

*The Peter and Katherine Tomassi Essay*  
SOUTH KOREAN WEAPONS EXPORTS

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South Korea, an ally of the United States and a Newly Industrialized Country, has made great strides in its ability to equip its military and rely more on its growing domestic defense industries and less on foreign firms to procure its weapons systems. After a late start to an indigenous defense development program in the 1970s under President Park Chung Hee, it has recently emerged as a competitive producer in the global arms trade with a state-of-the-art defense industry that has successfully been able to make high-profile arms deals to sell its highly developed weapons systems. The government of South Korea has been integral to the growth of the industry and is active in aiding the increased defense exports. As is the case with other countries that have prominent defense industries, the South Korean government works closely with companies in developing, acquiring, and exporting weapons systems. In addition, the government has traditionally been intimately connected to its major domestic companies. This follows South Korea's model of development throughout the twentieth century based on the principle of *chaebol*, in which the government worked very closely with the largest domestic corporations, providing export subsidies and other benefits to foster industrialization. Although the actual transactions and delivery are carried out by the companies themselves, the export of defense goods is ultimately monitored and led by the government.

In 2006, the Defense Acquisitions Program Administration (DAPA) was created within the Defense Ministry to consolidate eight subgroups that deal with weapons procurement (Sue-young). DAPA bolsters and coordinates existing civilian industries, such as

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the high-tech sector, heavy manufactures, shipbuilding, and defense industries to create its own version of a military-industrial complex ("Indigenous Weapons Systems"). With advantages in key civilian industries, its rapidly growing research and development (R&D) sector has already made significant strides in developing advanced weapons systems. For example, the Republic of Korea (ROK) deployed indigenous weapons for its military, such as the Sin Gung, a portable short-range surface-to-air missile; the HaeSeong, a long-range cruise missile; and the Cheong Sangeo, a lightweight torpedo ("Defense Procurement").

According to DAPA, its program will not only seek to supply its own military but will also emphasize an export promotion system. It has set a goal of reaching a total \$1 billion in exports by 2010 (Lee). Notable accomplishments include the transfer of technology for the K-9 self-propelled howitzer to Turkey and the sale of trainer aircraft to Indonesia. Ongoing efforts include its bid for a contract with the Australian army to upgrade its self-propelled howitzers and a submarine deal with Indonesia. Recent literature on arms acquisitions and technology transfers have endeavored to develop theories that help explain why a country like South Korea would seek to promote weapons exports so vigorously. Neorealist theory states that a state actor would sell its arms to allies to bolster their relative capabilities, which would positively affect its own relative capabilities, especially when a threat from an enemy seems imminent. For example, the threat of Soviet encroachment led to the United States' support of indigenous defense industries in Western Europe and Japan during the Cold War (Pages). Historians have cited the arms trade as a way of securing national interests (Grant).

In addition to the sale of traditional weapons and defense goods, South Korea has been involved with the export of dual-use technologies and materials. Dual-use goods are items that are used for peaceful purposes but can also be utilized for military purposes. In terms of explaining the motivations behind the sale of dual-use goods, Matthew Fuhrmann of Harvard University concluded that a state would "channel dual-use trade toward destinations where se-

curity guarantees exist and away from targets where security threats are present to minimize its potentially negative security externalities" (648). That is, a nation would not sell potentially dangerous technologies to states that could use those acquisitions to threaten the seller's security. They would seek to enforce certain security guarantees with the buyer nation in order to ensure that the dual-use technology would not be used for military purposes against other nations, but especially against its seller. Neo-liberal theorists posit a similar theory that exporting dual-use would be unlikely between a democratic country and a non-democratic country because democratic countries that adhere to international laws and norms would be more likely to curb the careless re-export of sensitive technologies and weaponry. A democratic country would also adhere strongly to the principle of abstaining from selling to countries on international sanctions lists (Fuhrmann 648).

