



Directorate of
Intelligence

~~Confidential~~ m

23503

23503

Soviet Industry in 1989: Falling Into Disarray

A Reference Aid

CIA HISTORICAL REVIEW PROGRAM
RELEASE AS SANITIZED
1999

CIA/sov - - - - | 90-16012 - - - -



Directorate of
Intelligence

~~Confidential~~

Soviet Industry in 1989: Falling Into Disarray

A Reference Aid

(REVERSE BLANK)

This paper was prepared by the
Office of Soviet Analysis, with
contributions from
SOVA. Comments and queries
are welcome and may be directed to the Chief,

Warning Notice

**Intelligence Sources
or Methods Involved
(WNINTEL)**

**National Security
Information**

**Unauthorized Disclosure
Subject to Criminal Sanctions**

Dissemination Control Abbreviations	NOFORN (NF)	Not releasable to foreign nationals
	NOCONTRACT (NC)	Not releasable to contractors or contractor/consultants
	PROPIN (PR)	Caution—proprietary information involved
	ORCON (OC)	Dissemination and extraction of information controlled by originator
	REL...	This information has been authorized for release to...
	WN	WNINTEL—Intelligence sources or methods involved

A microfiche copy of this document is available from OIR/DLB (482-7177); printed copies from CPAS/IMC (482-5203); or AIM request to userid CPASIMC. Regular receipt of DI reports can be arranged through CPAS/IMC.

Declassify: OADR
Derived from multiple sources

All material on this page
is Unclassified.

**Soviet Industry in 1989:
Falling Into Disarray**

Summary

*Information available
as of 15 February 1990
was used in this report.*

Soviet industry posted no growth in output in 1989, and chances for a turnaround this year are slim. Record high worktime losses last year accounted for much of the dismal showing; Soviet workers saw little reason to put in more effort on the job in the face of widespread consumer goods shortages.

The increased loss of worktime had a snowball effect, spawning transport and other supply bottlenecks and contributing to the underutilization of industrial capacity. Moreover, the effort to retool key industries, such as machine building, showed little progress.

We believe industrial production in 1990 will remain flat at best and probably will fall slightly. A steep decline in output cannot be ruled out, especially in the event of a serious disruption, such as a nationwide strike or widespread unrest in an economically important region.

Heavy industry faces painful cuts in investment as Moscow redirects funding toward consumer goods production. The Soviets are banking on reductions in the backlog of unfinished construction to offset the investment cuts. Still, planned belt-tightening could smother the leadership's modernization effort and lead to declines in output for some industries—particularly energy—that would cause serious bottlenecks throughout the economy.

(REVERSE BLANK)

Contents

	<i>Page</i>
Summary	iii
Overall Industrial Performance	1
Energy	1
Metallurgy	2
Machinery	3
Chemicals	7
Construction Materials	7
Wood Products	8
Soft Goods	9
Processed Foods	11

Table 1
USSR: Growth of Industrial Production *

Average annual rate of growth, percent

	1976-80	1981-85	1986	1987	1988	1989 ^b
Total industry	2.4	2.0	2.5	3.1	2.9	0
Fuels	3.0	0.8	3.3	1.9	1.4	-2.0
Electric power	4.5	3.1	3.6	4.1	2.4	1.0
Ferrous metals	1.1	0.8	3.4	1.4	2.0	-0.5
Nonferrous metals	1.5	2.0	3.0	1.9	3.5	0
Machinery^c	2.1	2.0	2.6	3.8	3.5	0
Chemicals	3.0	3.8	4.8	2.7	2.2	-2.5
Construction materials	0.9	1.8	4.0	3.6	2.5	0.9
Wood products	-0.4	1.9	4.5	2.2	3.2	0
Soft goods	2.4	1.6	1.4	1.7	2.4	1.2
Processed foods^d	1.3	1.8	-4.7	3.6	4.1	4.8

* Official Soviet measures of aggregate growth are generally believed to have an upward bias because of increased double counting over time and disguised inflation. We use official Soviet data for physical output of various commodities to construct synthetic measures of aggregate growth for each industrial branch. The growth rates are estimated by combining the value of a sample of products for each branch, using 1982 value-added weights.

^b Preliminary. Our estimates of individual industry growth rates for 1989, especially those for nonferrous metals, machinery, construction materials, and wood products, are very rough. The Soviets failed to report output data for a large number of key products in our sample in their 1989 plan fulfillment report.

