

The Soviet Whaling Industry, 1970-77

The Soviet Union became the world's leading whaling nation in the 1970's. During the 1977-76 Antarctic and 1976 North Pacific whaling seasons, the Soviet Union caught a total of 11,560 large and 3,034 small whales (Tables 1 and 2). Its catch of large whales was roughly 70 percent of the total world catch and more than triple the catch of its closest competitor, Japan. Its catch of small whales in 1976 was only slightly less than Japan's and in each of the previous three seasons was about 25 percent of the total world catch.

CATCH AND GROUNDS

In the 1970's, the four Soviet expeditionary whaling fleets have harvested four species of large whales: Fin¹, sei, Bryde's, and sperm. Of the four, sperm whales have made up the largest proportion of the annual catches. In the 1975-76 Antarctic and 1976 North Pacific season, sperm whales accounted for 88 percent of the total catch. Table 3 shows the species breakdowns for the 1975 and 1976 catches in all areas and includes provisional data for the 1976-77 Antarctic season. The category "other" under large whales shows the catch of gray whales by the native coastal fishery.

The annual Soviet catches of large whales, broken down by areas, are given in Tables 4 and 5. In 1976, the North Pacific and Bering Sea pelagic fisheries provided 38 percent of the total catch. (The total figure for the Southern Hemisphere includes the catches from the Antarctic pelagic fishery as well as the numbers caught dur-

¹During the 1976-77 and 1977-78 seasons, the Soviet Union did not harvest any fin whales.

ing transit to and from the Antarctic through the South Atlantic, South Pacific, and Indian Ocean.)

The Soviet catch of fin, sei, and Bryde's whales is quite small in comparison with the total catch of sperm whales. In 1976, the catch of fin and sei whales decreased both proportionally and absolutely relative to the total catch as a result of reduced International Whaling Commission (IWC) quotas (Table 4). The catch of fin whales decreased from 414 in 1975 to 88 in 1976, or from 3 percent to 1 percent of the

total catch; the catch of sei whales decreased from 1,632 to 505, or from 11 to 4 percent. In 1976, the catch of fin and sei whales was taken entirely from the Antarctic grounds, whereas in the previous season small numbers of each were also taken in the North Pacific Ocean and the Barents Sea. The catch of Bryde's whales in the North Pacific and the Barents Sea increased slightly from 629 in 1975 to 679 in 1976, or from 4 to 6 percent of the total catch.

The Soviet whaling fleets harvest three species of small whales: Minke, bottlenose, and killer. In the 1970's, the total catch of these small whales has consisted almost entirely of minke whales harvested in the Southern Hemisphere. The catch of minke whales increased suddenly in 1973 presumably because the Soviet Union increased directed whaling for this species in an attempt to offset the sharp decline in its catch of large whales. A year earlier, Japan had begun to catch

Table 1.—Soviet, Japanese, and world catches (total¹) of large whales, all areas, 1970-76.²

| Year | USSR | Japan | World |
|-------------------|--------|--------|--------|
| 1970 | 18,517 | 16,251 | 42,481 |
| 1971 | 15,014 | 15,794 | 38,771 |
| 1972 | 11,204 | 14,039 | 32,133 |
| 1973 | 14,903 | 11,268 | 32,602 |
| 1974 | 15,266 | 10,095 | 31,538 |
| 1975 | 14,456 | 9,450 | 29,179 |
| 1976 ³ | 11,560 | 3,657 | 16,698 |

¹The total number of whales for each year is the sum of the annual catches in the North Pacific and the catches during the split-year Antarctic season, which usually lasts from December through April. This rule also applies to the following tables.

²Source: "International Whaling Statistics," various years.

³Provisional data.

Table 2.—Soviet, Japanese, and world catch (total¹) of small whales, all areas, 1970-76.²

| Year | USSR | Japan | World |
|-------------------|-------|-------|-----------------|
| 1970 | 37 | 636 | 9,810 |
| 1971 | 51 | 623 | 8,865 |
| 1972 | 45 | 3,551 | 11,076 |
| 1973 | 3,695 | 2,744 | 14,652 |
| 1974 | 4,052 | 4,182 | 15,042 |
| 1975 | 3,543 | 3,976 | 14,258 |
| 1976 ³ | 3,034 | 3,405 | NA ⁴ |

¹Excluding U.S. incidental kill of small marine mammals in the tuna fishery.

