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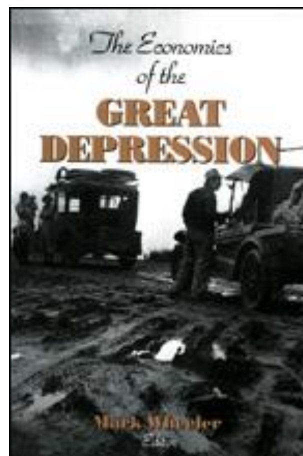

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2 Uneven Impacts of the Great Depression

Industries, Regions, and Nations

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The Great Depression of the 1930s brought hardship and suffering to many in the United States and in other countries around the world. The impact of the Great Depression was highly uneven, however. Although one-quarter of the U.S. labor force was unemployed at the low point in 1933, those who kept their jobs saw their purchasing power increase as prices fell. Statistical averages of economic performance conceal a wide variety of experiences for individuals and firms, as well as for larger aggregates.[1]

In this essay, I examine uneven impacts of the Depression on industries, regions, and nations. In discussing industries and regions, I compare the United States and the United Kingdom; in discussing nations, I examine less-developed economies in Latin America, Africa, and Asia. Even during the depths of the Depression, some industries prospered. Regions differed both in the severity of the downturn and in the speed of recovery from it. Government policies created in response to the Depression treated geographic areas differently. New concepts of regions and experiences of regional planning also emerged.

In the United Kingdom, the Depression worsened the difficulties of problem regions, which were older industrial areas, and policy did little to help. In the United States, by contrast, government policies had positive (although largely unintended) long-run effects on its major problem region, the low-income, less-developed South. As Wright (1986) argued, these policies eventually linked the previously isolated southern labor market with the national labor market and stimulated development. In the international sphere, some less-developed nations also benefited from the Depression, at least in the sense of more rapid industrialization in the short to medium run. But for these countries, it

was delinking from a larger economy—the international economy—rather than linking, that helped. Import substitution increased, and as countries became delinked, some pursued more independent monetary and fiscal policies.

My aim here is not to reinterpret the Depression as an unambiguously positive historical event. If some industries or regions were doing better than the national average, that also means some were doing even worse. What I want to emphasize is that any major economic change, or policy, affects economic actors and areas differentially. Rarely, if ever, does it make sense simply to say that such a change or policy is good or bad for "the economy" as a whole. Wall Street often reacts negatively to "good" news of lower unemployment rates; such rates cause some to fear inflation. Similarly, the question of whether or not immigration is "good" for the United States does not have a simple answer. Even an episode as apparently straightforward as the Great Depression proves to have a complicated mix of effects.

INDUSTRIES

In both the United Kingdom and the United States, some sectors and industries were much harder hit than others. The United Kingdom saw industrial production as a whole, as well as the transport and communication sector, decline during 1929–1932, but output rose slightly in services and distribution. Shipbuilding fell by 90 percent, mechanical engineering by 36 percent, and ferrous and nonferrous metals by approximately 28 percent, a much steeper decline than the 11 percent drop for all industry. Above-average declines also occurred in the drink, vehicles, mining, timber, precision instruments, building, and metal goods industries. Many of the industries with large declines were capital goods industries and/or were export-sensitive industries. Textiles, although a major export industry, saw relatively little change during 1929–1932, as did clothing, chemicals, and tobacco. Output actually increased in paper and printing, leather, food, and gas, water, and electricity, at rates of 5 to 11 percent (Aldcroft 1970, pp. 42, 48–49). Employment and investment also rose in some industries even during the worst years of the Depression (Beck 1951; Feinstein 1965).

From the perspective of business firms, profitability is a key indicator of health and is essential for long-run survival. As with output, employment, and investment, profitability during the Depression varied widely among industries. Twenty-one of 78 trade groups had profits in 1932 that were equal to or greater than their profits in 1927, and in 4, profits fell less than 10 percent. The largest percentage increases were in telephones, grain milling, and electricity; profits in public amusements rose 24 percent. At the other extreme, in six trade groups profits fell more than 60 percent. For half of the trade groups, the drop was 20–50 percent (Worswick and Tipping 1967, pp. 64–68). Estimates of annual profit rates for major manufacturing industry groups also showed wide variation during 1929–1932 (Hart 1968, p. 274).

The Depression hit the United Kingdom against a backdrop of longer-run decline and expansion of different industries. The major declining industries were the 19th century export staples of coal, iron and steel, shipbuilding, and textiles, which were regionally concentrated in the North and West. These industries already were in difficulty in the 1920s as international competition intensified, but many industry leaders were convinced that their earlier good fortunes would return. The Depression finally quashed some of those hopes. By 1932, the Lancashire Industrial Development Council magnanimously announced that

> now that some other countries have taken a part of the responsibility for supplying the world with cotton goods, Lancashire is able to turn with a freer mind to the development of those other industries which the mighty importance of the cotton trade tended for a long time to overshadow. (Lancashire Industrial Development Council 1932, p. 50)

Expansion was occurring in the inter-war years in a range of "other industries": new manufacturing industries such as motor vehicles, electrical products, and rayon; diverse types of light manufacturing; and services. The percentage of English households owning a car rose steadily from 1924–1938, though at a less rapid pace during 1929–1933 (Bowden and Turner 1993, p. 245). Unfortunately, as we shall see below, the older industrial regions most in need of these expanding industries in the 1930s were not very successful in attracting them. The Lancashire textile region did better than the heavy industrial

regions in Wales, Scotland, and northern England, partly because Lancashire contained the second largest center of population and purchasing power in England (Manchester/Liverpool).

Electricity is a good example of an industry that could thrive in the midst of depression. Output in the electrical engineering industry (including supply) dipped slightly in 1931, but mainly due to exports; growth in the home market was rapid (Catterall 1979, p. 253). Investment in electricity supply peaked in 1932, with expansion due to strong industrial and consumer demand and to technical economies leading to lower charges. Heavy capital outlays were needed in part because of deficiencies in electricity supply resulting from earlier delays and difficulties (Feinstein 1965, p. 46). Consumer demand for new electrical appliances such as cookers, irons, vacuum cleaners, wash-boilers, washing machines, refrigerators, and radios remained strong in the 1930s (Aldcroft 1970, p. 195).

It was somewhat paradoxical that the growth of demand and output for electrical consumer durables should be so strong when unemployment was so high. In noting the paradox, Catterall (1979, p. 272) described the inter-war period as "years in which Britain began to enter Rostow's 'Age of High Mass Consumption' in the midst of an age of mass unemployment." George Orwell had observed in 1937 that the consumption of cheap luxuries, particularly movies and mass-produced clothes, increased during depression.

> You may have three halfpence in your pocket and not a prospect in the world, and only the corner of a leaky bedroom to go home to; but in your new clothes you can stand on the street corner, indulging in a private daydream of yourself as Clark Gable or Greta Garbo, which compensates you for a great deal. (Orwell 1958, p. 88)

Gambling, "the cheapest of all luxuries," rose almost to the status of a major industry. Many were underfed, but everyone in England had access to a radio. Orwell concluded (p. 90) that "it is quite likely that fish and chips, art-silk stockings, tinned salmon, cut-price chocolate (five two-ounce bars for sixpence), the movies, the radio, strong tea and the Football Pools have between them averted revolution."

Recovery came more quickly in the United Kingdom than in the United States, where the Depression dragged on through the 1930s.

