



August 2011 No.49

The Marshall Plan: A Reality Check
Prof Nicholas Crafts
University of Warwick

WORKING PAPER SERIES

Centre for Competitive Advantage in the Global Economy

Department of Economics





The Marshall Plan: A Reality Check

Nicholas Crafts

(University of Warwick)

Abstract

This paper surveys the literature on the Marshall Plan which was designed to help the reconstruction of Europe after World War II. A basic description of how the Marshall Plan was implemented is provided but the focal point is a consideration of the impact of American aid on European growth. It is concluded that the direct effects were positive but modest. The indirect effects working through induced policy changes may have been larger. If so, the Marshall Plan may be thought of as a successful structural adjustment program of the kind advocated by believers in the Washington Consensus.

Keywords: Aid; Economic Growth; Marshall Plan; Structural Adjustment Program

JEL Classification: F35; N14; N22

August 2011

1. Introduction

The Marshall Plan was a major programme of aid which transferred \$12.5 billion from the United States to Western Europe during the years 1948 to 1951. The phrase 'Marshall Plan' has an iconic status, as is reflected in repeated calls over time for a new Marshall Plan for Eastern Europe (in the 1990s), for Africa (in the 2000s), and now for the Middle East. This suggests that it is important to be clear what it comprised, to evaluate its achievements, and to explain its successes and failures.

From the perspective of European economic history, the Marshall Plan has attracted a great deal of attention because it represents the prologue to an extraordinarily rapid phase of economic growth, the so-called 'Golden Age' of the 1950s and 1960s, which came so soon after the traumatic shock of World War II and its aftermath. This raises the issue of whether it made a crucial difference to the reconstruction and subsequent growth performance of Western Europe. Since this turns mainly on an analysis of the medium-term indirect effects that the Marshall Plan may have had on institutions and economic policy choices rather than the immediate short-run impact of aid on investment or imports, the answer to this question involves difficult counterfactuals and is unavoidably somewhat controversial.

From the perspective of today's economic policymakers, the Marshall Plan can be studied with a view to deeper understanding of the question of the effectiveness of aid in stimulating economic growth, an issue which has produced an enormous literature over the last 15 years or so. It can also be viewed as a structural adjustment program with similarities to the interventions made by the World Bank from the 1980s onwards and its content has distinct similarities to the policies embodied in the Washington Consensus. This directs attention to lessons that might be drawn from the experience of the Marshall Plan for structural adjustment lending.

The historiography of the Marshall Plan was initially dominated by accounts of a massive success story, for example, Mayne (1970). A well-known revisionist account was presented by Milward (1984) which argued both that the direct effects of inflows of aid on economic growth were small and also that the United States was not really able to reconstruct Europe according to its own blueprint. The reaction to this view can be found most notably in the work of Eichengreen and his several collaborators (Eichengreen and Uzan, 1992; Casella and Eichengreen, 1993; De Long and Eichengreen, 1993) which stressed the role of the Marshall Plan in promoting financial stabilization, market liberalization and the social contract on which the 'economic miracle' was based.

2. The Context

A good starting point is to consider two questions which are central to establishing the context of the Marshall Plan, namely, 'why did the United States decide to implement it?' and 'how promising were the opportunities for economic growth in Europe at the end of the 1940s?'.

The idea of the Marshall Plan, later formally designated as the European Recovery Program (ERP), was first put forward by Secretary of State George C. Marshall in a commencement speech at Harvard University on June 5, 1947. In the speech, Marshall noted that Europe's immediate needs for imported commodities especially food were much greater than its current ability to pay and that

¹ Marshall was awarded the Nobel Peace Prize in 1953 for his role as architect of and advocate for the Marshall Plan.

without substantial help Europe faced economic, social and political deterioration of a very grave character. The purpose of aid would be to permit the emergence of political and social conditions in which free institutions could exist and to provide a cure rather than a palliative.

The circumstances to which Marshall was alluding were, first, that Europe had a large current account balance of payments deficit running at about \$9 billion per year in 1946/7 matched by an American surplus of a similar amount, and second, that with the perception of a looming communist threat in Europe the Marshall Plan would be the Truman administration's response. The current account problem could not be dealt with by borrowing from private capital markets at a time when international capital mobility was heavily restricted and currencies were inconvertible.

