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Trends in US Arms Exports Since the Cold War

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Table of Contents

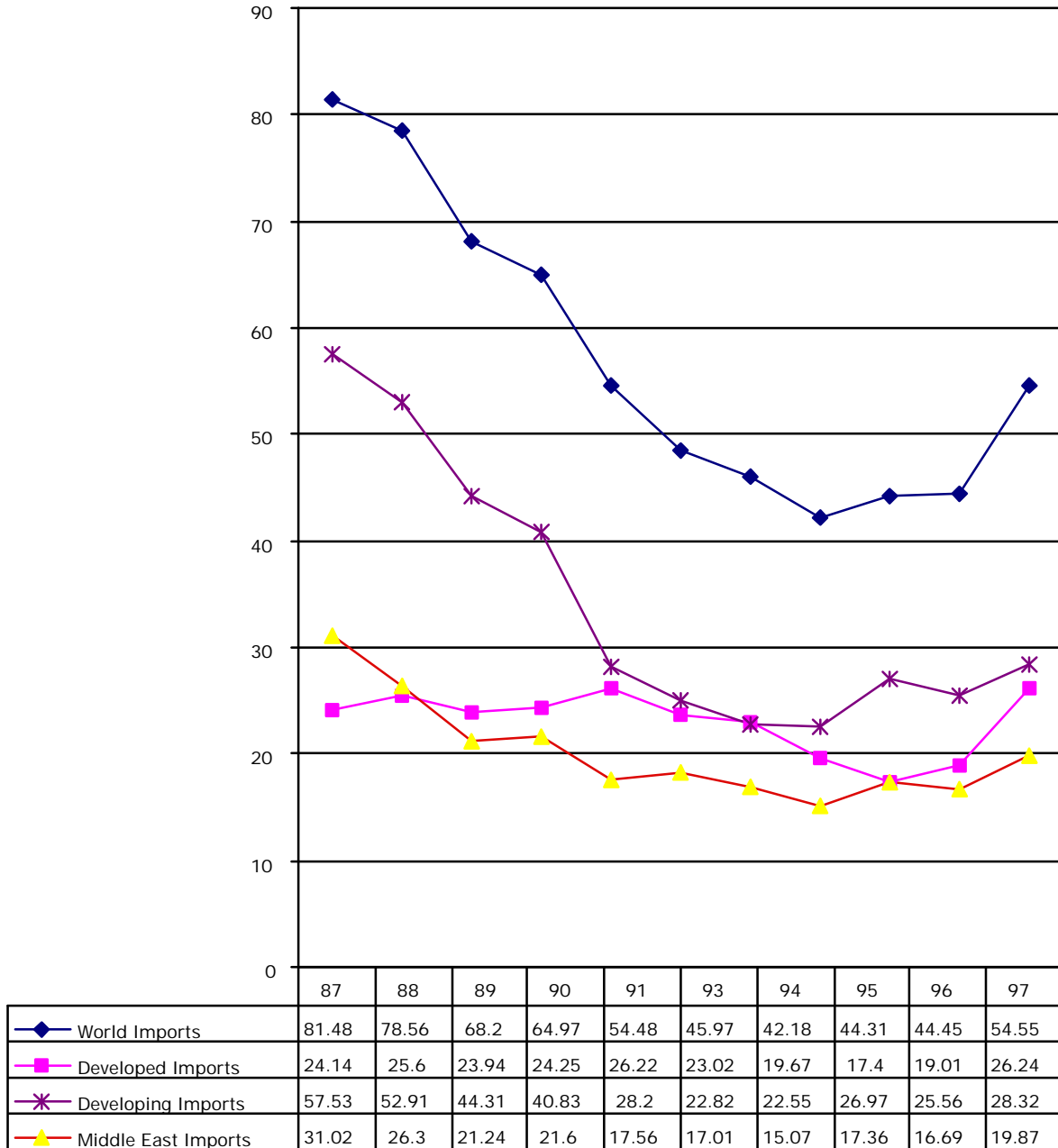
<i>Trends in US Arms Exports</i>	1
LOOKING AT THE BROAD PATTERNS IN ARMS SALES SINCE THE COLD WAR:	3
World Arms Exports Dropped Sharply After the End of the Cold War, but Began Recovery in 1996; Middle East is Key Market	4
What the US Exports: Numbers of Weapons by Type	6
US and NATO European Arms Exports Remain Constant: Russian and Warsaw Pact Sales Crash.....	7
US New Arms Sales Agreements Have Grown Sharply as a Part of Total World New Agreements and Most US New Agreements Still Are with Developed States.....	9
How US New Arms Sales Agreements Have Grown to Dominate Those of Other Major Arms Exporters.....	10
US New Arms Sales Agreements by Region: Europe, the Middle East, and East Asia Dominate US Arms Sales	11
Who Shares the Rest of the US Arms Market: World-Wide New Arms Sales Agreements Less US.....	12
ALTHOUGH THE US “MARKET SHARE” HAS GROWN, ARMS EXPORTS ARE STILL “SMALL CHANGE” IN TERMS OF WORLD TRADE:	13
The Value of World Arms Imports as a Percent of Total Imports has Dropped Extremely Sharply	14
US Arms Exports Have Dropped from 7-8% to 3.7-4.7 of Share of Total US Exports.....	15
But, the US Has Also Become the Major Nation with Arms Exports as the Largest Percentage of Total Trade.....	16
THE TWO KEY WORLD MARKETS: THE US DOMINATES NEW ARMS SALES AGREEMENTS IN EUROPE BUT THE MIDDLE EAST IS MORE COMPETITIVE	17
The “One Way Street” How US New Arms Sales Agreements Have Grown to Dominate European Imports.....	18
Competition Still Exists in the Middle East, Although the US is the Largest Exporter	19
The Chinese Case: Some Import Technical Imports, but Not a Major Importer. More an Exporter	20
THE IDEA THAT SANCTIONS DO NOT WORK DOES NOT APPLY TO THE ARMS TRADE:	21
Do Sanctions Work? Iran and Iraq and the “Train Wreck” in the Northern Gulf	22
Do Sanctions Work? The Iraqi Cumulative Arms Import Deficit Enforced by UN Sanctions.....	23
Do Sanctions Work? Iraqi Military Production Cannot Act as a Substitute for Arms Imports	24
Do Sanctions Work? Sanctions and Libya: The Arsenal of Nothing.....	25
Do Sanctions Work? Cutting Off North Korea: Minimal World-Wide Arms Transfers	26
Do Sanctions Work? Iran and Iraq and the “Train Wreck in the Northern Gulf	27

Looking at the Broad Patterns in Arms Sales Since the Cold War:

- **The end of the Cold War led to a major dip in world arms exports from the late 1980s to mid-1990s.**
- **A Rise since the mid-1990s has not brought arms sales back to anything like their Cold War level.**
- **US arms deliveries have been relatively constant in value.**
- **So have those of NATO European nations.**
- **Russia and China have lost a massive amount of their share of the world market and have declined sharply in value in constant dollars.**

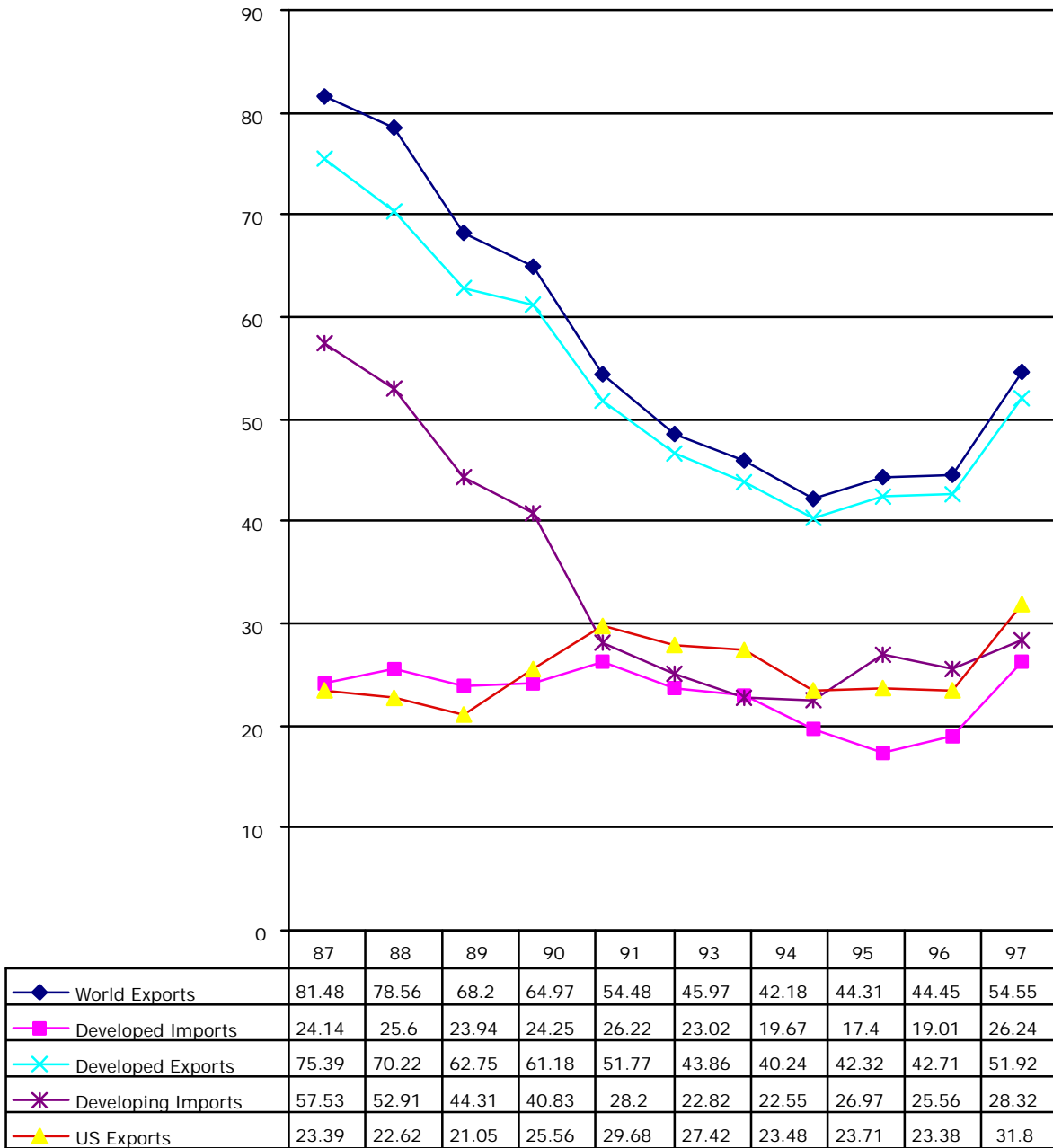
World Arms Exports Dropped Sharply After the End of the Cold War, but Began Recovery in 1996; Middle East is Key Market