²Source: Calculated by NMFS from "International Whaling Statistics," LXXVII and LXXIX (Provisional).

³Provisional data.

⁴NA Not available.

Table 3.—Russian catch of large and small whales, 1975-77¹.

| Species | Season | | |
|---------------------|---------------|---------------|----------------------|
| | 1974-75 | 1975-76 | 1976-77 ² |
| Large whales | | | |
| Fin | 414 | 88 | — |
| Sei | 1,632 | 505 | 621 |
| Bryde's | 629 | 679 | — |
| Sperm | 11,606 | 10,125 | 3,841 |
| Other ³ | 175 | 163 | — |
| Total | 14,456 | 11,560 | 4,462 |
| Small whales | | | |
| Minke | 3,500 | 3,017 | 3,950 |
| Bottlenose | 3 | 1 | 2 |
| Killer | 40 | 16 | 29 |
| Total | 3,543 | 3,034 | 3,981 |
| Grand total | 17,999 | 14,594 | 8,443 |

¹Source: "International Whaling Statistics," Vol. LXXVII and LXXIX (Provisional).

²Total for 1976-77 Antarctic season only, including the catch north of lat. 40°S.

³Gray whales—aboriginal catch.

Table 4.—Soviet whaling in the Antarctic season 1975-76 and outside the Antarctic in 1976¹.

| Area | Species | | | | | Total of whales | Percentage of total catch by area ³ |
|--|---------|---------|---------|----------|---------------------|-----------------|--|
| | Fin | Sei | Bryde's | Sperm | Others ² | | |
| Antarctic | 88 | 505 | — | 2,683 | — | 3,276 | 28 |
| Pelagic | (381) | (1,608) | (—) | (3,855) | (—) | (5,844) | (40) |
| North Pacific Ocean and Bering Sea | | | | | | | |
| Pelagic | — | — | 679 | 3,671 | — | 4,350 | 38 |
| Coastal | (33) | (24) | (629) | (3,750) | (—) | (4,436) | (31) |
| Pelagic ⁴ | (—) | (—) | (175) | (175) | (175) | (175) | (1) |
| South Atlantic Ocean | | | | | | | |
| Pelagic ⁴ | (—) | (—) | (—) | 2,124 | (—) | 2,124 | 18 |
| Coastal | (—) | (—) | (—) | (2,290) | (—) | (2,290) | (16) |
| Indian Ocean | | | | | | | |
| Pelagic ⁴ | (—) | (—) | (—) | 515 | (—) | 515 | 4 |
| Coastal | (—) | (—) | (—) | (393) | (—) | (393) | (3) |
| South Pacific Ocean | | | | | | | |
| Pelagic ⁴ | (—) | (—) | (—) | 1,132 | (—) | 1,132 | 10 |
| Coastal | (—) | (—) | (—) | (1,318) | (—) | (1,318) | (9) |
| Total | 88 | 505 | 679 | 10,125 | 163 | 11,560 | 100 |
| Pelagic | (414) | (1,632) | (629) | (11,606) | (175) | (14,456) | (100) |
| Percent of catch by species ³ | 1 | 4 | 6 | 88 | 1 | 100 | |
| | (3) | (11) | (4) | (80) | (1) | (100) | |

¹Figures in parentheses indicate previous year's totals. Source: "International Whaling Statistics," various years.

²Gray whales—aboriginal catch.

³May not add due to rounding.

⁴Antarctic pelagic expeditions on voyage to and from the Antarctic.

Table 5.—Soviet catch of large whales by areas, 1972-76¹.

| Area | 1972 | 1973 | 1974 | 1975 | 1976 ² |
|------------------------------------|--------|--------|--------|--------|-------------------|
| Antarctic, pelagic | 5,807 | 5,647 | 7,233 | 5,844 | 3,276 |
| North Pacific Ocean and Bering Sea | | | | | |
| Pelagic | 2,128 | 5,249 | 4,832 | 4,436 | 4,350 |
| Coastal ³ | 182 | 178 | 183 | 175 | 163 |
| South Atlantic Ocean ⁴ | 1,285 | 2,288 | 1,258 | 2,290 | 2,124 |
| Indian Ocean ⁴ | 1,265 | 522 | 723 | 393 | 515 |
| South Pacific Ocean ⁴ | 537 | 1,019 | 1,037 | 1,318 | 1,132 |
| Total | 11,204 | 14,903 | 15,266 | 14,456 | 11,560 |

¹Source: "International Whaling Statistics," various years.