Bernstein (1987) sought to explain the delayed recovery in the United States by examining varying experiences of different industries. Focusing on manufacturing, he argued that delay was due to a combination of financial disruption and long-run trends in the structure of consumption and production. Dynamic industries could be found even in the worst years of the Depression, but taken together they were not yet large enough in the national economy to pull it into recovery. Szostak (1995) made a similar argument, claiming that there were too few growing industries. He emphasized the problem of market saturation and the lack of new product technology in the late 1920s and early 1930s. Szostak's study included nonmanufacturing; government was the only major sector to show an employment increase even during 1929–1933.[2]

While most manufacturing industries lost employment, the beverages sector did show an increase in employment during 1929–1933, as did rayon, buttons, corsets, and several industries in the foods sector (Fabricant 1942, pp. 264–332). Physical output rose in beet sugar, butter, cane sugar, chocolate, liquors (distilled, malt, and vinous), malt, corsets, knit outerwear, rayon, collapsible tubes, and mechanical refrigerators. By 1935 it also had risen in radios, washing and ironing machines, and a variety of other industries (Fabricant 1940, pp. 382–602).

Throughout the 1930s, the food, leather, petroleum, and tobacco products sectors were relatively "depression-proof." Innovations in canning had become operational, and during the Depression households favored canned foods for their low prices and high nutritional value. The cigarette industry soared after a slight drop in 1932 (Bernstein 1987, pp. 53, 61–63, 70–72). Other individual industries also showed increases in output and employment (Fabricant 1940, pp. 382–602; Fabricant 1942, pp. 123–128, 264–332). Consumer credit facilitated purchases of consumer durables, as it did in the United Kingdom. Many households, however, cut back on purchases of consumer durables during the Depression (Olney 1991; Bowden and Turner 1993; Bowden and Offer 1994).

The aggregate net income of U.S. corporations declined drastically from 1929 to 1932 but, as in the United Kingdom, not all businesses suffered losses. In 1932, very large U.S. corporations still were making profits. Among seven broad industry groups, all were profitable in

1929 and 1930 except trade. But by 1931 and 1932, only public utilities and transportation had positive profits; that group was joined by manufacturing in 1933. Within manufacturing, profit rates varied widely. Even in 1932, three manufacturing subgroups were profitable: tobacco products (13.1 percent), chemicals and allied products (0.4 percent), and foods and beverages (0.3 percent). At the other extreme were forest products (–10.3 percent), textiles and products (–8.0 percent), and leather and products (–6.6 percent) (Fabricant 1935, pp. 3–4; Crum 1939, pp. 17, 45).

In both the United Kingdom and the United States, then, there were industries that were expanding and profitable during the worst years of the Depression, and there were even more such industries later in the 1930s. Changes in long-run patterns of consumption favored some of the same industries in both countries. There also were important differences. Building, for example, played a much more positive role in the United Kingdom than in the United States, where employment by construction contractors fell by 50 percent between 1928 and 1933 (Jaeger 1972, p. 139). Traditional light manufacturing industries that were adopting mass production methods somewhat later than in the United States were also expanding rapidly in the United Kingdom during the 1930s.

REGIONS

In the case of the United Kingdom, a focus on industries in the 1930s leads naturally into a discussion of regions. Many regions were highly specialized, and the fortunes of their leading industries were important determinants of their economic performance and welfare (Hatton 1986). This link was less close in the United States (and also less close in the United Kingdom later in the 20th century). In this section I examine short- and long-run impacts of the Depression on regions in both countries.

While both countries had problem regions, these were of different types. Problem regions in the United Kingdom—older industrial regions—were not helped significantly by the Depression or by economic policies of the 1930s. In the United States, the Depression ulti-

mately did improve the economic position of its main problem region—the low-income South. However, this was an unintended long-run result of New Deal policies; in the short run, such policies favored the richer regions.

The 19th century export industries in the United Kingdom had concentrated in northern and western regions. Coal, iron and steel products, and shipbuilding were found in South Wales, Mid-Scotland, Northumberland and Durham, and West Cumberland. The cotton textile industry clustered in Lancashire. These regions already were declining in the 1920s, and the Depression hit them especially hard. The unemployment rate in Jarrow, a northeastern shipbuilding town, was over 80 percent in 1932–1933 (Wilkinson 1939, p. 192). As we saw above, there were expanding industries and services in the United Kingdom in the 1930s, but they did not locate primarily in these older industrial regions. Instead, they concentrated in the South and Midlands, which were relatively prosperous throughout the inter-war years.

One might expect that unemployment would lower wages and attract new industry to depressed regions. Recent research suggests that local wages do influence business location (Bartik 1991, pp. 49–52). However, depressed industrial regions might be unattractive to business for other reasons even if wages did fall. Historically, resources (especially labor) often were not reallocated from old to new uses within a region. Instead, old resources remained unused, and growing industries incorporated new resources, often in new locations. In the United Kingdom, employers expressed a clear preference in the 1930s for labor without previous employment experience (Great Britain, Royal Commission on the Geographical Distribution of the Industrial Population 1937–39, p. 504).

Many of the expanding industries hired large numbers of young persons and women, rather than the older men being displaced from coal, iron and steel, and shipbuilding. Expanding industries also sought proximity to the market and concentrated in the South (near London). Young persons and women were readily available there (Heim 1984b). Norman Tebbit, Minister of Employment in the Thatcher government, observed in 1981 (a time of high unemployment) that during the 1930s, his father "got on his bike and looked for work" (Tebbit 1988, p. 187). But even if they had headed for the South in the 1930s, many of the unemployed would not have been hired.

During a time of general depression, there was little need to look to the older industrial areas for labor. Moreover, even if macroeconomic policy had succeeded in lowering unemployment and tightening labor markets in prosperous areas in the 1930s, organizational structures of firms in the South and Midlands were not yet sufficiently developed to manage distant branch plants in northern and western regions (Heim 1983). (By the 1960s this pattern had emerged, and in the 1980s Japanese firms investing in the United Kingdom located branch plants in northern and western regions, as well as in the new towns. Despite the availability of unemployed workers in the older regions, new labor often was hired instead. Workers without a history of trade union activism were preferred, and Japanese firms insisted upon a nonadversarial role for unions when they did accept them [Oliver and Wilkinson 1992, pp. 46, 186, 226, 247, 278–280].)[3]

The United Kingdom did not succeed in devising effective regional policy during the 1930s. After short-lived efforts to transfer workers out of depressed regions, programs were established to finance new industries there. The Bank of England, however, disliked these initiatives and sought to keep them just large enough to forestall more far-reaching government intervention on behalf of the depressed regions (Heim 1984a). Compared with governments in many other countries, however, inter-war U.K. governments were not highly interventionist on a regional or national scale. While limited public works spending was undertaken, and there were some efforts to stimulate rationalization and elimination of excess capacity in older industries, there was no equivalent to the U.S. New Deal with its wide range of spending and regulatory policies (Garside 1990).

U.K. macroeconomic policies since World War I had been oriented more toward defending the pound, protecting the gold standard, and limiting Treasury spending, rather than toward promoting domestic industry (Lewis 1949; Eichengreen 1992). What finally helped the declining regions in the late 1930s was rearmament and war, which increased employment in older industries such as iron and steel, coal, and shipbuilding (Thomas 1983). However, longer-run effects of the war and postwar military spending favored other regions. Research and development facilities in the research-intensive industries stimulated by the war, such as electronics, chemicals, and aircraft, tended to locate in the South near London (Heim 1987).

