The Marshall Plan: History's Most Successful Structural Adjustment Program[1]

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> [T]he world of suffering people looks to us for leadership. Their thoughts, however, are not concentrated alone on this problem. They have more immediate and terribly pressing concerns where the mouthful of food will come from, where they will find shelter tonight, and where they will find warmth. Along with the great problem of maintaining the peace we must solve the problem of the pittance of food, of clothing and coal and homes. Neither of these problems can be solved alone.
>
> —George C. Marshall, November 1945

> Can you imagine [the plan's] chances of passage in an election year in a Republican congress if it is named for Truman and not Marshall?
>
> —Harry S Truman, October 1947

I. Introduction

The post-World War II reconstruction of the economies and polities of Western Europe was an extraordinary success. Growth was fast, distributional conflicts in large part finessed, world trade booming. The stability of representative democracies in Western Europe made its

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political institutions the envy of much of the world. The politicians who in the post- World War II years laid the foundations of the postwar order had good warrant to be proud. They were, as Truman’s Secretary of State Dean Acheson put it in the title of his memoirs, *Present at the Creation* of an extraordinarily successful set of political and economic institutions.

Perhaps the greatest success of the post-World War II period was the establishment of representative institutions and “mixed economies” in that half of Europe not occupied by the Red Army. A similar opportunity is open today in Eastern Europe, with the possibility of replacing Stalinist systems with market-oriented industrial democracies. The future will judge politicians today as extraordinarily farsighted if they are only half as successful as Acheson and his peers.

Many argue that the West should seize this opportunity by extending aid to the nations of Eastern Europe in exchange for a commitment to reform. Advocates evoke as a precedent the Marshall Plan—the program that transferred $13 billion in aid from the United States to Western Europe in the years from 1948 to 1951. They argue that we should emulate the steps taken by the founders of the postwar order half a century ago by extending aid to Eastern Europe.

Any such argument by analogy hinges on two links. First, that the Marshall Plan in fact played a key role in inaugurating the postwar era of prosperity and political stability in Western Europe. Second, that the lessons of the postwar era translate to present-day Eastern Europe. In this paper we examine both propositions. The bulk of this paper evaluates the Marshall Plan. The conclusion steps back and weighs tthe extent to which the lessons of the post-World War II period can be applied to Eastern Europe including the regions of the Soviet Union today.

A. Summary of Conclusions

Our central conclusion is that the Marshall Plan did matter. But it did not matter in the way that the "folk wisdom" of international relations assumes. Milward (1984) is correct in arguing that Marshall Plan aid was simply not large enough to significantly stimulate Western European growth by accelerating the replacement and expansion of its capital stock. Nor did the Marshall Plan matter by financing the reconstruction of devastated infrastructure, for as we show below, reconstruction was largely complete before the program came on stream.[2]

The Marshall Plan did play a role in alleviating resource shortages. But this channel was not strong enough to justify the regard in which the program is held. By 1948 and the beginning of Marshall Plan aid bottlenecks were scarce, and markets were good at alleviating their impact.

Rather, the Marshall Plan significantly sped Western European growth by altering the environment in which economic policy was made. In the immediate aftermath of World War II politicians who recalled the disasters of the Great Depression were ill-disposed to "trust the market," and eager to embrace regulation and government control. Had European political economy taken a different turn, post-World War II European

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[2]Wartime relief, post-World War II UNRRA aid, and pre-Marshall Plan "interim aid" may well have significantly speeded up the reconstruction process. Although we do not address the question of the role of pre-Marshall Plan aid in this paper, we hope to examine its effects in future work.

recovery might have been hobbled by clumsy allocative bureaucracies that rationed scarce foreign exchange and placed ceiling prices on exportables to protect the consumption of urban working classes.

Yet in fact the Marshall Plan era saw a rapid dismantling of controls over product and factor markets in Western Europe. It saw the restoration of price and exchange rate stability. To some degree this came about because underlying political-economic conditions were favorable (and no one in Europe wanted a repeat of interwar experience). To some degree it came about because the governments in power believed that the "mixed economies" they were building should have a strong pro-market orientation. Marshall Plan aid gave them room to maneuver in order to carry out their intentions: without such aid, they would have soon faced a harsh choice between contraction to balance their international payments and severe controls on admissible imports. To some degree it came about because Marshall Plan administrators it pressured European governments to decontrol and liberalize even when they wished to do otherwise.

In post-World War II Western Europe the conditions imposed, formally and informally, for the receipt of U.S. aid encouraged the reductions in spending needed for financial stability, the relaxation of controls that prevented markets from allocating resources, and the opening of economies to trade. Marshall Plan "conditionality" pushed governments toward versions of the "mixed economy" that had more market orientation and less directive planning in the mix. While post-World War II European welfare states and governments are among the most extensive in proportion to economic life in history, they are built on top of, and do not supplant or bypass, the market allocation of goods and factors of production. The Marshall Plan should thus be thought of as a large and highly successful structural adjustment program.[3]

The experience of the Marshall Plan therefore suggests lessons for the role the West can play today. Although the yield of a Marshall Plan for Eastern Europe and the Soviet Union might well be high, the benefits would not not direct increases in productive capacity made possible by aid. Aid to Eastern Europe may accelerate growth in the manner of the Marshall Plan if it leads to policies that accelerate the move toward market organization, free trade, and financial stability. Aid might perhaps help as an incentive and as a cushion to make reform possible. But it is not a substitute for reform, or for the process of structural adjustment.

B. Organization of the Paper

After this introduction, section II of the paper develops the "folk image" and contrasts it with the reality of the Marshall Plan. It is followed by a series of sections that consider in turn alternative channels through which the Marshall Plan could have accelerated economic recovery. First, Marshall Plan aid might have quickened the pace of private investment. Second, it might have supported public investment in infrastructure. Third, it might have eliminated bottlenecks. Fourth, it might have facilitated the negotiation of a pro-growth "social contract"

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[3]Without the Marshall Plan, the pattern of post-World War II European political economy might might well have resembled the overregulation and relative economic stagnation of post-World War II Argentina, a nation that has dropped from First to Third World status in two generations. Or post-World War II Europe might have replicated the financial instability—alternate episodes of inflation and deflation—experienced by much of Europe in the 1920's as interest groups and social classes bitterly struggled over the distribution of wealth and in the process stalled economic growth. This is not to say that post-World War II Western Europe was a *laissez faire* economy. Post World War II European welfare states are among the most extensive in history.

that provided the political stability and climate necessary to support the postwar boom. We argue that the first two were of negligible importance, that the third had some but not overwhelming significance during the years of the Marshall Plan, and that the fourth was vital but is difficult to quantify.

Throughout the paper we use two sets of comparisons to structure and discipline the argument. The first comparison is with Europe after World War I. In contrast to the post-World War II era, after World War I European reconstruction had been a failure. Alternating inflation and deflation retarded recovery. Growth had been slow, distributional conflicts had been bitter, and the network of trade fragile and stagnant. Representative government had been tried and rejected by all save a handful of European nations.[4] The critical question from our perspective is to what degree the Marshall Plan was responsible for the different outcomes of the two postwar periods. The comparison addresses this issue and highlights features of the international environment besides the Marshall Plan that must figure in an adequate analysis.

The second comparison is with the experience of Argentina. Before the war, Argentina had been as rich as Continental Europe. In 1913 Buenos Aires was among the top 20 cities of the world in telephones per capita. In 1929 Argentina had been perhaps fourth in density of motor vehicles per capita, with approximately the same number of vehicles per person as France or Germany. Argentina from 1870–1950 was a country in the same class as Canada or Australia.

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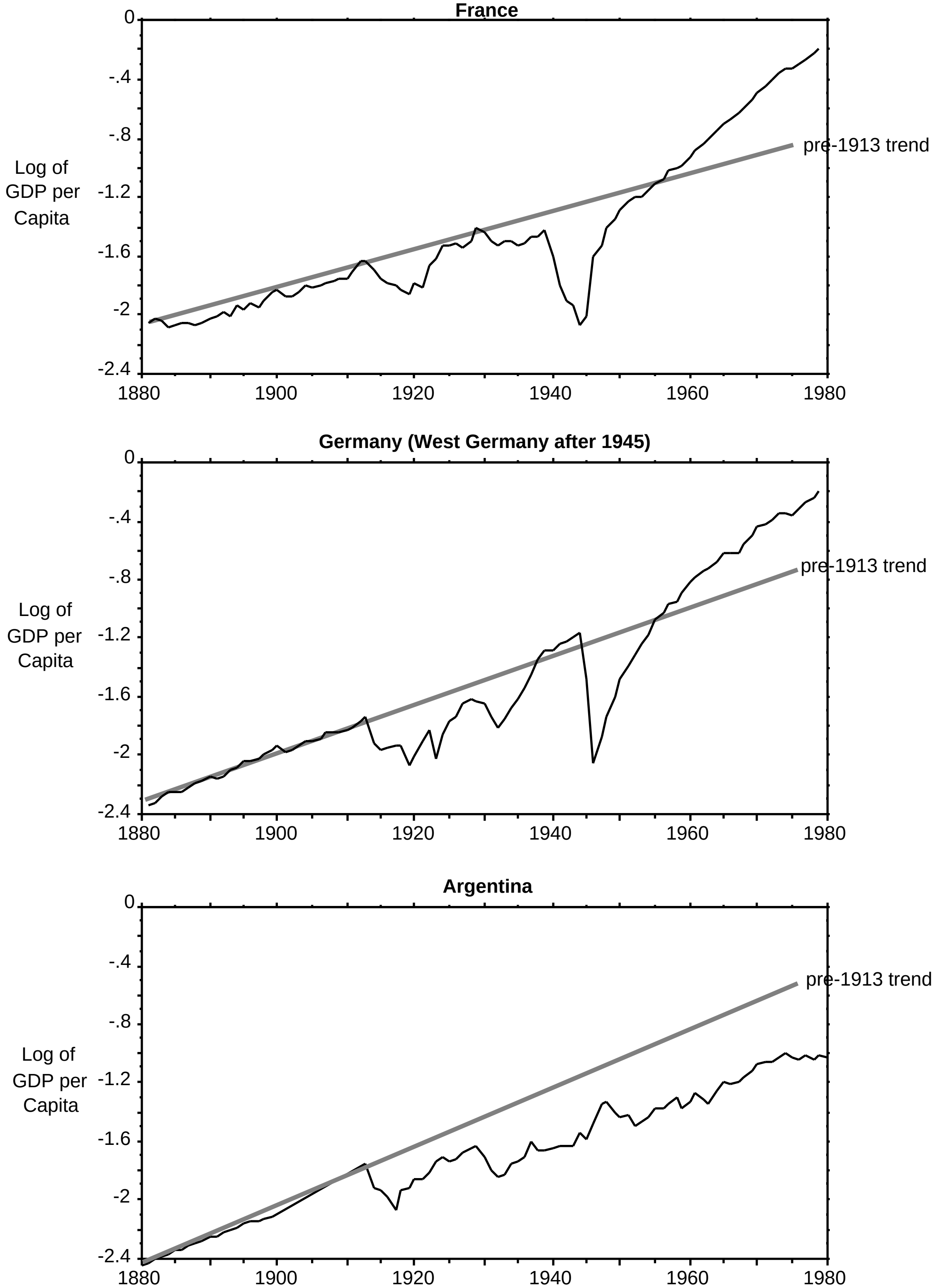
[4]Among others, Italy, Turkey, Portugal, Spain, Bulgaria, Greece, Rumania, Yugoslavia, Hungary, Albania, Poland, Estonia, Latvia, Lithuania, Austria, Germany—not to speak of Japan, China, and many Central and South American countries tried and then abandoned representative governments in the interwar period. See John Lukacs (1991).

