

Asia-Pacific Security Studies

The Asia-Pacific Arms Market:

Emerging Capabilities, Emerging Concerns



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Conclusions

The Asia-Pacific region is the second-largest arms market in the world after the Middle East, acquiring more than \$150 billion worth of arms between 1990 and 2002. Some of world's biggest arms buyers are found in this region, including Taiwan, Japan, Australia, China, South Korea, and India.

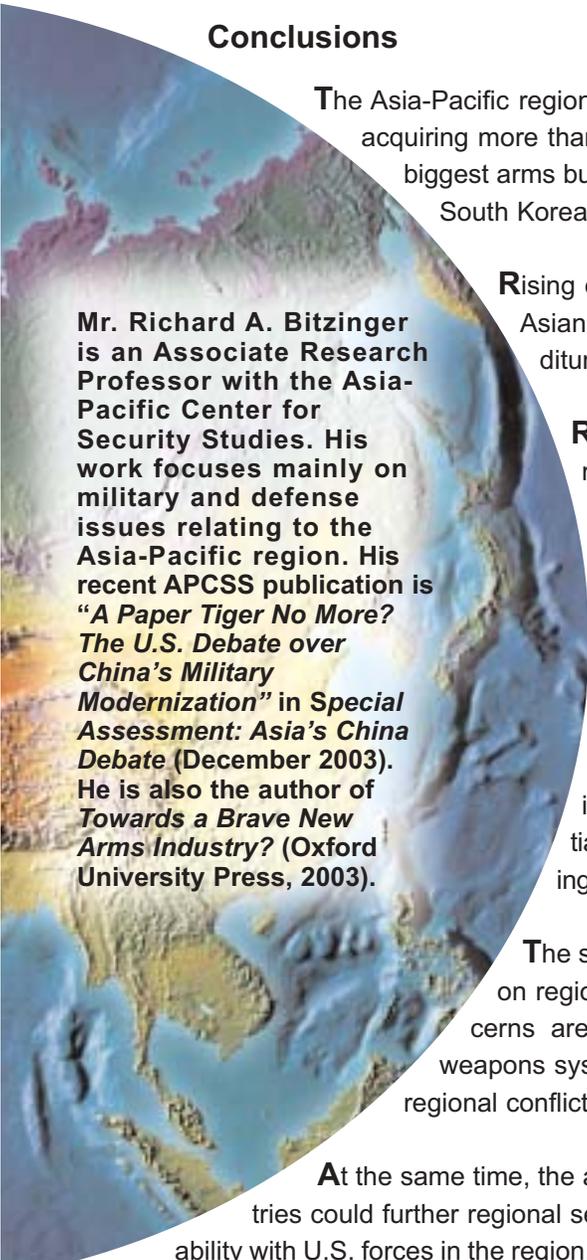
Rising defense budgets reflect the region's rising appetite for arms. The 1997 Asian financial crisis had only a temporary impact on regional military expenditures, and most countries have since resumed arms imports.

Recent Asia-Pacific arms imports go beyond mere modernization. Many regional militaries have acquired greater lethality and precision at greater ranges, improved battlefield knowledge, command and control, and increased operational maneuver and speed. These capabilities, taken together, provide local militaries with the kernel of transformational systems that could fundamentally change their concept and conduct of warfare.

These arms acquisitions have been aided by intense competition between the world's leading arms suppliers. As domestic defense markets in supplier countries have contracted, arms exports have become essential to the survival of their arms industries, and suppliers have been increasingly willing to offer their most advanced weapons to Asia-Pacific militaries.

The spread of advanced conventional weapons could have an adverse effect on regional security environments where tensions are already high. Such concerns are only multiplied when one considers the types of transformational weapons systems being acquired that could greatly increase the destructiveness of regional conflicts.

At the same time, the acquisition of more advanced weapons by U.S. allies and friendly countries could further regional security by strengthening bilateral military alliances and aiding interoperability with U.S. forces in the region. This enhanced interoperability could be especially crucial as the United States continues to transform its armed forces along the lines of the information technologies-based revolution in military affairs. At the very least, therefore, recent arms imports could complicate future U.S. security assessment and military planning in the Asia-Pacific region.



