Paper prepared for Conference on "Eastern Europe: Stability or Recurrent Crises?"

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Is the following statement true or false?

"Economic developments in the last few years on the world market—the energy crisis, accelerating inflation, the enlargement of the European Common Market, and the world-wide recession—have seriously impaired the ability of the East European (EE) countries to continue in the future their rapid expansion of trade with the West. EE is becoming more economically dependent on the Soviet Union, which in turn is giving a new impetus to CEMA integration, a tendency that obviously benefits the USSR. Since for at least a decade Western strategy vis-a-vis EE was to promote increased East-West trade and cultural interaction in the hope that this will liberalize EE, reduce Soviet influence in the region and thereby prevent the Soviet bloc from becoming a cohesive military, political and economic force in world affairs, current developments cannot be viewed as favorable for the West or, for that matter, for the countries of EE which would prefer greater economic and political independence rather than closer integration with the USSR and the rest of CEMA."

I believe that the above statement represents reasonably well the current consensus of expert Western opinion on the question of economics and integration in EE. This paper will explore the basic facts concerning recent political, economic and trade developments affecting EE, and detail the author's reasoning as to what these all could mean for CEMA integration and economic and political stability in the region. We will find that the above statement taken as a whole is not incorrect, but will argue that some of its conclusions are valid only if modified with important qualifications.

The paper deals with three interrelated topics: (1) the effect of recent developments in the world market on East-West trade and on EE's economic relations with the USSR; (2) the implications of these developments for CEMA
integration; and (3) economic and political problems and opportunities the
foregoing might create for the USSR and for EE.

THE EFFECT OF 1973-75 WORLD ECONOMIC DEVELOPMENTS ON THE
ECONOMIES OF EAST EUROPE

Economic Relations With the West

Trade with the West averages about one-third of the value of EE's total
trade turnover (ranging from a low of about one-fifth for Bulgaria to about
one-half for Romania and Poland). This trade plays a crucial role in the
economies of EE: machinery imports make an essential contribution to the
modernization of their industries, consumer goods imports improve the qual-
ity and assortment of retail goods available to consumers, and raw material
and foodstuff imports provide their industries essential products unavailable
or in scarce supply in CEMA.*

EE countries have a net export surplus in food, raw materials and semi-
manufactures with the industrial West. Their net export to the West of pri-
mary products and raw-material-intensive semimanufactures contributes to the
scarcity of primary products, called "hard goods," on the CEMA market, whereas
there is a net surplus in CEMA of garden variety manufactures, which are called
"soft goods."

While the predominant share of East-West commerce is still comprised of
simple import and export transactions, an increasing volume of commerce takes
place under so-called industrial cooperation (IC) agreements, which include
licensing and turnkey projects, co-production deals and (where permitted)
joint ventures. IC arrangements enable EE countries to obtain not only tech-
nology embodied in machinery but also highly-sought Western technical, mana-
gerial and marketing know-how. IC agreements often specify payment by EE
with products related to the agreement, to be made over an extended period.

* For example, Czechoslovakia buys approximately one-third of industrial raw
materials and semimanufactures imports from the industrial West (Svět Práce,
Currently there are more than 1,000 such East-West IC agreements and these types of transactions are believed to be the most dynamic components of East-West commerce.

In 1973 the world economy was shaken by a threefold increase in the price of oil. The immediate impact on EE was not unmanageable since about 80% of the region's oil and petroleum product imports comes from the USSR which, according to long-term agreements signed in 1970, continued to supply the scheduled quantities at fixed, pre-1970 world prices. In 1973 the six EE countries combined imported about 11 million tons of crude oil from sources other than the USSR [5]. Assuming that the price of a ton of crude oil increased from approximately $20 to $60, the initial extra hard-currency expenditure for EE was $4-500 million annually, somewhat less than 10% of EE's total 1973 exports to the West of over $6 billion.

The second adverse development for EE was double-digit inflation in key Western countries, triggered or fueled by the oil price rise. Since the prices of EE consumer-good and agricultural exports did not increase as much as the prices of their imports, EE's terms of trade with the West deteriorated. The extent to which this contributed to these countries' balance-of-payments problems varied, depending upon the structure of exchange with the industrial West.

The third adverse development now facing EE is reduced Western demand for their exports, triggered by world recession and the balance-of-payments problems of several West European countries which has forced further cuts in imports. Especially hurt were EE agricultural exports which formerly encountered the least resistance in penetrating Western markets. Hungary and Romania were dealt a severe blow, for example, when in 1974 the Common Market placed an embargo on beef exports to members of the Community.
Another, and in the long run perhaps even more adverse development for several EE countries is the 1972 enlargement of the Common Market, under which intra-Common Market tariffs are being reduced to zero by July 1977 in five stages. Since several of the countries which joined or became associated with the Common Market in 1972, such as the UK and Austria, are key markets for EE goods, this reduction of intra-West European tariffs while maintaining pre-1972 tariff levels on imports from non-members is hurting EE countries especially. Hardest hit are foodstuffs and basic materials which, for example, represent more than half of Hungary's exports to Austria.

