new decree laid out regulations on controlling “nuclear dual-use items and related technologies,” including a registration and licensing system and specific punishments for violations. In a “white paper” issued in December 2003, China asserted that its regulations and control lists “tally completely” with those of the Zangger Committee and the Nuclear Suppliers Group (NSG) and would be adjusted correspondingly in response to any changes made by those groups.¹⁵⁴ Export control regulations were again revised in 2006 with the goal of giving the government “more control over the end use” of exported technology, according to China’s official *Xinhua News Agency*.¹⁵⁵

Analysis by Western observers generally confirms China’s description of the overall direction of the changes, although there are questions about implementation and enforcement. The administrative and bureaucratic mechanisms necessary to monitor and control transfers have also evolved significantly since the first regulations on control of nuclear technology were published in 1997. As part of broader economic reforms in 1998, new civilian controlled entities assumed responsibility for many defense science, technology, and industry matters (including nuclear export control). The CAEA was separated from the CNNC and made a part of a new, civilian-controlled Commission on Science, Technology, and Industry on National Defense (COSTIND).¹⁵⁶ In 2008, COSTIND was renamed SASTIND (the State Administration of Science, Technology, and Industry for National Defense) and made part of a new Ministry of Industry and Informatization. While SASTIND continues to have the primary responsibility for licensing nuclear-specific goods and equipment, the Ministry of Commerce (MOFCOM) has assumed a greater role as the focus has broadened to dual use goods. MOFCOM is also responsible for educating Chinese industry officials about export control and enforcing relevant regulations. In addition, the General Administration of Customs (GAC) administers controls and is responsible for inspecting items as they are exported. As described in Evan Medeiros’ comprehensive 2005 analysis, China’s system of export controls has evolved from weak and ineffective administrative controls to a legal system that includes laws, regulations, rules, licenses, and a complex interagency mechanism to administer and implement the system.¹⁵⁷

In the opinion of many observers, there is still considerable room for improvement in the implementation—and particularly the enforcement—of export controls in China. While a formal structure is now in place, there is relatively little information on how it is translated into practice. China has taken some steps to educate industry and has established web sites to facilitate applications for licenses.¹⁵⁸ However, according to Jennifer Bulkeley’s interviews with Chinese officials in August 2003, many exporters say they are not familiar with the potential dual uses of goods they export, nor are they able to recognize end-users of potential concern.¹⁵⁹ On the enforcement side, there is little evidence that China is doing much to actively identify and penalize export control violations. China appears to rely primarily on intelligence information from foreign government to identify transactions of concern. For example, in August 2003, China interdicted an attempted export of tributyl phosphate (a chemical used in reprocessing nuclear fuel) to North Korea, but only after reportedly being warned about the event by US intelligence. China claims to be carrying out its own investigations of other infractions, but has provided no details.¹⁶⁰ Overall, as noted by Gary Bertstch in a 2008 analysis, China’s compliance with national and international trade regulations has made significant advances, but remains a work in progress.¹⁶¹

CONTRADICTIONS AND TENSIONS IN CHINA'S POLICY

China has clearly moved a long way from its early belief that it would be a good thing for additional “peace loving” states to develop nuclear weapons. Beijing today takes pains to emphasize its firm commitment to the international nonproliferation regime and asserts that its export control system meets all international standards. Beijing issued “white papers” on nonproliferation policy in 2003 and 2005 that lay out its official views in some detail. These documents underscore China’s view that the purpose of non-proliferation is to “safeguard and promote international and regional peace and security,” that the regime must be “fair, rational, and nondiscriminatory,” and that “unilateralism and double standards must be abandoned.” China maintains that the right to peaceful uses of nuclear energy must be guaranteed, but at the same time “it is necessary to prevent any country from engaging in proliferation under the pretext of peaceful utilization.”¹⁶²

Beijing’s “white papers” assert that in parallel with China’s move from a planned economy to a “socialist market” economy, its export control system has been transformed from one of administrative control to a law-based system that follows “current international standards and practices.” The documents tout China’s export registration and licensing system, end-user certification process, and application of detailed control lists. They also assert that exporters know “or should know” to apply “catch-all” provisions requiring an export license even if the item or technology is not on a control list, if there is a risk of it contributing to proliferation. No doubt aware of Western skepticism about how well these laws and regulations are applied in practice, the white papers devote considerable attention to implementation. They describe the various state organs involved in the export control process in some detail, as well as steps to make exporters aware of their obligations, the system for issuing licenses, the investigation of possible illegal exports, and the application of penalties.¹⁶³

China has made clear that it is committed to the international nonproliferation regime, but its decision to end nuclear assistance to Iran goes further. As Beijing argued for years before 1997, the NPT does not prohibit peaceful nuclear assistance; in fact Article IV of the treaty asserts the inalienable right to the use of nuclear technology for peaceful purposes (“in conformity” with Article I and II prohibitions on nuclear weapons development). China may have stopped aiding Iran’s nuclear program at least in part because it became convinced that Tehran was, in fact, bent on acquiring nuclear weapons. Beijing would want to avoid being seen as the key supplier for a covert, illegal nuclear weapons program in Iran. In addition, however—and, in the view of some observers, most important—China agreed to cut nuclear ties with Iran because it did not believe it could afford to directly challenge the United States on an issue that Washington saw as a core strategic interest. As John Garver has argued, Deng Xiaoping’s 1978 decision to focus on economic development and lifting China’s standard of living would require an accommodation with Washington to ensure access to US markets and technology.¹⁶⁴ By 1997, the Iran nuclear issue became a central issue in the relationship and a resolution was necessary to ensure continued good relations.

However, China’s desire to maintain a stable and productive relationship with the United States does not mean that China shares US perspectives on Iran and its nuclear program. According to interviews carried out by the International Crisis Group in Beijing in 2010, Chinese officials continue to resent what are seen as Western “double standards” in seeking to halt Iran’s enrichment program and “hypocrisy” in ignoring Israel’s nuclear weapons program.¹⁶⁵ There is also a strong undercurrent of belief that the United States plays nuclear favorites and seeks to use the NPT as a tool to achieve its national interests. More broadly, China has a natural sympathy with Iran as another ancient civilization that has suffered centuries of “humiliation” from Western powers. According to a recent essay co-authored by the Dean

of the School for International Studies at Peking University, many in China see US policy towards Iran as part of a broader effort to maintain its “hegemony and dominance” and to “prevent the emerging powers...from achieving their goals and enhancing their stature.”¹⁶⁶

This analysis suggests that China’s policy towards Iran’s nuclear program is a result of complex balancing of nonproliferation policy, a need to maintain good relations with the US, sympathy with Iran as a fellow victim of the West, and opposition to American “hegemony” in the Middle East. There is no reason to think that China will revisit its 1997 decision to halt nuclear assistance to Iran or take any other steps that would directly confront US interests. However, China does not feel the same urgency as the United States about the Iran nuclear issue. According to the analysis of the International Crisis Group, many in China even see Iran’s nuclear development as a positive in that it counters US influence and provides China with strategic leverage.¹⁶⁷ In such an atmosphere, even if direct nuclear assistance is off limits, many within the government and party might not be inclined to move aggressively against trade or technology transfer that could be of indirect benefit to Iran’s nuclear program or its related technology base.

ARE CHINESE ENTITIES CONTINUING TO ASSIST IRAN’S NUCLEAR PROGRAM?

By the mid-1990s, China was beginning to disengage from its cooperation with Iran, and in 1997 Beijing agreed not to “engage in new nuclear cooperation with Iran.”¹⁶⁸ Since that time, there have been few if any allegations that China is directly assisting Iran’s nuclear program as a matter of state policy. Although China still defends Tehran’s legal right to peaceful nuclear activities, Beijing does not assist the effort so as to stay on good terms with the United States and be seen as a responsible world power. In addition to ending state-to-state assistance, China pledged to improve its export control system to prevent the transfer of relevant technologies by companies or individuals.

Evaluating the actual effectiveness of Chinese controls on technology transfer is problematic. As noted above, China has made considerable strides in establishing a formal export control system, but details on implementation and enforcement are sketchy. Companies who may be transferring relevant technology outside the system would obviously aim to conceal their activities both from the Chinese government and outside observers. Some relevant cases have come to light as a result of press articles or the US imposition of sanctions on specific companies, but few details are known and there is no evidence that they involve significant nuclear-relevant assistance.

Export control cases of concern that have received press attention have generally involved Chinese citizens and/or companies that act as intermediaries to acquire sensitive materials such as graphite, high strength aluminum, or maraging steel. One example is Li Fang Wei and the LIMMT Economic and Trade Company, Ltd of Dalian China, which was sanctioned by the US Treasury Department in June 2006 for activities relating to WMD procurement.¹⁶⁹ LIMMT purchased a variety of materials on behalf of various subsidiaries of Iran’s Defense Industries Organization. Although the specific end use was not known, the materials were export controlled and potentially could be used for nuclear, ballistic missile, or military programs. A more recent case involved a Chinese broker who sought 20 tons of maraging steel from a US firm, claiming that the material was to be used in the manufacture of a “magic horse.”¹⁷⁰

One clue about the extent of US Government information on the continued transfer of nuclear-related technology can be found in the periodic Intelligence Community reports to Congress on the Acquisition

of Technology Related to Weapons of Mass Destruction.¹⁷¹ In the first few years after China's 1997 pledge, these reports certified that China appeared to be complying with its 1997 commitment to suspend nuclear cooperation with Iran.¹⁷² In the second half of 2000, a caveat began appearing that "we are aware of some interactions between Chinese and Iranian entities that have raised question about [China's] 'no new nuclear cooperation' pledge."¹⁷³ By the second half of 2003, this language had been replaced by an indication that "China has taken some positive steps during the reporting period" and that Beijing was soon to join the Nuclear Suppliers Group.¹⁷⁴ The most recent report for 2011 notes that "Chinese entities—including private and state-owned firms—continue to engage in WMD related proliferation activities" but makes no specific mention of Iran or nuclear-related assistance.¹⁷⁵

IMPACT OF CHINESE NUCLEAR-RELATED TECHNOLOGY TRANSFERS ON IRAN'S PROGRAM

Chinese assistance in the 1980s and early 1990s was an important factor in Iran's efforts to restart its nuclear program after the 1979 revolution. In addition to providing basic research facilities and training, China transferred uranium products, heavy water, and facility plans that helped jumpstart later projects that Iran undertook on its own. Since 1997, the only known assistance has been indirect. Some Chinese brokers are reported to have acquired sensitive materials and technology on behalf of Tehran's WMD programs, but few specifics are known.

There is no publicly available information indicating that China or Chinese entities have directly aided the most sensitive parts of Iran's nuclear program—uranium enrichment and the "possible military dimensions" addressed in numerous IAEA reports.¹⁷⁶ Iran did use Chinese provided UF₆ in covert enrichment projects carried out between 1998 and 2002.¹⁷⁷ However, Iran's uranium enrichment program is based largely on technology acquired from the A.Q. Khan network. New generation centrifuge designs have been modified significantly—probably at least in part to avoid the need for difficult-to-obtain maraging steel.¹⁷⁸ Little is known about the nature and extent of foreign assistance to Iran's nuclear weapons design related activities, although at least one Russian scientist is believed to have aided the effort.¹⁷⁹

In its interactions with the IAEA, Iran has stressed its intent to develop a comprehensive indigenous capability in all aspects of the fuel cycle. Given nuclear export controls and increasing restrictive sanctions, Tehran in most cases has little alternative other than to develop the relevant technology itself. As a result, the most important factor in the progress of Iran's nuclear program going forward is likely to be the capability of its indigenous industrial and S&T base. China has made significant investments in Iran, including building the Tehran subway system, power stations, ferrous metals smelting factories, and petrochemical plants.¹⁸⁰ These projects and other Chinese initiatives in Iran have the potential to indirectly aid the nuclear program by building up Tehran's industrial and S&T infrastructure.

Impact of Specific Chinese Transfers¹⁸¹

Basic Research and Development: Under nuclear cooperation agreements signed in 1985 and 1990, Beijing provided a range of basic facilities that enabled Iran to train scientists and become familiar with reactor operations and design principles.

Mining exploration: Through the 1990s, China aided Iran's explorations for uranium ore and assisted in the opening of a number of mines.

Uranium products: In 1991 China sold Iran 1.6 metric tons of uranium products that allowed Iranian engineers to conduct lab-scale experimentation in virtually all areas of the uranium fuel cycle.

Heavy water: China reportedly shipped "militarily significant" quantities of heavy water to Iran in the early 1990s. China suspended plans to supply a heavy water production facility and a heavy water moderated reactor, but some technology transfer may have occurred.

Uranium conversion: In 1997 China cancelled an agreement to provide a uranium conversion facility, but Iran retained the plans and design data and eventually built the plant with domestically produced equipment.

Zirconium production: China built a zirconium production plant that was grandfathered under the 1997 agreement with the US to end assistance to Iran. This facility will apparently produce Russian-style zirconium clad fuel for the IR-40 heavy water reactor at Arak.¹⁸²

Sensitive technology and materials. Chinese brokers are reported to have acquired sensitive materials on behalf of Iran's nuclear program, but few specifics are known.

CHINESE ASSISTANCE TO IRAN'S MISSILE PROGRAMS

DIRECT SUPPORT DURING IRAN-IRAQ WAR

When the war began with Iraq in 1980, Iran found itself fighting with an inventory of mostly US-made weapons but with resupply and replacement of those weapons unavailable from the United States. Tehran began urgently to equip its forces with non-US weapons, according to John Garver's analysis. Sales to Iran of West European arms were restricted by European fears of Tehran's revolutionary objectives. Access to Soviet munitions was limited by Moscow's alliance with Iraq and by Khomeini's distrust of the Soviet system. That left China among major arms producers and Beijing seized the opportunity.¹⁸³

In 1980 China's defense industry was granted permission to sell surplus arms and equipment on international markets but because Beijing had taken a strong moral stance against the Iran-Iraq War, it decided that Chinese entities should not sell directly to either side. Sales to third parties who might then resell to Iran or Iraq were admissible. In the case of Iran, Syria and North Korea became the major intermediaries for the sale of Chinese military goods.¹⁸⁴

While Russia and North Korea were Iran's major partners in the area of ballistic missile development, China played a key role in the naval area, according to analysis by John Garver.¹⁸⁵ China's first contribution was 200 HY-2 antiship cruise missiles (the export model identified by NATO nomenclature as the "Silkworm"). The first of several shipments was delivered in the summer of 1986, and Iran successfully test-fired an HY-2 in February 1987. The United States reacted strongly to reports of the HY-2 sale and the Reagan Administration lodged a formal protest. China reacted by issuing a blanket denial, calling the allegation groundless.¹⁸⁶ When the United States confronted China with strong evidence, Beijing claimed that these weapons had been supplied by North Korea. According to analysis by John Garver, it was possible that a number of HY-2s were indeed imported from North Korea, which received the HY-2 and related technology from China in the 1970s and had indigenously produced the missile since the early 1980s. However, despite Chinese denials, US intelligence sources reportedly gathered further evidence that at least some of the HY-2s in Iran had been sold directly by China.¹⁸⁷ On October 22, 1987, the Reagan Administration froze any further liberalization of technology sales to China.¹⁸⁸ In early March 1988, the US State Department received assurances from China that it would not sell antiship cruise missiles to Iran. Despite these assurances, China continued to sell Iran HY-2 missiles in 1988 and 1989. In addition, Iran claimed in early 1988 that it could produce HY-2 and other antiship missiles indigenously.¹⁸⁹

During 1988 China reportedly agreed to provide Iran with technology required to produce surface-to-surface missiles. John Garver notes that the agreement included Chinese training of Iranian engineers and technicians and provision of PRC technical advisors. China also agreed to provide equipment and technical assistance in developing the infrastructure to design, test, and manufacture such missiles. By 1989 China was reportedly assisting Iran in establishing a missile factory at Shadroud to produce an 800-km SSM. China also reportedly assisted in the construction of a missile test facility and launch range near Semnan.¹⁹⁰



Figure 13. HY-2 "Silkworm" Missile and launcher
Photo: Hossein Fatemi, Fars News Agency¹⁹¹

THE 1990S: CHINESE ASSISTANCE IMPROVES IRAN'S PRODUCTION BASE

With the end of the Iran-Iraq War, Iran's defense requirements, and consequently Sino-Iranian cooperation, changed. With Iraq partially disarmed under UN supervision, Iran's defense budgets fell sharply. Iran's leaders opted to forgo major increases in conventional arms, concentrating instead on the development of key, advanced, sophisticated technologies, especially missile capabilities. Tehran now sought to develop a self-sufficient indigenous production capacity for these technologies, and China helped it to achieve its objectives.¹⁹² In the years following the Iran-Iraq War China steadily ramped up its weapons sales to Iran.

