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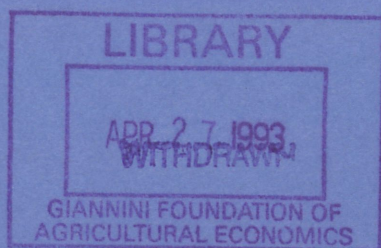
## **A Marshall Plan for the East: Options for 1993**

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February 1993

## Department of Economics



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Key words: Foreign aid, Marshall Plan, Soviet Union  
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## **A Marshall Plan for the East: Options for 1993**

### **Abstract**

The economic crisis in Eastern Europe and the former Soviet Union continues to evoke calls for Western assistance. Many observers question, however, whether a new Marshall Plan would be productive today. Answering this question requires first understanding what rendered Marshall aid so effective after World War II. This paper therefore reviews recent research on the effects of the Marshall Plan. It then considers four options for Western assistance to the East: a Marshall Plan on the scale of 1948-51, aid sufficient to fund a social safety net, aid sufficient to establish a multilateral clearing mechanism, and the provision of technical assistance.



## A Marshall Plan for the East: Options for 1993

### I. Introduction

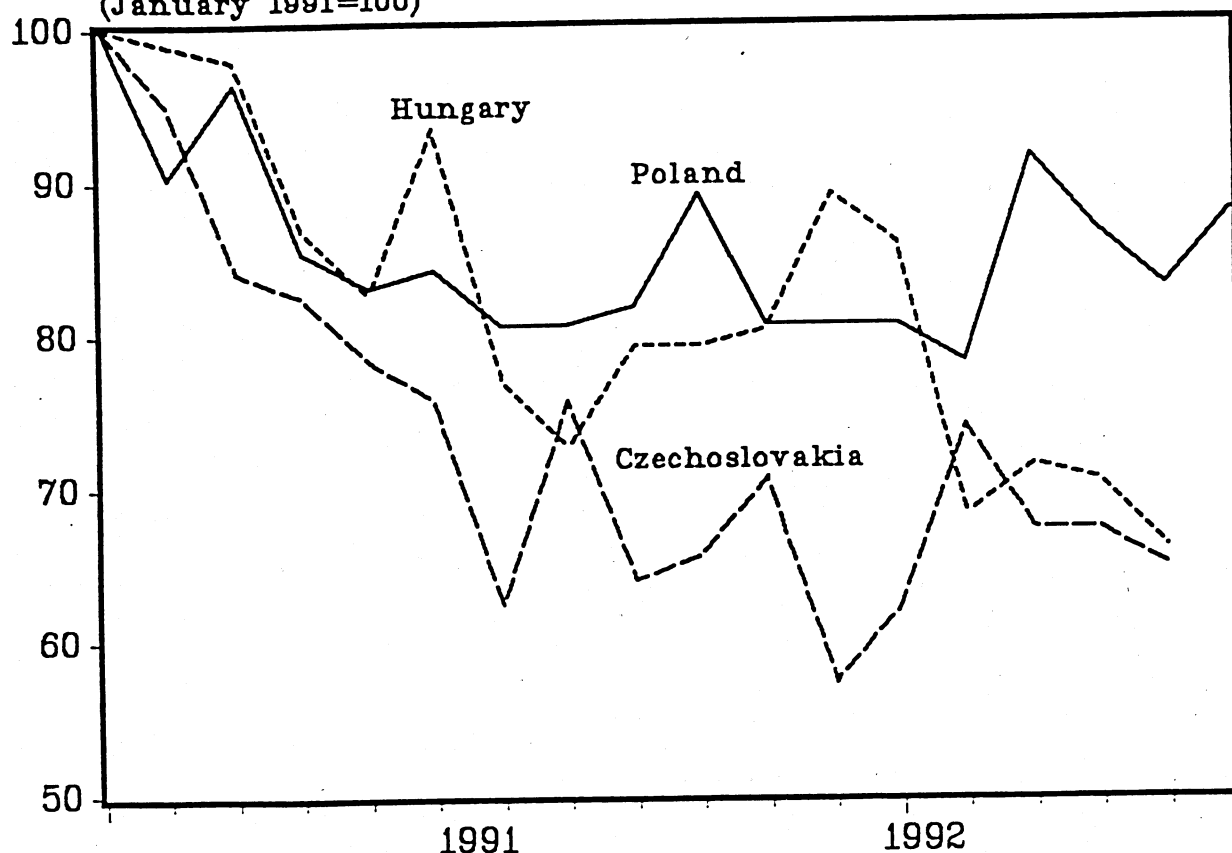
The countries of Eastern Europe and the former Soviet Union seeking to transform themselves into market economies have reached a fork in the road. In one set of countries, led by Poland, the decline in production associated with the inter-sectoral transfer of resources has slowed considerably and in some cases has been reversed. In Poland, GNP stabilized in 1992, and industrial output at the end of the year was up by more than 10 per cent over the end of 1991 (Figure 1). In Hungary and the Czech Republic the turnaround is not yet complete, but in each member of this group the transformation process nonetheless appears to be gaining momentum (see Table 1).

In the second set of countries, of which Russia is the largest member, output continues to decline. Mass redundancies have not yet occurred in Russia, but both government officials and independent observers anticipate significant increases in unemployment this year.<sup>1</sup> Inflation is accelerating, reflecting persistent monetary and fiscal imbalances. Not only the other former-Soviet republics but also various Eastern European countries also display these symptoms to varying degrees. In this group of countries the continued deterioration of economic conditions raises fears that support for the transformation process may evaporate.

The contrasting situation in the two groups of countries and the severity of crisis in the second group continues to evoke calls for Western assistance. Significant amounts of aid have been promised (see Table 2), but relatively little



Industrial Production: Czechoslovakia, Hungary,  
and Poland thru mid 1992  
(January 1991=100)



Source: United Nations Statistical Division.

— POLAND    - - - HUNGARY    - - - CZECH



has been dispersed, especially to the independent states of the former Soviet Union. Chaotic conditions in certain countries, particularly the persistent lack of monetary and fiscal control, have however prompted skepticism that Western aid would be used productively. Many observers, even some who supported proposals for large-scale foreign aid for the East a few years ago, question whether a new Marshall Plan would be productive today.