Further problems are created by European Community rules of origin, increasing the difficulty of exporting goods manufactured under IC, because the share of a product manufactured in non-member third countries may not surpass the percent fixed by the European Community if it is to be eligible for preferential intra-market tariffs.

While these developments affected adversely EE exports to the West, their appetite for Western goods and technology has not abated. During 1974 imports from hard-currency countries rose by nearly 50% (a good portion of which was due to price inflation, but imports also rose significantly in real terms), and purchases continued to increase rapidly during the first half of 1975. The combination of a sluggish rise in EE exports and rapid growth in EE imports resulted in several EE countries running record trade deficits with developed Western countries in 1974: the deficit of Poland exceeded $2.1 billion, that of the GDR exceeded $1 billion, and that of Hungary and Czechoslovakia totaled about $1/2 billion each [4]. The total gross hard-currency indebtedness of EE rose by something in the order of 50% during 1974, so that at the end of last year the combined gross hard-currency indebtedness of the six EE countries probably approached $15 billion.
All indications are that the figure will be significantly higher at the end of 1975.

Large deficits can be bridged temporarily with credits, which have become easier to obtain as relations between East and West improved and as Western countries, anxious to increase their own exports for balance of payments and for employment reasons, compete with each other in providing large official credits to promote sales to the USSR and EE. But growing indebtedness causes serious concern for EE planners. First, if indebtedness goes beyond a certain point (which is admittedly not clearly defined), it damages the credit-worthiness of a country, with obvious consequences for both the availability and cost of credit. But perhaps of more immediate concern to EE is that a rising debt-service burden impairs ability to secure a growing volume of imports which are needed (and cannot be obtained from CEMA) if an increasing share of export earnings is required to service debts rather than to pay for current imports.

Relations With the USSR

As a consequence of EE's development strategy, poor endowment of natural resources and wasteful use of materials, net import needs of energy, raw materials and foodstuffs grew rapidly during the postwar period. The four less developed countries absorbed an increasing share of their total output of primary products domestically and redirected some raw material exports to the West. The USSR became a large and by the mid-1960s only net supplier within CEMA of their needs, to the extent of nearly $3 billion worth of energy and raw materials by 1970 and $3.7 billion (1971 dollars or SDR units) by 1974. During the 1960s EE paid for this net import of fuel and industrial raw materials primarily with machinery, but by the 1970s these purchases came to be financed with a net surplus of machinery and industrial consumer...
Table 1. USSR Trade with East Europe by Major Commodity Categories
(Millions of Devisa-Rubles)

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<tr>
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<td>(50)</td>
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**NOTE:** To convert to 1971 US dollars (= SDR's), 1 devisa ruble = $.9

**SOURCE:** International Trade Information Management System (ITIMS) of Indiana University (based on official Soviet sources).
goods in about equal proportions (Table 1).

One interesting fact that can be noted in Table 1 is that although the
USSR's surplus (EE's deficit) of fuel and raw material exports has been
rising for two decades, the rate of increase of this surplus has been stead-
ily declining. From 1955 to 1960 the surplus more than quadrupled; from 1960
to 1965 it rose by 71%; from 1965 to 1970 it climbed 43%; but during the
cfour years 1970-1974 it increased by only 27%.

In late 1973 and in 1974, as world prices of energy and raw materials
increased rapidly, with the price of some commodities such as oil soaring
spectacularly, the Soviet Union found itself in a difficult situation. On
the one hand, it became more and more costly to continue with the 1970 bilateral
agreements under which increased quantities of energy and raw materials
were to be supplied to EE during 1971-75 at fixed (average 1966-70) world
prices.* On the other hand, an abrupt move to raise export prices substan-
tially before the agreements expired, or to ship less than the promised quan-
tities, would seriously damage Soviet prestige. More importantly, such actions

* More than any other commodity, oil illustrates the problem. In 1974 the
Soviet Union shipped about 60 million tons of crude oil and petroleum
products to the five European members of CEMA (Romania did not purchase
oil from the USSR), at $16 to $20 per ton (depending upon the mix of crude
and oil products), for a total revenue of $1.0 to $1.2 billion dollars.
During the same year the Soviets sold approximately 40 million tons of oil
in the West at the then current average world market price of about $70
per ton, for a total revenue of about $2.8 billion. If we make the admit-
tedly unrealistic assumption that the USSR could have sold the 60 million
tons of oil to the West rather than to CEMA, we find that they could have
earned $3 billion additional hard-currency revenue, increasing their $7.5
billion actual earnings by 40%.
would cause serious economic difficulties and reduce living standards in EE, quite possibly triggering dangerous political instability in the region.