- Tehran purchased an estimated \$400 million worth of weapons from the PRC between 1993 and 1996, and \$600 million during the 1997-2000 period, according to Richard Grimmett of the Congressional Research Service, ranking China third as Iran's military supplier.¹⁹³
- In 1990, China signed a ten-year agreement with Iran on military technology exchanges. Missile cooperation was a key focus of the agreement.¹⁹⁴
- During the 1990s China apparently agreed to help Iran set up production lines for M-11s (range of 280 km) and M-9s (range of 600 km) at the Esfahan factory. Iran and Syria had reportedly contributed to the development of the M-9s and even made a deposit on a purchase when they became available. China reportedly reneged on any commitment to sell complete M-9 systems to the Middle East, but moved ahead with assisting Iran with indigenous development and production capability for missiles closely comparable to the M-9. China apparently did not transfer whole M-11 missiles to Iran due to US pressure.¹⁹⁵
- During his July 1991 visit to Iran, Premier Li Peng traveled to Esfahan and reportedly several other complexes where Chinese experts were working to produce various types of missiles.¹⁹⁶
- The CIA assessed that China delivered dozens or perhaps hundreds of missile guidance systems and computerized machine tools to Iran sometime between mid-1994 and mid-1995, according to the *International Herald Tribune*.
- On November 21, 1996, the *Washington Times* cited a CIA report as saying that China agreed in August 1996 to sell to Iran's Defense Industries Organization gyroscopes, accelerometers, and test equipment that could be used to build and test components for missile guidance.¹⁹⁷ This equipment and technology allegedly allowed Iran to increase the accuracy of its North Korean SCUD missiles and facilitated development of an indigenous production capacity.¹⁹⁸
- In the mid-1990s, China provided Iran with a new generation of substantially more capable antiship missiles, the C-801 and C-802.¹⁹⁹ The C-801 is a solid-fuel system with a range of 40 km that can be fired from submarines via torpedo tubes and from aircraft. The C-802 at the time was China's top-of-the-line antiship cruise missile, with a longer range of 120 km. China reportedly agreed to sell 150 C-802s to Tehran but only 75 were delivered before the deal was frozen under US pressure.^{200 201 202} Reports of the C-802 sale triggered strong political reaction in Washington, and the Clinton Administration considered imposing sanctions on China for the sale, alleging that it violated the 1992 Iran-Iraq Arms Nonproliferation Act.^{203 204} This act targeted countries transferring destabilizing weapons, in quantitative and qualitative terms, to either Iran or Iraq.²⁰⁵

- The *Washington Times* on September 10, 1997 cited Israeli and US intelligence sources as saying that the Great Wall Industry Corp. was providing the entire telemetry and missile flight testing infrastructure to support the development of the Shahab-3 and Shahab-4 MRBMs.²⁰⁶ Over 100 PRC and North Korean experts worked there, according to the *Washington Times* and *Washington Post*.²⁰⁷ Citing a May 1998 intelligence report, the *Washington Times* reported that in May 1998, China discussed selling telemetry equipment to Iran.²⁰⁸ In Beijing in November 1998, Acting Undersecretary of State John Holum protested continuing Chinese missile technology aid to Iran, including a reported shipment of telemetry equipment in November 1998, according to the *Washington Post*.
- US intelligence agencies suspected continued PRC sales of missile technology to Iran in 1999, including specialty steel, telemetry equipment, and training on inertial guidance, reported the *Washington Times*.²⁰⁹ In 1999, China agreed to help Iran modify a Chinese FL-7 antiship missile, extending its range from 30 to 50 km and rendering it able to fire from either helicopters or fast attack craft. In 2000 Beijing provided Iran with yet another class of fast attack craft armed with Chinese FL-10 missiles.²¹⁰

THE 2000S: SANCTIONS CURB BUT DO NOT HALT CHINESE ASSISTANCE

The overall volume of arms sales from China to Iran decreased in the first decade of the 2000s—according to CRS’ Richard Grimmett, between 2002 and 2005 arms sales were valued at approximately \$100 million and then dropped below \$50 million in the period of 2007 to 2010—but reports of PRC missile-related transfers to Iran continued to surface and several Chinese entities were sanctioned.

On November 21, 2000, the Clinton Administration said it had determined that PRC entities had transferred Missile Technology Control Regime (MTCR) Category II items (missile components) to Iranian entities but that US sanctions on China would be waived given renewed missile nonproliferation promises, pursuant to Section 73 of the Arms Export Control Act.²¹¹

The *Washington Times* reported in January 2001 that NORINCO had shipped specialty metals and chemicals used in missile production to Iran (for a complete listing of sanctions against Chinese entities see appendix A). In 2002, President Bush told Congress that PRC entities “have continued to supply Iran with a wide variety of missile-related goods, technology, and expertise.” The report confirmed that the May 2002 sanctions under the Iran Nonproliferation Act of 2000 were imposed on three Chinese entities for conventional transfers to Iran related to unspecified missiles.²¹² On May 23, 2003, the Administration imposed sanctions on NORINCO and Iran’s Shahid Hemmat Industrial Group because it transferred missile technology to Iran. Again on June 26, 2003, the Administration imposed sanctions under the Iran Nonproliferation Act based on “credible information” that five PRC entities including NORINCO and one North Korean entity had transferred unspecified prohibited technology. The State Department noted in the act’s required report to Congress transfers of items that have the potential to make a “material contribution” to WMD, cruise missiles, or ballistic missiles.

On April 1, 2004, the Bush Administration imposed sanctions based on “credible information” that five PRC entities transferred unspecified prohibited items to Iran. The *Washington Times* reported on August 23, 2004, that the US Government detected several weeks before that a PRC company supplied missile technology to Iran within the previous six months. On September 20, 2004, the State Department imposed sanctions on Xinshidai, a defense industry conglomerate, for material contributions to missile

technology proliferation in a publicly unnamed country.²¹³ The Bush Administration again imposed sanctions on PRC entities under the Iran Nonproliferation Act, in September, November and December 2004.

US Undersecretary of State John Bolton said in a speech in Tokyo in February 2005 that the PRC Government had still not taken action to curb NORINCO's missile proliferation activities in Iran, and on December 23, 2005, the Administration again imposed sanctions on NORINCO and five other PRC entities for missile and chemical weapons related transfers. In April 2007, the United States again imposed sanctions on PRC entities for transfers contributing to weapons proliferation in Iran. In 2008, the United States reportedly raised concerns with China about a transfer to Iran of 208 tons of potassium perchlorate, which could be used in missile fuel. Also in 2008, the Advanced Technology and Materials Company reportedly sold to Iran large amounts of tungsten copper, and the United Arab Emirates intercepted a PRC shipment to Iran of specialized aluminum sheets, materials that could be used to produce ballistic missiles. Further LIMMT Economic and Trade Company and its executive, Li Fang Wei, used front companies to hide sales of materials to Iran from 2006 to 2008, according to an indictment in New York.²¹⁴

Jane's Defence Weekly reported that there has been considerable co-operation between the Iranian and Chinese aerospace industries in the 2008-10 period. The Cruise Systems Industry Group, Hongdu Aviation Industry Group (HAIG), CASIC, and CPMIEC are believed to have assisted with the development of the Iranian Kosar and Nasr short range antiship missiles. Kosar is similar to the Chinese C-701, and both Kosar and C-701 were first displayed in 1998. Kosar appears to be similar to the Chinese TL-10/JJ-10 air- and surface-launched missiles, and these differ from C-701 only in the wing shape. It is believed that the earlier Kosar missiles were assembled and tested in Iran, from Chinese supplied sub-assemblies. Kosar missiles were reportedly fitted to Peykaap 2 (IPS 16 mod) patrol craft in 2008, with two missile canisters located in the stern of the craft. It is believed that the Parvin (PGM-71) patrol craft may have been fitted with two Kosar missile canisters, and that the Tir patrol craft (IPS 18) may also have been fitted with two canisters, but neither of these have been confirmed. It is believed that there are two versions of the Nasr (C-704) missile in Iran. Experts believe that the C-701 entered service in China in 1999, and that Kosar entered service in Iran in 2005. The earlier Kosar missiles were assembled and tested in Iran, from Chinese supplied sub-assemblies.^{215 216 217}



Figure 14. Iranian Defense Ministry-released photo of what it says are Nasr 1 (Victory) missiles in a factory in Tehran.²¹⁸

There were at least two versions of the Kosar (derived from the Chinese C-701/TL-10), one with a TV seeker head and the other with an active radar seeker, with inertial guidance in the mid-course phase. The Chinese missiles were believed to have alternate designators, using TL-10A for the TV seeker version and TL-10B for the active radar seeker (believed to be likely a Ka band, 35 GHz). One report suggested that a semi-active laser (SAL) version had also been developed in Iran. The Kosar had a 29 kilogram HE/SAP warhead, a minimum range of three kilometers and a maximum range of 18 kilometers. The missiles were stored on and launched from a square box section canister, with two canisters mounted on a rotating launch assembly on a wheeled 4x4 truck.²¹⁹

In February and April 2009 and July 2010, the United States imposed sanctions on PRC entities and Li Fang Wei for missile proliferation in Iran. Also in July 2009, the State Department reportedly had concerns that Q.C. Chen arranged for the sale of a test chamber to Iran's Defense Industries Organization that could be used for testing missile parts. The test chamber was made by Voetsch China (a PRC subsidiary of a German firm) and was not controlled by the MTCR.²²⁰

Multiple sources reported that China inaugurated a missile plant in Iran in early 2010,²²¹ even as the United States and its allies were pressing Beijing to support a new round of tough economic sanctions on the Islamic Republic over its nuclear program, *Jane's Defence Weekly* reports. Robert Hewson, editor of *Jane's Air-Launched Weapons*, reported that the factory for assembling and producing Iran's Nasr-1 antiship missile was opened March 7. Hewson said no Chinese envoys were seen at the opening of the Nasr factory, but he notes that the event marked "another milestone in the continuing military/industrial bond between the two countries."²²² The Nasr is identical to China's C-704 antiship missile, Hewson says, and is a medium-range weapon that can be launched from warships or shore. The Chinese C-704 was developed by the China Aerospace Group and is the equivalent of the US AGM-119 antiship missile.²²³

Jane's Defence Weekly has assessed that the Nasr appears to be a scaled-up version of Kosar and is similar to the Chinese C-704 (TL-6/JJ-6) air- and surface-launched missiles. There are reportedly at least two versions of the Nasr. The first version is called the Nasr 1, and this started production in Iran in April

2010, with the final assembly and test of Chinese supplied sub-assemblies. An unconfirmed report stated that the solid propellant motors are made in Iran. A second version known as Nasr 2 is believed to be in development in Iran. Iran reportedly also received some C-704KD air-launched missiles from China, but it was not known if these missiles were fitted to fixed wing aircraft or helicopters.²²⁴

The Iranians, possibly with Chinese assistance, have also developed the Noor, an upgraded version of China's C-802, with a longer range than the original and over-the-horizon capabilities. Indeed, Hewson observed that "Iran has gone further than China in fielding the C-802, taking what was previously a land- and ship-launched weapon and producing an air-launched version that can be carried by Mi-17 helicopters and fast-jet types."²²⁵

Jane's Defence Weekly also reported in 2010 that "there were other cooperative tactical missile programs under way and China's design bureaus have displayed several 'export only' weapons (such as the C-705 lightweight cruise missile) that would seem set to follow the established route into Iran," Hewson added. "With such a solid relationship established between the two countries it is not difficult to see why China has been reluctant to commit to the Western push for sanctions against Iran."²²⁶

The United States reacted to these multiple reports of continued missile transfers by imposing additional sanctions on Chinese companies.

- During a visit to Beijing in September 2010, Robert Einhorn, then the State Department's Special Advisor for Nonproliferation and Arms Control, handed a "significant list" of companies and banks suspected of violating UN sanctions to their Chinese counterparts, according to the *Washington Post*.²²⁷
- In February 2011, the Section 721 report for 2010 told Congress that PRC entities continued to supply missile-related items to Iran and that entities in the PRC likely provided key components for Iran's production of ballistic missiles.
- In May 2011, Washington imposed sanctions on a Chinese national and three Chinese entities for unspecified transfers controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise/ballistic missiles.

A list of Iran-related sanctions imposed on Chinese entities is provided in Appendix B.

EVOLUTION AND EFFECTIVENESS OF EXPORT CONTROLS

Beginning about 1991, Beijing took steps to try to address international concerns by increasing its participation in international nonproliferation regimes. As Evan Medeiros notes, however, China only grudgingly placed controls on exports on missiles and related goods, and its compliance with stated commitments was weak. Several factors were at work. First, China rejected the existence of a global norm governing the nonproliferation of missiles. Second, it lacked the bureaucratic structures to control missile exports: China's aerospace industry was large and spread out, and China's aerospace firms had significant incentives to export missiles and missile-related items.²²⁸ Moreover, missile exports contributed to many of China's national security and foreign policy goals, among them to counter US influence in the region and to leverage those exports to prod the United States to limit its arms sales to Taiwan.