South Korea's behavior as a major exporter of weapons systems and technology cannot be fully explained by existing theories on arms and dual-use technology export, as stated above. Sales of weapons materials and technology transfers from South Korea are widespread and seem to be made regardless of the dangers they would pose to its closest ally, the United States, and even its own national security interests. Contrary to Fuhrmann's and other theorists' predictions of state behavior when it comes to weapons exports, South Korea sells its weaponry to democracies and non-democracies alike, to countries with all levels of security guarantees for handling critical materials, and even to countries on U.N. or U.S. sanction lists, such as Iraq and Myanmar.

This paper will seek to identify the strategy behind South Korea's heavily promoted military export program. Why does South Korea continue to pursue an expansion of arms exports despite their potential setbacks to its national security, regional dynamics, and alliance with the United States?

My hypothesis is that the South Korean government promotes arms exports to strengthen strategic relations with countries in order to best increase its prospects for securing energy and natural resources abroad. Whether the recipient country provides

security guarantees, is an ally of South Korea, or has a democratic form of government is not the most important factor in determining its likelihood of receiving South Korean arms exports. Instead, it is the recipient country's wealth of oil and energy resources that make the country a candidate for South Korean weapons and dual-use technology exports.

## ENERGY INSECURITY

In his book, *Asia's Deadly Triangle: How Arms, Energy, and Growth Threaten to Destabilize Asia-Pacific*, Kent Calder argues that a great "Arc of Crisis" in East Asia stemming from rapid economic growth, growing shortage of energy, and existing geostrategic uncertainties will all lead to rapid arms buildup in the region (3-5). All of these elements are present in South Korea. After its growth from a developing country in the 1960s to one whose current GDP per capita is comparable to most European Union nations, South Korea still boasts an average of 4.4 percent growth in GDP per year ("Country Briefings"). This rapid growth will only continue to exacerbate South Korea's dire need for energy in the future. Finally, South Korea faces significant threat from North Korea, which serves as a key motivator for its push to constantly revamp its military. Calder argues, "The uncertainties of the emerging East Asian power game, aggravated by energy shortage, have accelerated the dangers of a post-Cold War Asian arms race" (139). If Calder were correct about his assessment of the situation, the South Korean Defense Ministry would be devoted to the acquisition and import of weapons to bolster its relative military strength. However, the push for exporting its defense goods in major arms deals reveals another motivation. This paper will show that the promotion of the export of weapons and technology has helped address South Korea's energy insecurity by facilitating strategic relationships with resource-rich countries. South Korea relies heavily on imports to meet its energy scarcity. It has no domestic reserves of oil and very little natural gas within its boundaries. It is the world's second largest importer of liquid natural gas (International Energy Agency

23). The OECD International Energy Agency forecasted that under a business-as-usual scenario, one in which planned and existing policies are not accounted for, total primary energy supply will rise by nearly 70 percent from 2001 to 2020 (29).

Current total energy supply is comprised mostly of oil and coal. Nuclear power and liquid natural gas (LNG) make up the second largest component. LNG is the fastest-growing fossil fuel source, accounting for a 13 percent increase from 1995 to 2005, while the supply of oil only increased at 0.5 percent annually (25). Total final consumption of liquid natural gas also grew significantly during this period, with an annual increase of 27 percent (27). Roughly half of energy consumption was attributed to the industrial sector in 2004 and has been growing at an annual 8.5 percent since 1984 (25). Although it has a slower rate of growth than LNG, oil is still a major source of energy used by the industrial sector, making up 57 percent of the total industrial consumption (27).

According to the same report, South Korean energy policy objective is focused on expanding the use of natural gas, bituminous coal, and nuclear power, as opposed to a reluctant reliance on volatile foreign oil supply (29-32). “[South Korea] has also made efforts to explore for oil both in its own territory and abroad. Security of gas supply is of growing importance owing to the rising share of natural gas in Korea’s energy sector and the country’s total dependence on imported LNG” (23). Overseas resource development began in the late 1970s. In August 2006, 199 projects were underway in overseas fields and in off-shore exploration sites. The Vietnam 15-1 oil field, the Donghae-1 continental shelf gas field, the Caspian Sea oil field development, and development projects in Western China are among the most notable overseas development projects (32). There seems to be a clear correlation between a country’s energy resources and its receipt of South Korean weapons. For example, according to the OECD, South Korea’s consumption of coal will increase in the next thirty years (81). Indonesia and Australia, recipients of South Korean arms sales in recent years, are some of the main exporters of South Korea’s coal