(in Constant 1997 \$US billions)



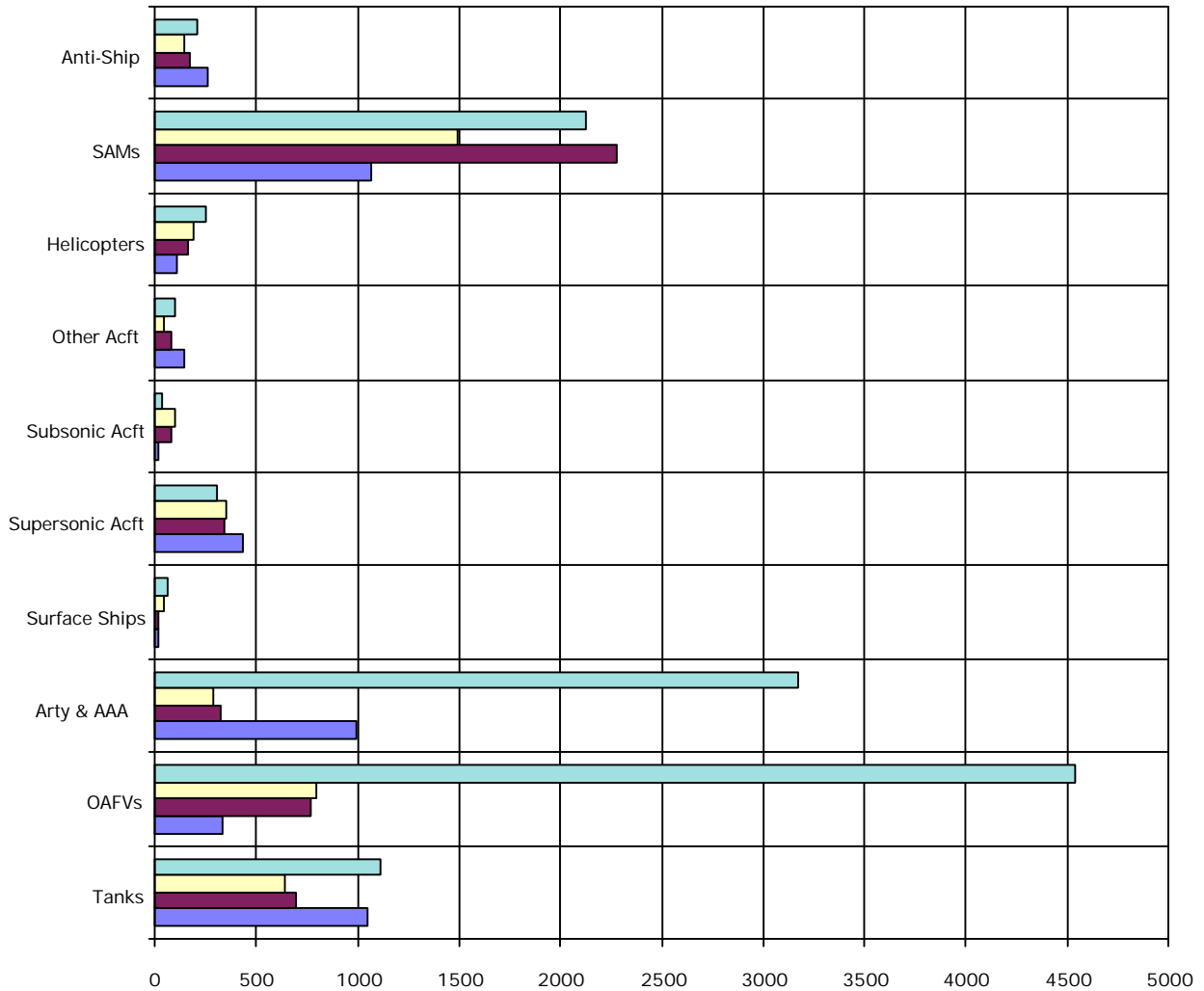
Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control, World Military Expenditure and Arms Transfers report

US Arms Exports Are Relatively Constant in Spite of Major Dip in World Sales
(in Constant 1997 \$US billions)



Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

What the US Exports: Numbers of Weapons by Type

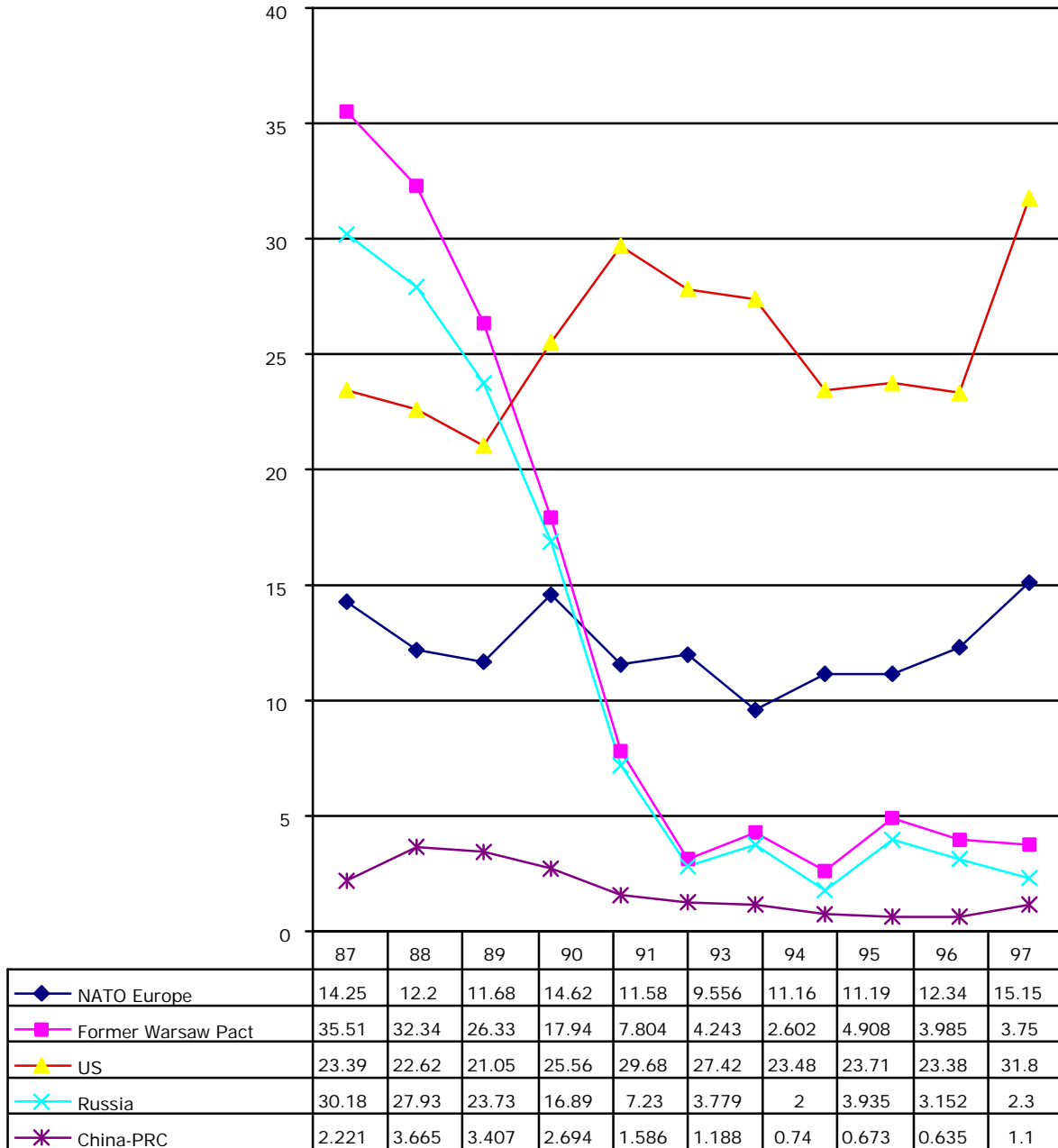


	Tanks	OAFVs	Arty & AAA	Surface Ships	Supersonic Acft	Subsonic Acft	Other Acft	Helicopters	SAMs	Anti-Ship
95-97	1115	4536	3172	66	310	32	100	253	2127	212
92-94	643	793	291	44	350	101	45	191	1491	143
89-91	699	766	330	18	340	83	79	159	2275	174
86-88	1051	336	994	15	436	17	143	104	1065	263

Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

US and NATO European Arms Exports Remain Constant: Russian and Warsaw Pact Sales Crash

(in Constant 1997 \$US billions)