The United States had already given substantial amounts of aid; between July 1945 and the end of 1947 flows amounted to \$13 billion and the GARIOA program was underway. In the absence of the Cold War, the support of Congress for such a further big aid program would have been inconceivable (Cronin, 2001). The communist coup in Czechoslovakia in February 1948 ensured that the European Recovery Act would be passed with a large majority but it should also be recognized that the provision of aid through in-kind transfers had business support from exporters and agricultural interests and that labor unions were placated by provisions that the supply of goods to Europe would be carried on American ships loaded by American dockers (Gardner, 2001).

The rhetoric that the Marshall Plan was vital for saving Europe prevailed. The explicit objectives of the ERP can be summarized as increasing European production, expanding European countries' foreign trade both within Europe and with the rest of the world, achieving financial stabilization, and developing economic cooperation notably through what in 1950 eventually became the European Payments Union (EPU) (Wexler, 1983). An important sub-text, notwithstanding French resistance, was the rehabilitation of the German economy as an integral part of West-European trade able to supply capital goods to its trading partners.

Although times were hard in the years immediately after World War II, the medium term prospects for European economic growth were quite bright provided that countries did not pursue damaging economic policies as, in different ways, many Latin American economies and the Soviet bloc would do. In fact, the scene was set for rapid catch-up growth to reduce the large American productivity lead which had built up over the first half of the 20th century both through reducing inefficiencies in the allocation of resources and the management of firms and through successful technology transfer. Abramovitz and David (1996) note that catch-up growth would be sustained by enhanced 'technological congruence' and 'social capability'. In other words, American technology was now more cost effective in European conditions than it had been in earlier decades and incentive structures in European countries were more conducive to effective assimilation of that technology. Technology transfer surged on the back of European investments in human capital, foreign direct investment especially by American multinationals a greater role for codified as opposed to tacit knowledge, and economic integration leading to larger markets (Nelson and Wright, 1992).

-2

² GARIOA is an acronym for Government Relief in Occupied Areas which financed imports of food, petroleum and fertilizers. Germany received aid under this program from July 1946 to March 1950 and during the period of overlap with the Marshall Plan received more from GARIOA.

³ Congressional support would presumably not have been forthcoming if the Soviet Union had accepted the American offer that it could participate together with its Eastern-European satellites. For a game-theoretic analysis which claims that this was an offer whose refusal was rationally anticipated, see Gardner (2001).

In any event, Western Europe was very different from the typical country or region for which so-called Marshall Plans have been proposed in the last 20 years. It had a capitalist tradition and a long history of reasonably successful market economies. We do not have quality of governance measures for the 1940s but it is clear that European countries in that period would score much better for the indicators now compiled by the World Bank like 'rule of law', 'control of corruption', 'regulatory quality' or 'government effectiveness' than the average third-world country today. This augured well for growth and, at the same time, increased the probability that Marshall Aid could make a positive difference.

3. The Details of the Marshall Plan

The basic mechanisms by which the Marshall Plan was implemented were as follows. First, European economies were allocated aid according to their dollar balance of payments deficits. American goods were shipped to meet the requests of individual countries. Second, each recipient country deposited the equivalent amount to pay for these imports in a so-called Counterpart Fund. The balances in these funds could be reclaimed for approved uses; approval was determined by the Marshall Plan authorities in the guise of the European Cooperation Agency (ECA) which had a resident mission in each country. Third, a productivity assistance program which aimed at reducing the productivity gap between Europe and the United States was established. This financed study tours by Europeans and provided follow-up technical services; it lasted in total for 10 years during which \$300 million was spent (Silberman et al., 1996). Fourth, each recipient country signed a bilateral treaty with the United States which committed them inter alia to follow policies of financial stability, trade liberalization including most-favoured-nation treatment for West Germany. Fifth, the Organization for European Economic Cooperation (OEEC) which was established in April 1948 provided 'conditional aid' of about \$1.5 billion to back an intra Western European multilateral payments agreement; in 1950 Marshall Aid recipients became members of the European Payments Union (EPU).