supply. Indonesia and Australia are also South Korea's two non-OPEC suppliers of oil. In addition, oil consumption, which has more than doubled since 1990, has made South Korea the ninth largest oil importer in the world. Oil-rich countries in the Middle East are key targets of South Korean arms exports, particularly the United Arab Emirates. Iran, another key oil supplier, has received South Korean dual-use technology (89). South Korea is involved in overseas oil and gas development projects, with private investments totaling almost \$3.5 billion by 2006 and \$1.7 billion public investment through the state-owned Korea National Oil Corporation (91). It aims to increase the amount of oil exports procured through South Korea-developed projects abroad, and the countries in which these projects are located have received generous packages of defense goods from the ROK.

Liquid natural gas will become an important source of energy in the future as it is part of South Korea's program to diversify its energy resources and rely less in the oil-rich but volatile region of the Middle East. As it does with its oil, South Korea imports all of its liquid natural gas. The state-owned company Korea Gas Corporation (KOGAS) is the largest single buyer of LNG in the world (98). Major LNG suppliers to South Korea, such as Indonesia, Malaysia, and Australia, were also recipients of major arms sales from the resource scarce nation.

These specific weapons exports help illuminate the relationship between arms sales and energy deals. It is important to note that these buyer countries have important energy resources and therefore have the greatest potential for improving South Korea's energy insecurity. Moreover, South Korea is not merely interested in securing suppliers for its key energy resources, but it also seeks to own shares of overseas energy development sites. Many countries that received South Korean weapons systems were the same countries where these exploration and development projects were located. An analysis of government documents, press releases, and press conferences helps establish the causality between the national strategy for energy procurement and arms deals.

The strategic use of South Korean weapons materials includes

both the major sales of conventional weapons and the less conspicuous and often illicit transfer of dual-use technology to countries prohibited from international weapons trade. Both types of transfers have been instrumental in securing energy interests abroad.

## WEAPONS FOR ENERGY

There are various cases in which South Koreans have been involved in selling weapons and technology that support the argument that the broad underlying purpose of these sales is to gain overseas energy sources abroad. In each of these cases, there is a direct correlation between the resources owned by the targeted buyer country and the occurrence of an arms sale. South Korea has rarely sold its weapons systems to a country with no natural resources which could not help ameliorate its energy insecurity. For example, Bangladesh, Kazakhstan, and Indonesia, all of which are common recipients of South Korean weaponry, are replete with energy resources, such as oil, coal, and natural gas.

South Korea has also been actively involved in securing energy deals with these countries. Energy deals were announced after or concurrently with the weapons sales, which illustrates that the defense deal was certainly not the only goal to be achieved in the energy-rich countries. Arms deals with the aforementioned countries, as well as the Philippines, Australia, and Venezuela, have all culminated in important developments for South Korean overseas energy procurement. For example, although the Philippines may not be as resource-endowed as other Southeast Asian nations, namely Indonesia, South Korea has nonetheless taken advantage of its geography, climate, and potential sources of energy in offshore blocks. For example, the Philippine National Oil Company is considering the sale of half of its own stakes (ten percent) in its biggest natural development project, a deepwater gas-to-power project in the South China Sea ("Natural Gas"). The national oil company has also signed a deal to diversify its fuel source with biodiesel. By cooperating with the South Korean biodiesel producer Eco Solu-