One approach to answering this question is to understand what rendered Marshall aid to Western Europe so effective after World War II. This is the point of departure for the present paper. I first review recent research on the economic effects of the post-World War II Marshall Plan with an eye toward assessing the applicability of similar measures in Eastern Europe and the former-Soviet Union in 1993. In light of this analysis, I then consider possibilities for Western assistance to the East. I evaluate the relative merits of four options: (1) a Marshall Plan on the scale of that of 1948-51; (2) aid sufficient to establish a social safety net; (3) aid sufficient to establish a multilateral clearing mechanism; and (4) the provision of technical assistance. The conclusion summarizes the implications of the analysis for foreign economic policy in 1993.

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## II. What the Marshall Plan Did

The literature on the Marshall Plan and the post-WWII economic miracle in Western Europe is a mixture of fact and fiction. Recovery was rapid and aid was substantial. The temporal coincidence has encouraged causal inferences attributing the former to the latter. Yet a range of other factors conducive to economic recovery was also in place. Repair of decayed infrastructure following

Table 1  
GDP-Growth in Selected Countries  
(real percent change over previous year)

	1989	1990	1991	1992 1)
Bulgaria	-1.5	-12.0	-23.0	-10.0
Czechoslovakia	0.7	0.0	-16.0	-7.0
Poland	0.3	-12.0	-9.0	-1.0
Romania	-5.8	-7.0	-13.0	-10.0
Former USSR	2.4	-4.0	-14.0	-18.0
Hungary	1.0	-3.0	-10.0	-4.0

1) Estimate

Source: Institute for International Finance and Vienna Institute for  
Comparative Economic Studies



a devastating war, modernization of plant and equipment after a decade and a half of inadequate private investment, the acquisition of a backlog of previously unexploited technology from the United States -- all of these factors could have stimulated European economic growth in the absence of the Marshall Plan.

Alternatively, U.S. aid could have complemented these factors in ways that significantly enhanced their contributions to growth. It could have permitted Western European countries to exploit these opportunities more efficiently than they would have been capable of doing otherwise. The trick is to pick out the precise contribution of the Marshall Plan. This requires identifying the channels through which the aid program operated.<sup>2</sup> I distinguish six alternatives.

#### A. The Marshall Plan as Stimulus to Investment

Investment is perhaps the most obvious channel through which the Marshall Plan could have accelerated Western Europe's economic recovery following World War II. Investment had lagged as a result of a decade of depression and half a decade of war. Productive capacity destroyed in the course of hostilities had to be made good. Although capital stocks in some countries, including Germany, were even larger following World War II than they had been in 1938, reflecting wartime investments in capacity, much of this investment had been devoted to increasing capacity in heavy industries essential to the war effort, relatively little to capacity for the production of consumer goods. Additional investment was needed if only to transform existing capacity to peacetime uses.

Europe's ability to undertake this investment was limited. Incomes were low in the aftermath of the war. In defeated Germany and other parts of Europe, individuals were living close to the margin of subsistence. As a

Table 2  
Assistance to the Central and Eastern European countries (CEEC)  
Global cumulative commitments from beginning  
1st quarter 1990 to end 2nd quarter 1992

	<u>Total Assistance</u>		<u>Of which Grants</u>	
	<u>bln ECU</u>	<u>bln US\$</u>	<u>bln ECU</u>	<u>bln US\$</u>
<u>A. G-24</u>				
1. <u>Economic Restructuring Assistance</u>	7.2	9.1	5.3	6.9
of which:				
- Social infrastructure & services	0.9	1.1	0.8	1.0
- Economic infrastructure & services	1.9	2.4	1.2	1.6
- Production sectors	1.5	1.9	1.1	1.5
- Multi-sector	2.9	3.7	2.2	2.8
2. <u>Macro-Financial Assistance</u>	11.4	14.4	6.3	8.0
of which:				
- Polish Stabilization Fund	0.8	1.0	0.2	0.2
- Medium-term Loan to Hungary	0.8	1.0	-	-
- Complementary (to IMF) Loans to:				
Czechoslovakia	0.8	1.0	0.01	0.01
Hungary	0.3	0.4	0.01	0.01
Bulgaria	0.4	0.5	-	-
Romania	0.5	0.6	-	-
- Debt	7.3*	9.2	6.0	7.6
3. <u>Emergency Assistance</u>	1.5	1.9	1.4	1.7
of which:				
- Food Aid	1.2	1.5	1.1	1.4
- Other Emergency Aid	0.3	0.4	0.3	0.3
4. <u>Official Export Credits</u>	8.8	11.2	-	-



5. <u>Official Support for Private Investment</u>	1.4	1.8	-	-
6. <u>Non-Specified</u>	3.6	4.6	0.9	1.1
<b>TOTAL G-24</b>	<b>33.9</b>	<b>43.0</b>	<b>14.0</b>	<b>17.7</b>
 <u>B. International Institutions</u>	 13.0	 16.5		
1. IMF	6.9	8.8	-	-
2. World Bank	5.4	6.8	-	-
3. EBRD	0.7	0.9	-	-
<b>GRAND TOTAL</b>	<b>46.9</b>	<b>59.5</b>	<b>14.0</b>	<b>17.7</b>

\* This figure represents official donor commitments towards the target set within the framework of the Club of Paris where members pledged:

- for Poland 50% reduction of external debt

- for Bulgaria \$1.4 bln ECU rescheduling over 10 years with a 6 year grace period

1 ecu = \$1.27

Source: European Commission (1992)

consequence, savings rates were depressed. In every European country but Norway, they were noticeably lower before 1951 than after.<sup>3</sup> Private foreign lending was not forthcoming because of unsettled economic and political conditions in the potential borrower countries and because the debt defaults of the 1930s had not been cleared away.

Despite these handicaps, the process of postwar investment was underway even before Marshall aid came on stream. Abelshauser (1975, 1991) therefore argues, on the basis of German evidence, that the Marshall Plan was largely superfluous. Moreover, viewed relative to total investment in the recipient countries, the Marshall Plan was not large. Marshall aid accounted for less than 2 1/2 per cent of the combined national incomes of the recipient countries between 1948 and 1951, a period when domestic investment was running in excess of 15 per cent of GNP. Only one in six Marshall Plan dollars was spent on machinery broadly defined.<sup>4</sup> The rest underwrote imports of industrial raw materials, semi-finished products and agricultural goods.