^c Total machinery output (including civilian and military machinery).

^d Including alcoholic beverages. Without alcoholic beverages, processed food output grew an estimated 1.7 percent in 1989.

Soviet Industry in 1989: Falling Into Disarray

Overall Industrial Performance

Last year was a bad one for Soviet industry. After a slow start—output growth during the first six months of 1989 was only about one-half the rate achieved during the same period in 1987-88—performance deteriorated steadily. By December, even by Soviet measures, which often overstate real growth, monthly production was lower than the corresponding period one year before. Overall, we estimate that industrial production showed no growth for the year as a whole. Poor results were registered almost across the board, with absolute declines in output in three of the 10 branches of industry (see table 1). Leading the downturn were the fuels and chemical industries, which failed to overcome persistent production backlogs with traditional last-minute “storming.” Although processed food production was up sharply, partly because of good harvests, much of the gain is attributable to increased production of alcoholic beverages following the leadership’s relaxation of its antialcohol campaign.

Record high worktime losses accounted for much of industry’s dismal showing. According to Soviet officials, absenteeism was up 30 percent from 1988, and some 40 million man-days were lost during the year in industry and construction, the equivalent of 140,000 workers off the job each day. Only 7 million lost man-days were attributed to strikes and ethnic disturbances. Greater worktime losses came from a slackening of labor discipline; workers saw little reason to put in more effort on the job at a time of worsening shortages of consumer goods and declines in the real value of the ruble. Increased work absences led to snowballing supply disruptions and transport bottlenecks and contributed to increased underutilization of production capacity. Moscow reported, for example, that two-thirds of the new enterprises completed over the last two years were operating at only 50 percent of capacity. In addition, numerous managers, operating under new reform measures designed to expand their

decisionmaking authority and increase their independence, reportedly shifted production toward more expensive products and used inflated prices to meet their output goals and boost profits. Such tactics helped enterprises to look good on paper but often masked reductions in real growth.

The industrial outlook for this year is poor. We believe industrial production will remain flat at best and probably will fall slightly. Moscow has already reported negative growth in industrial output for January. A steep decline in production cannot be ruled out, especially in the event of a major disruption, such as a nationwide coal, steel, or railroad strike or severe and widespread unrest in an economically important region such as the Ukraine. A planned cut in investment in the basic industries in favor of consumer goods production would, if implemented, prevent necessary expansion and modernization of the country’s antiquated capital stock. Moscow is counting on reductions in the backlog of unfinished construction to offset much of the cutback in new investment. Still, belt-tightening measures could cause sharp declines in output—especially in the energy industries—which would cause serious bottlenecks throughout the economy. Moreover, increased pressure from citizens and officials alike to close polluting chemical, pulp and paper, and metallurgical enterprises as well as prevent construction of new electric power plants will place additional constraints on the industrial sector in its attempt to maintain output.

Energy

In 1989, for the first time since the 1940s, total Soviet energy production declined in absolute terms. Oil output fell 2.5 percent, forcing Moscow to draw down domestic stocks to limit export cutbacks (see table 2).

Table 2
USSR: Production and Growth of Fuels and Electricity

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Oil^c						
(million b/d)	12.03		12.30	12.48	12.45	12.14
(percent)		-0.2	3.4	1.5	-0.2	-2.5
Natural gas						
(billion cubic meters)	435.2		686.1	727.4	770.0	796
(percent)		8.1	6.7	6.0	5.9	3.4
Coal						
(million raw metric tons)	716		751	760	772	740
(percent)		0.3	3.4	1.2	1.6	-4.1
Electricity						
(billion kilowatt-hours)	1,294		1,599	1,665	1,705	1,722
(percent)		3.6	3.6	4.1	2.4	1.0

^a Growth rates shown are annual averages for 1981-85.

^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates.

The reported volumes and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either calculated from volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.
^c Including gas condensate.

The oil industry is hamstrung by problems that are certain to persist—major producing areas are mature and in decline, and the Soviets lack the necessary technology to exploit major new areas such as the North Caspian Basin and the Barents Sea. Last year, these problems were compounded by inadequate investment and shortfalls in equipment production and installation.

Production of natural gas increased last year, but by the smallest increment in more than a decade. Production suffered from supply constraints similar to those that plagued the oil industry as well as from reduced investment and the increasing burden of maintaining the vast gas pipeline network. Coal output fell 32 million tons in 1989, the first decline in annual production since 1984. The industry was shaken by last summer's strikes, which caused a direct loss of 7 million tons and slowed mining for several months after miners returned to work. Mine operations were hampered as well by a shortage of railcars that delayed coal loading.

