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AC/127-WP/425

ECONOMIC COMMITTEE

CONTINUED ACCELERATION IN 1974 IN NEW ORDERS
BY EAST FOR WESTERN MACHINERY

As in the case of a similar paper last year (AC/127-WP/387 dated 21st March, 1974), the attached Note by the Economic Directorate attempts to estimate new machinery orders by the USSR and Eastern Europe in 1974 on the basis of reports in Eastern and Western media. In the past, such estimates have proved useful leading indicators of increases in extension of credit and in export of equipment from West to East.

2. Delegations are invited to confirm or revise the estimate or otherwise to provide relevant information.

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CONTINUED ACCELERATION IN 1974 IN NEW
ORDERS BY EAST(1) FOR WESTERN MACHINERY

I. VOLUME OF ORDERS PLACED

1. In 1974 estimated orders of Western machinery and pipe by Eastern countries for future delivery rose more than 100%, reaching almost \$7.6 billion(2) and breaking previous records for the third successive year. Advance Eastern commitments for machinery and equipment of NATO countries account for 78% of the total, while those placed in Japan amount to 16%. Over one-half (58%) of total orders originating in Eastern countries are placed in West Germany (\$2,500 million) or in France (\$1,900 million)(3).

2. Orders originating in the USSR rose from \$2,473 million in 1973 to \$5,806 million in 1974 in the industrial West, while those placed in NATO countries alone amounted to \$4,470 million. Orders originating in Eastern Europe, growing by more than 100%, rose to nearly \$1.8 billion: the bulk of the sum represented orders placed by Poland which registered a more than fourfold increase, reaching almost \$1.4 billion. Romania, with a heavy debt burden amounting to one half of total export earnings, reduced its level of orders sharply from \$476 million in 1973 almost to zero in 1974.

3. The USSR and Poland were able to increase considerably the volume of their orders for Western technology because they disposed of natural resources such as coal, oil, natural gas and timber, whose prices have been rising sharply on world markets. The consequent change in the terms of trade in favour of such commodities has facilitated conclusion of industrial co-operation agreements with Western firms, which agree to supply equipment under credits and to accept repayment later in products of the original machinery delivered.

4. Major "self-liquidating" deals of this type concluded in 1974 between the Soviet Union and Western companies included:

- Supply of West German steel pipes worth about \$600 million for long-distance pipeline for Soviet natural gas to be provided in repayment of credits;

(1) In this paper, the "East" consists of the USSR and other Warsaw Pact countries

(2) See Table 1. This figure does not include machinery orders totalling \$2,400 million placed in Italy on a barter basis. On the other hand it includes self-liquidating orders

(3) See Table 2

- French aluminium complex worth \$600 million to be repaid in Soviet aluminium products;
- Japanese equipment and know-how for development of timber reserves (\$550 million), coking coal (\$450 million) in Siberia, to be repaid in timber and coal.

5. In the case of Poland, the major self-liquidating deal concluded in 1974 is the one with the United Kingdom for a tractor plant worth \$350 million.

II. IMPLICATIONS FOR CREDITS

6. Machinery orders placed in the West by Eastern countries help to estimate the volume of credits extended to the East, since most purchases of machinery are financed by credits. In 1974 estimates of cash orders are unusually high, at least \$1.1 billion and probably substantially more. Deducting this from the value of total commitments by Eastern countries, orders benefitting from credits would then be of the order of about \$6 billion. Up to 20% of this value would consist of cash down-payments, on the basis of the usual procedures of the past. In 1974 credit extensions to the East might, therefore, have amounted to almost \$5 billion, consisting of about \$3.7 billion to the USSR and \$1.3 billion to Eastern Europe, largely to Poland. Of these totals, NATO countries would account for the lion's share of credit extended: \$2.7 billion to the USSR and \$900 million to Poland. Extensions from Japan to the USSR reportedly equalled \$1,050 million(1).

7. The preceding estimates will almost certainly differ from the total of credits to be reported by NATO countries as being extended to the East in 1974. In this estimate an attempt is made to account for all credits and not only those guaranteed by the governments. Moreover, a considerable amount of time - as much as two years - may pass between the conclusion of a contract and the accordance of the export credit guarantee. Consequently, credits connected with deals taking place in a particular year are sometimes reported by NATO countries the following year or the year after.