These imports of agricultural commodities and industrial inputs could, however, have released for use in domestic investment additional resources that would have otherwise had to be devoted to production in Europe of foodstuffs and raw materials. This is the thesis of Milward (1984), who argues that the ambitious programs of domestic investment pursued by Western European governments had by 1947 run up against a binding balance-of-payments constraint. This thesis admits to the possibility of multiplier effects: if every dollar spent on imported machinery required the equivalent of \$2 spent on the construction of factory buildings and related investments using inputs produced



domestically, then a relatively small amount of Marshall aid devoted to imports of capital goods could have had substantial investment effects.

Testing this hypothesis requires estimating the counterfactual level of investment that would have prevailed in the absence of the Marshall Plan. Eichengreen and Uzan (1992) estimate the determinants of the investment rate for a cross section of European countries in each year from 1948 through 1954. Investment is specified as a function of postwar catchup (the percentage drop in GNP since 1938) the technology gap (per capita GNP relative to that prevailing in the U.S.), and other factors including Marshall aid as a share of national income. (See Table 3.) Every dollar of Marshall aid is shown to have raised investment by 36 cents. This finding is consistent with Milward's hypothesis in that 17 cents of every dollar of Marshall aid was spent on imported capital goods but another 19 cents was spent on average on investment of domestic resources.

This estimate suggests that aid amounting to 2 1/2 per cent of Western European GNP would have raised the investment rate by less than 1 percentage point ( $0.36 * 2.5 = 0.9$ ). The investment rate, in other words, would have risen from, say, 15 to 16 per cent of national income. Even in circumstances like those of the late 1940s where investment had an exceptionally high rate of return, the impact on growth would have been small. The incremental capital-output ratio following the war appears to have been as low as 2.5 (Eichengreen and Uzan, 1992), which would tend to maximize investment's effect. But even in these circumstances, an additional percentage point of national income devoted to investment would have raised domestic production by less than half that much. Though a useful contribution, this aid-induced investment effect can account for

Table 3  
Channels linking the Marshall Plan to Growth, 1948-54

(Dependent variables expressed as shares of GDP)			
	Investment	Current account	Government spending
Constant	0.21 (5.42)	-0.16. (3.16)	0.37 (2.84)
GDP relative to US	-0.10 (2.42)	0.17 (3.20)	-0.28 (2.11)
GDP growth since 1938	0.10 (6.79)	-0.05 (2.41)	0.01 (0.29)
Terms of trade	-0.01 (1.98)	0.01 (0.37)	0.01 (0.34)
Pop growth	1.08 (2.42)	-0.24 (0.39)	1.95 (1.25)
CPI inflation	0.06 (2.73)	-0.55 (1.63)	-0.13 (1.75)
Openness	-0.03 (0.64)	0.48 (7.35)	-0.01 (0.03)
Marshall Plan lagged	0.36 (2.53)	-0.12 (2.28)	-0.31 (0.63)
n	122	113	125
S.E.	0.02	0.02	0.06

Note: t-statistics in parentheses. Country dummy variables are included in all equations.

Source: Eichengreen and Uzan (1992), p.64.

only a small share of the unprecedented growth of postwar Western Europe.

#### B. The Marshall Plan as Finance for Imported Inputs

Another obvious channel through which the Marshall Plan could have operated was by financing imports of much-needed industrial raw materials. A third or more of Marshall aid was used in this way. (Recall that the portion not devoted to capital goods or industrial inputs went largely to foodstuffs). These inputs could have removed critical bottlenecks that would otherwise have prevented European factories from getting up and running. Borchardt and Buchheim (1991) argue that imported yarn was critical for the recovery of German textile industry, for example.

A related argument along similar lines emphasizes the importance of forward linkages. Coal was needed to fuel blast furnaces, which were needed to produce steel, which was needed to manufacture vehicles, refrigerators and other goods. One can imagine that Marshall-Plan-financed imports of coal or another critical input utilized upstream might have had a multiplier effect on the volume of downstream production.

The question is the generality of such phenomena. Cotton, the case cited by Borchardt and Buchheim, is a strong one for the reason that none was grown in Europe itself. A little yarn could have opened the door to a lot of value added. The issue is to how many other sectors such arguments apply. The logical way of investigating it is input-output analysis, removing Marshall-Plan financed inputs and seeing by how much output falls. De Long and Eichengreen (1992b) use a vintage 1950 16 sector input-output table for Italy, a country especially dependent on imported coal.<sup>5</sup> Eliminating all imports of coal produces



a counterfactual drop in industrial production of 6.8 per cent, and a commensurate fall in the supply of transportation services. But since industry and transport accounted for less than half of the Italian economy, the decline in national income comes to less than 3 1/2 per cent. Schran (1992) has undertaken an analogous exercise for France, finding that the removal of all Marshall-Plan-financed imports could have reduced French output in the program's first year by as much as 9 per cent.

These are significant effects. But there are several reasons that they overstate the impact of Marshall-Plan-financed imports on the level of production. First, countries that might have been denied Marshall aid could have compressed other forms of spending in order to continue purchasing abroad critically-needed supplies. In principle, they could have exported more in order to finance at least some of these imports on their own. Eichengreen and Uzan (1992) provide econometric support for this hypothesis by estimating the determinants of current account balances for a cross section of Western European countries (Table 3 above). They confirm that a dollar of Marshall aid widened the current account deficit by less than a dollar. The counterfactual elimination of Marshall aid, this implies, would have led to additional exports as well as fewer imports.

In addition, results from input-output analysis are likely to overstate the impact of Marshall-aid-financed imports of raw materials due to their assumption of fixed coefficients. In practice, there was scope, except perhaps in extreme cases like cotton textiles, for economizing on the use of scarce and costly inputs by substituting factors of production in relatively abundant supply.

Even if one denies that there existed scope for using market mechanisms to relieve resource bottlenecks, the counterfactual changes in output due to the provision of additional aid-financed inputs pale in comparison to the doubling of industrial production in the participating countries between 1947 and 1951. This cannot be the entire story.