²Provisional data.

³Gray whales—aboriginal catch.

⁴Antarctic pelagic expeditions on voyage to and from the Antarctic.

large numbers of minke whales for the same reason.

In the 1970's, the Soviet Union's whale catch has generally declined. Its catch of large whales in 1976 was 38 percent less than in 1970 (Table 1). This decline, however, was not as great as that seen in the combined catch of all other countries (79 percent) or in the Japanese catch (78 percent) over the same period. The Soviet catch of small whales, like that of the Japanese, reached its maximum in 1974 with a total of 4,052 individuals and has since declined. The 1976 Soviet catch was 25 percent less than the record of 2 years before.

Although the total Soviet catch has been decreasing at a slower rate than the

combined total of all other countries, the Soviets have adhered to the quotas established by the IWC². Tables 6 and 7 show both the Soviet quotas and catches of individual species in the North Pacific-Bering Sea and the Southern Hemisphere.

²In recent years, the only objections to IWC conservation measures were by both the Soviet Union and Japan in 1973 with respect to minke whale quotas for the 1973-74 season. In previous seasons, specific quotas were not placed on minke whales. The fishing activities of both countries during the 1973-74 season resulted in the taking of almost 8,000 minke whales instead of the IWC recommendation of 5,000.

In the Southern Hemisphere prior to the 1972-73 season, the IWC did not regulate the harvest of individual species, but rather established an overall catch quota expressed in standard blue-whale units, e.g., 1 blue whale = 2 fin = 6 sei, etc. Because this system did not take into account the conditions of individual stocks, a new system of species quotas was introduced for the 1972-73 Antarctic season.

The Soviet whaling fleets in the Southern Hemisphere have generally taken all or nearly all of their quotas each year (Table 6). In the North Pacific Ocean and Bering Sea, however, the fleets have consistently harvested considerably less than permitted by the quotas (Table 7). In the 1976 season,

Table 6.—Soviet whale quotas and catches in the Southern Hemisphere, from 1972-73 to 1976-77¹.

| Season | Q and C ² | Species | | | |
|---------|----------------------|---------|--------------------------|----------|-------|
| | | Fin | Sei/Bryde's ³ | Minke | Sperm |
| 1972-73 | Q | 768 | 1,961 | No quota | 7,900 |
| | C | 619 | 945 | 3,653 | 7,898 |
| 1973-74 | Q | 583 | 1,768 | 4,000 | 7,900 |
| | C | 583 | 1,768 | 4,000 | 7,900 |
| 1974-75 | Q | 402 | 1,608 | 3,500 | 7,856 |
| | C | 381 | 1,608 | 3,500 | 7,856 |
| 1975-76 | Q | 88 | 895 | 3,017 | 6,454 |
| | C | 88 | 505 | 3,017 | 6,454 |
| 1976-77 | Q | 0 | 621/0 | 3,950 | 3,841 |
| | C ⁴ | 0 | 621/0 | 3,950 | 3,841 |

¹Source: "International Whaling Statistics," various years.

²Q = Quota; C = Catch.

³In 1975, the International Whaling Commission for the first time separated sei and Bryde's whales in the establishment of catch limits. Because these two species are difficult to distinguish in the field, they were previously treated together.

⁴Provisional.

Table 7.—Soviet whale quotas and catches in the north Pacific Ocean and Bering Sea, from 1971 to 1976¹.

| Season | Q and C ² | Species | | |
|--------|----------------------|---------|--------------------------|-------|
| | | Fin | Sei/Bryde's ³ | Sperm |
| 1971 | Q | 700 | 1,527 | 7,716 |
| | C | 190 | 934 | 5,525 |
| 1972 | Q | 560 | 1,222 | 6,173 |
| | C | 250 | 142 | 1,736 |
| 1973 | Q | 359 | 983 | 5,725 |
| | C | 161 | 759 | 4,329 |
| 1974 | Q | 304 | 983 | 5,725 |
| | C | 173 | 696 | 3,963 |
| 1975 | Q | 166 | 655 | 5,725 |
| | C | 33 | 653 | 3,750 |
| 1976 | Q | 0 | 0/681 | 4,752 |
| | C ⁴ | 0 | 0/679 | 3,671 |

¹Source: "International Whaling Statistics," various years.

²Q = Quota; C = Catch.

³See note 3 in Table 6.

⁴Provisional.

the differences between North Pacific and Bering Sea quotas and catches were reduced to a certain degree.