As a consequence of the Depression itself and the lack of effective policy response, unemployment differentials among regions in the United Kingdom widened. Taking the two extremes, in 1929 the unemployment rate in Wales was 18.2 percent, and in London and the South East, 4.5 percent. The difference between these two regions peaked in 1933, when unemployment was 34.1 percent in Wales and 10.7 percent in London and the South East. For Inner Regions (the South and Midlands) versus Outer Regions (Northern England, Wales, Scotland, and Northern Ireland), the difference in unemployment rates widened from 1929–1931, dropped slightly in 1932 and was fairly steady to 1935, then dropped further to 1937. It widened again with the 1938 recession, before dropping in the war boom to about the same gap as in 1929 (Beck 1951, Table 18 and p. 36; see also Garside 1990, p. 10).[4]

Recession in the 1970s and 1980s similarly increased unemployment differences among regions in the United Kingdom (Martin 1989, pp. 31–34; Champion and Townsend 1990, pp. 131–132). Gaps also widened in per capita gross domestic product (GDP) between 1975 and 1986. The South East, East Anglia, and the South West all saw their per capita GDP rise relative to the U.K. average, whereas that ratio fell for northern and western regions, and also for the West Midlands automobile region, which had become a declining rather than a prosperous region (Martin 1989, p. 40). This experience was shared by European regions generally: disparities in GDP per head widened slightly during the slow growth years in the first half of the 1980s, before narrowing in the second half of the decade and leveling off at the beginning of the 1990s (European Commission 1994, p. 37).

Did depression and recession lead to divergence (greater inequality) of per capita incomes in the United States? At the state level, the evidence is somewhat mixed. Divergence among states, measured by the standard deviation of the log of per capita income for states, or by the coefficient of variation of state per capita income, increased both during prosperous years of the 1920s and in the first years of the Depression (through 1932). The remainder of the 1930s saw convergence, which continued until 1978. Divergence occurred again from 1978–1988, after which convergence resumed (Barro and Sala-i-Martin 1991; Wheelock and Coughlin 1993; Sherwood-Call 1996). (Note that the 1920s and 1980s, when geographic disparities widened, also

were times of increases in other kinds of inequality, such as income distribution.)

Unlike what happened in the United Kingdom, in the United States in the 1930s the main problem region improved its position relative to other parts of the country. This region was the low-income, less-industrialized South, a very different type of region from the older industrial regions of the United Kingdom. Although Franklin D. Roosevelt still could refer to the South in 1938 as the nation's number one economic problem (Schulman 1991, p. 3), the Southeast's share of total personal income rose from 11.15 percent in 1930 to 13.23 percent in 1940, and the Southwest's share rose from 4.75 to 5.21 percent (Perloff et al. 1960, p. 274).[5] Installed horsepower increased most rapidly in the Southeast and Southwest during 1929–1939, in the latter case at more than twice the national rate (Wardwell 1951, p. 91). Throughout the nation nominal per capita incomes fell in this decade, but the total percentage change during 1929–1939 was lower in the Southeast than in any other region and was also low in the Southwest (U.S. Department of Commerce 1995, p. 11). The South's relative improvement was even stronger in the 1940s.

The sharpest drops in real per capita income during 1929–1933 were in the Northwest, Central, and Far West regions; the smallest drop was in New England. The Southeast and Southwest regions, where income fell by 24 and 29 percent, did well compared with the U.S. average of 28 percent. The 10 states with the smallest income declines (12 to 23 percent) were North Carolina, South Carolina, New Hampshire, Maine, Virginia, Rhode Island, Georgia, Maryland, Massachusetts, and Connecticut; the District of Columbia saw an 18 percent drop (Hurwitz and Stallings 1957, pp. 248–249).[6]

The employment picture for southern regions also was positive. The total employment index for the South Atlantic region was the best in the nation in 1933 at 88.3, when national employment stood at 78.4. The worst-off region in that year was East North Central at 69.5. The other southern regions, East South Central and West South Central, were below the national average in 1933, but along with the South Atlantic region made a very strong recovery later in the 1930s (Wallis 1989, pp. 53, 56–64).

Some regional and local differences in income and employment were rooted in industrial structure, though it may have been less impor-

tant than in the United Kingdom. In 1939, *Fortune* magazine reported being told in Houston, home to a booming oil industry, that "this is the city that never knew the depression" ("Texas" 1939, p. 87). Tobacco manufacture, an industry discussed above as one of the most prosperous throughout the Depression, helps to explain the performance of some southern states. California benefited from motion pictures, citrus fruit, and later airplanes, while mountain states declined along with the mining and lumber industries (Szostak 1995, p. 307).

Wallis (1989) argued that the South's strong performance during the Depression cannot be fully explained by the industrial composition of employment. It did not simply result from the South having its employment concentrated in industries that saw relatively small employment declines during the Depression. Nor were certain institutional changes associated with the New Deal (the Social Security and National Labor Relations Acts) primarily responsible. He concluded (p. 62) that "regional differences remain an important and unexplained part of the employment experience."

In their working paper on manufacturing employment change during 1929–1937, Rosenbloom and Sundstrom (1997) sought to control for both industry and region. They argued that industry effects were important in some regions, especially during 1929–1933. For example, the East South Central, Pacific, and Mountain regions, which had heavy concentrations of manufacturing employment in the lumber products industry, were hit hard when construction collapsed. Similarly, the automobile industry had a negative impact in the East North Central region. But Rosenbloom and Sundstrom argued that region, rather than industry, effects were primarily responsible for the relatively good performance of the South Atlantic and West South Central regions during 1929–1937. Their view was that in these regions, strong regional trends in manufacturing employment growth overcame negative industry composition effects. More research remains to be done to clarify the reasons for the relatively favorable performance of southern regions during the Depression.

Might the New Deal have benefited the South in other ways besides the changes associated with the Social Security and National Labor Relations Acts? Earlier research showed that, at least in the short run, southern states were not disproportionately favored by New Deal spending. Despite the aim of reform (which might be taken to include

Even if New Deal expenditures did not favor southern states generally, the long-run impact of New Deal policies promoted southern industrialization. Wright argued in *Old South, New South* (1986) that two policies adopted during the Depression ultimately ended the isolation of the southern labor market and linked it with the national labor market. When the South experienced severe dislocation, unemployment, and underemployment as a result of these policies, its leaders began to welcome capital and people from outside that would help to develop the region. The policies that set this process in motion were New Deal agricultural policies and minimum wage legislation.

Agricultural policies created incentives for landowners to eliminate sharecropping, the system of farm production in the South that involved working on an owner's land and dividing the crop with the owner. Under the New Deal, landowners received payments for limiting their production of agricultural goods; the hope was to increase prices of those products and thus farmers' incomes. However, if a landowner had sharecroppers or other tenants, the payments had to be shared with them. As a result, many landowners decided to dispense with their sharecroppers and other tenants and hire wage-labor instead. Displaced sharecroppers migrated to northern cities in large numbers in the 1940s and 1950s, when mechanization also reduced the need for labor on farms.

Minimum wage legislation, which applied in all states, also brought the South into a unified national labor market. The immediate impact of federal policies on southern blacks was negative. But the combined effect of these policies, and the resulting migration flows, was

> the final disappearance of the plantation regime . . . Having little of the old low-wage economy to protect, southern property owners opened their doors wholeheartedly to outside flows of capital, government funding, and highly paid labor. (Wright 1986, p. 15)

Initially they pressed for the South's "fair share" of military spending in the 1940s. The East South Central and West South Central regions did receive a larger share of wartime manufacturing facilities than their share of pre-war facilities, although the textile states of the South Atlantic region did not fare as well (U.S. War Production Board

1945, p. 36). Industrial development promotions exploded after the war, and especially after 1950 (Wright 1986, pp. 257–264). The South also benefited from spending on highways and from the federal home mortgage loan programs that had originated in 1933 and that stimulated city- and suburb-building after World War II. By 1990, per capita incomes in the South still were below the national average, but considerable progress had been made toward closing the gap (Heim, forthcoming).

In the United States, then, unlike the United Kingdom, policies adopted in response to the Depression did have a positive long-run impact on economic performance in the nation's problem region. The problem regions were of different types: in the United States, a low-income agricultural area, and in the United Kingdom, older industrial areas. The U.S. West, a less-developed region—although not one perceived as a problem region—also saw its development hastened by the water projects of the 1930s. The policies adopted in the United States (with the exception of the TVA programs) did not have as their explicit goal the development of lagging or newer regions. Nonetheless, in the case of the South, the linkage with national labor markets that resulted from New Deal agricultural and minimum wage policies did ultimately promote industrialization.