The EPU was a mechanism that addressed the problem of the absence of multilateral trade settlements in a world of inconvertible currencies and dollar shortage. In such circumstances, the volume of trade between each pair of countries is constrained to the lower of the amount of imports and exports because a surplus with one country cannot be used to offset a deficit with another. The EPU provided a multilateral clearing system supplemented by a credit line for countries temporarily in overall deficit. This was facilitated by the United States through conditional Marshall Aid acting as the main 'structural creditor' to address the difficulty that would otherwise have arisen from the prospect that some countries were likely to be persistent debtors.⁴

Table 1 sets out the amounts received by the major recipients of Marshall Aid. Although the amount of aid provided by the United States was generous and amounted to an average of a little over 1 per cent of GNP, the annual inflow to the recipients was modest in terms of their GDP at around 2 percent on average, although there was considerable variation. Table 2 describes the composition of aid shipments. Food was the largest category, especially at the outset, with capital goods accounting for only a small share. Table 3 reports on the use of counterpart funds in the largest economies which varied substantially. France, Italy and West Germany used most of their funds to

_

⁴ For a fuller account of the intricate details of the operation of the European Payments Union, see Eichengreen (1993).

boost production, although the composition of expenditure was quite different. By contrast, the United Kingdom used 97 per cent of its funds to reduce the national debt (recorded as contributing to financial stability).

4. Direct Effects on Growth

Growth accounting provides a useful starting point for thinking about the direct effects of the Marshall Plan on growth. The basic formula is

$$\Delta Y/Y = \alpha \Delta K/K + \beta \Delta L/L + \Delta A/A$$

where Y is output, K is capital, L is labour, A is total factor productivity (TFP) while α and β are the output elasticities of capital and labour, respectively. TFP growth will reflect improvements in the efficiency with which inputs are used and improvements in technology. This approach directs attention to effects that the Marshall Plan had by financing more investment and so raising Δ K/K and also on TFP growth through the productivity assistance program.

Conventional growth accounting would suggest that the impact of the Marshall Plan via investment must have been quite modest. The rate of growth of the capital stock = (I/Y)(Y/K). If all Marshall Plan inflows went to raise I/Y, the share of investment in GDP, on average across recipient countries this would have gone up by about 2 percentage points and with K/Y, the capital to output ratio, at about 2 this would imply that $\Delta K/K$ rose by about 1 percentage point. In growth accounting it would be conventional to assume that $\alpha=0.35$ so the maximum effect on GDP growth would be about 0.35 percentage points. In fact, a relatively small share of the aid either in terms of ERP shipments or counterpart funds was spent on capital goods so the minimum effect might be much lower. In practice, the use of aid for other purposes to some extent released funds for investment so the actual effect lay somewhere between these bounds. Reasoning of this kind underlay the conclusion in Milward (1984, pp. 107-8) that this kind of growth effect was small.

This analysis can be made more sophisticated by thinking in terms of a 3-gap model (Bacha, 1990). This takes into account that growth is a function of investment but also that investment may need not only savings but also imported inputs and complementary provision of infrastructure. Thus, aid can have positive growth effects through relaxing savings, foreign-exchange or fiscal constraints. Eichengreen and Uzan (1992) developed an analysis of this type which at the same time provided an econometric estimate of the actual effect of Marshall Aid on investment; their results are summarized in Table 4. They confirm the basic conclusion that the direct effects of Marshall Aid on growth were modest. There is no effect through alleviating a fiscal constraint and while \$1 allows a 12 cent increase in the balance of payments deficit this had no significant effect on growth performance. \$1 of aid was found to raise investment by 0.36 cents (well below the maximum postulated above) but this is found to have a relatively large output elasticity compared with conventional assumptions. The bottom line is that the direct effect of an average inflow of 2 per cent of GDP would have raised the growth rate by 0.3 percentage points during the years 1948-51.

The unimportance of the foreign exchange constraint suggests that resource bottlenecks were less important than is sometimes believed. De Long and Eichengreen (1993) buttressed this conclusion by considering coal where Europe imported about 7 per cent of its consumption from the United States. Using an input-output analysis, they obtained an upper-bound estimate that elimination of

these coal imports would have reduced GDP by no more than 3 per cent. Bottlenecks perhaps deserve more investigation and it has been suggested that they may have been particularly important in Germany where Borchardt and Buchheim (1991) argue that the Marshall Plan was important in delivering raw materials to the cotton industry and that counterpart funds mattered considerably for investment in the electricity industry.