tions Company Limited, it will establish *jatropha curcas* farms and oil mills that will extract oil from the seeds of these plants ("PIA"). In terms of arms sales, South Korea has tendered numerous retired munitions to the Philippines beginning in the mid-1990s, including the F-5A Freedom Fighter supersonic fighter plane and the Sea Dolphin. Australia, which purchased the Delos oil tanker made by Hyundai Mipo Dockyard Company to transform the civilian vessel into a warship capable of refueling Australian naval vessels, provides much of South Korea's most important energy resources, including oil, coal, and liquid natural gas (Graham). President Lee Myung-bak and Prime Minister Kevin Rudd held talks to cooperate on these issues when the newly-elected Korean President made clear South Korea's interests in expanding cooperative energy projects in Australia ("ROK"). The sale of naval ships to Venezuela is also not without Korean ambitions in acquiring stakes in its growing natural resources industry. Venezuela holds the world's third largest crude-oil reserves, and it will be useful for South Korea to become involved with oil and gas exploration and development projects in the country. The state company Korea National Oil Corporation (KNOC) already owns a 14 percent share of Venezuela's Onado oil field ("Energy Cooperation with Venezuela"). There have been numerous high-level talks to establish future joint ventures with Venezuela for hydrocarbon exploration and development in the Orinoco Belt region ("Venezuelan Oil, Gas").

There have been cases in which the private sector took the lead in managing and completing a weapons deal with the government of another country, while other deals were directed by government officials. For purposes of clarification, these two types of cases will be treated separately in this paper. However, whether negotiated by the government, as in the case of Indonesia and Kazakhstan, or brokered by the head of a company, such as Daewoo in Bangladesh, the procurement of energy deals was the ultimate outcome of exporting weapons in each of the major case studies in this research, namely Indonesia, Kazakhstan, and Bangladesh.



## GOVERNMENT-LED NEGOTIATIONS FOR ARMS DEALS

## Indonesia

Indonesia is a crucial country for South Korea's supply of liquid natural gas. Its political and economic instability in the late 1990s put roughly one-fourth of South Korea's total liquid natural gas consumption at risk (International Energy Agency 102). However, South Korea could not manage to abandon Indonesia, a country with such a large share of its most important source of natural resources in the future. Instead, it received South Korea's largest sale of indigenous conventional weapons.

Indonesia offers the prime example in which South Korea has been able to obtain arms export deals and energy cooperation agreements through diplomatic means. Meetings between high-level officials from both yielded numerous cooperative deals to jointly develop weapons and work toward energy cooperation. These meetings and cooperative memoranda exemplify the role of weapons and defense cooperation in helping South Korea procure energy resources abroad. South Korea's Korean Aerospace Industry (KAI) recently sold trainer aircraft to Indonesia in order to help bolster the Indonesian defense industry (Govindasamy). These trainer planes would then be reassembled by an Indonesian firm. KAI also agreed to a joint production facility with its Indonesian counterpart. Other opportunities in defense cooperation opened up after the transfer of the aircraft to Indonesia.

There have since been high-level diplomatic talks between the two countries over defense and energy cooperation. Earlier talks include President Roh Moo-hyun's 2006 visit to Indonesia, where he discussed how South Korea and Indonesia could improve cooperation by working to jointly produce weapons and increase technology transfers ("Indonesian Leaders"). There was also an increased number of talks between lower-level officials, including visits to South Korea by Indonesian Air Chief Marshal in 2007 and a visit by Chief of Naval Operations of South Korea in 2008 ("Navy Chief").

These exchanges led to the two countries' first defense meeting on June 12, 2008. Among the topics discussed was the bilateral weapons exchange program between South Korea and Indonesia, particularly South Korea's desire to win Indonesia's new order for submarines (Byun). This would be the first order of submarines in the history of South Korean defense R&D ("Subs-for-Aircraft Deal"). However, not all of the topics discussed at the meeting were strictly defense-related. At a press conference following one of these meetings, a Ministry of Defense spokesman mentioned the vital role of Indonesia's energy resources played in South Korea's interest in selling to the country:

The Ministry of National Defense has actively sought the establishment of dialogue channels with Southeast Asian nations rich in energy resources to support the Seoul government's so-called energy diplomacy ... To that end, we've decided to hold working-level defense talks with Indonesia for the first time among member states of the Association of Southeast Asian Nations (ASEAN), given Indonesia is not only an energy-abundant nation, but also a major arms sales partner for South Korea. (Jung)