### C. The Marshall Plan as Finance for Productive Public Spending

With production still depressed and their financial systems in disarray, postwar governments, it has been claimed, were revenue constrained. They possessed a portfolio of high-return expenditure programs which their limited ability to mobilize domestic resources prevented them from exploiting. An obvious example is infrastructure repair. Roads, bridges, railways and port facilities had all been heavily damaged in the war. Until inputs could be transported to the factory, outputs to the market, production would not recover. Hence, the Marshall Plan, as a transfer to European governments, provided them with the resources for infrastructure repair necessary for the recovery of economic activity.

This view finds little support in the data. Governments receiving Marshall aid did not spend more; if anything the receipt of aid was associated with a decline in the level of public expenditure. Eichengreen and Uzan estimate multivariate regressions determining the level of public spending for a cross section of European countries, finding a small negative but statistically insignificant coefficient on Marshall aid (Table 3 above). This suggests that governments in fact were not revenue constrained; seigniorage along with other sources of revenue were heavily utilized. Marshall aid, moreover, came with

conditions attached. The U.S. authorities pressured recipient countries to balance government budgets and limit public spending, arguably to some effect.<sup>6</sup>

In addition, there is the fact that the most critical forms of infrastructure repair were completed by the time Marshall-Plan funds began arriving in mid-1948. For example, the most important railway lines had already been repaired. The volume of goods loaded and shipped in Continental Western Europe was already 97 per cent of prewar levels at the end of 1946. When ton-kilometers (volume times distance) are considered, prewar levels had already been surpassed. Much superficial damage remained, and many additional years were required to repair Europe's housing stock, but the most important forms of damage affecting current productive capacity had been repaired by the time Marshall aid began to flow.

#### D. The Marshall Plan as Stimulus for the Reconstruction of Trade

One factor frequently mentioned as an engine of post-WWII economic growth is the rapid increase in Europe's trade.<sup>7</sup> The component that expanded most vigorously was trade among the Western European countries themselves (Eichengreen, 1993). History and proximity made these countries natural trading partners, although in the immediate aftermath of World War II their trade had fallen to virtually nothing. Its rapid reconstruction allowed them to specialize in the production of goods in which they had a comparative advantage and to more fully exploit economies of scale and scope. Competition between producers in different European countries prevented any one national enterprise from exploiting its market power domestically and promoted efficiency by admitting the chill winds of foreign competition.

The most important institutional innovation promoting intra-European trade was the European Payments Union (EPU) established in 1950. The EPU facilitated multilateral clearing among participating countries. Superseding the network of bilateral trade agreements upon which Europe's trade had been based, it allowed countries to use surpluses with one European trading partner to finance deficits against another. In addition, under the provisions of the EPU agreement, participating countries received credit lines (known as "swing") that could be used to finance deficits against the union as a whole. Each country was given a credit line equal to 40 per cent of its quota, and the quotas themselves were set at 15 per cent of the country's total visible and invisible trade with the EPU area in 1949.<sup>8</sup> These credits could be used to finance a country's cumulative deficit with the union. Both the credits and the facility for multilateral settlements stimulated the growth of intra-European trade.

The EPU was a product of the Marshall Plan. Indeed, it is unlikely that it would have come about without the active support, both financial and political, of the United States. The Economic Cooperation Administration (ECA), the American agency that administered the Marshall Plan, was an active proponent of the clearing union scheme, despite the danger that it might involve an element of discrimination against U.S. exports. Triffin (1957, p.163) describes its role as follows:

"The strong and imaginative leadership of the ECA helped crystalize the vague and often conflicting aspirations of a score of countries around a coherent plan of action, based on only a few, but strategic principles. The ECA showed the utmost flexibility in devising ways and means to meet legitimate fears and objections without sacrificing or compromising any of the fundamental features of its plan."



In addition, through the Marshall Plan the U.S. made a contribution of working capital to finance the operation of the system. Working capital was needed to induce the potential surplus countries to participate in the union. If all countries started out with zero balances with the union, those in weak balance-of-payments positions could expect to immediately start obtaining imports for credit. Countries in surplus with the rest of Europe, like Belgium, whose steel-making capacity was successfully reconstructed at a relatively early date, anticipated having to part with exports in exchange for inconvertible EPU credits which were worthless in transactions with the rest of the world. The provisions of the EPU agreement were designed to induce the participation of surplus countries. The proportion of receipts received in hard currency (gold and dollars) as a country's cumulative surplus grew was made to rise more quickly than the proportion of a deficit country's payments financed with hard currency rather than credit. (See Table 4.) If surplus and deficit countries ran through their quotas at the same rate, this asymmetry meant that more gold and dollars would have to be paid out to creditor countries than were paid in by the debtors. A Marshall Plan grant of \$350 million of working capital to the EPU was provided to make up the difference.

How important the EPU was to Europe's postwar recovery remains an open question. What is clear is that the EPU could not have been established, at least in its particular form, without the Marshall Plan.

#### E. The Marshall Plan as Technical Assistance

An integral component of the Marshall Plan was technical assistance.<sup>9</sup> As a condition of receiving Marshall aid, European countries were required to

Table 4

Initial Schedule of Settlements in the EPU  
(Percent of current deficit or surplus)

Cumulative Surplus or Deficit  (percentage of EPU quota)	Country with Cumulative Deficit		Country with Cumulative Surplus	
	Gold	Credit	Gold	Credit
From 0 to 20 percent	0	100	0	100
From 20 to 40 percent	20	80	50	50
From 40 to 60 percent	40	60	50	50
From 60 to 80 percent	60	40	50	50
From 80 to 100 percent	80	20	50	50
Overall percentage	40	60	40	60

Source: Kenen (1991), p.256.

participate in the technical assistance program and to co-finance its operation. The program was a response to the perception that technology and industrial organization in Europe had lagged behind best practice in the United States. To promote the transfer of knowledge, a large number of closely-monitored productivity study tours, comprised of European managers, labor leaders and government officials, were sent to the United States. The cost of the program was \$300 million, which was shared between the donor and recipient countries.<sup>10</sup>

Hundreds of productivity study tours took place starting in 1948, involving some 24,000 Europeans. Each tour was devoted to the study of a particular industry -- more precisely, to a specific sector within that industry (steel foundries rather than steel production, for example) -- or to a branch of applied research like agricultural extension or laboratory instrumentation. 12 to 17 individuals drawn from a particular field (managers, engineers, workers, union leaders and government officials) spent six weeks on a closely supervised tour of the United States. Each week involved three days spent visiting plants and three days writing reports. Upon conclusion of the tour, the team wrote a report summarizing its findings, which was published in book form. Dissemination of its findings and their applicability to Europe was further promoted by articles in technical journals, audio-visual presentations, and the provision of consultation services by American engineers and labor-management specialists and government statisticians.