NATIONS

A fascinating contrast is presented by certain less-developed nations during the Depression and subsequent decades. Their industrialization also accelerated, but as a result of *delinking* from a larger economy—in this case, the international economy—rather than becoming more closely linked with it. During the Depression, export earnings for many countries dried up, and capital inflows from more-developed countries such as the United States were curtailed drastically. In parts of Latin America, Africa, and Asia (as well as in some Scandinavian and Eastern European countries, and in Australia), emphasis shifted away from exports of primary products (such as agricultural products and minerals) and toward more import-substituting production of manufactured goods.

The idea that the Depression had promoted industrialization in Latin America was advanced by structuralists (Prebisch 1962; Furtado 1963), writers in the dependency school (Frank 1967), and others (Lee 1969; Díaz Alejandro 1970; Fishlow 1972; Thorp 1984). Díaz Alejandro (1984) provided a useful survey of the issues. The international shocks of the Depression pushed countries in Latin America toward policy experimentation. Some countries were questioning the "rules of the game" as early as 1930. Commitments to the gold standard and to balancing national budgets were no longer seen as a necessary or desirable means of attempting to ensure national prosperity. The gold standard regime of the 19th and early 20th centuries had always worked less well as a stabilizing force for the periphery of the world economy, including Latin America, than it had for the more-developed countries of the center. Defending the gold standard became even less a priority under the pressures of the Depression (Eichengreen 1992, pp. 54–65).

Being delinked from the world economy, and from institutions such as the gold standard, allowed a different set of domestic policies to be pursued that were favorable to industrialization. Not all countries were able to take this path. Díaz Alejandro suggested that among Latin American republics with nominal sovereignty, largeness (as in the case of Brazil) and a relatively autonomous public sector (as in Costa Rica or Uruguay) led to more favorable performance. Smaller countries such as Honduras and highly dependent governments such as Cuba were less able to experiment with unorthodox policies. He noted that "paradoxically, some clear-cut colonies in the Caribbean appear to have performed better than Cuba or the Dominican Republic" (Díaz Alejandro 1984, p. 18).

What were these policies? They included balance-of-payment policies, monetary and fiscal policies, and other policies promoting structural change and reform. As export values fell and capital inflows turned negative, gold and foreign exchange flowed out of Latin American countries. Some responded by abandoning the effort to maintain the gold parities of the gold-exchange standard, thereby avoiding the difficult deflationary process that was part of the classical adjustment mechanism. Instead they devalued their exchange rates. By 1930–1934, real import-exchange rates with respect to the dollar had depreciated between 30 and 90 percent, as compared to 1925–1929, in seven Latin American countries (Díaz Alejandro 1984, pp. 22–26).

Imports also were discouraged by higher tariffs and by quantitative restrictions, such as import or exchange controls. Several countries (Mexico, Chile, Colombia, Brazil, and Cuba) used delinquency on their international debt payments to alleviate balance-of-payments difficulties (Maddison 1985, pp. 23–32). U.S. tolerance of partial or total defaults by Brazil contrasted with British insistence on repayment by both Brazil and Argentina. This tolerance was especially important for Brazil, which had a more binding foreign-exchange constraint than Argentina in the 1930s (Abreu 1984, pp. 150–152). Other outward flows were limited by Latin American authorities: importers seeking to settle their short-term debts, and foreign companies wanting to remit profits abroad, had to wait to obtain the necessary foreign exchange (Díaz Alejandro 1984, p. 27).

Latin American countries also had serious debt problems in the 1980s, following the difficult years in the world economy after 1973 and the recession of 1980–1982. Again, many debts were rescheduled. In this debt crisis, unlike that of the 1930s, the International Monetary Fund acted as a "system manager," providing emergency credit and pressuring other creditors into helping. But it also imposed strict conditions on domestic policy, including budgetary restrictions and other deflationary measures that increased unemployment (Maddison 1985, pp. 45–66).

In the 1930s, Latin American governments could, and did, engage in more expansionary monetary and fiscal policies. The policies generally were not motivated by a conscious and deliberate program, but together they contributed to the maintenance of aggregate demand. Real money supplies increased in Argentina, Brazil, Chile, Colombia, Mexico, and Uruguay. Central banks found creative ways to issue domestic currency and increase credit in their economies. Banks generally were not allowed to fail, in sharp contrast to the situation in the United States (Díaz Alejandro 1984, pp. 29–31). Increases in the money supply were facilitated by greater leniency in terms of bank reserves (Twomey 1983, p. 243).

Similarly, fiscal policy helped to maintain aggregate demand. Brazil's policy after 1932 was deliberately expansionary, with planned deficits resulting from conscious additional expenditure. Government support for the coffee sector, through export taxes and acquisition of coffee, also helped to hold up that sector's income

(Fishlow 1972, pp. 328–330). In other countries, despite declarations by policymakers that they sought to balance their budgets, "efforts to reduce the deficit induced by the decline in foreign trade and output were tempered by either common sense or the sheer inability to cut expenditures and raise taxes fast enough" (Díaz Alejandro 1984, p. 34). Regional or local governments sometimes took the lead in expansionary fiscal policies, as in Colombia where the role of central government was smaller than elsewhere in Latin America (Maddison 1985, pp. 28–29).

Finally, Latin American governments also engaged in other structural and reform policies that included wage flexibility and moderation, land reform, price regulation for rural products and public utilities, strengthening of credit institutions, and large public works programs (Díaz Alejandro 1984, pp. 36–37). In Mexico, for example, agrarian reform hastened a transfer of resources to the modern sector by increasing uncertainty about returns to investment in agriculture. Public outlays for road construction reduced transport costs and enlarged the available market (Cárdenas 1984, p. 233).

The outcome of this policy experimentation was growth rates of gross domestic product (GDP) during 1929–1939 that were steadier and higher for Argentina, Brazil, Colombia, and Mexico than for the United States and Canada. (Since population grew more rapidly in Latin America, the disparity in real per capita income growth was not as great.) More impressive than the growth rates was the extent of structural change and industrialization. There was substantial movement from activities oriented toward export markets to those involving domestic sales. As import substitution surged, manufacturing grew much faster than GDP. Manufacturing growth rates during 1929–1939 ranged from over 3 percent per year in Argentina to over 8 percent per year in Colombia, while remaining near zero in the United States and Canada (Díaz Alejandro 1984, pp. 38–44).

Africa also provides examples of the Depression stimulating structural change and industrial development. Egypt was hard hit by the fall in the price of cotton, its major export. The resulting drop in the country's capacity to import created incentives for domestic manufacturing (Lee 1969, p. 152). By 1939, Egypt was meeting most of its local demand for simple products such as refined sugar, alcohol, cigarettes, soap, shoes, cement, and matches (Owen 1989, p. 142). Rather than

exporting almost all its cotton, Egypt began to use it in its own factories, and investment funds shifted from export-oriented agriculture toward industry generally (Lee 1969, p. 153).

The Egyptian government protected industry by tariffs, which were revised after a treaty with Italy expired in 1930. Tariffs were especially important in blocking textile imports from Japan, India, and Italy, which were less expensive than products made from Egyptian cotton. By 1939, textile imports, which were 40 percent of the value of all imports in 1920, had fallen to 16.5 percent. The government aided industry in other ways as well, such as purchasing locally made cement for public construction projects. Industrial growth was not the sole focus; Egyptian leaders also sought to maintain a high level of cotton exports (Tignor 1984, pp. 106–146).