China held very negative views of US efforts to restrict the international dissemination of missile technologies. Chinese analysts tended to see arms control agreements as instruments through which powers attempt to achieve military advantage over rivals. Analysis by John Garver notes that the Missile Technology Control Regime, set up by the United States and six other Western nations in 1987 was, in China's view, a mechanism of this US effort at continued military domination.²²⁹ By trying to impose the MTCR, the United States and its allies were trying to maintain the ability to attack from the air potential enemies in the Third World, while limiting the ability of those adversaries to retaliate with missiles.²³⁰ Fundamentally, Beijing saw the regime as a violation of the sovereign right of the Third World states to self-defense.²³¹

Despite this distrust of US motives, China first promised tentatively to abide by the Missile Technology Control Regime (MTCR) in November 1991 and February 1992 and later reaffirmed that commitment in an October 4, 1994 joint statement with the United States. On November 11, 2000, China said it had no intention of assisting any other country in developing ballistic missiles that can be used to deliver nuclear weapons and promised to issue missile-related export controls as soon as possible. Beijing also repeatedly assured Washington that it would end missile sales and twice endorsed joint statements avowing that they would respect MTCR guidelines.²³² Evan Medeiros notes that these changes in Chinese policy occurred almost exclusively in the context of bilateral bargaining with the United States and often as a result of US pressure.²³³

In the post-9/11 era, Chinese policymakers' growing concern about missile proliferation was reflected in the formal missile export control regulations China issued in 2002.²³⁴ Nevertheless, Beijing was accused of adhering to an overly narrow interpretation of the MTCR restrictions and neglecting the nonproliferation spirit and standards set by the regime. China's reluctance to fully embrace the MTCR has clearly frustrated US policymakers. As then US Assistant Secretary of State for Verification and Compliance Paula DeSutter stated in July 2003, "At the highest levels, the Chinese government has claimed that it opposes missile proliferation.... Unfortunately, the reality has been quite different."²³⁵ China did not join the 93 countries in signing the International Code of Conduct against Ballistic Missile Proliferation in The Hague in November 2002. In 2004 China applied to join the MTCR but has not been accepted as a member because of enduring concerns about its missile proliferation behavior.²³⁶

Comments from an unnamed senior US official to the *Washington Post* in 2010 indicated that Washington does believe China has made some progress in the past few years. The US official credited China with working hard to establish the bureaucratic structures and laws to control the export of sensitive technologies but said that China so far has not devoted resources to crack down on violators. "China has come a long way in putting in place an export control system. But it's one thing to have a system that looks good on the books and another to have a system that they enforce conscientiously... China's system is deficient on the enforcement side."²³⁷

IMPACT OF CHINESE MISSILE-RELATED TECHNOLOGY TRANSFERS

Taken together, Beijing's contributions helped Iran accomplish a considerable enhancement to its antiship weapons capabilities. This military modernization improved Iran's defenses against regional rivals Iraq and Saudi Arabia and against the United Arab Emirates (UAE), with whom Iran was locked in chronic disagreement over the ownership of three islands in the Strait of Hormuz, according to John Garver.²³⁸ Chinese transfer of dozens or perhaps hundreds of missile guidance systems and computerized machine tools to Iran sometime between mid-1994 and mid-1995, along with its later

agreement in August 1996 to sell to Iran's Defense Industries Organization gyroscopes, accelerometers, and test equipment that could be used to build and test components for missile guidance, allowed Iran to increase the accuracy of its North Korean SCUD missiles and facilitated development of an indigenous production capacity.²³⁹

Many experts believe that China's most significant contribution to Iran in the area of missile expertise, training and technology has been its assistance in the construction of missile production facilities. Iran's largest missile factory, located near Esfahan, was originally built in cooperation with North Korea, possibly with Chinese assistance. Beginning in 1987-88, this facility served as the assembly site for Iran's SCUD-B missile kits, imported from North Korea. In addition to production assistance at Esfahan, sources report that China has also helped build a ballistic missile plant and test range east of Tehran, and may also be involved in producing solid-fuel rockets at Iran's Seman facility.

CHINESE DIPLOMATIC SUPPORTS TO IRAN ON NUCLEAR/MISSILE ACQUISITIONS

China has traditionally provided diplomatic support to Iran in international arms control (see appendix D for a chart of China's diplomatic moves vis-à-vis Iran). As a matter of principle, Beijing objects to the use of sanctions in general. It recognizes Iran's right to uranium enrichment as long as it complies with the rules of the IAEA. Economic considerations and an instinctive dislike of sanctions make the Chinese skeptical of supporting the proposed oil embargo against Iran. China probably would have gone along had the proposed oil embargo been approved by the UNSC. Since it is led by the United States and a Western European nation, China views this initiative as lacking international legitimacy. Moreover, Washington's case against an Iranian nuclear weapons program has always struck Beijing as another example of American double standards—turning a blind eye to Israel's nuclear arsenal but threatening force against Iran's nuclear program.

As the West has increased its pressure on Iran, the latest effort being a concerted campaign to impose an oil embargo on Tehran, China has found itself in a tough dilemma, notes Minxin Pei of Claremont McKenna College. As China's third-largest supplier of crude oil—roughly 500,000 barrels a day—Iran constitutes a critical piece in China's energy security puzzle. Losing Iran's oil imports would cause an immediate supply shock to China, unless other oil-producing countries, notably Saudi Arabia, stepped in to make up the shortfall. In addition, Chinese oil companies have signed tens of billions of dollars of contracts for energy exploration and refining with their Iranian counterparts. China risks losing these potentially lucrative deals if it joins in the West-led sanctions.²⁴⁰

But given the importance of ties with the West, particularly the United States, China cannot completely continue business as usual in trading with Iran either. Its ties with Washington are no doubt far more critical to Chinese national interests than Chinese-Iran relations. The United States is China's second-largest export market (after the European Union (EU)). To complicate matters further, China has to take into account Saudi Arabia's staunch opposition to Iran's nuclear program. Finally, Beijing's pragmatists know that, given the mounting pressures within Israel to launch a pre-emptive attack against Iran's nuclear facilities, adopting sanctions that can really hurt Iran might be the only alternative to avert a far worse disaster: a war in the Persian Gulf that cuts off the flow of oil through the Straits of Hormuz and causes a global oil shock.

Over the past several months, Beijing appears, albeit with much reluctance, to be trying to take a middle course to protect its interests on multiple fronts that sometimes puts it at odds with Tehran. China has supported sanctions against Iran but only as a means of compelling Iran to honor its commitments to international law. For example:

- In January 2010, China participated in the release of a statement by the EU political director on behalf of the P5+1 that Iran's response to IAEA requests had been "inadequate," and that the group would pursue parallel tracks of a negotiated solution and "consideration of appropriate further measures."²⁴¹
- In March 2010, China and Russia both issued a demarche against Iran for rejecting a set of new incentives offered by the P5+1, including enriching uranium for Iran in France and Russia. Iran's negative response helped convince both UNSC permanent members to participate in a new round of negotiations for a sanctions resolution.²⁴²
- In April 2010, PRC Premier Wen Jiabao participated in negotiations with other UNSC permanent members and the EU foreign policy chief regarding a fourth sanctions resolution against Iran. PRC Foreign Ministry issued a statement saying that the PRC "does not oppose the twin-track strategy" of pursuing negotiations and sanctions simultaneously.²⁴³
- In June 2012, China sided with Russia in a vote to block Iranian membership in the Shanghai Cooperation Organization pending resolution of UN sanctions imposed on it.²⁴⁴

DIRECT OR INDIRECT PROLIFERATION FROM CHINA THROUGH THIRD PARTIES

Pakistan. China's past and persisting connections to Pakistan's nuclear program raised questions about whether China was involved in or had knowledge about the long-time efforts, publicly confirmed in early 2004, of Abdul Qadeer Khan, the former head of Pakistan's nuclear weapons program, in selling uranium enrichment technology to Iran. China's ties to the network were a concern, particularly because China was an early recipient of the uranium enrichment technology using centrifuges that Khan had acquired in Europe. In return, in 1982, China gave Pakistan 15 tons of uranium hexafluoride gas for production of bomb-grade uranium, 50 kilograms of weapons-grade enriched uranium sufficient for two bombs, and a blueprint for a nuclear weapon that China had already tested, according to Khan.²⁴⁵

There were also questions about whether China shared intelligence with the United States about Khan's nuclear technology transfers. With the troubling disclosures about Khan's network, China could, on the one hand, have been more willing to cooperate on nonproliferation or could have been reluctant to confirm its past involvement. A senior Pakistani diplomat was quoted as saying that, while in Beijing in 2002, PRC officials said they knew "A.Q. Khan was in China and bribing people and they wanted him out."²⁴⁶ Particularly troubling was the reported intelligence finding in early 2004 that Khan sold Libya a nuclear bomb design that he received from China in the early 1980s (reportedly in exchange for giving China his enrichment technology), a design China had already tested in 1966 and had developed as a compact nuclear bomb for delivery on a missile.²⁴⁷ That finding raised the additional question of whether Khan had sold the design to others including Iran and North Korea.

North Korea. Regarding the relationship between Beijing and Pyongyang in their common support for Iranian missile development efforts, not much is known. Presumably, it was Tehran that worked out the division of labor between those two countries and that brought in one or the other as Iranian needs dictated. Yet Beijing facilitated North Korea's missile cooperation with Iran. Questions have arisen about China's compliance with UNSC resolutions and even possible enabling of the DPRK's activities in allowing cross-border trade and transactions to and from North Korea as well as permitting Pakistani, North Korean, and Iranian ships and planes to use PRC ports and airspace (and perhaps military airfields). There were scattered reports during the early 2000s of use of Chinese facilities for illicit transfers. An Iranian ship stopped at the Tianjin port in China and picked up missile components before sailing on to North Korea to take delivery of missiles and rocket fuel in February and November 2002, according to a December article in the South Korean newspaper, *Joong Ang Ilbo*.²⁴⁸ From April to July 2003, China reportedly gave overflight rights to Iranian cargo planes that flew to North Korea at least six times to pick up wooden crates suspected of containing cruise missiles.

In June 2005, China agreed to deny overflight rights to an Iranian cargo plane that landed in North Korea allegedly to pick up missile components. In November 2007, the Bush Administration reportedly raised concerns with China that an Iran Air plane was flying from North Korea via Beijing's airport to Iran with a shipment of missile jet vanes for Iran's missile program. In August 2009, the United Arab Emirates seized a ship (ANL Australia) transporting North Korean weapons to Iran. However, after originating in North Korea, the cargo was first transferred in June to a PRC ship that docked at China's port cities of Dalian and Shanghai, where the cargo was then moved to the ANL Australia.²⁴⁹ In November 2009, South Africa seized North Korea's weapons cargo bound for Congo, and the shipment was first loaded onto a ship docked in Dalian.

In 2011, China tried to suppress a report at the United Nations suggesting that North Korea and Iran have been routinely sharing ballistic missile technology, United Nations diplomats said in early May, expressing concern that Beijing was again working to shield the North. The report, by a United Nations panel of experts, said prohibited "ballistic missile-related items" were suspected of being transferred between North Korea and Iran in breach of United Nations sanctions against North Korea. It said the transfers were believed to be taking place on regular scheduled flights of Air Koryo and Iran Air, using air cargo hubs that had less stringent security than passenger terminals.

The panel's findings said that the technology transfers had "trans-shipped through a neighboring third country." The report did not specify which, but several United Nations diplomats identified that country as China. The report was submitted to Security Council members, but had been delayed for days before that after the Chinese expert on the panel refused to sign off on the report.²⁵⁰

EFFECTIVENESS OF US AND INTERNATIONAL SANCTIONS REGIMES

"International sanctions have taken a toll on the Iranian economy, especially the energy, financial and transport sectors," according to Barbara Slavin, Senior Fellow of the South Asia Center of the Atlantic Council.²⁵¹ Iran cannot legally purchase or sell weapons, and its airlines and shipping companies are increasingly barred from foreign ports. The Comprehensive Iran Sanctions Accountability and Divestment Act (CISADA), enacted in 2010, has also had a chilling effect on foreign investment in Iran's energy sector. David Cohen, US Undersecretary of the Treasury for Terrorism and Financial Intelligence,

testified in 2011 that, as a result of foreign companies withdrawing investment from Iran, Iranian oil production was likely to decline by about 800,000 bpd by 2016, a 20 percent drop. “At current oil prices, such a decline will cost Iran on average about \$14 billion (about three percent of Iran’s GDP) in annual oil revenues through 2016,” he estimated.²⁵²

Secretary of State Hilary Clinton, in announcing the President’s granting of an exemption to financial firms from China and Singapore for facilitating Iranian oil shipments, argued that the cumulative actions of 20 countries that had been granted such exemptions to curb their oil imports from Iran “are a clear demonstration to Iran’s government that Iran’s continued violation of its international nuclear obligations carries an enormous economic cost.” She noted that the International Energy Agency (IEA) estimates Iran’s crude oil exports in 2011 were approximately 2.5 million bpd and had dropped to roughly 1.5 million bpd in mid-2012, “which in real terms means almost \$8 billion in lost revenues every quarter.”²⁵³

Sanctions on Iran’s energy sector have proved highly effective in discouraging much-needed investment in Iran’s aging oil and gas infrastructure. According to Iran’s Oil Minister, Iran needs \$40 billion in investment in its energy sector, and most experts think that it will need far more. “Yet, since March 2012, 20 out of 41 foreign firms previously engaged in Iran’s energy sector have withdrawn, including all the Western companies with advanced technologies,” according to analysis by the Stimson Center.²⁵⁴ This leaves Iran facing the prospect of declining oil production and the certain failure of its offshore gas development plans.

Iran’s banks largely have lost access to international finance due to financial sanctions. Between 2006 and 2010, the Treasury Department convinced 80 foreign banks to refuse to process transactions involving Iranian banks, including such giant institutions as UBS (Switzerland), Commerzbank AG (Germany), HSB (UK), and Deutsche Bank A.G. (Germany).²⁵⁵ As a result, Iran now experiences extreme difficulty processing significant transactions, especially oil transactions customarily conducted in euros or dollars. There are reports that China, India, and South Korea all owe Iran billions for past oil sales but cannot pay their debts due to banking complications. Bijan Khajehpour, Managing Partner, Atieh International and an expert on the Iranian economy, noted in a 2011 address at the Wilson Center that these banking complications have been a factor in the government’s inability to maintain a stable exchange rate for the rial. There have been sudden fluctuations in the value of the Iranian currency over the past three years, which have created a yawning gap between the official rate and the black market rate.²⁵⁶ Most recently, the Iranian currency fell to new lows, triggering a new round of accusations of mismanagement among Iranian politicians. The Iranian rial rate fell on 1 October to as low as 33,500 rials to the dollar on informal currency bazaars and exchanges, down 13 percent on the day, after already falling sharply the week before, according to traders in Tehran and currency websites. The currency responded in part to what some Iranian traders interpreted as tougher talk from US and Israeli officials, as well the Iranian central bank’s inauguration of a new currency exchange in Tehran on September 24.²⁵⁷

Khajehpour also noted that sanctions are making imports five to 10 percent more expensive. Other signs of economic weakness were the record amounts of bounced checks—\$25 billion worth between September 2010 and September 2011.²⁵⁸ “The Iranian Government has also drained a fund that held surplus oil payments to pay for a reform program that has substituted cash handouts to 80 percent of Iranians for subsidies on gasoline, electricity, and other consumer staples. The reforms, while reducing energy consumption, have so far cost the regime more money than the original subsidies,” according to Barbara Slavin, Senior Fellow of the Atlantic Council.²⁵⁹

Sanctions also affect Iranian business. Restrictions on loans and credit lines, insurance, and shipping severely hamper the business dealings of both wealthy and middle class Iranians. Shortages of raw materials due to sanctions further impede the average Iranian's ability to run a profitable enterprise, according to the *Wall Street Journal*.

