Underlying Patterns of American Arms Sales to China

By

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We are now in the seventh year of American military exports to China--exports which began in 1981 as a result of an overall liberalization of U.S. trade policy toward Beijing and continued in 1986 with the signing of a multi-million dollar avionics package to upgrade the Chinese F-8 air defense interceptor. The purpose of this essay is to describe the patterns of trade that emerged during these years, analyze the reasons for these patterns, and forecast insofar as possible the likelihood of their persistence for the remainder of this century.

BACKGROUND

Until the 1980s China was proscribed by U.S. policy from receiving any military items whatsoever. Americans had spilled blood in combat against Chinese forces in Korea, had fought in part to contain China in a long and bitter war in Vietnam, and were not about to assist militarily a real or potential enemy. By the late 1970s, however, what had begun years earlier with the Sino-Soviet split and the subsequent opening to China under the Nixon Administration, crystallized into a major strategic realignment of China. Beijing not only normalized relations with the United States and other Western nations, but also further distanced itself from Moscow in wide areas of human endeavor--political, economic and military.

These sweeping changes soon impacted strongly on American arms transfer policy. In March 1980, the Department of State issued Munitions Control Newsletter No. 81 (MC81), opening the People's Republic of China for the first time to exports of combat support equipment such as trucks, recovery vehicles, certain cargo/personnel-type aircraft and helicopters, some training and communications equipment, and airborne cameras. The following month, the licensing of civilian goods with possible military use (so-called dual-use items) was facilitated by the creation of a new and unique category, P, for China under commodity control export regulations administered by the Department of Commerce. The new policy permitted exports at a significantly higher level of technology than those for most other communist countries, although certain important restrictions were established:

> Approval is not likely when the potential military application is so significant that the export would present an unacceptable risk regardless of the stated end-use. Of particular concern are technologies that would make a direct and significant contribution to nuclear weapons and their delivery systems, electronic and anti-submarine warfare and intelligence gathering.[1]

In subsequent years, the liberalization process continued, highlighted by the removal of China in 1981 from the list of those countries for which it is U.S. policy to deny approval for munitions list exports, and the movement of China in 1983 to Category V on the export commodity control

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list, the same category as for other friendly countries to which the U.S. exports. The former measure permitted, for the first time, actual weapon exports to China, while the latter clarified and further liberalized dual-use exports of items at higher levels of technology. In all cases, the exports would remain subject to case-by-case review in accordance with appropriate national security, foreign policy, and arms control criteria.[2]

Throughout this period of liberalization, a prime consideration was the position of China vis-a-vis the Soviet Union. From an American perspective, arms transfers were a natural consequence of developing Sino-American cooperation. Moreover, although China was characterized as a "friend" and not an "ally," the global advantage of China's tying down a significant proportion of Soviet military power could not be overlooked.

From a Chinese perspective, the Soviet threat was also a force leading to cooperation with the United States, including arms and technology purchases. China feared that it could never take its rightful place in the world in the face of Soviet encirclement. To the north lay over fifty tank-heavy Soviet divisions backed by modern fighter aircraft and tactical nuclear weapons, which could wreak havoc on China's antiquated and insufficiently defended military forces. Soviet armored and mechanized forces were far superior to anything the People's Liberation Army (PLA) could field, and were generally positioned close to the Chinese border--a few divisions even in Mongolia. To the west, Soviet forces in Afghanistan were ruthlessly suppressing native freedom fighters. To the south, the Soviets were not only continuing to expand their military supply relationship with India, but also were establishing a base at Cam Ranh Bay and supporting Vietnamese expansion into Cambodia. Finally, to the east, the Chinese saw in the Pacific a dramatic rise in the flow of ships and planes paralleling the Chinese coast between Vladivostok and Cam Ranh Bay. The arrival in 1979 of the first Soviet aircraft carrier in Asia, the Minsk, and the large amphibious assault ship, the Ivan Rogov, only increased Chinese concerns. The encirclement appeared complete.

In the face of this military build-up, China turned to the United States and other Western nations for assistance, a move which gave rise in some quarters to rather grandiose expectations of massive U.S. arms transfers to its new friend in Asia. This view was nourished by frequent statements of Chinese officials to visiting American delegations that China resolutely opposed Soviet expansionism and efforts to seek hegemony in Asia. It was further reinforced by the aforementioned liberalization of U.S. export controls and, as the Chinese modernization program crystallized, by expectations of a rapid Chinese economic takeoff, which could facilitate purchases of high-priced and high quality American arms. Indeed, the euphoria of the early 1980s regarding prospects for increased US--PRC trade in general seemed to strengthen perceptions that significant and substantial arms transfers could soon occur. The old cliche of the China market was resurrected--what a sales opportunity if you lowered the hem on every pair of Chinese trousers just one inch!

Expectations of massive arms transfers gradually subsided as the reality of actual U.S. arms transfers became better known. While U.S. arms transfers to China have fluctuated somewhat from year to year, it has become clear that there are important factors militating against, as well as in favor of, a rapid expansion of United States arms sales to China.

PATTERNS OF MILITARY TRADE

The most striking characteristic of U.S. arms transfers to China is that the overall volume of the trade has been quite small with no major upsurge in value indicated. As shown in Table 1, the value of U.S. arms delivered to China during the period 1982-1986 totaled a mere $89 million, less than a quarter of one percent of worldwide U.S. military exports during the same period.

Table 1
U.S. Arms Deliveries to China
(in thousands of current dollars)

FY	Commercial	FMS	Total
1982	0	0	0
1983	588	0	588
1984	26,035	6	26,041
1985	42,581	425	43,006
1986	18,735	547	19,252
Total	87,939	978	88,887

A second pattern indicated by Table 1 is that while the overall trend is upward, the data do not indicate an imminent surge in military deliveries. Indeed, the peak sales figures for 1985 can be largely attributed to one sale--that of 24 Sikorsky S-70C transport helicopters. It is possible that additional big-ticket items could add significantly to future annual totals. For example, the FMS sale of avionics for the Chinese F-8 air defense interceptor, signed in the fall of 1986, is worth about $501 million. However, such items, even if exported completely according to plan, will take years to deliver.

A third pattern of arms trade with China is that, while U.S. sales to date have been overwhelmingly commercial, sales under the government-to government Foreign Military Sales (FMS) program are on the rise. China was not authorized for FMS until 1984, and then only on a cash basis. The FMS share of total military deliveries in 1985, the first full year for such sales, amounted to only one percent, rose to three percent in 1986, and may be expected to rise even further in the future. The rise in FMS reflects both increased military-to-military contacts and the high level of attention given significant arms sales by the U.S. Government. Nevertheless, the Chinese generally prefer commercial rather than FMS transactions, so that in the vast majority of cases American defense industries are found attempting to match their capabilities with Chinese needs within the limits established by U.S. policy. While numerous export license applications have been properly denied, those approved have enabled many companies to demonstrate equipment, provide technical data, discuss perceived requirements, and sell hardware, thereby gaining insights critical to a realistic assessment of the China market.

