

BLS and the Marshall Plan: the forgotten story

The statistical technical assistance of BLS increased productive efficiency and labor productivity in Western European industry after World War II; technological literature surveys and plan-organized plant visits supplemented instruction in statistical measurement

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The European Recovery Program (Marshall Plan) has been recognized as the most successful foreign-aid program ever undertaken by the United States. The Bureau of Labor Statistics (BLS) role in the accomplishments of the Marshall Plan's Technical Assistance Program has largely been ignored. This article highlights the BLS achievements in the Marshall Plan.

The Marshall Plan was named for then Secretary of State George C. Marshall, who, on June 5, 1947, proposed his solution to war-devastated Europe. The proposal was enacted into law in April 1948 as the European Recovery Program, which created an Economic Cooperation Administration Agency to organize and administer the program. The Marshall Plan recognized that the economies of Western European countries had continued to deteriorate in the immediate post-World War II period and that provisions of massive loans to individual countries had proven to be a failure.¹ Marshall's recovery plan proposal was revolutionary in that it required mutual cooperation among those 16 countries (a 17th, the German Federal Republic, joined in 1949) that responded to the invitation to participate. Recipients of American assistance under the Marshall Plan joined together to produce multilateral solutions to common economic problems. The result was a massive effort to improve the economic condition of 270 million people in Western Europe through increasing their domestic production by

collaborative effort. The participants proposed to do this by strengthening the economic superstructure of Western Europe.

An important component of the Marshall Plan was the statistical technical assistance offered by BLS and directed at increasing productive efficiency and labor productivity in Western European industry. Because of the special circumstances caused by the war crises, BLS efforts widened to include foreign assistance. These efforts "reached almost every plant in every industry, marketing agency, and agricultural entity in Western Europe, introducing them to a technology more than a generation in advance of what they were using."² Increases in industrial efficiency and productivity have been acknowledged as a major contributing factor to Western Europe's postwar economic recovery. Analysis by BLS of dislocations caused by the crises of war gave it good preparation to analyze post-war production problems. Therefore, BLS was not only capable of using its statistical measures to identify problems of inefficiency, but also could instruct Europeans in the most modern American industrial practices. Surveys discussed in technological literature and, more directly, plan-organized plant visits supplemented BLS instruction in statistical measurement.

On June 7, 1940, Congress passed an act authorizing BLS "to make continuing studies of labor productivity" and appropriated funds for the estab-

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lishment of a Productivity and Technological Development Division. The vehicle for the Marshall Plan's Technical Assistance Programs in each Western European country was a high priority national productivity drive, an area in which BLS had developed expertise through congressional mandate. Two basic methods of productivity calculation were advanced by BLS: (1) calculation from existing figures by dividing a time series on output by a time series on labor input; and (2) preparation of productivity reports by direct collection of comparable data for output and labor input in special studies. The latter approach examined the labor requirements per unit of output. The direct collection methods were effectively used during the European Recovery Program, and the funding for this approach was eventually transferred to the Marshall Plan's Agency, the Economic Cooperation Administration.³

In retrospective comments on the productivity studies that BLS performed for the Marshall Plan, BLS Commissioner Ewan Clague remarked, "It would be a gross exaggeration to say that statistics did the trick, but it is fair to say that these studies played a significant role in the spectacular economic recovery of Western Europe."⁴ It may have been a gross exaggeration to say that *statistics* did the trick, but this statement cannot be said of the BLS statisticians and economists who *applied* the statistics.

Key roles

Isador Lubin. To fully understand and appreciate the contribution of BLS staff to the success of the Marshall Plan, it is necessary to initially focus on Isador Lubin, Commissioner of BLS from 1933 until 1946. Sworn in during the depths of the Depression, "Lubin provided the impetus for the Bureau's development into a modern, professionally staffed organization equipped to deal with the many tasks assigned."⁵

Prior to and during the Second World War, Lubin was assigned an office in the White House West Wing and served as special statistical adviser to President Franklin Roosevelt. Thus he expanded not only his own personal influence but also, by extension, that of BLS.

Philosophically, Lubin was among the new breed of economists who postulated an increased role for government in the economic affairs of the Nation. In 1932, as adviser to Senator Robert LaFollette, he pioneered the notion of government responsibility for the national accounts.⁶ He stimulated passage of the Senate resolution, which reads in part, "That the Secretary of Commerce is requested to report ... estimates of the total national income for each of the calendar years 1929, 1930, 1931..."⁷

Most importantly, Lubin recognized the importance of relevant data to the success of New Deal economic programs and worked to improve BLS statistical programs.