Dotz and Silberman (1993) credit the technical assistance effort of the 1950s not just with transferring knowledge of production processes but with changing the mind set of European entrepreneurs and European society generally. The program, they argue, reoriented attention in more productivity-enhancing

directions. The creation of national productivity centers and government productivity drives, of which foreign technical assistance measures were an integral part, heightened the prominence of the need to enhance industrial efficiency. They succeeded in "rapidly focus[ing] everyone's attention on productivity as the primary mechanism for raising living standards..."<sup>11</sup>

Technical assistance, it is claimed, had an extremely high rate of return. Silberman and Weiss (1992) cite contemporary government sources suggesting that substantial increases in productivity quickly followed the return of Marshall Plan study teams. To quote,

"For example, the Productivity Centers' programs reached 400 of the 1,000 cotton-spinning and weaving firms in France by 1957, with industry-wide gains of 40 per cent in productivity and 25 percent increases in wages in four years. The French hand tool industry achieved overall gains in almost every management and production function affecting productivity. Plans realized gains in production of up to 40 percent, quality control time savings of 30 per cent, reduced production throughput of 65 percent, and substantial reductions in labor requirements."<sup>12</sup>

These authors attribute the increase in total factor productivity in Europe between the 1930s and 1950s, on the order of two or three percentage points per annum, to the operation of this program.

There are grounds for questioning the attribution of these effects to technical assistance under the Marshall Plan. There were other reasons, as we have seen above, to anticipate an increase in the rate of total factor productivity growth following World War II. The gap between best practice technique in Europe and in the U.S. would have provided scope for catch-up even in the



absence of technical assistance missions. The program may have done little more than shift forward slightly the timing of technology transfer. The fact that the largest productivity gains occurred in sectors to which missions had been targeted does not dispatch this objection, due to selectivity. Sectors to be favored with study tours were identified by national productivity commissions, which presumably preferred sectors where productivity was lagging farthest behind the United States -- that is, sectors where the scope for knowledge transfer was greatest even in the absence of technical assistance missions.

As for the change in attitudes in Europe that seemed to occur in the 1950s, again is not not clear that national productivity drives deserve credit. The 1930s had been a period of extensive import protection and cartelization in many countries. Productivity had not been stimulated by these barriers to competition; if anything, the opposite had been true. Perhaps the most important factor behind the renewed attention devoted to productivity in the 1950s was not technical assistance or government publicity campaigns but rather the reduction in trade barriers and hence the intensification of international and especially intra-European competition.<sup>13</sup>

Thus, technical assistance under the Marshall Plan, while valuable, may not have been as important as suggested by some recent investigators.

#### F. The Marshall Plan as a Facilitator of a Social Pact

Much research on the Marshall Plan accepts the revisionist critique that U.S. aid did not work primarily through the channels identified above. But it insists that the Marshall Plan contributed to the successful negotiation of the social contract upon which both recovery and the subsequent generation of rapid growth

ere based (Maier, 1977). On the eve of the Marshall Plan, Europe was suffering from a marketing crisis in which producers refused to bring goods to the market, and workers and managers limited the effort they devoted to market work. Political instability, shortages of consumer goods and fears of financial chaos led them to hoard commodities and withhold effort. The Marshall Plan facilitated the restoration of financial stability and the liberalization of production and prices by helping to end the "war of attrition" over distribution in which European capital and labor were engaged. It did so by increasing the size of the distributional pie, reducing the sacrifices required of the parties that compromised. With agreement on matters of distribution, budget balance again became possible. Once budgets were balanced and the specter of financial instability no longer loomed, it was possible to remove controls and liberalize prices. Inventories were released, and goods returned to the market. With the danger of confiscatory taxation removed, long-term investment projects could be undertaken again.

A critical contribution of U.S. aid, according to this view, was that it altered the environment in which economic policy was made. The strings attached to U.S. aid strengthened the hand of those who favored the return to a relatively uncontrolled economy. The Marshall Plan played a pivotal role at the juncture when post-World War II Europe was faced with the decision of whether to cultivate or suppress the market.

This view must come to terms with the fact the influence of Marshall aid was received differently in different places. As Kindleberger (1978) observes, American officials had no doubt that "the purpose of the Marshall Plan was to restore the economies of Europe to the point where free markets could function

efficiently." These ideas were enthusiastically received by Adenauer, Erhard and the German public. But in other countries the Marshall Plan was seen as providing support -- and finance -- for programs of economic planning. Even in Germany, as Abelshauser notes, the Frankfurt ECA Mission criticized Erhard's reforms as too beholden to the ideology of laissez-faire.

These views become possible to reconcile when one recalls that Europe's market economy was a "social market economy" (to translate the popular German term), a market economy with a social safety net. Western European planning was "indicative": government made suggestions and provided inducements as ways of affecting the direction of investment without suppressing market signals. The post-WWII European economy was by no means a pure free market economy, but it was freer than the centrally-planned alternative under consideration before the Marshall Plan.

Of all the channels through which the Marshall Plan operated, this one, more than the others, provides for it a major role in the post-WWII economic recovery of Western Europe. The question for policy is whether a new Marshall Plan could play such a role today.

### III. Options for 1993

What does this review of Marshall Plan experience imply for policy options for aiding Eastern Europe and the independent states of the former Soviet Union today? I evaluate the merits of four options, starting with the most ambitious.

#### A. A New Marshall Plan

The first option is an aid package on the scale of the post-WWII Marshall

Plan. If Western Europe, the U.S., Canada and Japan transferred a share of their combined GNPs equivalent to the share represented by the Marshall Plan, this would imply a transfer of about \$85 billion per annum spread over a six year period, a considerable sum.<sup>14</sup> Given the difference in relative size of donors and recipients in the two cases and the fact that recipient-country exchange rates were overvalued then but are undervalued now, transferring 2 1/2 per cent of the national incomes of the recipient countries, as under the Marshall Plan, would only cost \$20 billion a year for six years even if all of Eastern Europe and the former Soviet Union are included.