How Iranians Have Viewed the Impact of Sanctions

A RAND-sponsored survey of Iranians in 2010 found that overall:

"Half of the respondents either saw sanctions as a positive force or believed that they have had no impact. Although many of those surveyed felt that economic sanctions have affected the Iranian economy negatively, different patterns emerged across different subgroups. Specifically, almost half of women (48 percent) said that sanctions had affected the economy negatively, and 20 percent said that the sanctions have affected the economy positively. Roughly a quarter said that the sanctions had neither a positive nor a negative effect on the economy. On the other hand, 42 percent of men said that the sanctions had affected the economy negatively, and 23 percent said that sanctions had affected it positively." Opinions varied by class as well. "A greater proportion of poor respondents expressed negative views about the impact of sanctions than did any other social class."²⁶⁰

Experts, however, are divided on the effectiveness of sanctions as a tool to force rogue states to abandon their weapons programs. In the cases of Libya and Iraq, many analysts note the role economic sanctions had in inhibiting the development of weapons programs. Multiple reports suggest sanctions have retarded Iran's efforts to procure materials required for second-generation centrifuges, for example, an advance that could dramatically improve Iran's uranium enrichment capabilities. Other reports say that Iran manages to bypass UN sanctions for most of its procurement needs. Sanctions on military items claim a number of high-profile successes, such as Russia's cancellation of a contract to sell advanced air defense missiles to Tehran, but given the secretive nature of Iran's military complex it is hard to get reliable information on the status of the illicit arms trade. Selected reports strongly suggest that Iran cooperates with North Korea to secure nuclear and military technology and might have dealings with Pakistan. As Barbara Slavin of the Atlantic Council points out, Iran has faced sanctions of one kind or another for 31 of its 32 years and, as a result, has developed enormous creativity and flexibility in circumventing such restrictions. The latest penalties have contributed to distortions in the economy that favor the Revolutionary Guard Corps and other state-run and semi-state-controlled entities with privileged access to hard currency.²⁶¹

In short, sanctions are weakening the country's economy, hurting its prospects for economic growth by impeding the development of its oil and gas resources and limiting its access to technology. However, "after decades of struggling under punitive financial measures, Iran has persisted with its policies ranging from terrorism to proliferation of weapons of mass destruction," write CFR's Ray Takeyh and Suzanne Maloney of the Brookings Institution. "All this suggests that ideological regimes that put a premium on their political priorities and which are seemingly insensitive to the mounting costs of their belligerence may not be suitable candidates for the type of cost-benefit analysis that sanctions diplomacy invites."²⁶²

LINKS BETWEEN CHINA'S IRAN POLICIES AND ITS BROADER NATIONAL POLICY GOALS

Many countries are wary of Iran's nuclear activities and assertive foreign policy but at the same time attracted to its abundant energy resources and economic potential. Yet few have been as bold as China is seizing these opportunities. As a result, China is in the paradoxical position of having more leverage than almost any other country vis-à-vis Iran, but also having the most to lose should more broadly punitive sanctions be imposed or war breaks out in the region.²⁶³ Still, China's relations with Iran are primarily shaped by its economic interests and more specifically by its energy needs. Additionally, China's policy toward Iran is deeply influenced by the PRC's perceived rivalry with the United States.

In the name of its own energy security interests, China deals with pariah countries such as Sudan and Iran, which puts it at odds with the global consensus, according to analysis by Barbara Slavin. For example, in the 2011 vote at the United Nations on Syria, China remained willing to align itself with Russia in the United Nations veto that blocked widely popular international efforts to further isolate the Assad regime. And as Scott Warren Harold and Alireza Nader of the RAND Corporation point out, "From the Chinese perspective, there is strategic value in helping Iran develop enough military capabilities to counter US dominance of the Persian Gulf. The US partnership with the states of the Gulf Cooperation Council (GCC) has ensured a security regime consistent with US interests in the Middle East."²⁶⁴

So, in public at least, China does not seem to be undertaking much of a shift on Iran. On a January 2012 visit to Beijing, US Treasury Secretary Geithner pressed for China's support in isolating Iran because of its nuclear program. China offered a mixed public response, with the Chinese Foreign Ministry spokesmen insisting the dispute over Iran's nuclear program "cannot be resolved by sanctions alone."²⁶⁵ But actions speak louder than words. In fact, China has made important changes in its policy on Iran in recent years—in large part due to the Obama administration's assertive diplomacy on Iran. Industry sources reported that China had decided in February 2012 to continue to cut its oil imports from Iran compared to the previous year by about half.²⁶⁶ And in 2010, China supported United Nations Security Council Resolution 1929, the most extensive package of sanctions Iran has ever faced. China did so despite a last-minute diplomatic effort by Turkey, Brazil, and Iran to avert its passage.

China is also apparently partially complying with the provisions of the Comprehensive Iran Sanctions, Accountability, and Divestment Act, enacted by the United States in 2010, which could trigger penalties against Chinese entities assisting Iran in sanctioned activities. Chinese firms have scaled back their activities in Iran in response to instructions from both Chinese leadership and their own business calculations. Chinese national energy companies such as the China National Petroleum Company, China National Offshore Oil Corporation, and the Sinopec Group have all slowed or halted work on multi-billion dollar Iranian energy development projects such as the North and South Pars gas field and the Yadavaran oil field. Although these are positive developments, the challenge remains in getting multinational corporations around the world, including Chinese companies, to comply with existing sanctions on Iran.

China has also taken steps to diversify its oil supply so that it is not so reliant on Iranian crude. From 2006 to 2011, as China increased its average annual global crude imports from less than 3 million bpd to 5 million bpd, it nearly doubled oil imports (to over 1 million bpd) from its number one supplier, Saudi Arabia, and dramatically increased imports from other suppliers such as Angola and Iraq, while its imports from Iran remained in the range of 300-500 thousand bpd.²⁶⁷ China is also planning to diversify

its energy supplies away from the troubled Persian Gulf, as evidenced by Sinopec's plan to build a \$10 billion, 400,000-barrel-a-day refinery on the Saudi Red Sea Coast. And during a recent visit by Premier Wen Jiabao to the Gulf region, China National Offshore Oil Corp. unveiled plans to build a refinery at Taizhou, on the coast of China's Jiangsu province in a joint venture with Qatar Petroleum International and Royal Dutch Shell Group.

These shifts have developed over the past couple of years. While it remains extremely unlikely China will adopt a full embargo against the regime in Tehran, China's diplomatic messages to Iran are also becoming more emphatic, reinforcing the international message that Iran must be held accountable for its uncertain nuclear intentions. China's step forward is evident in its leaders publicly voicing their concerns about the Iranian nuclear program, a sharp contrast to China's past position. At the end of his six-day visit to the Middle East in January 2012, Premier Wen stated at a Doha press conference that China "adamantly opposes Iran developing and possessing nuclear weapons."²⁶⁸ His visit to the Persian Gulf region marked the first in 21 years for a Chinese premier to visit Saudi Arabia. And his visit to the UAE and Qatar were the first ever by a Chinese premier. Even more striking is that Wen's trip did not include a visit to Iran.

DIVERGING INTERESTS MAY LIMIT CHINESE-IRANIAN COOPERATION

As Scott Harold and Alireza Nader of RAND's Center for Middle East Public Policy note:

Although China and Iran may appear united in their opposition to US "hegemony," their respective interests vis-à-vis the United States differ greatly., China relies on the United States for economic growth, whereas Iran is almost completely cut off from the US economy and faces increasingly harsh US-organized international sanctions.²⁶⁹

In recent years, China-Iran bilateral relations have faced some challenges. For Tehran, there is a growing feeling that Beijing is having some commitment issues. There is a perception that China's approach is not only increasingly mercantilist—trying to exploit Iran's economic isolation—but also opportunistic.

In terms of economics, Beijing has used financial sanctions, which have restricted Iran's ability to conduct dollar-denominated oil transactions, as a pretext to force Iran into barter deals, as Javad Heydariyan of the CSIS Pacific Forum blog, *The Diplomat* notes.²⁷⁰ This has opened a floodgate of cheap, subsidized, and often sub-standard Chinese products, which have increasingly displaced Iranian industries and displeased the large consumerist middle class. There are also reports of delayed payments, causing intermittent trade frictions with Tehran.

Increasingly, Iran's oil exports to China are being paid for with Chinese goods. With Iran's biggest trade partner, the European Union, imposing a total oil embargo on Iran as of July 1, 2012, and US allies such as South Korea and Japan vowing to reduce their imports of Iranian crude, Tehran is looking to countries such as China and India to fill in the gap.

However, it appears that as China becomes even more central to Iran's economic viability, it is bent on securing additional concessions from Iran on the price of oil and the type of payments made. Earlier this year, when the United States and the EU tightened sanctions, China cut its monthly oil imports from Iran by almost 50 percent, with no indication of future significant increases in its purchases of Iranian crude. When the Saudis and Emiratis expressed their interest in stepping in to fill any Iranian oil vacuum, China dispatched Premier Wen Jiabao to the Persian Gulf to negotiate further deals. This also means that Iran

might need to make more concessions to meet its exports targets. Wen warned Iran against closing the Strait of Hormuz, indicating the importance of the free flow of oil supply to his country's energy security and national interest. Thus, China effectively tried to veto Iran's main military option for discouraging further Western sanctions.

RAND's Harold and Nader documented some of the ways that China's Iran interests are diverging:

Chinese-Iranian economic ties have also created some backlash and dissatisfaction with the relationship among some Iranians. Increasing numbers of Iranians appear to perceive Iran's economic ties with China as largely consisting of China buying Iranian oil, gas, and raw materials while flooding the Iranian market with low-priced and inferior Chinese-manufactured goods at the expense of Iran's industrial development.²⁷¹ The Ahmadinejad government has had to defend itself against accusations that it has allowed unrestricted imports that have damaged several Iranian industries, including the agricultural sector.²⁷² Iran has also taken measures to block "cheap" Chinese imports.²⁷³

Moreover, the Islamic Republic prohibits foreign ownership of its energy resources, which limits China's opportunities to acquire equity in Iranian oil. Additionally, foreign investors have historically experienced frustration with Iran's approach to international business dealings, which regularly involve continuous rounds of contract negotiations and unimplemented business deals. Chinese investors are said to have found this every bit as frustrating as have their Western and Japanese counterparts.²⁷⁴

Furthermore, it is not clear to Iranian officials whether China has the necessary technology and know-how to help Iran exploit its oil and natural gas resources to the fullest extent possible. Iran has been frustrated with China's pace in developing Iranian natural gas reserves; the Iranian government has even warned the China National Petroleum Corporation that it may cancel its \$5 billion contract to develop phase 11 of South Pars field if the Chinese firm does not accelerate its pace of exploration.²⁷⁵

The close Chinese-Iranian relationship could also be put at risk if Iran undergoes a major political transformation. A more democratic and secular Iran may resent China's support for the repressive Islamic Republic. Much will depend on Iran's future relationship with the United States. Continued hostility between the two could enhance Chinese influence in Iran, whereas normalization of US-Iranian relations could translate into significantly less Chinese influence in Iran and perhaps throughout the Middle East if American, European, and other East Asian companies begin to compete with China for contracts in Iran once more. Similarly, if a more open and democratic Chinese government were to emerge in the future, China may view a close relationship with Iran as less attractive, allowing the mobilization of greater international pressure on the Islamic Republic regarding its nuclear program.²⁷⁶

As the pressure on Iran grows, China's rhetoric is shifting, and it is increasingly calling for Iran to be more transparent and forthcoming. It remains to be seen in the coming months whether China will try to ease sanctions against Iran and help Tehran overcome its growing isolation, or become increasingly estranged from its partner.

IRAN'S VIEW OF CHINA'S SHIFTING POLICIES

Iran's main think tanks seem to agree on a single line of analysis concerning Iran-China relations—Iran and China are natural allies and continue to cooperate in many areas, but US pressure on China to cut ties with Iran has limited the relationship between the two countries, and thus China has sold out to the West. The issue of Syria seems to be the one area where Iran has expressed the most hope of strengthening ties with China.

- In October 2009, the Iranian Expediency Council's Center for Strategic Research (CSR) published an analysis that called Iran-China relations a trilateral relationship that revolves primarily around the United States. It went on to say that following 9-11 and the US foreign policy focus on the Middle East, US-China relations improved greatly. With this warming in relations, China was less willing to support Iran's nuclear bid, and had essentially sold out to the "America-centric international order." The article argued that Iran-China relations would be very strong if it were not for US pressure on China to be a "responsible stakeholder."²⁷⁷
- In February 2012, CSR published an analysis of Russia and China's role in the Syrian crisis and praised their resistance to the "Western plan" in Syria. The article referred to an "Iran-Russia-China front" against creating a Libya-like situation in Syria and considered China's veto at the UN the first time China stood up to the West in the Security Council. It went on to say that American-led support for the rebels in Syria can be considered a proxy war against Iran that is setting the stage for a real war. The article concluded by arguing that since Russia and China also have entrenched interests in Syria, Western support for the rebels is aimed at shrinking their influence in the region as well, and thus the conflict could lead to a US-led war against Russia and China.²⁷⁸
- In April 2012, the Institute for Trade Studies and Research, a think tank affiliated with the Iranian Ministry of Industries and Mines, published a lengthy article analyzing the factors affecting Iran-China relations. The article first highlighted the reasons that Iran and China are natural allies. The author considered both countries "revisionist states," meaning that both are unhappy with the international world order controlled by the US and the West. Their common worldview is manifested in their stances on western intervention in Libya, Sudan, and Syria, which both countries consider interference in internal affairs. China and Iran also have a long history of military cooperation, trade, and energy agreements, and the author argued that Iran is still a major importer of Chinese military equipment. However, the article concluded, as did the previous CSR publication, that there exist limitations to Iran-China relations that supersede their common interests, the primary limitation being Western pressure on China. Iranian officials had placed a lot of hope in China to act as a counterweight to US sanctions, as was illustrated by Ahmadinejad's "Look to the East" policy in 2005. This policy was abandoned after numerous meetings between high-ranking government officials from both countries produced no agreements. One Iranian oil industry official was quoted as saying, "Not one of the big contracts we signed with [China] is active. In their actions the Chinese are no different than the West, but in their words, they are playing with us."²⁷⁹
- A roundtable discussion was held on May 21, 2010²⁸⁰ by the Iranian think tank Asia Research with local China experts, Javad Mansuri, Bahman Aqarazi, and Mohsen Shariatinia. When asked about Iran's importance to China, they all agreed that in addition to energy needs, Iran is strategically significant to China for its Persian Gulf interests. Mansuri also claimed that Iran was well regarded in the Muslim world and that China wishes to leverage that influence. Shariatinia repeated the notion that the United States is at the center of Iran-China relations and that China has found it strategically useful to play mediator between Iran and the United States. China's contradictory stances towards Iran can be seen as an attempt to maintain that role.²⁸¹

Iranian news media tend to focus on a number of specific subjects when discussing China, and generally portray China in a positive light. These topics include Chinese diplomatic support for Iran, tensions between China and the United States (and thus commonality between Iran and China), growing Iran-

China ties, and Chinese support for the Syrian government. The most common anti-Chinese comments in the Iranian press refer to the large quantities of Chinese imports in the face of widespread domestic economic problems.

