RECONSTRUCTION FINANCE CORPORATION

How Roosevelt's RFC Revived Economic Growth, 1933-45

by Richard Freeman

> The most crucial element of the American System, is the role of Federal credit in promoting the investment in development and maintenance of essential public elements of the nation's basic economic infrastructure, while promoting long-term investment in private entrepreneurial ventures of a type which are to be desired in the general interest. This action is premised on the crucial, constitutional principle of our system, that the creation and issue of legal currency, is a monopoly of the Federal government. This is also the case in practice when, as under Franklin Roosevelt's Presidency, devices such as the Reconstruction Finance Corp. (RFC), were used as a vehicle for accomplishing this result.
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> —*Lyndon H. LaRouche, Jr., "Deficits as Capital Gains: How to Capitalize a Recovery,"* EIR*, Jan. 27, 2006*

The Reconstruction Finance Corporation meets the LaRouche standard, and was an indispensable element of the successful Roosevelt precedent of economic reconstruction of 1933-45. We present a summary of its achievements here, as the second in a series on America's use of capital budgetting. The first dealt with Eisenhower's Defense Highway Act (*EIR,* Feb. 3, 2006).

As the financial system collapsed and the physical economy disintegrated, President Herbert Hoover created the RFC on Jan 22, 1932. He then spent $1.62 billion in RFC funds for a *purely defensive purpose:* to bail out the banking system (and secondarily, to bail out the railroad bonds, which were the largest asset held by the banks). By repulsing attempts to expand the use of the RFC, Hoover utterly failed to halt the physical-economic collapse, or even to save the banking system.

Roosevelt's conception of the RFC was 180 degrees opposed to Hoover's: that the RFC could instead be used as a powerful primary lending institution, which would restore to the United States sovereign control of its credit.

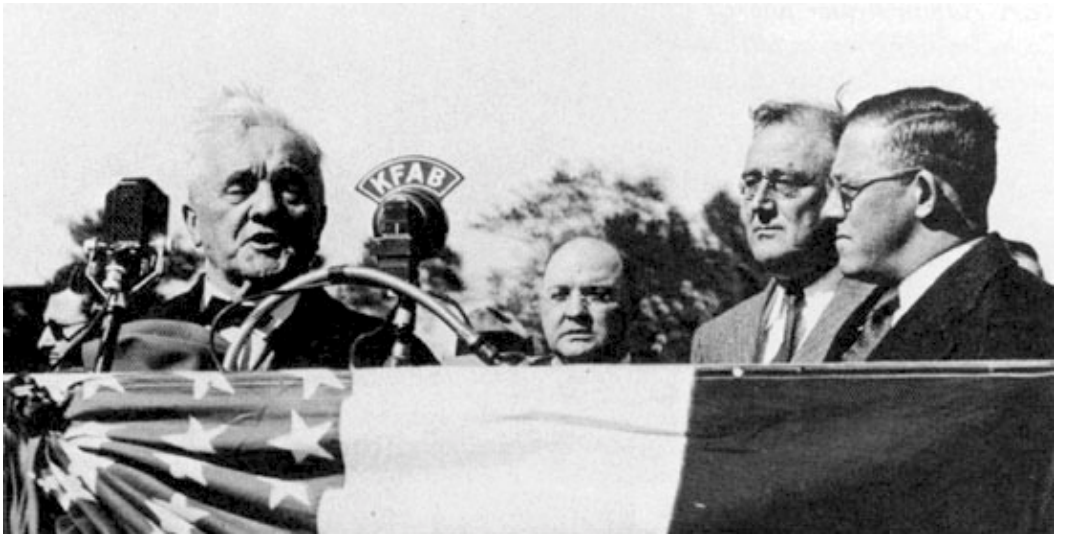
The U.S. government owned the RFC outright. The private financiers did not own or control one iota of the Corporation. Thus, using the RFC, Roosevelt could substantially break with the British-European system of central banking which had dominated the United States since 1900, up through the Hoover Administration. Roosevelt deployed the RFC on the revolutionary principle of Alexander Hamilton's First National Bank (1791-1811): issuing cheap and abundant directed credit to develop infrastructure, machine-tool-design machinery, manufacturing, and agriculture.

Between 1933-45, the RFC lent out $33 billion (over $1.2 trillion in today's dollars), making it the largest lending institution in the United States, and in the world. Roosevelt utilized this credit to carry out three of his central missions:

1. A substantial bankruptcy reorganization of the U.S. banking system, which reversed the headlong collapse.

2. A long-term infrastructure-building program. In collaboration with Harold Ickes' Public Works Administration, and Harry Hopkins' Works Progress Administration, this created millions of productive jobs, and permanently raised the productive level of the U.S. economy.

3. The lion's share of the crash economic mobilization for World War II of 1939-44. This brought a revolutionary



Sen. George Norris of Nebraska, known as the "Father of the TVA," addresses a crowd during the 1936 election campaign, as President Roosevelt (second from right) looks on. Norris worked with FDR to bring electrication to rural America. By 1955, New Deal programs had electrified 88% of American homes and farms.

scientific transformation to the U.S. economy, and doubled its productive output.

As they interacted, these, and other Roosevelt programs, made the United States the greatest agro-industrial power on Earth. The RFC also financed long-term infrastructure development in Ibero-America during this period, and helped launch Germany's Kreditanstalt für Wiederaufbau (Reconstruction Finance Agency). The RFC was then dissolved in 1956.

1. Putting the Banking System Back Together

In the United States, during the first eight months of 1931, approximately 1,000 commercial banks failed. A frightened President Hoover sought a solution in keeping with *"laissez-faire"* dogma.

By October-November 1931, Hoover was desperate. Led by Treasury Secretary Ogden Mills, Hoover's economic team proposed to establish the Reconstruction Finance Corporation. The original intent of the RFC is seen in the message that Hoover sent to Congress on Dec. 7, 1931:

"In order that the public may be absolutely assured that the Government may be in position to meet any public necessity, I recommend that an emergency Reconstruction Corporation of the nature of the former War Finance Corporation [during World War I] should be established. It may not be necessary to use such an instrumentality very extensively. The very existence of such a bulwark will strengthen confidence. The Treasury should be authorized to subscribe a reasonable capital to it, and it should be given authority to issue its own debentures. *It should be placed in liquidation at the end of two years.* Its purpose is by strengthening the weak spots to thus liberate the full strength of the Nation's resources" (emphasis added).