Other parts of Africa under colonial control had relatively little of the independence in setting policy that Díaz Alejandro identified as being important in successful Latin American cases (though some colonial powers, particularly the Belgians, were more attuned to the needs of industry than others). The Depression still had some positive impacts on industrialization. Clarence-Smith (1989, p. 195) argued that in the colonies of equatorial and central Africa, the main contribution of the 1930s was the strong signal it provided to private industrialists about the potential of the home market and about the types of industries most suitable for the region.

Industries manufacturing cheap products for the African mass consumer market did well even in the worst years of the early 1930s and fared better than industries producing for European settlers in many areas. Settler purchasing power fell; many settlers were heavily in debt and were hurt by deflation. In some places their numbers declined. Import substitution in the African market proceeded in soap and textiles and in some intermediate goods such as cement. The overall level of industrialization in equatorial and central Africa did not rise dramatically in the 1930s, though the experiences of that decade did help to lay the groundwork for more rapid growth in Angola in the 1940s (Clarence-Smith 1989, pp. 170, 188–196).[7]

In Asia as well, there was less policy autonomy than in Latin America during the Depression. Colonies were less able to impose trade and exchange controls, to engage in expansionary monetary and fiscal policies that would generate some inflation, or to default on

debts. As in Africa, some colonial governments were more developmentalist than others. The Japanese practiced what Maddison called "military developmentalism" in Korea and Taiwan, which included encouraging some industrialization. Korean heavy industry provided intermediate products to Japan, and Taiwan produced fertilizers, textiles, metals, and chemicals. The British and Dutch followed more orthodox policies in their colonies (India, Indonesia), defending overvalued currencies and pursuing deflationary policies (Maddison 1985, pp. 22, 33–43).

The Depression did, nonetheless, stimulate industrialization in some parts of India such as Madras, as the terms of trade moved to favor industry over agriculture and rural moneylenders sought new avenues for their funds. Investments were made in sugar refineries, cotton textile mills, cement, and electricity supply, as well as in banks, insurance companies, and the film industry. Record numbers of joint stock companies were registered in 1933–1937 (Baker 1978, pp. 238–242).

Japan grew very rapidly during the 1930s, and in this case, being linked to the world economy was crucial. Japanese exports rose by 70 percent between 1929 and 1937, at a time when France, Germany, the United Kingdom, and the United States all saw their exports fall. But Japanese export success in this period was based partly on an earlier phase of delinking and import substitution. During World War I, developed economies such as Britain were unable to supply manufactured goods, and Japan began producing textiles both for the local market and for other Asian countries. Military spending in the 1930s also stimulated the growth of Japan's heavy industry (Maddison 1969, pp. 35–39).

China was at the other end of the spectrum during the Depression and was perhaps best described as "unlinked" rather than "delinked." The Chinese economy was so underdeveloped and internally oriented that it was largely immune to the shocks of the Depression. Myers (1989, pp. 256–259) summarized data showing that GDP grew in real terms at 1.55 percent per year during 1931–1936, and growth in manufacturing was considerably higher, at 2.11 percent. Some industries in the modern sector outpaced their Western counterparts. Coal production in modern mines grew at 7.81 percent per year (this figure includes Manchuria, which had been seized by Japan in 1931–1932). Growth

also was especially rapid in modern banking, electrical power, and postal services.

By the mid 1930s, China was engaging in relatively expansionary monetary and fiscal policies, had increased tariffs, and was continuing the debt default and readjustment it had begun in the 1920s (Maddison 1985, pp. 33–34). Internal trade boomed, much of the urban sector flourished, and new consumer goods became available. Rural distress occurred, but bad harvests were a major cause. Myers (1989, p. 274) concluded that "China simply did not experience any national economic depression as the world depression deepened."

The import-substituting industrialization pursued by many less-developed countries during the Depression had its flaws. In Egypt, for example, locally produced goods were almost invariably more expensive than those of foreign producers (Owen 1989, p. 142). But as Maddison (1985, p. 23) argued, "In the conditions of the 1930s, the verdict must be in favor of the import substitution policies, for openness to the world economy of the type Cuba was compelled to follow meant large-scale unemployment of productive resources." He quickly went on to assert that in the longer run these measures, which continued in the 1940s and 1950s, were a hindrance to growth.

By the 1970s, many critics were pointing to undesirable effects of import substitution policies and associated protectionist measures. They cited price distortions, resource misallocation, lack of competition in the industrial sector, and an anti-export bias. Movement away from inward-looking policies, initiated by Brazil, had begun in the 1960s. Other countries followed in the 1970s and 1980s, particularly following the second oil shock and the debt crisis (Corbo 1992). Long-lasting negative impacts on growth from some of the inward-looking policies first adopted during the Depression recently were estimated by Taylor (1998). However, when comparing countries in Latin America's Southern Cone (Argentina, Brazil, Chile, Paraguay, and Uruguay) with other Latin American countries, Taylor (1996) noted that the "big push" into manufacturing also may have generated dynamic externalities with long-run benefits for at least some parts of Latin America.[8,9]

CONCLUSION

Like most episodes in economic history, the Depression of the 1930s had winners and losers. In both the United States and the United Kingdom, certain industries flourished. Some of these industries produced the cheap luxuries that made the Depression more tolerable for those at the bottom of the income scale, as well as other new consumer goods (such as electrical appliances) whose use continued to grow even during these years of economic difficulty. However, while there were growth industries in both countries in the 1930s, these industries did not necessarily locate in the regions that most needed them. This was especially true in the United Kingdom, where expanding industries and services concentrated in the prosperous South and Midlands rather than in the older industrial areas of the North and West.

In the United States, it was the South—a poor, less-developed region—that had been the main problem region. The South was hit less hard than other U.S. regions by the Depression and recovered more quickly, for reasons that still are not fully understood. Short-run impacts of the New Deal were not responsible. New Deal spending went disproportionately to wealthy western states, where voting patterns were less reliably Democratic than those of the South and where there had been especially sharp drops in income in 1929–1933. But in the longer run, New Deal agricultural and minimum wage policies broke down the isolation of the southern labor market and linked it to the national labor market. Without the remains of a plantation economy to protect, the South became more open to economic development, especially after 1950.

Elsewhere in the world, the Depression of the 1930s had more immediate effects in stimulating industrialization. In these cases delinking, rather than linking, was what helped. As their export revenues fell and capital inflows dried up, less-developed countries found themselves less able to import. Several of the larger, more independent countries in Latin America began experimenting with unorthodox, expansionary monetary and fiscal policies that cushioned the effects of the Depression. They also instituted policies that encouraged more domestic manufacturing. There was less scope for this response in Africa and Asia, where colonial control remained stronger. Egypt did

follow a similar path of import substitution, and the Depression also created new awareness of the potential of African consumer markets in equatorial and central Africa.

It is interesting to speculate as to why, for the U.S. South, the Depression had positive effects through linking the South with a larger economy, whereas for less-developed countries it was delinking that proved beneficial. Delinking, of course, is not usually an option for regions in the same sense as for nations, although Jane Jacobs (1984) did argue that if it were possible there would be advantages to cities and their regions becoming independent sovereignties, issuing their own currencies and conducting their own policies. Perhaps part of the reason for the difference between the U.S. South and less-developed countries is that it was labor markets that were linked in the U.S. case. Is linking labor markets more beneficial than linking product and capital markets? Would less-developed countries have been better off in the 1930s and later decades if international barriers to migration had not been erected in the 1920s and more migration to richer countries had been possible (similar to the migration of displaced sharecroppers to the U.S. North)?

International labor markets were more linked, and migration widespread, in the earlier period from 1870–1914. A group of scholars has argued that certain European areas with large outmigrations (Ireland, Sweden, and Italy) were better off as a result; the departure of the movers raised wages, reduced unemployment, and eroded poverty at home (Boyer, Hatton, and O'Rourke, 1994; O'Rourke and Williamson, 1995; Williamson 1996; Taylor and Williamson 1997). However, southern Italy remained a less-developed region in the later 20th century. There also may be difficulties in applying these arguments to less-developed countries with very large populations, such as China or India.