Electricity production increased a modest 1 percent in 1989, and maintaining output at current levels is becoming a problem of crisis proportions. Past failure to complete sufficient fossil-fuel-fired plants and the slowdown in nuclear reactor construction have resulted in a severe shortfall in generating capacity.

Metallurgy

Output of most metals declined in 1989, after posting healthy increases in 1988. Crude steel production fell nearly 2 percent, and output targets for aluminum, copper, lead, and zinc went unmet (see table 3). The State Committee for Statistics (Goskomstat) reported that only one in three metallurgical enterprises fulfilled its contract commitments last year. The industry was also criticized for shortfalls in output of more advanced products such as high-grade steels and specialized pipe.

Table 3
USSR: Production and Growth of Ferrous Metals *

	1980	1981-85 ^b	1986	1987	1988	1989 ^c
Crude steel						
(million metric tons)	147.9		160.6	162	163	160
(percent)		0.9	3.8	0.8	0.7	-1.8
Rolled steel products						
(million metric tons)	102.9		112.0	114.1	116.0	NA
(percent)		1.0	3.4	1.9	1.7	-0.4
Steel pipe						
(million metric tons)	18.2		19.8	20.3	20.8	20.6
(percent)		1.3	2.4	2.5	2.5	-1.0
Iron ore						
(million metric tons)	244.7		250.0	251	250	241
(percent)		0.2	1.0	0.4	-0.4	-3
Manganese ore						
(million metric tons)	9.8		9.3	9.4	9.1	NA
(percent)		0.2	-6.1	1.1	-3.2	NA

* The Soviets do not report production of any nonferrous metals.

^b Growth rates shown are annual averages for the period 1981-85.

^c Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State

Committee for Statistics, which also reports annual growth rates. The reported volumes and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either calculated from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.

Moscow blamed inadequate deliveries of scrap and shortages of coking coal, stemming from last summer's coal strikes, for the steel industry's poor performance. Increased enterprise autonomy, resulting from decentralizing reforms, also reportedly caused problems. Several enterprises, for example, were castigated in the press for exporting scrap metal, stainless steel, and other metal products at the expense of domestic consumers to earn hard currency and boost profits. In the nonferrous metals sector, part of the blame for production difficulties was placed on shortfalls in the supply of energy, particularly hydroelectric power in East Siberia

Goskomstat reported that overall air pollution attributable to the metals industry was reduced in 1989, but the industry continues to be blamed for heavy air and water pollution in cities in the Urals, the

Ukraine, Kazakhstan, and the Soviet Far East. So far, however, we have seen no environmentally motivated closures or conversions of metals plants similar to those that have caused output shortfalls in the chemical and wood products industries.

Machinery

Overall machinery output showed no growth in 1989. A decline in military machinery production offset gains in civil machine-building output. With the exception of automobiles, consumer durables output increased in 1989 as compared with 1988 (see table 4). Machine builders generally failed, however, to meet ambitious plan targets for producing major appliances levied on them by the leadership

Confidential

Table 4
USSR: Production and Growth of Selected Items of Machinery

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Turbines						
(million kilowatts)	19.6		20.9	22.2	21.1	NA
(percent)		2.0	-3.2	6.2	-5.0	NA
Generators						
(million kilowatts)	16.1		14.9	12.6	13.7	NA
(percent)		-5.2	21.1	-15.4	8.7	NA
AC electric motors						
(million kilowatts)	51.8		55.8	54.6	54.0	NA
(percent)		1.1	1.8	-2.2	-1.1	NA
Metalcutting machine tools						
(billion 1982 rubles)	1.861		2.922	2.838	3.085	NA
(percent)		7.6	9.0	-2.9	8.7	NA
Numerically controlled machine tools						
(thousands)	8.9		20.3	21.0	22.3	23.7
(percent)		14.9	14.0	3.4	6.2	6.3
Industrial robots						
(thousands)	1.4		15.4	14.7	9.6	NA
(percent)		56.6	16.7	-4.5	-34.7	NA
Instruments and automation equipment						
(billion 1982 rubles)	3.436		4.800	5.002	5.419	5.6
(percent)		5.7	5.9	4.2	8.3	6
Computer equipment						
(billion 1982 rubles)	2.403		4.761	5.538	6.518	7.7
(percent)		11.8	13.3	16.3	17.7	20
Agricultural machinery^c						
(billion 1982 rubles)	5.128		6.937	7.107	6.935	6.4
(percent)		5.1	5.4	2.5	-2.4	-7
Tractors						
(thousands)	555		595	567	559	532
(percent)		1.1	1.7	-4.7	-1.4	-4.8
Excavators						
(thousands)	42.0		42.9	41.5	41.7	36.4
(percent)		0.3	0.7	-3.3	0.5	-12.7
Chemical equipment						
(billion 1982 rubles)	0.770		0.968	0.942	1.031	1.1
(percent)		4.0	3.4	-2.7	9.4	2
Oil industry equipment						
(million 1982 rubles)	201		248	241	270	229
(percent)		2.6	8.3	-2.8	12.0	-15.2