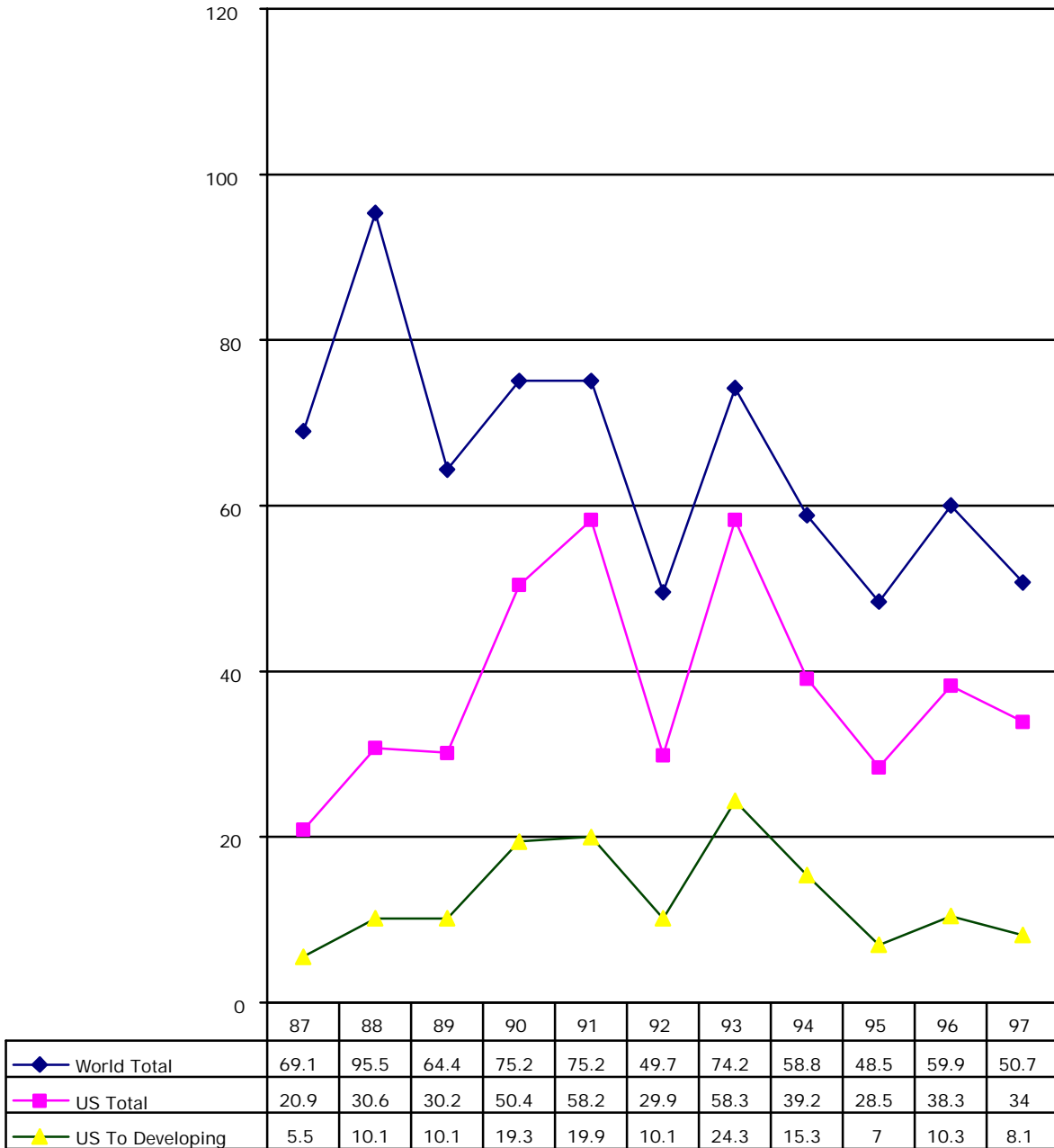
Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

The US “Market Share” Has Changed Sharply Since the Cold War:

- **The fact US sales held their value in constant dollars led to a major rise in world market share.**
- **This rise in market share was even greater if measured in terms of new arms sales agreements. (Deliveries normally occur about 2-3 years after a firm contract)**
- **Most US sales still go to developed states: i.e. NATO and Japan**
- **The key regions for US sales are Europe, the Middle East, and East Asia.**
- **The US has had an extremely large share of new agreements relative to any other major exporter since the end of the Cold War.**
- **Russia remains the largest competing vendor in terms of new agreements, but the US has no “peer” rival.**
- **The value of sales, however, is not a measure of the number of arms transferred.**

US New Arms Sales Agreements Have Grown Sharply as a Part of Total World New Agreements and Most US New Agreements Still Are with Developed States

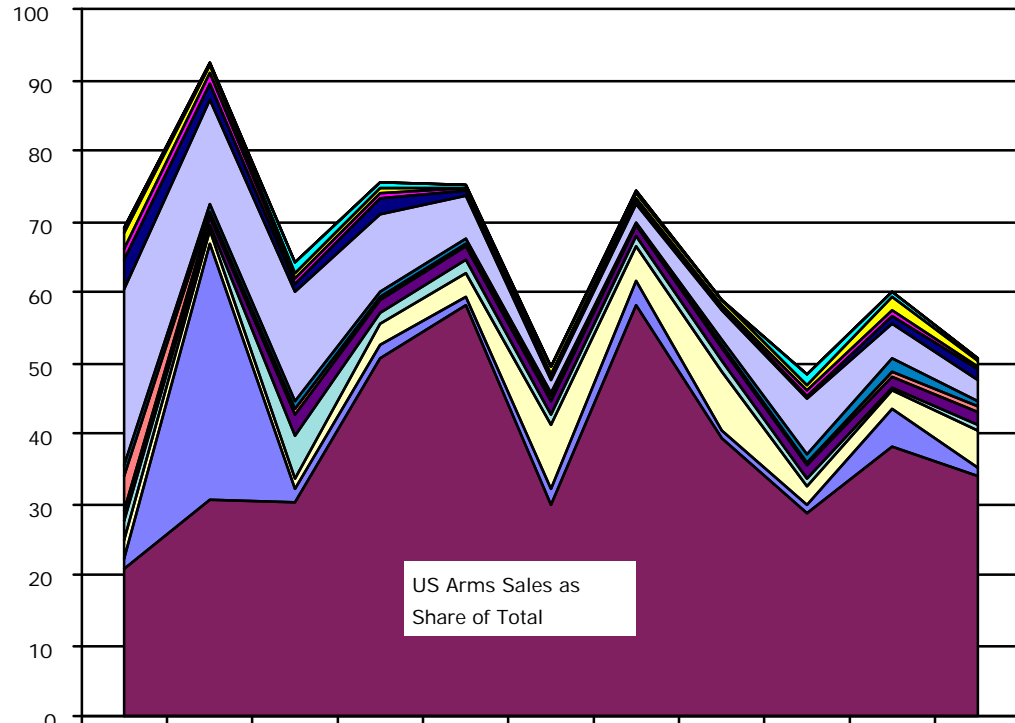
(in Current \$US billions)



Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

How US New Arms Sales Agreements Have Grown to Dominate Those of Other Major Arms Exporters

(in Current \$US billions)

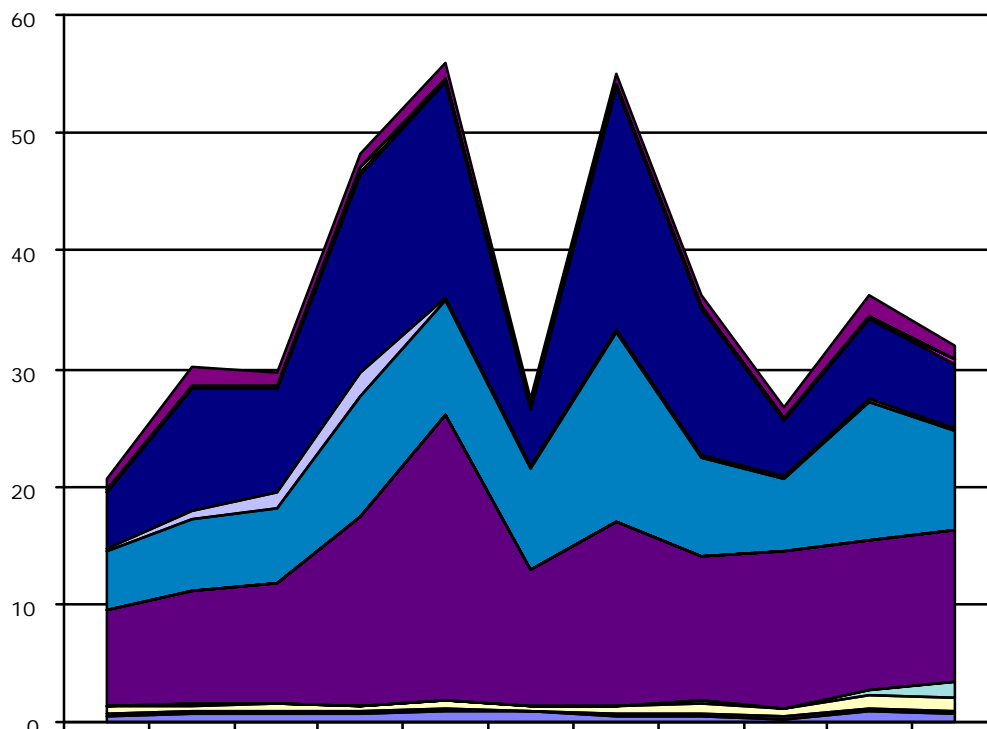


	87	88	89	90	91	92	93	94	95	96	97
■ TOTAL WORLD	*69.1	*95.5	*64.4	*75.2	*75.2	*49.7	*74.2	*58.8	*48.5	*59.9	*50.7
■ Others	0.8	0.7	1.5	0.7	0.3	0.3	0.5	0.3	1.6	0.7	0.5
■ Middle East	2.4	1	0.8	0.5	0.3	0.9	0.6	0.6	0.9	2	0.8
■ Other East Asia	1.2	1.4	0.7	1	0.4	0.3	0.2	0.2	0.8	0.6	0.4
■ China	4.5	2.3	1.4	2.2	0.6	0.5	0.6	0.7	0.2	1	1.3
■ Russia	24.7	14.8	15.5	10.9	6.2	1.8	2.5	4.1	7.8	5.1	3.3
■ Other E. Europe	1.7	1.1	1	0.6	0.6	0.6	0.4	0.5	1.2	1.9	0.7
■ Other W. Europe	4.8	0.7	0.6	0.4	0.3	0.5	0.2	0.7	0.3	0.5	0.5
■ Other NATO	1.4	1	3.2	1.9	2	2.1	1.3	1.8	2.2	1.7	2.1
■ Germany	2.6	1.1	6	1.8	1.7	1.4	1.4	1.3	1	0.3	0.8
■ France	2.8	1.7	1.5	2.7	3.5	9	5	8.5	2.7	2.8	5.1
■ UK	1.3	36.2	1.9	2.2	1.1	2.3	3.3	1.1	1.2	5	1.2
■ US Total	20.9	30.6	30.2	50.4	58.2	29.9	58.3	39.2	28.5	38.3	34

Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

US New Arms Sales Agreements by Region: Europe, the Middle East, and East Asia Dominate US Arms Sales

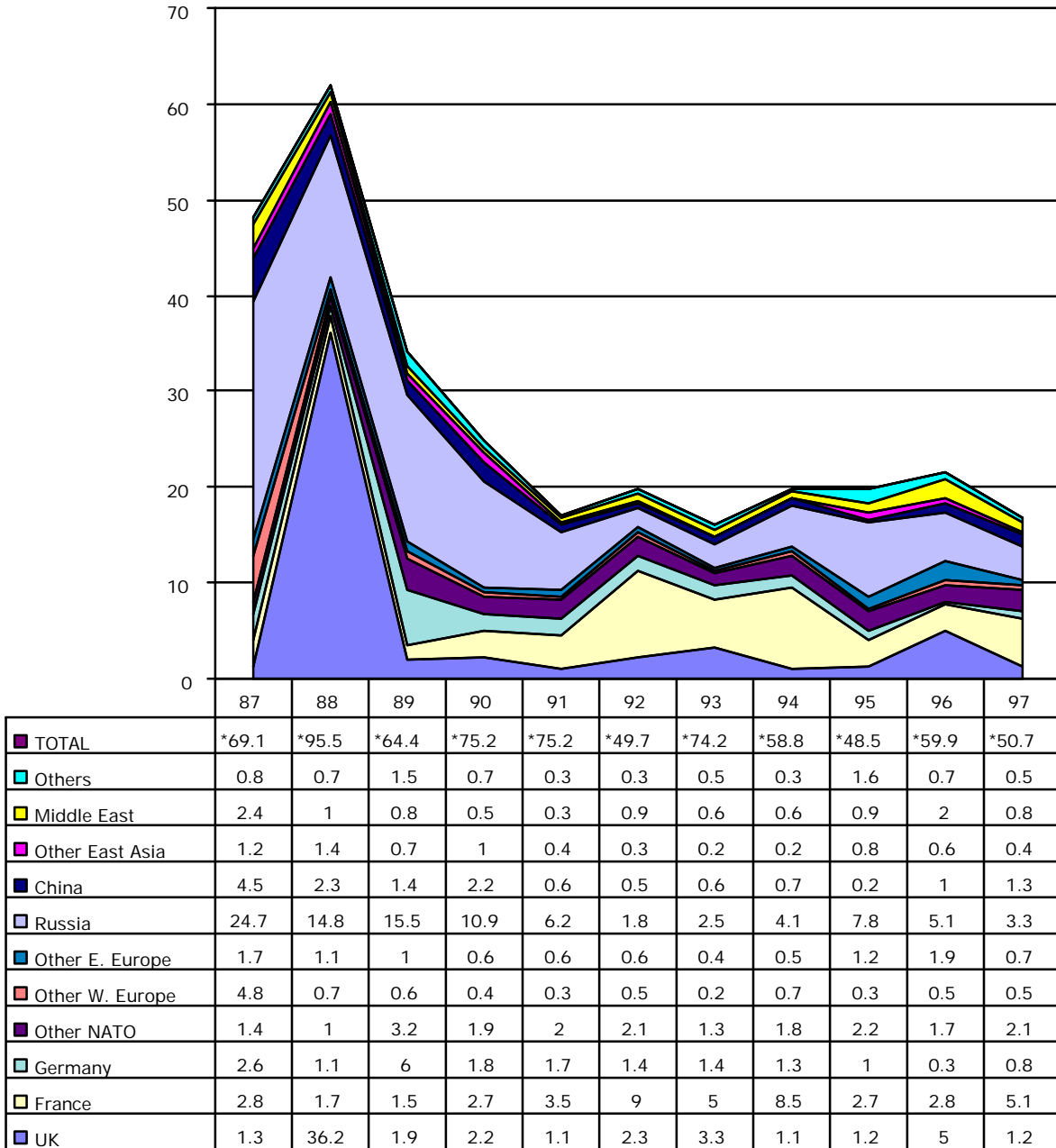
(in Current \$US billions)



	87	88	89	90	91	92	93	94	95	96	97
■ Oceania	0.9	1.6	1.2	1.2	1.4	0.8	0.9	1	1	1.8	1.3
■ Southern Africa										0.2	
■ Central Africa	0.1	0.1	0.1	0.5	0.1		0.1	0.1		0.1	
■ North Africa	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.4
■ Middle East	4.6	10.4	8.9	16.9	18.2	4.9	20.7	12.3	4.8	6.6	5.5
■ South Asia	0.3	0.7	1.2	1.9	0.3	0.2	0.2	0.2	0.1	0.3	0.1
■ East Asia	5	6.1	6.5	10.2	9.8	8.5	16.1	8.4	6.1	11.8	8.3
■ Central Asia									0.2		
■ Western Europe	8.2	9.6	10.2	16.2	24.1	11.6	15.5	12.4	13.2	12.6	12.9
■ Eastern Europe		0.1					0.1	0.1	0.1	0.5	1.5
■ South America	0.6	0.6	0.6	0.4	0.8	0.4	0.7	0.9	0.6	1.2	1.2
■ Central America	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1
■ North America	0.4	0.6	0.7	0.7	0.9	0.9	0.5	0.5	0.3	1	0.7

Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

Who Shares the Rest of the US Arms Market: World-Wide New Arms Sales Agreements Less US (in Current \$US billions)

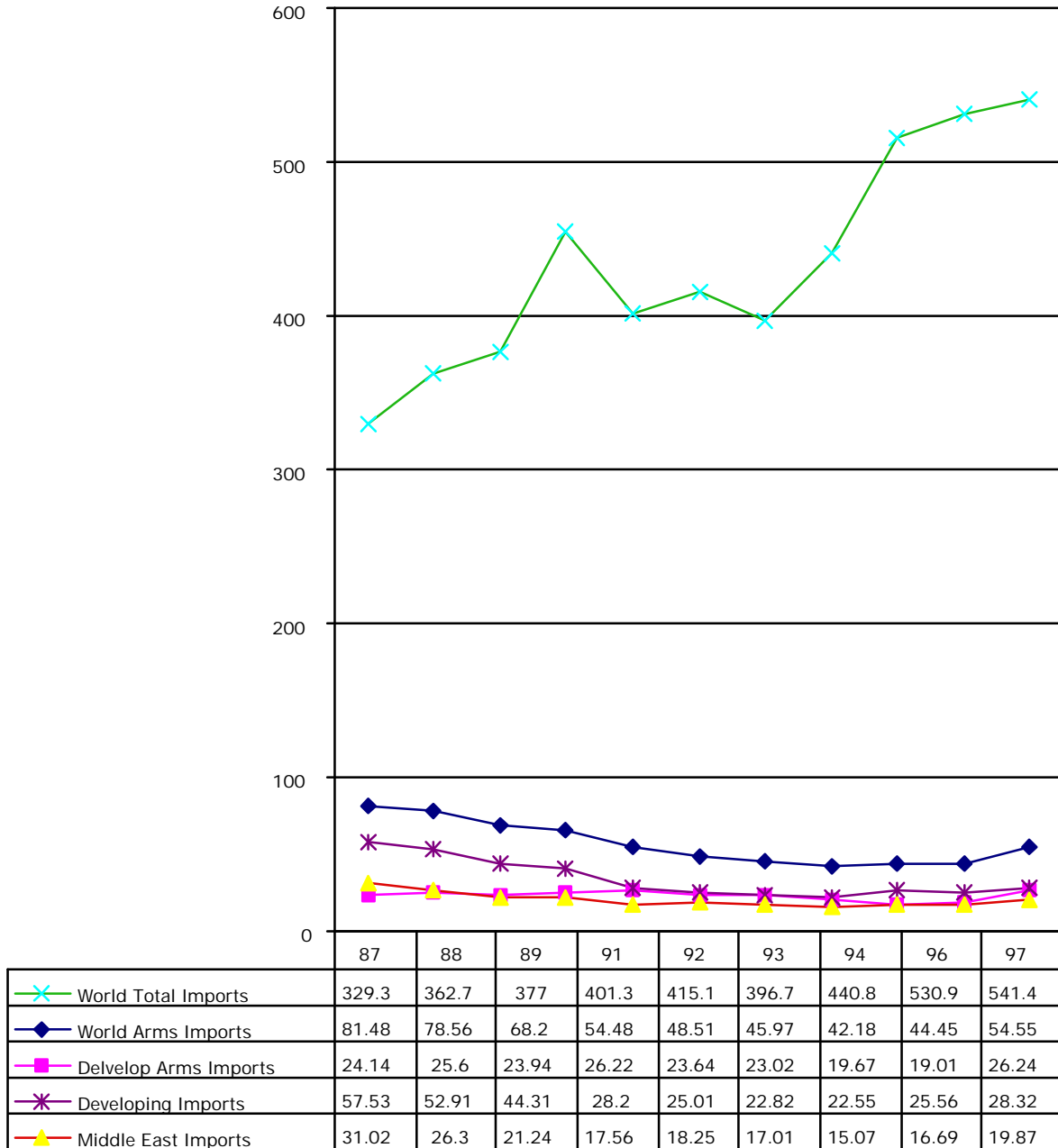


Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

Although the US “Market Share” Has Grown, Arms Exports are Still “Small Change” in Terms of World Trade:

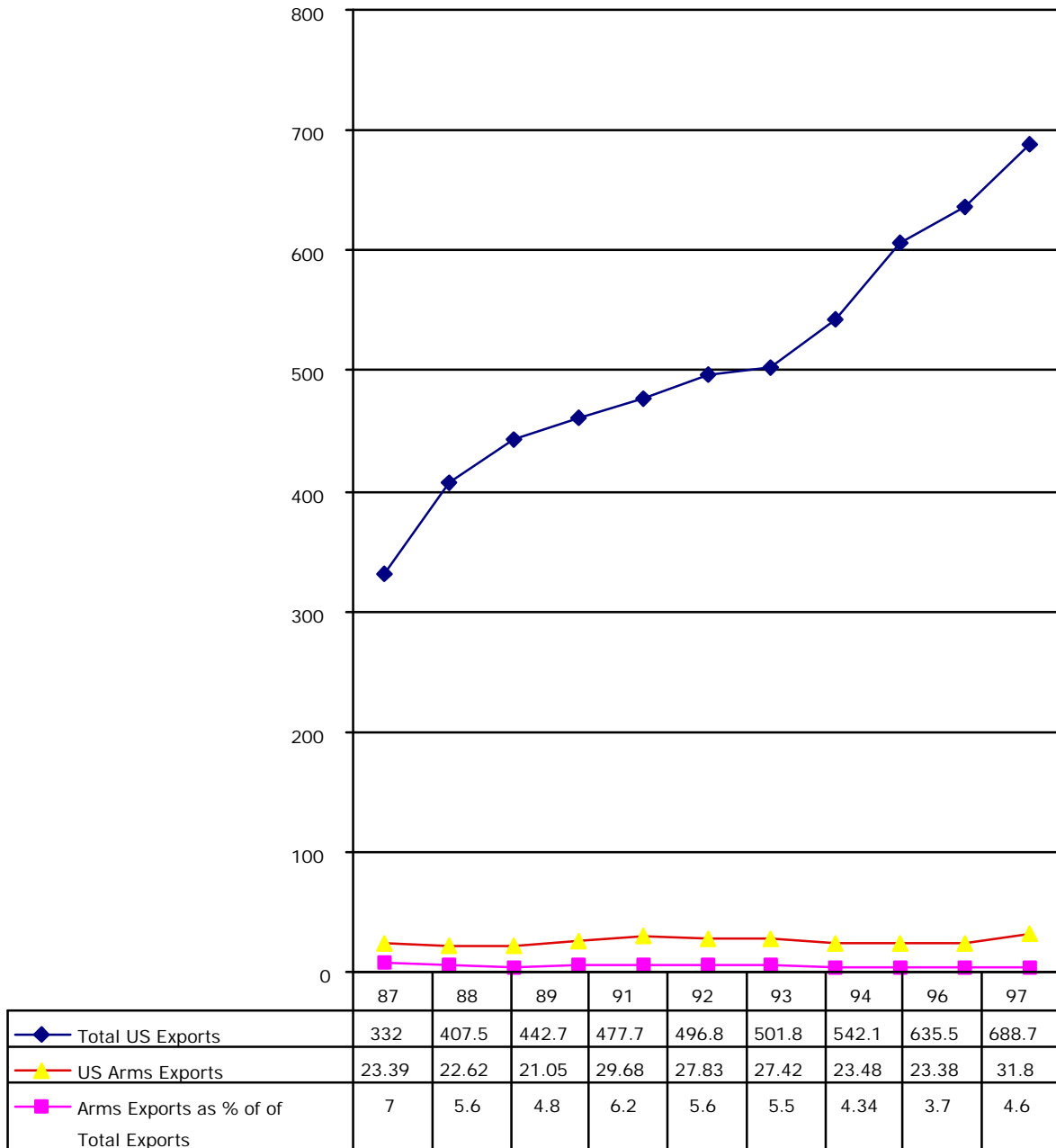
- **World trade has expanded vastly since the end of the Cold War, while arms sales have shrunk.**
- **The arms market may have a major niche in technology and some effect in reducing unit costs to the exporting nation, but is of little macroeconomic importance in gross terms.**
- **Although the US greatly increased its global market share, arms exports dropped by about 50% as a percentage of total US exports, and are scarcely a key aspect of US trade.**
- **The US is, however, now the largest arms exporter as a percent of total arms exports.**

The Value of World Arms Imports as a Percent of Total Imports has Dropped Extremely Sharply (in Percent)



Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

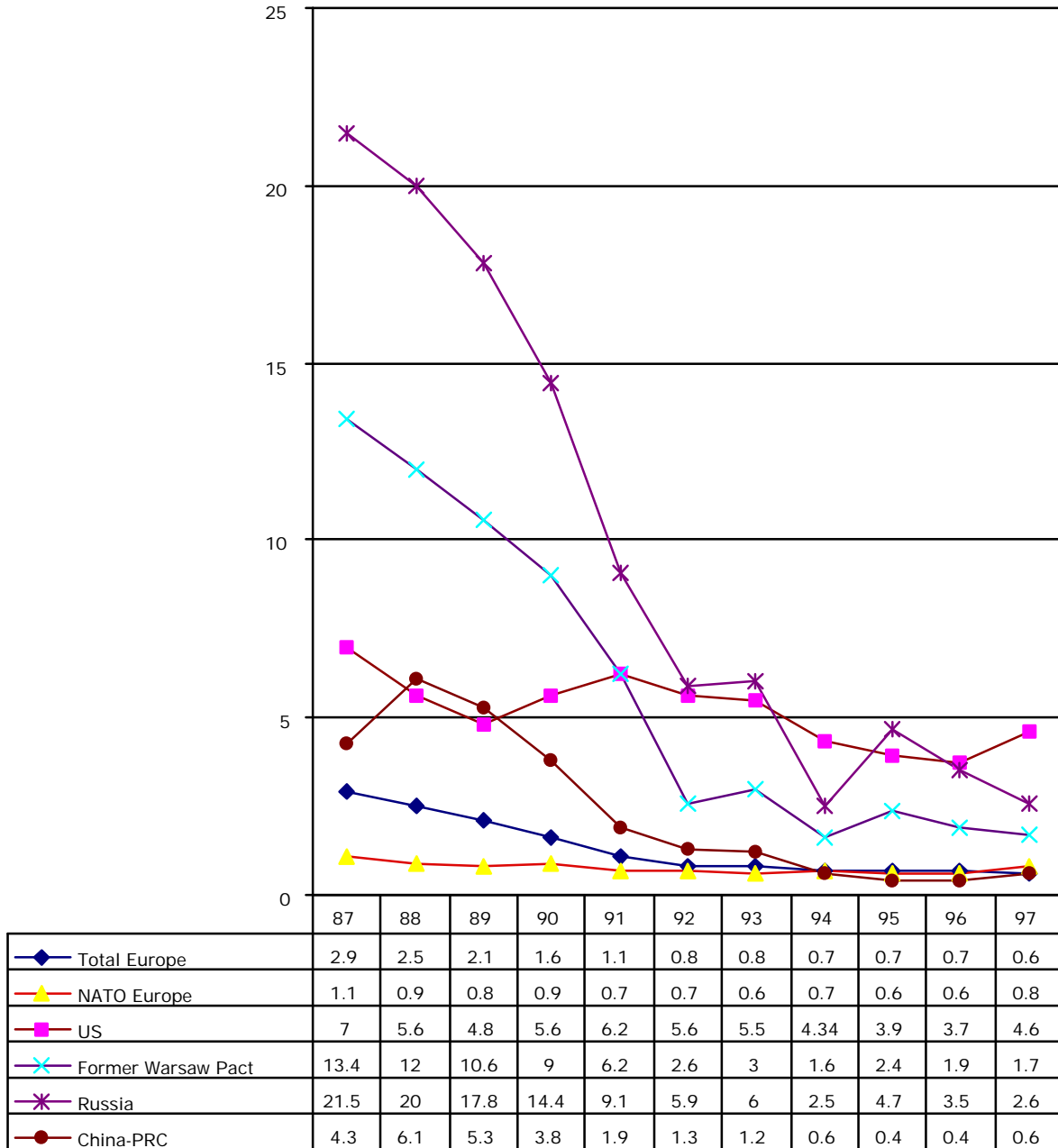
US Arms Exports Have Dropped from 7-8% to 3.7-4.7 of Share of Total US Exports (in Percent)



Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control, World Military Expenditure and Arms Transfers report.