Yet after World War II, Argentina grew very much more slowly than France or Germany, rapidly falling from the ranks of the First World to the Third (see figure 1). Features of the international economic environment affecting Argentina as well as Europe—the rapid growth of world trade under the Bretton Woods system, for example—are not sufficient therefore to explain the latter's singular stability and rapid growth. Again the comparison points to factors aside from the direct effects of foreign aid that mattered, and factors in conjunction with which foreign aid must work in order to unleash a period of rapid growth.

The concluding section of the paper summarizes our argument, and examines what light our analysis of the Marshall Plan sheds on the current situation in Eastern Europe.

Figure 1
Very Long Run Economic Growth, 1880–1980



Source: Angus Maddison, *Phases of Capitalist Development;* Robert Summers and Alan Heston, *Penn World Table V;* Carlos Díaz Alejandro, *Essays on the Economic History of the Argentine Republic.*

II. The Marshall Plan: Image and Reality

This section reviews the state of the European economy on the eve of the Marshall Plan. We first offer a conventional portrait of conditions in Europe following World War II and survey the origins of the Marshall Plan. We then use comparisons with the state of Europe's economy after World War I to revise and extend that account. The first subsection seeks to characterize the image of the Marshall Plan in the "folk tradition" of analysts of international relations. The following subsections evaluate and criticize various aspects of this traditional picture.

A. The Folk Image

Western Europe's recovery from World War II had ground to a halt by the end of 1947.[5] The first phase of postwar expansion and recovery had come to an end. Reserves of foreign assets had been depleted. Export earnings were insufficient to finance purchases of raw materials and equipment from the only remaining functioning industrial economy, the United States. Bankers in the United States recalled the dismal returns on investments in Europe after World War I. Observing Communist electoral strength, they were unwilling to loan capital to Europe on any terms.[6] Incomes were too low to provide savings needed to finance reconstruction. Taxes were inadequate to balance government budgets. Inflation and financial chaos eroded Western Europe's ability

[5]See for example Hogan (1987), van der Wee (1986), Mee (1984), Price (1955), and Tinbergen (1954).

[6]See Block (1977) for a discussion of reasons U.S. private investors were unwilling to loan money to Europe after World War II. Eichengreen and Portes (1989) describe the very different post-World War I experience when U.S. private investment bankers were relatively eager to channel capital for European reconstruction.

to reconstruct and reorganize its economy. Internal U.S. State Department memoranda spoke of an approaching breakdown of the division of labor between town and country, and between resource extraction, manufacturing, and distribution sectors. Many feared an economic collapse in Europe as soon as U.S. humanitarian aid ceased to prop it up.

Figure 2
Economic Growth in European Nations During the Marshall Plan Years

Such is the picture of Western Europe on the eve of the Marshall Plan painted by biographers of statesmen and by historians of international relations.[7] The Marshall Plan, they allege, solved these problems at a stroke. It provided funds to finance investment and public

[7]For example, see Wexler (1983), Mee (1984), Mayne (1973), Gimbel (1976), and Arkes (1972). At variance with the folk image conveyed by these accounts is Milward (1984), one of the few who pays close attention to the quantitative dimensions of the American aid program. Milward's revisionist downplaying of the importance of the Marshall Plan and his conclusion that the pace of European recovery would not have been very different in its absence have recently colored discussions of policy toward Eastern Europe. See for example *The Economist* (15 June 1991), or Collins and Rodrik (1991). As shall become apparent below, we believe that Milward's revisionism is overstated.

expenditure. It allowed countries to import from the United States. It eliminated bottlenecks that had obstructed economic growth. It set the stage for prosperity. European growth was very rapid after 1948 and the beginning of Marshall Plan aid, as figure 2 charts.

At the time, it was not even clear that post-World War II Western Europe would utilize market mechanisms to coordinate economic activity. Belief in the ability of the market to coordinate economic activity and support economic growth had been severely shaken by the Great Depression. Wartime controls and plans, while implemented as extraordinary measures for extraordinary times, had created a governmental habit of control and regulation. Seduced by the very high economic growth rates reported by Stalin's Soviet Union and awed by its war effort, many expected centrally-planned economies to reconstruct faster and grow more rapidly than market economies. Memory of the Great Depression was fresh, and countries relying on the market were seen as likely to lapse into a period of underemployment and stagnation. Communists predicted that post-World War II reconstruction would dramatically reveal the superiority of central planning. Europe's East would pull ahead of whatever regions in the West remained attached to market organization and private property.[8]

Moreover, it seemed at least an even bet that the United States would withdraw from Western Europe. The U.S. government had done so after World War I, when the cycles of U.S. politics had led to the

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[8]See Sweezy (1943) for an extreme but surprisingly widely held contemporary view. See Maier (1987) for a historian's account of attitudes toward the market. In the immediate aftermath of World War II, the remaining pillar of market economics was the United States, but its performance during the Great Depression had been far from inspiring. Maier (1987) quotes British historian A.J.P. Taylor as speaking in late 1945 of how "nobody in Europe believes in the American way of life—that is, in private enterprise; or rather those who believe in it are a defeated party—a party which seems to have no more future."

erosion of the internationalist Wilson administration and the rise to dominance of a Republican isolationist Congress. The same pattern appeared likely after World War II: Republican Congressional leader Robert Taft, the dominant figure in the Senate after the election of 1946, was extremely isolationist in temperament.

By all indications, the American commitment to relief and reconstruction was limited. The end of hostilities against Japan had led to the immediate cessation of lend-lease to Britain. Humanitarian aid under the auspices of the United Nations was seen as limited and transitional. The Truman administration was viewed as internationalist, but weak. Congressional critics called for balanced budgets. The 1946 Congressional elections were a disaster for the Democratic Party.

Considerable economic aid had been extended to Europe from the U.S. after World War I, first by the Herbert Hoover-led relief and reconstruction effort and then by private capital speculating on a restoration of monetary stability and pre-World War I exchange rates. The very magnitude of U.S. private capital flows after World War I militated against their repetition. Post-World War I reconstruction loans had been sold as sound private investments. They did not turn out to be so. Seymour Harris (1948) calculated that in present value terms nearly half of American private investments in Europe between the wars had been lost. Once burned, twice shy.[9] With strong Communist parties in Italy and France, a nationalization-minded Labour government in

[9]One of us has suggested previously that Harris's estimate of realized returns is overly pessimistic. See Eichengreen and Portes (1989). But Harris could not anticipate the settlement negotiations between U.S. creditors and debtor governments that would occupy the first postwar decade and return to American investors at least a portion of their principal. If Harris could not anticipate this outcome, neither were contemporary investors likely to do so. Thus, from the perspective of 1947, the returns on post-World War I loans to Europe appeared disappointing.

Britain, and a Germany once again pressed for reparations transfers, capital flows from American investors gambling on European recovery and political stability seemed unlikely.

Nevertheless, within two years after the end of the war it became U.S. government policy to build up Western Europe politically, economically, and militarily. The first milestone was the Truman Doctrine: President Truman asked Congress to provide aid to Greece to fill the gap left by the retreating British. The Truman Doctrine inaugurated the policy of containment. Included in the Doctrine was a declaration that containment required steps to quickly regenerate economic prosperity in Western Europe. This policy extended beyond Greece and Turkey to the rest of Western Europe as well. As columnist Richard Strout summarized the informal conversations, leaks, and trial balloons emanating from the government in early 1947, "State Department strategists have now come around—to the point a good many 'visionaries' have been urging all along—that one way of combating Communism is to give western Europe a full dinner pail."[10]

Employing Secretary of State George C. Marshall's reputation as the architect of military victory in World War II, conservative fears of the further extension of Stalin's empire, and a political alliance with influential Republican Senator Arthur Vandenberg, Truman and his administration outflanked isolationist and anti-spending opposition and maneuvered the Marshall Plan through Congress. In the first two post-World War II years the U.S. contributed about four billion dollars a year to relief and reconstruction through UNRRA and other programs.[11] The

[10]TRB, *The New Republic*, May 5, 1947.
[11]Costs of the German occupation, however, were largely borne by Germany.

Marshall Plan continued these flows at comparable rates. But a significant difference was that UNRRA aid could be, and was expected to be, cut off at any time. Each additional quarter it was continued was a windfall. Its continuation was not something upon which Europe could count.

By contrast, the Marshall Plan was a multi-year commitment. From 1948 to 1951, the U.S. contributed $13.2 billion to European recovery. $3.2 billion went to the United Kingdom, $2.7 billion to France, $1.5 billion to Italy, and $1.4 billion to the Western-occupied zones of Germany that would become the post-World War II *Bundesrepublik*.

In its first year, half of all Marshall aid was devoted to food. Overall, 60 percent was spent on primary products and intermediate inputs: food, feed, fertilizers, industrial materials, and semi-finished products, divided evenly between agricultural goods and industrial inputs. One-sixth was fuel. One-sixth was spent on machinery, vehicles, and other commodities.[12]

The received image of the Marshall Plan sees it as the catalyst for Western European recovery. Before Marshall aid began to arrive, all was stagnation and fear of collapse. After, all was growth and optimism. Charles Mee's (1984) narrative is one of the most enthusiastic:

> The ink was not dry before the first ships set sail—[with] 19,000 tons of wheat—followed by the SS *Godrun Maersk* with tractors, synthetic resin, and cellulose acetate; the SS *Gibbes Lykes* with 3,500 tons of sulfur; the SS *Rhondda* with

[12]The remaining seven percent was spent employing the U.S. merchant marine rather than lower cost competitors.

> farm machines, chemicals, and oil; the SS *Geirulo*, the SS *Delmundo*, and the SS *Lapland* with cotton. When shipments of carbon black began to reach Birmingham—Europe's largest tire plant was put back into production and 10,000 workers returned to their jobs.

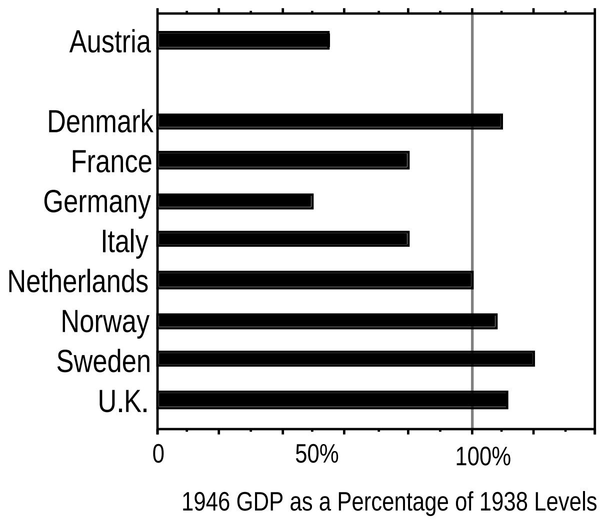
B. The Reality: The European Economy Following the Two Wars

Such is the "folk image" of the Marshall Plan. We now seek to contrast that image with historical reality. In this section we reassess the state of Europe's economy, turning in subsequent sections to our reassessment of the Marshall Plan. This section brings out four points. (1) World War II was more destructive than World War I. (2) Economic recovery was significantly faster after World War II. (3) There is no necessary relationship between the two preceding points. Rapid growth after World War II was not mainly a "rubber band effect" (the reversal of wartime output losses); rather, it was a sustained acceleration. (4) Nor did rapid postwar growth simply reflect a favorable international economic environment. Not all countries experienced comparable accelerations despite all being exposed to the same favorable international economic climate.