It has been claimed that the productivity assistance program had big effects through increasing TFP. Silberman et al. (1996) asserted that productivity increases of 25 to 50 per cent were common in firms following a study tour just through raising awareness of what was possible. However, the evidence for big productivity effects is not convincing. These authors note that there was no proper evaluation using control groups at the time (1996, p. 449). A cross-section regression study which took account of whether or not there had been a report by the Anglo-American Productivity Council had no effect on a British industrial sector's productivity growth in the early postwar period (Broadberry and Crafts, 1996). This is not only explained by the general belief that American methods were inappropriate in British conditions, but also reflects the bargaining power of workers who opposed change and the weakness of competition which permitted the survival of inefficient firms. The productivity assistance program had no leverage to remove these obstacles.

5. Indirect Effects on Growth

The Marshall Plan not only provided flows of aid it changed the environment in which economic policy was conducted. The indirect effects on long-term growth which resulted were probably much more important than the short run growth accounting impacts discussed above but they are harder to quantify. The channels through which these effects may have been transmitted include facilitating macroeconomic stabilization in the early postwar years, conditionality which inter alia promoted European economic integration, and providing an impetus towards postwar settlements which underpinned a cooperative equilibrium between firms and their workers in which high investment was the quid pro quo for wage moderation. The literature has stressed effects working through investment but there may have been positive implications for TFP growth as well.

Stabilization which ended the threat of postwar inflation required that government budget deficits were reduced and liquidity creation stemmed. The potential contribution of Marshall Plan aid was to reduce the sacrifices required to achieve this and thus to make easier a political compromise that would suffice to end a 'war of attrition'. It has been argued 2 to 2.5% of GDP might go a long way in this context and that in some countries, notably France and Italy, the Marshall Plan was a key ingredient facilitating early stabilization (Casella and Eichengreen, 1993). This claim has some theoretical plausibility but is not easy to prove.⁶

-

⁵ It should be noted that James Silberman, the lead author of this paper, was not an impartial observer; he conceived and launched the productivity assistance program of the Marshall Plan in his capacity as Chief of Productivity and Technology Development at the Bureau of Labor Statistics.

⁶ The idea has been formalized in terms of a model proposed by Alesina and Drazen (1991) in which inflation results from a distributional conflict over who will bear the costs of stabilization. Delay in making concessions is rational as long as the costs of stabilization are borne unevenly and there is uncertainty about the staying power of rivals. Aid reduces the fiscal burden on the group that concedes first (the Left in late-1940s France and Italy) and thus induces earlier concessions; for a formal analysis and qualifications to this result see Casella and Eichengreen (1996).

Conditionality was embedded in the Marshall Plan in several ways. First, the bilateral treaty that each country had to sign was an agreement that embodied sound macroeconomic policies and a commitment to trade liberalization. Second, the requirement for American permission for the use of counterpart funds gave the ERP authorities both some control over the use of resources and ostensibly bargaining power with regard to domestic policy decisions. Third, Marshall aid gave the Americans leverage to encourage recipients to join the European Payments Union which also entailed reducing barriers to trade and adopting most-favoured-nation treatment of imports from other members. This had the implication that West Germany would be reintegrated into European trade and able to resume its role as major exporter of capital goods.

The use of conditionality by the United States was clearly subject to important limitations. In particular, the strong American preference for moderate governments in France and Italy meant that counterpart funds had to be released to them and could not be used to influence domestic economic policies (Esposito, 1995). Similarly, the United Kingdom's importance as an ally gave it substantial bargaining power over the implementation of the ERP – for example, there was no serious attempt to dissuade the British government from its extensive nationalization programme (Burnham, 1990). Moreover, the design for European trading arrangements was negotiated, notably with regard to British and French concerns, rather than imposed and the EPU did not match the original American plans for a free-trade customs union and early current-account convertibility (Milward, 1984).