THE FLEET

The Soviet whaling fleet in 1976 consisted of 4 motherships and 64 catcher boats (Table 8). The motherships *Vladivostok* and *Dal'ny Vostok*, which are based in Vladivostok, operated in the North Pacific and Bering Sea. These vessels were constructed in the Federal Republic of Germany in the early 1960's and were commissioned in 1962 and 1963, respectively. They are built so that they can be switched over to fish processing following the conclusion of the whaling season.

The motherships *Sovetskaya Ukraina* and *Sovetskaya Rossiya* operated in the Antarctic in 1976, as they have since they were first deployed in 1959 and 1961, respectively. These motherships were constructed in Soviet shipyards and have also been equipped with fish-processing machinery. The *Sovetskaya Ukraina* is based in Il'ichevsk and the *Sovetskaya Rossiya* in Vladivostok.

A total of 31 catcher boats were used in conjunction with the *Vladivostok* and *Dal'ny Vostok* during the 1976 North Pacific whaling season, and 33 boats with the *Sovetskaya Ukraina* and *Sovetskaya Rossiya* during the 1975-76 Antarctic season. Most of the catcher boats used during the various expeditions were probably of the *Mirnyy* class. About 100 of these vessels were constructed between 1956 and 1964 as part of an effort to expand and modernize the whaling fleet and to decrease the purchases of catcher boats abroad. Reportedly, many of them have been equipped to perform both whaling and fishing operations.

Two other classes of catcher boats have also been deployed on whaling expeditions. These are the *Slava* class (39.9 m, 385 GRT) and converted U.S. mine sweepers (56.4 m, 915 GRT). Presumably, these vessels are no longer in use, having been replaced by the more modern *Mirnyy*-class boats.

In the past, the Soviet whaling fleet has included as many as 7 motherships, each of which could support up to 20

Table 8.—The Soviet whaling fleet.

| Vessel | Year built | Length (m) | Size (GRT) | Crew | Major area of operation |
|---------------------------|------------|------------|------------|------|-----------------------------|
| Motherships | | | | | |
| <i>Sovetskaya Ukraina</i> | 1959 | 217.8 | 32,000 | 510 | Antarctic |
| <i>Sovetskaya Rossiya</i> | 1961 | 217.8 | 33,200 | 510 | Antarctic |
| <i>Vladivostok</i> | 1962 | 182.0 | 17,200 | 400 | North Pacific |
| <i>Dal'ny Vostok</i> | 1963 | 182.0 | 17,000 | 400 | North Pacific |
| Catcher Boats | | | | | |
| <i>Mirnyy</i> class | 1956-64 | 63.6 | 825 | 30 | Antarctic and North Pacific |

Table 9.—Soviet production of whale oils and meal, 1970-76¹.

| Year | Oils, Antarctic | | | Oils, Pacific | | | Oils, total | | | Meal |
|------|-----------------|-------|-------|---------------|-------|-------|-------------|-------|-------|------|
| | Sperm | Other | Total | Sperm | Other | Total | Sperm | Other | Total | |
| 1970 | 21.1 | 18.4 | 39.5 | 59.1 | 3.4 | 62.5 | 80.2 | 21.8 | 102.0 | 24.6 |
| 1971 | 18.7 | 18.3 | 37.0 | 47.8 | 2.5 | 52.1 | 66.5 | 20.8 | 87.3 | 21.1 |
| 1972 | 22.0 | 16.6 | 38.6 | 28.1 | 1.5 | 29.3 | 50.1 | 18.1 | 68.2 | 16.2 |
| 1973 | 27.8 | 10.7 | 38.5 | 32.2 | 1.7 | 33.9 | 60.0 | 12.4 | 72.4 | 17.3 |
| 1974 | 29.8 | 12.6 | 42.4 | 30.0 | 1.5 | 31.5 | 59.8 | 14.1 | 73.9 | 18.3 |
| 1975 | 24.2 | 10.3 | 34.5 | 35.0 | 0.8 | 35.8 | 59.2 | 11.1 | 70.3 | 17.1 |
| 1976 | 18.6 | 4.6 | 23.2 | 33.4 | 0.8 | 34.2 | 52.0 | 5.4 | 57.4 | 11.4 |

¹Source: "FAO Yearbook of Fishery Statistics: Fishery Commodities," various years.

catcher boats. As a result of increasing worldwide attempts to protect whales, the Soviet Union has been forced to gradually reduce the size of its fleet. In 1968, the mothership *Slava* was retired and the following year the *Aleut* was sold for scrap. In 1975, the mothership fleet was reduced to its present size, when the *Iuriy Dolgorukiy* ceased its Antarctic operations.