Not only must raw data be improved but the Bureau must be enabled more fully to analyze the data it now has, so that evidence may be available as to where the recovery program is having the greatest effect and where it is falling down.⁸

Soon after assuming his position of leadership within BLS, Lubin, along with U.S. Secretary of Labor Frances Perkins, worked to implement President Roosevelt's Executive Order establishing a Central Statistical Board. The Board was soon legislatively established for a 5-year period "to ensure consistency, avoid duplication, and promote economy in the work of government statistical agencies."⁹

Lubin's professional career had begun during the First World War, when he was employed by the Food Administration to analyze governmental labor and price policy in order to increase production of foodstuffs needed by Allied Nations. He later joined the War Industries Board's Price Section where he studied the effect of price shifts on the petroleum and rubber industries' output.

A most important period in his professional development was his work at the Brookings Institute. Founded in 1922 by Robert Brookings, who had served as chairman of the Price Fixing Committee of the War Industries Board, the Institute strived to develop adequate economic information that could be used in governmental policymaking.

Lubin had a unique role at the Institute. He was hired as an instructor in its graduate program, that is, at that time the Institute was a Ph.D. granting institution; he was also awarded his own Ph.D. in 1926 with his book, *Miners Wages and the Cost of Coal*, accepted as fulfilling his dissertation requirements.¹⁰ During his years at the Institute, he developed a national reputation for scholarly work in the field of industrial labor economics.

Early in 1947, after having stepped down as BLS Commissioner, Lubin extolled the excellence of BLS in collecting and analyzing data. In his presidential address to the American Statistical Society in January of that year, Lubin emphasized both the place of statistics in modern economic society and the value to the free world of pertinent data. Even before the announcement of the Marshall Plan, he understood that the challenge facing America was to help Europe recover from the devastation of war.¹¹

He concluded his presidential address with the following:

Our ability to meet this responsibility...will to a large degree be determined by the availability and intelligent use of pertinent data. Never before have facts, figures and intelligent economic judgments been as important as they will be in the years immediately before us. Never before has adequacy of data and statistical integrity been so essential. For never before in history have the stakes been so high.¹²

The Truman Administration. During the early days of the Truman Administration, in the postwar period, there had been some debate as to how best to seek a remedy to the devastation that had engulfed Western Europe. Two schools of thought emerged.¹³ One, known as the “fundamentalist” approach, favored the granting of charity and loans to these countries and the continuing implementation of the efforts of the United Nations Relief and Rehabilitation Administration. A second approach, motivated by enlightened self-interest, was forwarded by American big business and gained influence within the Administration. Known as the “progressive” approach, it reasoned that if America could tutor Europe in the techniques of American productivity, the problem would be permanently solved.¹⁴ The progressives also looked to a tariff-free and integrated European economy as a solution to postwar recovery. It was the belief of U.S. Under Secretary of State William Clayton that Europe’s interwar failure to keep pace with American economic growth had sprung from national rivalries, which had led to tariff restrictions throughout Europe and constraints on international trade. America viewed European markets as too local and advocated their integration and expansion. It was a belief shared by Lubin.¹⁵

A key component of the Marshall Plan, put forward in 1947, called for cooperative meetings of the 16 European nations who would be its beneficiaries. These nations met in Paris in 1947 and formed what came to be known as the Organization for European Economic Cooperation. It was the belief that this Organization would unanimously determine what Europe’s economic needs would be and help give shape and substance to the Marshall Plan. Chief among the issues to be resolved would be the opening of tariff-free European markets to the products of American industry.

As the Organization for European Economic Cooperation considered Europe’s needs, other economic issues were drawn into focus. The report from the 1947 meeting pointed out that “before World War II, the sixteen participating nations were...highly efficient in trade, industry, and agriculture and derived a substantial income from international trade...Trade, industry and agriculture had been twisted out of shape by the forces of war.”¹⁶ (However, BLS surveys of European productivity had revealed significant longer term deficiencies.) It became clear that if a meaningful recovery was to take place, problems associated with increasing industrial production throughout Western Europe would have to receive a high priority.