A fourth pattern which emerges from examination of the data is the clear Chinese preference for acquiring technology rather than military end-items in quantity. As shown in Table 2, some 500 licenses have been issued for commercial exports, with a total value at over $500 million. The majority of these transactions involve the transfer of technical data, components of combat or combat support equipment, a single item, or a handful of items. Large-quantity purchases are few and far between, while the level of technology requested tends to be relatively sophisticated. This "window shopping" approach, in which the PRC seeks to examine or otherwise utilize only a few of the items in which it expresses interest, is illustrated by the fact that from 1982-1986 less than 17 percent of the value of licensed items was actually purchased. While some difference in these numbers is to be expected, the size of the gap for China clearly shows that Beijing continues to seek technology rather than large arms purchases.

Table 2

Licenses and License Values of U.S. Commercial Arms Transfers to China

	Licenses Issued (number)	License Value (thousands dollars)
FY1982	28	185
FY1983	47	71,459
FY1984	109	82,994
FY1985	154	286,418
FY1986	163	79,527
TOTAL	501	520,583

The fifth identifiable pattern of Chinese purchases is related to the fourth. That is, Chinese purchases have largely consisted of high-technology items for future integration into Chinese systems, rather than standard equipment of immediate need but of declining value in the face of sophisticated weaponry in the 1990s and beyond. Most commonly sought are computers, electronics, communications equipment, night vision devices, fire control systems, and airborne reconnaissance system. Few of these items have direct military application without integration into a complete weapons system either already in the Chinese inventory or under development. Most have direct application to air and naval systems, with application to ground forces an important but less significant part of total arms imports as seen by China.

Finally, the most striking characteristic of Chinese military development is the struggle between the drive for self-reliance and the understanding that strong ties with the West will assist them in developing new military technologies. The traditional wisdom that "it is better to buy one hen than to buy eggs every day" is alive and well in modern China. Chinese leaders want their nation to build its own weapons and wherever possible avoid dependence on foreigners for national security. They take a long view of history and, in that perspective, the huge technological lead of the West is but a passing phenomenon. They continue to believe that the country which invented gunpowder will reassert the genius of its people, now over a billion strong, so as to enable China to stand up to the military forces of outside powers.

The continuing belief in self-reliance not only militates against massive arms purchases, but means that China will invest fairly heavily in training and technology, even when the immediate results may be negligible. In the 1970s, for example, China undertook a major effort to produce the British Spey aircraft engine only to abandon the project after numerous failures and hundreds of millions of dollars had been spent. From the Chinese viewpoint, however, the money may have been worthwhile if it facilitated future indigenous engine development programs. The commitment to self-reliance persists not only in the face of immediate economic disadvantage but also under conditions of sharply limited Chinese ability to absorb foreign technology. It will take many years for Deng and his successors to overcome the legacy of the Cultural Revolution--thirteen years in which universities were closed, scientific literature discontinued, and technological experts sent to do farmwork. It is no wonder that in the early 1980s U.S. intelligence specialists testified before Congress that China was having major problems absorbing Western military technology. The Central Intelligence Agency pointed to weaknesses in China's electronics industry that prevent large-scale introduction of new radars, sonars, and other electronic equipment, while the Defense Intelligence Agency noted PLA [People's Liberation Army] inability to produce an engine for an advanced fighter despite a ten -year effort to do so.[3] Despite such problems, China's space and nuclear successes, its investment in education, to include 15,000 mostly engineering students in

the United States, and its persistent efforts to become self-reliant in conventional weapons production, all attest to the depth of the leadership's confidence in long-term Chinese capabilities.

Whether these six patterns of U.S. arms sales to China--low total volume, modest increases in sales, largely commercial methods of sale, a preponderance of technology over arms transfers, high-technology subsystem integration, and a heavy Chinese emphasis on self-reliance--will persist in future years depends to a large extent on whether the reasons which initially led to U.S.-Chinese arms trade will continue to be predominant. Chinese and American motivations for the trade are of paramount concern in this regard, and, as the record shows, are subject to varying influences both internal and external.

Table 3
Soviet Military Power in East Asia[4]

Far East Theater		Pacific Fleet	
Divisions	53	Aircraft arriers	2
Tanks	14,900	Principal surface combatants	83
Armored vehicles	17,300	Other combatant ships	120
Artillery	13,400	Auxilliaries	90
Tactical surface-to-surface missiles	375	Submarines (less ballistic nuclear)	90
Tactical aircraft	1,730	Naval aviation	510
		Naval infantry division	1

External Factors

The greatest external determinant of Chinese arms purchases continues to be overall Soviet military power. Although quantitative increases in Soviet *conventional* forces have been quite modest during the 1980s, current strength, depicted in Table 3, remains significant and has been modernized at an accelerated pace. For example, a second VSTOL aircraft carrier joined the Soviet Pacific Fleet in 1984, along with an additional Ivan Rogov-class amphibious ship. In 1985 a second Kirov-class battle cruiser as well as modern guided missile destroyers were added. Other fleet additions include cruise missile combatants, modern attack submarines, and air-cushioned landing vehicles. Ground forces have an increasing share of T-72 tanks, BMP armored infantry fighting vehicles, and 152mm self-propelled artillery, along with sophisticated helicopter gunships and troop carriers.[5] Perhaps most impressive, however, is the increase in Soviet theater nuclear weapons. The number of SS-20 mobile IRBMs, first deployed in the late 1970s, had by 1986 increased to 441 launchers, with over a third of the missiles in Asia. Armed with a 5000km MIRV'd warhead with three reentry vehicles each, the SS-20 threatens not only all of China, but other U.S. friends and allies throughout Asia and Europe as well. In addition, the nuclear capable Backfire bomber continues to be deployed well within range of China, while front-line aircraft, many of which are nuclear capable, have continued to arrive in theater.

If the high quality and firepower of Soviet forces did not serve to disquiet the Chinese, then Soviet activity in support of Vietnam gave the leadership in Beijing further cause for concern. From 1978 to 1985 the Soviet Union provided Vietnam over $5 billion in military aid and $7 billion in economic aid.[6] This support enabled Vietnam not only to continue its occupation of Cambodia, considered by Beijing a special sphere of Chinese influence, but also to confront the PLA in sometimes intense skirmishes along the Sino-Vietnamese border. Moreover, Soviet use of Cam Ranh Bay continued to increase, with 20-25 Soviet ships routinely deployed from that base, together with eight BEAR D/F aircraft and a squadron of FLOGGER C/G fighters. This

impressive collection of military assets adds to the already cited Chinese feeling of encirclement and hence need for appropriate defensive armaments

Increased Soviet military activity in nearby North Korea must also be of concern to Chinese authorities. According to the Defense Department's 1986 report *Soviet Military Power,* there are already over 20 MIG-23s in North Korea with a total of 35 to 45 such aircraft expected to be delivered. The initiation of Soviet military reconnaissance overflights of North Korea, and the first port calls in North Korea by Soviet naval combatants in 1985 and 1986, are all disquieting Soviet activities adjacent to China. [8]

Of course, these strictly military considerations do have political consequences, such as the highly publicized Chinese objections to Soviet occupation of Afghanistan, Soviet support of Vietnamese occupation of Cambodia, and the high level of Soviet troops along the Sino-Soviet border and in Mongolia. Known collectively as the "three obstacles" to normalized Sino-Soviet relations, they have long been a thorn in the side of the Chinese leadership and effectively preclude rapprochement with the USSR.