1. World War II was more destructive

When World War II ended, more than 40 million in Europe were dead by violence or starvation. More than half of the dead were inhabitants of the Soviet Union. Even west of the post-World War II Soviet border, perhaps one in twenty were killed—close to one in twelve in Central Europe. In World War I the overwhelming proportion of those killed had been soldiers. During World War II fewer than half of those killed were in the military.[13]

Figure 3
Production Immediately After World War II



Material damage in World War II was spread over a wider area than in World War I. Destruction in the First World War was by and large confined to a narrow belt around a static trenchline. Although material destruction along the trenchline was overwhelming, it extended over only a small proportion of the European continent. World War II's battle sites were scattered more widely. Weapons were a generation more advanced and more destructive. World War II also saw the first large-scale strategic bombing campaigns.[14] Figure 3 plots relative levels of national product in the year immediately after World War II, relative to a prewar 1938 base.

Thus the aftermath of World War II saw many of Western

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[13]On the consequences of World War II and the situation at its end, see Milward (1984), Calvocoressi and Wint (1972) and Halle (1967).
[14]We do not pass judgement here on the economic implications of strategic bombing. See U.S. Strategic Bombing Survey (1976) for a contemporary assessment. Also see Milward (1965, 1984), and Ellis (1990).

Europe's people dead, its capital stock damaged, and the web of market relationships torn. Relief alone called for much more substantial government expenditures than reduced tax bases could finance. The post-World War I cycle of hyperinflation and depression seemed poised to repeat itself. Prices rose in Italy to 35 times their prewar level. France knocked four zeroes off the franc.

Industrial production recovered somewhat more rapidly than agricultural output after 1945. But two years after the end of the war, coal production in Western Europe was still below levels reached before or during the war. German coal production in 1947 proceeded at little more than half of the pre-World War II pace. Dutch and Belgian production was 20 percent below, and British 10 percent below, pre-World War II 1938 levels.[15] Demands for coal for heating reduced the continent's capacity to produce energy for industry. During the cold winter of 1946-47 coal earmarked for industrial uses had to be diverted to heating. Coal shortages led to the shutdown of perhaps a fifth of Britain's coal-burning and electricity-using industry in February 1947. Western European industrial production in 1946 was only 60 percent, and in 1947 only 70 percent, of the pre-World War II norm.[16]

Problems of agriculture were, if anything, more serious. Denmark's 1945-46 crops were 93 percent of prewar averages, but those in France, Belgium, Germany, and Italy were barely half. 1947's harvest was a disaster. Fertilizer and machinery remained in short supply. A

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[15]Although 1938 was a recession year in the United States, its use as a baseline for post-World War II comparisons should not be misleading for Europe. The European slowdown in economic activity in 1938 was relatively minor.

[16]Italian industrial production had fallen to one-third of its pre-World War II level. In the three western-occupied zones of Germany (including the Saar), industrial production had fallen to one-fifth of that of 1938.

fierce winter and a dry spring froze and withered trees and crops. Financial chaos meant that a large part of the harvest was not marketed. Farmers hoarded crops for barter and home consumption. Western Europe in 1946-47 had four-fifths its 1938 supply of food. Its population had increased by twenty million—more than a tenth—even after accounting for military and civilian deaths.

Europe’s ability to draw resources and import commodities from the rest of the world was heavily compromised by World War II. Traditionally, Western Europe had exported industrial and imported agricultural goods from Eastern Europe, the Far East, and the Americas. Now there was little prospect of rapidly restoring this international division of labor. Eastern European nations adopted Russian-style central planning and looked to the Soviet Union for economic links. Industry in the United States and Latin America had expanded during the war to fill the void created by the cessation of Europe’s exports. Imports of food and consumer goods for relief diverted hard currency from purchases of capital goods needed for long-term reconstruction.

Changes in net overseas asset positions reduced Western Europe’s annual earnings from net investments abroad. Britain had liquidated almost its entire overseas portfolio in order to finance imports during the war. The reduction in invisible earnings reduced Western Europe’s capacity to import by approximately 30 percent of 1938 imports. The movement of the terms of trade against Western Europe gave it in 1947-48 32 percent fewer imports for export volumes themselves running 10 percent below pre-World War II levels; higher export volumes might worsen the terms of trade further. The net effect of the inward shift in demand for exports and the collapse of the net investment position was to give Europe in 1947-8 only 40 percent of the capacity to import that it had possessed in 1938.

By contrast, after World War I Europe's external position had appeared more favorable. Europe emerged from the Great War with its overseas investments still large.[17] European shipping still generated substantial net revenues. Invisible receipts financed more than 20 percent of European imports in the years immediately after World War I. The shift in terms of trade against Europe was smaller after World War I than after World War II.

More importantly, virtually every European nation quickly regained access to the international capital markets after World War I. This was true even of reparations-burdened Germany until the spring of 1921, when the stage for hyperinflation was set.[18] American private investors were eager after World War I to make loans for European recovery. In the decade after World War I, they loaned more than $1 billion a year overseas, primarily to European nations. Government restrictions on foreign loans were rare, and by and large limited to cases in which countries had unsettled war debts owing to the United States.[19]

Table 1
European Balance of Payments Position, 1946-47 and 1919-20
(Billions of 1946-47 Dollars at Annual Rates)

[17]The existence of war debt liabilities to the United States complicates the picture. But typically service of these obligations did not begin until the second half of the 1920's, facilitating immediate post-World War I adjustment.

[18]Holtfrerich (1986) analyzes the massive flow of short-term capital from the U.S. to Germany in 1919-21.

[19]A strict loan embargo was imposed against the Soviet Union, the absence of a war-debt funding agreement led to the disapproval of a Romanian loan in 1922, and refunding issues for France were delayed. But Eichengreen (1989a) concludes that U.S. government restrictions were more bark than bite, and that "in almost all cases where the government entered an objection, [they] could be gotten round." Eichengreen (1989a), quoting Feis (1950).

	1946-47	1919-20
European Imports	11.2	11.8
European Exports	5.2	4.6
Trade Account	-6.0	-7.2
Net Income from Investments	0.4	1.1
Other Current Account	-1.1	1.3
Total Current Account	-6.7	-4.8
Reduction in European Assets	-1.8	-2.0
Total Loans and Grants from U.S.	4.9	2.8

Source: authors' calculations based on United Nations (1948) and United Nations (various years).

Table 1 summarizes Europe's balance-of-payments position after the two wars. Even though United States-provided UNRRA and other government-provided assistance in the pre-Marshall Plan years was much larger in real terms than all sources of financing—public and private loans and public and private grants—had been in the equivalent period after World War I, the higher volume of financing did not allow Europe to import more from the rest of the world. Real imports were in fact a hair higher after World War I than after World War II because of the substantial deterioration in Europe's invisibles balance in the latter instance.

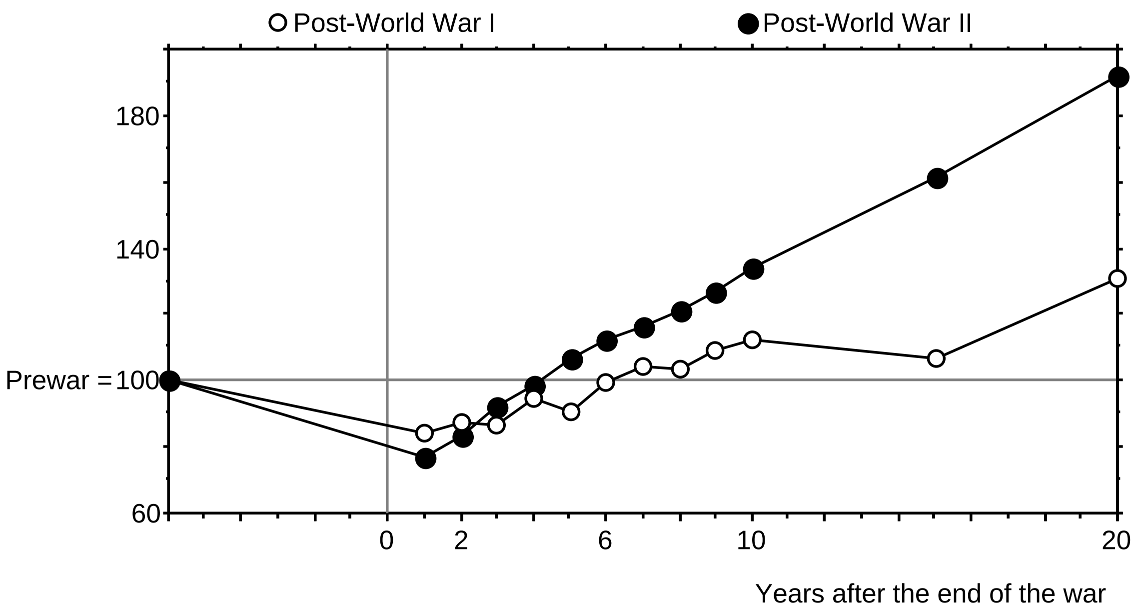
Thus Europe after World War II was in at least as bad economic shape as it had been after World War I. Rapid reconstruction and a return to prosperity did not seem inevitable. Another episode of financial and political chaos like that which had plagued the Continent following World War I appeared likely. U.S. State Department officials wondered whether Europe might be dying—like a wounded soldier who bleeds to death after the fighting. State Department memoranda in 1946-7 presented an apocalyptic vision of a complete breakdown in Europe of the division of labor—between city and country, industry and agriculture, and between different industries themselves.[20] In the aftermath a Communist triumph was seen as a distinct possibility.

2. Recovery from World War II was faster

In 1946, the year after the end of World War II, national product per capita in the three largest Western European economies had fallen at least 25 per cent below its 1938 level. This was half again as much as production per capita in 1919 had fallen below its pre-war (1913) level. Yet the pace of post-World War II recovery soon surpassed that which followed World War I. As figure 4 shows, by 1949 national income per capita in Britain, France, and Germany had recovered to within a hair of pre-war levels.

[20]William Clayton, Undersecretary of State for Economic Affairs, was the strongest voice. See Mayne (1973). The influential Harriman Report (1947), *European Recovery and American Aid*, a key piece of the administration's lobbying effort, took the same perspective. On U.S. State Department thinking before the Marshall Plan, see Acheson (1966), Bohlen (1973) and Pogue (1990).