The Congress passed the RFC Act, and Hoover signed it into law on Jan. 22, 1932. It included the following provisions:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that there be and is hereby, created a body corporate with the name 'Reconstruction Finance Corporation'. . . .

"Sec. 2. The corporation shall have capital stock of $500,000,000, subscribed by the United States of America. . . ."

With its government-owned stock, the RFC had the authority to extend credit up to the level of $1.5 billion, which was subsequently increased to $3 billion. To appreciate how substantial the RFC's lending authority was, in 1932, the U.S. government's budget was only $4.66 billion. (The RFC would raise its capital, other than the initial $500 million, through issuing its own debentures—a form of bond.)

A synopsis of the Act, written by its Administration sponsors, stated at the very outset: "To provide emergency financing facilities for financial institutions, to aid in financing agriculture, commerce, and industry, and for other purposes."

The Act approved loans to banks and virtually every type of financial institution; to railway corporations; and to agricultural corporations. It declined to authorize loans to industry, but claimed that by helping banks, it would increase their capacity to lend to industry. This limitation notwithstanding, the RFC had considerable power. But Hoover shrank the Act to performing but one function: futilely bailing out the banks and railroad bonds.

As chairman of the RFC, Hoover appointed Eugene Meyer, who was simultaneously chairman of the U.S. Federal Reserve Board, in order to keep the RFC within this straitjacket. Meyer was a leading force at Lazard Frères investment bank, a key institution of the international Synarchist faction.

During 1932, the Corporation lent $950 million to banks and trust companies; $330 million of that amount went to only 26 banks. While what the banks really needed was a functioning economy, the RFC loans simply increased their indebtedness. Additionally, the RFC lent $337 million to the railroads, which primarily propped up the railroad bond market.

By the end of 1932, the RFC had lent a stunning $1.62 billion, of which 79% was extended as bailouts to banks and railroads. But the economy and banks were no healthier than at the start of the year. It was as if the money had been poured through a sieve.

Hoover's British-vectored policies failed. In 1932, Franklin Roosevelt swept Hoover from office in a landslide. By the time of FDR's Inauguration, the financial system had collapsed. One-quarter of the 23,695 American commercial banks that were in existence at the start of 1930 had declared bankruptcy. By Inauguration Day, every bank, the New York Stock Exchange, and every commodity market in the United States had shut down.

In parallel fashion, the physical economy broke down. Between 1929 and 1933, U.S. industrial production collapsed by between 37% and 54% (depending on the source of the data used). At the start of 1933, steel production operated at a mere 24% of its 1929 capacity. Between 1929 and 1933, net farm income, in constant dollars, had fallen 45%. Officially, 12.83 million workers were unemployed in January 1933, officially constituting 24.9% of the labor force (but the actual rate was higher).

Roosevelt Reverses Hoover's Course

President Roosevelt shifted gears. He saw that the RFC could function like a Hamiltonian National Bank to issue sovereign credit to stop the collapse, and generate a recovery. While Congress exercised rigorous oversight, Roosevelt would not have to go back to Congress to get new funds. The RFC had its own funding mechanism—through issuing debentures to the public—and each time the RFC was paid back the principal and interest on a loan, it could use that as a revolving fund to lend out new, increased volumes of productive credit.

Roosevelt would need to ask Congress to pass amendments to the RFC Act, which would allow the Corporation to lend to industry, and other provisions that the Hoover Administration had blocked.

(In fact, Congress retains the power to change the RFC, and could create a new RFC, or a similar agency with similar powers, today.)

In 1933, FDR appointed Jesse Jones, who was already on the Board of Directors of the Corporation, as chairman of the RFC. Jones, who was strongly anti-Wall Street, had been a successful entrepreneur and rose to head the National Bank of Commerce. In 1913, Jones had been appointed to head the Houston Harbor Board; he was a leader in one of the most important infrastructure projects in the state of Texas: the construction of the Houston Ship Channel and the Port of Houston.

National Archives

Jesse Jones ran the Reconstruction Finance Corp., and helped shape many of FDR's anti-Depression policies.

Expanded Powers of the RFC

One of the first tasks Roosevelt undertook, was to expand the power of the RFC to get the U.S. banking system back on its feet. The day after he took office on March 4, 1933, he issued an Executive Order, using a provision of the 1917 Trading with the Enemy Act, to declare a national bank holiday. This closed all the banks in the United States indefinitely, beginning March 6.

On March 9, Roosevelt introduced to Congress, the Emergency Banking Act, which had been worked out by his economic team, a few members of the outgoing Hoover economic team, and with input from Jesse Jones. Title I legalized the bank holiday Roosevelt had already declared. Title II authorized the U.S. Comptroller of the Currency to appoint conservators who would have the authority to put banks into receivership, and to liquidate the insolvent banks that could not be salvaged. Title III amended the 1932 RFC Act to authorize the Corporation to purchase the capital stock of banks, railways, and other institutions, in order to strengthen the banks, etc., and prevent them from failing. Previously, the RFC could only make loans to the banks. This distinction is significant.The collapse of the economy from 1929 through 1932, had wiped out the banks' ability to earn money from their own loans to manufacturing and agriculture, which, in fact, produced losses. The RFC loans to the banks had meant that the banks had to make monthly or quarterly interest and principal payments to the RFC, at precisely the time the banks had no ability to make those payments. Their condition worsened.

By contrast, under the Roosevelt-RFC policy, the agency was authorized to purchase a troubled bank's capital notes or preferred stock. This increased the volume of the bank's assets and the value of its core capital. This, in turn, brought

FDR Library

Outgoing President Herbert Hoover (left), with Franklin D. Roosevelt, March 4, 1933. Hoover's had tried to use the RFC to bail out the banking system. But his policy was a disaster, since instead of extending credit to build infrastructure and create jobs, he slashed expenditures, declaring, on May 5, 1931, that a balanced Federal budget "was the most essential factor to economic recovery."

the bank up to the required Federal solvency level and gave it funds to lend out. All this, without increasing the bank's indebtedness.