However, despite the aforementioned Soviet build-up, China does not appear to be overly anxious about the threat, does not perceive it to be as imminent as the increased Soviet capabilities would lead one to expect, and has not initiated a crash program of military modernization in response. Explanations for this anomaly vary, but for one, China weighs military intentions quite heavily and it experienced only a mild Soviet reaction to its attacks on northern Vietnam in 1979. Secondly, China may believe that its limited nuclear capability deters much of the Soviet threat. Thirdly, China may perceive advantages in countering increased Soviet strength not so much by increases of its own as by the threat of a greater military arms relationship with the United States. Finally, Beijing may see Moscow as too concerned with the problems of the Soviet Union and of overextension in the Third World, as in Afghanistan, to risk a costly cross-border attack. In any case, the Chinese, who certainly do not take the Soviet build-up lightly, apparently view the Soviets as a long-term threat rather than an imminent one and have orchestrated their planned military purchases accordingly. This conclusion is supported by China's weak foreign exchange position and its relegation of the military to the least important of its four modernizations.

China's perception of the threat and reaction to it may have become manifest as early as the 1970s, when Chinese arms shopping patterns in Western Europe also demonstrated a lack of urgency. In the 1980s, it is becoming even clearer as China defers major military purchases and concentrates instead on economic modernization and slightly improved ties with Moscow in non-political areas. The latter relationship has been marked by a long term agreement to increase trade, by efforts to reduce tension along the border and, finally, by a cautious interest in the 1986 Gorbachev initiative to improve Moscow's position in Asia.[9]

Finally, as regards Soviet behavior, the fact that Soviet military power has failed to be translated into effective political influence elsewhere in East Asia, cannot have been lost on the Chinese. Whether or not the U.S. counterbuildup in the late 1970s and early 1980s entered into Chinese calculations on this issue, the implications for Chinese arms purchases are enormous--the USSR is seen as a long-term national threat with a significant and probably growing lead in military strength vis-a-vis China; therefore, only a long-term solution making the best of a difficult relationship with the USSR, while simultaneously building the domestic economy and long-term military strength, will assure the security of China into the 21st Century.

INTERNAL FACTORS

This conclusion regarding the external threat has been conveniently reinforced by internal military, economic and political considerations. Needed first was a restructuring of the People's Liberation Army (PLA). The PLA was already under considerable pressure to modernize when, in

attempting to teach Vietnam a lesson for its 1978 invasion of Cambodia, it suffered heavy losses in a poorly executed operation to occupy temporarily Vietnam's five northern provinces. Poorly trained, ill-equipped, and insufficiently supported, the PLA learned that, if it could not do better against Vietnam, what could be expected against the infinitely better equipped and far more mobile and dangerous Soviet forces across their northern border. This consideration was rendered all the more cogent by questions raised concerning the traditional PLA strategy of people's war. The PLA had long been considered an outstanding guerrilla force, whose effectiveness against invading Soviet forces could well be enhanced by a "lure 'em deep" strategy in which Soviet troops would pay an extremely high price to take and/or hold Chinese territory. The lessons of Afghanistan, in which the Soviets have failed to subdue even a primitive guerrilla force, seemed to support this fundamental strategy.

At the same time, the increasing sophistication and mobility of Soviet forces close to vulnerable Chinese positions in the northeast, in which Chinese industry and mineral production are heavily concentrated, may be seen to threaten China with another type of danger--the destruction of large parts of the Chinese economy and infrastructure in a punitive Soviet raid. Such a raid would be designed not to take and hold territory but to punish China for political misdeeds, much as China sought to punish Vietnam for its invasion of Cambodia. Under these circumstances, the Soviets might be deterred less by traditional PLA armaments and tactics than by a modernized people's war, in which PLA main force units would utilize increased firepower, mobility, and shock action to delay and disorganize any invader from the outset, then join with regional and local forces to isolate and attack in areas of penetration. While still dependent upon popular support and defense in depth, the PLA would also need restructuring to utilize modern weapons, technology, and tactics.

This restructuring involves difficult decisions to reduce the size of the force, replace its leadership, and reorganize its units to fight a people's war under modern conditions--all to be accomplished within the present decade. Beginning in 1982, therefore, China began to reduce the size of its armed forces from an all-time high of 4.75 million in 1981.[10] As shown in Table 4, estimated PLA force levels have dropped over a million men since 1981 and, according to Chinese sources, will drop even further in 1987.[11]

Table 4
Military Expenditures
(millions)

	Current dollars	Constant 1983 dol.	Armed Forces (thousands)
1981	20,100	22,600	4,750
1982	21,700	22,700	4,350
1983	22,700	22,700	4,100
1984	24,000	23,200	4,100
1985	24,800	23,200	3,900
1986			3,500

Of particular significance for Chinese defense purchases is the fact that Chinese military expenditures have not dropped at the rate of PLA force levels, thereby making room for necessary budgetary allocations for modernization purposes. Moreover, the PLA has undertaken several roles in economic production, to include converting some military facilities into civilian use, transferring military technology to civilian projects, and assisting Chinese civilian aircraft and commercial rocket and satellite production.[12] With major additional PLA cuts still scheduled and reorganization still far from complete, it may well be that major new acquisitions must be deferred

till the 1990s, although the modernization of weaponry already begun as part of the overall reorganization is likely to increase somewhat in tempo for the remainder of this decade, assuming that financing is available.

Economic considerations substantiate this judgement. The Seventh Five-Year Plan announced in 1986 calls for an annual real growth rate of 7 percent over the next five years. Private U.S. forecasts hold this high growth rate to be attainable.[13] Chinese total trade, which grew at a phenomenal rate of 9.4 percent during the sixth five year plan, is expected to rise at an even greater rate in the 1986-1990 period. Thus, there is substantial overall potential for growth of the economy, including its international component.

There are, however, at least three inhibiting factors as far as arms purchases are concerned. The first and most significant factor to date has been the lower priority of military modernization when compared to other segments of the Chinese economy. In the late 1970s, Deng proclaimed the Four Modernizations of agriculture, industry, science and technology, and defense as the crucial sectors of his plan for revamping the economy. Top priority was given to agriculture and as the plan unfolded it became clear that military modernization was not of the highest priority. Secondly, there is the aforementioned technology problem. Ironically, the very need for military modernization which initially enticed and encouraged arms transfers to China also served to limit them, since the Chinese quickly recognized the enormous challenges posed in absorbing modern technology. A third significant inhibitor of future Chinese arms purchases is the fact that Chinese imports have recently been growing at a much brisker rate than exports, leading to a deterioration of the current account and a depletion of foreign exchange reserves. Therefore, the Chinese government had indicated its intention to hold down the growth of imports generally. Indeed, 1986 may have been the first time in more than ten years that Chinese imports actually declined. The prospect for a resumption of substantial import growth will improve by the late 1980s and will continue to improve in the next decade.[14]

One of the ways Beijing has apparently decided to satisfy its conflicting needs for arms and foreign exchange is through its own military exports. As seen in Table 5, Chinese arms exports have grown dramatically during the past five years, and beginning in 1980, its military exports have consistently exceeded imports. While 1985 exports (as presently estimated) were appreciably less than in the previous year, it is likely that this figure will be adjusted upward as more complete data for this most recent year become available. In any case, the trend is clearly upward, as indicated by the fact that Chinese exports of military goods during the period 1981-1985 totaled $5.4 billion, compared to $810 million in the preceding five year period--a more than sixfold increase in less than a decade.