The Soviet Union took what may be considered a middle course to resolve the dilemma. It renegotiated intra-CEMA foreign trade prices (which were supposed to remain fixed from January 1971 until December 1975) substantially to its advantage, to be effective January 1, 1975. The justification for discarding the old agreement was that the dramatic changes in world market price and supply conditions could not have been foreseen in 1970. Most importantly, the price of oil sold to EE was doubled from 18 to 37 rubles (still less than the world price). Selected other price increases were also negotiated, involving both Soviet exports to and imports from EE. The price revisions improved substantially Soviet terms of trade with EE, thereby reducing but not eliminating (what the Soviets claim to be) unfavorable trading arrangements with CEMA. In addition to improved prices, for several years the Soviets have also been taking certain "compensatory" actions for what they view as the economic liability of supplying EE with cheap energy and raw materials. Most important among these is obtaining from EE large, low-interest credits to develop energy and raw material resources in the USSR.

In a move of major significance, the method of determining intra-CEMA prices after 1975 was also changed. Beginning with 1976, the old system of maintaining fixed prices for five years will be replaced by a moving average price base. Each year prices will be based on the average world market prices of five years immediately preceding the year for which the newly calculated prices are applicable. Thus, prices in 1976 will be established across the board on the basis of average world prices of 1971-75, in 1977 on the basis of average prices in 1972-76, and so on.
What is the portent of these developments for EE's economic relations with the USSR? Focusing on that most important and visible commodity, oil, the 1975 doubling of its price means that in 1975 alone EE has to find ways to pay at least an additional $1 billion.* On the assumption that until 1980 the price of oil on the world market will remain at its recently determined level of $77/ton (or $11/barrel), the new CEMA pricing mechanism means that by 1978 EE would pay the current world market price. On the 1974 quantity of about 60 million tons this would mean an oil bill approximately double again, from its 1975 level of $2 to about $4 billion. Each $1 billion (of unchanged 1971 purchasing power) additional cost means that EE's exports to the Soviet Union must rise by something like 10% in real terms.

These figures are meant only to illustrate the magnitude of the problem EE countries are now facing in trade with the Soviet Union. Many factors will influence the actual burden: the prices of other commodities traded, future world market price changes, and on what terms can EE finance the extra cost of imports, to mention just a few factors. It should also be noted that individual EE countries are affected by all this to varying degrees. For example, Poland, a large supplier to the USSR of coal whose prices have also risen substantially, and Romania, which has domestic oil (though it still must import), will have a smaller burden than the rest of EE.

To sum up, the significance of these developments is, first, that a major shift of resources from domestic uses into exports will have to occur in EE to pay for needed Western as well as Soviet imports, which can be expected to have an adverse effect on living standards. Second, these recent developments are of still greater significance because of the likelihood that they will represent only the beginning of a major increase in the cost of living in the EE countries. The importance of these developments is increased by the knowledge that they will not be isolated: the Soviet Union is not likely to reduce its demands on EE for imports, and the effects of this are likely to be felt not only in EE, but also in the countries of Western Europe. The musical chairs of international trade are not likely to be played on in EE, as they have been in the past, because of the need to refinance its debt to the International Monetary Fund.

* It is important to note that the nominal revaluation of the ruble vis-a-vis the dollar increases the dollar but not the ruble value of intra-CEMA trade. Thus, when calculating the real burden of intra-CEMA price changes in dollars, an unchanged ruble/dollar exchange rate must be used.
developments have increased further EE’s economic dependence on the USSR, raising for them the cost of non-compliance with Soviet economic and political demands.

IMPLICATIONS FOR CEMA INTEGRATION

The Problem of Defining "Integration"

Western Views. As Montias stated six years ago, few subjects of interest to economists are as "mushy" as the economics of CEMA integration: "There is no recognized methodology for analyzing problems in this field; the problems themselves have not been rigorously formulated or put down in precise language" [12]. I believe this is still true today.

While this conference is not the forum to try to arrive at a rigorous formulation, some thoughts on definition might be helpful.

The word integration may refer to a process or a state. Economic integration inevitably has political dimensions, with the political component increasing in importance as integration moves from lower to higher stages. Among market economies, the stages of integration (presented here if only to show the difficulty of applying the same definition to CEMA) have been defined as progressing through the stages of: (1) removal of trade barriers (trade integration); (2) liberalized factor movements (factor integration); (3) harmonization of national economic policies (policy integration); and (4) uniformization of these policies (total integration) [1].