After the bank holiday, the Roosevelt Administration reopened the banks. By April 12, the vast majority had reopened without assistance, while 3,115 nationally chartered banks remained closed; they were not insolvent, but required RFC assistance. Finally, during the course of 1933, the Comptroller of the Currency's conservators liquidated 1,100 banks as irreversibly insolvent.

Many of the 3,115 banks that required RFC assistance would not come forward to seek it. Moreover, a few months after the banks had reopened, Jones discovered that several thousand of them, including several big ones, had serious problems, and would require assistance, or else fail.

Meanwhile, the Synarchist Morgan-Mellon-DuPont banking alliance attacked the revamped RFC as socialist, and discouraged banks from seeking its assistance.

The issue came to a head at the Sept. 5, 1933 American Bankers Association annual convention in Chicago, where Jones was one of the featured speakers. Not a single person applauded his remarks. The next speaker, Federal Reserve Board member Eugene Black, made disparaging comments about Jones' speech. Later, at a convention dinner, Jones was asked to speak; he rose and said:

"I made one speech today, and you did not like it. Now I suppose, I ought to say something to redeem myself in your eyes. What I say here is being said at a private dinner, and is 'entirely off the record'; and if there are any newspapermen here, they will so treat it. . . .

"Half the banks represented in this room are insolvent; and those of you representing these banks know it better than anyone else."

Jones sat down; there was dead silence.

But the logjam was broken. In October, Harvey D. Gibson, president of the large Manufacturers Trust Bank of New York, accompanied by the bank's attorney, visited Jones in Washington. Gibson told Jones that the bank desperately needed $25 million in capital. Jones provided it. Other banks followed suit.

By June 1935, the RFC had an investment of $1.3 billion in the purchase of stock and capital notes of 6,800 banks, which meant that the RFC owned more than one-third of all outstanding capital in the U.S. banking system (if the RFC had wanted to nationalize the banks, it had the leverage to do so; but that was not its purpose). At that point, the RFC decided the banks were stable, and began to disinvest, a process which it completed in a matter of a few years.

Roosevelt and Jones *had put the banking system through a substantial bankruptcy reorganization* (under the reorganization, some banks would further write down their bad financial paper; but the RFC did not write off a lot of the speculative obligations of the banks, simply because, to a large extent, the banking collapse had already wiped out much of it).

The 1,100 U.S. banks put out of existence by Federal conservators in 1933, were but a fraction of the number that would have failed without the Roosevelt-RFC action. In 1934, only 61 commercial banks failed; in 1935, only 32. Roosevelt and the RFC had halted the hemorrhaging of the system.

2. The New Deal's Infrastructure-Building

During the New Deal of 1933-37, Roosevelt used the RFC to finance the recovery and reconstruction of the economy, by building a magnificent array of technology-transmitting infrastructure projects. This had two effects: It employed millions in public works directly, and in the feeder industries for these projects. Second, the infrastructure transmitted technology to the whole economy. This was one of the greatest infrastructure-building programs in the nation's history, second only to that which President Abraham Lincoln and his economic advisor Henry Carey set off during the period 1861-79.

To accomplish this, the Congress expanded the RFC's

Harold Ickes was FDR's Secretary of the Interior, and headed the infrastructure-building Public Works Administration.

powers: In the Spring and Summer of 1933, the Corporation was given authorization to make loans to agricultural districts and to industry; and in 1934, to municipal districts.

Public Works

One historian reported that in 1933, President Roosevelt "wanted the RFC to provide $1.5 billion in direct loans to business and self-liquidating loans to political subdivisions [counties, localities, etc.] for public works." The RFC loans supplemented already existing public works, which were principally financed by general budget funds; or, on many occasions, they financed a substantial share of an infrastructure project.

Roosevelt and the Congress created several public institutions to foster and direct public works. Two were most preeminent: the Public Works Administration (PWA), headed by Harold Ickes; and the set of agencies directed by Harry Hopkins: In May 1933, Hopkins headed the Federal Emergency Relief Administration (FERA); in late 1933, he created the Civil Works Administration for public works; in 1935, the CWA was superseded by the Works Progress Administration. Principally, the PWA built heavy infrastructure; the CWA/WPA built light to medium infrastructure.

Roosevelt, working with the Congress, got two large Federal budget appropriations into public works: $3.3 billion from Title II of the National Industrial Recovery Act of June 1933, which was called the "Public Works and Construction Projects" title; and $5.0 billion from the Emergency Relief Appropriation Act of April 1935, both of which were record amounts in their time. But when money was short, Roosevelt called upon the RFC.

The RFC issued $500 million to FERA in 1933. This made possible one of the most remarkable crash-mobilization public-works programs in history. In late 1933, with the more than 11 million unemployed, and facing a harsh Winter, Hopkins proposed to Roosevelt that he create the Civil Works Administration. With FDR's approval, the CWA started operations on Nov. 9, 1933. Ten days later, Hopkins was employing 800,000 people on CWA payrolls. Two weeks later, the CWA employed nearly 2 million people. By Jan. 18, 1934, the CWA hit its peak employment: 4,263,644 men and women. With RFC assistance, the CWA built or improved tens of thousands of invaluable infrastructure projects, and kept people alive.

Upon the creation in April 1935, of the Works Progress Administration—the CWA's successor—under Hopkins, "the RFC provided the [WPA] with $1 billion so it could begin work immediately," building public works, one historian reported.

The RFC then adopted a novel way to infuse significant funds into the Public Works Administraton, which held large amounts of state and local securities. The RFC offered to take the securities off the PWA's hands and sell them: if in selling the PWA-owned securities, the RFC made a profit, it gave the full value of the security and the profit to the PWA; if it suffered a loss, the RFC would absorb the loss, and pay the security's full value to the PWA. This way, the RFC paid $695 million for the PWA's state and local securities. In the same manner, the RFC sold $199 million of railroad bonds that had been owned by the PWA.