Nevertheless, the EPU represented an important success as a mechanism for restoring West Germany to its central role in the European economy (Berger and Ritschl, 1995) and for promoting trade growth. The EPU was a second-best way of reviving European trade and multilateral settlements compared with full current-account convertibility but it speeded up the process by solving a coordination problem. It lasted until 1958 by which time intra-European trade was 2.3 times that of 1950 and a gravity-model analysis confirms that the EPU had a large positive effect on trade levels (Eichengreen, 1993). This can be seen as a stepping stone to further trade liberalization through increases in the political clout of exporting firms relative to import-competing firms (Baldwin, 2006). The long-term effect of economic integration raised European income levels substantially, by nearly 20 per cent by the mid-1970s according to estimates by Badinger (2005). This was perhaps the most important way in which the long-term effect of the Marshall Plan was to raise TFP.⁷

This account may seem to suggest a route by which the Marshall Plan had a major effect on postwar European economic growth. The obvious and very important qualification is, of course, that there were other routes to achieving trade-led growth. They may have taken a bit longer but by the early 1950s, at least for countries other than Germany, they were becoming increasingly feasible as reconstruction continued, exchange rates were adjusted, and the dollar shortage evaporated. Exclusion from the Marshall Plan and the EPU postponed but did not preclude trade liberalization, as

⁷ Higher TFP could come through improvements in allocative and productive efficiency and through the expediting of technology transfer. Studies which find a strong positive impact of trade on income levels, for example, Frankel and Romer (1999), incorporate these effects.

the case of Spain shows.⁸ The difficult issue which remains is what the net benefit of the Marshall Plan was relative to a counterfactual of a feasible alternative liberalization strategy.

De Long and Eichengreen maintained that there was a further long-term effect of the Marshall Plan on long-run growth, namely, that it facilitated the negotiation of a 'social contract' that delivered a high investment rate. They suggested that this was "vital but...difficult to quantify" (1993, p. 192). The idea is that the social contract which involves wage restraint by workers in return for high investment by firms was underpinned by governments through their fiscal and welfare policies and through restrictions on capital mobility and the extent of foreign competition. Marshall aid and the EPU were conducive to setting up these arrangements.

There is evidence that coordinated wage bargaining conducted by industry-level peak organizations, which were conducive to the patience which is required to support such a cooperative equilibrium, was good for investment and growth during the Golden Age and that the effects were quite large (Gilmore, 2009). It should be recognized, however, that participation in the Marshall Plan was neither necessary nor sufficient for this outcome. Thus, Sweden had institutions of this kind (the so-called 'Swedish Model') but the Marshall Plan played no part in their development while wage moderation in Italy was underpinned by Lewis-type 'unlimited' supply of labour rather than corporatism (Crouch, 1993). Moreover, game-theoretic analysis shows that social contracts of this kind are very fragile and were vulnerable to many possible shocks, notwithstanding Marshall aid (Cameron and Wallace, 2002).

All this confirms that it is hard to say what difference the Marshall Plan made although it surely was helpful. In any event, insofar as it was favourable to the adoption of policies conducive to faster economic growth it should be remembered that Europe was fertile ground with high quality human capital and institutions together with a history of successful market economies.

6. Lessons for Today

In recent years there has been a massive literature on the effectiveness of aid in stimulating economic growth. It is now clear that, on average, aid has not resulted in increased growth in developing countries as the meta-analysis by Doucouliagos and Paldam (2011) confirms. There remains some controversy about whether aid has favourable effects in countries which have good governance and good policy environments, as was once firmly believed by World Bank economists following in the footsteps of Burnside and Dollar (2000). This claim does not appear very robust (Easterly, 2003) and the very careful analysis by Rajan and Subramanian (2008) was unable to reject the null hypothesis that aid has no effect on growth in any circumstances.

⁸ Spain undertook a unilateral reform program in 1959 with help from the IMF which greatly reduced barriers to trade and exchange-rate distortions. This also had a significant positive effect on growth of income per person, raising it by almost 1 percentage point per year through the mid-1970s (Prados de la Escosura and Roses, 2010).

⁹ The key to sustaining the equilibrium is that both sides have low discount rates. This can be expected to be less likely if capital becomes more mobile, exchange rates are no longer fixed, technological progress slows down or inflation becomes more volatile. This suggests that the economic environment of the 1950s, rather than the Marshall Plan, played a relatively large role in underpinning 'social contracts'; for further analysis, see Cameron and Wallace (2002).