Under a somewhat narrower definition, economic integration is said to consist of stages (1) plus (2) only, which, as a process, Montias defines as convergence toward identical relative scarcities for all pairs of goods, and as an achieved state, when relative scarcities in a bloc have moved as close to equality as transportation and communication barriers will allow [12].
Unfortunately, it is difficult if not impossible to measure the extent of CEMA integration according to the above criteria because centrally administered domestic prices, and lagged world prices used to arrive at intrabloc foreign trade prices, have only tenuous links to relative scarcities within the bloc. Therefore, CEMA integration has been gauged by indirect measures, such as the volume of intrabloc trade (absolute level or relative share), the extent of "cooperation" or "discord" among members, and the "pooling" of resources in the form of product and component specialization and joint investment projects. Since any trading bloc comprised of sovereign nations must contend with centrifugal as well as centripetal forces, an assessment of where CEMA stands at a moment in time, or what it has achieved over time, will depend upon the proclivity of the observer to focus upon one or the other set of forces. Is the cup of CEMA integration half full or half empty?

Regardless of the economic system of member states, the institutional basis for economic integration may be (1) supranational, i.e., direct coordination with or without the agreement of individual members; (2) voluntary coordination of plans for (or policies influencing) production, trade and investments; and (3) market coordination through decentralized production, trade and investment decisions. The Common Market, for example, relies to some degree on all three institutions, whereas CEMA integration is based primarily on voluntary coordination of plans, with a modicum of market coordination, after supranational planning was proposed by the Soviets in 1962 but then discarded, at least for the time being.

It is interesting to note that some observers view the process of integration as synonymous with the growth of supranational institutions, arguing that effective integration can be achieved only through the gradual ceding of the member states' sovereignty to supranational organs. In applying this
criterion to CEMA, Western observers tend to be ambivalent. When comparing the Common Market and CEMA, it is often pointed out that the former has a supranational bureaucracy with real scope and authority to make decisions, whereas CEMA is merely a voluntary association of states with no supranational authority. If follows that the Common Market is "better" because it can perform more effectively in many respects. At the same time, any suggestion by member states that CEMA organs be transformed into supranational agencies is viewed by Western observers as an attempt by the Soviet Union to strengthen its grip on EE since, inevitably, it would dominate any such organization.*

Views from CEMA. The Hungarian economist I. Vajda introduced a distinction between "market integration" and "production and development" integration. The former is defined as the unhindered sale of each member's products within the bloc, the latter as "raising to an international level the planning and production of those branches of industry which ... cannot be developed to an optimum size within national boundaries" (as cited in [1]). Thus, according to Vajda, the essence of economic integration is the taking advantage of efficiencies that arise from specialization and economies of scale.

Soviet economist O. Bogomolov, who has long specialized in CEMA affairs, defines integration much along the same lines: "The transformation and harmonization of the production structure of the member countries ... in order to better utilize the advantages offered by international specialization and cooperation in production, as well as by mass production, and by a guaranteed

* Among the few who have taken a different posture on this is Remington who argues that the integration processes in EE have been marked by an increasing assertion of national sovereignty, which argues for viewing the bargaining among states, rather than the growth of supranational structures per se, as the primary conduit of integration [16].
market with huge absorptive capacity. The implementation of specialization
decisions ... and joint construction projects ... should become the pivot
of CEMA integration" [3]. As to how this is to be implemented, Bogomolov
adds: "Joint planning has an overriding role to play in directing the inte-
gration processes of the CEMA countries because in their economies ... the
state plan is the chief regulator of economic life" [2].

CEMA Integration: Centrifugal and Centripetal Forces

According to the CEMA economists cited, the definition of the integration
process is progress toward production and trade specialization and a growing
number of joint investment projects, designed and implemented through co-
ordinated or joint planning among CEMA members. What are the centrifugal
and centripetal forces which shape CEMA integration and what has been accom-
plished up to now?

With regard to specialization, one should note that this is not simply
a question of a rapid increase in intrabloc trade or having a large share of
a member country's total trade with bloc partners. Real specialization, based
on natural or man-made differences in resource endowments among countries,
should mean that different countries specialize in the production of rela-
tively labor-intensive, or capital-intensive, or natural-resource-intensive
products.

**Centrifugal Forces.** Obstacles to economic integration include the following:*

1. Restraints on the movements of labor and other resources.
2. The existing structure of production in EE. By following a Soviet-
type strategy of industrialization in the immediate postwar period,
all EE countries created or expanded parallel productive capacities,
much of it in machine building, which hinders specialization. The

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* For a more detailed discussion of many of these issues, see [12].
production of consumer goods, a branch where gains from specialization are particularly large, had been given low priority. Post-war Soviet import demands, serviced either under war-related indemnities or on commercial basis, created special industries in the EE countries, and this has tended to favor bilateral trade with the USSR rather than multilateral trade among themselves.

