

CONSEIL DE L'ATLANTIQUE NORD
NORTH ATLANTIC COUNCIL

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WORKING PAPER
AC/127-WP/387

ECONOMIC COMMITTEE

ESTIMATED MACHINERY ORDERS BY EASTERN COUNTRIES IN 1973

Note by the Chairman

Attached is an estimate by the International Staff of a "leading indicator" of East-West trade trends in 1973 - the volume of new orders placed by the USSR and Eastern Europe in the West during that year.

2. The estimate is a preliminary one, based on a fairly limited selection of UNCLASSIFIED sources including Eastern and Western media reports. Arrival at a general consensus concerning this leading indicator would be most useful.

3. To this end, delegations are invited to confirm or revise the estimate or otherwise to provide further relevant information.

(Signed) Y. LAULAN

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ESTIMATED WESTERN MACHINERY ORDERS BY EAST
IN 1973 RISE 25% OVER RECORD HIGH OF 1972

Note by the Economic Directorate

1. Orders by Warsaw Pact countries for Western machinery and technology broke past records again last year. Such purchases of machinery for delivery amounted to \$3.3 billion, or about 27% more than the 1972 total, which was approximately double the maximum amount of previous years (see Annex I). The increases of both years remain considerable even after allowances are made for dollar devaluation (about 10% each year) and inflation.

2. Changes in new orders, in the East as in the West, are significant for several reasons. First, the rise in Soviet/East European machinery orders may presage an eventual increase of roughly similar degree in extension of medium/long-term export credits by industrialised Western countries. Furthermore, while small relative to Western machinery production (about \$25 billion for France alone in 1970) and total Soviet investment (perhaps \$130 billion in 1970), new orders indicate the future volume of Eastern machinery imports, which accounted for about 3/8 of total Soviet imports in hard currencies in 1972. Such acquisitions of Western technology represent a major Eastern objective in East-West trade and one of the principal growth possibilities therein. Finally, new orders reflect the degree of confidence of both sides in Eastern credit-worthiness, in Eastern economic prospects generally, and (to some extent) in East-West détente.

3. In 1973 the USSR continued to account for about 3/4 of total Eastern machinery orders (see Annex I) as well as the bulk of those placed in the industrial West on relatively easy payment terms. Self-liquidating projects and credits, which are ultimately repayable by the East with products of the Western equipment originally provided under the credit, represented only 15% of East European orders but about 64% of the USSR's (see Annexes II and III). Soviet industrial co-operation arrangements of this type with the West concentrated largely on chemical plant and equipment and auxiliary installations. Over 90% of Eastern European orders originated in Rumania and Poland. For the second successive year, such purchases exceeded \$300 million in the case of Poland, whose general economic situation has been strengthened by its dynamic economic growth, by rising world demand for coal and by the increasing competitiveness of its own engineering industry, which received substantial orders from the West last year (see Annex III).

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4. NATO countries were the beneficiaries of about 85% of the Eastern machinery orders placed in the West in 1973, as in 1972 (Annex I). The United States received the largest amount totalling about \$1.3 billion, followed by Italy, West Germany, France and Japan (\$300-540 million apiece) in that order (see Annexes II and III).

5. As regards possibilities for continuance or further increases in such high levels of Eastern orders, the recent emergence of shortages of fuel and other materials in industrialised Western countries injects considerable new uncertainties. Prospects for East European countries, excepting Rumania, appear relatively unfavourable. The rise in world oil prices should ultimately be reflected in oil exports by the USSR to its allies, in effect absorbing a larger proportion of their exports and thus decreasing their ability to repay credits - and to place machinery orders - in the West. The USSR may also lose in certain respects from the oil-price rise, which may lead to substantial redirection to Persian Gulf countries (the primary oil suppliers) of Western machinery exports and capital markets. On the other hand, the USSR is itself a minor exporter of oil and a major exporter of other minerals, and may accordingly, on balance, remain relatively competitive for Western credits and industrial co-operation. arrangements in this field.

ESTIMATED ORDERS OF THE USSR AND EASTERN EUROPE
FOR WESTERN MACHINERY AND TECHNOLOGY 1971-1973

(\$ Millions)

	1971		1972		1973	
	TOTAL	(NATO)	TOTAL	(NATO)	TOTAL	(NATO)
Total Eastern Countries	1,059	(757)	2,590	(2,173)	3,314	(2,912)
USSR	841	(644)	1,965	(1,659)	2,473	(2,171)
Eastern Europe	218	(113)(1)	625	(514)	841	(741)
Rumania	72	(72)	32	(32)	476	(464)
Poland	70	(23)	427	(370)	301	(254)
Bulgaria	-	-	53	(53)	48	(13)
Czechoslovakia	17	(17)	91	(46)	12	(8)
Hungary	59	(1)	22	(13)	4	(2)

Sources: USSR, 1971 and 1972 - "Soviet Economic Prospects for the Seventies" - article by Mr. J.T. Farrell, published by the Joint Economic Committee, US Congress, 24th June, 1973.

Other data: See Annex III, page 1, footnote (1).