For its large-scale, capital-intensive programs, the PWA used its RFC-supplied funds to buy machine tools and earth-movers, and participated in, or financed projects, which transformed the nation, such as the Hoover Dam; the Grand Coulee and Bonneville dams; and in part, the river diversion/flood control of the Mississippi River (in conjunction with the Army Corps of Engineers). From 1933 to 1939, 70% of the nation's new school buildings and 35% of its hospitals and health systems, were RFC projects.

In toto, from 1933 through 1938, the RFC channelled more than $2 billion into Ickes' and Hopkins' public works programs. In addition to transmitting technology which permanently upshifted the productive power of infrastructure, which in turn, upshifted manufacturing and agriculture, the public works programs provided jobs: There were on average 3.1 million public works jobs created per year; these produced a multiplier-effect, generating the private-sector manufacturing jobs producing the steel, cast-iron piping, cement, bricks and tiles, and advanced machinery that were consumed in building the infrastructure projects.

The RFC financed many other crucial infrastructure-public works programs. For example:

- It lent $145 million to 632 levee and irrigation districts in Illinois, Missouri, Florida, Mississippi, Colorado, California, and Texas, to enable these districts to remain solvent, and in many cases to construct water-management and flood-control projects.
- It disbursed $26 million to Chicago teachers, who had not been paid in nine months. This kept the schools open.

• It lent $209 million to construct the 244-mile Colorado River Aqueduct which conducts water from the Colorado River, obtained from Hoover Dam storage, across the mountains to Los Angeles, San Diego, and 26 smaller communities in Southern California. Today, this aqueduct is the source for much of the water supply of Los Angeles, America's second-largest city.

• It lent $13 million to build a bridge over the Mississippi River at New Orleans.

• It lent $78 million to build the famous 1.5-mile San Francisco-Oakland Bay Bridge.

• It lent $1.9 million to Utica, N.Y., to build a waterworks system.

• It lent $35 million to the Pennsylvania Turnpike Commission to build a 160-mile toll highway from Pittsburgh to Harrisburg, entailing the world's deepest highway cut.

• It lent $8.1 million to build Knickerbocker Village, a low-rent housing development in New York City.

• It lent $5 million to construct a series of dams and canals along the upper Rio Grande River near Albuquerque, New Mexico.

Most of these were of Federal capital budget (5- to 20-year) loans in maturity. The RFC financed every type of infrastructure—many were very large, but some were medium-sized. The loans were all paid back.

Reviving Rail

When RFC chair Jesse Jones decided to turn his attention to rebuilding the nation's railroads, he came up against the banker-controlled railroad board of directors, which, having asset-stripped the railroads, and provided themselves the highest salaries in all U.S. industry, then pushed to put those railroads into a form of bankruptcy/receivership, where they could continue to operate at minimal levels. Jones engaged in hand-to-hand combat with the board.

In May 1933, the Harriman-run Southern Pacific leaders met with Jones in Washington about a loan. But there were conditions. At this time, Hale Holden, chairman of Southern Pacific, had the highest annual salary of any rail executive in the country, at $150,000; Paul Shoup, the vice chairman, and Angus McDonald, the president, drew $100,000 and $85,000, respectively. Using authority that the Congress had newly passed in 1933, Roosevelt proposed slashing Holden's salary to $25,000; Jones actually cut it to $60,000; Shoup's and McDonald's salaries were trimmed to $50,000, and $42,500, respectively. Shoup and McDonald resigned, but Southern Pacific got the loan.

Then Jones directed Southern Pacific to place a portion of its funds into capital investments to improve the physical condition of the railroad, and to hire back workers.

Jones carried out similar reorganizations with several other railways.

It is noteworthy to compare what Jones and the RFC did in the 1930s, to what could be done with the auto sector today.

FDR Library

Harry Hopkins headed a set of agencies including the Civil Works Administration and the Works Progress Administration, that built light to medium infrastructure.

GM, Ford, DaimlerChrysler, and some major auto-parts producers, like Delphi Corporation, under the policy of globalization, have shut down hundreds of auto plants in the United States, with invaluable machine-tool capacity, and fired hundreds of thousands of skilled workers over recent years. What have the White House and the Congress done about it? Outside of a few statements, absolutely nothing. The Bush-Cheney Administration has even stated that this is a matter for "free enterprise" to determine.

In Spring 2005 memos, Lyndon LaRouche called for putting the auto sector into "strategic bankruptcy," and changing the policy and even management of the auto companies, if necessary. Some have protested that the government is not allowed to do this. But this is exactly what Jesse Jones and the RFC did.

Inventive Practices

The RFC also engaged in some inventive practices:

• It set up public corporations, whose stock it owned, to carry out lending to other sectors of the economy. One example was the Home Owners Loan Corporation (HOLC), established in June 1933. At that time, 40% of the nation's mortgages were in default, and thousands of homeowners were foreclosed on and thrown out of their homes every week. The mortgage lending institutions were bankrupt. Therefore, the RFC created the HOLC, and used $200 million of its monies to purchase *all* of the Corporation's initial capital stock. The HOLC was then allowed to issue up to $2 billion (eventually, $3 billion) in bonds—a 15-fold multiplier effect. The HOLC lent money to strengthen shaky home mortgages, and issued cash advances to help homeowners pay taxes and make repairs. By the time it went out of existence in 1936, the HOLC

had helped refinance one in five mortgaged urban private dwellings in America. The HOLC brought an end to mass home foreclosures.

The RFC repeated the process of setting up an agency with a credit-multiplier mechanism in the farm sector, to prevent the massive foreclosure of family farms. The RFC created the Federal Farm Mortgage Corporation (FFMC), and bought all of FFMC's stock. By 1936, the FFMC had refinanced more than 20% of all farm mortgages in the United States, preventing farm foreclosures and the shutdown of farming.