8. These discrepancies notwithstanding, Eastern orders remain a useful indicator of Western credits extended in a given year - at least in regard to the direction and speed of changes in their magnitude from previous years. While the preceding estimates of orders placed might have borne little relation to

(1) The amounts and terms of some individual credit extensions have been reported in the press. See Annex

the level of guaranteed credits reported by member governments for a given year, orders have proven to be a reliable guide to growth and acceleration of credits reported for the same year. It thus appears safe to conclude that the estimated 100%-odd increase in Eastern machinery orders last year will almost certainly be followed by a dramatic (though not necessarily 100%) rise in credits guaranteed by member governments.

9. In addition to these export credits which are tied to specific purchases in the creditor Western nations, loans raised on the Eurodollar market by Eastern countries in 1974 are estimated at \$540 million(1).

III. PROSPECTS FOR MACHINERY EXPORTS

10. The continued sharp rise in Soviet East European machinery orders in recent years will be reflected in exports of NATO countries over the next few years, adding an element of stability to external economic prospects. A relatively strong market in the East for the equipment of member countries can be predicted even under pessimistic assumptions. On the basis of existing order contracts, the 1972 level of \$2.6 billion in machinery exports should be maintainable for about three years, even if future Eastern orders should decline sharply to the rates of the 1960s. For 1974 and 1975 NATO country exports of machinery and pipe to European Communist countries might rise as high as \$4 billion(2) per year depending on the speed at which the record-breaking volumes of orders during 1972-1974 are delivered.

(1) See Table 3

(2) Maximum estimate based on 1973 levels and on extrapolations of past correlations among machinery orders, drawings and imports. Most machinery orders are probably delivered within 2 or 3 years of the date when the order is announced. This lead-time can vary considerably, however - from apparently only a few months for some orders to 5 years or more for larger Siberian projects

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FOR WESTERN MACHINERY AND TECHNOLOGY 1971-1974

(\$ Millions)

	1971		1972		1973		1974	
	TOTAL	(NATO)	TOTAL	(NATO)	TOTAL	(NATO)	TOTAL	(NATO)
Total Eastern Countries	1,059	(757)	2,590	(2,173)	3,314	(2,912)	7586	(5915)
USSR	841	(644)	1,965	(1,659)	2,473	(2,171)	5806	(4470)
Eastern Europe	218	(113)(1)	625	(514)	841	(741)	1780	(1445)
Romania	72	(72)	32	(32)	476	(464)	7.6	(7.6)
Poland	70	(23)	427	(370)	301	(254)	1368.0	(1135.0)
Bulgaria	-	-	53	(53)	48	(13)	61.0	(61.0)
Czechoslovakia	17	(17)	91	(46)	12	(8)	100.0	(48.0)
Hungary	59	(1)	22	(13)	4	(2)	70.0	(20.0)
GDR	-	-	-	-	-	-	173	(173)

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, 24.6.73.

Other estimates: NATO International Staff on basis of press reports.

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TABLE 2

ORDERS PLACED IN NATO COUNTRIES BY EASTERN COUNTRIES IN 1974

	Total East	USSR	Eastern Europe	Poland	GDR	CSSR	Hungary	Bulgaria	Romania
TOTAL West	7586	5806	1780	1368	173	100	70	61	7.6
NATO Countries	5915	4470	1445	1135	173	48	20	61	7.6
France	1886	1101	785	547	170	48	-	20	-
FRG	2536	2303	233	186	-	-	6	41	-
Italy	166	164	2	-	-	-	-	-	2.0
Netherlands	9	4	5	5	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
UK	633	227	406	389	3	-	14	-	-
USA	677	671	5.6	-	-	-	-	-	5.6
Canada	8	-	8	8	-	-	-	-	-
Austria	315	140	175	158	-	-	17	-	-
Japan	1321	1196	125	75	-	50	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	35	-	35	-	-	2	33	-	-

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TABLE 3

ESTIMATES OF EASTERN COUNTRIES' BORROWINGS
ON THE EURODOLLAR MARKET IN 1974

(\$ Millions)