2 1/2 per cent of recipient-country income could no more underwrite the investment needs of these economies than it did in the aftermath of World War II. Munich's IFO Institute estimates that the combined investment needs of Eastern Europe and the former Soviet Union will average at least \$260 billion year for the foreseeable future, even if these economies are assumed to converge to Western per capita incomes only slowly.<sup>15</sup> A large transfer, calibrated to donor- rather than recipient-country incomes as described above, would be needed to have an impact on this figure.

A similar argument applies to a new Marshall Plan's capacity to finance imported inputs. The countries of Eastern Europe and, aside from Russia, most of the former Soviet Union will be confronted with heavy import bills when Russia begin to charge world prices for petroleum. For Belarus to finance its current energy imports at world prices would cost it 2 1/2 times its current hard-currency earnings, for example.<sup>16</sup> Only a very substantial aid transfer could make a dent in this bill.



Skeptics of the efficacy of Western aid retort that under present circumstances it is unlikely to be employed effectively. Transferring additional resources to governments running large budget deficits and financing them by inflationary means does not bode well for the efficient utilization of the donated funds. Such governments, if given additional resources, may use them to finance subsidies permitting enterprises that are better restructured or closed to continue operating in their present uneconomical fashion. Inflation will not slow if the recipient governments simply increase their spending by an amount equaling the aid inflow. Aid would be as likely to provide additional resources to factions seeking to slow or reverse the transformation process as those seeking to accelerate it.

It is worth recalling why Marshall aid tipped the balance toward stabilization and liberalization instead of against them after World War II. In Western Europe there already existed widespread support for and experience with the market. The Marshall Plan helped to tip the balance toward stabilization by reducing slightly the magnitude of the sacrifices needed to implement the requisite austerity measures and remove controls. It is far from clear that the same appreciation of the nature of the market and widespread public support for the policies needed to establish it prevail in 1993 in substantial parts of Eastern Europe many former-Soviet republics.

#### B. Financial Support for a Social Safety Net

If cultivating support for the transformation process is to be the goal of a new Marshall Plan, there may be a more direct way to achieve it. This is to use Western aid to establish a social safety net in the countries of the East. Given the

fact that the minimum wage in Russia is \$6 a month at current exchange rates, providing the minimum-wage equivalent to 6 million unemployed persons as income support would cost less than \$500 million in Western currency. Soros (1993) suggests the establishment of a more generous program covering all of the republics of the former Soviet Union, which would still cost less than \$10 billion a year.

Such a program would not be large enough to finance significant imports of capital goods or industrial inputs. Hence, it could not aspire to stimulate growth in the former Soviet Union via the investment and imported input channels through which the Marshall Plan operated at least in part. Rather, a social safety net providing income support for those least able to protect themselves from the disruptions associated with the transition to the market would help to contain the potential for backlash against market-oriented policies. It would help to maintain a social consensus in favor of reform.

If the monthly maintenance payment was made in dollars or another convertible Western currency, this would have the further benefit of introducing a stable unit of account and store of value into former-Soviet economies currently experiencing extremely high rates of inflation. Both hoarding of commodities and the diversion of effort from real to financial activities would be reduced.

Soros suggests that explicit dollarization, achieved in this way, would reduce inflation by raising the cost/benefit ratio for a government contemplating continued reliance on inflationary finance. Raising the same seigniorage revenues would produce even larger percentage increases in domestic-currency prices, encouraging governments to forswear use of the instrument. Unfortunately,

knowledge of this fact may lead potential recipient governments, clearly eager to establish their own currencies, to resist the implementation of this proposal.

### C. Financial Aid for a Multilateral Clearing Mechanism

Western analysts agree that a multilateral clearing mechanism for the former-Soviet states is necessary for reconstructing intra-republic trade (see for example Dornbusch 1992). The republics are highly specialized in production, rendering them dependent on trade and vulnerable to trade disruptions. Table 5 shows some data on the extent of trade dependence and on inter-republican trade balances. More recent data would show lower levels of trade, but these would be contaminated by the very collapse that a clearing mechanism is designed to reverse. Current account convertibility may be preferable in theory, but for the time being it does not appear to be feasible in practice; hence the argument for a payments union on second-best grounds.

Foreign aid, as described above, was critical to the establishment of multilateral clearing in Western Europe after World War II. It provided the working capital that helped to induce structural creditors to participate in the EPU. As Table 5 makes clear, the structural-creditor problem is likely to be even more severe in the former Soviet Union for the foreseeable future. Russia has a trade surplus with virtually every republic, due in large part to the others' dependence on it for energy imports traditionally supplied at sub-market prices. Although some substitution away from oil imports is possible, the limited flexibility that exists in the short run means that in the immediate future higher energy prices will tend to translate into still larger deficits for many republics and still larger surpluses for Russia.

Table 5  
Trade Dependence  
(Percent of Net Material Product)

	Exports		Trade Balance <sup>a</sup>	
	Inter-republican	Total	Inter-republican	Total
Russia	18.00	36.8	28.5	41.3
Ukraine	39.1	45.8	-3.9	-5.4
Belorussia	69.6	76.1	-0.2	-2.5
Kazakhstan	30.9	33.8	-1.1	-7.7
Uzbekistan	43.2	50.5	0.1	-4.4

<sup>a</sup>In million rubles at world market prices  
Source: IMF et al. (1991)

In January 1993, the Russian government undertook to provide 200 billion rubles of working capital to finance the establishment of a clearing union to be operated by a proposed Inter-State Bank. It offered, in other words, to provide that much credit for deficits incurred by other republics in return for their commitment to multilateral clearing. Support within the Russian government for this investment in rebuilding intra-republican trade may prove inadequate, however (Boulton, 1993). This creates an argument for the West to provide the working capital.

600 billion rubles amounted to about \$1.5 billion at the time the offer was made. Alternatively, the \$350 million provided the EPU in 1950 by the Marshall Plan authorities is the equivalent of \$2 billion in 1992 dollars.<sup>17</sup> This is still a relatively modest transfer compared to the options discussed above.

The question is whether it would have the desired effect. The EPU was established following inflation stabilization and monetary reform in the participating countries. Large budget deficits, rapid rates of money growth and unsustainable excess demands for imported goods had been eliminated by 1950. Previous efforts to establish a multilateral clearing mechanism in Western Europe had failed, precisely because it was expected that the potential participants, anticipating the rapid exhaustion of the system's working capital, would manipulate their balances of payments so as to capture the credits rather than losing them to their trading partners (Triffin, 1957). The countries least able to do so (the structural creditors) were therefore unwilling to participate.