Figure 4
Post-WWI and Post-WWII Recoveries of GDP per Capita
Average of Britain, France, and Germany*

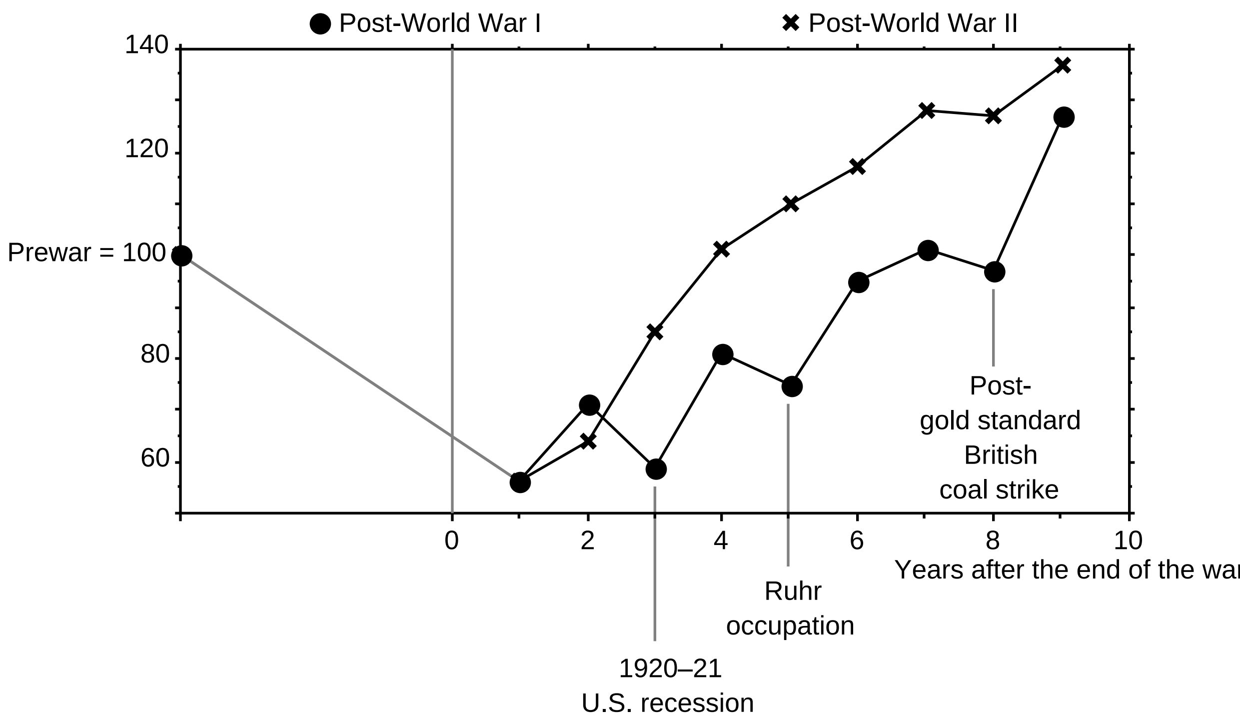


*West Germany after World War II.
Source: Angus Maddison, *Phases of Capitalist Development;*
Robert Summers and Alan Heston, *Penn World Table V.*

Recovery at that date was some two years ahead of its post-World War I pace. By 1951, six years after the war and at the effective end of the Marshall Plan, national incomes per capita were more than 10 percent above pre-war levels. Measured by the yardstick of the admittedly imperfect national product estimates, the three major economies of Western Europe had achieved a degree of recovery that post-World War I Europe had not reached in the 11 years separating World War I years from the Great Depression. Post-World War II Europe accomplished in six years what took post-World War I Europe sixteen.

Post-World War II recovery dominated post-World War I recovery by other economic indicators as well. Figures 5 through 7 plot the comparative pace of post-World War I and post-World War II recoveries of Western European steel, cement, and coal production. Since all three are measured in physical units, these indices are not vulnerable to the potential sources of error afflicting national income and product accounts. Figure 5 shows that by 1950—five years after the end of the Second World War—Western European steel production had surpassed its prewar level. After World War I, in contrast, steel production did not exceed its 1913 level until nine years after the fighting ended. Figure 6 shows that the relative recovery of cement production after World War II ran three years ahead of its post-World War I pace.

Figure 5
Post-World War I and Post-World War II Recoveries of Western European Steel Production*

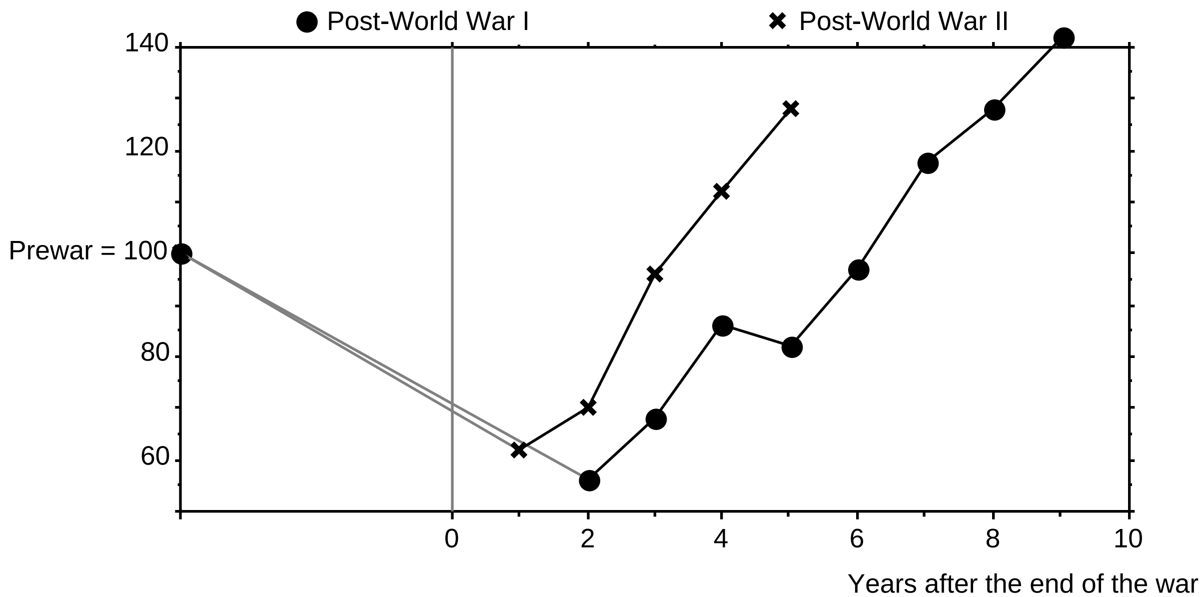


*Weighted average of Britain, Denmark, France, Italy, Belgium, Luxemburg, Netherlands, and Germany. West Germany only after World War II.
Source: B.R. Mitchell, *European Historical Statistics;* U.N. Economic Commission for Europe, *Economic Survey of Europe since the War;* Ingmar Svennilson, *Growth and Stagnation in the European Economy.*

The recovery of coal production after World War II also outran its post-World War I pace by a substantial margin, as figure 7 shows, even though coal was seen as in notoriously short supply in the post-World War II years. By contrast, the recovery of coal production after World War I was erratic. Coal production declined from 1920 to 1921—falling from 83 percent of pre-World War I levels in 1920 to 72 percent in 1921—as a result of the deflation imposed on the European economy by central banks that sought the restoration of pre-World War I gold standard parities, accepted the burden of deflation, and allowed the 1921 recession in the United States to be transmitted to their own countries.

After World War II, no central bank or government pursued monetary orthodoxy so aggressively in order to roll back price and wage increases and preserve the real wealth of rentiers.

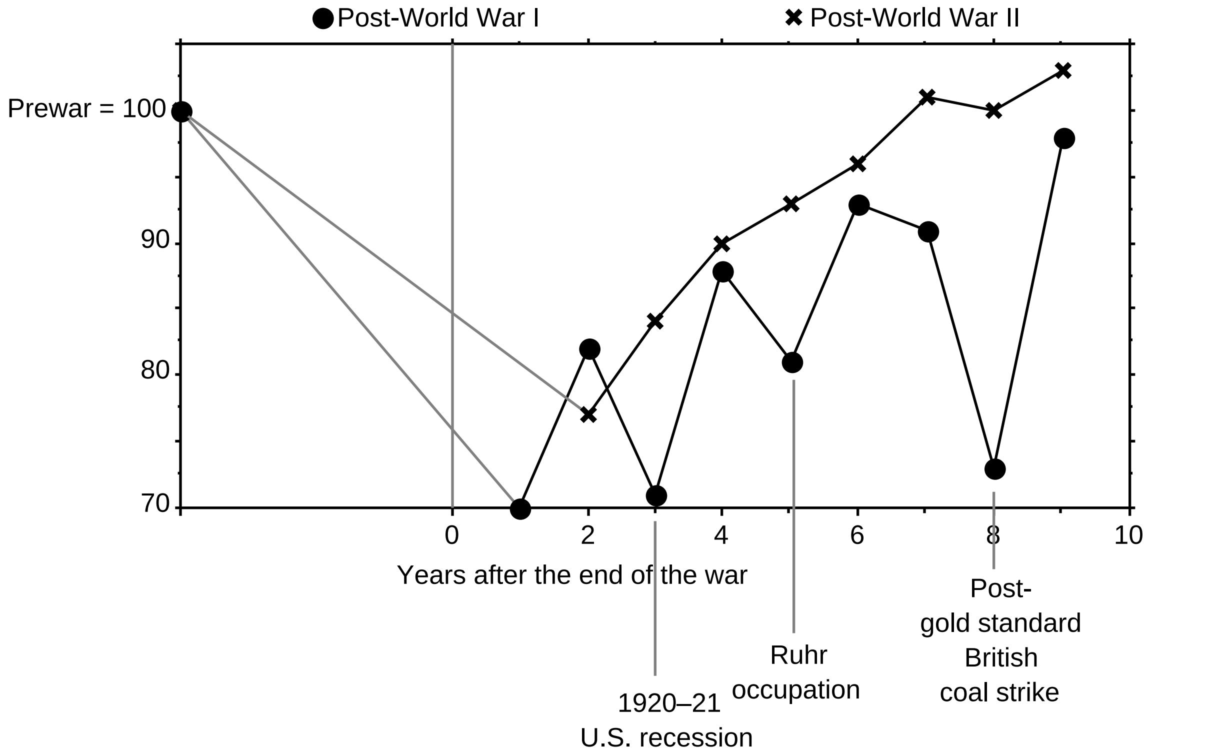
Figure 6
Post-World War I and Post-World War II Recoveries of Western European Cement Production*



*Weighted average of Britain, Denmark, France, Italy, Belgium, Luxemburg, Netherlands, and Germany. West Germany only after World War II.
Source: B.R. Mitchell, *European Historical Statistics;* U.N. Economic Commission for Europe, *Economic Survey of Europe since the War;* Ingmar Svennilson, *Growth and Stagnation in the European Economy.*

Coal production fell again in 1922–23. The breakdown of negotiations over German reparations led the French to occupy the Ruhr. Their occupation did not lead to significantly increased transfers from Germany to France. But it did begin the German hyperinflation.

Figure 7
Post-World War I and Post-World War II Recoveries of Western European Coal Production*



*Weighted average of Britain, Denmark, France, Italy, Belgium, Luxemburg, Netherlands, and Germany. West Germany only after World War II.
Source: B.R. Mitchell, *European Historical Statistics;* U.N. Economic Commission for Europe, *Economic Survey of Europe since the War;* Ingmar Svennilson, *Growth and Stagnation in the European Economy.*

Coal production fell for yet a third time in 1926. Attempts to reduce wages in the aftermath of Britain’s deflationary return to gold triggered a walkout by British coal miners, accompanied by a short-lived general strike. The 1920’s in Britain saw stubborn attachment by successive governments to a policy of a high real exchange rate and deflation, and an extraordinary degree of downward nominal wage inflexibility as well.