Most Iranian news media tend to ignore the complicated nature of Iran-China relations and focus on the growing ties between the two countries. On November 8, 2011, *Alef News*, affiliated with lawmaker Ahmad Tavakolli, published a story quoting Chinese officials in support of negotiations to come to a peaceful resolution to Iran's nuclear stand-off with the West.²⁸² On December 12, 2011, the same news agency carried a story quoting the Chinese president stating that China would be willing to go to war with the United States if Iran is attacked.²⁸³ Similarly, on April 6, 2010, *Tabnak News*, affiliated with former IRGC Chief Mohsen Rezai, published a story denying rumors that China had cut off all oil purchases from Iran. The head of the Iran-China Chamber of Commerce, Asadollah Asgaroladi, is quoted as saying, "The West has doubled its efforts to pressure China into cutting relations with Iran. There are sanctions against Iran and so far China has opposed them. Not only has China not cut relations with Iran, our relations with them are growing."²⁸⁴

This theme of growing relations is also stressed at all levels of government and society. On September 9, 2012 *Tabnak* published a story announcing the meeting between Iranian Majles Speaker Ali Larijani and Chinese National People's Congress head Wu Bangguo. The stated topic of discussion was the need for an improved relationship between the two parliaments.²⁸⁵ The next day *Tabnak* published another story quoting Ayatollah Seyyed Hashem Hoseini-Bushehri, the Director of the National Seminaries Organization, after a meeting with the Chinese Religions Organization. Hoseini-Bushehri confirmed the growing ties between China and Iran and emphasized that cultural and religious ties were just as important as economic and political ones.²⁸⁶ This analysis was preceded by an August 14, 2012 *Khabar Online* story about the trip members of the conservative Islamic Coalition Party took to China. The reason the members gave for the trip was to improve relations with China's 80 million Muslims.²⁸⁷

While the Iranian press tends to avoid the claim that China sold out to the West, news outlets often run stories that show America as antagonistic to both China and Iran.

- On May 11, 2011, *Alef News* published a story that accused the United States and Saudi Arabia of trying to sabotage Iran-China relations by sending increased amounts of Saudi oil to China to reduce their need for Iranian oil.²⁸⁸
- On September 9, 2012, *Tabnak* published an analysis of US-China-Russia relations, highlighting China's desire to limit US presence in Asia and the Pacific and asked the question, "Will Russia and China Become Involved in a Conflict with the US?"²⁸⁹
- *Khabar Online*, affiliated with Majles Speaker Ali Larijani, published a lengthy analysis on June 27, 2012 that carried the same theme. The article claimed that the United States is attempting to implement a policy of containment against China through a strong naval presence in Asia. In doing so, the article illustrated the growing conflict between China and the United States, and thus the common interests between Iran and China.²⁹⁰

Chinese imports are a contentious issue in Iran, magnified by Western sanctions. On September 10, 2012, *Shafaf News*, affiliated with Tehran Mayor Mohammad Baqer Qalibaf, published a news story critical of China's growing economic influence in Iran by highlighting the plight of local walnut growers in the face of massive Chinese imports. Walnuts are the primary cash crop in the western region of Kerman province. The massive drop in the market price of walnuts due to the influx of cheap walnuts from China

is threatening the livelihood of Kermani farmers.²⁹¹ Similarly, on January 8, 2011, *Khabar Online* published an article critical of the large amounts of Chinese imports into Iran. The article made the claim that many of these imports are often of unnecessary items (such as neckties, which most Iranians do not wear) or locally produced goods (such as pears), thus harming local industry.²⁹²

In recent months, the topic of China's condemnation of Western interference in Syria has been popular in several Iranian news outlets. *Mehr News*, a news website with strong ties to the Iranian military and Islamic Revolutionary Guard Corps (IRGC), published a story on August 3, 2012 highlighting China's commitment to a political rather than military solution to the Syrian crisis, a commitment that Iran supports. The article quoted Chinese Ministry of Foreign Affairs Spokesman Hong Lei as he expressed sadness at Kofi Annan's resignation as special envoy to Syria. China viewed Annan as a constructive voice in finding a peaceful end to the violence.²⁹³ A few weeks later, *Mehr* carried another story describing China's desire for a non-military solution to Syria.²⁹⁴ *Farda News*, another outlet close to Tehran Mayor Qalibaf, echoed *Mehr's* reporting in a story that quoted the Chinese Minister of Foreign Affairs, Yang Jiechi. Yang once again condemned foreign intervention in Syrian affairs and called for a political solution to end the violence.²⁹⁵

OPPORTUNITIES FOR THE UNITED STATES

In seeking to gauge US influence on China with respect to Iran, it is useful to have some comparative perspective about Iran's value to China relative to that of the United States. Through October 2011, total Chinese-Iranian trade amounted to about \$39 billion, according to *Bloomberg News*.²⁹⁶ The PRC's new investments in Iran reportedly totaled roughly \$1 billion in 2011, though figures are hard to come by and the Iranian regime is widely suspected of deliberately seeking to exaggerate the size of Chinese investments for political purposes. By contrast, through the third quarter of 2011, Chinese investments in the United States amounted to \$15.9 billion, while US imports from China reached approximately \$330 billion through October 2011. As noted by RAND's Harold and Nader, "in the energy sector, the Chinese firms CNOOC and Sinopec have purchased more than \$4.6 billion worth of energy assets in the United States, giving these firms an incentive not to put their US investments at risk by cooperating with Iran in ways that earn Washington's ire."²⁹⁷

China can also use its diplomatic leverage with Iran as tensions mount in the Persian Gulf region. Tehran's recent threats to close the Strait of Hormuz against the backdrop of rumors of Israeli military action against Iran's nuclear weapons efforts have increased tensions in the region. Behind-the-scenes Chinese diplomacy with Iran can continue to send the message that it would be unwise for Iran to continue to make threats that would harm the global security and economic environment.²⁹⁸

Scott Harold and Alireza Nader note that China is entering into a political transition year in 2012, and during such times Beijing's leadership is widely believed to favor downplaying confrontation and ensuring that foreign policy issues do not intrude into leadership succession debates. Those who favor prioritizing cooperation with Washington may, at least temporarily, succeed in downplaying relations with Iran to prevent tensions with the United States over Iran from disrupting the handover of authority from Hu Jintao and Wen Jiabao to their successors.²⁹⁹

APPENDIX A: US AND INTERNATIONAL SANCTIONS AGAINST IRAN

The long list of US economic and political sanctions against Iran has its root in the 1979 Tehran hostage crisis. On November 14, 1979, President Jimmy Carter declared an emergency and ordered a freeze on all Iranian assets "which are or become subject to the jurisdiction of the United States." Additional sanctions were imposed when, in January 1984, Iran was implicated in the bombing of the US Marine base in Beirut, Lebanon. The United States added Iran to its list of countries that support terrorism (in this case, the Lebanon-based militant group Hezbollah), banning US foreign aid to Tehran, and imposing export controls on dual-use items.³⁰⁰

Concern over Iran's nuclear program surfaced later, and the following areas are targeted by *significant US sanctions*:

- **Weapons development.** The Iran-Iraq Arms Nonproliferation Act (October 23, 1992) calls for sanctioning any person or entity that assists Tehran in weapons development or acquisition of "chemical, biological, nuclear, or destabilizing numbers and types of advanced conventional weapons." Subsequent nonproliferation orders include the Iran-Syria-North Korea Non-Proliferation Act, and Executive Order 13382, signed by President Bush in June 2005.
- **Trade and investment.** On April 30, 1995, President Bill Clinton announced a comprehensive ban on US trade and investment in Iran, a move codified by Executive Order 12959. In March 2010, US President Barack Obama, like George W. Bush, renewed Clinton's executive order banning US trade and investment with Iran.
- **Nuclear materials.** The Iran and Libya Sanctions Act of 1996 (ILSA) was aimed at denying Iran access to materials to further its nuclear program by sanctioning non-US business investment in Iran's energy sector. While the act has been seen as a blueprint for possible actions aimed at foreign support of Iranian weapons development, in practice the measure has proven largely symbolic. Kenneth Katzman, an Iran analyst at the Congressional Research Service, noted that "no projects have actually been sanctioned under ILSA, and numerous investment agreements with Iran since its enactment have helped Iran slow deterioration of its energy export sector."
- **Direct Iranian Financial Dealings.** The US Treasury Department administers a vast array of financial sanctions against Iran, from bans on the importation of gifts over \$100 to laws barring financial dealings with Iranian entities. Efforts to ban Iranian banks from accessing the US financial system have also increased in recent years. In November 2011, the United States designated the entire Iranian banking regime as potentially aiding and abetting terrorist activities, but the measure fell short of sanctioning the country's central bank.
- **Foreign Financial Dealings with Iran.** Section 1245(d)(1) of the National Defense Authorization Act (NDAA) for Fiscal Year 2012, signed into law on December 31, 2011, launched a new round of sanctions against Iran that used access to the US financial sector as a lever to discourage foreign companies from engaging in substantial economic activity with Iran. The NDAA prohibits or imposes strict conditions on the maintaining correspondent or payable-through accounts in the United States "by a foreign financial institution that the President determines has knowingly conducted or facilitated any significant financial transaction with the Central Bank of Iran or another Iranian financial institution designated by the Secretary of the Treasury for

the imposition of sanctions.” The NDAA contains a provision that allows the President, for a set period of 120 days, to waive penalties for financial institutions of countries facilitating importation of petroleum from Iran if he determines it to be in the national interest. Thus far 20 countries have received presidential waivers, including China, included with Singapore in a second tranche of waiver announcements in late June 2012.³⁰¹

- **Assets.** Following the terrorist attacks in New York and Washington, President Bush authored Executive Order 13224, freezing the assets of entities determined to be supporting international terrorism. This list includes dozens of individuals, organizations, and financial institutions in Iran. Over the years, Washington has sanctioned dozens more individuals and Iranian institutions, including banks, defense contractors, and the Revolutionary Guard Corps. In October 2011, the Treasury Department added five Iranians, including four senior officers of the IRGC's elite paramilitary Quds Force, to this list for plotting the assassination of the Saudi ambassador to the United States. It also added Iranian commercial airline Mahan Air for providing financial, material, and technological support to the IRGC and Quds Force. The IRGC-Quds Force was also listed in Executive Order 13572 of April 2011 aimed at blocking properties of individuals and entities for supporting the Syrian regime's human rights abuses and suppression of anti-government protests.
- **Petroleum Resources and Products.** In July 2010, President Obama signed into law the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010, a measure aimed at harmonizing and implementing a number of bilateral and multilateral sanctions against Iran, and also adding penalties against domestic and foreign companies that substantially help develop Iran's petroleum resources, assist in building up Iran's oil refining capacity, or sell refined petroleum products to Iran.³⁰² As Toni Johnson and Greg Bruno of the Council on Foreign Relations note “China and Russia quickly opposed the unilateral US measure on grounds that the move—aimed at closing loopholes in the UN sanctions regime—could hurt their business interests while undermining diplomatic overtures to Tehran.”³⁰³
- **Energy, shipping, and insurance sectors.** On August 10, 2012, President Obama signed into law H.R. 1905, The Iran Threat Reduction and Syria Human Rights Act of 2012. Among other things, the law imposes penalties on entities that provide Iran with vessels or shipping services to transport certain goods related to proliferation or terrorism activities. It also imposes sanctions with respect to provision of underwriting services or insurance or reinsurance for the National Iranian Oil Company or the National Iranian Tanker Company and establishes new reporting requirements regarding any sanctionable activities undertaken with Iran for all companies filing periodic reports with the Securities and Exchange Commission. The new legislation targets Iran's Revolutionary Guard Corps and requires companies that trade on the US stock exchange to disclose any Iran-related business to the Securities and Exchange Commission. The new legislation builds on penalties that focus on foreign financial institutions that do business with Iran's central bank by prohibiting them from opening or maintaining correspondent operations in the United States. Under the law, any company shipping proliferation-sensitive goods to Iran would be subject to penalties. It would deny visas to and freeze assets of individuals and companies that supply Iran with technology that could be used against its citizens, such as tear gas, rubber bullets and surveillance equipment. It would also extend sanctions on human rights violators to Syria.^{304 305}

INTERNATIONAL EFFORTS

The UN Security Council has wrestled with imposing sanctions on Iran since 2006 due to Iran's failures to comply with International Atomic Energy Agency requirements and its continuing uranium-enrichment activities. In December of that year, the council approved the first of four binding resolutions authorizing bans on exports of nuclear, missile, and dual-use technologies; limiting travel by dozens of Iranian officials; and freezing the assets of forty individuals and entities, including Bank Sepah and various front companies. The measures also call on states to refrain from business with Iran, and authorize the inspection of cargo carried by Iranian shippers. In June of 2010, the Security Council issued a fourth round of sanctions under Resolution 1929—putting the squeeze on Iran's Revolutionary Guards-owned businesses, its shipping industry, and the country's commercial and financial service sector. Efforts to push through a fourth round of economic noose-tightening at the UN, while successful, were nonetheless complicated by resistance from Russia and China, which are linked to Iran by important economic and political interests.

Yet despite opposition from the two permanent Security Council members, international efforts to squeeze Iran economically are solidifying. In July 2010, Canada banned new investment in Iran's oil and gas industries. European allies have also implemented their own sanctions, and although historically these states have had less of an appetite for punitive measures, recent actions have been tougher. For much of the 1990s, while Washington imposed unilateral sanctions, EU countries maintained a policy of "critical dialogue" with Iran. But as Iran grew increasingly defiant on the nuclear front, European partners turned up the heat, Katzman of the Congressional Research Service notes. In June 2008, the EU froze the assets of nearly forty individuals and entities doing business with Bank Melli, Iran's largest bank; Western officials have accused Bank Melli of supporting Iran's nuclear and missile programs. Japan and the EU have also placed restrictions on international lending to Iran, which, Katzman writes, "represents a narrowing of past differences between the United States and its allies on this issue."

In June 2010, the European Union went further, enacting measures similar to those approved by the US Congress that ban investment and assistance to Iran's energy sector. In July 2010, a series of prohibitions were placed on European firms doing business in the country. The EU also added to it a list of designated individuals, companies, banks, and organizations targeted for asset freezes. Many analysts believe the moves, taken together, will place increased strain on the Iranian economy, given the EU's position as Iran's largest trading partner. In 2010, Iran exported \$19 billion worth of goods to EU countries, 90 percent of which were energy-related. In response to the IAEA report in November 2011, the UK and Canada also imposed new sanctions similar to US restrictions on the activities of Iran's central bank. In January 2012, the EU also agreed to begin embargoing exports of oil from Iran on July 1.