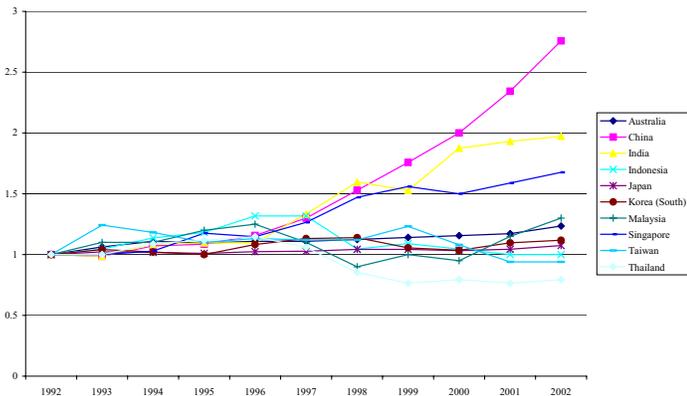
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The Asia-Pacific has long been a major market for advanced conventional weaponry. The region is second only to the Middle East when it comes to global arms purchases, importing nearly \$130 billion worth of arms between 1990 and 1999, according to data compiled by the United States Department of State. In addition, some of the world's biggest arms buyers are found in the Asia-Pacific. Taiwan, for example, received nearly \$26 billion worth of foreign weapons systems during the 1990s—only Saudi Arabia imported more armaments. During this same time frame, Japan imported \$22 billion worth of arms; South Korea, \$16 billion; Australia, \$12 billion; and China and India, \$7 billion each. During the period 1999–2002, the region imported more than \$30 billion worth of arms, according to the United States Congressional Research Service (CRS).

Rising defense budgets reflect much of the Asia-Pacific region's rising appetite for arms. Military expenditures in the Asia-Pacific market grew by nearly 27 percent in real terms over the past decade, and an extra \$126 billion was added to regional defense budgets between 1992 and 2002. India's defense budget has doubled since the early 1990s, for example, while Chinese military expenditures increased by more than 140 percent in just the past six years (1997–2003).

The Asian financial crisis of 1997 appears to have only temporarily dampened regional military expenditures. In fact, all major countries in the Asia-Pacific save Thailand increased their defense spending overall during the period 1992–2002, and most were able to keep their military budgets above their 1992 levels, even taking into account the 1997 crisis (see Figure 1). Consequently, arms sales to the region have increased in recent years.

Figure 1. Asia-Pacific defense spending, 1992–2002



There are few signs that regional military expenditures—and the corresponding enthusiasm for arms imports—will abate anytime soon. The U.S. Defense Department expects the Chinese defense budget to continue to grow at a double-digit rate at least through the 10th Five-Year Plan (2001–2005). South Korea plans to invest more than \$17 billion in modernizing its armed forces over the next five years (2003–2007), and as an initial down payment Seoul will increase military spending by 8 percent in 2004. Taiwan intends to spend more than \$20 billion over the next decade on new military equipment, including eight diesel-electric submarines, antisubmarine warfare (ASW) aircraft, and an anti-ballistic missile system; much of the funding for these programs will come out of a special appropriations budget separate from the annual budget for Taiwan's military. In September 2003, the then Malaysian Prime Minister Mahathir stated that Asia would altogether likely spend up to \$70 billion on arms imports between 2002 and 2006.

Geographical Breakdown of Buyers and Sellers

For all of its size and complexity, the Asia-Pacific arms market is remarkably compartmentalized. *Japan* and *South Korea* have traditionally relied on the United States for much of their arms

imports. Other countries have typically penetrated these markets only when it comes to weapons systems the United States does not build—for example, the sale of diesel submarines (the German Type-209) or advanced trainer jets (the British-built Hawk) to South Korea. In addition, Japan's strict regulations concerning arms exports effectively limit its international defense technological-industrial cooperation to just the United States, e.g., the FSX/F-2 fighter jet program or missile defense.

Taiwan's arms market is also nearly wholly owned by the United States. The United States is the only country able to withstand pressure from Beijing not to sell arms to Taipei. Most European arms producers, including France, Germany, and the United Kingdom, have in general refused to sell arms to Taiwan, out of respect for—or fear of—China. Beijing, for example, retaliated against France's sale of jet fighters and frigates in the early 1990s by interrupting trade and diplomatic relations with Paris until France agreed not to sell further armaments to Taiwan; in 1996, this agreement resulted in France's canceling the sale of Mistral surface-to-air missiles to Taiwan. Pressures from Beijing also eventually forced the Netherlands to cancel the sale of four diesel submarines to the Taiwan Navy in the 1980s.