The course of coal production shows that to a large extent the slow post-World War I recovery was inflicted by Europeans on themselves. The major factors hindering a rapid post-World War I recovery were not strictly economic but social and political. One interpretation is that post-World War I Europe saw the recovery of output repeatedly interrupted by political and economic "wars of attrition," in the language of Alesina and Drazen (1991), that produced instability in European finance, politics, and labor relations.

In the aftermath of World War I, the distribution of wealth both within and between nations, the question of who would bear the burden of postwar adjustment, and the degree to which government would act to secure the property of the rentier were all unresolved issues. Social classes, political factions, and nation-states saw that they had much to lose if they did not aggressively promote their claims for favorable redistribution. Much of the social and economic history of interwar Europe can be seen in terms of such "wars of attrition," in which fiscal, financial, monetary, and labor relations instability—and concomitant slow economic growth—are trials of strength over who would succeed in obtaining a favorable redistribution of wealth.

After World War II such "wars of attrition" were less virulent. Memories of the disastrous consequences of the aggressive pursuit of redistributional goals during the interwar period made moderation appear more attractive to all. The availability of Marshall Plan aid to nations that had accomplished stabilization provided a very strong incentive to compromise such distributional conflicts early, and gave European countries a pool of resources that could be used to cushion the wealth losses sustained in restructuring.[21]

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[21]Olson (1982) argues that World War II destroyed distributional coalitions and delayed the

3. This was “Supergrowth” and not simply a “rubber band effect”

Moreover, post-World War II reconstruction did more than return Western Europe to its previous growth path. As Figure 1 showed, French and West German growth during the post-World War II boom raised national product per capita at rates that far exceeded pre-World War II, pre-1929, or even pre-1913 trends.

This was not merely a process of making up ground lost during the war. In fact, there is no strong connection between the fall in levels of production across the wartime period and the pace of the subsequent recovery, contrary to what would be expected if fast post-World War II growth was primarily a process of catch-up to pre-war trends. The bivariate relationship is statistically significant at standard confidence levels (cf. Dumke, 1990), but when one controls for other characteristics of countries like openness and the investment rate, the significance of the relationship evaporates and even its sign becomes uncertain (see Eichengreen and Uzan, 1991).

The reconstruction of Western Europe in the aftermath of World War II appears to have created economies capable of dynamic economic growth an order of magnitude stronger than had previously been seen in Europe. Postwar Europe’s “supergrowth,” as Charles Kindleberger has termed it, was much more than catch-up and reattainment of a pre-war neoclassical growth path.

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development of new ones, thus limiting the extent to which post-World War II European political economy could follow the post-World War I pattern of intensive redistributional strife. Below we suggest, however, that there was no absence of distributional coalitions after World War II; the difference lay rather in their behavior—and in the selective incentives to which they responded.

4. “Supergrowth” reflected more than a favorable environment

Yet such rapid growth and recovery as Western Europe saw after World War II was not inevitable. It was not a natural consequence of a favorable international regime. The post-World War II expansion of world trade under Bretton Woods was a great aid to European recovery, but Western European growth reflected more than a rising tide of international trade lifting all boats.

As Figure 1 showed, a Latin American country like Argentina, as rich in the years before and immediately after World War II as industrial Western Europe, grew slowly even under the post-World War II expansionary Bretton Woods regime. Fast post-World War II growth and catchup to American standards of productivity were to a large degree specific to Western Europe, and thus to the countries that received Marshall Plan aid.

III. The Marshall Plan and Private Investment

Investment is an obvious channel through which the Marshall Plan might have accelerated economic growth in post-World War II Western Europe. Postwar Europe was poor and capital-scarce. Maintaining living standards at levels the citizenry regarded as minimally tolerable consumed a large share of total product, leaving little for the replacement of railroads, buildings and machines damaged by war. The Marshall Plan could have relaxed this constraint.

It is difficult to ascribe large effects to this channel. Viewed relative to total investment in the recipient countries, the Marshall Plan was not large. Marshall Plan grants were provided at a pace that was not much greater in flow terms than previous UNRRA aid and amounted to less than three percent of the combined national incomes of the recipient countries between 1948 and 1951. They equalled less than a fifth of gross investment in recipient countries. Only 17 percent of Marshall Plan dollars were spent on “machinery and vehicles” and “miscellaneous.” The rest were devoted to imports of industrial materials, semi-finished products and agricultural commodities. The commodities bought directly with Marshall Plan dollars were not additions to the fixed capital stock of Western Europe that would have boosted output permanently.

Marshall Plan dollars did significantly affect the level of investment: countries that received large amounts of Marshall Plan aid invested more. Eichengreen and Uzan (1991) calculate that out of each dollar of Marshall Plan aid some 65 cents went to increased production and 35 cents to increased investment. The returns to new investment were high. Eichengreen and Uzan's analysis suggests that social returns may have been as high as 50 percent a year: an extra dollar of investment raised national product by 50 cents in the subsequent year.

Even with such strong links between the Marshall Plan and investment and between investment and growth, the investment effects of Marshall Plan aid were simply too small to trigger an economic miracle. U.S. aid in the amount of three percent of West European output per year raised the share of private investment in national income by one percentage point. An increase of one percentage point in the ratio of investment to national income over would increase economic growth by one-half of one percentage point.

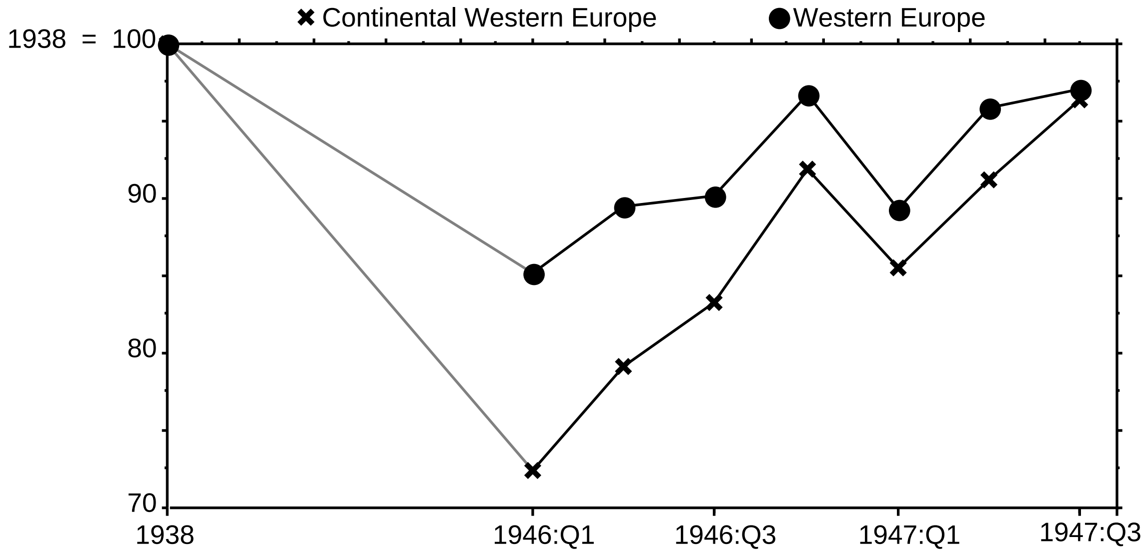
Over the four years of the Marshall Plan, this increase in growth cumulates to two percent of national product. Eichengreen and Uzan's estimates of the strength of this investment channel suggest thus that it led to Western European national income levels after 1951 that were some two percent higher than would have been the case otherwise. While this was a valuable addition, it is hardly the sort of dramatic change trumpeted by champions of the Marshall Plan. It was too little to make the difference between prosperity and stagnation. It was not enough to make the Marshall Plan a decisive factor in the long boom of the post-World War II period.

IV. The Marshall Plan and Public Investment

A second channel through which the Marshall Plan could have stimulated growth was by financing public spending on infrastructure. Western European roads, bridges, railroads, ports, and other infrastructure had been severely damaged by the war. They were prime targets of the Allied strategic bombing campaign. Their destruction had been the first priority of retreating Nazis. The social rate of return to their repair and reconstruction was very high. This task was one of the principal objectives of postwar governments. Those same governments had limited resources out of which to finance infrastructure repair. National tax systems were in disarray. The tax base had been eroded by the war. Social programs competed for scarce public revenues. Inflationary finance was at odds with the imperative of financial stabilization.

The question is how tightly the fiscal constraint limited public spending on infrastructure repair. In fact, the damage to European infrastructure was not that thorough or that long lasting. Although allied generals had learned during World War II that strategic bombing could destroy bridges, paralyze rail yards, and disrupt the movement of goods and troops, they had also learned that bridges could be quickly rebuilt and tracks quickly relaid.

Figure 8
Post-World War II Recovery of Western European Rail Traffic*



*Western Europe includes Britain, Denmark, France, Italy, Belgium, Luxemburg, Netherlands, and the British, French, and American occupation zones in Germany. Continental Western Europe is Western Europe with Britain omitted.
Source: U.N. Economic Commission for Europe, *Economic Survey of Europe 1948.*

Europe's transportation infrastructure was in fact quickly repaired. As Figure 8 shows, by the last quarter of 1946 almost as much freight was loaded onto railways in Western Europe as had been transported in 1938. Including British railways, total goods loaded and shipped in the last quarter of 1946 amounted to ninety-seven percent of pre-war traffic. Weighted by the distance traveled—measured in units not of tons carried but multiplying each ton carried by the number of kilometers traveled—

1947 railroad traffic was a quarter higher than pre-World War II traffic. European recovery was not significantly delayed by the lack of track and rolling stock.[22]

V. Bottlenecks and Foreign Exchange Constraints

Another channel through which the Marshall Plan might have stimulated growth was by relaxing foreign exchange constraints. Marshall Plan funds were hard currency in a dollar-scarce world. They might have allowed Europe to obtain imports that that would relieve bottlenecks. After the war, coal, cotton, petroleum, and other materials were in short supply. The Marshall Plan allowed them to be purchased at a higher rate than would have been possible otherwise. Marshall Plan dollars added to Europe's international liquidity and played a role in restoring intra-European trade. To the extent that the breakdown of the intra-European division of labor was reducing production, added liquidity may have relieved bottlenecks in foreign exchange.

In a well-functioning market economy, it is difficult to argue that such bottlenecks had more than a transient impact on the level of production. The European economy was not without possibilities for substitution. Market economies are very good at finding and utilizing such possibilities. However, assume for argument's sake that little active

[22]Similarly, the rapid repair of other forms of publicly-provided infrastructure prevented them from constraining recovery. Water systems were quickly restored. The electrical grid was put back into operation (although there was not always coal to fuel the power plants). In fact, public spending did not rise in countries receiving large amounts of Marshall Plan aid. Countries that were major aid recipients saw the government spending share of national income fall relative to other nations (see Eichengreen and Uzan, 1991). The Marshall Plan did not accelerate growth by releasing resource constraints that prevented governments from rebuilding infrastructure.