Australian sanctions. Australian Foreign Minister Bob Carr announced on August 22 the implementation of Australian sanctions on Iran, including trade in oil, petroleum, gas, financial services, and precious metals. Senator Carr said the sanctions were necessary following the failure of the Iranian Government to engage constructively with the international community on its nuclear program. "These sanctions aim to increase pressure on Iran to comply with nuclear non-proliferation obligations and with United Nations Security Council resolutions," Senator Carr said. "By introducing these sanctions—alongside others such as those of the European Union—we seek to bring Iran back to serious negotiations." Australia's new sanctions would take effect under the Autonomous Sanctions Regulations 2011 to

restrict dealings with Iran's oil, gas, petroleum and financial sectors; and trade in gold, precious metals, diamonds, and new Iranian currency. The measures targeting Iran's financial services sector are in addition to Australia's existing arms embargo and financial and travel sanctions on individuals and entities and they prohibit:

- Any Iranian financial institution setting up in Australia, and any Australian financial institution setting up in Iran;
- Any commercial relationship between Australian and Iranian financial institutions; and
- Trade with Iranian Government entities in gold, precious metals, diamonds and new Iranian currency.³⁰⁶

APPENDIX B. PRC ENTITIES SANCTIONS FOR WEAPONS PROLIFERATION TO IRAN

Entity/Person	Reason	Effective Dates
China Great Wall Industry Corporation China Precision Machinery Import/Export Corp. (CPMIEC)	Missile Proliferation: 73(a)(2)(A) Arms Control Export Act 11B (b),(l),(B),(i), Export Administration Act (Category II items in MTCR annex to Pakistan)	June 25, 1991 Waived on March 23, 1992
Ministry of Aerospace Industry and related entities, including: China National Space Administration China Aerospace Corp. Aviation Industries of China CPMIEC China Great Wall Industry Corp. Chinese Academy of Space Technology Beijing Wan Yuan Industry Corp. (aka Wanyuan Company or China Academy of Launch Vehicle Technology) China Haiyang Company Shanghai Astronautics Industry Bureau China Chang Feng Group (aka China Changfeng Company)	Missile Proliferation: 73(a)(2)(A) Arms Control Export Act 11B (b),(l),(B),(i), Export Administration Act (Category II items in MTCR annex to Pakistan)	August 24, 1993 Waived on November 1, 1994
Five PRC citizens: Liao Minglong Tian Yi Chen Qingchang Pan Yongming Shao Xingsheng Two PRC companies: Nanjing Chemical Industries Group Jiangsu Yongli Chemical Engineering and Technology Import/Export Corp. One Hong Kong company: Cheong Yee Ltd.	CW proliferation: 81(c), Arms Export Control Act 11(c), Export Administration Act (dual-use chemical precursors, equipment, and/or technology to Iran)	May 21, 1997
Jiangsu Yongli Chemicals and Technology Import/Export Corp.	CW/BW proliferation: 3, Iran Nonproliferation Act	June 14, 2001 For two years

China Metallurgical Equipment Corp. (aka CMEC, MECC)	Missile Proliferation: 73 (a)(2)(A), Arms Export Control Act 11B (b),(l),(B),(i), Export Administration Act (MTCR Category II items to Pakistan)	September 1, 2001 For two years.
Liyang Chemical Equipment China Machinery and Electric Equipment Import/Export Co. Q.C.Chen	CW/BW Proliferation: 3, Iran Nonproliferation Act (Australia Group controls)	January 16, 2002 For two years.
Liyang Yunlong (aka Liyang Chemical Equipment) China Machinery and Electric Equipment Import/Export Co. Zibo Chemical Equipment Plant (aka Chemet Global Limited) China National Machinery and Electric Equipment Import and Export Co. Wha Cheong Tai Co. China Shipbuilding Trading Co. CPMIEC China Aero-technology Import/Export Corp. Q.C.Chen	Weapons Proliferation: 3, Iran Nonproliferation Act (AG-controlled items and conventional weapons related technology related to unspecified missiles)	May 9, 2002 For two years.
Jiangsu Yongli Chemicals and Technology Import Export Corp. Q.C.Chen China Machinery and Equipment Import Export Corp. China National Machinery and Equipment Import Export Corp. CMEC Machinery and Electric Equipment Import Export Co. CMEC Machinery and Electrical Import Export Co. China Machinery and Electric Equipment Import/Export Co. Wha Cheong Tai Co. China Shipbuilding Trading Co.	Weapons Proliferation: 1604(b), Iran-Iraq Arms Non-proliferation Act and 81(c), Arms Export Control Act 11C(c), Export Administration Act (chemical weapons technology to Iran) Only under Iran-Iraq Arms Non-proliferation Act (cruise missile technology)	July 9, 2002 For two years. For one year.
North China Industries Corporation (NORINCO)	Missile Proliferation: Executive Order 12938 (amended by EO 13094) (missile technology to Iran)	May 23, 2003 For two years.

Taian Foreign Trade General Corporation Zibo Chemical Equipment Plant Liyang Yunlong Chemical Equipment Group Company NORINCO CPMIEC	Missile Proliferation: 3, Iran Nonproliferation Act	June 26, 2003 For two years.
CPMIEC	Missile Proliferation: Executive Order 12938 (amended by EO 13094) (missile technology to publicly unnamed country)	July 30, 2003
NORINCO	Missile Proliferation: 73 (a)(2)(A), Arms Export Control Act 11B (b),(l),(B),(i) and (iii), Export Administration Act (substantial contribution in proliferation of MTCR category II technology to publicly unnamed country)	September 19, 2003 For two years: waived for one year on import ban for non-NORINCO products; waiver extended on September 18, 2004 for six months; waived for six months on March 18, 2005; waived for six months on March 18, 2006; waived on September 18, 2006, for six months; permanently waived on March 18, 2007.
Beijing Institute of Opto-Electronic Technology (BIOET) NORINCO CPMIEC Oriental Scientific Instruments Corp. (OSIC) Zibo Chemical Equipment Plant (aka Chemet Global Ltd., South Industries Science and Technology Trading Company)	Weapons Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	April 1, 2004 For two years.
Xinshidai (aka China Xinshidai Company, XSD, China New Era Group, or New Era Group)	Missile Proliferation: Executive Order 12938 (amended by EO 13094) (material contribution to missile proliferation in publicly unnamed country)	September 20, 2004

Beijing Institute of Aerodynamics BIOET China Great Wall Industry Corporation NORINCO LIMMT Economic and Trade Company, Ltd. OSIC South Industries Science and Technology Trading Company	Weapons Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	November 24, 2004 For two years.
Beijing Alite Technologies Company Ltd. CATIC China Great Wall Industry Corporation NORINCO Q. C. Chen Wha Cheong Tai Company (aka Wha Cheong Tai Co., Hua Chang Tai Co.)	Weapons Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	December 27, 2004
CATIC NORINCO Hongdu Aviation Industry Group LIMMT Metallurgy and Minerals Company Ltd. Ounion (Asia) International Economic and Technical Cooperation Ltd. Zibo Chemet Equipment Company	Missile and CW Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	December 23, 2005 For two years.
Beijing Alite Technologies Company, Ltd (ALCO) LIMMT Economic and Trade Company Ltd. China Great Wall Industry Corporation (CGWIC) CPMIEC G.W. Aerospace (US office of CGWIC)	Weapons Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	June 13, 2006 One June 19, 2008, sanctions lifted against CGWIC and G. W. Aerospace
Great Wall Airlines (aka Changcheng Hangkong)	Missile Proliferation: Executive Order 13382 (unspecified transfers probably to Iran)	August 15, 2006
China National Electronic Import-Export Company CATIC Zibo Chemet Equipment Company	Weapons Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	December 28, 2006 For two years.

CPMIEC Shanghai Non-Ferrous Metals Pudong Development Trade Company Ltd. Zibo Chemet Equipment Company	Weapons Proliferation: 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	April 17, 2007 For two years.
China Xinshidai Company China Shipbuilding and Offshore International Corporation Huazhong CNC	Weapons Proliferation: 3, Iran, North Korea, and Syria Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	October 23, 2008 For two years.
Dalian Sunny Industries (aka LIMMIT Economic and Trade Company), LIMMT (Dalian) Metallurgy and Minerals Company, and LIMMT (Dalian FTZ) Economic and Trade Organization) Bellamax	Missile Proliferation: 73(a)(I), Arms Control Export Act 11B (b),(I),Export Administration Act	February 2, 2009 For two years. Waived for PRC government activities related to missiles, electronics, space systems, and military aircraft.
Dalian Sunny Industries (aka LIMMIT Economic and Trade Company), LIMMT (Dalian) Metallurgy and Minerals Company, and LIMMT (Dalian FTZ) Economic and Trade Organization) Bellamax	Missile Proliferation: Executive Order 12938	February 2, 2009 For two years.
Fangwei LI (aka Karl LEE), C/o LIMMIT Economic and Trade Company	Missile Proliferation: Executive Order 13382	April 7, 2009
Karl LEE Dalian Sunny Industries (aka LIMMIT Economic and Trade Company), LIMMT (Dalian) Metallurgy and Minerals Company, and LIMMT (Dalian FTZ) Economic and Trade Organization) Shanghai Technical By-Products International (STBPI) Zibo Chemet Equipment Company	Weapons Proliferation: 3, Iran, North Korea, and Syria Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)	July 14, 2010 For two years.

<p>Entities in Hong Kong apparently associated with Iran:</p> <ul style="list-style-type: none"> Advance Novel Limited Alpha Effort Limited Best Precise Limited Concept Giant Limited Great Method Limited Ideal Success Investments Logistic Smart Limited Neuman Limited New Desire Limited Partner Century Limited Sackville Holdings Limited Sandford Group Limited Sino Access Holdings Limited Smart Day Holdings Limited Starry Shine International Limited System Wise Limited Top Glacier Company Limited Top Prestige Trading Limited Trade Treasure Limited True Honour Holdings Limited 	<p>Weapons Proliferation: Executive Order 13382</p>	<p>January 13, 2011</p>
<ul style="list-style-type: none"> Karl LEE Dalian Sunny Industries Dalian Zhongbang Chemical Industries Company Xian Junyun Electronics 	<p>Weapons Proliferation: 3, Iran, North Korea, and Syria Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)</p>	<p>May 23, 2011 For two years.</p>

Note: This table is excerpted from CRS Report RL31555, China and Proliferation of Weapons of Mass Destruction and Missiles: Policy Issues, Shirley A. Kan, November 9, 2011.

APPENDIX C. INTEGRATED TIMELINE

Integrated timeline of Sino-Iranian relations since 1979 linking key points in the bilateral energy relationship, reported arms sales and weapons proliferation activities; and international actions to prevent those transfers. Events are color-coded: black for nuclear events; blue for missile-related; purple for energy-related; and green for international diplomatic events.³⁰⁷

Date	Event
1967	US supplies 5 MW Tehran Research Reactor (TRR)
1970	Iran signs the Nuclear Nonproliferation Treaty (NPT)
1974	Atomic Energy Organization of Iran (AEOI) is established
1975	German firms contract to build Bushehr power reactor
1979	Nuclear program suspended after Iranian revolution
1981-1993	Series of undeclared uranium processing experiments
1985	First China-Iran nuclear cooperation agreement
1985	Iran receives first Scud-Bs from Libya
1985-87	Iran launches a centrifuge uranium enrichment program, seeks Pakistan's help
1987	Argentina provides 20% enriched uranium for TRR
1987-88	Bushehr reactors are heavily damaged by Iraqi bombing raids
1987	China sells Iran "Silkworm" missiles to Iran
1987	Iran receives 100 Scud-B missiles from North Korea
1988	China agrees to provide Iran with equipment, know how to develop and test medium-range ballistic missiles
1988-95	China provides nuclear research facilities at Esfahan
1989	Chinese geologists aid uranium prospecting in Iran
1990	China and Iran reportedly sign a 10-year agreement for scientific cooperation and the transfer of military technology

1990	Iran signs a ten-year nuclear cooperation agreement with China
1991	Iran imports 1,600 kg of uranium products from China
1991	Iran seeks heavy water research reactor from China, India
1992	China agrees to provide power reactors but cancels research reactor deal
1994	Chinese provides laser used for uranium enrichment research
1994-6	Iran receives uranium enrichment centrifuge drawings and components from A.Q. Khan
1995	Iran contracts with Russia to complete Bushehr power reactor
1996	Iran test fires a Chinese-built C-802 surface-to-surface missile
1996	China reportedly supplies Iran with gyroscopes, accelerometers, and related missile guidance equipment and technology
1996	Iran reportedly fires, for first time, a Chinese C-802 antiship missile from one of its 10 Chinese-built "Houdong" patrol boats
1997	After extensive discussion with United States, China cancels UCF and power reactors and promises no further nuclear assistance to Iran
1997	Iran reportedly tests two Chinese-built C-801K air-launched cruise missiles from an F-4 Phantom
1992-2002	Iran conducts a series of undeclared uranium enrichment centrifuge tests at the Kalaye electric company using Chinese origin UF6
1998	Iran publicly displays the Shahab 3 missile, Chinese antiship missiles, and solid propellant surface-to-surface missiles at military parade
1999	Iran announces it is producing the Shahab-4 missile not for military purposes but for satellite launch
November 1999	US intelligence reportedly believes that North Korea recently sold Iran 12 No Dong missile engines
March 2000	The Iran Nonproliferation authorizes sanctions against persons transferring nuclear or missile related materials and technology to Iran

April 2000	State Department imposes sanctions on Iran's MODAFL, AIO, SHIG and SANAM Industrial Group for missile proliferation activities
2000	Construction begins on a uranium ore concentration plant at Gachine
July 2000	Iran provides IAEA with preliminary design information on UCF (goes ahead with project on its own using Chinese plans)
2002	Iran begins work on advanced centrifuge using plans acquired from A.Q. Khan
August 2002	Iranian opposition group discloses Natanz enrichment site and Arak heavy water reactor
Early 2002	Alleged effort to develop nuclear warhead for the Shahab-3 missile begins
September 2002	Iran announces ambitious plans to develop nuclear power plants with a total capacity of 6,000 MW within the next 20 years
June 2003	Iran introduces UF6 into centrifuges at Natanz for the first time
November 2003	Iran signs IAEA Additional Protocol (AP), suspends enrichment activity at Natanz
January 2004	Iran begins production of the Raad cruise missile and the DM3b active radar sensor for the Noor antiship missile
March 2004	Zhuhai Zhenrong Corporation, a Chinese state-run company, signs 25-year contract to import 110 million tons of Liquefied Natural Gas (LNG) from Iran
August 2004	Iran announces the successful test of an upgraded Shahab-3 MRBM, which is longer than the original version, with a larger fuel tank and increased range
September 2004	Iran displays two Shahab-3 variants assessed to have longer ranges of 1,500 and 2,000 km
October 2004	Iran and China agree to \$100 billion deal adding an extra 250 million tons of LNG to China's energy supply over a 25-year period
2005	North Korea allegedly supplies Iran with 18 missile assembly kits for the BM-25 (or Musudan), a version of Russia's SS-N-6 with range of 2,400 to 3,000 km

May 2005	Iran announces test of a solid-fuel engine for the Shahab-3 to increase durability and range
June 2005	President Bush issues Executive Order freezing assets of Iranian WMD-related entities including AIO, SHIG, Shahid Bakeri Industrial Group, and AEOI
August 2005	Iran resumes production of UF6 two months after election of President Mahmoud Ahmadinejad
August 2005	Supreme Leader Khamenei issues fatwa forbidding nuclear weapons
September 2005	IAEA finds Iran in noncompliance with NPT because of the conduct of undeclared nuclear activities violating its safeguards agreement
February 2006	IAEA sends Iran file to UN Security Council, Iran suspends Additional Protocol and resumes uranium enrichment
March-April 2006	Iran tests a variety of missiles, including the Noor cruise missile which may be an upgrade of the Chinese C-802 and the Kowsar, a variant of the Chinese C-801, during “Holy Prophet” war games in the Persian Gulf
June 2006	US Department of the Treasury sanctions four Chinese companies for supplying Iran with missile-related and dual-use components
July 2006	Treasury sanctions two Iranian companies (SANAM Industrial Group and Ya Mahidi Industries Group) for their ties to missile proliferation
December 2006	UNSC resolution 1696 requires that Iran suspend uranium enrichment and implement Additional Protocol
August 2006	Arak heavy water production facility inaugurated
October 2006	IAEA reports that Iran has injected UF6 into the second enrichment cascade at Natanz
December 2006	UNSC resolution 1737 imposes sanctions to prevent Iranian nuclear and ballistic missile development, designates eight Iranian companies
January 2007	Treasury imposes financial sanctions on Bank Sepah, an Iranian financial institution described as “the linchpin of Iran’s missile procurement network”