The number of catcher boats deployed in whaling operations has also declined. In 1973, for example, the fleet consisted of 5 motherships and about 100 catcher boats. In 1975, about 80 catcher boats were used in conjunction with the 4 remaining motherships. The following year, only 64 catcher boats were deployed.

Unless otherwise noted, material in this section is from the Foreign Fishery Information Releases (FFIR) compiled by Sunee C. Sonu, Foreign Reporting Branch, Fishery Development Division, Southwest Region, National Marine Fisheries Service, NOAA, Terminal Island, CA 90731, or the International Fishery Releases (IFR) or Language Services Daily (LSD) reports produced by the Office of International Fisheries, National Marine Fisheries Service, NOAA, Washington, DC 20235.

WHALE UTILIZATION

The Soviet Union produces whale oil, whale and bone meal, whale meat, blubber, ventral grooves, whale liver, vitamin A, and other products from its annual whale catch. In terms of quantity, whale oils are the single most important commodity.

The Soviet production of whale oils has decreased at about the same rate as the total catch during the 1970's (Table 9). Total oil production in 1976 was 44 percent less than in 1970, compared with a corresponding 38 percent decrease in the total catch of large whales. The production of sperm whale oil, which has been making up an increasing percentage of the total oil production, has decreased less than the production of oils from other whales: 35 percent as compared with 75 percent between 1970 and 1976. In 1970, sperm whale oil accounted for 79 percent of the total oil production of 102,000 metric tons (t); by 1976 sperm whale oil production had risen to over 90 percent of the total of 57,400 t.

The Soviet production of whale meal, like that of oils, has decreased during the 1970's. Meal production went from 24,600 t in 1970 to 11,400 t in 1976, a 54 percent decrease.

The Soviet whaling industry is also engaged in the production of whale

meat, whale liver, blubber, ventral grooves, vitamin preparations, and other products. Complete statistics on the annual Soviet output of these products, however, are not available. Table 10 shows the Soviet production of whale by-products from the North Pacific pelagic fishery for 1970-75. Similar data does not exist for the Antarctic pelagic fishery.

Statistics on the per capita consumption and industrial uses of whale products in the Soviet Union are not published by the Soviet Government. Though some Soviet nationalities in the Far East do include whale meat in their diets, the majority of Soviet citizens are reportedly not fond of it. Large quantities of the whale meat produced in the Soviet Union are exported to Japan. Some of the whale meat that is retained domestically is used in the production of fish sausages or boiled for use as feed for fur-bearing animals, such as mink.

FOREIGN TRADE

Soviet trade in whale products is dominated almost exclusively by exports; there is little or no import activity. The two major export products are whale oils and meats. Certain other

whale products are also exported but they are not listed separately in Soviet trade statistics. For example, exports of vitamins extracted from whale liver are included in the general category of "medicinal oils from marine products," thus making it impossible to determine the exact quantity of vitamins traded.

Soviet exports of whale oils have declined tremendously in the 1970's. In 1970, oil exports totaled 34,100 t; by 1976, only 1,900 t of oil were exported, a decrease of over 94 percent (Table 11). The value of these exports declined by more than 93 percent over the same period. Soviet exports of whale oils were greatest in the 1960's, when they reached a peak in 1966 at 70,500 t.

Soviet exports of whale oils to various countries in the 1970's are shown in Table 12. As is evident from the table, foreign buyers of Soviet whale oils have become fewer and fewer in number. In 1976, the only major importer of Soviet whale oil was Czechoslovakia, which purchased 800 t. The Netherlands, which at one time imported large quantities of Soviet whale oil, has turned to other sources of supply, Japan being among them. In 1976,

the Soviet Union exported 3.3 percent of its total oil production; in 1970, over 33 percent of its total production was exported.