The press release regarding the defense talks carried a similar message:

The ministry has been working to hold dialogue with key Southeast Asian nations to help government efforts to secure stable sources of energy and expand room for the country's military diplomacy... As part of those efforts the ministry will hold talks with Indonesia, a key member of the Association of Southeast Asian Nations (ASEAN) and a resource-rich nation that is also one of our country's key partners in the defence [sic] industrial sector. (Byun)

The changeover of South Korea's presidential administration from a liberal to a conservative party has only seen an increase in

diplomatic exchange regarding arms sales. Energy cooperation has continued to rise. During the Group of Eight summit in Japan in the summer of 2008, President Lee Myung-bak promised to increase investments into Indonesia's energy and resource sectors after speaking with Indonesian President Yudohyono. In turn, Lee asked Yudohyono to allow South Korea to supply Indonesia with arms and to support the ROK's interests in oil, natural gas, coal, and forest projects in resource-rich Indonesia ("Subs-for-Aircraft Deal"). President Lee again made news when he held unscheduled talks with the President of Indonesia again during his visit to Brazil in November 2008, where they spoke on the same topics ("Energy Cooperation in Brazil").

South Korea's deals with Indonesia offer a clear demonstration of how the government's push for acquiring arms deals with a nation is tied to its interest in that country's energy resources. From the beginning, government statements regarding talks about Indonesia weapons sales have mentioned talk of energy cooperation, even when the dialogue had been conducted by the Minister of Defense. This shows that the Ministry of Defense is aware of the importance of these buyer countries to its energy insecurity and that goal of acquiring these resources is made clear to those involved in brokering deals with Indonesia.

## Kazakhstan

Kazakhstan is replete with natural resources that make the Central Asian country very attractive to South Korea and other resource-scarce countries. Located on the northeast shore of the Caspian Sea, it possesses the largest onshore and offshore recoverable crude oil reserves. According to the United States Energy Department, the growing oil industry is able to export approximately 1.2 million barrels a day, and this figure is expected to grow with continued influx of foreign direct investment ("Kazakhstan"). The Kashagan field, located near the northern portion of the Caspian Sea, is the largest oil field outside of the Middle East (Umurzakov 3). South Korea's Samsung Corporation was one of the early inves-

tors of the Kazakh petroleum in 1996, which was still at an early stage of its oil production following the country's independence from the Soviet Union ("1988-1999 Privatization").

Furthermore, Kazakhstan can provide three other crucial components of South Korea's energy program because of its wealth of liquid natural gas, coal, and uranium. Kazakhstan is expected to be a potential competitor in the region with Russia as a major exporter of natural gas and has made cooperative deals to export gas to other major areas in the region (Umurzakov 9). It also has the largest supply of coal reserves in the region that are amenable to South Korea's current and future coal consumption. Although it still has net exports of coal, its production has fallen since becoming independent from the Soviet Union due to difficulties in attracting foreign investments into its coal industry (10). Finally, its wealth of uranium is very attractive to a country like South Korea, which seeks to fully diversify its energy sources by bolstering its nuclear power capabilities. Kazakhstan has the second-largest uranium reserves in the world, holding one-fifth of the world's total. It will soon join Australia and Canada as the world's major exporters of the resource (12).

Considering the potential benefits for increased ties with the country, it should be expected that South Korea seek to cooperate more closely with Kazakhstan. It has done so with numerous exchanges, agreements, and a notable weapons donation. The push for closer ties with Kazakhstan began as early as September 2004, when President Roh Moo Hyun was able to broker an agreement that encompassed the crucial tie between its use of military assistance and donations with access to the Central Asian state's natural resources. In April 2005, the South Korean Defense Minister visited Kazakhstan, pledging to donate three retired Sea Dolphin fast patrol boats, the same model of boat that was sold to Bangladesh a few years prior ("Kazakhstan Navy"). Whereas South Korea could have profited from selling these retired boats to another country like Bangladesh, the decision to donate came in the same month as an important agreement with Kazakhstan to cooperate in a joint mining venture for uranium (Umurzakov 12). The donation of na-

val vessels certainly contributed to winning this deal. Furthermore, since the weapons donation, President Roh Moo Hyun signed an agreement with President Nursultan Nazarbayev on “military-technical cooperation, joint development of Caspian energy resources” (“PM to Visit Kazakhstan”).