March 2007	UNSC adopts Resolution 1747 imposing further sanctions and designating additional Iranian entities involved in ballistic missile activities
May 2007	IAEA reports that eight cascades are operating at Natanz (1312 centrifuges)
June 2007	Treasury imposes financial sanctions on two additional Iranian companies involved in missile work for Iran's Aerospace Industries Corporation
August 2007	Iran agrees to "work plan" with IAEA to resolve outstanding issues
September 2007	Iran displays the Qadr-1 missile during a military parade—reportedly an upgraded version of the Shahab-3 with a range of 1,800 km
November 2007	Iran says it has a new missile, the Ashura, with a range of 2,000 km
November 2007	Iran informs the IAEA it is conducting mechanical tests on "a new generation of centrifuge design"
December 2007	National Intelligence Estimate judges that Iran "halted nuclear weapons program" in 2003
March 2008	UNSC resolution 1803 extends travel restrictions and asset freezes, bans Iran from buying almost all nuclear and missile-related technology
May 2008	IAEA reports that 20 cascades are operating at Natanz (3280 centrifuges)
August 2008	Treasury imposes financial sanctions on two additional Iranian firms for their links to Iran's missile program
August 2008	Iran launches the "Safir," a two-stage liquid-fueled rocket based on the Shahab-3
September 2008	Treasury imposes sanctions on the Islamic Republic of Iran Shipping Lines (IRISL) and 18 of its subsidiaries for facilitating shipments of military cargo
September 2008	Treasury sanctions six additional Iranian military firms controlled by MODAFL
November 2008	Iran claims to have successfully tested the Seiji, a two-stage, solid fuel, surface-to-surface missile with a range of 2,000 km

November 2008	Iran reportedly using exclusively domestically mined, milled, and converted uranium after overcoming difficulties at UCF
December 2008	Iran has reportedly tripled the number of operational Shahab-3 missiles with over 100 new missiles delivered to the IRGC
April-May 2008	Iranian officials reportedly present in North Korea for launch of long-range rocket and detonation of a nuclear device
2009	US District Attorney in New York charges a Chinese businessman with conspiring to sell tungsten, high-strength steel, and exotic metals
January 2009	Iran and China signed a \$1.76bn contract for the initial development of the North Azadegan oil field in western Iran
March 2009	China and Iran reach three-year \$3.39 billion deal to produce LNG in Iran's mammoth South Pars natural gas field
April 2009	Fuel Manufacturing Plant is inaugurated; will provide natural uranium fuel for Arak heavy water reactor and low enriched fuel for LWRs
June 2009	IAEA reports that 30 cascades operating at Natanz (4920 centrifuges)
September 2009	Iran belatedly discloses underground enrichment facility at Fordow after site becomes known to Western intelligence services
October 2009	Iran rejects deal negotiated with EU to send 20% enriched uranium abroad
November 2009	IAEA reports that Iran has produced 1808 kg of low enriched uranium
February 2010	IAEA reports that Iran has begins enriching to 20% at Natanz
March 2010	Iran reportedly begins indigenous production of the Chinese-designed Nasr-1 antiship missile, based on the Chinese C-704 missile
March 2010	Jane's Defence Weekly reports expansion of the launch facility at Iran's Semnan space center
May 2010	Iran, Brazil, and Turkey attempt to revive plan to send Iranian 20% enriched uranium abroad
June 2010	UNSC Resolution 1929 imposes fourth round of sanctions on Iran banning military assistance and recommending inspection of cargo
June 2010	Treasury sanctions the IRGC Air Force and the IRGC missile command for their ties to ballistic missile programs

August 2010	Iran begins transferring fresh fuel to the Bushehr Nuclear Power Plant
September 2010	IAEA reports that Iran has produced 25 kg of 20% enriched uranium
September 2010	Singapore interdicts a shipment of 18 tons of Iran-bound aluminum powder that could be used to make solid propellant for missiles
September 2010	Treasury sanctions a German bank for “enabling Iran’s missile programs to purchase more than \$3 million in materials”
November 2010	Iranian President Ahmadinejad admits that a “cyberbug” may have created “problems for a limited number of our centrifuges”
2011	Beijing and Tehran sign deal that gives China exclusive rights to several Iranian oil and natural gas fields through 2024
January 2011	Treasury announces sanctions against two companies linked to AIO that have been solicited foreign technologies for Iran’s ballistic missile programs
February 2011	Iran tests a supersonic, antiship ballistic missile, called the Khalij Fars, which Iran claims can carry a 650 kg warhead a range of 300 km
February 2011	Treasury imposes sanctions on 11 entities in an illicit procurement network supporting AIO
May 2011	Iran begins mass production of the Qiam-1 ballistic missile and delivery of the system to the IRGC
May 2011	According to a UN Panel of Experts report, Iran and North Korea are suspected of exchanging ballistic missile technology, using regular, scheduled Air Koryo and Iran Air flights
June 2011	Iran announces plan to move 20% enrichment to Fordow and triple output
June 2011	The IRGC fires 14 missiles, including one Shahab-3, two Shahab-2, and nine Zelzal, as part of its “Great Prophet 6” exercises
August 2011	Iran inaugurates a production line for carbon fiber, which has a variety of advanced missile and reentry vehicle applications
September 2011	Iran’s Defense Ministry reportedly delivers the 200 km-range Qader antiship cruise missile to Iran’s Navy and to the IRGC’s Naval Force
September 2011	Bushehr provides first electricity to the Iranian national electric grid

2011	China refining giant Sinopec reaches import deal for 90,000 barrels per day of condensate, boosting China's Iranian oil buys to new peaks
2011	Sinopec Group delays the start date of the \$2 billion Yadavaran oil development
September 2011	CNPC delays drilling exploration wells at South Pars field, leading to warnings by Iran to speed up work or risk losing the multi-billion-dollar deal
December 2011	Iran tests naval antiship and surface to air missiles during the Velayat-90 naval exercise in the Persian Gulf and Sea of Oman
January 2012	EU agrees to oil embargo and freeze on Iranian assets
February 2012	Iran begins production of the Zafar naval cruise missile, a short-range, antiship, radar-guided missile apparently based on Chinese C-701AR missile
March 2012	Australian David Levick indicted in the United States for illegally exporting to Iran equipment that could be used in missiles, drones, and torpedoes
March 2012	China's largest bank withdraws from plan to head a consortium that would finance the \$1.6-billion Pakistani portion of a Iran-to-Pakistan gas pipeline
June 2012	Iran's major hydropower group, Farab, cancels a US \$2 billion hydroelectric project with China's Sinohydro Group
June 2012	US announces sanctions against China-owned Bank of Kunlun because the bank had "facilitated transactions...on behalf of Iranian banks"
August 2012	Iran has 55 cascades operating at Natanz and four at Fordow. In total, Iran has produced 6876 kg of 3.5% enriched uranium, 1567 of which has been used to produce 124 kg of 20% enriched uranium
August 2012	A British bank, Standard Chartered, has agreed to pay \$340 million to settle claims that it laundered hundreds of billions of dollars in tainted money for Iran.

APPENDIX D. PRC DIPLOMATIC SUPPORT FOR IRANIAN NUCLEAR AND MISSILE ACTIVITIES (1997-2012)

Date	Venue	Organization / Actor	Diplomatic Action	Substance of Action
August 1, 2012	PRC FM	PRC FM	Public Statement	China escalated its protest of US sanctions against the Bank of Kunlun and a unit of China National Petroleum Corporation, warning that the sanctions would damage Sino-US relations. China's Foreign Ministry stated that the sanctions, "badly violate rules governing international relations and hurt China's interests," further expounding, "China is strongly dissatisfied, is firmly opposed to it and will raise solemn representations to the US from both Beijing and Washington." ³⁰⁸
July 25, 2012	PRC FM	PRC Foreign Ministry	Public Statement	China strongly protested US unilateral sanctions on the Bank of Kunlun and Elaf Islamic Bank (Iraq) for arranging transactions linked to Iranian weapons programs. ³⁰⁹
June 2012	SCO meeting	PRC Foreign Ministry	Public Statement	Chinese CASS experts on Eurasian studies wrote in 2009 that "Regarding Iran's application for Shanghai Cooperation Organization membership, Russia does not object." (对于伊朗加入上合组织的申请, 俄罗斯也不反对。) Yet in 2010 Chinese reports were circulating that Russia's Foreign Ministry objected to letting in a country sanctioned by the UN. ³¹⁰ At the June 6, 2012 SCO meeting in Beijing, rules on admission were formally adopted that precluded Iran's acceptance pending resolution of the UN sanctions imposed on it. ³¹¹ Also reinforcing this decision, prior unspecified objections to Iran's admission were raised by both China and Uzbekistan. ³¹²
June 21, 2012	PRC FM	PRC FM	Public Statement	A PRC Foreign Ministry spokesperson insisted that imports of Iranian oil did not violate any relevant UN Security Council resolutions. "China's importing of Iranian oil is based on its own economic development needs. This is fully reasonable and legitimate," according to the spokesperson. The statement came in reaction to US sanctions aimed at Iran's oil exports. ³¹³

June 12, 2012	UNSC	PRC UN Mission	Public Statement	The PRC UN ambassador called upon all parties to solve the Iranian nuclear issue through dialogue and negotiations, saying, “China is firmly against use of force...Dialogue and negotiation constitute the only right path to proper settlement of the Iranian nuclear issue.” The ambassador spoke in reference to the monitoring of provisions in UNSC Resolution 1737. ³¹⁴
June 6, 2012	Multilateral Summit (PRC)	PRC Premier	Public Statement	PRC Premier Wen Jiabao stated China’s opposition to any state possessing nuclear weapons in the Middle East during a visit of IRI President Mahmoud Ahmadinejad for a security summit hosted by the Shanghai Cooperation Organization. Wen further stated that China, “upholds that the Iranian nuclear issue should be addressed through diplomatic channels in an impartial way.” ³¹⁵
February 14, 2012	PRC FM	PRC FM	Public Statement	In advance of PRC Vice President Xi Jinping’s visit to the United States, PRC Assistant Foreign Minister Ma Zhaoxu was dispatched to Tehran to try to persuade Iran to return to P5+1 negotiations, saying China seeks to “encourage Iran to strengthen cooperation with the International Atomic Energy Agency to ensure the Iran nuclear issue moves forward on the proper course of dialogue.” ³¹⁶
February 2012	International Tour	PRC Premier	Public Statement	On a tour of three Gulf countries, PRC Premier Wen Jiabao reiterated China’s adherence to the principle of non-interference and hopes for increased energy and other commercial trade with the region. During Premier Wen Jiabao’s tour, state oil company Sinopec signed an \$8.5 billion deal with Saudi Aramco for a joint venture oil refinery. Wen also stated that “China supports nuclear non-proliferation, and would be against Iran should it be developing or possessing a nuclear weapon.” ³¹⁷
January 15, 2011	P5+1	PRC	Demurral	China declined an invitation to tour Iranian nuclear sites as part of negotiations between the P5+1 and Iran in Istanbul, Turkey. Cuba, Egypt, Oman, Syria, and Venezuela took part in the tours, while countries that declined included China, the EU, and Russia. ³¹⁸
August 6, 2010	Bilateral Meeting (PRC)	PRC Vice Premier	Public Statement	PRC Vice Premier Li Keqiang reassured IRI Oil Minister Massoud Mirkazemi that China would honor its commitments to complete unspecified cooperation projects even in an environment of increasing international pressure on Iran. ³¹⁹

May 18, 2010	UNSC	PRC UN Mission	Public Statement	An anonymous source from the PRC UN Mission stated that despite the internal circulation of a draft resolution sanctioning Iran, this “does not mean the door for the diplomatic efforts has been closed.” The draft resolution was agreed to by the P5+1 group after intensive rounds of negotiations in April. ³²⁰
April 28, 2010	UNSC	PRC FM	Public Statement	PRC Premier Wen Jiabao participated in negotiations with other UNSC permanent members and the EU foreign policy chief regarding a fourth sanctions resolution against Iran. PRC Foreign Ministry issued a statement saying that the PRC “does not oppose the twin-track strategy,” of pursuing negotiations and sanctions simultaneously. ³²¹
April 20, 2010	UNSC	PRC UN Mission	Negotiations	During month-long negotiations over a fourth round of sanctions on Iran, the PRC voiced objections to the proposed sanctions, threatening to “water down punitive measures contained in the draft resolution.” ³²²
April 13, 2010	Nuclear Security Summit	PRC President	Negotiations	PRC President Hu Jintao met with US President Barack Obama at the first Nuclear Security Summit, held in Seoul, South Korea, and agreed to “step up the pressure on Iran for its nuclear program,” according to the US delegation. The official PRC statement after the meeting differed in wording, calling upon “various parties...to step up diplomatic efforts and actively seek effective ways to resolve the Iranian nuclear issue through dialogue and negotiations.” ³²³
April 8, 2010	P5+1	PRC	Negotiations	China participated in P5+1 negotiations on new sanctions on Iran, meeting regularly throughout the month of April. ³²⁴
March 23, 2010	PRC FM	PRC FM	Demarche	China and Russia both issued a demarche against Iran for rejecting a set of new incentives offered by the P5+1 group, including enriching uranium in France and Russia, in a bid to head off new sanctions. Iran’s inadequate response to both demarches helped to convince both Security Council permanent members to participate in a new round of negotiations for a sanctions resolution. ³²⁵
March 4, 2010	UNSC	PRC UN Mission	Council Deliberations	Both China and Russia used a session of the Security Council to urge Iran to accept a plan to send nuclear fuel abroad for reprocessing. This was seen as a bid to buy time for P5+1 negotiations with Iran. ³²⁶

February 4, 2010	PRC's US Embassy	PRC's US Embassy	Public Statement	Wang Baodong, PRC embassy spokesman in Washington, DC spoke out regarding the UNSC negotiations over a sanctions resolution, saying that "China is against Iran developing and owning nuclear weapons [and] stands for safeguarding the international non-proliferation system and maintenance of peace and stability in the Middle East." Yet, according to Wang, "we believe there's still room for diplomatic settlement of the Iranian nuclear issue and we don't endorse discussing sanctions for now." ³²⁷
January 16, 2010	P5+1	PRC UN Mission	Negotiations	China participated in the release of a statement by the EU political director on behalf of P5+1 that Iran's response to IAEA requests had been "inadequate," and that the group would pursue parallel tracks of a negotiated solution and "consideration of appropriate further measures." ³²⁸
January 6, 2010	UNSC	PRC UN Mission	Public Statement	PRC UN Ambassador Zhang Yesui stated that "A peaceful settlement on the Iranian nuclear issue through diplomatic means will be the best option, and is also in the common interest of the international community because sanctions itself is not an end." This was in response to calls by the United States and other Western powers to impose a fourth round of sanctions on Iran. The PRC sought to delay any consideration of a sanctions resolution saying, "This is not the right time or right moment for sanctions because the diplomatic efforts are still going on." ³²⁹
October 2009	Bilateral Summit (IRI)	PRC Premier	Public Statement	PRC Premier Wen Jiabao hailed China's "close coordination in international affairs" with Iran, during a visit to Beijing by IRI's first vice president. ³³⁰
April 3, 2008	IAEA	PRC UN Mission	Intelligence Disclosure	Anonymous diplomatic sources close to IAEA investigations into Iran's nuclear program revealed that China had provided the agency with intelligence regarding Iran's nuclear activities as part of an increased amount of intelligence forwarded by member nations. ³³¹