Table 5
China's Arms Trade
(in thousands of current dollars)

FY	Exports	Imports
1979	130	180
1980	270	170
1981	420	130
1982	1100	40
1983	1600	5
1984	1900	80
1985	450	100
Total	5770	705

IMPLICATIONS FOR THE U.S.

It is clearly not in the U.S. interest to see the large gap in relative Sino-Soviet conventional military power in Asia become a chasm. However, as indicated earlier, that is precisely what was happening along the Sino-Soviet border until the 1980s. While arms transfers to China by themselves cannot be expected to close that gap, they have had some effect in slowing the rate at which this gap grows, so that a semblance of a military balance may be restored at some point. This is an extremely important element in Sino-Soviet relations, for it not only serves to deter unlikely but possible Soviet adventurism, but also helps to prevent political intimidation and provides an atmosphere more conducive to an independent Chinese foreign policy. While China remains a friend and not an ally of the United States, it also remains a friend who happens to tie down roughly one-fourth of Soviet ground combat power and significant portions of Soviet air and naval forces. Moreover, China is a friend whose confidence, based in part on some level of capability for self-defense has enabled it to demand in the strongest possible terms the termination of Soviet aggression in Afghanistan and of Soviet support for Vietnam's occupation of Cambodia, and the reduction of excessive Soviet forces along the Sino-Soviet border.

U.S. interests are also served by a stable and modernizing China oriented to the West which does not have to react to Soviet power by a crash program of militarization. The fact that American and other Western arms sales are available to update and modernize the PLA certainly facilitates Chinese research, development, and training, and may well enable China to attain a modicum of self-sufficiency in modern weapons production considerably sooner than otherwise would be the case. The very fact that China is able to progress at a measured pace in military matters has helped it to concentrate resources in fulfillment of civilian modernization goals, further promoting the stability of the region and solidifying its ties with the West, from which its major source of modernization assistance is derived.

The slow and measured pace of Chinese arms acquisitions also meshes well with American concern for stability in the rest of Asia. If Chinese purchases were to entail a rapid and quantum leap in capability--for example, through a hypothetical surprise announcement of licensed manufacturing of an advanced fighter aircraft --the reaction elsewhere in Asia would assuredly be immediate and negative. America concern for regional stability, including the effect of its sales to China on Taiwan, is thus well served by the Chinese predilection for careful window shopping and self-reliance. Indeed, initial Chinese window shopping was so broad and its actual purchases were so small that a major effort was undertaken to identify conventional Chinese defensive mission requirements and American weapons and equipment that could realistically meet those needs within releasability standards for technology transfers. One result of this effort was an understanding in 1983 that the United States would focus on a mission-oriented approach, in which Americans arms initially would be in the air defense, anti-tank, and artillery defense mission areas. Another result was the increasing purchase by China of single items and technical literature for examination, thereby enhancing China's future ability to absorb high-tech Western arms.

Still another American interest served by the developing patterns of arms transfers to China is the improvement in bilateral relations resulting from greater military understanding. As U.S. policy on arms and technology transfers to China gradually was clarified and defined, and as China began to establish clear lines of authority to request, develop, test, purchase, and produce foreign military arms, not only did many of the misunderstandings between American and Chinese officials and weapons producers decline, but also both sides gained a more realistic appreciation of exactly what type of exports were possible and how they would enhance China's defense needs. A direct military-to-military relationship evolved, highlighted by the visits to China of Secretary of Defense Caspar Weinberger in 1983 and 1986 and of the Chairman of the Joint Chiefs of Staff, the Secretary of the Navy, and other top Pentagon officials in the intervening years. As noted earlier, China became eligible for government-to-government sales in 1984 on a cash basis through the FMS program. This step, in turn, facilitated the exchange of military delegations and permitted

still greater understanding of China's military needs and U.S. capabilities of meeting those needs. Together with the aforementioned high-level military visits, FMS eligibility also provides China with the opportunity for greater procurement of American rather than third country weapon systems.

While the advantages to the United States and China in the current arms transfer relationship are considerable, certain problems have yet to be fully resolved. In the early 1980s, for example, Beijing was concerned that its anticipated arms imports not be interpreted as its condoning American arms transfers to Taiwan. When Secretary of State Alexander Haig visited China in June 1981, he also invited General Liu Huaqing, Chief of PLA research and development, to bring a delegation to the United States to discuss possible arms purchases.[15] The Liu visit never occurred. The issue of U.S. arms transfers to Taiwan took on increasingly contentious overtones and it was only after the United States agreed to limit its arms sales to Taiwan, based on a continuation of the PRC's peaceful approach to the Taiwan issue, that momentum was slowly restored to the US-PRC arms transfer relationships.[16] Since that time the Taiwan question has not been so major a determinant of China's arms purchases, which have developed their own modest momentum for reasons having nothing to do with Taiwan.[17]

CONCLUSIONS

Chinese interest in American arms, as in other international transactions, is primarily a function of supply and demand. Chinese demand for modern weapons, in turn, is a function of many factors. Although Moscow has been circumspect in not directly threatening Beijing in a military sense, the increasing size and sophistication of its armed camp in the East is such that there is no way Beijing can feel secure about its present military capabilities without Western assistance. The fact that this threat does not appear imminent, that the PLA is undergoing a major reorganization and force level drawdown, that foreign exchange is scarce, and that China takes the long view of history, all support the judgment that growing yet moderate arms transfers can be expected to characterize the Chinese-American relationship for at least the remainder of the decade.

The United States remains the nation most capable of supplying Chinese defense needs. U.S. technological expertise, production skills, systems management, and weapons support programs all excel. China does have other alternatives, particularly in Western Europe, for assistance in many of its military programs. Nevertheless, U.S. arms transfers are seen to mesh well with Chinese needs now and in the near future. Moderate and gradually increasing purchases, marked by continued window shopping, great concern for self-reliance, and a preference for technology rather than massive quantities of arms, all support U.S. interests in a modernizing but non-threatening Chinese military force in the 1990s.