South Korea has continued to make significant headway in other key efforts to gain stakes in Kazakh energy deals, including memoranda of understanding on oil exploration projects on various off and onshore oil blocks and the Kazakh-Korean Petrochemistry Working Group. According to a Kazakh news agency reporting on South Korean Prime Minister Han Seung-soo’s visit to the country in 2008, “The South Korean PM’s visit is part of President Lee Myung-bak’s policy of pragmatic diplomacy. Ensuring energy and resource security for South Korea is a priority” (“PM to Visit Kazakhstan”). More so than Indonesia, the focus of South Korea’s objectives has clearly been energy. The donation of South Korean patrol boats was embedded in a rigorous diplomatic effort to establish a working relationship with the energy-rich nation.

## BUSINESS NEGOTIATIONS SUPPLEMENTED BY THE SOUTH KOREAN GOVERNMENT IN BANGLADESH

Bangladesh is an interesting case in which a South Korean firm was complicit in its recent political controversies that revolve around its weapons and energy deals. The Sea Dragon and Sea Dolphin patrol and gun boat sales were completed without political disruption, but the sale of the DW-2000H frigate from Daewoo Corporation caused considerable political backlash for former Bangladeshi Prime Minister Hasina Wajed, who was charged in a high-profile court case for corruption (“Sea Dolphin”). Her administration came under fire for signing a deal with Daewoo Corporation, which was only the fourth lowest bidder for a frigate deal. This was not only illegal but allegedly incurred a loss of more than \$88 million for the government. The Bangladeshi navy also detected irregularities in the ship, causing it to decommission the vessel (“Hasina”).

Bangladesh has a wealth of resources, such as coal and potential oil and gas, and has signed memoranda of understanding with South Korean energy firms, which included Daewoo Corporation, in November 2007 and December 2008 (Rahman). Daewoo Corporation's double involvement in weapons deals and subsequent energy contracts with Bangladesh exemplify the major role of energy as a driver factor for arms sales.

Interestingly, the same company has been mired in the disputes over recent maritime boundaries between Bangladesh and Myanmar. This controversy, which sparked tension and military maneuvers between the two countries, began in October 2008 when Daewoo Corporation, also hired by Myanmar, began drilling a hydrocarbon exploration well in an off-shore block in disputed maritime territories. Myanmar warships allegedly escorted South Korean gas and oil exploration rigs in contested waters ("Myanmar"). Fortunately, South Korean diplomats, along with counterparts from China and India, all of whom received energy contracts from Myanmar, were involved with the multilateral efforts to quell the crisis.

Although it is not clear whether the sale of patrol and gun boats was orchestrated by the government, what is evident is that the government has been integral to maintaining key energy projects in Bangladesh by supporting diplomatic efforts to help manage the crisis. The motivation for intervention was clear: for protecting Daewoo Corporation's energy exploration and development projects in the country. It is unclear whether Daewoo received pressure from the government to sell its frigates as a strategy to forge an energy deal with Bangladesh, but the immediate diplomatic support that the company received during the crisis represents the tight-knit relationship between the public and private sectors in South Korea.

## ILLICIT SALE OF DUAL-USE GOODS & DANGERS OF AN ARMS-FOR-ENERGY POLICY

South Korea's illicit sales of dual-use technology have come

under international criticism. The ROK is a signatory of multilateral efforts to contain proliferation, such as the Wassenaar Arrangement of 1996. “The “agreed membership criteria” under the Wassenaar Arrangement are that participants have adequate export controls, adhere to the major existing nonproliferation regimes — the Missile Technology Control Regime, Australia Group, and Nuclear Suppliers Group — and have “responsible” export control policies toward the so-called pariah countries: Iran, Iraq, Libya, and North Korea” (Grimmett).