Confidential

Table 4 (continued)

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Radios						
(millions)	8.478		8.924	8.143	8.025	8.6
(percent)		8.6	0.8	-8.8	-1.4	7
Television sets						
(millions)	7.528		9.436	9.081	9.637	9.9
(percent)		4.5	0.7	-3.8	6.1	3
Refrigerators and freezers						
(millions)	5.932		5.948	5.984	6.231	6.5
(percent)		-0.2	1.5	0.6	4.1	4
Washing machines						
(millions)	3.826		5.383	5.779	6.104	6.7
(percent)		5.8	6.2	7.4	5.6	10
Automobiles						
(millions)	1.327		1.326	1.332	1.262	1.217
(percent)		0.1	-0.5	0.5	-5.3	-3.6

^a Growth rates shown are annual averages for 1981-85.

^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates.

The reported volumes and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either calculated from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.

^c Including equipment for livestock and feed production.

Production of producer durables also rose last year, but at a slower pace than in 1988. Of 65 key machine-building projects scheduled for completion in 1989, moreover, only 40 were actually put into service. Shortfalls in the supply of critical oil equipment and agricultural machinery—which, according to Soviet sources, worsened during the year—reportedly created serious problems in other sectors of the economy. According to the chairman of Goskomstat, interruptions of supplies were aggravated by “excessive concentration” throughout the industry. Output of diesel locomotives fell, for example, largely because of delivery shortfalls by the sole Soviet manufacturer of critical electrical parts.

Some machine builders engaged in consumer goods production benefited substantially from the government's crash program to improve Soviet living standards. They received heightened priority in the allocation of raw materials and investment and, therefore, avoided many of the supply disruptions that plagued the rest of the industry. Although Moscow's highly touted program to convert many military production lines to civilian use made little progress, the defense industries raised output at shops traditionally dedicated to consumer goods production.

Confidential

Table 5
USSR: Production and Growth of Selected Chemicals

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Mineral fertilizers						
(million metric tons 100% nutrient equivalent)	24.8		34.7	36.3	37.1	34.3
(percent)		6.0	4.5	4.6	2.2	-7.5
Pesticides						
(thousand metric tons 100% active ingredient)	282		332	327	317	NA
(percent)		4.2	-4.0	-1.5	-3.1	NA
Caustic soda						
(million metric tons)	2.755		3.229	3.288	3.323	3.2
(percent)		2.1	5.7	1.8	1.1	-4
Sulfuric acid						
(million metric tons)	23.033		27.847	28.531	29.372	28.3
(percent)		2.5	7.0	2.5	2.9	-4
Synthetic resins and plastics						
(million metric tons)	3.627		5.345	5.488	5.675	5.8
(percent)		6.7	6.5	2.7	3.4	2
Chemical fibers						
(million metric tons)	1.176		1.480	1.517	1.555	1.6
(percent)		3.5	6.2	2.5	2.5	0.2
Motor vehicle tires						
(million units)	60.1		66.0	67.8	69.1	NA
(percent)		1.6	1.2	2.7	1.9	NA
Synthetic detergents						
(million metric tons)	1.012		1.193	1.244	1.301	NA
(percent)		2.6	3.7	4.3	4.6	NA ^c

^a Growth rates shown are annual averages for 1981-85.

^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates.

The reported volumes and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either calculated from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.

^c Production of synthetic detergents (in "small packages") reportedly grew 10 percent in 1989.