China, on the other hand, imports its arms almost exclusively from Russia, with some purchases from Israel and Western Europe. Russia supplies more than 80 percent of Beijing's arms imports, and between 1995 and 2002, for example, China imported some \$9 billion worth of arms from Russia, including Su-27 and Su-30 fighter aircraft, Kilo-class submarines, and Sovremenny-class destroyers. More importantly, Moscow is a critical source of foreign technological-industrial assistance to China's defense industry; China, for example, is currently producing up to two hundred Su-27 fighters under license from Russia. Since the 1989 Tiananmen Square massacre, the European Union (EU), along with the United States, has banned the sale of arms to Beijing. In practice, however, the EU arms embargo is much looser than that of the United States—and may soon be overturned altogether—and individual European nations have over the past decade continued to supply the Chinese military with a variety of military-related, non-lethal equipment, including radars, sonars, helicopters, and jet engines for Chinese fighter planes.

China has been on a major spending spree for imported weapons in recent years. Since 1999, Beijing has signed new arms purchase agreements in excess of \$11 billion (again, mostly from Russia), according to the CRS. In 2002 alone, it purchased \$3.6 billion worth of foreign weapon systems.

India has also historically relied on Russia for the bulk of its arms, although Western Europe has supplied critical niche items (e.g., submarines from Germany, trainer jets from the United Kingdom, and helicopters from France). In recent years, Israel has become India's second-largest source of imported weaponry, selling such specialized equipment as unmanned aerial vehicles (UAVs), attack drones, and radars for missile defense. The United States has so far been unable to penetrate India's arms market, aside from a handful of modest sales such as artillery-locating radar and, possibly, P-3C ASW aircraft.

The situation in *Southeast Asia* and *Australia* is one of more or less truly open competition for arms sales. Although it is by far the smallest of the subregional arms markets, it is worth collectively around \$2 billion to \$3 billion annually. The United States, for example, dominates the region in the sale of fighter aircraft (e.g., F-16s to Indonesia, Singapore, and Thailand, F/A-18s to Australia and Malaysia), while the United Kingdom has scored particular success in exporting its Hawk trainer jet to Australia, Malaysia, and Indonesia. Germany has sold submarines to Indonesia and surface combatants to Malaysia and Singapore; France, warships to Singapore and antiship cruise missiles (ASCMs) to Indonesia, Malaysia, Singapore, and Thailand; Russia, Mig-29 fighters to Malaysia; and Sweden, submarines to Australia and Singapore.

The Demand Side: Beyond Modernization

As a result of recent arms imports—supplemented in some cases by indigenous production, particularly on the part of China, India, and Japan—many countries in the Asia-Pacific have since the beginning of the 1990s greatly expanded their warfighting capacities beyond the mere modernization of their armed forces, that is, simply replacing older fighter aircraft with more sophisticated versions, or buying new tanks and artillery pieces. In fact, many militaries in the region have over the past decade added capabilities they did not possess earlier, such as new capacities for force projection and standoff attack, low-observability (stealth), and greatly improved command, control, communications, computing, intelligence, surveillance, and reconnaissance (C4ISR) networks. Several armed forces in the Asia-Pacific now deploy or will soon acquire several new weapons platforms, advanced armaments, or sophisticated military systems, including aircraft carriers, submarines, maritime patrol aircraft, air-to-air refueling aircraft, longer-range air-to-air missiles, UAVs and drones, airborne early warning (AEW) aircraft, and modern ASCMs. For example:

- China, India, South Korea, Malaysia, Singapore, and Taiwan have either expanded or are in the process of expanding their blue-water navies with modern foreign-built—or foreign-designed but locally constructed—destroyers, frigates, missile patrol boats, and diesel-electric submarines.
- Thailand has acquired a small aircraft carrier from Spain, India has recently concluded an agreement to purchase a used, refurbished and re-equipped carrier from Russia, and Japan plans to construct two flattop “helicopter destroyers.”
- China, India, Japan, South Korea, Malaysia, and Singapore have all received or will soon acquire tanker aircraft for air-to-air refueling.
- Nearly every Asia-Pacific country currently possesses at least some “fourth-generation” fighter aircraft—such as the Russian Su-27, Su-30, or MiG-29, the U.S. F-16 or F/A-18, and the French Mirage-2000—capable of firing standoff active radar-guided air-to-air missiles, such as the U.S. AMRAAM or the Russian AA-12.
- India is developing the Brahmos supersonic antiship cruise missile in cooperation with Russia, while China has purchased the SS-N-22 “Sunburn” ASCM from Russia to outfit its destroyers.
- China, Japan, Singapore, and Taiwan all currently possess airborne early warning aircraft, while India and Korea intend to acquire AEW aircraft in the near future.
- Australia, India, Japan, and Taiwan have plans to acquire missile defenses, either in cooperation with other countries or through the purchase of off-the-shelf systems.