In the past decade, South Korea has failed to enforce an export control policy that could have avoided the transfer of vehicles, fiber-optic communication equipment, sophisticated military computer technologies, and radar systems to the Saddam Hussein’s Iraqi regime from the 1990s to 2001 (“Regime Finance”). The recent State Department sanctions on the South Korean firm, Yolin/Yullin Tech, which was among other firms and foreign entities that transferred “dangerous weapons and related material” to Iran, North Korea, and Syria (“US Sanctions”). These were either “goods, services, or technology” listed on the major multilateral export control lists and other items that could be used to build WMDs, cruise, and ballistic missiles. Exporting dual-use materials to these countries signified South Korea’s relaxed export policy that lacks significant end-use guarantee and restrictive measures that are expected of a member country under the Wassenaar Arrangement.

These transfers of materials and technology can actually come at odds with South Korea’s actual security for two reasons. The more glaring threat to its security is that all three of these buyer countries have ties with North Korea, a nation with which South Korea is still at war. The suspected nuclear cooperation between North Korea and Myanmar is just one of the many speculations between the rogue country and recipients of South Korea’s arms (Robespierre). Another important factor is that South Korea’s sale of dual-use goods to these countries may put a strain on its important alliance with the United States. Nonetheless, these exchanges seem to continue within the world of business, creating significant threats to its allies, as well as its own security.

There is reason to believe that the motivation for these exchanges may be resource-related. Both Iraq and Iran have a wealth of oil, still South Korea's crucial energy resource. As seen in case studies of conventional arms, the sale of weaponry can pave the way for continued ties between South Korea and the recipient country. Moreover, the sale of weapons materials at reasonable prices could be utilized strategically to better win deals, especially with military regimes in countries like Myanmar.

The most illustrative case was the illegal sale of weapons materials by Daewoo International to the military junta of Myanmar in order to win energy deals with the government. Daewoo's former president and CEO, Lee Tae-yong, was tried for exporting weapons equipment and technology to build an arms factory in Myanmar ("Burma Problem"). Although the sale of defense materials to Myanmar may have been illegal, it locked in an energy deal that has been allowed to continue by the South Korean government. The decision to allow Daewoo to continue its energy projects in Myanmar reflects the South Korean government's emphasis on energy procurement. Daewoo Corporation holds 60 percent of three natural gas fields in Myanmar and has announced the discovery of the largest gas reserve in which any South Korean company has ever held shares ("Burma Problem"). Daewoo continues to explore for hydrocarbons in Myanmar's offshore blocks.

This behavior strikes a major difference from Japan, where there are similar firms seeking markets for defense products and dual-use technologies. According to the Energy Information Administration, "Japan has virtually no domestic oil or natural gas reserves and is the second-largest net importer of crude oil and largest net importer of liquefied natural gas in the world" ("Country Analysis Briefs: Japan"). In addition to sharing common energy insecurity, Japanese firms, like their Korean counterparts, receive a significant amount of support from the government. Its Defense Ministry continues to provide heavy protectionism for companies, such as Marubeni Corporation and Fuji Heavy Industries, which have successfully been able to provide for its need for defense goods, such as ships for its navy. However, unlike South Korea, Ja-



pan reaffirmed in 2007 its commitment to its Cold War-era Three Principles on Arms Exports, which prohibits the sale of arms to any country (“Shiozaki”). Even with its potential for becoming a leading player in the global arms trade, Japan remains a rigorously compliant signatory to the Wassenaar Arrangement and has recently revised its foreign trade laws to tighten its regulations on arms exports to states under the United Nations embargoes (“Japan to toughen”). An explanation for this difference in behavior is that Japan is more secure in its energy needs than South Korea. Japan was the first country in East Asia to industrialize after World War II. Japan has the advantage of already having worked on creating strategic ties in resource-rich countries, whereas South Korea entered the race for energy years behind Japan. Therefore, South Korea’s offers of weapons to resource-rich countries are used as a tool for gaining a foothold in energy development and procurement.