Earlier pre-Marshall Plan post-World War II aid may, however, have helped in the speedy reconstruction of Europe's infrastructure.

substitution of cheap goods for scarce imports was possible on the production side. It is still the case that Europe would not have seen lower production without Marshall Plan aid if governments had made sustaining production a priority when allocating foreign exchange. Absent the Marshall Plan, according to this scenario, imports of consumption goods would have been reduced as foreign exchange was diverted to purchase industrial raw materials, but output would not have been noticeably affected.

Had substitution possibilities been lacking in both production and use of foreign exchange, materials shortages might then have reduced production. But consider the following back-of-the-envelope calculation for the most severe bottleneck: coal. In 1938 Western Europe consumed 460 million tons of hard coal. It produced only 400 million tons in 1948. Over the life span of the Marshall Plan, Western Europe imported about seven percent of its coal consumption from the United States. Assuming that coal was the most important bottleneck, that half of national product was produced in coal-burning sectors, and that these coal-burning sectors used fixed coefficients in production, then elimination of coal imports would have reduced Western European total product over the duration of the Marshall Plan by no more than three per cent.

This back-of-the-envelope calculation neglects indirect effects and general equilibrium repercussions. One can imagine that, for example, a small decline in coal consumption might have produced a large decline in steel output, which in turn provoked an even larger fall in output in sectors for which steel was an essential input.

Input-output analysis is the classic way of analyzing such a situation. Consider Italy, for which Marshall Plan administrators prepared a 1950 input-output table.[23] Italy imported $72 million—13 billion lire—worth of coal during the Marshall Plan. Assume that all uses of coal would have been proportionately reduced in the absence of Marshall Plan imports, that all industry production functions were Leontief, and that slack resources would have remained idle.[24] Then input-output analysis reveals that industrial production would have fallen by 6.8 percent and transportation by 7.3 percent of a year's production.[25] The coal bottleneck would have produced secondary bottlenecks in steel production, refining, and transport. But agriculture and services would have been unaffected. Since industry and transport account for less than half of national product, the latter would have fallen by 3.2 percent of a year's production.[26]

This, of course, is an overestimate of the likely effects in 1950 of a coal bottleneck. The economy did possess substitution possibilities in production and foreign-exchange allocation. If the market was functioning and so uncovering substitution possibilities, it is plausible that losses due to all bottlenecks together would have been less than this calculation for coal. And even 3 percent is small relative to the speed of the remarkable European recovery. In individual periods —such as the winter of 1947—bottlenecks, primarily in coal, were present. Earlier in recovery, bottlenecks and resource scarcities may well have been very important. But the elimination of bottlenecks more than three years after

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[23]1950 is almost precisely the midpoint of the Marshall Plan. The MSA mission, led by Hollis Chenery, in fact provided several such tables. We use the 16 sector input-output table provided by U.S. Mutual Security Agency (1953), pp.132-133.
[24]Of course, these assumptions are patently false, a point whose implications we explore below.
[25]We derive these estimates by reducing each element of the vector of final demands by the same proportion until the coal constraint is just binding.
[26]Compare the back-of-the-envelope calculation in the preceding paragraph, which came to three percent.

the end of the war as a result of Marshall aid is unlikely to have been a significant factor driving the rapid Western European recovery, at least if the counterfactual is one in which the market is doing its job of adjustment and reallocation.

VI. The Political Economy of European Reconstruction

But would the market economy have been allowed to do its job? The 1930's had seen not chronic bottlenecks but chronic deficiencies of aggregate demand. Production had fallen far below normal for the entire decade; market forces had failed to restore demand to normal levels. Circumstances during the Great Depression had been exceptional, but circumstances in the aftermath of World War II were exceptional as well. Many feared the return of the Depression.[27]

Thus a live possibility in the absence of the Marshall Plan was that governments would not stand aside and allow the market system to do its job. In the wake of the Great Depression, many still recalled the disastrous outcome of the *laissez-faire* policies then in effect. Politicians were predisposed toward intervention and regulation: no matter how damaging "government failure" might be to the economy, it had to be better than the "market failure" of the Depression.

Had European political economy taken a different turn, post-World

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[27]In fact, aside from the possibility that fear of a renewed Great Depression would act as a self-fulfilling prophecy, the return of the Great Depression was not likely in the 1940's. The memory of the Depression, and the greater strength and incorporation of social democratic political movements in government kept right-wing governments from adopting policies of out-and-out national deflation. The availability of the large United States market to European exports—especially with the coming of the Korean War Boom and NATO in the early 1950's—prevented any large world aggregate demand shortfall as in the Great Depression. With the American locomotive under full steam, Western European economies were unlikely to suffer from prolonged Keynesian demand-shortfall depressions.

War II European recovery might have been stagnant. Governments might have been slow to dismantle wartime allocation controls, and so have severely constrained the market mechanism. In fact the Marshall Plan era saw a rapid dismantling of controls over product and factor markets in Western Europe, and the restoration of price and exchange rate stability. An alternative scenario would have seen the maintenance and expansion of wartime controls in order to guard against substantial shifts in income distribution. The late 1940's and early 1950's might have seen the creation in Western Europe of allocative bureaucracies to ration scarce foreign exchange, and the imposition of price controls on exportables in order to protect the living standards of urban working classes.

A. Europe in the Argentine Mirror

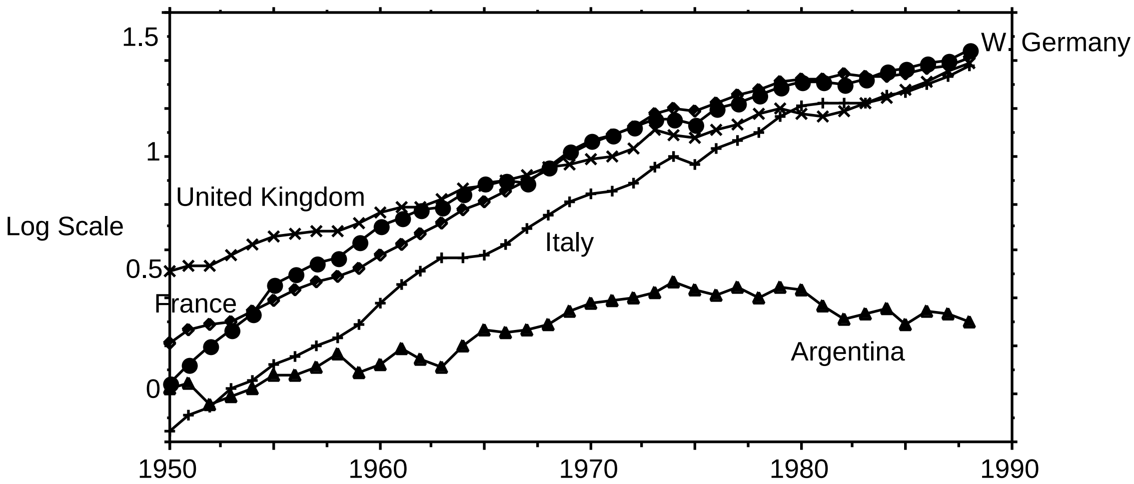
The consequences of such policies can be seen in the Argentine mirror. In response to the social and economic upheavals of the Depression, Argentina adopted demand stimulation and income redistribution. These policies were coupled with a distrust of foreign trade and capital, and an attraction to the use of controls instead of prices as allocative mechanisms. Argentina's growth performance in the post-World War II period was very poor. Figure 9 displays the post-World War II growth of Argentine GDP per capita along with that of the four largest European economies. Even in the 1950's, and even relative relative to Britain, Argentine growth was slow.

Díaz Alejandro (1970) provides a standard analysis of Argentina's post-World War II economic stagnation. According to his interpretation, the collapse of world trade in the Great Depression was a disaster of the first magnitude for an Argentina tightly integrated into the world division of labor. While Argentina continued to service its foreign debt, its trade partners took unilateral steps to shut it out of markets. The experience of the Depression justifiably undermined the nation's commitment to free trade.[28]

In this environment Juan Perón gained mass political support. Taxes were increased, agricultural marketing boards created, unions supported, urban real wages boosted, international trade regulated. Perón sought to generate rapid growth and to twist terms of trade against rural agriculture and redistribute wealth to urban workers who did not receive their fair share. The redistribution to urban workers and to firms that had to pay their newly increased wages required a redistribution away from exporters, agricultural oligarchs, foreigners, and entrepreneurs.

[28]Moreover, conservative dictatorships in the 1930's had sharpened lines of political cleavage. Landowner and exporter elites had always appropriated the lion's share of the benefits of free trade. They had in the 1930's shown a willingness to sacrifice political democracy in order to stunt the growth of the welfare state.

Figure 9
Post-World War II GDP per Capita Growth in Argentina, Britain, France West Germany, and Italy



Source: Robert Summers and Alan Heston, *Penn World Table V.*

The Perónist program was not *prima facie* unreasonable given the memory of the Great Depression, and it produced almost half a decade of very rapid growth. Then exports fell sharply as a result of the international business cycle as the consequences of the enforced reduction in real prices of rural exportables made themselves felt. Agricultural production fell because of low prices offered by government marketing agencies. Domestic consumption rose. The rural sector found itself short of fertilizer and tractors. Squeezed between declining production and rising domestic consumption, Argentinian exports fell. By the first half of the 1950's the real value of Argentine exports was only 60 percent of the depressed levels of the late 1930's, and only 40 percent of 1920's levels. Due to the twisting of terms of trade against agriculture and exportables, when the network of world trade was put back together, Argentina was by and large excluded.

The consequent foreign exchange shortage presented Perón with unattractive options. First, he could attempt to balance foreign payments by devaluing to bring imports and exports back into balance in the long run and in the short run by borrowing from abroad.[29] But effective devaluation would have entailed raising the real price of imported goods and therefore cutting living standards of the urban workers who made up his political base. Foreign borrowing would have meant a betrayal of his strong nationalist position. Second, he could contract the economy, raising unemployment and reducing consumption, and expand incentives to produce for export by decontrolling agricultural prices.[30] But once again this would have required a reversal of the distributional shifts that had been the central aim of his administration.

The remaining option was one of controlling and rationing imports. Not surprisingly, Perón and his advisors chose the second alternative, believing that a dash for growth and a reduction in dependence on the world economy was good for Argentina. Díaz Alejandro writes:

> First priority was given to raw materials and intermediate goods imports needed to maintain existing capacity in operation. Machinery and equipment for new capacity could neither be imported nor produced domestically. A sharp decrease in the rate of real capital formation in new machinery and equipment followed. Hostility toward foreign capital, which could have provided a way out of this difficulty, aggravated the crisis…

[29]Foreign borrowing would have appeared even less attractive to Argentines who recalled the extraordinarily high real effective interest rates that their foreign debt had carried during the deflation of the 1930's. See Díaz Alejandro (1970).

[30]The experience of the previous generation, however, suggested *ex ante* that Argentina did not need to further specialize in the international division of labor. Demand for its export products had been depressed for twenty years.

Subsequent governments did not fully reverse these policies, for the political forces that Perón had mobilized still had to be appeased. Thus post-World War II Argentina saw foreign exchange allocated by the central government in order to, first, keep existing factories running and, second, keep home consumption high. Third and last priority under the controlled exchange régime went to imports of capital goods for investment and capacity expansion.