Where all this may lead in the 21st Century becomes quite speculative. As Chinese ability to absorb modern technology increases, as the modernization already underway produces anticipated success, and as Sino-American military relations develop further momentum, there is every possibility that Sino-American arms transfers could expand. If, on the other hand, Soviet forces opposite China were to decline dramatically, Soviet meddling in Afghanistan and Indochina to cease, and no other threats to Chinese national security to arise, then there is a likelihood that Chinese demand for U.S. arms would decline. Any erratic or power projection activities on the part of the Middle Kingdom would be likely to tighten U.S. export restraints, if not lead to the cessation of exports altogether. But again, such hypothetical situations are mere speculation at this point.

As far as the eye can see in 1986, it appears that China is attempting to modernize its military forces in a moderate and measured fashion, in order to meet very real national security needs. Under these circumstances it is particularly important not only that China succeed, but also that it succeed with American assistance.

Notes

1. Paragraph 385.3 of U.S. Department of Commerce, "US Export Administration Regulations," October 1, 1982. The categorization took effect on April 25, 1980. The reference to anti-submarine warfare is to subsurface capabilities.

2. Such constraints, for example, take into account the effect of arms transfers on Taiwan and neighboring states.

3. Henry J. Kenny, *The American Role in Vietnam and East Asia*, (New York: Praeger, 1984), p. 144.

4. U.S. Department of Defense, *Soviet Military Power*, 1986, p. 13.

5. Secretary of Defense Caspar Weinberger and Admiral Crowe, CINCPAC, as cited in the *Congressional Quarterly*, July 5, 1986; John M. Collins, *U.S.-Soviet Military Balance, 1980-1985*, p. 141; and Secretary of the Navy John F. Lehman, "Posture Statement," *FY 1987 Report to the Congress*, pp. 5-6.

6. *Soviet Military Power, op. cit.*, p. 138.

7. *Ibid.*

8. *Ibid*, p. 140.

9. During a speech in Vladivostok on the Soviet position in Asia, the Soviet General Secretary promised to consider withdrawing some Soviet forces from Mongolia and to accede to the Chinese position that their common border along the Amur River runs in the center of the channel and not on the Chinese side as previously held by Moscow. He also stated that the USSR was prepared to negotiate further withdrawals of troops along their mutual border areas. Gorbachev made no promise, however, to do anything to pressure the Vietnamese to end their occupation of Cambodia -- a particularly sore point from the Chinese perspective.

10. See Table II in this and previous editions of U.S. Arms Control and Disarmament Agency, *Worldwide Military Expenditures and Arms Transfers*.

11. *Beijing Review*, July 18, 1986.

12. *Ibid.*

13. "Forecast to 1990," in Data Resources, Inc., *Asian Review*, Fall, 1986, pp. 210-223.

14. "China Taking Off on a Flying Tiger," in *Asian Review, op. cit*, pp. 182-193.

15. Liu did visit the United States in 1980, but that was prior to authorization for Chinese arms purchases.

16. According to the United States-China Joint Communique of August 17, 1982, China reiterated its "fundamental policy to strive for a peaceful solution to the Taiwan question," while the United States declared its intention "to reduce gradually its sales of arms to Taiwan, leading over a period of time to a final resolution."

17. Constraints do remain, of course, on arms transfers which might pose a threat to Taiwan as well as to neighboring states in the region.

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Whither the Third World Arms Producers?

By

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[The following is a reprint of an essay originally published by the U.S. Arms Control and Disarmament Agency in its report, *World Military Expenditures and Arms Transfers, 1986,* dated April 1987.]

The increased prominence of secondary suppliers in the international arms market--including the growing role of some Third World producers--has been among the most discussed trends in worldwide arms transfers in recent years. By 1984, countries outside the NATO and Warsaw Pact alliances accounted for 17 percent of the world arms market and 20 percent of the Third World market.[1] The share of Third World arms exporters in 1984 reached almost 15 percent of the world market and about 18 percent of the Third World market.[2] The present article examines these trends and some of their implications in greater detail.

Figure 1:
Arms Suppliers in 1981-1985 by Group and Scale of Exports

MILLIONS OF CURRENT DOLLARS (CUMULATIVE)*	WARSAW PACT	OTHER COMMUNIST	NATO	OTHER NON-COMMUNIST	
				DEVELOPED MARKET	THIRD WORLD
50,000	● SOVIET UNION				
			● UNITED STATES		
20,000			● FRANCE		
10,000			● UNITED KINGDOM ● WEST GERMANY		
5,000		● CHINA†			
	● POLAND ● CZECHOSLOVAKIA		● ITALY		
3,000			● SPAIN†		
2,000	● ROMANIA	● NORTH KOREA†			● SOUTH KOREA†
	● BULGARIA †	● YUGOSLAVIA †			● ISRAEL†
1,000	● EAST GERMANY		● BELGIUM	● SWITZERLAND ● JAPAN	● BRAZIL†
	● HUNGARY		● CANADA ● NETHERLANDS	AUSTRIA ● SWEDEN ● FINLAND	● PAKISTAN†
500					● EGYPT† ● SAUDI ARABIA†
			● PORTUGAL TURKEY†		LIBYA†
200			● GREECE	● AUSTRALIA	
					● SYRIA†
100					● ARGENTINA†
		● CUBA †	● NORWAY		SINGAPORE†
60					PERU†
				● SOUTH AFRICA	● TAIWAN†
35			● DENMARK		INDIA† ● CHILE†

● Ratio or log scale; equal vertical distances represent equal ratios of value.
† "Developing country per WMEAT definition.
Underlined countries are discussed in this essay.

TRENDS

Figure 1 shows the range of arms exporting countries and puts into perspective the Third World suppliers to be highlighted in the present article. All of the countries selected are "developing" in accordance with the World Military Expenditures and Arms Transfers (WMEAT) definition of this term. [Editor's note. WMEAT classifies the following countries as *developed*: all member countries of NATO except Greece and Turkey; all Warsaw Pact members except Bulgaria; Austria, Finland, Ireland, Sweden, and Switzerland (i.e., "other Europe"); and Australia, Japan, New Zealand, and South Africa. All other nations are classed as *developing*. (WMEAT, p. 155.)]

Tables 1 and 2 summarize arms export statistics for these selected suppliers over the past ten years. These data support the following observations:

- Most of these suppliers were able to increase their exports in the period 1982-1984, even as worldwide arms transfers were leveling off and starting to decrease. However, many now appear to be feeling the impact of the recent downturn of the global arms market.[3]

Table 1
Annual Arms Exports of Selected Arms Exporters
(In Millions of 1983 dollars)

	Argentina	Brazil	China	Egypt	India	Israel	North Korea	Pakistan	Singapore	South Korea	Yugoslavia
1985	0	56	327	28	5	196	196	28	9	47	290
1984	77	483	1,837	193	19	232	367	290	10	508	556
1983	20	130	1,600	50	0	170	290	300	20	370	330
1982	0	335	1,151	356	10	408	680	21	10	994	314
1981	11	190	470	34	22	392	644	45	45	291	325
1980	6	169	327	0	36	169	230	12	0	303	303
1979	13	145	185	13	40	343	119	13	26	238	224
1978	0	143	242	114	29	185	128	43	29	100	585
1977	8	123	170	77	77	93	31	8	15	170	370
1976	0	114	229	0	16	245	131	0	33	8	278