USSR	100
Eastern Europe	440
Poland	200
Hungary	50
East Germany	50
Bulgaria(1)	140
Romania(2)	-

- (1) Bulgaria was also the beneficiary of credits (possibly of a credit line) extended by Japan totalling \$100 million
- (2) Romania is reported to have raised \$170 million loan from the World Bank: \$60 million for the construction of a fertilizer plant, \$50 million for a special steel project and \$60 million for a thermal power station

The extension to the USSR of credits amounting to at least \$1.5 billion by West Germany and France has been reported in the press:

- German credits were syndicated bank loans aiming at easing the financing of two major sales: 950,000 tons of steel pipes in return for natural gas and some thousand medium-weight trucks. Credit extensions in the former project amounted to \$600 million (interim credits) and in the latter to \$300 million.
- The extension of \$600 million in French credits was reportedly connected with the construction of an aluminium complex in the Soviet Union.

Indications of the readiness of member governments to guarantee export credits in the future are provided by "lines of credit" that have been announced. The credit covering the French aluminium complex was part of a larger credit line (over \$2 billion) which was announced by the French Authorities in December 1974. Interest rates on credits extended are reportedly to vary between 7.2% and 7.55%. The United Kingdom followed suit by opening a credit line to the benefit of the Soviet Union of the order of \$2,400 million in February 1975. France also extended a credit line of the order of \$900 million to Poland early in 1974(1). Part of this credit line, about \$500 million, has already been committed to the financing of Poland's machinery purchases in France for a steel complex in Jutta Kuttozice and for a cable plant.

(1) Financial Times, 24th April, 1974

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	<u>Total</u>
<u>USSR</u> orders placed in the West: Total	<u>5,806</u>
NATO countries: Total	<u>4,470</u>
<u>France: Total</u>	<u>1,101</u>
Aluminium complex	600
4 fertilizer ammonia plants	200
Steel tubes for natural gas exploration, production and transport	128
Factory to manufacture electrical equipment for cars	80
Gas and oil processing equipment	25
Chemical colour brighteners	30
Plant to extract and purify enzymes	20
Air cooling equipment	16
Batch production of sandwich panels	2.0
<u>Federal Republic of Germany: Total</u>	<u>2,303</u>
Kursk integrated steelworks	1,000
950,000 tons of steel pipes for Soviet gas industry	600
10,000 medium tonnage trucks	436
Automatic swaging lines for the Kama motor vehicle works	60
Tyre factory in Minsk	50
Plant for the unloading depot and trans- port of urea in ocean-going vessels in Odessa	49
Vinyl chloride plant	43
Typewriter factory	40
Annealing line for stainless steel	12

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<u>USSR cont'd</u>	<u>Total</u>
<u>Federal Republic of Germany (cont'd)</u>	
Automatic canning units for fishing industry	8
2,000 containers	5
2 large automated crankshaft for the Kama River plant	?
<u>Italy: Total</u>	<u>164</u>
Plants to produce woollen clothing	77
Plant to assemble washing machines	30
<u>United Kingdom: Total</u>	<u>227</u>
Equipment for Kama River	60
Computer controlled mill room	60
Equipment for a polyethylene plant	48
Machine tool plant	34
Carpet tufting machinery	13
25 carriers to transport containers at ports and terminals	7
Hydraulic presses	2.4
Rank Xerox deal	2.4
Continuous heat treatment furnaces	0.7
<u>USA: Total</u>	<u>671</u>
65 modular gas turbine compressors (100 with West Germany)	250
Equipment for the Kama River complex	150
Construction equipment	100
Construction of 3 hotels with Sweden	90

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<u>USSR cont'd</u>	<u>Total</u>
<u>USA</u> (cont'd)	
Polystrene plant	50
Machinery for a truck plant	20
Ball valves for natural gas pipeline	31
Road building and paving machine	9.5
39 pay-loaders and parts	8.5
Fly wheel and ring gear assemblies	7.3
Material handling equipment	5.5
<u>Netherlands: Total</u>	<u>3.7</u>
50 air-cooled natural gas coolers	3.7
<u>Japan: Total</u>	<u>1,196</u>
Development of timber resources	550
Coking coal project	454
Equipment for the exploration of oil and gas on the Sakhalin continental shelf	100
Plant to make medical X-ray film	52.7
Large ball and gate valves	18
Acrylonitrile monomes plant	10
20,000 tons of alloy steel	7
10,000 tons of steel for bearing	4
<u>Austria: Total</u>	<u>+ 140</u>
200,000 tonnes of pipeline	+ 140