As a result, the early 1950's saw a huge rise in the price of capital goods. Each percentage point of total product saved led to less than half a percentage point's worth of investment. Díaz Alejandro found "[r]emarkably, the capital…in electricity and communications increased by a larger percentage during the depression years 1929-39 than… 1945-55," although the 1945–55 government boasted of encouraging industrialization. Given low and fixed agriculture prices, hence low exports, it was very expensive to sacrifice materials imports needed to keep industry running in order to import capital goods. Unable to invest, the Argentine economy stagnated.

In 1929 Argentina had appeared as rich as any large country in continental Europe. It was still as rich in 1950, when Western Europe had for the most part reattained pre-World War II levels of national product. But by 1960 Argentina was poorer than Italy and had less than two-thirds of the GDP per capita of France or West Germany. One way to think about post-World War II Argentina is that its mixed economy was poorly oriented: the government allocated goods, especially imports, among alternative uses; the controlled market redistributed income. Thus neither the private nor the public sector was used to its comparative advantage: in Western Europe market forces allocated resources—even, to a large extent, for nationalized industries—the government redistributed income, and the outcome was much more favorable.

B. The European Analogy

In the absence of the Marshall Plan, might have Western Europe followed a similar trajectory? In Díaz Alejandro's estimation, four factors set the stage for Argentina's relative decline: a politically-active and militant urban industrial working class, economic nationalism, sharp divisions between traditional elites and poorer strata, and a government used to exercising control over goods allocation that viewed the price system as a tool for redistributing wealth rather than for determining the pattern of economic activity.

From the perspective of 1947, the political economy of Western Europe would lead one to think that it was at least as vulnerable as Argentina to economic stagnation induced by populist overregulation. The war had given Europe more experience than Argentina with economic planning and rationing. Militant urban working classes calling for wealth redistribution voted in such numbers as to make Communists plausibly part of a permanent ruling political coalition in France and Italy.[31] Economic nationalism had been nurtured by a decade and a half of Depression, autarky and war. European political parties had been divided substantially along economic class lines for a generation.

Yet Europe avoided this trap. After World War II Western Europe's mixed economies built substantial redistributional systems, but

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[31]For details, see Casella and Eichengreen (1991).

they were built on top of and not as replacements for market allocations of goods and factors. Just as post-World War II Western Europe saw the avoidance of the political-economic “wars of attrition” that had put a brake on post-World War I European recovery, so post-World War II Western Europe avoided the tight web of controls that kept post-World War II Argentina from being able to adjust and grow.

VII. The Role of the Marshall Plan

Did the Marshall Plan play a role in Western Europe’s successful avoidance of these traps? In answering this question, it is important to distinguish three effects of the American Marshall Plan program: its immediate contribution to the restoration of financial stability; its role in restoring the free play of market forces; and its part in the negotiation of the social contract upon which the subsequent generation of supergrowth was based.

A. The Restoration of Financial Stability

Financial instability was pervasive in post-World War II Europe. Relief expenditure sent budgets deep into deficit. Governments responded to inflation by retaining controls, prompting the growth of black markets and discouraging transactions at official prices. Farmers refused to market produce as long as prices were restricted to low levels. With receipts vulnerable to inflation or taxation, they were better off hoarding inventories. The post-World War II food shortage reflected not merely bad weather in 1947 but the reluctance of farmers to deliver food to cities. Moreover, manufactured goods farmers might have purchased remained in short supply. Manufacturing enterprises had the same incentive to hoard inventories. As long as food shortages persisted, workers had little ability—or incentive—to devote their full effort to market work. Few were willing to sell goods for money when inflation threatened to accelerate at any time.[32]

The liberal, market-oriented solution to the crisis was straightforward. Prices had to be decontrolled to coax producers to bring their goods to market. Inflation had to be halted for the price mechanism to operate smoothly and to encourage saving and initiative. Budgets had to be balanced to remove inflationary pressure. With financial stability restored and market forces given free reign, individuals could direct their attention to market work. Without financial stability, the allocative mechanisms of the market could not be relied on—and government controls over the process of goods allocation would appear the more attractive option.

For budgets to be balanced and inflation to be halted, however, political compromise was required. Consumers had to accept higher posted prices for foodstuffs and necessities. Workers had to moderate their demands for higher wages. Owners had to moderate demands for profits. Taxpayers had to shoulder additional liabilities. Recipients of social services had to accept limits on safety nets. Rentiers had to accept that the war had destroyed their wealth. There had to be broad agreement on a “fair” distribution of income, or at least on a distribution of the burdens that was not so unfair as to be intolerable. Only then could

[32]Wallich (1955) describes how German industries that made consumer goods would pay their workers in the factory's output so that its workers would have something with which to barter, while industries that made producer goods paid their workers some of their wages in coal which managers had diverted from power generation.

pressure on central banks to continually monetize budget deficits and cause either explicit or repressed inflation be removed.

Here the Marshall Plan may have played a critical role. It did not obviate the need for sacrifice. But it increased the size of the pie available for division among interest groups. Two-and-a-half percent—Marshall Plan aid as a share of recipient GDP—was not an overwhelmingly large change in the size of the pie. But if the sum of notional demands exceeded aggregate supply by five or seven-and-a-half percent, Marshall Plan transfers could reduce the sacrifices required of competing distributional interests by a third or as much as a half. The presence of Marshall Plan aid could thus have significantly reduced the costs of compromise relative to the benefits.[33]

Dangerous instability arises if the failure to compromise leads to a "war of attrition." Suppose that the difference between the total sum of claims to output and output itself shows up as a deficit in the government's budget. Then even small conflicts over "fair shares" can easily lead to aggregate demand which exceeds supply by some seven or eight percent. To meet such a shortfall of revenues relative to demands for services and transfers through money creation, the government has to increase the high-powered money supply by eight percent of GDP each year. The consequences of such a rate of increase in high-powered money are likely to be disastrous.

Marshall Plan aid of two and a half percent of national product goes a substantial way toward closing this excess demand gap. Moreover, its potential availability if the government's stabilization plan meets the criteria required by Plan administrators provides a powerful

[33]This is the argument developed for Italy and France in Casella and Eichengreen (1991).

incentive for governments to impose financial discipline. With Marshall Plan aid available, the benefits for quick resolution of “wars of attrition” were greater, and so the Plan in all likelihood advanced the date of financial stabilization. While internal price stabilization after World War II took four years, the German hyperinflation took place in the sixth year after the end of World War I, and France’s post-World War I inflation lasted for eight years. Some large part of the credit for this early stabilization goes to the Marshall Plan, and to earlier aid programs.[34]

Along with the carrot of Marshall Plan grants, the U.S. also wielded a stick. For every dollar of Marshall Plan aid received, the recipient country was required to place a matching amount of domestic currency in a counterpart fund to be used only for purposes approved by the U.S. government. Each dollar of Marshall Plan aid thus gave the U.S. government control over two dollars' worth of real resources. Marshall Plan aid could be spent on external goods only with the approval of the United States government. And the counterpart funds could be spent internally only with the approval of the Marshall Plan administration as well.

In some instances the U.S. insisted that the funds be used to buttress financial stability. Britain used the bulk of its counterpart funds to retire public debt. Vincent Auriol claims that the U.S. refused to release French counterpart funds in 1948 until the new government affirmed its willingness to continue policies leading to a balanced budget.[35] French officials were outraged: nevertheless, they took steps to

[34]Banca Italiana governor Menichella attributed Italian stabilization to the pre-Marshall Plan “interim aid” program. In his belief, “stabilization was made possible by interim aid.…Interim aid and the prospect of the Marshall Plan made it possible to maintain stability in prices." See Price (1955).

[35]Auriol (1970), p.162. Other sources do not contradict Auriol’s memoires. See, for example,

obtain release and raised taxes. This was policy: nations undergoing inflation could not draw on counterpart funds until the Marshall Plan administration was satisfied that they had achieved a workable stabilization program (Price, 1955).

Marshall Plan administrators believed that their veto power over the use of counterpart funds considerably increased U.S. leverage over Western European economic policies. Moreover, counterpart funds were only one of several available levers. Plan administrators believed that if governments could afford to divert funds from reconstruction to social services, Marshall aid could be eliminated proportionately. Britain lost its Marshall Plan timber line item as a result of the government's entry into the construction of public housing. West Germany found the release of counterpart funds delayed until the nationalized railway had reduced expenditures to match revenues (Arkes, 1972). Marshall and Lucius Clay, Military Governor of the American zone of Germany, viewed with alarm British schemes for unifying and nationalizing the coal industries of the Ruhr, then part of the British zone of occupation, and successfully lobbied against them. The United States was not interested in having Marshall Plan aid support policies of nationalization. The U.S. even put pressure on Britain's Labour government to delay and shrink its own nationalization programs.

B. The Free Play of Market Forces

Renewed growth required, in addition to financial stability, the free play of market forces. Though there was support for the restoration of a market economy in Western Europe, it was far from universal. Wartime

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Price (1955).

controls were viewed as exceptional policies for exceptional times, but it was not clear what was to replace them. Communist and someSocialist ministers opposed a return to the market. It was not clear when, or even if, the transition would take place.

On this issue the Marshall Plan—specifically, the conditions attached to U.S. aid—left Western Europeans with no choice. Each recipient had to sign a bilateral pact with the United States. Countries had to agree to balance government budgets, restore internal financial stability, and stabilize exchange rates at realistic levels. Europe was still committed to the mixed economy. But the U.S. insisted that market forces be represented more liberally in the mix. This was the price that the U.S. charged for its aid.

The demand that European governments trust the market came from the highest levels of the Marshall Plan administration. Dean Acheson describes the head administrator, Economic Cooperation Administration chief Paul Hoffman, as an "economic Savonarola." Acheson describes watching Hoffman "preach…his doctrine of salvation by exports" to British Foreign Secretary Ernest Bevin. "I have heard it said," wrote Acheson, "that Paul Hoffman… missed his calling: that he should have been an evangelist. Both parts of the statement miss the mark. He did not miss his calling, and he was and is an evangelist."[36]

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[36]The Marshall Plan was not left to professional politicians, potentially interested in getting along with recipient countries and building bureaucratic empires. Because Republican senators like Arthur Vandenberg had feared either that Marshall aid would be wasted or—like New Deal programs—used to solidify Democratic political bases in the U.S., the Economic Cooperation Administration had "sunset" provisions built into its enabling legislation and a peculiar status as an administrative agency formally subordinate to but not reporting to or responsible to the president. Republican worries moreover set in motion a chain of events that led the Economics Cooperation Administration to be headed by a businessman: Paul Hoffman had previously been President of Studebaker.

Truman originally sought Dean Acheson as Marshall Plan Administrator, but Acheson demurred. Senator Arthur Vandenberg had been the key to getting the program shell fuelled with

European economic integration was pursued intensely by the Plan administration. Even where domestic markets were highly concentrated, they believed competition could be injected via intra-European and international trade. Government intervention and other efforts to interfere with the operation of market forces would be disciplined by foreign competition. As a condition for receiving Marshall Plan aid, each country was required to develop a program for removing quotas and other trade controls. In 1950, discussions culminated in the European Payments Union, a system of credits to promote multilateral trade among European countries.[37]

It was not inevitable that Western Europe would have accepted the bargain. Marshall aid was ostensibly offered to Eastern Europe, and even to the U.S.S.R. Moscow's rejection can be seen in part as unwillingness to allow the U.S. to sidetrack its satellites' progress toward central planning. It is critical to acknowledge that the price charged for the aid was a price Western Europe might have paid for its own sake in any event. Support for the market was widespread, although just how widespread was uncertain. The Marshall Plan at most tipped the balance.