(3) Just as vertical channels of coordination and control weaken links between producing and trading enterprises in a given country, so do coordination problems between countries inhibit specialization. For example, trade delegations which are supposed to make specialization decisions are several removes from the enterprises which are to produce the exports or use the imports. These problems make it especially risky for planners and enterprises to depend on foreign suppliers.

(4) Perhaps most important of all, prices that would balance supply and demand on the rather insulated CEMA market are quite different than the lagged world prices at which CEMA countries value their intrabloc trade. Parallel development strategies created surpluses in machinery, much of it not modern, a fact which is not reflected in the prices of engineering products traded. Concentration of production by each country in the heavy industry which gobbles up material inputs, combined with the wasteful use of these inputs, has led to a rapid growth of demand for energy and raw materials. Since each CEMA country wants to make itself, or at least the bloc as a whole, as self sufficient as possible, this has prompted them "to extract, produce and cultivate some of the scarcer materials far beyond what would be considered as the margin of minimum return in the West" [12], making the marginal cost of energy and raw materials very high.
The combination of high demand and high costs of production has created a shortage of primary products in CEMA, which again has not been reflected in the trading bloc's relative prices. The dilemma of intrabloc price formation is that if relative prices deviate substantially from world prices, this will induce buyers of relatively high-priced goods to import them from the West, and sellers of relatively low-priced goods in CEMA to sell them elsewhere, creating dangerous centrifugal pressures. Such pressures have in fact been felt for sometime, among other reasons, because CEMA prices used to remain fixed for five years, during which world price relatives usually changed considerably.

(5) These price distortions and lack of a convertible currency within CEMA (whose introduction in turn is hindered by these price distortions) contribute decisively to the bilateral character of trade under which not only total imports and exports but trade within each commodity group is balanced bilaterally. This balance is watched especially in the "hard good" and "soft good" categories.

(6) The introduction of economic reforms in some CEMA countries devolves some production and trade decisions to enterprises. Specialization agreements are especially difficult to plan and implement when one of the parties to the agreement has not undertaken similar reforms.

Many of the problems just outlined are also applicable to joint investment projects. Joint financing of new industries and joint investment projects in the extractive industries require calculations of comparative costs, hindered greatly by a lack of uniformity among countries in their methods of forming administratively determined prices and costs. For investments where the availability of raw materials is the decisive factor, joint investment
decisions presumably can be made largely on engineering grounds. But even such projects require bringing to a common denominator the value of each member's contribution to the project, setting interest rates on loans, and arriving at principles of profit distribution acceptable to all participants.

Centripetal Forces. In addition to some of the not-so-new considerations, such as the small size and geographic proximity of the EE economies, recent developments have given a renewed impetus to CEMA integration.

(1) Among the more intangible forces pushing them in this direction are implications deriving from the increasing hard-currency indebtedness of the EE countries. As imports from the West become more difficult to secure, obtaining an increased flow of hard goods from CEMA becomes more important. As certain CEMA members become more important suppliers of critical imports, more attention will be paid, inevitably, to facilitate obtaining these imports. Supplies from CEMA can become more critical either because alternative sources are less readily accessible or because what in the past were assured deliveries become uncertain supplies, contingent perhaps upon the importing country's policies with regard to, say, CEMA integration. Both of these developments have in fact taken place recently, as will be documented below.

(2) Another one of these intangibles is the effect on the Weltanschauung of EE leaders of Western recession, inflation, monetary crisis, and the continued discrimination against EE exports in the West. As EE decisionmakers weigh their commercial policy options, the difficulties of closer cooperation with CEMA in general and the USSR in particular probably appear more attractive today, by comparison, than when the waters of the Western economies were calmer.
(3) Still another intangible factor pushing EE in the direction of closer cooperation within CEMA is the growing importance of trade blocs, as shown by the highly successful OPEC oil cartel and the prospects that similar groups will emerge elsewhere. To be sure, EE countries are not likely to be in a position to form OPEC-like cartels, but they might improve their position if they try to negotiate as a bloc, for example, advantageous commercial deals with the Arabs. Also, the Common Market is exerting pressure on them to negotiate on trade and economic matters with the Common Market Commission rather than with its individual member countries. Decisionmakers in EE must consider how much they could improve their negotiating clout if they face Brussels jointly rather than singly, even though the economic and trade interests of individual CEMA countries vis-a-vis the Common Market differ, and of course letting the Russians be the chief spokesman for them might be an unwelcome trade-off.