A variety of problems were responsible for last year's checkered performance. Both press accounts [] [] have noted that, under self-financing, machinery producers frequently met plan targets—which are measured in rubles—by raising prices on the basis of spurious improvements in

quality. Producers also adjusted their output mix toward higher priced items to ease the task of plan fulfillment. There were numerous complaints throughout the year about machinery enterprises ignoring their customers' needs and violating contract obligations to increase profits.

Confidential

Probably more disturbing to the Soviet leadership was the increased slippage in the industrial modernization program that occurred in 1989. Senior officials criticized machine builders for slow replacement of obsolete equipment and poor assimilation of scientific and technological advances. At the end of 1989, the proportion of machinery 20 years or older that was still in service rose to 11 percent. Moreover, Soviet survey results show that the amount of time equipment was in use at machine-building plants—the so-called shift coefficient—dropped from 12.8 hours per day in 1988 to 12.6 hours last year. On a daily basis, one in five enterprises had its machinery in operation for less than one eight-hour shift.

Chemicals

We estimate that overall output of the chemical industry fell sharply last year, compared with 2.2-percent growth in 1988. Strikes, ethnic conflicts, a drop in labor and management discipline, and widespread transport bottlenecks, which resulted in slow deliveries of needed supplies, all contributed to the decline in chemical production. A shortage of tank cars, the slow implementation of reforms, the June reorganization of the chemical ministries, failure of construction enterprises to complete investment projects on time, and the slow pace of retooling also compounded the chemical industry's troubles.

The industry was criticized in the press throughout the year for failing to meet production quotas, especially for ammonia, soda ash, sulfuric acid, caustic soda, and structural plastics (see table 5). Ministry officials were also faulted for not meeting targets for the production of consumer goods. Nearly one-half of chemical industry enterprises failed to meet contract commitments in 1989.

Chemical production was also hampered by work stoppages resulting from concern for pollution, and a rash of industrial accidents took their toll. Environmentalists forced a cutback in sulfur production at the Astrakhan' gas-processing facility, which in turn reduced production of sulfuric acid and phosphate

fertilizer. The explosion of a liquefied petroleum gas pipeline in June interrupted supplies of feedstock to plants producing plastics and synthetic rubber. Another accident, in Lithuania, disrupted regional supplies of fertilizer.

Construction Materials

Production of construction materials rose less than 1 percent in 1989, a falloff from the 2.5-percent growth registered in 1988. Cement output increased slightly, but Moscow failed to report production of precast ferroconcrete or window glass, two of the industry's most important products (see table 6). The Soviets traditionally omit data for sectors that do poorly. The laggard performance of the industry, coupled with ever-present transport bottlenecks, delayed construction projects throughout the country. In Armenia, a blockade of supplies from Azerbaijan came on top of the industry's production problems, bringing the building of critically needed housing in the earthquake zone to a standstill.

The reasons for the industry's bad showing last year were not unique to construction materials production. These included the piecemeal implementation of economic reforms; managers and workers often tried in vain to follow confusing new procedures while attempting to meet plan targets. Although slower growth would not be incompatible with one of the main goals of reform—higher quality at reduced cost—available evidence suggests little progress in lowering costs or raising quality. Both industrial buyers and consumers are demanding higher quality building materials and rejecting low-quality products. The abolishment of the Ministry of the Construction Materials Industry in June—its responsibilities have been transferred to the State Construction Committee—was designed to facilitate the production and distribution of construction materials, but so far the change has had little effect on the industry's performance.

Table 6
USSR: Production and Growth of Construction Materials

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Cement						
(million metric tons)	125.0		135.1	137.4	139.5	140
(percent)		0.9	3.3	1.7	1.5	0.7
Precast ferroconcrete						
(million cubic meters)	122		142	149	153	NA
(percent)		2.2	4.4	4.9	2.7	NA
Wall materials						
(billion conventional bricks)	58.0		61.6	62.8	65.8	NA
(percent)		0.4	4.2	1.9	4.8	NA
Soft roofing and insulation materials						
(billion square meters)	1.723		2.002	1.983	2.010	2.0
(percent)		2.3	3.8	-0.9	1.4	-2
Window glass						
(million square meters)	245		256	252	250	NA
(percent)		-0.2	5.3	-1.6	-0.8	NA

^a Growth rates shown are annual averages for 1981-85.

^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates.

The reported volumes and growth rates, however, embody different degrees of rounding. The rates shown here are either calculated directly from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.