Table 2
World Ranking of Selected Arms Exporters, 1976-1985

	Argentina	Brazil	China	Egypt	India	Israel	North Korea	Pakistan	Singapore	South Korea	Yugoslavia
1985	--	25	9	31	37	15	16	32	34	28	12
1984	33	14	5	25	40	22	16	19	43	13	12
1983	37	26	6	31	--	25	20	18	39	10	14
1982	--	18	5	17	41	14	11	36	44	8	19
1981	40	21	12	35	37	13	9	30	31	19	17
1980	39	17	10	--	30	18	13	36	--	11	12
1979	36	17	14	37	33	10	20	38	35	12	13
1978	--	17	12	20	32	15	19	31	35	25	19
1977	40	16	13	23	24	20	30	43	38	14	10
1976	--	19	13	--	33	12	18	--	31	38	10

- Despite increased exports in recent years, most countries did not dramatically improve their relative position *vis-a-vis* other exporters. South Korea, for example, ranked twelfth in 1979 and thirteenth in 1984, despite a doubling of exports. Brazil was seventeenth in 1979 and fourteenth in 1984, even though exports had tripled in this period.

- Apart from China, the countries listed in Tables 1 and 2 are all suppliers of decidedly second rank. Even the larger exporters (North Korea, South Korea, and Yugoslavia) export less than half the volume of arms that China and other major countries do.

- Market competition is intense and susceptible to large year-to-year fluctuations. Of interest are Israel's general decline in the ranking since 1979, significant drops (over fifty percent) in transfers between 1982 and 1983 for such countries as North and South Korea, Brazil, and Egypt, and major reductions practically across the board in 1985.

- Interesting patterns within regions also emerge. Brazil maintains a clear lead over Argentina, the only other significant Latin American arms supplier. Pakistan's edge in exports over India is perhaps surprising, given the much greater size and diversification of India's defense industry. However, this edge is primarily due to troop support costs for Pakistani manpower, which is prominent in many Middle East military establishments, particularly Saudi Arabia.

The graphs in Figure 2 on the following page provide a perspective on the regional patten of exports by these suppliers over the past five years. Two significant conclusions flow from these data:

- Most of these countries depend heavily for their markets on the Middle East. This is understandable since a greater proportion of world arms transfers goes to this region than to any other (approximately 49 percent in recent years). However, the dependence of many Third World suppliers on Middle East markets is much higher, and it has been increasing over the past five years.

- Most of these countries do not have a regionally balanced arms transfer pattern. Apart from a general dependence on the Middle East, none of these suppliers approaches a market distribution resembling the worldwide pattern of arms transfers represented in Fig. 3. For example, Brazil, Argentina, and Israel all have major dependence on Latin American markets.

The accompanying box (on page 76) lists some of the major weapons produced by selected Third World suppliers. Most of these systems are low to medium technology, based on licensed production or copies of older weapons, and have not been exported in large numbers. For example, with the exception of the Israeli Merkava, other producer's tanks do not have the sophisticated fire control systems and optics of modern tanks built by the major suppliers. Moreover, according to ACDA data, Third World suppliers to date have not exported a significant portion of the tanks, artillery, warships, or aircraft involved in the world arms trade, probably deriving more business from the supply of infantry support weapons and munitions of various types. Two cross-cutting trends--recognition of the battlefield value of high technology "smart" weapons, demonstrated in Lebanon and the Falklands in 1982, and the enduring demand for simple, rugged weapons and enormous quantities of ammunition, exemplified in the Iran-Iraq war--suggests that Third World suppliers could theoretically pursue either end of the market. In reality, however, few Third World suppliers will be able to compete in the high end of the market.

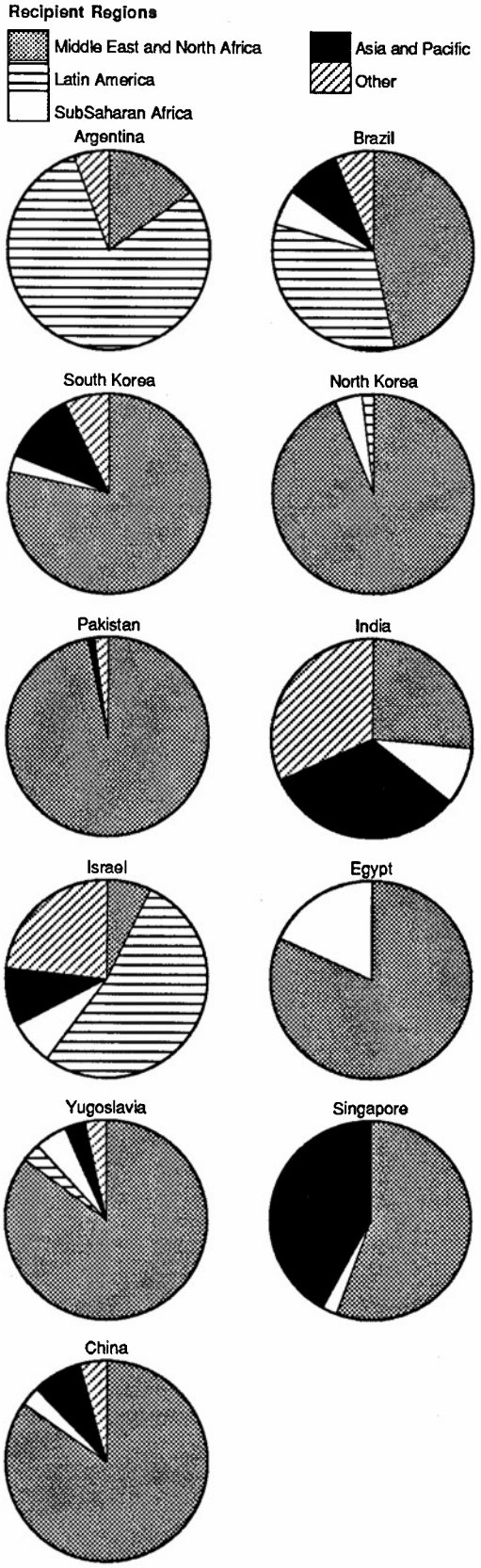
LIMITATIONS

While the increased role of Third World arms suppliers in the international arms trade can be demonstrated, projections are complicated by a number of potential financial, technical, economic, and political constraints. Whether the trend will revolutionize the global arms trade and have a major impact on world politics will depend to a large extend on whether Third World suppliers can overcome these serious limitations.

The financial issue boils down to whether, in a world of substantial debt servicing burdens, falling commodity prices, and shrinking foreign aid resources, Third World countries can afford to import the technology and training required to produce modern weapons systems. For example, the U.S. has underwritten the one billion dollar development cost for the Israeli Lavi combat aircraft--funding which has been crucial to sustain the Lavi program. Few countries, however, will be able to build an aircraft that costs $15 to $22 million a copy. U.S. assistance for the Korean indigenous tank has been substantial, and U.S. help for the expansion of Egyptian and Pakistani defense industries will be essential for the development of military production in these countries over the next 5-10 years. The U.S. and other major suppliers are now under pressure to support weapons sales through coproduction or other offset arrangements that ultimately will lead to increased Third World capabilities and competition. However, the continued willingness of these suppliers to provide such support hangs as a question mark over the future development of Third World arms industries.