(4) A subtle and interesting observation was made by Korbonski [10] that relates to the previous point. Strong Soviet pressure on CEMA members to conform closely on all matters, but especially on making CEMA a supranational body, has apparently been absent for some time. This must have gone a long way to allay the fears of some, such as Romania and Poland, that closer economic integration would be a first step toward loosing sovereignty and ultimately perhaps national identity.

Turning to some of the more tangible centripetal forces, the crucial variable, it seems to me, is the past and prospective future increase in the world prices of primary products. This has had numerous important consequences in CEMA.
(5) One consequence is that Soviet oil and gas fields and mineral deposits which a few years ago may have looked economically marginal, and thus uninviting to invest in, have suddenly become feasible investment propositions.

(6) Another consequence of rising world energy and raw material prices is that their increase justifies the raising of CEMA prices of these goods. This brings relative prices in the bloc more in line with relative scarcities in the region, without releasing dangerous centrifugal forces. This contributes to an improved climate for making investment and specialization decisions, which will tend to support integration efforts.

(7) Along the same lines, bad world inflation triggered, paradoxically, a good CEMA decision to get rid of the inflexible system of intrabloc foreign trade pricing. If large discrepancies between CEMA and world price relatives induce centrifugal forces, as mentioned earlier, then bringing CEMA prices closer to world prices annually rather than once every five years should be a plus for CEMA integration.

(8) Rising world prices might even make the intrabloc convertibility of the transferable ruble a more realistic possibility. This is because one of the strongest obstacles to making the transferable ruble convertible has been Soviet concern that it would remain a large debtor vis-à-vis EE, requiring it to make settlements in hard-currency or gold. With its substantially improved terms of trade, the Soviet Union now has little reason to fear this possibility.

(9) As EE countries accumulate larger and larger hard-currency debts and undertake joint investment projects requiring Western imports, they will find it advantageous to borrow hard-currency through the two CEMA banks. Not only can these banks borrow on better terms than the
individual EE countries can, but, given implicit Soviet backing of these loans, Western credit becomes more readily available to EE through this channel.

(10) My final point relates to the supportive role that East-West industrial cooperation might play in CEMA integration. In my current research on the US perspective on East-West IC, I am struck by the finding that many US companies are large multinational firms and that many have signed or are negotiating IC agreements in more than one EE country. Since the economic feasibility of many IC agreements depends on having a market of more than national size or being able to combine resources from several CEMA countries, Western firms are carefully assessing bloc-wide production and marketing opportunities and are carrying out their activities accordingly. Since socialist enterprises in CEMA countries have neither the interest nor the opportunity today to venture into each other's territory, by default they leave the field to Western multinationals to help integrate EE. John Hardt suggested (privately) that there may be a possible analogy here between the role US subsidiaries in Europe have played in helping to integrate the EEC in the 1950s and 1960s and the role US multinationals and other Western firms may be playing in promoting CEMA integration in the 1970s.*

The Evolution of CEMA Programs

At the risk of oversimplifying greatly, the evolution of CEMA may be sketched by identifying three stages.

* An example of how the expansion of East-West commerce can contribute to CEMA integration: shortly after EE countries began to purchase Western licenses on a regular basis, CEMA decided to introduce (in 1967) a system of payments for the transfer of licensing and know-how among CEMA countries— an indispensable first step toward improving the effectiveness of intra-CEMA technology transfer. Another example is the establishment of a central CEMA office for purchasing Western licenses proposed by the USSR to avoid duplication. This would be linked to CEMA funding of joint specialization projects.
Stage 1 was characterized by inactivity throughout the 1950s, with "CEMA" affairs consisting almost entirely of bilateral relations between the Soviet Union and individual EE countries. A phrase coined by Fred Pryor describes the period well: "Soviet Embassy system of coordination."

Stage 2 encompasses the period of the 1960s, which began with Khrushchev's hasty attempt to transform CEMA into a supranational organization. After the attempt was abandoned in the face of strong resistance from several countries, the talk turned to "plan coordination." This consisted largely of an exchange of information on national plans already approved by the national authorities, hence changes suggested by CEMA organs encountered benign neglect or express resistance. The principal interest of members in "coordination" was to insure from each other the supplies needed to fulfill their domestic plans. The main achievement of CEMA during this period was the free exchange of technical information (which, however, soon became a brake on rather than force for further integration), the creation of two banking institutions with considerable (but unused) integrative potential, the construction of a coordinated transport network and the building of a multinational oil pipeline and electricity grid. It should be noted that these latter two multinationally planned joint projects did not involve capital transfers across national boundaries since each country was responsible only for constructing sections located on its own territory. The 1960s was also a period of experimentation, of finding out mostly what integration schemes would not work; learning that the more far-reaching the scheme, the more there will be coordination problems and resistance from particular countries.