Wood Products

Output of the wood products industry last year showed no increase, down from 3.2 percent in 1988. The industry came under fire from the central authorities throughout 1989 for failing to meet production goals: both paper and cardboard output fell in absolute terms (see table 7). Only a 7 percent increase in furniture production—measured in value terms—saved the industry from an absolute decline in output.

Although the Soviets failed to report actual output of commercial timber in 1989, they complained that the economy was undersupplied by 15 million cubic meters—about 5 percent of recent annual production. Several pulp and paper plants were forced to close or restructure their product mix as a result of increased local and regional concern for environmental damage. In combination with inadequate raw timber supply and widespread transport bottlenecks, such closures led to a nationwide shortage of paper and newsprint. Early this year, several newspapers were forced to cut

Table 7
USSR: Production and Growth of Wood Products

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Commercial timber						
(million trimmed cubic meters)	278		296	303	305	NA
(percent)		0.2	5.3	2.4	0.7	NA
Paper						
(million metric tons)	5.288		6.156	6.191	6.322	6.3
(percent)		2.5	2.8	0.6	2.1	-0.1
Newsprint						
(billion square meters)	30.0		34.5	35.8	36.5	37.1
(percent)		2.1	3.6	3.8	2.0	1.6
Pulp						
(million metric tons)	7.132		8.663	8.633	8.749	NA
(percent)		3.3	3.5	-0.3	1.3	NA
Cardboard						
(million metric tons)	3.445		4.239	4.375	4.499	4.3
(percent)		3.2	5.1	3.2	2.8	-4.4
Furniture						
(billion 1982 rubles)	5.678		8.312	8.703	9.400	NA
(percent)		7.0	4.5	4.7	8.0	7

^a Growth rates shown are annual averages for 1981-85.

^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates.

The reported volume and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either calculated from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure annual growth.

back the size and number of issues published. Moscow also blamed increased private building activity for the insufficient availability of wood products for the consumer. Huge forest fires—attributed by the Soviets to human carelessness—also played havoc with timber supplies. Central Siberia lost 14 million cubic meters of timber resources to fire, and 200,000 hectares of forest were destroyed on Sakhalin Island.

Soft Goods

Output of the soft goods industry rose by only an estimated 1.2 percent last year, despite high consumer demand. Calculated from data in physical terms, growth rates for the major categories of light industry products were all below 1988 levels. Production of knitwear rose by 1.7 percent, while output of textiles,

~~Confidential~~

Table 8
USSR: Production and Growth of Soft Goods

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Textiles						
(billion square meters)	10.746		12.310	12.721	13.066	13.1
(percent)		2.3	2.1	3.3	2.7	0.6
Knitwear						
(billion articles)	1.623		1.775	1.831	1.890	1.923
(percent)		1.3	2.5	3.2	3.2	1.7
Sewn goods						
(billion 1982 rubles)	23.5		26.3	26.3	27.0	NA
(percent)		2.0	1.2	0	2.7	NA
Leather footwear						
(million pairs)	743		801	809	819	827
(percent)		1.2	1.6	1.0	1.2	1.0
Hosiery						
(billion pairs)	1.669		1.968	2.044	2.107	2.098
(percent)		2.7	3.1	3.9	3.1	-0.4

^a Growth rates shown are annual averages for 1981-85.

^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates.

The reported volumes and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either calculated from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.

hosiery, and footwear grew by 1 percent or less (see table 8). Growth in production of clothing and footwear for children and the elderly, moreover, continued at a slow pace, and these products reportedly all but disappeared from store shelves in 1989 as demand outstripped supply.

Despite these poor physical production figures, Goskomstat's yearend plan fulfillment report indicates that light industry output, measured in retail prices, rose by nearly 5 percent. We estimate that more than one-half of this increase resulted from price hikes, because enterprises continued to increase production of expensive items while dropping cheaper goods from their product lines in order to boost profits

The industry's failure to commission new productive capacity was partly responsible for its poor showing last year. Only about two-thirds of the projects scheduled for completion in 1989 were actually put in operation. The textile sector, for example, brought on only about 80 percent of planned new capacity on stream, and commissionings elsewhere in the industry ranged from 40 to 65 percent of targets. Moreover, the failure to replace obsolete equipment in existing factories meant continued shortages for consumers.