This precedent suggests that the only multilateral clearing mechanism that is viable for countries that have not yet succeeded in stabilizing is one without



provision for credits or "swing." Western aid to finance swing would stimulate inter-republican trade briefly, but the credits would be exhausted quickly, and the recriminations that followed could sour subsequent efforts at cooperation. This implies that the main contribution the West can make to the establishment of a clearing mechanism is not financial aid but technical assistance regarding the operation of such a system.

#### D. Technical Assistance

More generally, a relatively modest option for providing foreign aid would be to underwrite technical assistance for a wide range of economic activities. Silberman and Weiss (1992) estimate that a program of technical assistance for Russia patterned on the model of the Marshall Plan would cost less than \$80 million (an average of \$40 million for each of two years). With this expenditure of resources, about 100 Russian teams would visit the United States each year, once the program was fully underway. This would permit at least one employee from half of the 25,000 enterprises in Russia with more than 800 workers to participate. Extending the program to the rest of Eastern Europe and the former Soviet Union would not cost more than twice this much. This is a small amount compared to the other options discussed above.

Maximizing the returns to such a program would require the cooperation of firms in North America, Japan and Western Europe in accepting study teams and sharing information. It would necessitate the establishment of a productivity center or commission in each of the participating countries to identify the sectors likely to benefit the most from technical assistance. It would require the founding of counterpart organizations in each of the industrial countries to help organize the

tours.

The significant gap that exists between the formerly planned economies of the East and the market economies of the West in production technology, inventory management, knowledge of labor-management relations, personnel practices, marketing and advertizing suggests that the scope for knowledge transfer is even greater than in Western Europe after World War II. The question is whether knowledge, once transferred, will be productively utilized. One reason why technology transfer to Western Europe -- whether Marshall-Plan-related or independent -- had a dramatic impact on growth was that there were strong incentives to apply it. Western Europe in the 1950s was a market economy. Firms were subjected to competitive pressure. Those which excelled in the application of previously-unexploited imported techniques were able to gain a competitive advantage over their rivals, both domestic and foreign. Those which lagged in the application of new techniques might be competed out of business. Clearly, comparable pressures do not exist in the former Soviet Union or large parts of Eastern Europe today. Many of the large enterprises most likely to be represented on technical assistance missions are national monopolies sheltered from foreign competition. Soft budget constraints lead management and workers to anticipate bailouts if they find themselves in an unsustainable economic position.

Under these circumstances, the incentive to actually apply the fruits of technical assistance is weak. Absent other measures to insure a successful transition to a market economy, such assistance is unlikely to have as significant an effect in Western Europe after World War II. It is most likely to have a discernible impact in countries like Poland, the Czech Republic and Hungary that

have already gone a considerable distance toward creating a competitive market. In the other potential recipient countries, it would not be productive for the donors to focus exclusively on such a program.

#### IV. Conclusion

What are the implications of this analysis for aid options in 1993? It suggests, first of all, that many forms of aid -- technical assistance, funds to underwrite swing credits for a multilateral payments mechanism, and finance for the purchase of imported capital goods and industrial inputs -- are more likely to be productive after stabilization and liberalization than before. Until stabilization and liberalization harden budget constraints, revive money's store-of-value function and allow the price system to guide resource allocation, there will be only limited incentive to apply knowledge gains from technical assistance. It will be impossible to sustain the operation of a payments mechanism featuring credit lines. There will be a very real danger that the wrong kinds of capital goods and industrial inputs will be imported by the wrong enterprises. While there is a limited role even now for these forms of aid, notably advice about the operation of multilateral clearing and about the production and personnel practices of newly-established enterprises, their scope will have to remain limited until stabilization and liberalization take place.

Thus, the target for aid must be to encourage stabilization and liberalization where they have not yet occurred and to cement their progress where they are already underway. Here foreign aid can make a difference only on the margin. Fundamental policies of reform can be undertaken only in the presence of a

domestic government committed to their implementation. Such a government, to survive, must retain the support of its domestic constituency. Western aid to promote the creation of a social safety net can help to protect those least able to protect themselves during the difficult transitional period, thereby containing the danger of a backlash against reform. Once reform is clearly underway, other forms of aid can follow.

## Footnotes

1. In late January, Fyodor Prokopov, the head of Russia's State Employment Service, estimated that the number of unemployed would rise to 4-6 million by the end of 1993, from fewer than 600,000 at the end of 1992. International Herald Tribune (January 23, 1993, p.14).
2. The discussion that follows draws mainly on De Long and Eichengreen (1993a). See also De Long and Eichengreen (1993b) and Eichengreen and Uzan (1992), and the referenced cited therein.
3. Eichengreen and Uzan (1992), Table 3. Page 25 of that paper provides a discussion of the unusual Norwegian case.
4. This is the sum of the categories "machinery and vehicles" and "miscellaneous commodities."
5. The input-output table is drawn from U.S. Mutual Security Agency (1950).
6. Eichengreen and Uzan (1992) suggest that conditionality was most effective in relatively small European countries in weak fiscal positions.
7. For a discussion, see for example Boltho (1982).
8. In their totality the arrangements were somewhat more complicated than this. For discussion, see Triffin (1957).
9. For details see Silberman and Weiss (1992), from where the bulk of the description that follows is drawn. See also Price (1955).
10. The exact proportions in which these costs were shared are open to interpretation. Silberman and Weiss assert that two thirds was paid by the United States through the Marshall Plan, one third by the recipient countries. But two thirds of the U.S. two thirds was itself financed out of the recipient countries' counterpart funds. Domestic-currency counterpart represented matching funds that the recipient had to deposit to earmarked accounts upon the receipt of Marshall aid, whose disbursement was subject to the approval of the United States. Although the mechanism by which "counterpart" was officially raised was the sale of donated commodities by the government to private parties, to conclude that these funds were a U.S. donation would count the value of the donated commodities twice. It seems more sensible, therefore, to argue that the recipients of Marshall aid paid 80 per cent of the cost of the \$300 million technical assistance program as a condition for receiving more than \$13 billion of aid.
11. Dotz and Silberman (1993), p.5.
12. Silberman and Weiss (1992), p.12.
13. For a study of one country's (Britain's) productivity slump in the 1930s and its relationship to protection and cartelization, see Broadberry and Crafts (1990). On the

contrasting role of intra-European competition and its tendency to undermined national monopoly power in the 1950s, see Triffin (1957).