All agree that the Marshall Plan was good for growth, even though as we have seen there is great scope still to differ on the magnitude of the effect. So, why was the Marshall Plan different? The answer partly does seem to be that there was a favourable institutional and policy environment with reasonably competent governments that could implement reforms and use the funds effectively. In these conditions, it is argued, the Marshall Plan has positive effects which might not be replicated elsewhere (Eichengreen and Uzan, 1992). This suggests that the Burnside-Dollar argument may have more going for it than recent econometric analysis has been able to show. The possibilities seem to be either that there are measurement difficulties in identifying the conditions in which aid can work and/or that the Western European economies in the late 1940s had better institutions and policies than are typically found in developing-country samples.

The Marshall Plan can be thought of a 'structural adjustment program' (SAP), that is to say policy-based lending with conditionality, similar in essence to the concessionary lending of the World Bank after 1980; indeed, De Long and Eichengreen (1993) called it 'History's Most Successful Adjustment Program'. Since there has been considerable scepticism about SAP lending and the use of conditionality, again the question arises what made the Marshall Plan different. The main point is similar, namely, that the evidence is that success or failure of World Bank programs resulted primarily from domestic political economy considerations. On average, success is most likely with recently-elected democratic governments. The implication of the Marshall Plan period, as with the World Bank experience, is that "The key to successful adjustment lending is to find good candidates to support" (Dollar and Svensson, 2000, p. 896). Put another way, the Marshall Plan might be able to 'tip the balance' where countries were, in any case, basically well disposed to the reforms that it advocated (Eichengreen, 2001).

Looking at the Marshall Plan as a structural adjustment program also reveals that it had a common core with the Washington Consensus as originally formulated by Williamson (1990). This comprises support for policies that are conducive to macroeconomic stabilization, are outwardly-orientated, and strengthen the operations of the market economy. It includes trade but not capital-account liberalization as in the so-called 'Bretton-Woods Compromise' (Rodrik, 2002). Since the Washington Consensus as set out by Williamson can be seen as advocating that developing countries should reform their policy mix to make it more similar to OECD orthodoxy this is not so surprising. The greater success of the Marshall Plan than the Washington Consensus quite possibly reflects the institutional environment of Latin America compared with Western Europe rather than the basic mindset of the designers.

All this tends to suggest that those who have called for a new 'Marshall Plan for Africa' either do not mean it literally or have a serious misconception as to what it entailed. It seems unlikely that the average supporter of this kind of proposal really has in mind a structural adjustment program based on Washington-Consensus principles. On the other hand, they probably do believe that the aid inflows were much greater than the historical average of 2-2.5 per cent of GDP and they probably do not realize that the success of the Marshall Plan in stimulating growth is quite unusual compared

-

¹⁰ This is on the basis of taking the Washington Consensus in terms of its economic dimensions rather than its alleged ideological connotations of neo-liberalism or market fundamentalism.

¹¹ If it is accepted that the original Washington-Consensus reforms in Latin America had modest success in raising growth (Birdsall et al., 2010) and the more grandiose claims for the Marshall Plan are discounted, then the results are perhaps not as different as commonly assumed.

with the general record of aid effectiveness. In important respects, Africa in the 2000s is very different from Western Europe in the 1940s and it is perfectly reasonable to be sceptical that a 'Marshall Plan for Africa' would deliver anything remotely similar to the results claimed by De Long and Eichengreen (1993) for the real Marshall Plan.