- In the Fall-Winter of 1933-34, President Roosevelt revalued America's official gold price, and devalued the dollar, a move intended to break the British oligarchy's gold cartel and its grip on the banking system, which kept the world in a deflationary vise. The RFC was the principal agency through which Roosevelt administered this policy, which included the Congress passing a Jones-sponsored piece of legislation which gave the RFC a $50 million fund to buy up "market" gold.
- In 1934, the RFC created the Export-Import Bank of the United States as a division within the RFC. It financed export of American capital and other goods around the world.
- In 1937-38, the RFC created the Federal National Mortgage Association (Fannie Mae), which, in its original form, played a positive role, injecting money to banks to enable them to increase the volume of home mortgages.

The RFC's Electrification of America

Roosevelt's use of the RFC to finance the electrification of rural America is exemplary of Roosevelt's deployment of the RFC as an institution of sovereign credit-creation to finance *long-term infrastructure projects* over a duration of 20 years or longer.

During the 1920s and 1930s, the power trust—the electric companies owned by the Morgan Bank, the Mellon family, the Duke family (of tobacco notoriety)—owned electric-power generation and electricity transmission in the United States. They forcefully suppressed the availability of electricity, especially to rural America, insisting that the communities in the South and Far West, did not need development, and besides, they alleged, it cost too much to build power-generating stations, and to string transmission wires to these communities. Consequently, in 1934, only 1% of the farms in Mississippi, and 3% in Tennessee had electricity. Over 49 million (or 89%) of rural Americans had no electricity; two-fifths of all Americans were without electric power.

To break through this roadblock, Roosevelt had great public infrastructure projects built that would produce abundant cheap electricity: the Tennessee Valley Authority; the Bonneville and Grand Coulee Dams in the Far West; the Hoover Dam in the Southwest; etc.

Then the electricity had to be transmitted. On May 11, 1935, Roosevelt issued an Executive Order (relative to the Emergency Relief Appropriation Act), which created the Ru-

How the REA Deal Happened

In his book *$50 Billion: My Thirteen Years With the RFC,* RFC chairman Jesse Jones gave a colorful account of how the financing arrangement for the Rural Electrification Administration (REA) came into being.

Jones wrote that, one day in 1935, he was meeting with Roosevelt in the President's office, when the President asked him to meet with Sen. George Norris of Nebraska, who was just then coming into the office, about the REA. According to Jones:

"When we got in the Cabinet room I asked the Senator what he had in mind. He said he wanted the farmers to have the benefit of electricity and explained his idea of groups of farmers organizing themselves and borrowing money from the government to get electric service.

"I asked the Senator how much money he thought it would take.

"He replied, 'A billion dollars.'

" 'How fast can that money be spent?' I asked. 'How much a year do you think will be needed?'

" 'Forty million dollars a year,' he replied; . . .

" 'Well, what would you think, Senator, of our adopting your plan in principle by [the RFC] making a definite commitment for ten years? That is, we would make available $40,000,000 a year for the first ten years.'

" 'That would be all right,' the Senator replied, 'but we are not going to pay your rate of interest.'

" 'Do you think 4 per cent is too much?' I asked.

" 'Yes.'

" 'What do you think about 3 per cent?'

"That would be the right figure,' Senator Norris remarked.

" 'Then we are in agreement,' I said. 'The RFC will lend $40,000,000 a year for the next ten years at 3 per cent interest, secured by notes of local rural electrification organizations such as cooperatives, . . . with a 20 per cent margin to the RFC. That is, we will lend 80 per cent of the face value of the farmers' notes to the local [REA] agency.' "

Jones wrote, "That was the creation of the Rural Electrification Administration which has proven of immense value to rural sections throughout the country."

ral Electrification Administration. The Executive Order stated the REA's purpose: "To facilitate, formulate, administer, and supervise a program of approved projects with respect to the generation, transmission, and distribution of electricity in rural areas." The Norris-Rayburn Act, passed in 1936, gave the REA more permanent footing.

The REA was the brainchild of Roosevelt himself; key REA personnel included Sen. George Norris (R-Neb.), who also played a major role in creating the TVA; and Morris Llewellyn Cooke, a brilliant engineer whom Roosevelt had appointed in 1933, as the head of the Federal Mississippi River Commission, which planned out, over the next two years, the water management, flood control, and where appropriate, hydroelectric power generation, along the immense expanse of the Mississippi River system and its tributaries. Roosevelt appointed Morris Cooke as the REA's administrator.

Roosevelt biographer Kenneth S. Davis reported in *FDR: The New Deal Years, 1933-37:*

"Cooke quickly discovered, if he did not know to begin with, that [the] REA could not operate as a relief agency if it were to pursue successfully its main goal of rural electrification. If it expended at the very least 25 percent of its budget on labor, drawing 90 percent of the labor from relief rolls, as the relief agency guidelines required, it could do little to electrify America. Cooke therefore proposed that it become primarily a lending agency, using funds supplied by the Reconstruction Finance Corporation to make low interest loans to facilitate the construction of transmission lines into the electricity-starved countryside."

The prime source of REA funds for this undertaking would be the RFC.

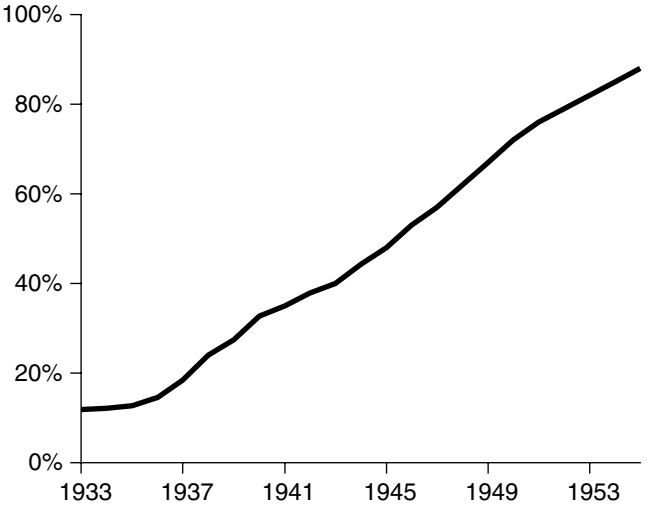
According to his own testimony, Jones negotiated the general shape of the arrangement with Senator Norris, coming up with a target of lending $40 million a year, at 3% interest, over the course of ten years. (See box.)