The acquisition of these new military capabilities has two repercussions for militaries in the Asia-Pacific. At the very least, these new types of armaments promise to significantly upgrade and modernize the manner of warfighting in the region. Certainly, Asia-Pacific militaries are acquiring greater lethality and accuracy at greater ranges, improved battlefield knowledge and command and control, and increased operational maneuver and speed. Standoff precision-guided weapons, such as cruise and ballistic missiles and terminal-homing (e.g., GPS or electro-optical) guided munitions, have greatly increased combat firepower and effectiveness. The addition of modern submarines and surface combatants, amphibious assault ships, air-refueled combat aircraft, and transport aircraft has extended these militaries’ theoretical range of action. Advanced reconnaissance and surveillance platforms have considerably expanded their capacities to “look out” over the horizon and in all three dimensions. Additionally, through the increased use of stealth and active defenses (such as missile defense and longer-range air-to-air missiles), local militaries are significantly adding to their survivability and operational capabilities. Consequently, conflict in the region, should it occur, would likely

be more “high-tech”: faster, more long-distance and yet more precise, and perhaps more devastating in its effect.

More importantly, many Asia-Pacific militaries are acquiring the types of military equipment that, taken together, could fundamentally change the concept and conduct of warfare. In particular, those systems related to precision-strike, stealth, and above all C4ISR, comprise some of the key hardware ingredients essential to implementing a revolution in military affairs. Sensors, computers, communications systems, automated command and control, electronic warfare systems, advanced navigation and targeting aids, and “smart” weapons can be bundled together in innovative new ways that could greatly synergize their individual effectiveness and create new “core competencies” in warfighting. These emerging capabilities, in turn, have the potential to significantly affect strategy and operations on tomorrow’s battlefield and hence to alter the determinants of critical capabilities in modern warfare. At the very least, therefore, the countries of the Asia-Pacific region increasingly possess the kernel of what is required to transform their militaries.

The Supply Side: Everything Must Go

Given the size and strength of the Asia-Pacific arms market, it is not surprising that this region has become a critical market—and therefore the object of particularly fierce competition—for the world’s leading arms suppliers, particularly the United States, Western Europe, Russia, and Israel. The leading West European arms producers—the United Kingdom, France, Germany, and Italy—together exported more than \$18 billion worth of arms to the region during the period 1995–2002, accounting for 28 percent of all their deliveries. Many European arms producers have come to depend heavily on sales to the Asia-Pacific. During the period 1995–2002, for instance, three-quarters of Italy’s arms exports, 62 percent of Germany’s, and 41 percent of France’s went to the region. Looking at recent (1999–2002) arms sales agreements, the Asia-Pacific region accounted for nearly half of all the major West European export market.

The Asia-Pacific is a particularly critical market for Russia’s arms industry. During the period 1995–2002, 70 percent of all Russian arms exports—approximately \$15.6 billion worth—went to this region, mainly to China and India. Russian arms sales agreements with Asia-Pacific nations have surged in recent years, totaling \$18 billion for just the period of 1999–2002 and accounting for more than 80 percent of all of Russia’s new overseas arms sales.

The United States also exports considerable numbers of weapons systems to the Asia-Pacific. In recent years it has been the single largest arms supplier to the region, delivering more than \$24 billion worth of armaments between 1995 and 2002. The Asia-Pacific accounted for approximately 31 percent of all U.S. arms exports during this period—only the Middle East, at \$47 billion worth, was a larger arms market for the United States.

Nations have many reasons for exporting arms. The United States, for example, has traditionally supported arms sales to the Asia-Pacific region for *military-strategic* regions, i.e., to bolster allies, strengthen alliance relationships, and promote interoperability. In recent years, however, *economic* considerations have increasingly dominated the drive to export arms. As military procurement budgets have fallen significantly since the end of the Cold War—even in the United States, where the Pentagon’s procurement budget is still less than half what it was during the height of the Reagan buildup—\$73 billion in fiscal year (FY) 2004, versus \$145 billion in FY1985 and \$103 billion in FY1990 (all expressed in constant FY2004 dollars)—arms producers have increasingly sought new markets abroad to compensate for shrinking markets at home. As a result, leading European defense firms now typically export the majority of their industrial output. The Russian arms industry is particularly dependent on overseas sales; in fact, the Asia-Pacific region has become the single largest consumer of Russian arms, even larger than Russia itself.

Compared with their European and Russian counterparts, U.S. defense firms, with their huge domestic arms market, have generally been under much less pressure to export arms. Even then, overseas sales have become increasingly critical when it comes to particular weapons systems, such as the F-16 fighter and the M-1 tank, which are now exclusively produced for foreign markets.