Moreover, the U.S. South benefited from the outflow of labor partly because what followed were inflows of capital and skills. Would many less-developed nations or regions in the 1930s and later decades have seen similar inflows, on terms that would be beneficial to development, if their labor markets were more linked to international ones? And did they have institutional and political structures that would have allowed them to use such inflows effectively?

The timing of the linking or delinking also may be important for either regions or nations. Although stimulated by Depression-era poli-

cies, the actual linking of the U.S. South with the national economy came during the prosperous 1940s and 1950s. Clearly there are many questions that remain to be answered. My hope is that this consideration of the uneven impacts of the Great Depression on industries, regions, and nations will have illustrated the complexity of that experience and will stimulate further thought about its consequences.

Notes

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1. For individuals, experiences differed by race, age, gender, and other dimensions (Eichengreen and Hatton 1988, pp. 29–35 in the editors' introduction and chapters by individual authors; Szostak 1995, pp. 308–309). See Bresnahan and Raff (1991) on differences among U.S. firms in the motor vehicles industry during the Depression.
2. On the debate over the role of new industries in pulling the United Kingdom out of depression, see Buxton (1975) and von Tunzelmann (1982).
3. There is evidence of a preference for greenfield sites and new labor in the recent location of Japanese auto transplants in the United States. Locations in or near the Midwest were chosen partly for proximity to other automotive firms and supplier networks. But the transplants often avoided large, older urban centers and hired rural workers, some of whom maintained connections to farms (Bingham and Eberts 1990, pp. 317–320; Mair, Florida, and Kenney 1988; Helper 1991; Kingsolver 1992). For example, Japanese automotive facilities located in the 1980s "in the exurban counties around Dayton and Columbus" (Blair and Fichtenbaum 1990, p. 152). Smith and Florida (1994) sought to challenge this view, at least for Japanese-affiliated establishments in auto-related activities such as components, steel, finishing and processing, and rubber and tire manufacturing (i.e., not auto assembly establishments). There may be problems in their analysis arising from correlation between their population and population density variables.
4. Unemployment differentials among regions widened in some other countries as well. As in the United Kingdom, the absolute gap in unemployment rates increased by more than the ratio of rates in high- and low-unemployment areas (see the editors' introduction in Eichengreen and Hatton [1988, pp. 30–31]).
5. U.S. regions are defined differently by different authors. See the appendix for lists of states included in regions discussed in this paper.

6. Not all southern states did well. In the Southeast the range was from 12 percent (North and South Carolina) to 34 percent (Arkansas). In the Southwest it was 27 percent (Texas) to 40 percent (Arizona) (Hurwitz and Stallings 1957, pp. 248–249).
7. Interestingly, the food, beverage, and tobacco industries, which were relatively prosperous in the United States and the United Kingdom, fared rather badly. They were more closely tied to the settler market (Clarence-Smith 1989, pp. 194–195).
8. The section in Taylor (1996) comparing Latin America's Southern Cone and other Latin American countries was omitted in Taylor (1998), which focused exclusively on the costs of inward-looking policies. The results in Taylor (1996) do, however, suggest variation in the experience of Latin American countries with such policies. All experienced costs, but some also may have experienced benefits. It stands to reason that the larger Southern Cone countries, which embarked most strongly upon import-substituting industrialization, would reap the greatest benefits from the dynamic externalities that a long tradition of writers on economic growth have emphasized.
9. The question of whether any of the policies pursued by governments of less-developed countries during the Depression would have been appropriate in the 1970s to 1990s is a complicated one that is beyond the scope of this paper. Not all accept the idea that export-led industrialization was by the 1980s a universally desirable alternative to approaches maintaining some emphasis on domestic markets, nor do all accept a view of the state as primarily the problem rather than a part of the solution in less-developed countries. Fishlow (1990) argued that while more attention to market signals was appropriate, the degree of emphasis on liberalization and the invisible hand of the market that accompanied debt assistance plans of the 1980s went too far in denying a positive developmental role for the state. Earlier he suggested that even the import substitution of the 1930s to 1950s in Brazil might have suffered from an excessive reliance on the market, as it did not result in an articulated development bloc (Fishlow 1972, pp. 355–356). See Shapiro and Taylor (1990) for a survey on the role of the state and different developmental strategies. They noted that some successful export promotion strategies depended upon a previous phase of import substitution. Maddison (1985) and Thorp (1984, pp. 13–14) discussed comparisons between the 1930s and the 1970s and 1980s.

Appendix
Definitions of Selected U.S. Regions

Hurwitz and Stallings (1957)

Central:	Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin
Far West:	California, Nevada, Oregon, Washington
New England:	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Northwest:	Colorado, Idaho, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming
Southeast:	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia
Southwest:	Arizona, New Mexico, Oklahoma, Texas

Perloff et al. (1960)

Southeast:	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia
Southwest:	Arizona, New Mexico, Oklahoma, Texas

Louisiana is included in the Southeast in Perloff et al.'s discussion on p. 274. Later in the book it is included in the Southwest, due to the growth of the petroleum industry and oil-using industries in more recent decades.

Rosenbloom and Sundstrom (1997)

U.S. Census Divisions

East North Central:	Illinois, Indiana, Michigan, Ohio, Wisconsin
East South Central:	Alabama, Kentucky, Mississippi, Tennessee
Mountain:	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
Pacific:	California, Oregon, Washington (Alaska and Hawaii were included in this division from 1960 on)
South Atlantic:	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
West South Central:	Arkansas, Louisiana, Oklahoma, Texas

Rosenbloom and Sundstrom (*cont.*)

In the U.S. Census, the South includes the South Atlantic, East South Central, and West South Central divisions.

U.S. Department of Commerce, Bureau of Economic Analysis (1995)

Southeast:	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia
Southwest:	Arizona, New Mexico, Oklahoma, Texas

U.S. War Production Board (1945)

Regions are not defined on pp. 35–36, but appear to be U.S. Census Divisions, as for Rosenbloom and Sundstrom (1997).

Wallis (1989)

U.S. Census Divisions, as for Rosenbloom and Sundstrom (1997).

Wardwell (1951)

Southeast:	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia
Southwest:	Arizona, New Mexico, Oklahoma, Texas

Wright (1986)

South:	At most, 11 states: 1) the Deep South states of Alabama, Georgia, Louisiana, Mississippi, and South Carolina; 2) broadened by the addition of Arkansas, North Carolina, and Tennessee; 3) plus the "swing" states of Florida, Texas, and Virginia, which sometimes are dropped. For example, for aggregates such as land-labor ratios, including Texas would cause problems; for migration, Florida would be the problem state.

References

Abreu, Marcelo de Paiva. 1984. "Argentina and Brazil during the 1930s: The Impact of British and American International Economic Policies." In *Latin America in the 1930s: The Role of the Periphery in World Crisis*, Rosemary Thorp, ed. New York: St. Martin's Press.

Aldcroft, Derek H. 1970. *The Inter-War Economy: Britain, 1919–1939.* London: B.T. Batsford.

Arrington, Leonard. 1969. "The New Deal in the West: A Preliminary Statistical Inquiry." *Pacific Historical Review* 38: 311–316.

Baker, Christopher. 1978. "Debt and the Depression in Madras, 1929–1936." In *The Imperial Impact: Studies in the Economic History of Africa and India*, Clive Dewey and A.G. Hopkins, eds. London: Athlone Press, University of London, for the Institute of Commonwealth Studies.

Barro, Robert J., and Xavier Sala-i-Martin. 1991. *Convergence across States and Regions.* Brookings Papers on Economic Activity no. 1: 107–158.

Bartik, Timothy J. 1991. *Who Benefits from State and Local Economic Development Policies?* Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.

