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Herbert Hoover was sworn in as president at the end of a decade of generally vigorous economic growth, marred by the deep but short recession of 1920–21. By March 1929, the economy was near the top of a vigorous boom. In his inaugural address, Hoover was lyrical in his vision of American prosperity: "Ours is a land rich in resources; stimulating in its glorious beauty; filled with millions of happy homes; blessed with comforts and opportunity. In no nation are the institutions of progress more advanced. In no nation are the fruits of accomplishment more secure. In no nation is the government more worthy of respect. No country is more loved by its people. I have an abiding faith in their capacity, integrity, and high purpose. I have no fears for the future of our country. It is bright with hope" ("Inaugural Address" 1929). However, that bright hope received a terrible jolt just seven months later with the stock market crash of October. In 1930, the unemployment rate jumped to nearly 9 percent, triple the rate of the previous year. During 1932, Hoover's last full year in office, nearly a quarter of the labor force was out of work (Smiley 1983).

Hoover did not fiddle while Rome burned. He had been an activist secretary of commerce for eight years, and he moved far more forcefully to influence the course of the economy than any previous president.

Because the agricultural sector was depressed when he assumed office, Hoover supported the establishment of the Federal Farm Board with authority to lend money to farmers and promote farm coopera-

tives. Concern with the speculative stock market boom of 1927–28, fueled by the low interest rates of the New York Federal Reserve Bank, led him to pressure the bank to desist in lowering rates and also to seek new regulations to limit margin buying and insider trading. Because of the stock market crashes of October 24 and November 29, Hoover feared that a major cyclic downturn was impending, and he sought to counter it with a reduction in taxes and expanded public works. He also held a series of conferences, organized with the help of the NBER, that involved representatives of business, labor, and government to address the impending recession ("American President: Herbert Hoover," n.d.).

Because he expected the economic downturn of 1930–31 to be similar to that of 1920–21 (sharp but brief), Hoover initially opposed major federal intervention. However, the large rise in bank failures and a huge jump in unemployment led him to support legislation establishing a vigorous public works program and temporary emergency relief. He also supported prolabor legislation curtailing injunctions against strikes and confirming the right of workers to organize in unions ("American President: Herbert Hoover," n.d.).

In addition to legislation and executive orders, Hoover engaged in extensive jawboning, organizing conferences of business, labor, and academics aimed at persuading large corporations not to cut wages and unions not to strike. These efforts, in which the NBER played a major role, were surprisingly effective.

Nevertheless, the rate of bank failures rose to unprecedented levels, and, by 1932, unemployment was eight times the level of 1929 (one of every four industrial workers was unemployed). Hoover sought to stem the decline in the economy by deficit spending, doubling the national debt, which reached 40 percent of GNP in 1932 (Gay and Mitchell 1929, 1933; NBER 1931, 1932; "United States Unemployment Rate," n.d.).

The New Deal

During the election of 1932, Roosevelt railed against the shocking escalation of federal government spending by Hoover and his expan-

sion of the federal bureaucracy. Roosevelt's running mate, John Nance Garner (the speaker of the U.S. House of Representatives), accused Hoover of "leading the country down the path of socialism" (Otto, Gorey, and Galvin 1982, 26). The recurrent themes of Roosevelt's campaign were a return to laissez-faire and fiscal solvency at all levels of government.

After his inauguration, however, Roosevelt unleashed a fury of measures aimed at turning the economy around through "relief, recovery, and reform." Much of this program was formulated before he took office by his "brain trust," academic advisers trained in economics and corporate law and connected to Columbia University.[1]

During his first hundred days in office, Roosevelt concentrated on overcoming the banking panic. The day after his inauguration, Congress passed legislation for a "bank holiday," which stopped the run on the banks, and then established the Federal Deposit Insurance Corporation, which provided federal insurance of deposits if banks failed. He also extended Hoover's relief programs under the supervision of a new agency, the Federal Emergency Relief Organization.

To remove single, young, unemployed men from the labor market, he established the Civilian Conservation Corps to work on construction projects in rural areas. Congress also broadened the antimonopoly powers of the Federal Trade Commission, and the powers of Hoover's Reconstruction Finance Commission were extended to permit government financing of industry and railroads. The Agricultural Adjustment Administration was established to raise farm prices by paying farmers to take land out of production and reduce the size of herds.

The National Industrial Recovery Act (NIRA), which became law on June 16, 1933, was the main instrument used by Roosevelt in his attempt to reorganize the economy. The act permitted the president to establish the Public Works Administration, which initiated construction projects that included the Boulder Dam (now Hoover Dam) in

1. Roosevelt's original brain trust included Adolf Berle (corporate law), Raymond Moley (political science), Rexford Tugwell (economics), and James Warburg (banking). Berle, Moley, and Tugwell all taught at Columbia University.

Colorado and the New York Triborough Bridge (now the Robert F. Kennedy Bridge).