Stage 3 is the period beginning with 1971, marked by the unveiling of the Comprehensive Program for Integration. Highly significant is the recognition that crucial to integration efforts is the effective coordination of investment
plans and that such coordination should mean joint planning on a selective basis. Crucial to creating the conditions for a forward momentum is the principle that each country should be allowed to decide whether or not to participate in a given CEMA project. Two important new CEMA committees were established in 1971, a committee for planning and a committee for scientific and technical collaboration, both placed high in the CEMA hierarchy, above the dozens of standing commissions. The supranational planning efforts of these committees are limited to activities in which members express an interest; there is a right to abstain from joining particular agreements or joint activities.

Although the Comprehensive Program was unveiled with great fanfare in 1971, there was not much movement toward implementation for a couple of years. The Soviets were pursuing détente and the focus of attention was on East-West trade, with no one being quite certain what all that will mean for CEMA integration. The "events" of 1973-74 provided the impetus to move CEMA integration off dead center. As the centripetal forces outlined in the previous section began to work, the Soviets must have realized that this was a propitious opportunity to push CEMA integration forward, and EE that this was no time to balk. In 1974 an important agreement was reached on a multilateral joint investment project, the big Orenburg gas pipeline.

* The establishment of the planning committee, where member countries are represented by the chairmen of their state planning agencies, is regarded by EE economists as one of the most important events in the institutional evolution of CEMA [7].

** The seven European CEMA nations all agreed to take part in building a 1,700 mile natural gas pipeline with 22 large compressor stations from the USSR's Orenburg gas fields to its Western border, paralleling the Friendship and Brotherhood oil pipelines. The USSR provides feasibility studies, all technical documents and blueprints, overall construction supervision and more than 50% of the capital. Bulgaria, Czechoslovakia, the GDR, Hungary and Poland will each build one of the pipeline's five sections; Romania contributes by buying equipment in third countries. The large amount of Western pipe and equipment required for the project is financed by CEMA's International Investment Bank large borrowings in the West. According to a Polish source, EE countries also provide hard-currency for financing the purchase of pipe for their respective sections (Zycie gospodarcze, April 20, 1975).
Although it is perhaps too early to tell, it seems that the integration gains of the last few years were consolidated at the 29th CEMA Session, held in Budapest in June 1975. A Soviet spokesman describes in unusually glowing terms the signing there of an Agreed Plan for Multilateral Integration Measures, calling it "an internationalist document of great political and economic significance" [15]. The importance of the document apparently lies in that:

For the first time in the history of cooperation among the socialist countries, grouped together are major economic integration problems for joint solution and also specified [are] the forms, methods and stages of their handling. The plan incorporates, among other things, the joint construction and financing of large projects and additional capacities, involving resources of the interested countries [Examples]. The total estimated cost of joint ventures included in the Agreed Plan amounts to roughly 9 billion transferable rubles" [15].

FUTURE PROSPECTS: THE CRITICAL FACTOR OF SOVIET COMMITMENT

One conclusion of this paper is that the critical factor which will decide how the centrifugal and centripetal forces battling on CEMA integration will be resolved is the extent of Soviet commitment to CEMA integration. I think that it is by no means a foregone conclusion that the Soviets will push integration much further than it now stands. And it is at least conceivable that the Soviets will find it necessary in a few years to reverse some aspect of the CEMA integration process. This is because the catalyst which provides CEMA its current integration momentum is Soviet willingness to continue to provide a growing volume of net surplus of hard goods to CEMA.

How firmly is this willingness committed, looking to 1980 and beyond?

According to a Soviet spokesman, writing in October 1975:

There is a preliminary agreement ... for 1976-1980. A large part of the harmonized provision of commodities is directly related to various forms of industrial cooperation, particularly joint construction of new capacities, coordinated capital investments, and specialized and cooperative produc-
tion in manufacturing industries. Preliminary coordination promises a possible increase of over 50 percent in the CMEA countries' mutual trade turnover in the next five-year period (based on the 1974 prices) [15] (emphasis added).

Then a few paragraphs later:

The major part of the CMEA nations' fuel and energy requirements is provided by the Soviet supply which will continue to grow after 1980 as well. But this depends largely on the condition that the interested countries take part in building up the additional oil and gas extracting capacities and recognize the expenses needed to maintain the production of these important crude products at an adequate level.... It is appropriate to point out that the Soviet Union not only provides additional supplies of important raw materials on a long-term basis, but also makes certain adjustments in its national economic pattern by raising the share of its extractive industries... to meet the requirements of other socialist countries in crude products [15] (emphasis added).