Beck, G.M. 1951. *A Survey of British Employment and Unemployment, 1927–45.* Oxford: Oxford University Institute of Statistics.

Bernstein, Michael A. 1987. *The Great Depression: Delayed Recovery and Economic Change in America, 1929–1939.* Cambridge: Cambridge University Press.

Bingham, Richard D., and Randall W. Eberts. 1990. "The Future of the Midwest Economy: Two Scenarios." In *Economic Restructuring of the American Midwest: Proceedings of the Midwest Economic Restructuring Conference of the Federal Reserve Bank of Cleveland*, Richard D. Bingham and Randall W. Eberts, eds. Boston: Kluwer.

Blair, John P., and Rudy Fichtenbaum. 1990. "Dayton, Ohio: A Dramatic Rebound." In *Economic Restructuring of the American Midwest: Proceedings of the Midwest Economic Restructuring Conference of the Federal Reserve Bank of Cleveland*, Richard D. Bingham and Randall W. Eberts, eds. Boston: Kluwer.

Bowden, Sue, and Avner Offer. 1994. "Household Appliances and the Use of Time: the United States and Britain since the 1920s." *Economic History Review* 47: 725–748.

Bowden, Sue, and Paul Turner. 1993. "The Demand for Consumer Durables in the United Kingdom in the Interwar Period." *Journal of Economic History* 53: 244–258.

Boyer, George R., Timothy J. Hatton, and Kevin O'Rourke. 1994. "The Impact of Emigration on Real Wages in Ireland, 1850–1914." In *Migration and the International Labor Market, 1850–1939*, Timothy J. Hatton and Jeffrey G. Williamson, eds. London: Routledge.

Bresnahan, Timothy F., and Daniel M. G. Raff. 1991. "Intra-Industry Heterogeneity and the Great Depression: The American Motor Vehicles Industry, 1929–1935." *Journal of Economic History* 51: 317–331.

Buxton, Neil K. 1975. "The Role of the 'New' Industries in Britain during the 1930s: A Reinterpretation." *Business History Review* 49: 205–222.

Cárdenas, Enrique. 1984. "The Great Depression and Industrialisation: The Case of Mexico." In *Latin America in the 1930s: The Role of the Periphery in World Crisis,* Rosemary Thorp, ed. New York: St. Martin's Press.

Catterall, R.E. 1979. "Electrical Engineering." In *British Industry between the Wars: Instability and Industrial Development, 1919–1939*, Neil K. Buxton and Derek H. Aldcroft, eds. London: Scolar Press.

Champion, A.G., and A.R. Townsend. 1990. *Contemporary Britain: A Geographical Perspective*. London: Edward Arnold.

Clarence-Smith, Gervase. 1989. "The Effects of the Great Depression on Industrialisation in Equatorial and Central Africa." In *The Economies of Africa and Asia in the Inter-war Depression*, Ian Brown, ed. London: Routledge.

Corbo, Vittorio. 1992. *Development Strategies and Policies in Latin America: A Historical Perspective*. Occasional Paper No. 22, International Center for Economic Growth, San Francisco, California, April.

Crum, William Leonard. 1939. *Corporate Size and Earning Power*. Cambridge: Harvard University Press.

Díaz Alejandro, Carlos F. 1970. *Essays on the Economic History of the Argentine Republic*. New Haven: Yale University Press.

——. 1984. "Latin America in the 1930s." In *Latin America in the 1930s: The Role of the Periphery in World Crisis*, Rosemary Thorp, ed. New York: St. Martin's Press.

Eichengreen, Barry. 1992. *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939*. New York: Oxford University Press.

Eichengreen, Barry, and T. J. Hatton, eds. 1988. *Interwar Unemployment in International Perspective*. Dordrecht: Kluwer.

European Commission. 1994. *Competitiveness and Cohesion: Trends in the Regions: Fifth Periodic Report on the Social and Economic Situation and Development of the Regions in the Community.* Luxembourg: Office for Official Publications of the European Communities.

Fabricant, Solomon. 1935. *Profits, Losses and Business Assets, 1929–1934.* National Bureau of Economic Research Bulletin 55. New York: National Bureau of Economic Research.

——. 1940. *The Output of Manufacturing Industries, 1899–1937.* New York: National Bureau of Economic Research.

——. 1942. *Employment in Manufacturing, 1899–1939: An Analysis of Its Relation to the Volume of Production.* New York: National Bureau of Economic Research.

Feinstein, C.H. 1965. *Domestic Capital Formation in the United Kingdom, 1920–1938.* Cambridge: Cambridge University Press.

Fishlow, Albert. 1972. "Origins and Consequences of Import Substitution in Brazil." In *International Economics and Development,* Luis Eugenio Di Marco, ed. New York: Academic Press.

——. 1990. "The Latin American State." *Journal of Economic Perspectives* 4: 61–74.

Frank, Andre Gunder. 1967. *Capitalism and Underdevelopment in Latin America: Historical Studies of Chile and Brazil.* New York: Monthly Review Press.

Furtado, Celso. 1963. *The Economic Growth of Brazil: A Survey from Colonial to Modern Times.* Berkeley: University of California Press.

Garside, W. R. 1990. *British Unemployment, 1919–1939: A Study in Public Policy.* Cambridge: Cambridge University Press.

Great Britain, Royal Commission on the Geographical Distribution of the Industrial Population. 1937–39. *Minutes of Evidence.* London: His Majesty's Stationery Office.

Hart, P.E. 1968. "A Long-Run Analysis of the Rate of Return on Capital in Manufacturing Industry, United Kingdom, 1920–62." In *Studies in Profit, Business Saving and Investment in the United Kingdom, 1920–1962,* P.E. Hart, ed. London: Allen & Unwin.

Hatton, T.J. 1986. "Structural Aspects of Unemployment in Britain between the World Wars." In *Research in Economic History,* vol. 10, Paul Uselding, ed. Greenwich, Connecticut: JAI Press.

Heim, Carol E. 1983. "Industrial Organization and Regional Development in Interwar Britain." *Journal of Economic History* 43: 931–952.

——. 1984a. "Limits to Intervention: The Bank of England and Industrial Diversification in the Depressed Areas." *Economic History Review* 37: 533–550.

——. 1984b. "Structural Transformation and the Demand for New Labor in Advanced Economies: Interwar Britain." *Journal of Economic History* 44: 585–595.

——. 1987. "R&D, Defense, and Spatial Divisions of Labor in Twentieth-Century Britain." *Journal of Economic History* 47: 365–378.

——. Forthcoming. "Structural Changes: Regional and Urban." In *The Cambridge Economic History of the United States*, vol. III, *The Twentieth Century*, Stanley Engerman and Robert Gallman, eds. Cambridge: Cambridge University Press.

Helper, Susan. 1991. *The Restructuring of Supplier Relations in the U.S. Auto Industry: Do Regions Matter?* Photocopy. Paper presented at the annual meeting of the Social Science History Association, New Orleans.

Hurwitz, Abner, and Carlyle P. Stallings. 1957. "Interregional Differences in Per Capita Real Income Change." In *Regional Income*, Studies in Income and Wealth, vol. 21. Princeton, New Jersey: Princeton University Press for the National Bureau of Economic Research.

Jacobs, Jane. 1984. *Cities and the Wealth of Nations: Principles of Economic Life*. New York: Random House.

Jaeger, Hans. 1972. "Business in the Great Depression." In *The Great Depression Revisited: Essays on the Economics of the Thirties*, Herman van der Wee, ed. The Hague: Martinus Nijhoff.

Kingsolver, Ann E. 1992. "Tobacco, Textiles, and Toyota: Working for Multinational Corporations in Rural Kentucky." In *Anthropology and the Global Factory: Studies of the New Industrialization in the Late Twentieth Century*, Frances Abrahamer Rothstein and Michael L. Blim, eds. New York: Bergin & Garvey.