Accordingly, the REA established cooperatives in each local area of the country, each of which hired someone to build the electricity transmission system in that area to bring power to the farms. Each local REA cooperative borrowed from the REA national center (by presenting individual farmers' notes, which the REA national center would discount). Thus, the REA national center was loaning to its cooperatives 20-year, 3% interest loans. In turn, the REA had borrowed money from the RFC.

Thus, the RFC was deliberately making possible long-term capital loans to the REA cooperatives. This gave the cooperatives a sufficient time horizon to build the transmission lines, and pay back the loans through selling the electricity.

By 1943, the RFC had extended in credit $246 million to the REA—for its day, a huge sum. By this impetus, by the mid-1970s, the REA program included 1.8 million miles of power transmission lines, 50% of the nation's total. **Figure 1** shows that in 1933, only one in ten American farmers had electricity; as the full effect of the REA and New Deal programs came on line, this rose to 88% by 1955.

FIGURE 1
American Farms With Electricity, 1933-55
(percent)



Source: National Archives of the United States, U.S. Dept. of Agriculture.

After his home was electrified, one farmer exclaimed, "Electricity is the greatest development, next to God."

Electrification revolutionized farm life, saving farmers and their families 10-20 hours of labor, per person, per week. In terms of home life, this included not having to hand-pump water outside and bring it into the house (which could take up to two hours per day); not having to heat water in a fireplace to take a bath or clean dishes; not having to wash clothes by hand, etc. In terms of farm work, productivity was doubled, or even quadrupled; electricity could run an electric pig brooder, infra-red chicken hatchery, refrigeration system, corn shellers, or milking machines; it could power and repair farm machinery. It produced a social revolution: Farm families now had more leisure time, including reading and schooling time.

Between 1932 and 1939, the RFC extended $9.5 billion, and, with the exception of the Hoover money, all of it was productive.

3. The RFC Drives the Economic Mobilization of 1939-44

For his greatest challenge, the economic mobilization for World War II, 1939-44, Roosevelt turned again to the RFC. It would finance a crash economic build-up, in which science

Pennsylvania Rural Electric Association

Morris Llewellyn Cooke was appointed by President Roosevelt to run the Rural Electrification Administration.

became the driver of the economy. This involved the mass production and the technological gear-up of two indispensable sectors in particular: the nascent aircraft industry, and the machine-tool-design sector. The great projects of the New Deal would now generate the immense volume of electricity needed to produce aluminum, which was used in aircraft production, and other wartime materiel.

In 1939, Roosevelt began to gear up military production; until the United States entered the war, following the Japanese attack on Pearl Harbor, on Dec. 7, 1941, the nation's war production was sent overseas, primarily to Russia and Britain (in 1939-40, under the "Cash and Carry" policy; and in 1941, under "Lend-Lease").

Roosevelt understood the overall principle involved: He shook up the nation with this challenge on May 16, 1940: "Our immediate problem is to superimpose on [existing U.S.] production capacity, a greatly increased production capacity. I should like to see this Nation geared up to the ability to turn out 50,000 planes a year." He called for modernization "to increase production facilities for everything needed for the Army and Navy for national defense, and to put all factories with Army and Navy supply contracts on a twenty-four hour basis."

In a May 17, 1940 editorial, the *New York Times* revealed the source of the funds for the mobilization: The "capital would be filled by loans advanced through the Reconstruction Finance Corporation."

From 1941 through 1945, the RFC extended in credit, the extraordinary amount of $23 billion, for the war mobilization. That would be the equivalent of $795 billion today.

In the mobilization, the United States would develop entirely new industries, like aluminum, magnesium, synthetic rubber; and nascent scientific fields, such as radar, the harnessing of the atom, and penicillin; as well, it would scientifically upgrade existing industries, like steel and machine tools. Each year, industrial sectors were pushed to what was thought to be their limits, only to exceed them, and then repeat the same process the next year; accordingly, over half a decade, the U.S. physical economy doubled in size.

To do this, the United States had to overcome the key chokepoint: an insufficient machine-tool-design sector, indispensable for an industrial gear-up. Machine tools build all the other machines which are used in every phase of the economy, from the machines that produce aircraft, to those that make aluminum, to those that make steel. This is done as follows: The most advanced scientific discoveries are incorporated into the design of the machine tool, which then transmits the higher technology into other machines and the economy as a whole. Without machine tools, new plant and equipment cannot be constructed, and old plant and equipment cannot be retooled. In 1938, the U.S. only produced 34,000 machine tools of all kinds.

In December 1940, after much internal debate, the RFC devised a mechanism to invest what would ultimately become $2 billion into America's machine-tool sector. The unique way it did this, was to use the Defense Plant Corporation (DPC), to make the investment. The RFC had set up the DPC as a subsidiary in August 1940, to make investments in production facilities for all U.S. defense production.

The DPC set up a pool, starting with $35 million, to purchase machine tools. It then advanced a portion of the purchase price (usually a third) to the manufacturer directly, and promised to pay all of the cost of the machine tool, if a private purchaser did not come forward. The RFC assumed all the risk. The machine tool was then put into a pool, where it would be available to any industrial corporation that needed it. With the money advanced from the DPC, the manufacturer could produce the machine tools, and also make the investment to expand his own capacity. In reality, and all parties understood this, *the RFC's Defense Plant Corporation was loaning money against the future production of machine tools.* The manufacturers used a significant portion of the DPC's advance as capital investment, expanding the production capacity of the machine-tool sector.

On top of this, the DPC program also lent money for working capital to the machine-tool manufacturers. The program was intended to allow the manufacturer to free up a portion of his own funds that he otherwise would have had to spend for working capital, into investment in new plant and equipment. This further increased the building of new machine-tool plants.

The DPC extended $284 million to the machine-tool program in 1941, $1.361 billion in 1942, and $223 million in 1943: a total of $1.945 billion. As a result, thousands of machine-tool shops were started up again, and added immense new capacity, either enlarging existing plants, or building hundreds of new plants. Machine-tool production reached

unprecedented heights. Under the impress of the RFC's Defense Plant Corporation, by 1942, the U.S. produced 307,000 machine tools, 50 times the level of 1933, and nearly ten times the level of 1938.