BLS and productivity measures. During the prewar period and during World War II, BLS increased its capabilities, stature, and expertise. Although not a war agency itself, BLS “cooperated with and serviced practically every war agency that was established...as well as the pertinent defense agencies, such as the Departments of War and Navy, and the

Maritime Commission.”¹⁷

BLS responsibilities were directed at the collection and analysis of data for war agencies concerned with:

Wages, prices, employment, factors affecting production with emphasis on wage stabilization, price control, rationing manpower, labor turnover, accident prevention, maximum hours of labor, extent and causes of strikes, productivity of labor, and labor conditions in the United States and other countries (especially countries that were or might be occupied by Allied forces).¹⁸

As noted previously, the Productivity and Technological Development Division was established within BLS as the result of a congressional act passed in 1940. The function of the division was to provide government and private agencies:

With current information on productivity, technological developments, and factors influencing productivity; and to maintain files and issue reports on technology and other topics relating to utilization of materials and human resources in peace or war.¹⁹

The Division became operational in 1941, and by 1942 had organized itself into an administrative unit with two functioning divisions—the Productivity Statistics Section, which compiled indexes of output per person hour of labor and unit labor cost; and the Productivity Studies Section, which produced reports focusing on labor requirements per unit of output in specific industries and factors influencing the output trends in these industries. By 1944, three additional divisions had been added: the Absenteeism Studies Section, the Technological Relationships Section, and the Current Technological Development Section.

A specific example of BLS importance to war procurement is its report on the air frame industry. Procurement for war materiel had created mass markets for previously specialized industries. One of the BLS most relevant direct productivity studies to address the adaptation to a mass market was that of the airframe industry.²⁰ The industry was, in a sense, new. The demand for airframes was expected to grow in the postwar period due to airplanes being manufactured for civilian use.

The BLS study in the airframe industry found that there had been a phenomenal 200-percent increase in output between Pearl Harbor and 1944. This rise in productivity was made possible by a concentration of effort on standard designs produced in large volumes. Conversion of the industry to mass production was achieved through minute specialization of labor machinery and hand tools. Productivity data relating to individual plants and types of aircraft suggest that unit labor requirements in all plants tended to decline at fairly similar rates with production increasing 27 per-

cent to 35 percent with every doubling of cumulative output. This study also demonstrated that one model does not fit all, that is, in one plant much of the work may be done on a single line, while in another producing identical planes, a series of subassemblies may be built first. Output per person hour may, nevertheless, be similar. The production technique actually adopted may depend on the nature of existing buildings and equipment or on the traditional methods of the company. The flexibility demonstrated in these analyses helped prepare BLS economists for the variety of situations they would encounter abroad.

German reparations. President Franklin Roosevelt appointed Isador Lubin as Minister to the Allied Reparations Commission in 1945 after recognizing Lubin's current service on the War Production Board, his experience with the War Industries Board during World War I, and his intimate knowledge of the mistakes that had led to hyperinflation.²¹

The immediate issue facing Lubin, therefore, was an approach to the handling of German reparations in a way that would not further devastate Germany's industrial productive capacity. He knew that German industry was central to the recovery of Western Europe, but that its importance had to be measured in commodity terms in order to be effectively noninflationary. To tackle the problem, Lubin needed standardized measurements, that is, statistical data on the reparations Germany could afford, the state of German industrial capacity, and the living standards of the German population. For answers, he turned to BLS, of which he was still technically the Commissioner.

He addressed the following query to A. Ford Hinrichs, the BLS Acting Commissioner during Lubin's assignment to the White House.

In calculating Germany's capacity to pay reparations and in scheduling reparations details in kind, the United States Mission to the Reparations Conference will need a great deal of actual information on the input of resources and output of products in all various sectors of the German economy. Accordingly, I should greatly appreciate it if your Employment and Outlook Branch would prepare for us a study of the input and output relations in the German economy similar to studies that have been published for the American economy. It would be desirable to have as quickly as possible an initial report for some recent prewar year, say 1936. It would be desirable to have also a report on the postwar situation that would prevail under alternative plausible assumptions as to war damage, and possible capital removal and destruction in every industry.²²

Lubin was aware that the interindustry data and analysis that he had requested was already in the development process at

BLS. Lubin had authorized BLS to create a small research unit at Harvard University in 1941; the unit, under the direction of Wassili Leontief, constructed the first official input-output table.²³ Leontief's new technique employed a system of double-entry bookkeeping that tabulated the transactions of any one transactor group industry with all other groups. It included the flow of intermediate as well as final output.