The main feature of NIRA was its Title I, which permitted the president to cartelize industry and require farmers to take land out of production. To implement NIRA, leaders of each industry were asked to design codes to control economic activity by maintaining prices and wages, production, and employment. The aim of the program was to raise prices by reducing production, and, initially, it had the desired effect. But, after the fall of 1933, implementation of the program became sporadic as firms stopped cooperating. The increase in economic activity stalled between the fall of 1933 and 1935, when the Supreme Court declared NIRA unconstitutional (Smiley, n.d.; Romer 1993, 1999).

The 1934 congressional elections gave Roosevelt large majorities in both houses of Congress. Among the legislation that emerged was the bill creating the Works Progress Administration (WPA), which employed 2 million workers, including many writers, artists, and actors. The WPA put actors to work in roving theaters that performed in local neighborhoods, and the artists painted murals on the walls of public buildings. More important in its impact on labor was the National Labor Relations Act of 1935, which gave a powerful impetus to workers to engage in collective bargaining through trade unions. That act prohibited employers from blocking the activities of unions and required employers to bargain with representatives of unions. It established the National Labor Relations Board to enforce the act.

It has become something of a legend that the high level of government spending under Roosevelt pulled the economy forward. Indeed, between 1932 and 1936, real GNP increased at over 7.5 percent per year. It is also true that deficit spending at the federal level remained high. The decline in unemployment from 25 percent of the labor force in 1933 to about 14 percent in 1937 has also been attributed to fiscal policy. Somewhat puzzling, then, is the 1938 rise to 19 percent of unemployment, which lingered above 14 percent through the end of 1940, when Roosevelt promised to make America "the Arsenal of Democracy."

Overall, fiscal policy had little effect on the recovery from the De-

pression. During most years of Roosevelt's first two terms, there were substantial increases in local, state, and federal taxes. Although government spending increased between 1933 and 1939, in all these years except 1936 taxes exceeded government expenditures. While the federal government ran deficits, state and local governments had offsetting surpluses. As E. Cary Brown of the Massachusetts Institute of Technology (a specialist in public finance) put it, fiscal policy was unsuccessful in promoting recovery from the Depression, "not because it did not work, but because it was not tried" (Brown 1956, 863, 866).

The growth of the U.S. military was a major factor inhibiting unemployment. In 1933, less than a quarter of a million men were in the armed forces. By 1940, the figure had doubled, and, by 1941, the last peacetime year (Congress did not declare war until December 8), the armed forces had quadrupled. The armed forces and the armament industries soaked up much of the pool of unemployed workers (U.S. Bureau of the Census 1975, chap. D, esp. ser. D1–10).

The Federal Government Assumes Responsibility for the National Income Accounts

In June 1932, reeling from the prolonged recession, the U.S. Senate passed a resolution calling on the Department of Commerce to provide estimates of U.S. national income for the years 1929–31. Since there was no one in the Department of Commerce who was familiar with the construction of national income accounts, the department called on the NBER for help. By 1930, Simon Kuznets, who had become the principal investigator in this area at NBER, was "loaned" to the Department of Commerce to accomplish this task.

In January 1933, Kuznets established a working group at the Department of Commerce that included Robert R. Nathan, one of his former graduate students at the University of Pennsylvania. Kuznets's work on this project was informed by his command of welfare theory, which provided the basis for his estimating procedures. He also carefully checked and rechecked the work of his assistants in several ways. Kuznets, extremely well organized, not only completed the report within a year but also provided estimates for 1932, one year more

than requested by the Senate. The printed report had a main section of 157 pages and over 100 pages of additional material. "Both in accuracy and in wealth of detail, this report was far ahead of anything yet produced on national income," wrote two historians of government statistics (Duncan and Shelton 1978).

Kuznets's report was well received by a number of government agencies, which began to make use of the national income concept. It was also widely used by business organizations for market analysis and in the research of academic economists. Press coverage of the report was substantial, and sales of the report to the public exceeded those of the *Statistical Abstract* (Duncan and Shelton 1978).

In December 1934, Nathan was asked to return to the Commerce Department, where he became chief of a permanent national income section (later a separate division). He thoroughly reviewed and updated the earlier work in addition to producing new annual estimates of national income and related statistics, including unemployment. In June 1940, he was asked to shift to the newly established National Defense Advisory Commission, which advised Roosevelt on the U.S. military buildup (Edelstein 2001; Robert Nathan, in discussion with the Fogels, 1990; Carson 1990).

Making America the Arsenal of Democracy

On December 29, 1940, President Roosevelt delivered a speech aimed at building popular support for the British struggle against the Nazis. By that date, most of Europe, including France, was under Nazi control. British cities suffered heavy bombing attacks, and, after capturing the British Channel Islands, Hitler was poised to invade the British mainland.