Is East Europe an Economic Liability to the Soviets?*

The actual distribution of gains and losses in Soviet-CMEA trade in 1960 and 1970 was estimated by two Western scholars. Under ordinary circumstances, when two nations engage in trade both partners are expected to benefit, even though the distribution of gains from trade may not be equal. Defining gains from trade as the ratio of the estimated resource costs of exports to the potential resource cost of full import substitution, Hewett [17] found, however, that trading with CEMA actually results in a loss for the Soviet Union. That is, by these calculations, in 1960 it cost the USSR 38% more resources to export to CEMA than it would have cost to substitute domestic production for imports from CEMA. In contrast, all CEMA countries except Romania were able to save anywhere from 3 to about 30% of the resources they would have had to expend had they been forced to produce domestically the commodities imported from the Soviet Union (Romania "lost" 19%).

By 1970, both CEMA foreign trade prices and the commodity structure of Soviet-CEMA trade had changed. Assuming that only prices changed (i.e., that

* This section is based on [11] and follows closely its text.
Hewett calculates that the Soviet loss on trade with CEMA would have increased to 67%. This is largely because fuels and ores have had to be extracted in increasingly remote Asian regions, where production and transport costs to the borders of East Europe are higher. The actual loss was only 28% because of changes in the structure of trade: by 1970 a larger proportion of Soviet exports to CEMA was comprised of machinery than a decade earlier (Table 1). In spite of changes in the commodity composition, CEMA countries had increased their gains from trading with the Soviet Union by 1970 as compared with 1960 (gains for Poland remained about the same).

Somewhat similar results were obtained, via a different methodology, by McMillan [14]. Using the so-called Leontief method, he calculated the capital, labor and natural resource requirements of a typical basket of Soviet exports as well as import replacements. He found that in 1959 (the only year for which he was able to perform these calculations) Soviet exports contained absolutely greater amounts of labor, capital and natural resources than those of import substitutes of equivalent value. McMillan found that the overall losses had originated in trade with the more developed CEMA partners, East Germany, Czechoslovakia, Poland and Hungary. That is, Soviet exports to these countries used up more labor, capital and natural resources than it would have required to produce the manufactured goods which make up the bulk of Soviet imports from them.

Because of data problems and the simplifying assumptions, the results should not be interpreted as precise measurements and neither of the two experts cited claim more. For example, we have no information on the volume and price of military equipment shipped from the Soviet Union to East Europe (scattered evidence suggests that the prices charged are high), which could
influence not only the magnitude but perhaps also the direction of these results. We have also omitted many other relevant items, such as the grant equivalents of EE's interest-free or subsidized capital transfers to the USSR.

Be that as it may, the question of "cost" can be approached from another perspective also, which is perhaps more relevant, given the way in which the Soviets are likely to think about the problem.

The Soviet Union continues to face a declining rate of growth of national product, attributable not only to the problems of bureaucracy and poor managerial incentives, but also to a substantial slowdown in the rate of growth of labor force (due to demographic factors) and capital stock (as an increased proportion of new capital replaces rather than adds to the existing stock). Acceleration of economic growth requires a more rapid improvement in productivity, which, in the view of the current leadership, requires increased Western capital and know-how. These imports must be paid for, currently or as credits are repaid, largely with Soviet energy and raw material products. The more these earners of convertible currency are exported to CEMA partners rather than to the West, the more East Europe is viewed by the Soviets as an economic liability.

The poor harvests of 1972 and 1975, as well as the likelihood of their future occurrence, must also enter the equation. The poor harvests forced the Soviet Union to purchase large quantities of agricultural products in the West, close to $3 billion worth during 1972-73, and probably close to that amount again in 1975. Such huge and unplanned purchases contribute to large trade deficits with hard-currency countries. The larger the Soviet hard-currency deficits, the greater the opportunity cost—economic liability—of
supplying to CEMA countries commodities that could be sold readily for hard currency in the West. The substantial windfall gains which accrued to the USSR during 1973-74 on account of large increases in the price of oil, gold, timber and other hard-currency export products smoothed the way for financing the huge unplanned grain purchases of 1972-73 and 1975-76. But there is no guarantee that the Soviet Union will have similar offsets in case it runs into a series of consecutive bad harvest situations.

Looking at the current and near-term future situation, EE can be considered an economic liability to the Soviet Union. But the perspective on this question might well be different if one considers the economic and political costs and benefits of intrabloc relations as interacting factors and joint products. While the Soviet Union would find it economically attractive to diminish its direct economic links with CEMA partners, it must also view EE's increased economic dependence as a political asset, as its CEMA partners must continuously weigh the economic cost of non-compliance with Soviet political demands.