14. Kager and Bruckbauer (1992), p.34. They calculate that the aggregate GDP of the EC and EFTA countries along with the U.S., Japan and Canada was US\$16,747 billion in 1991. One per cent of this for three years is \$502 billion (\$167 billion a year) which, if dispersed over six years, produces an annual transfer of \$83 billion.

15. Kager and Bruckbauer (1992), p.2. These numbers imply the investment of about 35 per cent of national income when the latter is calculated on the same basis as in the previous paragraph. Such investment rates were not unknown in the aftermath of World War II (see Eichengreen and Uzan, 1992, on the case of Norway), but they were exceptional then and are unthinkable now in the absence of credible stabilization.

16. See Boulton (1993). The critical qualification is "hard currency" earnings. Were it possible for Belarus to use receipts in inconvertible currencies earned from exporting to other former-Soviet republics to finance its oil-import bill, the situation would appear less dire. This suggests using aid to establish a multilateral clearing mechanism, as taken up below.

17. This calculation is based on the change in the U.S. consumer price deflator.

## References

- Abelshauser, Werner (1985), Wirtschaft in Westdeutschland 1945-1948, Stuttgart: DVA.
- Abelshauser, Werner, "The Economic Role of the ERP in German Recovery and Growth After the War: A Macroeconomic Perspective," in Charles Maier and G. Bischof (eds), The Marshall Plan and Germany, Oxford: Berg, pp.367-409.
- Boltho, Andrea (1982), "Introduction," in Andrea Boltho (ed.), The European Economy: Growth and Crisis, Oxford: Clarendon Press.
- Borchardt, Knut and Christian Buchheim (1991), "The Marshall Plan and Key Economic Sectors: A Microeconomic Analysis," in Charles Maier and G. Bischof (eds), The Marshall Plan and Germany, Oxford: Berg, pp.410-451.
- Boulton, Leyla (1993), "Former Soviet Republics Try to Avert Trade Collapse," Financial Times (January 22), p.5.
- Broadberry, S.N. and N.F.R. Crafts (1990), "Explaining Anglo-American Productivity Differences in the Mid-Twentieth Century," Oxford Bulletin of Economics and Statistics 52, pp.375-402.
- De Long, J. Bradford and Barry Eichengreen (1993a), "The Marshall Plan as a Structural Adjustment Program," in Rudiger Dornbusch, Wilhelm Nolling and Richard Layard (eds), Postwar Economic Reconstruction: Lessons for Eastern Europe, London: Anglo-German Foundation for the Study of Industrial Society, pp.19-28.
- De Long, J. Bradford and Barry Eichengreen (1993b), "The Marshall Plan: History's Most Successful Structural Adjustment Program," in Rudiger Dornbusch, Wilhelm Nolling and Richard Layard (eds), Postwar Economic Reconstruction and Lessons for the East Today, Cambridge, Mass.: MIT Press (forthcoming).
- Dornbusch, Rudiger (1992), "A Payments Mechanism for the Commonwealth and Eastern Europe," unpublished manuscript, MIT.
- Dotz, Mark and James Silberman (1993), "Building Capabilities: A Marshall Plan Type Productivity Enhancement Program for Eastern Europe and the Former Soviet Union," unpublished manuscript: The World Bank.
- Eichengreen, Barry and Marc Uzan (1992), "The Marshall Plan: Economic Effects and Implications for Eastern Europe and the Former USSR," Economic Policy 14, pp.13-75.
- Eichengreen, Barry (1993), "The European Payments Union: Historical Perspectives and Policy Implications," unpublished manuscript, University of California at Berkeley.



European Commission (1992), "G-24 Scoreboard of Commitments," Doc. BNW 171/92, Brussels: Directorate-General for External Relations.

International Cooperation Administration (1958), European Productivity and Technical Assistance Programs, Paris: ICA.

International Monetary Fund et al. (1991), A Study of the Soviet Economy, Washington, D.C.: International Monetary Fund.

Kager, Marianne and Stefan Bruckbauer (1992), "A Marshall Plan for the East," East-West 4, pp.32-38.

Kenen, Peter B. (1991), "Transitional Arrangements for Trade and Payments Among the CMEA Countries," Staff Papers 38, pp.235-267.

Kindleberger, Charles P. (1978), "The OECD and the Third World," in OECD, From Marshall Plan to Global Independence, Paris: OECD, pp.105-121.

Maier, Charles (1977), "The Politics of Productivity: Foundations of American International Economic Policy After World War II," reprinted in Charles Maier, In Search of Stability, Cambridge: Cambridge University Press, pp.121-152.

Milward, Alan (1984), The Reconstruction of Western Europe, 1945-1951, Berkeley: University of California Press.

Price, Harry D. (1955), The Marshall Plan, Ithaca, N.Y.: Cornell University Press.

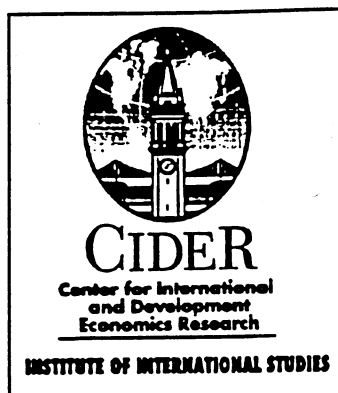
Schran, Steve (1992), "France Without the Marshall Plan: Some Counterfactual Conjectures," unpublished manuscript, Harvard University

Silberman, James M. and Charles Weiss, Jr. (1992), "Restructuring for Productivity: The Technical Assistance Program of the Marshall Plan as a Precedent for the Former Soviet Union," Industry and Energy Department Working Paper, Industry Series No. 64, The World Bank: Washington, D.C.

Soros, George (1993), "Needed: Hard Currency for a Social Safety Net in Russia," International Herald Tribune (January 5), p.7.

Triffin, Robert (1957), Europe and the Money Muddle, New Haven: Yale University Press.

United States Mutual Security Agency (1953), The Structure and Growth of the Italian Economy, Rome: MSA.



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