The technique had proved useful to the Office of Strategic Services during the war, helping to pinpoint bombing targets of those German industries crucial to the war effort. Its earliest domestic application had been an estimate made in 1944 for the Planning Division of the War Production Board.²⁴

Within months, BLS had prepared a table of 27 industry groupings by applying the 1939 American coefficients to German industry, that is, the proportion of each industry's input to particular outputs. Detailed comment and analysis from German industrial experts accompanied the tables, thus modifying the methodology in light of what was known about German industry. Additionally, tables were prepared on consumer expenditures by German families. These data formed the basis for estimates on the effect on both industrial and household income of German reconversion to peacetime production.

Lubin was named U.S. Representative to the Temporary Subcommittee on the Economic Reconstruction of Devasted Areas, which was created by the Economic and Employment Commission of the United Nations Economic and Social Council, serving from 1946 to 1949. He was one of the group of State Department officials who saw Germany as the key to the integration of Europe. They felt that German unity could not be achieved without the unity of Europe, and that the unity of Europe could best be approached "crabwise" through technical cooperation in economic matters. These ideas were the beginning of the concepts that led to the Marshall Plan proposal.²⁵

James Silberman. Following the European Recovery Program's initiation, President Harry Truman signed in 1948 the act creating the Economic Cooperation Administration to administer the Marshall Plan. Paul G. Hoffman, C.E.O. of Studebaker Motors, was appointed its Administrator. He recognized immediately the backwardness of European production as a major problem that BLS would subsequently identify statistically.

One enterprise Sir Stafford Cripps and I jointly inaugurated was the Anglo-American Council on Productivity. This turned out to be one of the most effective innovations introduced by the Marshall Program. Almost all European countries faced the necessity of a rapid increase in productivity. Their factories were filled with out-dated tools and they were employing old-fashioned methods.²⁶

W. Duane Evans, Chief of the BLS Office of Labor Economics, was appointed adviser to the Anglo-American Council on Productivity. Evans oversaw the work of James Silberman, Chief of Productivity and Technology Development, and his colleague Kenneth Van Auken. Silberman and Van Auken were sent to England and then to France in May 1948, shortly after passage of the European Recovery Program. Their assignment was to investigate industrial production in each country. After visiting 35 factories in 5 or 6 industries in England, Silberman pinpointed inefficiency in production management as the major problem.²⁷

Countering claims by Europeans that the major problem was the war's destruction, Silberman pointed out that in the prewar period, Europe had fallen so far behind the United States in output per person that trade relations had been seriously disrupted. His analysis prompted the rallying cry of "productivity" that swept over Europe. Many European economists eventually accused Americans of believing that they had been the discoverers of productivity.

In actuality, it was the British economist Laszlo Rostas who that same year had noted, "British productivity was substantially below that of the United States, despite her having at one time been the industrial leader of the world."²⁸ Silberman's analysis of English as well as 16 French factories uncovered similar findings.²⁹ Thus, BLS could be viewed as the logical entity to provide ground level measurement standards for productivity. BLS economists in the postwar period were experts in industrial organization both through training and experience. Many BLS economists, including Duane Evans, also held engineering degrees.

By 1948, BLS had had many years of experience in the systematic collection and appraisal of productivity measures covering almost every type of industry in the United States. Each year, more than 3,000 American factories were visited, and BLS representatives conferred with plant managers, engineers, comptrollers, and cost accountants, among others. Detailed company output per person hour and production statistics were collected and factual information obtained regarding the numerous factors affecting operational efficiency. With this experience in the analysis of productivity data, BLS maintained a body of specialized knowledge relating to productivity measurement, which could be found nowhere else in the country. Additionally, the BLS technical abstract service, initiated in 1942, had served throughout the war as the official source for abstract information on factory equipment and methods.

The *Factory Performance Reports* (discussed later) created for the Technical Assistance Program were rooted in this experience.³⁰ A number of personal plant visits led to additional funding in 1945 to develop a sizable project for the preparation of industrial productivity measures by an entirely new approach using cost accounting data.

These reports were detailed case studies of manufacturing operations in individual American plants, designed primarily for use in Europe. In this program, BLS agents collected detailed information which yields person hours per unit required to make a given product, for a plant as a whole, for each department, and for each important operation. The data were supplemented by a description of each plant's equipment, layout, manpower, materials handling methods, and other similar plant characteristics.