Lancashire Industrial Development Council. 1932. *Lancashire: An Introduction to the Commercial and Industrial Resources of the World's Greatest Manufacturing Area with Some Account of Its Past History and Present Activities*. Manchester: Lancashire Industrial Development Council.

Lee, C.H. 1969. "The Effects of the Depression on Primary Producing Countries." *Journal of Contemporary History* 4: 139–155.

Lewis, W. Arthur. 1949. *Economic Survey, 1919–1939*. London: Allen & Unwin.

Maddison, Angus. 1969. *Economic Growth in Japan and the USSR*. London: Allen & Unwin.

——. 1985. *Two Crises: Latin America and Asia, 1929–38 and 1973–83*. Paris: Development Centre of the Organisation for Economic Co-operation and Development.

Mair, Andrew, Richard Florida, and Martin Kenney. 1988. "The New Geography of Automobile Production: Japanese Transplants in North America," *Economic Geography* 64: 352–373.

Martin, Ron. 1989. "The Political Economy of Britain's North-South Divide." In *The North-South Divide: Regional Change in Britain in the 1980s*, Jim Lewis and Alan Townsend, eds. London: Paul Chapman.

Myers, Ramon H. 1989. "The World Depression and the Chinese Economy, 1930–6." In *The Economies of Africa and Asia in the Inter-war Depression*, Ian Brown, ed. London: Routledge.

Oliver, Nick, and Barry Wilkinson. 1992. *The Japanization of British Industry: New Developments in the 1990s*. Oxford: Blackwell.

Olney, Martha. 1991. *Buy Now, Pay Later: Advertising, Credit, and Consumer Durables in the 1920s*. Chapel Hill, North Carolina: University of North Carolina Press.

O'Rourke, Kevin Hjortshøj, and Jeffrey G. Williamson. 1995. "Open Economy Forces and Late Nineteenth Century Swedish Catch-Up: A Quantitative Accounting." *Scandinavian Economic History Review* 43: 171–203.

Orwell, George. 1958. *The Road to Wigan Pier.* New York: Harcourt, Brace & World.

Owen, Roger. 1989. "Egypt in the World Depression: Agricultural Recession and Industrial Expansion." In *The Economies of Africa and Asia in the Inter-war Depression*, Ian Brown, ed. London: Routledge.

Perloff, Harvey S., Edgar S. Dunn, Jr., Eric E. Lampard, and Richard F. Muth. 1960. *Regions, Resources, and Economic Growth*. Baltimore: Johns Hopkins Press, for Resources for the Future.

Prebisch, Raúl. 1962. "The Economic Development of Latin America and its Principal Problems." *Economic Bulletin for Latin America* 7: 1–22.

Raitz, Karl B., and Richard Ulack, with Thomas R. Leinbach. 1984. *Appalachia: A Regional Geography: Land, People, and Development.* Boulder, Colorado: Westview.

Reading, Don C. 1973. "New Deal Activity and the States, 1933 to 1939." *Journal of Economic History* 33: 792–810.

Rosenbloom, Joshua L., and William A. Sundstrom. 1997. *The Sources of Regional Variation in the Severity of the Great Depression: Evidence from U.S. Manufacturing, 1919–1937.* NBER Working Paper 6288, National Bureau of Economic Research, Cambridge, Massachusetts, November.

Schulman, Bruce J. 1991. *From Cotton Belt to Sunbelt: Federal Policy, Economic Development, and the Transformation of the South, 1938–1980.* New York: Oxford University Press.

Shapiro, Helen, and Lance Taylor. 1990. "The State and Industrial Strategy." *World Development* 18: 861–878.

Sherwood-Call, Carolyn. 1996. "The 1980s Divergence in State per Capita Incomes: What Does It Tell Us?" *Federal Reserve Bank of San Francisco Economic Review* no. 1: 14–25.

Smith, Donald F., Jr., and Richard Florida. 1994. "Agglomeration and Industrial Location: An Econometric Analysis of Japanese-Affiliated Manufacturing Establishments in Automotive-Related Industries." *Journal of Urban Economics* 36: 23–41.

Szostak, Rick. 1995. *Technological Innovation and the Great Depression.* Boulder, Colorado: Westview.

Taylor, Alan M. 1996. *On the Costs of Inward-Looking Development: Historical Perspectives on Price Distortions, Growth, and Divergence in Latin America from the 1930s to the 1980s.* NBER Working Paper 5432, National Bureau of Economic Research, Cambridge, Massachusetts, January.

——. 1998. "On the Costs of Inward-Looking Development: Price Distortions, Growth, and Divergence in Latin America." *Journal of Economic History* 58: 1–28.

Taylor, Alan M., and Jeffrey G. Williamson. 1997. "Convergence in the Age of Mass Migration." *European Review of Economic History* 1: 27-63.

Tebbit, Norman. 1988. *Upwardly Mobile.* London: Weidenfeld and Nicolson.

"Texas." 1939. *Fortune* 20: 81–91, 162–177.

Thomas, Mark. 1983. "Rearmament and Economic Recovery in the Late 1930s." *Economic History Review* 36: 552–579.

Thorp, Rosemary, ed. 1984. *Latin America in the 1930s: The Role of the Periphery in World Crisis.* New York: St. Martin's Press.

Tignor, Robert L. 1984. *State, Private Enterprise, and Economic Change in Egypt, 1918–1952.* Princeton, New Jersey: Princeton University Press.

Twomey, Michael J. 1983. "The 1930s Depression in Latin America: A Macro Analysis." *Explorations in Economic History* 20: 221–247.

U.S. Department of Commerce, Bureau of Economic Analysis. 1995. *State Personal Income: 1929–93.* Washington, D.C.: U.S. Government Printing Office.

U.S. War Production Board. 1945. *Wartime Production Achievements and the Reconversion Outlook.* [Washington, D.C.: U.S. Government Printing Office.]

von Tunzelmann, G.N. 1982. "Structural Change and Leading Sectors in British Manufacturing, 1907–68." In *Economics in the Long View: Essays in Honour of W. W. Rostow*, vol. 3, *Applications and Cases, Part II*, Charles P. Kindleberger and Guido di Tella, eds. New York: New York University Press.

Wallis, John Joseph. 1987. "Employment, Politics, and Economic Recovery during the Great Depression." *Review of Economics and Statistics* 69: 516–520.

——. 1989. "Employment in the Great Depression: New Data and Hypotheses." *Explorations in Economic History* 26: 45–72.

——. 1998. "The Political Economy of New Deal Spending Revisited, Again: with and without Nevada." *Explorations in Economic History* 35: 140–170.

Wardwell, Charles A.R. 1951. *Regional Trends in the United States Economy.* Washington, D.C.: U.S. Government Printing Office.

Wecter, Dixon. 1975. *The Age of the Great Depression, 1929–1941.* New York: Franklin Watts (New Viewpoints edition).

Wheelock, David C., and Cletus C. Coughlin. 1993. *The Divergence of State Per Capita Incomes: Comparing the 1920s and 1980s*. Photocopy. St. Louis, Missouri, May.

Wilkinson, Ellen. 1939. *The Town That Was Murdered: The Life-Story of Jarrow.* London: Victor Gollancz.

Williamson, Jeffrey G. 1996. "Globalization, Convergence, and History." *Journal of Economic History* 56: 277–306.

Worswick, G.D.N., and D.G. Tipping. 1967. *Profits in the British Economy, 1909–1938.* Oxford: Basil Blackwell.

Wright, Gavin. 1974. "The Political Economy of New Deal Spending: An Econometric Analysis." *Review of Economics and Statistics* 56: 30–38.

——. 1986. *Old South, New South: Revolutions in the Southern Economy since the Civil War.* New York: Basic Books.