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	<u>Total</u>
<u>Polish orders placed in the West:</u> Total	<u>1,368</u>
NATO countries: Total	<u>1,135</u>
<u>France:</u> Total	<u>547</u>
Cable plant	300
Equipment for the steel complex at Jutta Kattozice	200
Carbon sulphur plant	25
Drilling and bolting assemblies	8.6
3 corrugated cardboard productions	6.0
2 factories to produce animal feed	5.0
Weaving machines	2.5
<u>Federal Republic of Germany:</u> Total	<u>186</u>
Fertilizer plant	125
Chloride electrolysis plant	55
Silicon plant in Tarnov	6
Plant to produce galvanised synthetic coated profiled strips and sheets 200,000 tons per year	?
<u>United Kingdom</u>	<u>389</u>
Tractor plant	350
Forging plant	25
Draw-texturing machinery	12
Heat treatment and melting plant	2.5
10 rotary forge furnaces	?
Steel in exchange for 1½ million tons of coking coal	?

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<u>Poland cont'd</u>	<u>Total</u>
<u>Netherlands:</u> Total	<u>5</u>
Trailing suction hopper dredger	5
<u>Canada:</u> Total	<u>8</u>
300 log skidders for use in lumbering operations	8
<u>Japan:</u> Total	<u>75</u>
Polyester plant	75
<u>Austria:</u> Total	<u>158</u>
Heavy industrial equipment	158
<u>German Democratic Republic</u> orders placed in the West: Total	<u>173</u>
NATO countries: Total	<u>173</u>
<u>France:</u> Total	<u>170</u>
Railway wagons	170
<u>United Kingdom:</u> Total	
Clothing, carding and combing machines	2
Accessories for knitting machines	0.5
Knitting machine needles	0.4
Cotton spinning machinery	0.5
<u>Bulgarian</u> orders placed in the West: Total	<u>61</u>
NATO countries: Total	<u>61</u>
<u>France:</u> Total	<u>20</u>
Polythylene plant - annual capacity 50,000 tonnes	20
<u>Federal Republic of Germany:</u> Total	<u>41</u>
1973/74 Polyvinyl chloride plant	17

<u>Bulgaria cont'd</u>	<u>Total</u>
<u>FRG</u> (cont'd)	
Oil and gas firing equipment (Wilcox AG Oberhaus, a British subsidiary)	6.4
Suspension-PVC plant	18
<u>Romanian orders placed in the West:</u> Total	<u>7.6</u>
<u>NATO countries:</u> Total	<u>7.6</u>
<u>Italy:</u> Total	<u>2.0</u>
Plant to make rubber transmission straps for cars	2.0
<u>USA:</u> Total	<u>5.6</u>
Engine bearing plant	5.6
<u>Czechoslovakian orders placed in the West:</u> Total	<u>100</u>
<u>NATO countries:</u> Total	<u>48</u>
<u>France:</u> Total	<u>48</u>
Polyethylene plant	34
Ethylene storage plant	14
<u>Japan:</u> Total	<u>50</u>
Nylon-six tire cord manufacturing plant	50
<u>Switzerland:</u> Total	<u>1.8</u>
11 data acquisition and communications systems	1.8
<u>Hungarian orders placed in the West:</u> Total	<u>70</u>
<u>NATO countries:</u> Total	<u>20</u>
<u>Federal Republic of Germany:</u> Total	<u>6.4</u>
4 parquet floor factories	6.4

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Hungary cont'd

	<u>Total</u>
<u>United Kingdom:</u> Total	<u>14</u>
Chemical plant	14
<u>Austria:</u> Total	<u>17</u>
Electro-magnetic vibration feeder	17
<u>Switzerland:</u> Total	<u>33</u>
Office machinery	33