(1) Probably understated.

ESTIMATED ORDERS BY THE USSR AND EASTERN EUROPE FOR WESTERN MACHINERY AND TECHNOLOGY,
1973 INCLUDING SHARE OF SELF-LIQUIDATING PROJECTS(1): BY WESTERN AND EASTERN COUNTRIES

(\$ Millions; (%) indicates share accounted for by self-liquidating projects)

Purchaser Supplier	TOTAL East	USSR	Eastern Europe	Rumania	Poland	Bulgaria	Czecho- slovakia	Hungary
TOTAL West	3,314 (52%)	2,473 (64%)	841 (15%)	476 (17%)	301 (5%)	48 (69%)	12 (-)	4 (50%)
<u>NATO Countries</u>	2,912 (54%)	2,171 (68%)	741 (11%)	464 (14%)	254 (6%)	13 (-)	8 (-)	2 (-)
France	433 (70%)	414 (72%)	19 (20%)	-	6 (67%)	13 (-)	-	-
FRG	498 (12%)	357 (15%)	141 (4%)	9 (33%)	130 (2%)	-	2 (-)	-
Italy	537 (93%)	532 (94%)	5 (20%)	5 (20%)	-	-	-	-
Netherlands	5 (-)	-	5 (-)	-	5 (-)	-	-	-
Norway	23 (-)	17 (-)	6 (-)	-	-	-	6 (-)	-
United Kingdom	145 (42%)	81 (-)	64 (95%)	61 (100%)	1 (-)	-	-	2 (-)
United States	1,271 (50%)	770 (81%)	501 (3%)	389 (1%)	112 (9%)	-	-	-
Austria	4 (-)	-	4	-	-	-	-	-
Japan	303 (48%)	209 (48%)	94 (15%)	12 (100%)	47 (-)	35 (94%)	-	-
Sweden	73 (3%)	71 (-)	2 (100%)	-	-	-	-	2 (100%)
Switzerland	22 (-)	22 (-)	-	-	-	-	-	-

Source: See Annex III, page 1, footnote (1)

(1) Self-liquidating projects and credits are those that are repaid over time by the Eastern recipient with products of the Western equipment ordered.

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ORDERS PLACED FOR MACHINERY AND TECHNOLOGY BY THE
USSR AND EASTERN EUROPE IN INDUSTRIAL WESTERN
COUNTRIES (AND VICE VERSA) IN 1973(1)
(\$ MILLION)

(1)	(2)	(3)	(4)
<u>Eastern and</u> <u>Western</u> <u>Customers &</u> <u>Suppliers</u>	<u>Item</u> <u>Ordered</u>	<u>Total</u>	<u>Value</u> <u>Self-liquidating(2)</u>
I. <u>USSR: Orders placed in the West</u>		<u>2,473</u>	<u>1,578</u>
<u>NATO Countries: Total</u>		<u>2,171</u>	<u>1,478</u>
<u>France: Total</u>		<u>414</u>	<u>300</u>
	Cellulose plant	180	180
	Three styrene/ethylene plants(3)	115	115
	Anode plant	42	
	40,000 tons of seamless pipe	19	
	Textile equipment	17	
	Cigarette lighter plant	12	
	Communications cables	10	
	Twenty oil-pipeline compressors	5	
	Pipe-threading equipment	5	5
	Aircraft data system	3	
	50 truck trailers	3	
	Crushing machinery	3	
<u>FRG: Total</u>		<u>357</u>	<u>54</u>
	Transmission gear plant (for Kama truck factory)	125	
	Polyester fibre plant	68	
	Polyethylene plant	54	54
	Aluminium coating equipment	32	
	Electrical equipment for rolling mill	24	
	Slab casting plant	20	
	Cigarette filter plant	14	
	Aluminium rolling mill	12	
	Conveyors for ZIL truck factory	8	

- (1) Source: Collation by International Staff of reports from Western and Eastern media and other UNCLASSIFIED sources.
- (2) Self-liquidating projects and credits are those that are repaid by the Eastern recipient with products of the Western equipment ordered.
- (3) Order placed with group consisting of French and US companies.

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(1)	(2)	(3)	(4)
<u>Italy: Total</u>		<u>532</u>	<u>500</u>
7 chemical plants (e.g. ammonia, urea, titanium dioxide)		500	500
Materials handling system for aluminium foundry		22	
Confectionery plant		5	
Pipeline valves		5	
<u>Norway: Total</u>		<u>17</u>	
Fish-factory ships		15	
Paper-felt production equipment		2	
<u>United Kingdom: Total</u>		<u>81</u>	
Cellulose triacetate spinning and processing plant		65	
Razor blade plant		9	
Chloroprene monomer plant		4	
Brake-shoe plant		3	
<u>United States: Total</u>		<u>770</u>	<u>624</u>
Port facilities on Black Sea(1)		400	400
Chemical fertilizer plants(1)		200	200
Trade centre: offices and hotel for foreign business representatives		50	
Acetic acid plant		45	
Compressors for gas pipelines		25	
Bicycle and motorcycle plants		19	19
Blast furnaces		15	
Knitting machinery		6	
Soft-drink bottling plant		5	5
Forge machinery (for Kama truck factory		3	
5,000 containers		2	

(1) Portions of projects in agreement with the Occidental Corporation that appear to be under way. Total Occidental agreement reportedly amounts to about \$4 billion, is self-liquidating and covers chemical fertilizer plants, pipelines, port facilities, and superphosphoric acid to be provided by Occidental under credits.