These machine tools had a far greater technological power than what came before—of critical importance in producing aircraft. For example, the engine for the Wright Cyclone 14 aircraft was composed of 3,500 different parts, totaling 8,500 pieces, requiring an estimated 80,000 machining operations. Therefore, new machine-tool techniques as well as machines were developed. In the Oct. 1, 1942 issue of *Automotive and Aviation Industries* magazine, George H. Johnson, then president of the National Association of Machine Tool Builders, provided an example:

"One of the most difficult and important assignments given the machine tool industry was the design and building of hundreds of special-purpose machines needed to convert the aircraft engine industry from small-lot to mass production." The article then refers to an accompanying photo of "a specially designed machine which drills, countersinks and spotfaces 224 identical 3/8 inch holes in an aluminum airplane engine crank case. It works simultaneously on 32 holes from two different directions. These operations previously took two hours twelve minutes. This one machine now completes the job in 23 minutes."

This 83% reduction in production time for this single operation, was repeated, in hundreds of thousands of production processes daily throughout the economy. The United States not only produced ten times the number of machine tools it had five years earlier, but each machine tool was two to five times more powerful and efficient. This not only generated a record output of defense goods and logistics-in-depth to defeat the Nazis and their allies, but that potentiality—a new economy—was embedded, and available for use when the war was over.

Library of Congress

A carpenter at work on the Douglas Dam in 1942, part of the massive TVA project. Great infrastructure projects like the Hoover, Grand Coulee, and Bonneville Dams were made possible by financing from the RFC.

Retooling the RFC

To accomplish this, the RFC had to be changed so it could extend its directed credit to all manufacturing that would need it for the task ahead. Three RFC officials played a special leading role: Emil Schramm, Clifford Durr, and Hans Klagsbrunn. When on July 15, 1939, Jesse Jones resigned as RFC chairman to become the Federal Loan Administrator (with general supervision over the RFC), Schramm became RFC chairman. Schramm had joined the RFC in 1936 as head of its levee and drainage work. He kept an open mind to new proposals. Durr and Klagsbrunn were leaders of what might be termed the "New Deal Caucus" at the RFC, strongly supporting Roosevelt's policies. Durr was chief of the RFC's legal section, concerned with bank recapitalization when the RFC restored the U.S. banking system. He resigned from the RFC in late 1941, over a policy dispute. Indicative of Durr's outlook, is the fact that, in 1955, he was the lawyer defending Rosa Parks during the Montgomery Bus Boycott. Born in Vienna, Klagsbrunn had joined the RFC in 1933, working jointly with Durr.

Sensing that war with fascism was inevitable, and taking seriously Roosevelt's clamor to launch a build-up, Klagsbrunn and Durr sought a total change in the RFC's lending policy to industry. As a result of amendments the Congress passed in 1933, the RFC was authorized to make loans to business, provided the business was in a position to pay the loan back; often the RFC would make such loans only if the business were distressed. Now, Durr and Klagsbrunn sought to have the RFC make loans to business for purposes of "defense." According to an historian, they wanted the RFC "to makes loans and purchase stocks in corporations for national defense purposes, either directly or through subsidiaries." Further, they sought for the RFC to have the power to set up subsidiaries that could purchase strategic and critical materials and also authorize loans for "the construction, expansion and equipment of industrial plants." They also contended that if the U.S. government financed the construction of a plant, it should own the plant, and lease it out to defense production companies.

Working with the approval of RFC chairman Schramm

and President Roosevelt, the Durr-Klagsbrunn proposals were written into legislation to amend and enhance the RFC's powers stated in the 1932 RFC Act. The bill was presented to Congress in May 1940, the same month Roosevelt called for producing 50,000 planes per year.

The legislation proposed the RFC could set up subsidiaries, as government-run corporations, to implement the above tasks. These corporations were empowered, among other things, to "purchase, and produce equipment, supplies and machinery for the manufacture of arms, ammunition, and implements of war."

The Congress passed the legislation containing these proposals, and amending the 1932 Act, enabling the RFC to create subsidiaries that did the major work for the economic mobilization for World War II: the Defense Plant Corporation, the Defense Supplies Corporation, the Rubber Reserve Company, and the Metals Reserve Corporation (these four were created between June and August 1940).

In 1941, the RFC recognized that it needed legislation that made explicit its authority to lend not only to the company that produced the final military unit, such as a tank, but also to the company that was a few steps down on the production chain, say the company that produced the ball bearing. It had legislation introduced that would give the RFC this power. P.D. Houston, president of the American Bankers Association, protested: "If business is going to the government for the bulk of its credit now, it will be dependent on the government in the future." Rep. Jesse P. Wolcott (R-Mich.) charged that the bill, if enacted, "would grant such broad powers to the executive branch of the Government as to make it possible to establish a Fascist state in the United States."

Congress, nonetheless, passed the legislation to give the RFC the further power it requested.

The strengthened RFC could now fulfill its mission to make investments in aircraft—the single biggest element of its financing—and to other industries.

With the RFC able to lend to virtually every part of the economy, at an interest rate of 3-4%, and as a result of Roosevelt leaning on the U.S. Federal Reserve Board to keep the discount rate at no higher than 1.0% from 1940-45—commercial banks could borrow at 1.0%, and lend at 3-4% interest rate—the credit market of the United States woke up to a new reality: Directed credit would go to manufacturing.

The Defense Plant Corporation went into full mobilization. The DPC financed, partially or wholly, 14 of the 15 largest airplane-engine plants constructed during the Second World War.

The Defense Plant Corp.

The Defense Plant Corporation directed credit to multiple industries, producing a technological shock-front that finished off the Depression. We look at three industries: aircraft, steel, and aluminum.

Aircraft Greenfield Plants: The DPC financed the construction of the $176 million Dodge aircraft-engine plant, near Chicago, one of the largest industrial plants in America. The factory built the engines for America's B-29 Superfortesses and the B-32 heavy bombers. The new plant complex consisted of 19 buildings spread over 476 acres, operating more than 100,000 machine tools, and employing more than 50,000 workers.