Post-World War II Europe was far from *laissez faire*. Government ownership of utilities and heavy industry was substantial. Government

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appropriations. Vandenberg had worked hard to separate Marshall Plan administration from the ongoing governmental bureaucracy. Acheson believed—correctly—that the appointment of a State Department insider like himself would be taken as a rejection of what Vandenberg had worked for. Acheson suggested that Truman, instead, ask Vandenberg for his choice—and he speculated that Vandenberg would recommend Paul Hoffman. Truman did ask, and Vandenberg did so recommend.

[37]Between 1948 and 1952, trade among European countries increased more than five times as fast as European trade with other continents. The economies of Europe were once again permitted to specialize in the production of goods in which they had a comparative advantage. Productivity received another boost.

redistributions of income were large. The magnitude of the “safety nets” and social insurance programs provided by the post-World War II welfare states were far beyond anything that had been thought possible before World War I. But these large welfare states were accompanied by financial stability, and by substantial reliance on market processes for allocation and exchange.

C. The Social Contract and Long-Term Growth

The restoration of financial stability and the free play of market forces launched the European economy onto a two-decade long path of unprecedented rapid growth. European economic growth between 1953 and 1973 was twice as fast as for any comparable period before or since. The growth rate of GDP was 2 percent per annum between 1870 and 1913 and 2.5 percent per annum between 1922 and 1937. In contrast, growth accelerated to an astonishing 4.8 percent per year between 1953 and 1973, before slowing to half that rate from 1973 to 1979.[38]

Because the roots of postwar Europe’s “super-growth” are not adequately understood, it is difficult to isolate the contribution of the Marshall Plan. We will nonetheless hazard some speculations about the role that U.S. aid might have played.[39]

Europe’s rapid growth in the 1950’s and 1960’s was associated with exceptionally high investment rates.[40] The investment share of GNP was nearly twice as high as it had been in the last decade before World War II or it was again to be after 1972. Accompanying high rates of

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[38]Statistics in this section are from Boltho (1982).
[39]The hypotheses advanced in this and the succeeding paragraph are developed at more length in Eichengreen (1989b).
[40]This point, made forcefully for Britain by Matthews (1967), applies to other European countries as well. See Glyn et al. (1990).

investment was rapid growth of productivity. Even in Britain, the laggard, productivity growth rose sharply between 1924-37 and 1951-73, from 1 to 2.4 percent per annum.[41] This high investment share did not, however, reflect unusual investment behavior during expansion phases of the business cycle. Rather, it reflected the tendency of investment to collapse during cyclical contractions and the absence of significant cyclical downturns between 1950 and 1971.

It would be tempting to ascribe Europe's cyclical stability to the advent of Keynesian stabilization policy, but for the fact that Keynesian policy was not forgotten when increasingly volatile cyclical fluctuations recurred after 1972. A possible reconciliation is that Keynesian policy was effective only so long as labor markets were accomodating. So long as increased pressure of demand applied by governments in response to slowdowns produced additional output and employment rather than higher wages and hence higher prices, the macroeconomy was stable. Investment was maintained at high levels, and rapid growth persisted.

The key to Europe's rapid growth, from this perspective, was its relatively inflation-resistant labor markets.[42] So long as they accomodated demand pressure by supplying more labor input rather than demanding higher wages, the other pieces of the puzzle fell into place. What then accounted for the accomodating nature of postwar labor markets?

The conventional explanation, following Kindleberger (1967), is elastic supplies of underemployed labor from rural sectors within the advanced countries and from Europe's southern and eastern fringe.

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[41] Broadberry (1991), Table 6, computed from Matthews, Feinstein and Odling-Smee (1982).
[42] This, of course, is the famous conclusion of Kindleberger (1967), although the mechanism there linking labor markets to economic performance is somewhat different.

Elastic supplies of labor disciplined potentially militant labor unions. A problem with this argument is that the competition of underemployed Italians or Greeks or Eastern European refugees was hardly felt in the United Kingdom, yet labor market behavior was transformed in the U.K. as in other countries after World War II.[43]

Another explanation is "History." Memory of high unemployment and strife between the wars served to moderate labor-market conflict. Conservatives could recall that attempts to roll back interwar welfare states had led to polarization, destabilizing representative institutions and setting the stage for fascism. Left-wingers could recall the other side of the same story. Both could reflect on the stagnation of the interwar period and blame it on political deadlock.

Yet another potential explanation is the Bretton Woods System. Bretton Woods linked the dollar to gold at $35 an ounce and other currencies to the dollar. So long as American policy makers' commitment to the Bretton Woods parity remained firm, limits were placed on the extent of inflationary policies. So long as European policy makers were loath to devalue against the dollar, limits were placed on their policies as well. Price expectations were stabilized. Inflation, where it surfaced, was more likely to be regarded as transitory. Consequently, increased pressure of demand was less likely to translate into higher prices instead of higher output, higher employment, and greater macroeconomic stability.

A final potential explanation is the Marshall Plan. Putting the point in this way serves to underscore that the Marshall Plan was but one of several factors contributing to observed outcomes. In principle, the

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[43]See Broadberry (1991).

Marshall Plan could have mattered directly. Marshall Planners sought a labor movement interested in raising productivity rather than in redistributing income from rich to poor. With labor peace a potential precondition for substantial Marshall Plan aid, labor organizations agreed to push for productivity improvements first and defer redistributions to later. Moreover, money was channeled to non-Communist labor organizations. European labor movements split over the question of whether Marshall aid should be welcomed—which left the Communists on the wrong side, opposed to economic recovery (Maier, 1987).

In practice, we believe, the Marshall Plan's indirect effects were important. One way to think about the post-World War II settlement, and the contrast with the interwar period, is as a coordination problem. Labor, management and government in Europe could, in effect, choose to try to maximize their current share of national income—as after World War I. Inflation, strikes, financial disarray, cyclical instability and productivity problems can all be seen as corollaries of this equilibrium. Alternatively, the parties could trade current compensation for faster long-term growth and higher living standards, even in present-value terms. Workers would moderate their wage demands, management its demands for profits. Government agreed to use demand management to maintain employment in return for wage restraint on the part of unions. Higher investment and faster productivity growth could ensue, eventually rendering everyone better off.

Such a "social contract" is advantageous only if it is generally accepted. If workers continued to aggressively press for higher wages, management had little incentive to plow back profits in return for the promise of higher future profits. If management failed to plow back profits, workers had little incentive to moderate current wage demands in return for higher future productivity and compensation. If labor relations were conflictual rather than harmonious, productivity would be the casualty. The Marshall Plan could have shifted Europe onto this "social contract" equilibrium path, for once workers and management began coordinating on the superior equilibrium they had no obvious reason to stop.[44]

The Marshall Plan provided immediate incentives for wage moderation in the late 1940's. U.S. policy encouraged European governments to pursue investment-friendly policies. Productivity soared in the wake of financial stabilization and the advent of the Marshall Plan. The advantages of the cooperative equilibrium were suddenly clear.

It is intriguing that, within the group of reconstructing nations, those where the United States had most leverage had the fastest-growing economies. United States influence was strongest in Germany, weaker in France and Italy, and weakest in Britain. In the post-World War II period the German economy was the most successful, the British economy least. Japan, where MacArthur was proconsul, is the exception that proves the rule.

VIII. Implications for Eastern Europe

[44]We leave for another place what the question of what caused the postwar settlement to break down in the 1970's. Two intriguing treatments of this question are those of Marglin (1990) and Broadberry (1991), both of whom argue that the postwar settlement contained the seeds of its own destruction.

Do conditions like those that made the Marshall Plan a success after World War II exist in Eastern Europe and the Soviet Union today? There are important parallels. Just as in Western Europe in 1947–48, enterprises hold back inventories in anticipation of higher prices once controls are relaxed. Excess liquidity and government budget deficits create the specter of rampant inflation. Belief that reform must occur soon, but uncertainty about its nature, provides a powerful incentive to delay investment and rationalization until the situation is clarified.

A paradox of reform in Eastern Europe is that the workers in heavy industry who initiated the rebellion against Communist domination were, from an economic standpoint, relatively unproductive at world prices and thus “privileged” under the *ancien régime*. Their wages were relatively high. The industries in which they worked were massively subsidized. Their real wages will be among the first to fall, and must fall the farthest. Their jobs are most likely to disappear during transition. Ironically, those in the vanguard of rebellion against the *ancien régime* may be the first to withdraw their support for reform. Even with substantial aid to cushion the fall in consumption during adjustment, it is not clear that adjustment can be successfully completed.

As in Europe after World War I, political struggles over economic structure could lead to damaging “wars of attrition.” Conflict over distribution could produce inflation, price controls, and foreign-exchange rationing. Alternatively, market prices could be controlled in the interest of stabilizing income distributions. The government’s fiscal and investment stance would be used to allocate resources. This might well result in stagnation, for much evidence suggests that markets are best at the allocation of resources and governments at moderating the distribution of income. If Argentina is any guide, such a semi-planned economy might last for a generation before being discredited.

To avoid both the post-World War I "distributional conflict" trap and the Argentinian "populist overregulation" trap, Eastern Europe will have to be lucky. A substantial aid program might help them to make their own luck. Supporting Eastern European living standards could limit public opposition to economic reform when output initially falls during the transition to a market economy. Hard currency would allow higher imports of much-needed commodities from the West. Reserves would make monetary stabilization and currency convertibility possible.

Important differences weaken the case for a Marshall Plan, especially for the regions of the Soviet Union. In post-World War II Western Europe there already existed widespread support for and experience with the market. The Marshall Plan only tipped the balance. It is not clear that comparable support exists in the Soviet Union today, or in much of Eastern Europe. Powerful elements still oppose economic liberalization. And many advocates have no clear idea of what liberalization entails.

In post-World War II Western Europe, Marshall Plan aid was effective at least in part because Europe had experience with markets. It possessed the institutions needed for their operation. Property rights, bankruptcy codes, court systems to enforce market contracts—not to mention entrepreneurial skills—all were in place. None of this holds in Eastern Europe today. For fifty years potential entrepreneurs have been labeled as "speculators" and attacked as public enemies. One principle of a market economy is that entrepreneurial profits tell not how much the entrepreneur is an exploiter but how wasteful of resources the situation would have been in his absence. This principle is not yet established, and so political leaders will be tempted to try to earn populist applause by renewed crackdowns on “speculators.”

In post-World War II Western Europe, U.S. aid and U.S. conditionality encouraged the reductions in government spending needed for financial stability. It encouraged the elimination of controls and the liberalization of trade. It is far from certain that aid today will have the same effect. Transfers to the central government may delay rather than accelerate the process of privatizing industry and creating a market economy. But whatever programs are adopted, aid is likely to work better if provided on the basis of actions taken rather than need.

These observations all point toward caution on the part of those contemplating the extension of Western aid to the East. They remind that aid for Eastern European reform is a gamble. The original Marshall Plan was a gamble as well. The Marshall Plan’s Senate floor leader, Arthur Vandenberg, did not promise success. In his final speech before the Senate vote he warned that “…there are no blueprints to guarantee results. We are entirely surrounded by calculated risks. I profoundly believe that the pending program is the best of these risks…”

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