Ewan Clague. Ewan Clague, Commissioner of Labor Statistics (1946–65), grasped the importance of the opportunities created by Silberman's productivity comparisons studies in England and France and brought them to the attention of U.S. Secretary of Labor Maurice Tobin. In a memo written to Under Secretary of Labor John Gibson, Clague suggested:

Either you, or the Secretary should make a report to Mr. Hoffman...I believe it is important to see Mr. Hoffman this week—before he attends the hearings on his budget which takes place this week.³¹

Clague's intent was to have BLS "secure parallel data collection programs which will provide the basis for reasonably precise and accurate international comparisons." The architects of the Marshall Plan had assumed that financial aid, in the form of new investment, would quickly restore European productivity levels to U.S. levels, but BLS "techno-economic studies" had demonstrated otherwise.³² Observations at 200 factories in 6 countries revealed dramatic differences between European and American productivity. Despite the fact that Europe was at least as advanced as the United States in terms of scientific and technical theory, BLS studies demonstrated that Europe had fallen behind America in applying this knowledge to industrial production.

Western European managers and engineers were not aware of the productivity gap between them and their U.S. counterparts, and did not realize the need for substantial technology transfer until the Bureau of Labor Statistics' studies.³³

At the time (1949), Clague noted this distinction in remarks presented to a conference on productivity.

It may not be generally realized that, in large measure, the high living standard in the United States is the direct result of higher productivity. Productivity levels in the United States are more than twice those in Great Britain, and recent figures indicate that our productivity is more than three times that of Belgium, France and other industrial countries of Europe.³⁴

James Silberman, in a 1992 summary of the accomplishments of the Marshall Plan, stated it in a different way:

The technical assistance program of the Marshall Plan was the largest and most comprehensive program of assistance to civilian industry ever undertaken. In a few years, and at low cost, those programs reached almost every plant in every industry, marketing agency, and agricultural entity in the war-devastated countries of Western Europe, introducing them to a technology more than a generation in advance of what they were doing. These programs accelerated the postwar economic recovery, raising the annual rate of increase in labor productivity of Western European industry from its historic level of about 1 percent per year to 4 percent or more. Within individual enterprises, productivity commonly increased by 25 to 50 percent within a year with little or no investment.³⁵

Formalizing the efforts

The BLS studies indicating that net investment, by itself, was not the remedy placed an emphasis on increasing productivity through greater efficiency. Greater attention to operational efficiency had the advantage of being cost effective because it did not put pressure on the dollar scarcity which prevailed in these debtor countries of Western Europe. During the Marshall Plan period, \$19.4 billion were allocated for capital costs. The cost of the Technical Assistance Program was \$300 million; only one-third was contributed by the United States.

A means of realizing the potential in the Technical Assistance Program was noted by Sol Ozer, labor adviser to the Economic Cooperation Administration, who wrote the following memo to Ewan Clague:

I was impressed by (the) thesis, namely that a few American labor production experts brought here to Europe—to France in particular—might make a few changes but would not correct the basic situation. However, if a few thousand of the brighter management and production people of France had the opportunity to see the operations in the United States in factories similar to theirs here, a revolution in technique might begin after they returned. If enough Frenchmen were involved they would stimulate each other to do in France what production planners and technical engineers have done in the States.³⁶

The idea behind the suggestion of Silberman to bring a few thousand management and productivity people to the United States was that European business practices were more traditional and less adaptable than were those of their American counterparts. The suggestion was an attempt to

introduce Europeans to the elusive quality of American “know how,” a quality demonstrated by America’s response to the war effort. The results achieved are shown in the following report:

The technical assistance program has emerged as one of the Marshall Plan’s most successful activities in France. To date, about 60 teams of 700 specialists from nearly every French industry and profession have come to the United States to study productivity in specialized fields. Inside France, it has...resulted in the first breakdown of the traditional iron-clad trade secretcies.³⁷ Team members now visit each others plants—usually for the first time in their lives—before going to the United States in order to have a rounded picture of their own industries.³⁸

Secretary of Labor Maurice Tobin foresaw that bringing people together from the same occupational culture could make a positive effect on European recovery and, thus, had moved to formalize these relationships. On August 20, 1948, he sent a memo to Paul Hoffman and several leaders of organized labor, who had been involved in the recovery program, with the four recommendations:

1. Department productivity personnel should participate in the technical staff for American-European Councils of productivity;
2. productivity targets, based on American performance standards, should be included as part of programs to increase productivity;
3. there should be a general exchange of information and the publication of information; and
4. the technical abstract service should be used as the central clearing point for information.