Aircraft Retooling: The RFC extended hundreds of millions of dollars to General Motors and many other companies to retool existing facilities to produce aircraft engines and parts. In toto, the DPC disbursed $3.03 billion to the aircraft defense sector: In 1939, the United States produced 5,865 planes; by 1944, some 96,000, a more than 15-fold increase. By its November 1943 peak, the army of aircraft plant employees grew to 2.1 million workers—12.4% of the total national manufacturing workforce.

Aluminum: Aluminum had been known since 1825, but its production is very energy-intensive; therefore its commercial supply had been limited. But the hydropower of the New Deal—projects such as the TVA—provided plentiful, cheap electricity. The RFC disbursed $702 million, and as a result, aluminum production rose 28-fold, from 100 millon tons before the war, to 2.78 billion tons in 1945.

Steel: Roosevelt had to have a knock-down, drag-out fight with the Morgan-led U.S. Steel and Bethlehem Steel companies, which resisted the government's efforts to expand steel production. The President, after consultation with RFC Chairman Jesse Jones, authorized the DPC to disburse $947 million to build and upgrade 183 steel and pig-iron plants, adding 10-11 million tons of capacity.

In all, the RFC, through the DPC and its other subsidiaries, between 1941 and 1945, extended $23 billion in credit, equivalent to $795 million in today's dollars. Each of the 2,300 projects triggered 10-30 projects/contracts in the industries that supplied the machines, materials, etc., into the main project. As the U.S. physical economy became more productive, the labor force was also upgraded, through extensive skill training by the government and private industry, and the creation of manufacturing jobs. Between 1939 and 1944, the manufacturing labor force jumped by 70% to 17.3 million, while the legions of unemployed shrank to less than 1 million.

TABLE 1
Employment by Sector, 1939-47
(In Millions)

Year	Armed Forces	Civilian	Manufacturing	Unemployed
1939	0.37	55.75	10.28	9.48
1940	0.54	55.64	10.99	8.12
1941	1.62	55.91	13.19	5.56
1942	3.97	56.41	15.28	2.66
1943	9.02	55.54	17.60	1.07
1944	11.41	54.63	17.33	0.67
1945	11.44	53.86	15.52	1.04
1946	3.45	57.52	14.70	2.27
1947	1.59	60.17	15.55	2.36

Solving Unemployment, Through Production

Using the Reconstruction Finance Corporation as a fulcrum, Roosevelt's approach was a total success. It absolutely defeated the Depression, and went far beyond. It used a crash mobilization, behind a scientific mission, incorporating the extraordinary infrastructure built during the New Deal.

Table 1 shows the change in the labor force. In 1939, the official number of unemployed, at 9.5 million, was almost as large as the total number of the manufacturing workforce, at 10.3 million. By 1944, the unemployment level had fallen to 0.67 million; there was an acute labor shortage throughout all sectors of industry. This represented a reduction of the unemployment level by 8.81 million.

From 1939 until 1944, the U.S. armed forces grew from 370,000 to 11.41 million. The common, but false interpretation of the war period, is that the armed forces simply absorbed the unemployed. But look at what happened to the manufacturing labor force: It grew by 7.3 million, or 70%, during the war years. In 1947, a recessionary year, the level of unemployment was 2.36 million, but never anywhere near the 1939 level, of nearly 10 million. The labor force had been changed.

The industrial production of the American economy, based on an index of 1967=100, had risen from 21.7 in 1939, to 47.4 in 1944, a more than doubling. The recovery of the American economy was achieved. When combined with the preceding infrastructural and other achievements of the New Deal, the result was explosive, anti-entropic growth.

A frightened reaction to Lyndon LaRouche's proposal to scrap existing policy, and adopt an American System sovereign credit system, as with retooling the auto sector—is to say that the ideas are lofty and good, "but let's be practical," they cannot ever be implemented.

As the U.S. financial system enters systemic breakdown, the LaRouche solution not only becomes necessary—it is the only solution. To anyone who says it can't be done, the Roosevelt precedent says, yes, it can.

Mittal-Arcelor Steal: Behind the Fairy Tale

by Jacques Cheminade

Mr. Cheminade is the pre-candidate for President of the Solidarity and Progress party in France. This abridged version of his article has been translated from French.

"An Indian ogre, Mittal Steel, has launched the biggest hostile takeover bid in the history of the European steel industry, to grab hold of European giant Arcelor. A plum industry may thus fall into the lap of a third world, family-run group."

Those lines are the children's fairy tale version recounted by mass media, concerning a gigantic financial operation that, in its initial stage, represents roughly 18.6 billion euros, with billions more to come.

On the French side, "economic patriotism" has nothing to do with it. What is actually going on here, is the next stage in "globalization," in which "creating value," or, in plain speech, generating cash flow, is deemed far more critical than any principles, whether national, industrial, or social. What the press refers to as "Indian" is no more Indian than I am, and what it calls "French" is a Luxemburg-based conglomerate.

The actual policy is to cartelize steel production and set up, as Mittal Steel's Chairman Lakshmi Mittal has aptly put it, a "global champion."

Now, what is Mittal Steel? It comes from India, where, backed by huge financial groups, the company became involved in buying out, and then restructuring major companies. It's just the sort of thing practiced by Claude Bébéar of the AXA insurance empire: Operating out of a tiny insurance firm at Rouen, les Anciennes Mutuelles, Bébéar swallowed up, step by step, bigger and bigger firms.

Although, unlike Bébéar, Lakshmi Mittal is not wont to pose for photographers in front of the carcasses of African game, he too is a "real killer." Said to be the world's third richest man, his London home is reported to have cost $100 million, and the pool in his garden to be encrusted with precious stones. Mittal *adores* France, and when his daughter Vanish married a City of London financier, he spent 60 million euros on a string of wedding feasts that flitted from Versailles through Vaux-le-Vicomte to Saint-Cloud. But look on the bright side: the currently ruling UMP spent eight times less on the coronation of Interior Minister Nicolas Sarkozy.