But, the US Has Also Become the Major Nation with Arms Exports as the Largest Percentage of Total Trade

(in Constant 1997 \$US billions)



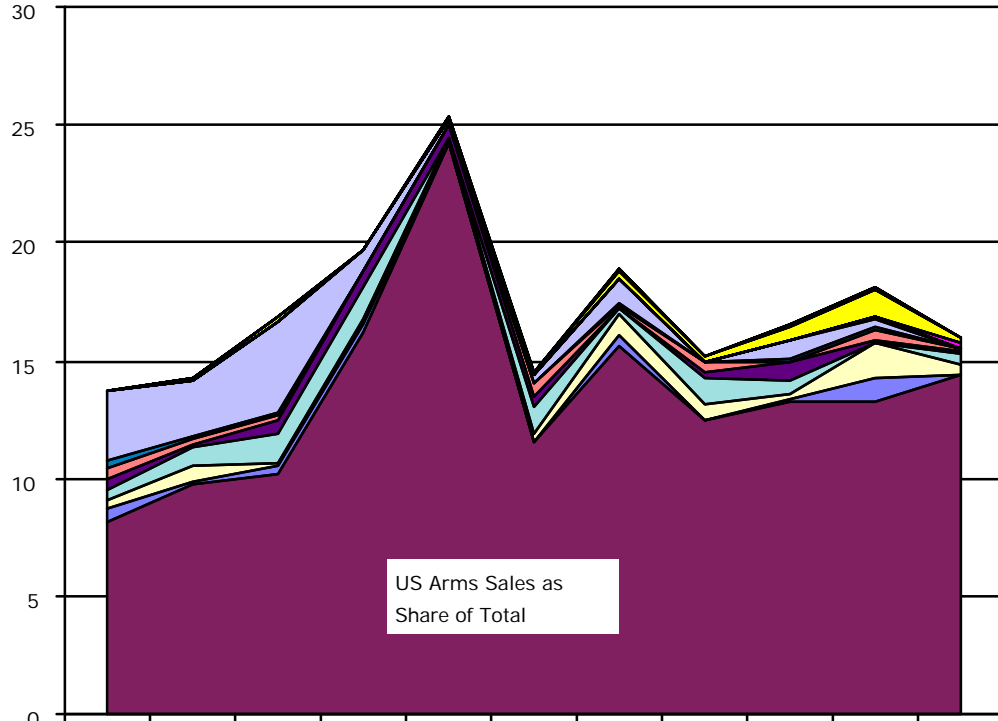
Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

The Two Key World Markets: The US Dominates New Arms Sales Agreements in Europe but the Middle East is More Competitive

- **The US has turned arms exports to European states into a virtual “one way” street.**
- **The divisions in Europe, and emphasis on buying nationally made equipment made effective competition with the US impossible.**
- **The key market in the developing world – the Middle East – was far more competitive.**
- **This shows the extent to which the European emphasis on buying nationally made products blocked competition in Europe**
- **While China is a “wild card” in this list, it is important to note that it is not a massive importer, but rather an exporter of arms.**

The “One Way Street” How US New Arms Sales Agreements Have Grown to Dominate European Imports

(in Current \$US billions)

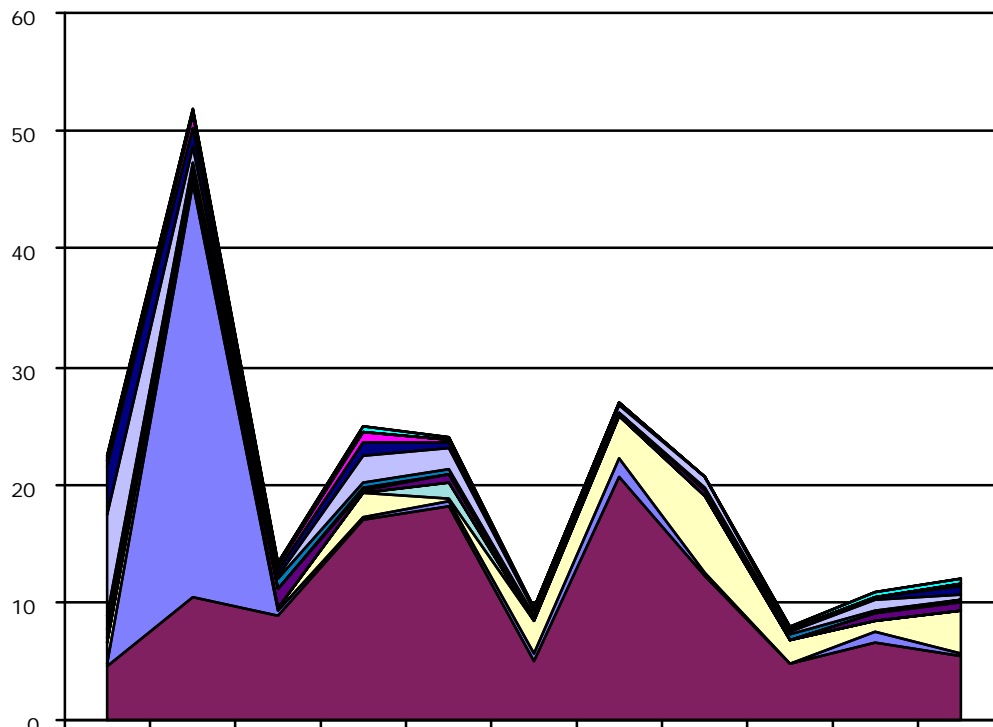


	87	88	89	90	91	92	93	94	95	96	97
TOTAL	*13.6	*14.4	*17.0	*19.8	*25.5	*14.4	*18.9	*15.3	*16.4	*18.1	*15.8
Others					0.1		0.1		0.1	0.1	
Middle East		0.1	0.3		0.1	0.1	0.4	0.2	0.5	1.1	0.3
Other East Asia									0.1		0.2
China										0.2	
Russia	3	2.4	3.8	0.9	0.2	0.4	1	0.1	0.7	0.3	
Other E. Europe	0.3	0.1	0.1				0.1		0.1	0.1	
Other W. Europe	0.4	0.3	0.3			0.5	0.1	0.4	0.1	0.4	0.1
Other NATO	0.5	0.1	0.5	0.7	0.5	0.5		0.2	0.7	0.2	0.1
Germany	0.4	0.8	1.3	1.3		1.1	0.2	1.2	0.6		0.5
France	0.4	0.7	0.1	0.3	0.3	0.3	0.9	0.6	0.2	1.4	0.4
UK	0.5	0.1	0.3	0.3			0.5		0.2	1.1	
US	8.2	9.7	10.2	16.2	24.2	11.6	15.6	12.5	13.2	13.2	14.4

Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

Competition Still Exists in the Middle East, Although the US is the Largest Exporter

(in Current \$US billions)

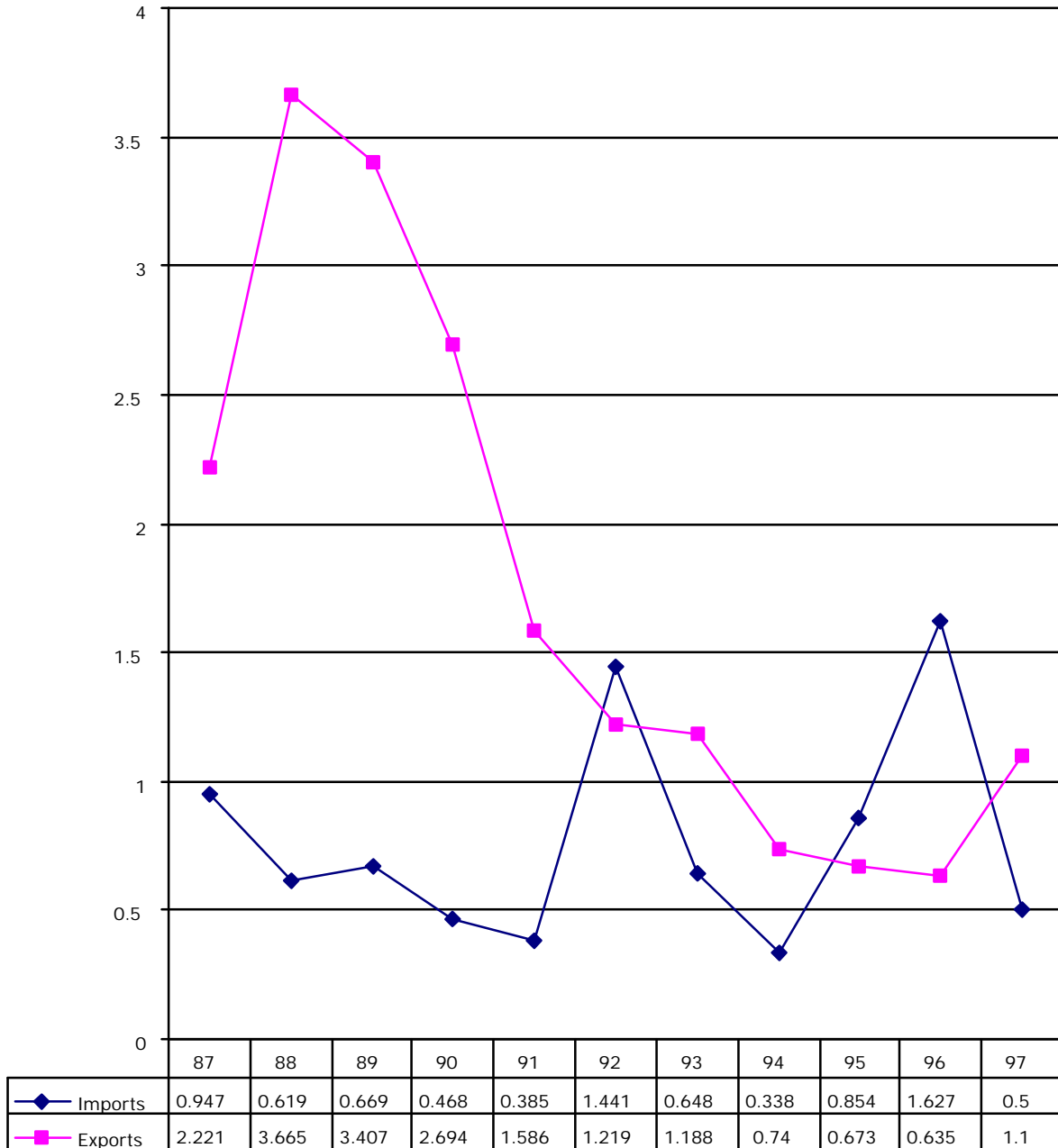


	87	88	89	90	91	92	93	94	95	96	97
TOTAL	*22.7	*51.7	*13.2	*24.9	*23.7	*9.7	*26.8	*20.8	*8.1	*10.9	*11.7
Others	0.6	0.2	0.2	0.5	0.1	0.1			0.3	0.3	0.4
Middle East		0.3					0.1			0.1	
Other East Asia	0.5	1	0.5	0.9	0.2	0.1			0.1		0.1
China	4	1.6	0.4	1	0.4	0.1	0.2	0.1	0.1	0.3	0.7
Russia	8.6	1.3	0.2	2.4	2	0.4	0.6	0.8	0.2	0.8	0.4
Other E. Europe	1.1	0.6	0.8	0.4	0.4	0.2	0.1	0.2	0.4	0.3	0.2
Other W. Europe	0.7	0.3	0.1	0.3					0.1		0.1
Other NATO	0.4	0.2	1.5	0.2	0.6	0.4	0.1	0.5	0.1	0.6	0.7
Germany	0.1	0.1			1.5		0.1				0.1
France	1.8	0.6	0.4	2	0.2	2.6	3.7	6.5	1.9	0.9	3.5
UK	0.1	35.2	0.3	0.3	0.3	0.8	1.4	0.2		0.9	0.2
US	4.6	10.4	8.9	16.9	18.2	4.9	20.7	12.3	4.8	6.6	5.5

Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

The Chinese Case: Some Import Technical Imports, but Not a Major Importer. More an Exporter

(in Constant 1997 \$US billions)



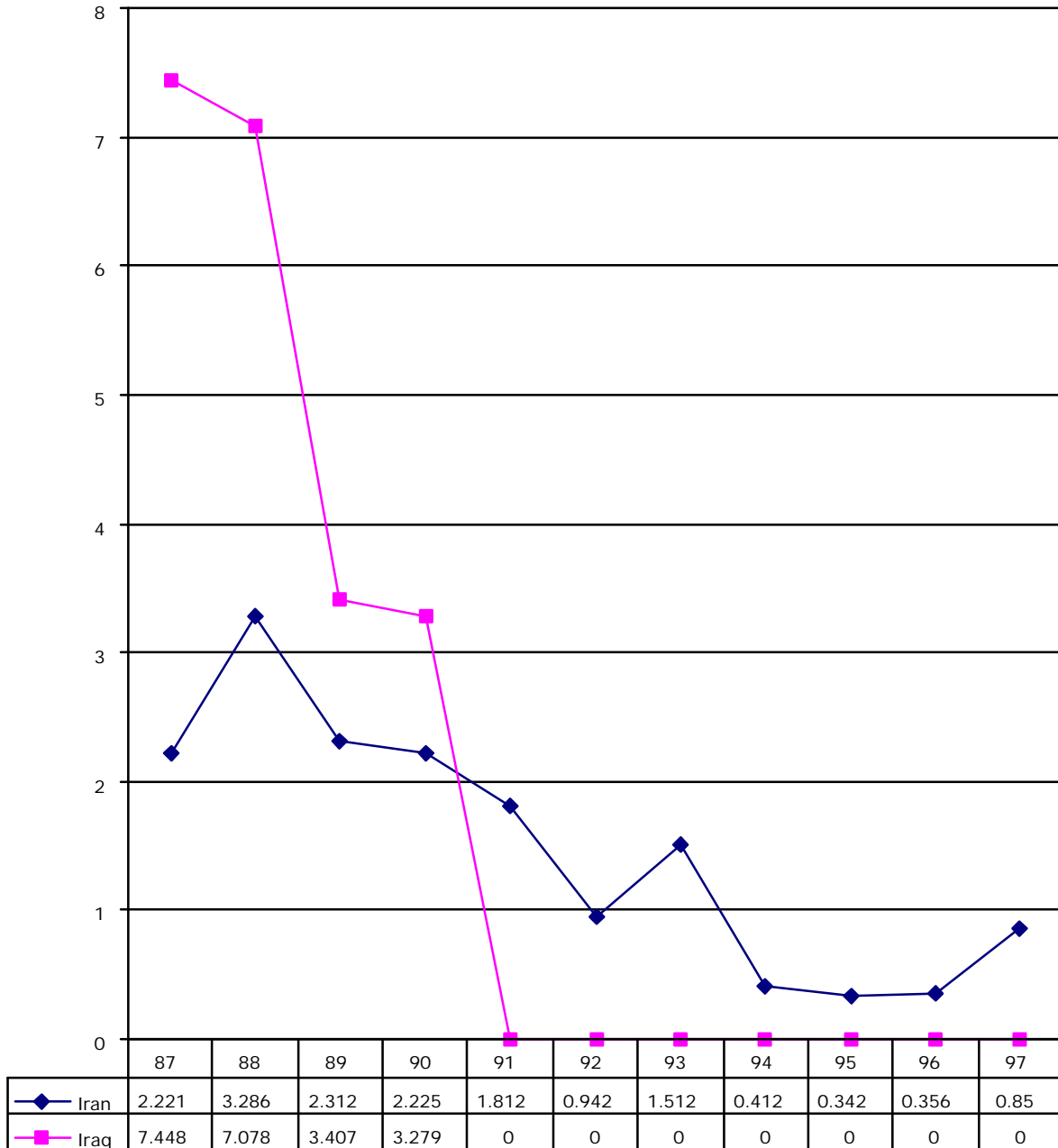
Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

The Idea that Sanctions Do Not Work Does Not Apply to the Arms Trade:

- **Iran's arms imports have dropped to a small percentage of their Iran-Iraq War level.**
- **(Although the only rises have occurred since the passing of ISLA.)**
- **Iraq has been crippled by the arms embargo since mid-1990 and faces vast potential recapitalization costs.**
- **Libya has been pushed off the arms import map.**
- **North Korea is a penny ante arms importer.**

Do Sanctions Work? Iran and Iraq and the “Train Wreck” in the Northern Gulf

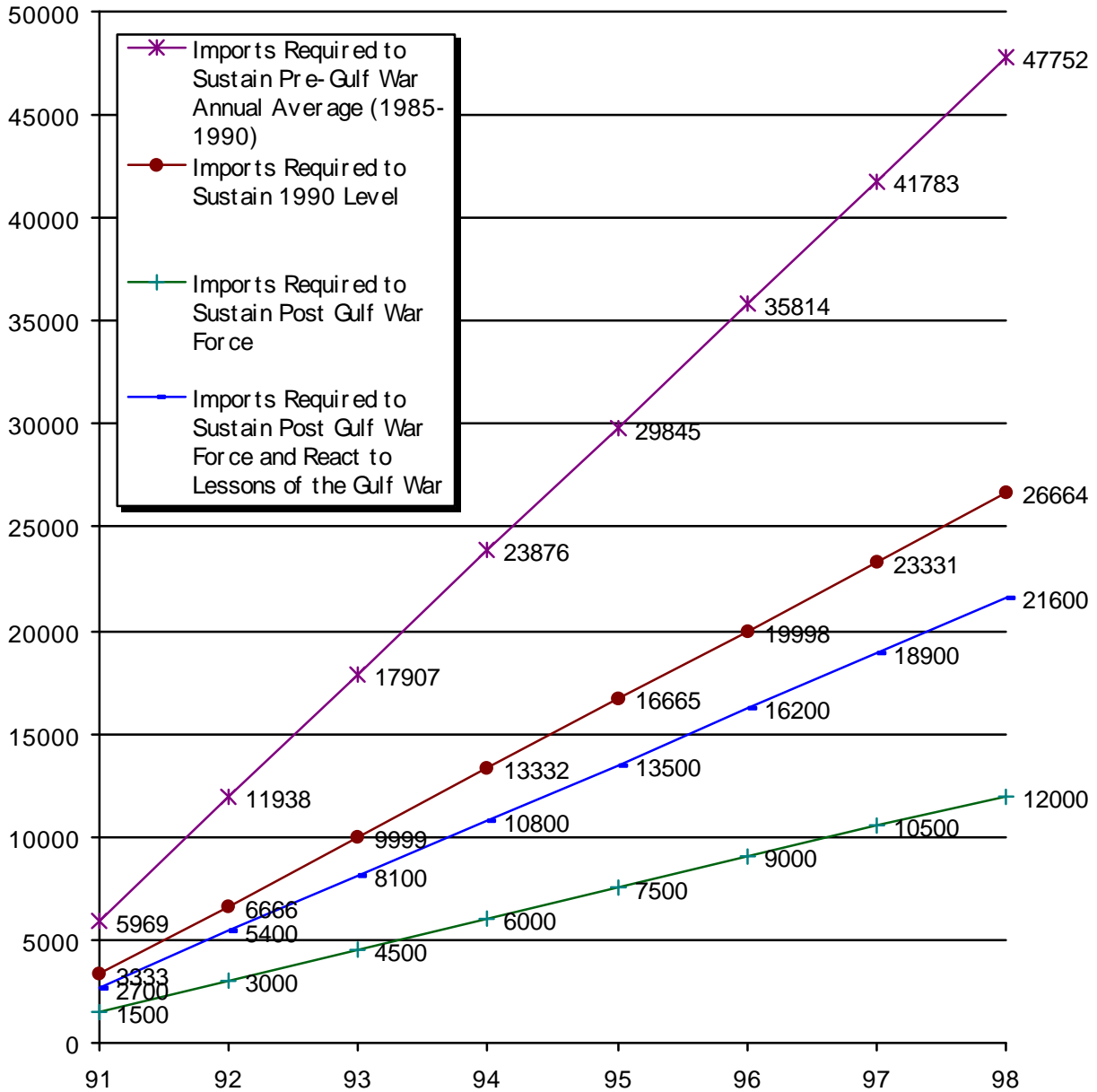
(in Constant 1997 \$US billions)



Source: Adapted by Anthony H. Cordesman from ACDA database for Table IIIA in State Department Bureau of Arms Control , World Military Expenditure and Arms Transfers report.