As these economic requirements have become paramount, supplier restraint has been replaced by a readiness on the part of the major arms producers to sell to the Asia-Pacific just about every type of conventional weapon system available. In addition, Europe and Russia have often used technology transfers and off-sets as inducements to make an arms sale, even though these activities can pose considerable proliferation concerns. Germany, for example, has transferred submarine production technology to South Korea, while Russia has licensed the production of its Su-27 fighter jet to China.

U.S. arms producers have also become much more aggressive in pursuing exports, and the U.S. government has been increasingly willing to lobby hard for arms sales in support of its defense industry. Washington has also become much more permissive when it comes to the overseas release of some of the country's most advanced military systems. This policy has even been applied to state-of-the-art U.S. weapons systems that are still in development, such as the Joint Strike Fighter project, for which codevelopment partnerships have been offered to Singapore and Australia.

Conclusions

The impact of recent Asia-Pacific arms imports on regional security is still unclear, although it has many potentially ominous aspects. Countries, of course, have the right to legitimate self-defense, and therefore the right to maintain armed forces with sufficient capabilities to meet their perceived requirements; in this regard, many arms imports can be viewed as "security-building." On the other hand, the introduction of new types of arms and, therefore, unprecedented military capabilities into a region, can have many unintended consequences. They can, for example, create or exacerbate arms races that, in turn, could seriously disturb or even destabilize regional or bilateral military balances (such as China-Taiwan, or India-Pakistan), leading to more insecurity and instability in the region. In particular, the spread of the most advanced conventional weapons could have an adverse effect on regional security environments where tensions are already high, such as the Taiwan Strait. Beijing's growing arsenal of Russian-supplied warships, submarines, fighter aircraft, and precision-guided munitions has certainly increased Taiwan's threat perceptions of China, and it has fueled Taipei's counter-acquisition of new air and missile defenses, anti-submarine and anti-surface warfare systems, and counter-landing weapons. Yet, as these militaries become more capable, the situation across the Taiwan Strait has not necessarily become less tense—just the opposite, in fact, as armed forces on both sides increasingly test each other's strengths and weaknesses in the strait. Such concerns are only multiplied when one considers

the types of military systems being acquired—transformational weapons that promise to fundamentally change the conduct of warfare and which could greatly increase its destructiveness.

Secondly, without necessarily leading to arms races, these new arms acquisitions can lead to very expensive, and ultimately imprudent, arms competitions. For example, South Korea's efforts to acquire a blue-water navy (complete with a large fleet of ocean-going submarines), intended to rival Japan's and China's maritime forces, could have the effect of drawing resources away from defending against an attack from North Korea. Additionally, when it comes to the poorer countries in the Asia-Pacific, one might question the wisdom of such arms purchases from an economic aspect, particularly if these acquisitions divert considerable funds away from pressing social needs.

It is also legitimate to question whether some of these countries actually "need" such increasingly sophisticated armaments. This is particularly apropos when it comes to Southeast Asia: Does Thailand have a military requirement for an aircraft carrier, especially one that is so expensive to acquire and to operate and is of such little strategic value? Should Western countries sell certain types of armaments—such as modern submarines or AMRAAM-type air-to-air missiles—to countries in the Southeast Asia when the release of such weapons systems could have far-reaching implications for regional security dynamics?

At the same time, the acquisition of more advanced weapons by U.S. allies and friendly countries could further regional security, both by strengthening bilateral military alliances and by aiding interoperability and burden-sharing with U.S. forces in the region. For example, the closest U.S. allies in the region (Australia, Japan, and South Korea) have over the past decade imported more than \$50 billion worth of arms to modernize their armed forces. This enhanced interoperability could be especially crucial as the United States continues to transform its armed forces along the lines of the information technologies-based revolution in military affairs, as it would permit Asia-Pacific allies to tie into U.S. concepts of net-centric warfare. For example, Japan and South Korea are both acquiring the Aegis naval sensor and combat system, which could enable their ships to link up with U.S. naval forces in cooperative engagements against opposing forces, or, as in the case of Japan, permit these nations to work with the United States in developing and deploying ship-based missile defenses.

The Asia-Pacific will continue to be an important arms market and an increasingly avid consumer of advanced weapon systems. As already noted, many of these recent arms imports go beyond mere modernization and are greatly expanding the capabilities of local armed forces when it comes to force projection, precision-strike, battlespace knowledge, and command and control. These developments, in turn, are injecting new uncertainties into the regional security calculus. At the very least, therefore, the United States should continue to carefully monitor how much these new types of armaments might complicate future U.S. security assessments and military planning in the Asia-Pacific region.



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