In forwarding these recommendations, Tobin was aware of the overall capabilities of BLS. Early in 1949, Paul Hoffman discussed these proposals with a delegation from the Department of Labor that included Secretary of Labor Tobin and BLS Commissioner Clague. BLS accepted responsibility for making statistical surveys of technology and labor productivity in American industry in order to provide guidelines for stimulating the productivity of Western European industry. European countries were encouraged to establish national productivity centers, which would both improve the productivity of their own workforces and make parallel studies for comparison with those made in the United States.

These efforts were summed up in a report released by the International Cooperation Administration.

While no complete accounting for TA (technical assistance) activities in Europe from 1948–1957 is available, it

may be readily estimated that about \$60 million in direct U.S. aid was expended on TA projects over this period. These expenditures financed TA study trips of Europeans to the U.S., the use of American specialists in Europe and the provision of technical information and services. Reliable data indicate that through March 1957, nearly 19,000 European technicians, specialists and leaders of industry, labor, and government had visited the United States. Nearly 15,000 U.S. specialists had served abroad in the direct implementation of the national programs. Extensive technical services were provided including over 35,000 technical and scientific books, periodicals, and other literature; over 2,500 replies by mail to technical inquires, over 3,000 digests of articles from U.S. technical and trade magazines; some 48 Bureau of Labor Statistics' factory performance reports.³⁹

Factory Performance Reports/productivity

As noted previously, a unique contribution of BLS to the Technical Assistance Program was the preparation and issuance of *Factory Performance Reports*. These studies made use of a new technique in direct productivity analysis, that is, the utilization of the vast sum of information contained in industry cost accounting records. Never before had accounting data been used in the systematic study of productivity. Therefore, it was necessary to develop methodologies for adapting these accounting records to an application entirely different from that for which they were designed.

Factory Performance Reports required direct observation in the field, and these field-based reports of actual productivity contributed substantially to European recovery. The reports were designed to present operational profiles of U.S. plants. Businessmen in other countries could then use these profiles to evaluate their own operations, isolate their areas of good or poor performance, and improve those areas that needed improvement. The case studies covered factories of similar size and products generally comparable with those in foreign companies.

Extensive field-based research was conducted in order to adapt these records to the case study methodology. At each plant, BLS representatives discussed and analyzed cost accounting data to derive unit employee hours for each selected product. Also included in these examinations were classifications of labor accounts, scope of operations, parts and equipment purchased, the ratio of various indirect labor accounts to total direct employee hours per person, extent and type of hours paid for but not worked, and the basis for reporting capacity data. Use of these studies permitted the evaluation of similar plants in other countries and presented a standard for gauging

“good” or “poor” performance. The data were supplemented by an outline of each plant’s equipment, layout, manpower, materials handling methods, production and work scheduling methods, and operating policies.

BLS also organized two types of teams to close the productivity gap between the United States and Western Europe. In one, experts were sent to Europe to work closely with individual country productivity centers to provide information on turning statistical data into useful knowledge. The other program brought a total of 24,000 Europeans to the United States to see firsthand new approaches to organizing workplaces, new concepts of business and marketing organization, new products, new design and engineering functions, and new equipment.

In this effort, teams of between 12 and 17 Europeans, organized by industry and representing a cross-section of functions, visited their American counterparts. Each team prepared a comprehensive technical report that documented their findings. On their return, these reports were disseminated to plants within industries.

The analyses provided by BLS *Factory Performance Reports* and the “hands-on” approach of having European productivity teams visit their American counterparts challenged the institutional barriers to modernization in European industries. The effectiveness of these programs was based on the analytical and practical application of BLS data. Their use as tools in identifying organizational production deficiencies in European industry presented a rational basis for measuring success.