Technical constraints are closely related in the sense that technology transfer is also a developmental necessity not guaranteed and not fully within the control of would-be suppliers. To use the Lavi as an example again, more than 100 U.S. companies are involved in providing components for this "indigenous" aircraft. From the engine to the winds to the flight control computer and heads-up display, U.S. technology is broadly incorporated in the Lavi. A similar range of foreign technology will be required for India to produce its Light Combat Aircraft (LCA). Whether most of this technology will come from the U.S. or from

FIGURE 2: Arms Exportations of Selected Supplies, 1981- 1985



PRODUCERS AND PRODUCTS

Argentina: TAM medium tank; IA-58 Pucara counter-insurgency aircraft; 1A-63 Pampa trainer/attack aircraft; Hughes 500/300 helicopters; utility aircraft including Piper and Cessna; and 105mm rocket launchers.

Brazil: EE-T1 (Osorio) and MB-3 (Tamoyo) tanks; Urutu and Cascavel armored personnel carriers; Astros-11 multiple rocket launcher; EMB-312 Tucano trainer aircraft; EMB 110 Bandeirante and EMB 120 Brasilia transport aircraft; and Gaviao and Esquilo helicopters.

China: Type 69 tank; various artillery including 152mm self-propelled howitzers; multiple rocket launchers (107mm-103mm); F-7 and F-8 fighters; B-6 bomber; and a range of naval vessels.

Egypt: artillery including 122mm howitzers and 130mm gun; Swingfire anti-tank guided missile; ZSU-23 air defense gun; Alpha Jet trainer/attack aircraft; Gazelle helicopter; and Hawkeye man-portable surface-to-air missiles.

India: Vijayanta and Arjun tanks; Vijayanta 130mm self-propelled gun; Godavari-class frigate; MIG 21/23/27 fighter; S-315 Cheetah helicopter; and Atoll air-to-air missiles.

Israel: Merkava tank; Mar 290mm rocket launcher; Kfir fighter; Arva transport; Gabriel anti-ship missile; and Shafrir and Python air-to-air missles.

North Korea: T-62 tank; Type 303 armored personnel carrier; artillery including 122mm/130mm/152mm self-propelled weapons; various classes of coastal patrol boats; MI-2 Hoplite helicopter; SA-7 surface-to-air missile; and AT-3 anti-tank guided missiles.

South Korea: Daewoo infantry fighting vehicle; 105mm/155mm howitzers; Vulcan air defense gun; coastal patrol boats; F-5E fighter; and Hughes 500 helicopters.

Pakistan: 120mm mortar; Muschsak trainer aircraft; various infantry weapons and munitions, including RPG-7 anti-tank rocket launchers and 106mm recoilless rifles.

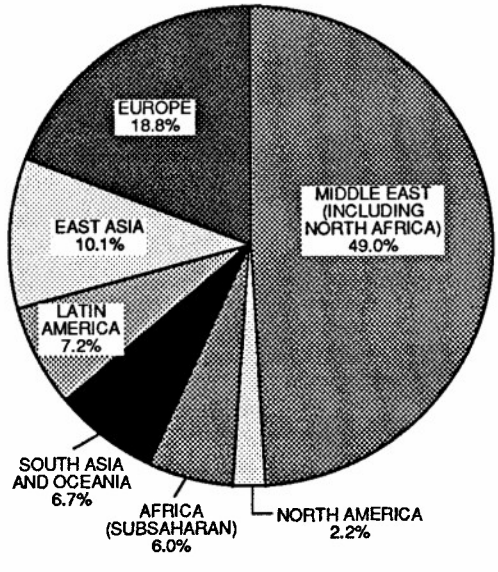
Singapore: 120mm mortar; coastal patrol boats; various infantry weapons including Ultimax 100 light machine gun and SAR-80 rifles.

Yugoslavia: T-72 tank:various infantry combat vehicles; field and air defense artillery guns; Galeb and Utva trainer aircraft; Gazelle helicopter; and AT-3 anti-tank guided missiles.

Western Europe is not yet clear. However, if the Indians insist on producing high-tech "indigenous" aircraft, the technology will have to come mainly from abroad. Foreign equipment inputs to the Brazilian EE-T1 (Osorio) light tank are also instructive in this regard. The tank incorporates a West German engine, transmission, and tracks, a British suspension system, and British or French main gun and fire control system.

In a broader sense, the financial and technical constraints discussed above can be viewed as aspects of the political limitations facing Third World arms suppliers. Financial assistance and technology transfer are political decisions by major arms producers, which are based on a dynamic calculus of strategic, political, and economic self-interest. The extent to which such decisions create new problems--increased competition, loss of control, new centers of power -- is likely to serve

FIGURE 3: Regional Shares of World Arms Imports, 1981 - 1985



as growing restraint on additional transfers. Furthermore, these transfers of assistance and technology provide a measure of political control in that the supplier has at leas the theoretical possibility of influencing the Third World producer's international marketing efforts. U.S. law, for example, prohibits the retransfer to a third party of any U.S. equipment or system containing U.S. components without the prior approval of the U.S. Government. Although Israel undoubtedly hopes to market the Lavi and its Merkava main battle tank abroad, it needs specific authorization from the U.S. to do so. If such approval is given, these Israeli systems could be competing directly with U.S. tanks and fighter aircraft for foreign sales.

The choices are likely to be even more stark for major Western European suppliers, whose arms industries are more dependent upon arms exports than is the defense industry in the United States. Failure to control the marketing of licensed production by Third World suppliers could have a serious impact on British and French arms industries, for example, and make it even more expensive for these countries to equip their own forces. The crunch is likely to come because most Third World producers will probably find themselves in a situation even more acute than that of the British and French in being faced with a relatively small internal market and a consequent need to export to maintain their defense industrial base.

Moreover, political constraints could be imposed by Third World producers on the own efforts. The desire to secure political influence in certain countries, to coordinate policies with important allies, or to limit the impact of foreign sales on a country's own armed forces can influence decisions to sell arms abroad even in the case of secondary suppliers. Even Brazil, for example, whose arms export policy is almost totally driven by commercial factors, has recently been supportive of U.S. efforts to restrict arms sales to Libya. India is another case in point. Although India possesses the largest arms industry in the Third World, the volume of India's armed exports is small, owing to the large demands of its own forces, its dependence on restrictive licensed production, and its desire to maintain political standing in non-aligned fora. None of these considerations lends itself to an effort to maximize international sales. Finally, Israel, reacting to recurrent "scandals" involving Israeli arms dealers, recently announced measures to insure stricter administration of arms exports. It is even possible that some sort or Knesset review of the Israeli arms sales process could evolve over the next few years. More dramatically, in response to the recent U.S. report to Congress on the South African arms embargo, Tel Aviv has announced a ban on future defense agreements with South Africa and is considering other ways of down-grading its military ties to Pretoria.