Do Sanctions Work? The Iraqi Cumulative Arms Import Deficit Enforced by UN Sanctions

(Measured in \$US 97 Constant millions)



Source: Adapted by Anthony H. Cordesman from US Arms Control and Disarmament Agency, World Military Expenditure and Arms Transfers report., 1995, GPO, Washington, 1996, and , World Military Expenditure and Arms Transfers report., 1998, GPO, Washington, 1999.

Do Sanctions Work? Iraqi Military Production Cannot Act as a Substitute for Arms Imports

- Iraq developed significant ammunition, small and light arms, and gun barrel production facilities before the Gulf War, and many survive and function. However, focused most resources on weapons of mass destruction.
- Left even high tech service (e.g. French and Russian aircraft) to foreign technical support teams. Did not attempt to develop major in-house capabilities.
- Pre-1991 production was heavily prototype-oriented and largely prestige-oriented in nature.
- Did import T-72 kits, in theory as transition to production facilities. However, far from clear that Iraq has industrial base for such manufactures.
- Iraqi modifications sometimes succeeded, but many failed and had an “impress the maximum leader character.” E.g. T-72 upgrades.
- Historically, assembly of major weapons does not lead to technology transfer or effective reverse engineering capability without extensive foreign support. Net impact is to create over-specialized facilities, waste resources.
- No developing state, including India and China, has yet demonstrated that it can successfully mass manufacture an advanced fighter plane or tank, even on a turnkey basis.
- Few nations have made useful major equipment upgrades for armor and aircraft. Jordan, South Korea, and Turkey are among few successes. Egypt, India, Pakistan are more typical.
- Iraq has effectively been cut off from all major imports of parts and specialized equipment since 1990s, although dual use items, civilian electronics and sensors, and computer gear are not effectively controlled.
- Black market imports, substitution, and local manufactures can only provide an erratic and inefficient substitute for large-scale resources.
- Some indications that Iraq is giving priority to importing equipment for weapons of mass destruction.

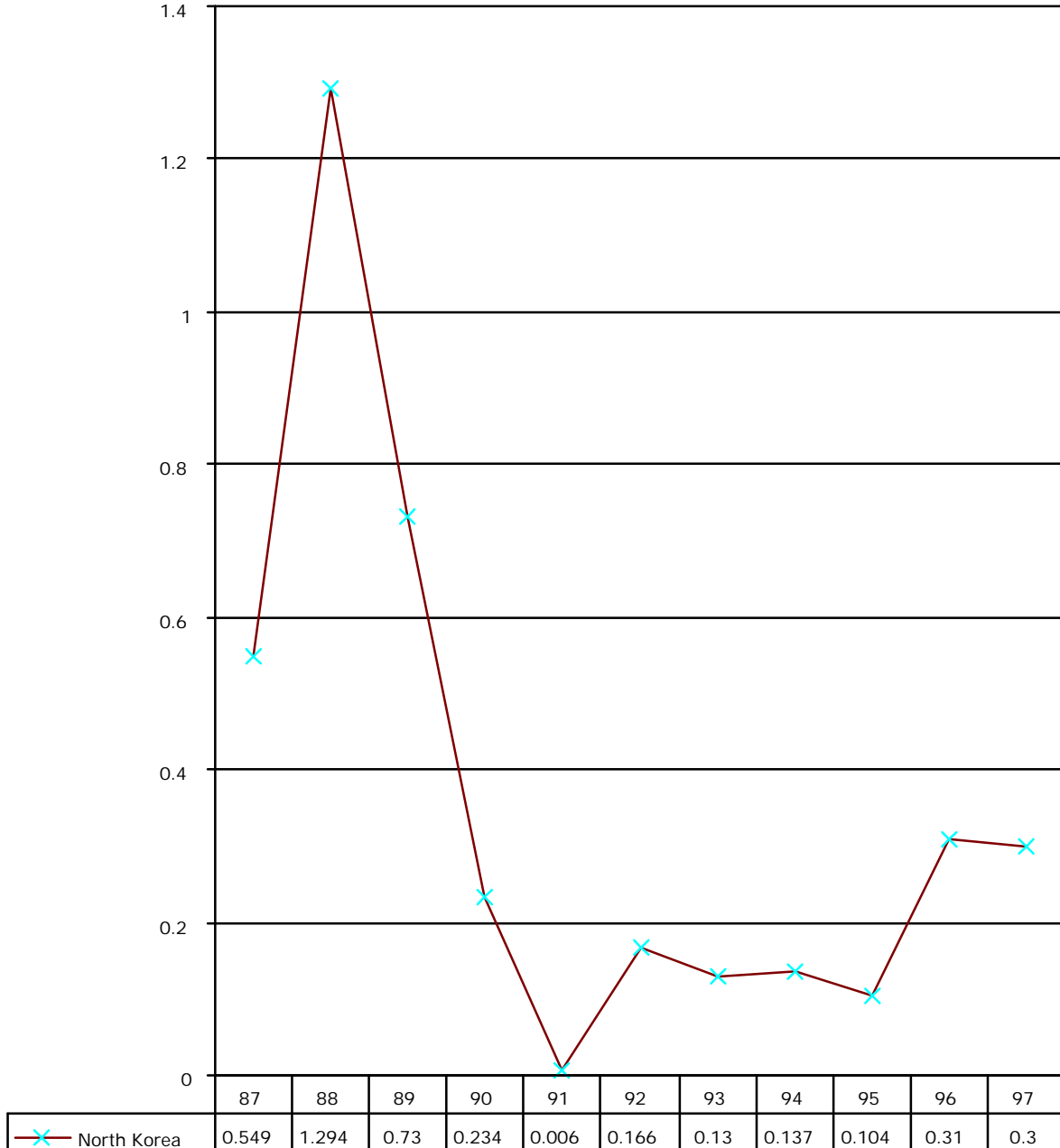
Do Sanctions Work? Sanctions and Libya: The Arsenal of Nothing (in Constant 1997 \$US billions)



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Do Sanctions Work? Cutting Off North Korea: Minimal World-Wide Arms Transfers

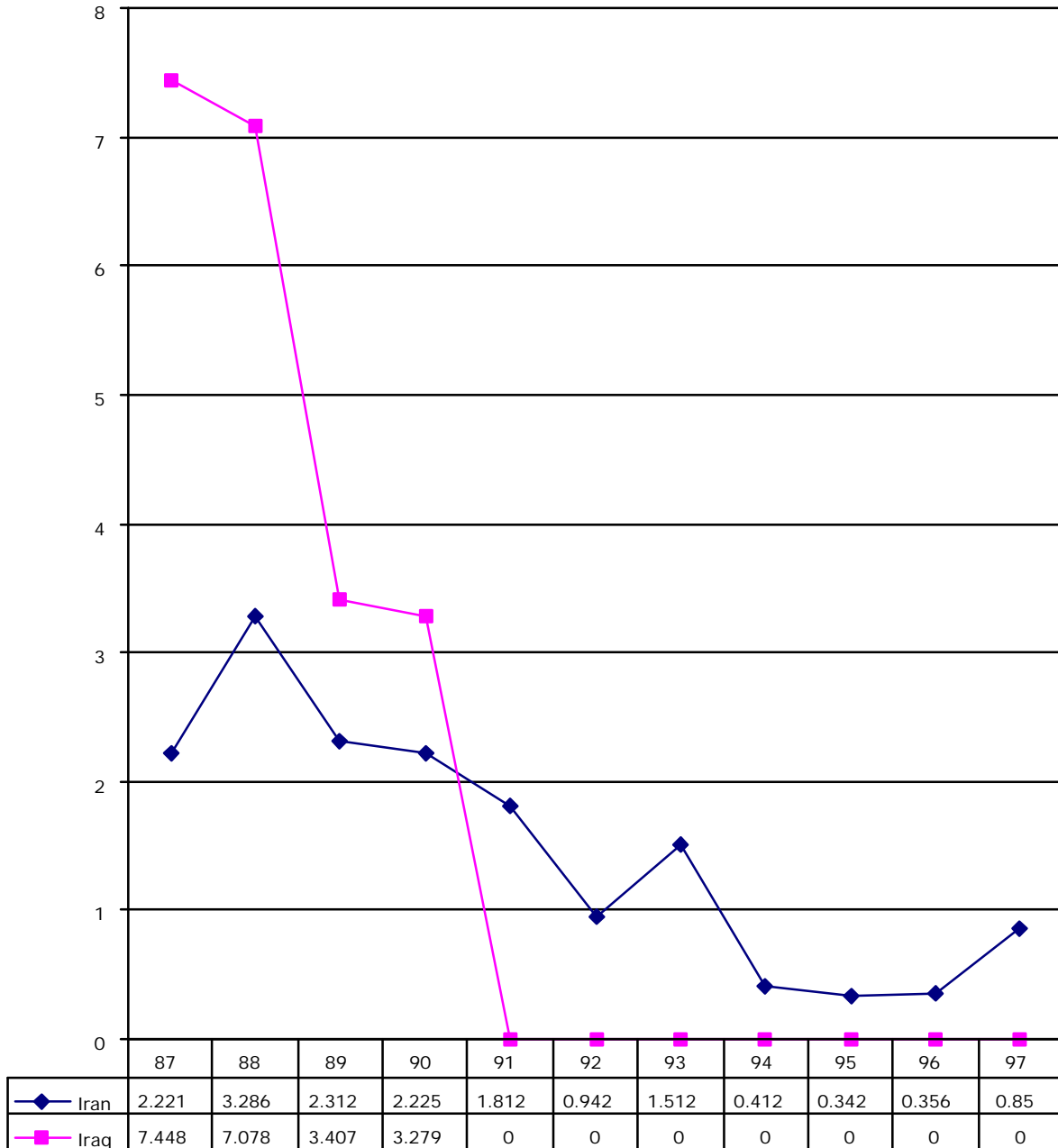
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Do Sanctions Work? Iran and Iraq and the “Train Wreck in the Northern Gulf

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