In contrast to the general downward trends noted in all sectors of the Soviet whaling industry thus far, Soviet exports of whale meat increased between 1970 and 1976 (Table 13). These exports rose by 33 percent during that period, increasing from 13,500 t to 18,000 t. Japan, which has been the primary importer of Soviet whale meat in the 1970's, is now the sole importer. Japanese imports increased from 7,500 t, or 56 percent of total Soviet whale meat exports, in 1970 to 18,000 t, or 100 percent of Soviet exports, in 1976. The sudden increase in Japanese imports in 1973 coincided with the equally sudden increase in the Soviet catch of minke whales, the meat of which is commercially valuable for human consumption. In terms of value, Japanese imports of Soviet whale meat increased by nearly 680 percent between 1970 and 1976, compared with a 240 percent increase in quantity. (Source: IFR-78/93.)

Table 10.—Soviet production of whale by-products (in metric tons) from the North Pacific pelagic fishery, 1970-75¹.

| Year | Meat | Liver | Meat, blubber, ventral grooves | Other | Vitamin A ² |
|------|--------|-------|--------------------------------|-------|------------------------|
| | | | | | |
| 1970 | 11,737 | — | 8,254 | 362 | 10.2 |
| 1971 | 8,892 | — | 5,472 | 495 | 10.1 |
| 1972 | 3,065 | — | 3,634 | 312 | 3.1 |
| 1973 | 4,227 | 108 | 4,613 | 508 | 3.7 |
| 1974 | 3,763 | — | 4,905 | 53 | 4.0 |
| 1975 | 3,364 | — | 4,171 | 267 | 3.7 |

¹Source: "International Whaling Statistics," various years.
²Data is listed in trillions of units.

Table 12.—Soviet exports of whale oils by country, 1970-76¹.

| Country | Year | | | | | | |
|----------------------|-------------------|------|------|------|------|------|------|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
| | 1,000 metric tons | | | | | | |
| Czechoslovakia | 3.2 | 2.0 | 4.9 | 2.1 | 2.1 | 2.0 | 0.8 |
| German Dem. Republic | 3.0 | 1.1 | — | — | — | — | — |
| Hungary | 1.2 | — | — | — | — | — | — |
| Netherlands | 21.5 | 8.7 | 8.4 | — | — | — | — |
| United Kingdom | 4.0 | — | — | — | — | — | — |
| Other | 1.2 | 2.4 | 2.7 | 2.2 | 2.1 | 2.0 | 1.1 |
| Total | 34.1 | 14.2 | 16.0 | 4.3 | 4.2 | 4.0 | 1.9 |

¹Source: "Vneshnyaya Torgoviya SSSR," various years.

Table 11.—Soviet exports of whale oils, 1970-76¹.

| Year | Quantity (1,000 metric tons) | Value | |
|------|------------------------------|--------------|------------|
| | | 1,000 Rubles | 1,000 US\$ |
| 1970 | 34.1 | 7,815 | 8,683 |
| 1971 | 14.2 | 3,399 | 3,777 |
| 1972 | 16.0 | 3,245 | 3,946 |
| 1973 | 4.3 | 899 | 1,215 |
| 1974 | 4.2 | 888 | 1,197 |
| 1975 | 4.0 | 946 | 1,307 |
| 1976 | 1.9 | 432 | 572 |

¹Source: "FAO Yearbook of Fishery Statistics: Fishery Commodities," various years.

Table 13.—Soviet exports of whale meat, 1970-76¹.

| Year | To all countries | | | To Japan | | | Exports to Japan as percent of total |
|------|----------------------------|--------------------|------------|------------------------------|--------------------|------------|--------------------------------------|
| | Quantity 1,000 metric tons | Value ² | | Quantity (1,000 metric tons) | Value ² | | |
| | | 1,000 Rubles | 1,000 US\$ | | 1,000 Rubles | 1,000 US\$ | |
| 1970 | 13.5 | 2,697 | 2,854 | 7.5 | 1,505 | 1,593 | 56 |
| 1971 | 11.5 | 2,623 | 2,914 | 8.0 | 1,847 | 2,052 | 70 |
| 1972 | 10.0 | 2,068 | 2,516 | 6.7 | 1,411 | 1,716 | 67 |
| 1973 | 11.7 | 2,687 | 3,631 | 11.7 | 2,687 | 3,631 | 100 |
| 1974 | 17.2 | 5,005 | 6,745 | 17.2 | 5,005 | 6,745 | 100 |
| 1975 | 15.1 | 4,061 | 5,609 | 15.1 | 4,061 | 5,609 | 100 |
| 1976 | 18.0 | 8,135 | 10,775 | 18.0 | 8,135 | 10,775 | 100 |

¹Source: "Vneshnyaya Torgoviya SSSR," various years.

²US\$ values calculated from annual exchange rates.