Also, after observing South Korea’s illicit sales, it could be argued South Korea exports its weaponry to achieve a more comprehensive foreign policy strategy that allows more freedom than mere reliance on its alliance with the United States. In other words, while South Korea may still stand by its ally on many foreign policy decisions, it may also choose objectives that may be at odds with the United States’ interests. This makes for such anomalies, such as trading illicitly with Saddam Hussein’s government before it supported the United States in the Iraq War by providing troop and technical support for stability and reconstruction efforts in Iraq. South Korea’s troops also conducted crucial humanitarian and reconstruction efforts in Afghanistan from 2002 to 2007 and in Iraq from 2003 to 2008 (“No Redeployment”). This assistance did not come without costs for the South Korean government, due to strong public opposition to the war (“South Korea Ends Iraq Deployment”).

Furthermore, after withdrawing its troops from Afghanistan and Iraq, South Korea has continued to support its alliance with the United States. Examples could be seen in Special Measures Agreement (SMA) meetings between the two governments, in

which they discussed burden sharing for military expenditures and logistics on the peninsula. South Korea has agreed to increase its share of costs for maintaining joint security forces in the peninsula, which has amounted to a rise of 45.1 billion won from 2006 to 2007 (“Defense Cost-Sharing”). In addition, South Korea and the United States reaffirmed their commitments to their Mutual Defense Treaty. The two countries, represented by U.S. Defense Secretary Robert Gates and South Korean National Defense Minister Lee Sang-Hee, established their alliance at the Defense Consultative Talks in the same month that the U.S. State Department announced its sanction on Yullin Tech.

This proposed explanation simply describes South Korea’s foreign policy strategy. It is true that the sale of dual-use materials had potential to harm the ROK’s relationship with the United States. However, this was an aberration from the norm of South Korea’s whole-hearted efforts to support its most important ally. The argument, that the desire to export dual-use technologies to gain independence in foreign policy options from the United States, is insufficient to explain why South Korea wholeheartedly supported NATO operations in Afghanistan and state-building operations in Iraq. There is more to South Korea’s foreign policy strategy than gaining independence. As a rational actor, South Korea needs to gain specific resources to address its most glaring insecurity, its insufficient domestic energy sources. Therefore, whereas realist or neo-liberal explanations have failed to sufficiently explain South Korea’s arms sales, this paper’s pragmatic approach has helped shed light on how the country’s significant energy insecurity has driven the pattern of its arms exports.

## CONCLUSION

The evidence found in this research illustrates how the South Korean government has pragmatically utilized its arms sales in order to secure resource deals abroad, which has key implications to understanding the global arms trade of the twenty-first century. The example of South Korea illustrates how emerging weapons

developers around the world may utilize its rapidly expanding indigenous defense program to address a specific insecurity. In the East Asian country, this was its pressing need for procuring energy resources. Realist and neo-liberal theories have both come short of explaining South Korea's overarching strategy behind its weapons sales. The sales were directed to allies and non-allies alike, as well as a range of democratic and non-democratic countries with various levels of capabilities and willingness to comply with guarantees of handling the materials in a non-threatening manner. Instead, a pragmatic approach for explaining the motivation for the weapons exports was far more demonstrative of South Korea's behavior. Indeed, the arms exports were made in the context of furthering South Korea's energy objectives in resource-rich countries.

Moreover, this research has shown that a country's rigorous export program, if left unchecked or poorly regulated, could profoundly endanger not only international security but also its own national security. When selling to countries with poor security mechanisms, there exists a possibility that these very weapons—material and technology—could be transferred to rogue actors and terrorist groups with nefarious intentions to use these goods against South Korea and its allies. Therefore, a major policy recommendation derived from this research is that South Korea should create stronger export controls and end-use guarantees, in accordance with international agreements and norms, as this is ultimately in the best interest in regards to South Korea's overall national security concerns.

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