December 14, 2007	UNSC	PRC UN Mission	Public Statement	PRC UN Ambassador Wang Guangya effectively stated that no new sanctions resolution would be forthcoming in 2007, calling on the P5+1 group to offer a diplomatic path as well as pursuing additional sanctions. Ambassador Wang also cited a US National Intelligence Estimate's analysis that Iran halted its nuclear program in 2003 as further indications that new sanctions were not necessary. ³³²
November 1, 2007	UNSC	PRC UN Mission	Council Deliberations	US diplomats suggested that Russia and China were "effectively blocking a third resolution," that would impose new sanctions on Iran, since a March UN Security Council sanctions resolution was passed. ³³³
July 5, 2007	UNSC	PRC UN Mission	Council Deliberations	PRC UN Ambassador Wang Guangya expressed disdain at considering a new sanctions resolution, particularly in the context of Iranian willingness to meet with the head of the IAEA and EU foreign policy chief, talks encouraged by China. Ambassador Wang also suggested that "parties who have a direct interest...engage in direct dialogue negotiations with the Iranians," a possible reference to the lack of direct diplomatic US relations with Iran. ³³⁴
March 9, 2007	UNSC	PRC UN Mission	Council Deliberations	After Iran failed to meet the requirements of a resolution passed by the UN Security Council in December 2006 with "limited economic penalties" and a demand that Iran cease nuclear fuel cycle work within 60 days, negotiations among the P5 stalled over a follow-on resolution. China objected to the inclusion of financial penalties to the Iranian Revolutionary Guards, including freezing of assets held by the Guards. "China might be presenting the greatest objections to the proposed penalties," according to the US State Department. ³³⁵
January 10, 2007	PRC FM	PRC FM	Public Statement	PRC Foreign Ministry issued a statement strongly condemning US sanctions imposed against three companies suspected of selling weapons-related material to Iran and Syria, saying, "We strongly oppose this and demand the US side correct this erroneous action." ³³⁶
January 10, 2007	PRC FM	PRC FM	Public Statement	A PRC Foreign Ministry spokesperson lambasted US sanctions against three Chinese companies suspected of selling weapons-related material to Iran and Syria. ³³⁷

December 5, 2006	UNSC	PRC UN Mission	Council Deliberations	Both China and Russia continued to resist efforts to pass a sanctions resolution against Iran in the UN Security Council. Despite weeks of deliberations and “hours and hours of discussions,” Russian and Chinese positions were unchanged, namely that “Western-backed measures go too far.” ³³⁸ Resolution 1737 ultimately passed unanimously on December 23, 2006, with certain provisions “watered down” in order to accommodate the Russian and Chinese delegations. ³³⁹
September 15, 2006	PRC FM	PRC FM	Public Statement	PRC Foreign Ministry reacts with a strongly-worded statement against claims made against it in US Congressional testimony by the Assistant Secretary of State for Verification, Compliance, and Implementation that China is a potential proliferation risk by supplying dual-use technology to Iran and North Korea. ³⁴⁰
April 21, 2006	Bilateral Summit (US)	PRC President	Public Statement	PRC President Hu Jintao, in remarks following a summit meeting with US President George W. Bush, expressed that “China was ready to work with Washington to negotiated settlements” to the Iran and North Korean nuclear issues, but refused to publicly commit to a UN Security Council Chapter 7 resolution, which would authorize sanctions or military force. Hu stated, “both sides agree to continue their efforts to seek a peaceful resolution of the Iranian nuclear issue.” ³⁴¹
January 31, 2006	IAEA	PRC FM	Referral Deliberations	Foreign ministers of the P5+1 group issued a joint statement calling upon the IAEA Board of Governors to refer Iran’s nuclear dossier to the UN Security Council at its next meeting in February, but also called upon the UN Security Council to delay action until a March report was issued by the IAEA on Iran’s nuclear activities. China and Russia decided to show a “united front” with the other P5+1 members to pressure Iran to cooperate with the IAEA. ³⁴²
January 26, 2006	PRC FM	PRC Foreign Ministry	Public Statement	China opposed “impulsively using sanctions or threat of sanctions to solve problems,” referring to efforts to pressure Iran to accept a Russian offer to enrich uranium on their behalf. ³⁴³
January 24, 2006	IAEA	PRC UN Mission	Referral Deliberations	Russia pushed for a delayed timetable in referring Iran to the UN Security Council. China supported a slower process, voicing support for “diplomatic means to resolve the Iranian nuclear issue.” ³⁴⁴

January 17, 2006	IAEA	PRC UN Mission	Referral Deliberations	China and Russia agreed that Iran’s nuclear dossier should be referred to the UN Security Council after Russia’s position shifted in the face of Iran’s continuing reluctance to accept the fuel reprocessing deal offered by the Russians. While China “remained hesitant,” to formally rebuke Iran, the referral was all but a “done deal,” according to Western diplomats. ³⁴⁵
December 27, 2005	PRC FM	PRC FM	Public Statement	PRC Foreign Ministry calls for the lifting of sanctions it describes as “unlawful action,” aimed at several Chinese government-run companies suspected of violating the Iran Nonproliferation Act by selling missile- and chemical arms-related goods to Iran. ³⁴⁶
September 12, 2005	IAEA	PRC UN Mission	Nonaligned Movement	Thirteen Nonaligned Movement countries cited China and Russia’s ongoing opposition to the referral of Iran’s nuclear case to the UN Security Council as grounds for deferring their own decision to side with one position or another. ³⁴⁷
November 22, 2004	PRC FM	PRC Foreign Minister	Public Statement	While on a visit to Tehran, PRC Foreign Minister Li Zhaoxing demurred when asked about China’s willingness to use its veto on the UN Security Council if Iran was referred there by the IAEA, saying that “Veto cannot be used extensively since there are special limits to that. We should not set any hopes [on] China in the Security Council.” ³⁴⁸
November 6, 2004	PRC FM	PRC FM	Public Statement	PRC Foreign Minister Li Zhaoxing weighed in on debates in the IAEA over Iran’s nuclear program, saying that China’s stance on the Iranian nuclear issue was that all nations had the right to pursue and use peaceful nuclear technology. The statement was an implicit gesture of support to Iran and a demonstration that “Beijing took Tehran’s words at face value.” ³⁴⁹
September 19, 2004	IAEA	PRC UN Mission	Deliberations	The IAEA Board of Governors took up the issue of referring Iran’s nuclear dossier to the UN Security Council, with China’s representative calling on the international community to respect Iran’s right to peaceful use of nuclear energy. Uranium enrichment, he said, could be used to either generate electricity or make bombs. As such, enrichment per se was not banned by the NPT. He also called on Iran to cooperate with the IAEA and “welcomed” Iran’s signing of the additional protocol providing for enhanced IAEA inspections of nuclear facilities. ³⁵⁰

August 26, 2004	PRC FM	PRC FM	Public Statement	A spokesman for the PRC Embassy in Washington DC denied allegations that China had recently provided ballistic missile-related technology to Iran, saying, “China’s government is firmly opposed to the proliferation of [WMD] and their means of delivery.” ³⁵¹
August 24, 2004	PRC FM	PRC Ambassador to Iran	Public Statement	PRC ambassador to Iran declared that Iran had an “absolute right” to peaceful uses of nuclear energy. ³⁵²
May 2004	PRC FM	PRC Ambassador to Iran	Public Statement	The PRC ambassador to Iran reassured Expediency Council chairman Rafsanjani that China continued to back Iran’s accession to the WTO. China became a WTO member in December 2001. ³⁵³
March 9, 2003	PRC FM	PRC Ambassador to Iran	Public Statement	In early March 2003, as the US invasion of Iraq seemed imminent, China’s ambassador to Iran issued a statement expressing solidarity with the so-called three-plus-five group of nations opposed to war. This group included France, China, and Russia and Iraq’s five neighbors, including Iran. The ambassador said, “Iran and China wish to navigate the world toward peace. We shall, therefore, try to form a coalition with all advocates of peace worldwide.” ³⁵⁴
April 2002	Bilateral Summit (IRI)	PRC President	Meeting	PRC President Jiang Zemin visited Iran in April 2002 as part of a five-nation tour of the region. This was the first visit of a PRC paramount leader to Iran since Hua Guofeng’s visit in 1978. During Jiang’s tour the Foreign Ministry issued a statement decrying the spread of “imperial hegemonics” in the region and framed Jiang’s tour as shoring up multipolarism and “global strategic balance.” ³⁵⁵
March 21, 2002	PRC FM	PRC FM	Public Statement	PRC Foreign Ministry issues a statement reiterating China’s adherence to the Convention on Banning Chemical Weapons in response to US State Department claims that Iran has sought to acquire chemical weapons materials, technology, and equipment from China and Russia. ³⁵⁶
January 24, 2002	PRC FM	PRC Foreign Ministry	Public Statement	China’s Foreign Ministry condemns US sanctions on three Chinese companies accused of violating the Iran Nonproliferation Act of 2000. ³⁵⁷

June 26, 2001	Bilateral Summit (IRI)	PRC President	Joint Communiqué	PRC President Jiang Zemin signs a joint communiqué with IRI President Mohammad Khatami voicing mutual commitment to a world free from nuclear, biological, and chemical weapons, further expressing support for making the Middle East a WMD-free zone. ³⁵⁸
May 2001	Bilateral Meeting (IRI)	PRC FM	Consultation Mechanism	The inaugural PRC-IRI regular meeting as part of the newly established “consultation mechanism” took place in May-June 2001 in Beijing. A second meeting occurred in September 2001. ³⁵⁹
May 2001	WTO	PRC FM	Joint Statement	China joined with other “emerging economies” to voice support for Iran’s accession to the World Trade Organization. The issue was taken up after this gesture of support, but Iran’s application was vetoed by the United States in 2001 and 2002. ³⁶⁰
January 2001	Bilateral Summit (IRI)	PRC Vice President	Meeting	PRC Vice President Hu Jintao visited Iran in January 2001. ³⁶¹
January 2001	Bilateral Relations (IRI)	PRC Ministry of Defense	Military Exchanges	After a six-year hiatus, military exchanges between the PRC and IRI were reinstated. PRC minister of the State Commission for Science, Technology, and Industry for National Defense visited Iran for talks with the IRI defense minister. ³⁶²
September 2000	UN	PRC UN Mission	Public Support	The PRC supported Iran’s effort to launch a “dialogue among civilizations” as a putative response to the popular view in the United States of Samuel Huntington’s “clash of civilizations” analysis. Subsequently, the year 2001 was declared the “Year of Dialogue Among Civilizations” by the United Nations. ³⁶³
June 22, 2000	Bilateral Summit (IRI)	PRC President	Joint Agreement	PRC President Jiang Zemin IRI President Khatami sign a joint agreement espousing their support for a world free of nuclear weapons, yet recognize each others’ right to civilian nuclear, chemical, and biological technologies. ³⁶⁴
June 2000	Bilateral Summit (IRI)	PRC FM	Meeting	IRI President Khatami visited Beijing in June 2000 as part of the resuscitation of relations between China and Iran. This was the first visit to China by an Iranian president since May 1989. ³⁶⁵
June 2000	Bilateral Meeting (IRI)	PRC Defense Minister	Private Meeting	An undisclosed meeting between the IRI foreign minister and defense minister with the PRC defense minister during Khatami’s Beijing visit was the impetus to resume military exchanges seven months later. ³⁶⁶

February 2000	Bilateral Meeting (IRI)	PRC FM	Consultation Mechanism	PRC Foreign Minister Tang Jiaxuan formally established a regular “consultation mechanism” between China and Iran during a visit to Tehran in February 2000. Tang also opened the first phase of the Tehran subway project, which China had won the bid to construct. His visit to Tehran was the first for a PRC foreign minister since 1994. ³⁶⁷
September 2000	UN	PRC FM	Consultation Mechanism	As part of the restoration of the Sino-Iranian partnership, PRC Foreign Minister Tang Jiaxuan met with his counterpart at a meeting of the United Nations in New York to discuss the establishment of a “consultation mechanism” in which vice foreign ministerial-level exchanges would occur regularly between the two countries. ³⁶⁸
March 13, 2000	Bilateral Relations (US)	PRC FM	Halting Uranium Shipments	After US protests, PRC entities ceased certain elements of nuclear cooperation with the IRI. China’s Nuclear Energy Industry Corporation had sold chemicals used for enrichment of weapons-grade uranium to Isfahan Nuclear Research Center. China halted shipment of the anhydrous hydrogen fluoride, estimated at 100 tons. ³⁶⁹
November 1, 1999	Bilateral Summit (US)	PRC President	Joint Agreement	PRC President Jiang Zemin and US President Bill Clinton announce that the US-China Agreement on Peaceful Nuclear Cooperation has gone into effect, including China’s pledge to halt nuclear cooperation with Iran. ³⁷⁰
October 28, 1997	Bilateral Summit (US)	PRC President	Joint Statement	PRC President Jiang Zemin provides “authoritative, written communications” to US President Bill Clinton that China will end nuclear technology sales to Iran as part of a deal for opening trade in civilian nuclear technology with the United States. Steps have been taken by both sides to implement the 1985 accord, the US-China Agreement on Peaceful Nuclear Cooperation. ³⁷¹
October 8, 1997	Bilateral Meeting (US)	PRC FM	Negotiations	US Deputy Assistant Secretary of State for Proliferation Issues returns from a meeting in Beijing saying that “substantial progress” had occurred in moving the PRC to halt nuclear cooperation with Iran: “They’ve made the decision that they will indeed suspend that cooperation [with Iran].” ³⁷²
August 25, 1997	Bilateral Meeting (Israel)	PRC FM	Private Assurances	PRC Deputy Prime Minister for Foreign Trade gave assurances to Prime Minister Benjamin Netanyahu that China would cease assistance to Iran in constructing a nuclear power plant. ³⁷³

April 16, 1997	Bilateral Relations (IRI)	PRC FM	Public Statement	PRC Foreign Minister Qian Qichen reassures IRI Deputy Foreign Minister Aladin Burujardi of their countries' good relations despite increasing international criticism over their nuclear cooperation: "China and Iran have a long tradition of friendship, and Beijing is prepared to work alongside Teheran [sic] in order to take the bilateral relationship forward on the basis of equality." ³⁷⁴
December 19, 1996	Bilateral Relations (US)	PRC FM	Private Assurances	PRC officials respond favorably to US requests to halt the sale of a uranium hexafluoride conversion plant to Iran in exchange for opening civilian nuclear technology trade with the United States. ³⁷⁵
April 18, 1996	Bilateral Relations (IRI)	PRC FM	Cooperation	PRC nuclear scientists participated in the construction of a nuclear plant in Esfahan, Iran as part of the concluded "long-term discussions" between PRC and IRI governments. ³⁷⁶
January 22, 1996	Bilateral Meeting (IRI)	PRC FM	Cooperation	PRC Foreign Minister visits Iran despite US objections to discuss the sale of two 300-megawatt nuclear reactors to the IRI. ³⁷⁷
January 9, 1996	PRC FM	PRC FM	Public Statement	PRC Foreign Ministry states that China will not sell two nuclear reactors to Iran, saying, "implementation of the agreements between China and Iran on nuclear cooperation has ceased." China retains the option of cooperation on other projects. ³⁷⁸
July 9, 1991	Bilateral Summit (IRI)	PRC Premier	Joint Statement	PRC Premier Li Peng issues a joint statement with IRI leaders Ayatollah Khomeini and President Rafsanjani declaring their shared opposition to the use of nuclear, chemical, and biological weapons, further calling for "just, logical, comprehensive, and balanced" arms control. ³⁷⁹

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