BLS CONTRIBUTED SIGNIFICANTLY to the overall success of the Marshall Plan’s Technical Assistance Program. As the Marshall Plan was coming to a close in 1953, Arynness Joy Wickens, who had served as acting BLS Commissioner, made the following point in a presidential address to the American Statistical Association:

In the past few years, statistics in the United States have come to be used as determinants of private and public actions affecting millions...Statistics have come to be one of the great descriptive and analytical tools of modern industrial society, comparable to the other new tools of science.⁴⁰

It is to the BLS credit that it was able to apply the new “tool of science” to help in the recovery of the postwar world. Still, however useful many of these statistical programs proved to be, the most remarkable achievement of BLS was in the field of productivity. Its productivity achievement extended beyond just showing that productivity depended on many factors and also demonstrated the extent to which each factor influenced the entire result. □

Notes

¹ See <http://www.marshallfoundation.org> (visited May 24, 2004). Summary of the Marshall Plan: "The idea of massive U.S. loans to individual countries had already been tried (nearly \$20 billion – mainly long-term, low interest loans –since the war's end) and had failed to make any headway against Europe's social and economic problems."

² James M. Silberman and Charles Weiss, Jr., *Restructuring for Productivity: The Technical Assistance Program of the Marshall Plan as a Precedent for the Former Soviet Union* (Washington, Global Technology Management, Inc., Under contract for the World Bank, 1992) pp. vii–viii.

³ Joseph W. Duncan and William Shelton, *Revolution in United States Government Statistics, 1926–1976* (Washington, U.S. Department of Commerce, 1978), p. 97.

⁴ Ewan Clague, *The Bureau of Labor Statistics* (New York, Praeger Publishers, Inc., 1968), p. 158.

⁵ Joseph P. Goldberg and William T. Moye, *The First Hundred Years of the Bureau of Labor Statistics*, Bulletin 2235 (U.S. Bureau of Labor Statistics, September 1985), p. 140.

⁶ Duncan and Shelton, *Revolution in United States Government Statistics*, p. 77.

⁷ Carol S. Carson, "The History of the United States National Income and Product Accounts: The Development of an Analytical Tool," *Review of Income and Wealth* 1975, Vol. 21, Issue 2, p. 155f. "In February, 1932, two groups interested in pursuing information on national income were brought into contact...officials of the Commerce Department...and...what was known as the LaFollette group."

⁸ *Annual Report, 1933* (U.S. Department of Labor), p. 41.

⁹ Goldberg and Moye, *First Hundred Years*, p. 145.

¹⁰ Lewis Lansky, *Isador Lubin* (Ph.D. diss. typescript, Case Western Reserve University, Cleveland, Ohio), p. 16.

¹¹ Richard D. McKinzie, Oral History interview with Dr. Isador Lubin (Harry S. Truman Library, Independence, Missouri, January 1976), p. 31.

McKinzie: "At the end of the war there was a view about the postwar world which economists had been nurturing during the war, particularly those who were close to Will Clayton. It was that there would be a new order of things and it would be characterized by more integration of economiesBut, at least, the economic integration would create a mutual dependence and, therefore, stability. Did you share that view?" Lubin: "Very definitely, yes."

¹² Isador Lubin, "Social and Economic Adjustments in a Democratic World," *Journal of the American Statistical Association*, March 1947, p. 19.

¹³ Ernie Englander and Allen Kaufman, "The End of Managerial Ideology: From Corporate Social Responsibility to Corporate Social Indifference," *Enterprise & Society*, September 2004, pp. 407–08. Formed in 1942, the Committee for Economic Development gave corporate management their first public voice. [Paul Hoffman was the president of the organization, which promoted the idea of the Marshall Plan in order to create a receptive public opinion.] It gained prominence when it helped to coordinate the transition from war to peace by establishing regional offices that reported data on local business plans.

¹⁴ David McLellan and Charles E. Woodhouse, "The Business Elite and Foreign Policy," *The Western Political Quarterly*, 1960, p. 172.

¹⁵ McKinzie, Oral History, p. 23.

¹⁶ "Development of the European Recovery Program," *Monthly*

Labor Review, January 1948, p. 40.

¹⁷ "Activities of the Bureau of Labor Statistics in World War II," *Historical Reports of War Administration*, No. 1, June 7, 1947, p. 9.

¹⁸ *Ibid.*, p. 10.

¹⁹ *Ibid.*, p. 59.

²⁰ Kenneth A. Middleton, "Wartime Productivity Changes in the Airframe Industry," *Monthly Labor Review*, August 1945, pp. 215–25.

²¹ McKinzie, Oral History, p. 29. McKinzie: "If Mr. Pauley didn't have any appreciation of the problems which reparations caused after World War I, did the Department of State? "Lubin: "Definitely, yes. The people in the Economic Section were very conscious of what had happened in Germany as a result of inflation and as a result of reparations. [President Roosevelt] was very conscious of what had happened to Germany as the result of reparations. He made it perfectly clear that we would not talk dollars. We would talk physical things that they needed to rebuild their country and he emphasized that to me."