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(1)	(2)	(3)	(4)
<u>Japan: Total</u>		<u>209</u>	<u>100</u>
Paper plant		100	100
Air-conditioner plant		75	
Heavy presses		34	
<u>Sweden: Total</u>		<u>71</u>	
Sulphite pulp plant		45	
Cash-register plant		18	
6 metal-forging presses		8	
Switzerland: Machine tools (for Kama truck factory)		<u>22</u>	
 II. <u>RUMANIA</u>			
A. <u>Orders placed in the West</u>		<u>476</u>	<u>79</u>
<u>NATO Countries: Total</u>		<u>464</u>	<u>67</u>
<u>FRG: Total</u>		<u>9</u>	<u>3</u>
9 steam generators		5	
Aircraft parts plant		3	3
Truck engine plant		1	
<u>Italy: Acrylic yarn plant</u>		<u>5</u>	<u>1</u>
<u>United Kingdom: Total</u>		<u>61</u>	<u>61</u>
Irrigation system		53	53
3 steel furnaces		6	6
Hydrogen peroxide plant		2	2
<u>United States: Total</u>		<u>389</u>	<u>2</u>
Petrochemical plant		300	
3 Boeing 707 aircraft		45	
Radial tyre plant		35	
Nuclear reactor		4	
Micro-wave equipment		3	
Computer equipment		2	2

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(1)	(2)	(3)	(4)
<u>Japan:</u> Protein chemical plant		<u>12</u>	<u>12</u>
<u>B. Orders placed by the West in Rumania</u>			
<u>Norway:</u> 12 ships (7,300 tons each)		<u>25</u>	<u>25</u>
<u>III. POLAND</u>			
<u>A. Orders placed in the West</u>		<u>301</u>	<u>16</u>
<u>NATO Countries: Total</u>		<u>254</u>	<u>16</u>
<u>France: Total</u>		<u>6</u>	<u>4</u>
Computer production equipment		4	4
Dust extractors (textile equipment)		2	
<u>FRG: Total</u>		<u>130</u>	<u>2</u>
3 tankers		100	
2 meat processing plants		15	
Yarn-twisting equipment		13	
Potato harvester plant		2	2
<u>Netherlands: Dredging equipment</u>		<u>5</u>	
<u>United Kingdom: Shipyard equipment</u>		<u>1</u>	
<u>United States: Total</u>		<u>112</u>	<u>10</u>
2 meat processing plants		50	
Foundry		30	
Metal finishing plant		10	10
Food storage warehouse		9	
9 steel furnaces		6	
4 soft-drink plants		5	
Computer system		2	
<u>Japan: Total</u>		<u>47</u>	
Ethylene plant		44	
Satellite communication equipment		3	

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(1)	(2)	(3)	(4)
	<u>B. Orders placed by the West in Poland</u>	<u>185</u>	<u>25</u>
	<u>NATO Countries: Total</u>	<u>175</u>	<u>25</u>
	<u>Denmark:</u> Hotel, steel plant, docks, ships	45	25 repaid in form of Polish shares in Danish ventures
	<u>Norway:</u> Two large liquid-gas tankers	??	Repeatedly one of largest orders ever placed in Poland
	Seven other ships	??	
	<u>Netherlands, FRG, United Kingdom:</u> Five container vessels	130	
	<u>Sweden:</u> Floating dock	<u>10</u>	
IV.	<u>BULGARIA</u>		
	<u>Orders placed in the West</u>	<u>48</u>	<u>33</u>
	<u>NATO Countries:</u>		
	<u>France:</u> Telecommunications equipment	<u>13</u>	
	<u>Japan:</u> Total	<u>35</u>	<u>33</u>
	Tourist hotel	30	30
	Ball-bearing plant	3	3
	Brewery	2	
V.	<u>CZECHOSLOVAKIA</u>		
	<u>Orders placed in the West</u>	<u>12</u>	
	<u>NATO Countries:</u>		
	<u>FRG:</u> 8 high-pressure containers for chemical plant	2	
	<u>Norway:</u> Machinery	6	
	<u>Austria:</u> Gas heating plant	4	

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(1)	(2)	(3)	(4)
VI. <u>HUNGARY</u>			
A. <u>Orders placed in the West</u>		<u>4</u>	<u>2</u>
<u>NATO Countries:</u>			
<u>France:</u> 4 generators		?	
<u>United Kingdom:</u> 1,000 containers		2	
<u>Japan:</u> Polyvinyl-chloride plant		?	
<u>Sweden:</u> Seeds and technology		2	(Repay with frozen fruit)

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