References

- Abramovitz, M. and David, P. A. (1996), "Convergence and Delayed Catch-Up: Productivity Leadership and the Waning of American Exceptionalism", in R.Landau, T. Taylor and G. Wright (eds.), *The Mosaic of Economic Growth*. Stanford: Stanford University Press, 21-62.
- Alesina, A. and Drazen, A. (1991), "Why are Stabilizations Delayed?", *American Economic Review*, 81, 1170-1188.
- Bacha, E. L. (1990), "A Three-Gap Model of Foreign Transfers and the GDP Growth Rate in Developing Countries", *Journal of Development Economics*, 32, 279-296.
- Badinger, H. (2005), "Growth Effects of Economic Integration: Evidence from the EU Member States", *Review of World Economics*, 141, 50-78.
- Baldwin, R. (2006), "Multilateralising Regionalism: Spaghetti Bowls as Building Blocks on the Path to Global Free Trade", *The World Economy*, 29, 1451-1518.
- Berger, H.and Ritschl, A. (1995), "Germany and the Political economy of the Marshall Plan, 1947-52: a Re-Revisionist View", in B. Eichengreen (ed.), *Europe's Postwar Recovery*. Cambridge: Cambridge University Press, 199-245.
- Birdsall, N., de la Torre, A. and Caicedo, F. V. (2010), "The Washington Consensus: Assessing a Damaged Brand", World Bank Policy Research Working Paper No. 5316.
- Borchardt, K. and Buchheim, C. (1991), "The Marshall Plan and Key Economic Sectors: a Microeconomic Perspective" in C. S. Maier and G. Bischof (eds.), *The Marshall Plan and Germany*. Oxford: Berg, 410-451.
- Bossuat, G. (2008), "The Marshall Plan: History and Legacy", in E. Sorel and P. C. Padoan (eds.), *The Marshall Plan: Lessons Learnt for the 21st Century*. Paris: OECD, 13-28.
- Broadberry, S. N. and Crafts, N. F. R. (1996), "British Economic Policy and Industrial Performance in the Early Post-War Period", *Business History*, 38 (4), 65-91.
- Burnham, P. (1990), The Political Economy of Postwar Reconstruction. Basingstoke: Macmillan.
- Burnside, C. and Dollar, D. (2000), "Aid, Policies and Growth", *American Economic Review*, 90, 847-868.
- Cameron, G. and Wallace, C. (2002), "Macroeconomic Performance in the Bretton Woods Era and After", Oxford Review of Economic Policy, 18, 479-494.
- Casella, A. and Eichengreen, B. (1993), "Halting Inflation in Italy and France after the Second World War", in M. D. Bordo and F. Capie (eds.), *Monetary Regimes in Transition*. Cambridge: Cambridge University Press, 312-345.
- Casella, A. and Eichengreen, B. (1996), "Can Foreign Aid Accelerate Stabilisation?", *Economic Journal*, 106, 605-619.

- Cronin, J. E. (2001), "The Marshall Plan and ColdWar Political Discourse", in M. Schain (ed.), *The Marshall Plan: Fifty Years Later.* Basingstoke: Palgrave, 281-293.
- Crouch, C. (1993), Industrial Relations and European State Traditions. Oxford: Clarendon Press.
- De Long, J. B. and Eichengreen, B. (1993), "The Marshall Plan: History's Most Successful Adjustment Program", in R. Dornbusch, W. Nolling and R. Layard (eds.), *Postwar Economic Reconstruction and Lessons for the East Today*. Cambridge, Mass.: MIT Press, 189-230.
- Dollar, D. and Svensson, J. (2000), "What Explains the Success or Failure of Structural Adjustment Programmes?", *Economic Journal*, 110, 894-917.
- Doucouliagos, H. and Paldam, M. (2011), "The Ineffectiveness of Development Aid on Growth: an Update", *European Journal of Political Economy*, 27, 399-404.
- Easterly, W. (2003), "Can Foreign Aid Buy Growth?", Journal of Economic Perspectives, 17(3), 23-48.
- Eichengreen, B. (1993), *Reconstructing Europe's Trade and Payments*. Manchester: Manchester University Press.
- Eichengreen, B. (2001), "The Market and the Marshall Plan", in M. Schain (ed.), *The Marshall Plan:* Fifty Years After. Basingstoke: Palgrave, 131-145...
- Eichengreen, B. and Uzan, M. (1992), "The Marshall Plan: Economic Effects and Implications for Eastern Europe and the former USSR", *Economic Policy*, 14, 13-75.
- Esposito, C. (1995), "Influencing Aid Recipients: Marshall Plan Lessons for Contemporary Aid Donors", in B. Eichengreen (ed.), *Europe's Postwar Recovery*. Cambridge: Cambridge University Press, 68-90.
- Frankel, J. A. and Romer, D. (1999), "Does Trade Cause Growth?", *American Economic Review*, 89, 379-399.
- Gardner, R. (2001), "The Marshall Plan Fifty Years Later: Three What-Ifs and a When", in M. Schain (ed.), *The Marshall Plan: Fifty Years After*. Basingstoke: Palgrave, 119-129.
- Gilmore, O. (2009), "Corporatism and Growth since 1945: Testing the Eichengreen Hypothesis", unpublished MSc dissertation, University of Warwick.
- Mayer, H. C. (1969), German Recovery and the Marshall Plan, 1948-1952. Bonn: Atlantic Forum.
- Mayne, R. J. (1970), *The Recovery of Europe: from Devastation to Unity*. London: Weidenfeld and Nicolson.
- Milward, A. S. (1984), The Reconstruction of Western Europe, 1945-1951. London: Methuen.
- Nelson, R. R. and Wright, G. (1992), "The Rise and Fall of American Technological Leadership: the Postwar Era in Historical Perspective", *Journal of Economic Literature*, 30, 1931-1964.
- Prados de la Escosura, L. and Roses, J. (2010), "Stabilization and Growth under Dictatorship: the Experience of Franco's Spain", CEPR Discussion Paper No. 7731.