²² Isador Lubin, Letter to A. Ford Hinrichs, May 19, 1946 (U.S. National Archives and Records Administration (NARA), Roosevelt Library, Lubin Papers).

²³ Martin C. Kohli, "The Leontief-BLS partnership: a new framework for measurement," *Monthly Labor Review*, June 2001, p. 31.

²⁴ W. Duane Evans and Marvin Hoffenberg, "The Interindustry Relations Study for 1947," *Review of Economics and Statistics*, May 1952, pp. 97–142.

²⁵ Charles P. Kindleberger, "Charles P. Kindleberger on the Economic Background (of the Marshall Plan)" (U.S. National Archives and Records Administration, State Department records, Record Group 59 [Central Decimal File 840.50 Recovery/7–2248]).

²⁶ Oral History interview with Paul G. Hoffman (Truman Museum and Library, October 25, 1964) on the Internet at www.trumanlibrary.org/oralhist/hoffmanp.htm (visited Dec. 26, 2004).

²⁷ Memo from W. Duane Evans to Ewan Clague, SG405, June 28, 1948 (U.S. National Archives and Records Administration).

²⁸ Ewan Clague: "A British economist, L. Rostas, estimates that output per worker in manufacturing in the United States was over two times that in the United Kingdom for the years 1935–1939. According to French sources, recent statistics indicate that output of steel per year is four times that of France, and productivity in agriculture is three times the French level. In Belgium, another highly industrialized country, average production per hour according to recent estimates, is less than one-third the levels for corresponding industries in the United States...In order to explain these productivity differentials, it is necessary to examine the techniques of production. Basic scientific research and technology are at least as far advanced in Europe as in the United States, but the application of technology to industrial methods has not progressed so far. In short, America has more 'know how.'" See Ewan Clague, "Productivity, Employment and Living Standards," "Conference on productivity, held in Milwaukee, Wisconsin), p.7.

²⁹ James Silberman and Kenneth Van Auken, "Factory Visits, May 29 to July 11, 1948, England and France," W. Duane Evans papers (Typescript report, W. Duane Evans Collection, Cornell University archives), transmitted by Labor Advisor Clinton Golden: "I am very much impressed by [the work of Jim Silberman and Kenneth Van Auken] and the content of the preliminary report, which in this case, was first submitted to David Bruce, Chief of the ECA Mission in France," in a Letter from Labor Advisor Clinton Golden to Under Secretary of Labor John Gibson, Economic Cooperation Administration, RB174 (U.S. National Archives and Records Administration).

³⁰ Foreign Operations Administration Technical Aids Branch in cooperation with BLS *Factory Performance Reports*. Undated introduction: *Factory Performance Reports* are designed to present operational profiles of U.S. plants against which businessmen in other countries can evaluate their own operations, isolate their areas of good or poor performance, and then improve those areas which may need improvement. The reports are not engineering studies, nor do they tell a novice in the industry how to establish and operate a plant. They are designed for practical use by foreign manufacturers who are already familiar with production techniques and practices in the industry.

³¹ Memo from Ewan Clague to John W. Gibson, December 27, 1948 (U.S. National Archives and Records Administration).

³² *Ibid.*

³³ *Ibid.*

³⁴ Clague, *op.cit.*

³⁵ James M. Silberman and Charles Weiss, Jr., *Restructuring for*

Productivity, p. vii.

³⁶ Memo from Sol Ozer, Labor Adviser to the ECA, to Ewan Clague, December 23, 1948 (U.S. National Archives and Records Administration).

³⁷ James Silberman, "Survey of French Productivity" (Typescript report, W. Duane Evans Collection, Cornell University archives) p. 11, "The unwillingness of plant managements to visit other French plants, or be visited themselves (to guard their secrets of production), is wholly different and less effective than the free exchange of ideas found in American plants."

³⁸ *Ibid.*, 3 years into the Marshall Plan.

³⁹ *European Productivity and Technical Assistance Programs, a summing up (1948–1958)* (Paris, International Cooperation Administration, Technical Cooperation Division, May 15, 1958), p. 7.

⁴⁰ Arynnes Joy Wickens, "Statistics and the Public Interest" *Journal of the American Statistical Association*, March 1953, pp. 1–14.