And then there are the economic limitations. Although some secondary suppliers have thus far not been substantially affected by overall reduced demand in the world arms market, this trend, if it should continue, could eventually have a serious impact on Third World suppliers. Reduced funds, completion of procurement cycles, and programs to extend the service life of old equipment rather than purchasing new are all likely to undercut the smaller producers' ability to sell. Financing arrangments for major weapons purchases are likely to be difficult for Third World suppliers to support, and the proliferation of suppliers will make the market more competitive and survival more problematic.

Finally, the extent to which the markets for Third World producers are dependent upon transitory conditions needs to be considered. The heavy orientation of some suppliers toward the Middle East market has been previously noted. Much of this trade has resulted directly from the Iran-Iraq war and from U.S. efforts to restrict the flow of arms from major suppliers to the belligerents. A resolution of the conflict, recission of the U.S. embargo, or policy choices on the part of major suppliers could substantially reduce this important market. The over-dependence of secondary suppliers on the Middle East market is a basic weakness, and most Third World suppliers have yet to demonstrate a capability to diversify markets for long-term stability and growth.

PROSPECTS

Notwithstanding such limitations, there are certain factors stimulating the growth of arms industries in the Third World that are unlikely to change in the near term. Whether for primary economic motives (e.g., Brazil, Argentina), security considerations (e.g., Israel, North and South Korea), or desires for self-sufficiency in arms supply (e.g., Egypt and India), Third World producers are likely to continue to play an important role in the world arms market.

The proliferation of Third World producers has been paralleled by a widespread desire for diversification among arms recipients in an effort to gain leverage on their major or sole suppliers. The goal of diversification has perhaps been most intense in countries with longstanding arms relationships to Moscow such as India, Algeria, North Yemen, and even Syria. Dissatisfaction with the performance of Soviet military equipment, with the standards of Soviet military training and support, with Soviet arrogance and unwillingness to provide technology transfer and assistance programs that would lead to military independence have all been responsible for this trend. This situation, coupled with what could be a less ambitious Soviet Third World policy under Mikhail Gorbachev, should help to open markets for Third World producers.

One aspect of the arms market that could provide momentum for Third World producers is the potential for refurbishment and upgrade of existing equipment. If (as seems probable) the near-term global economic situation tends to restrict the purchase of expensive new weapons, many countries may turn to upgrades to prolong the life of equipment already in service. Some Third World producers have, or are developing, capabilities to provide this kind of service, including Singapore, Brazil, Israel, Egypt, Pakistan, and India. Israeli-developed reactive armor, for example, provides a simple and relatively inexpensive way to enhance armor protection for tanks and armored personnel carriers. This type of upgrade is likely to be attractive to cash-strapped armed forces in many countries.

Another favorable development for some Third World producers is the extent to which they are currently receiving foreign support in expanding their defense industries. U.S. assistance to Israel in this regard is widely known and highlighted by the extent of technological and financial assistance provided for the Lavi program. Brazil and Italy are collaborating on the AMX fighter, and the Argentines have an agreement with the Italians to co-produce a remotely piloted vehicle. A 1984 U.S.-Pakistani agreement on defense industrial cooperation is intended to facilitate the flow of technological and industrial information to Pakistan. Specific areas for cooperation include ammunition production, tank upgrade and rebuild, development of aircraft and shipyard overhaul capabilities, and production and maintenance of electro-optics and electronics. Egypt has received industrial base assistance through assembly and licensed production arrangements for British, French, and U.S. weapons, while India has made similar arrangements and is seeking additional ones from these and other countries, including the Soviet Union.

On another level, the pooling of resources may provide a partial solution for the problems facing Third World producers. Just as production consortia have become common in Europe (the British-French Jaguar, British-German-Italian Tornado, and French-German Euromissile corporation, are examples), cooperative bilateral and multilateral arrangements among Third World arms manufacturers could also be developed. For example:

- A revitalization of the Arab Organization for Industrialization, originally formed in 1975 but which became a victim of the Camp David Accords, could enhance the defense industrial potential of Egypt and other Arab states.

- Other Arab capabilities could eventually develop through the creation of a Gulf Cooperation Council (GCC) arms industry as envisaged under a 1979 agreement which predates the founding of the GCC itself. Recent indications that the Saudis are planning to purchase a

munitions manufacturing capability from West Germany, an anti-tank missile production facility from the U.S., and the likelihood of some kind of licensed-manufacture or assembly arrangement for Brazilian tanks (if the Saudis buy Brazilian) suggest some of the possibilities. Moreover, in the fall of 1986, GCC defense ministers adopted a resolution dealing with the expansion of arms production in member countries, suggesting that the GCC is indeed serious about this program.

- Brazil's recent political rapproachment with Argentina and trends in economic cooperation between the two countries suggest the possibility of a fledgling Latin American arms consortium. In fact, Brazil and Argentina have signed an agreement to build a replacement for the Brazilian Bandeirante civil-military transport aircraft. This arrangement marks the first co-production agreement to date between the two largest arms manufactures in Latin America and may be a harbinger of future arms cooperation.

CONCLUSION

Even with some pooling of resources, none of the Third World arms producers would appear to have the capability to escape the ranks of the secondary suppliers. Despite the diversification of arms manufacturers and the significance of this development for certain producers and recipients, the international arms trade will continue to be dominated by the major suppliers. Indeed, the Third World exporters' share of the world arms market dropped to 7 percent in 1985--barely above the level of a decade ago.

Some Third World producers, however, may be able to influence the international arms market in another way. By increasing their own self-sufficiency in arms, they may reduce the total world demand for arms imports. The following percentage shares of total Third World arms imports in 1981-1985 show that eight countries accounted for over half the total.

Iraq	15.9	Syria	5.9	India	4.0
Saudi Arabia	9.8	Egypt	4.7	Israel	2.7
Libya	6.9	Iran	4.2	All Others	45.9

At lease four of these countries--Egypt, India, Saudi Arabia, and Israel--have the potential for and are actively pursuing policies geared toward expanding indigenous arms production. Such production in the largest market countries could have an important impact on both the size and pattern of the international arms market. The longer term significance of producer proliferation, therefore, may not be in the direction of stimulating greater arms transfers, but of promoting local and regional arms autarky.

NOTES:

1. "Third World" as used herein refers to the non-NATO and non-Warsaw Pact developing countries.

2. These estimates are based on revised data for 1984, as shown in this edition of *World Military Expenditures and Arms Transfers* (WMEAT). The previous edition (WMEAT 1985) had indicated that the non-NATO and Pact share of the world market had reached 19 percent in 1984 and that the combined U.S.-Soviet share had declined from 78 percent in 1973 to under 50 percent in 1984. Current estimates place the U.S.-and-Soviet share above 50 percent in 1984 and higher in 1985, according to preliminary data. A current review of estimates of Soviet arms transfers in value terms may raise this share even higher in future editions.

3. Available 1985 data, however, are preliminary and are likely to be revised upward when more complete information becomes available.

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