- Rajan, R. G. and Subramanian, A. (2008), "Aid and Growth: What Does the Cross-Country Evidence Really Show?", *Review of Economics and Statistics*, 90, 643-665.
- Rodrik, D. (2002), "Feasible Globalizations", NBER Working Paper No. 9129.
- Silberman, J., Weiss, C. and Dutz, M. (1996), "Marshall Plan Productivity Assistance: a Unique Program of Mass Technology Transfer and a Precedent for the Former Soviet Union", *Technology in Society*, 18, 443-460.
- Wexler, I. (1983), *The Marshall Plan Revisited: the European Recovery Program in Economic Perspective*. Westport, CT.: Greenwood Press.
- Williamson, J. (1990), "What Washington Means by Policy Reform", in J. Williamson (ed.), *Latin American Adjustment: How Much Has Happened?*. Washington, DC.: Institute for International Economics, 5-20.

Table 1. The Distribution of U.S. Aid, 1948-1951 (\$ million and % GDP)

	\$ million	% GDP
United Kingdom	2826.0	1.8
France	2444.8	2.2
Italy	1315.7	2.3
West Germany	1297.3	1.5
Netherlands	877.2	4.0
Austria	560.8	5.7
Belgium & Luxembourg	546.6	2.2
European Payments Union	350.0	N/A
Denmark	257.4	2.2
Norway	236.7	2.5
Sweden	118.5	0.4

Note: other countries not listed here received funds

Sources: Bossuat (2008) and Eichengreen and Uzan (1992)

Table 2. Composition of Aid, 1948-1951 (%)

	UK	France	West	Italy	Others	Total
			Germany			
Food, feed, fertiliser	30	10	43	17	30	26
Petrol, coal	12	23	4	14	10	13
Raw cotton	9	14	19	25	5	11
Other raw materials	25	13	15	6	13	15
Machinery, vehicles	6	17	3	15	14	12
Tobacco	8	1	5	0	3	4
Other commodities	0	1	1	0	1	1
Ocean freight	3	12	8	9	4	6
EPU	1	0	0	0	11	4
Miscellaneous	4	8	3	13	9	8

Notes:

'Miscellaneous' includes shipments made but not yet documented and technical services.

Source: United States, Statistical Abstract (1952)

Table 3. Approvals for Withdrawal of Counterpart Funds, 1948-1952 (\$ million)

	France	West	Italy	United	Total
		Germany		Kingdom	
Power	738.4	182.6	1.0	0.0	1025.5
Transport & Communication	294.2	86.8	348.9	0.0	957.5
Agriculture	234.1	70.7	204.8	0.2	817.6
Manufacturing	249.2	218.7	22.6	0.0	681.7
Mining	340.6	91.8	0.0	0.0	481.8
Other Production	69.1	103.1	246.5	2.0	502.2
Total Production	1925.6	753.7	823.8	2.2	4466.3
Financial Stability	171.4	0.0	0.0	1706.7	2583.3
Housing & Public Buildings	314.4	97.7	172.7	0.0	767.5
Other	291.4	157.7	45.9	53.9	834.2
Total	2702.8	1009.1	1042.4	1762.8	8651.3

Note: total includes other countries not separately listed

Source: Mayer (1969)

Table 4. The Marshall Plan: Effect an Aid Inflow of 2% GDP (percentage points)

	Impact of	Growth effect
Investment/GDP	+ 0.72	+ 0.3
Current Account	-0.25	0
Government Spending	0	0

Note: zero indicates an insignificant coefficient.

Source: derived from Eichengreen and Uzan (1992)