~~Confidential~~

Processed Foods

Excluding alcoholic beverages, growth of processed foods production rose by an estimated 1.7 percent last year. If alcoholic beverages are included, output of which went up 19 percent in 1989, the industry's overall growth rises to 4.8 percent. Production of mineral water and other nonalcoholic beverages also increased (see table 9, pages 12 and 13). Production of granulated sugar and vegetable oil—both of which reportedly were in short supply in state stores—grew at healthy rates. Slow but steady growth in output of processed meat and dairy products was made possible by continued stability in livestock procurements. Edible fish production fell, perhaps because of sporadic strikes in the fishing industry, and smaller state purchases of fruits and vegetables forced a decline in output of some canned goods. Despite increased production of most processed foods, shortages are increasing as a result of distribution problems and hoarding.

The defense industries, charged with producing equipment to modernize and expand the industry's decrepit capital base, were sharply criticized for high machinery prices and falling output of many items. Moreover, other industries are refusing to produce some food-packaging materials because low state-set prices make them unprofitable to produce under self-financing.

Goskomstat resumed publication of data on tea and salt production in its 1989 report. Officials may be trying to provide the press with evidence to reassure consumers and slow panic buying.

~~Confidential~~

Table 9
USSR: Production and Growth of Processed Foods

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Meat^c						
(million metric tons)	9.140		11.670	12.243	12.826	12.9
(percent)		3.4	8.0	4.9	4.8	0.9
Sausage products						
(million metric tons)	3.074		3.555	3.713	3.853	3.9
(percent)		2.1	4.1	4.4	3.8	2
Fish						
(million metric tons)	5.0		5.7	5.7	6.0	5.7
(percent)		2.3	1.8	0	5.3	-4
Animals fats and oils^d						
(million metric tons)	1.278		1.612	1.672	1.724	1.7
(percent)		3.5	6.3	3.7	3.1	0.4
Whole milk products						
(million metric tons)	25.5		31.3	32.5	33.5	34.6
(percent)		3.2	5.0	3.8	3.1	3.3
Margarine products						
(million metric tons)	1.263		1.455	1.535	1.494	1.5
(percent)		2.2	3.1	5.5	-2.7	0.6
Vegetable oil						
(million metric tons)	2.650		2.882	2.950	3.142	3.2
(percent)		-0.8	13.2	2.4	6.5	3
Granulated sugar						
(million metric tons)	10.1		12.7	13.7	12.1	13.3
(percent)		3.2	7.6	7.9	-11.7	11
Confectionary goods^e						
(million metric tons)	3.861		4.447	4.631	4.859	5.1
(percent)		2.1	3.8	4.1	4.9	5
Canned goods						
(billion standard cans)	15.270		19.968	20.548	21.109	20.9
(percent)		3.3	11.0	2.9	2.7	-1
Nonalcoholic beverages						
(million dekaliters)	351		495	531	606	613
(percent)		1.8	29.2	7.3	14.1	1.2
Mineral water						
(million dekaliters)	111		148	159	169	173
(percent)		3.2	13.8	7.4	6.3	2.4
Vodka products						
(million dekaliters)	295		147	123	142	NA
(percent)		-4.2	-38.2	-16.3	15.4	NA ^f

~~Confidential~~

Table 9 (continued)

	1980	1981-85 ^a	1986	1987	1988	1989 ^b
Grape wines						
(million dekaliters)	323		141	147	179	NA
(percent)		-3.9	-46.8	4.3	21.8	NA ^c
Brandy						
(million dekaliters)	9.4		6.7	9.5	11.8	NA
(percent)		-5.7	-4.3	41.8	24.2	NA ^c
Sparkling wines						
(million bottles)	178		195	225	258	NA
(percent)		6.9	-21.4	15.4	14.7	NA ^c
Beer						
(million dekaliters)	613		489	507	558	NA
(percent)		1.4	-25.6	3.7	10.1	NA ^c

^a Growth rates shown are annual averages for 1981-85.
^b Preliminary. Apparent discrepancies between volume and growth indicators for 1989 are the result of Soviet reporting practices. Production volumes shown are those reported by the Soviet State Committee for Statistics, which also reports annual growth rates. The reported volumes and growth rates, however, embody different degrees of rounding. The rates of growth shown here are either

calculated from the volume data or taken directly from Soviet reporting, whichever yields the more precise measure of annual growth.
^c Industrially processed meat.
^d Excluding production from private sources.
^e Excluding production by food-service enterprises.
^f Total production of alcoholic beverages—in volumetric terms—reportedly increased by 19 percent in 1989.