Roosevelt warned: "If Britain goes down, the Axis powers [Germany, Italy, and Japan] will control the continents of Europe, Asia, Africa, Austral-Asia, and the high seas. And they will be in a position to bring enormous military and naval resources against this hemisphere." We would, he continued, "be living at the point of a gun," and we could survive only by converting ourselves "permanently into a militaristic power on the basis of war economy." The oceans could

no longer protect us from overseas aggression because advances in technology made it possible for bombers to fly from Europe and back without refueling. Calling on workers and managers of plants to cooperate in producing the needed armaments, Roosevelt promised a proper division between aiding Britain and U.S. national defense. Making ourselves "the great arsenal of democracy," he said, was both patriotic and correct policy (Roosevelt 1940).

Roosevelt's speech had a powerful effect on mobilizing the country for war. It precipitated a new globalism in place of the isolationist doctrine that prevailed after World War I. It also made it possible to expand greatly the number of men under arms, from 458,000 in 1940 to 1,801,000 a year later (U.S. Bureau of the Census 1975, chap. Y, ser. Y 904–16).[2]

Roosevelt's call to the nation was not the beginning of the U.S. mobilization for war. Although he ran his reelection campaign of 1940 on the promise not to involve the United States in another European war, the president began the mobilization for war in May 1940, with the establishment of the National Defense Advisory Commission (NDAC), whose mission was to mobilize industry and the nation for war. In June, Robert Nathan was asked to become the associate director of the NDAC, where he worked closely with the director, Stacy May, an economist, on the task of determining what the military requirements would be under alternative assumptions about the scope of U.S. engagement in the war. However, the planners at the army and navy were not interested in cooperating (Nathan 1994).

Nathan, therefore, spent the balance of 1940 working on what GNP would be at full employment, a project with which some of the military planners were cooperative. The analysis took account of the fact that one-seventh of the labor force was still unemployed and of the continuing underutilization of plant capacity. Nathan and his team estimated that, at full employment, 45 percent of GNP would be absorbed by the military, with the rest available for essential civilian activities. Within that context, they then estimated at what level of GNP critical

2. The rapid increase in the armed forces was facilitated by the Selective Service and Training Act, which passed Congress in September 1940.

shortages would arise. They focused on steel (needed for tanks, ships, and guns), aluminum (needed for airplanes), and copper (needed for munitions). On the basis of this analysis, plans were developed for the stockpiling of critical materials, the building of new plants and equipment, and the allocation of products for civilians (Robert Nathan, in discussion with the Fogels, 1990; Nathan 1994).

The steel industry leaders initially rejected the call for expansion of their plants because only a few years earlier they were operating at just 20 percent of capacity and were still well below capacity in 1940. Moreover, they expected that, after the war, the economy would return to the conditions of the Great Depression and they would be stuck with even greater overcapacity than previously. The government responded by offering attractive incentives, and, by the time Pearl Harbor was attacked, steel capacity was up by nearly 15 percent (Nathan 1994).

In the case of aluminum, the sole producer, the Aluminum Company of America (also known as ALCOA) did greatly expand its capacity. The government also aided in the establishment of two new aluminum companies, the Reynolds Company and Kaiser Aluminum. Jointly, these companies provided the output to create the large stockpiles required to accelerate military production at remarkable rates after the bombing of Pearl Harbor.

In June 1941, Roosevelt called on the army, the navy, and the Maritime Commission to estimate resource needs in the event of a war. The resulting estimates were combined into a plan that came to be called the "Victory Program" and were sent to the president in the early fall. After the attack on Pearl Harbor, Roosevelt used the Victory Program to formulate his objectives for war production in 1942 and 1943. In his State of the Union Address to Congress on January 6, 1942, he announced his "must list" of production targets for 1942: 60,000 planes, 45,000 tanks, and 6 million tons of shipping. For 1943, the goals were 125,000 planes, 75,000 tanks, and 10 million tons of shipping.

The question then became, Were these production goals feasible? If the goals were too high, they would result in many tanks without treads and many planes without propellers because not all components could be increased at the same rate. In deciding this issue, there

was a fundamental disagreement between civilian economists and senior military officials. The economists argued that the military's goals were unrealistic and would result in resources being squandered on parts that could not be used. The issue was ultimately decided by the Roosevelt administration, which sided with the economists (Brigante 1950; Edelstein 2001; Smith 1959).

That question was put to the Planning Committee of the War Production Board, of which Nathan was chairman and Kuznets chief economist. Kuznets prepared a highly classified memorandum using national income techniques to show that much more could be produced with ambitious but attainable goals than with unattainable goals. Eventually, the planners within each of the armed services were convinced to accept the lower production goals adopted by the War Production Board (Nathan 1994; Edelstein 2001).

World War II was by far the most extensive dedication of economic resources to war in American history. Out of a labor force of 60 million, more than a third were either in the armed forces or engaged in war production. World War II was also an exceedingly bloody war. All told, there were about 60 million deaths, one-third military and two-thirds civilian, with about 85 percent on the Allied side and 15 percent on the Axis side (Nathan 1994).

The Economist's War

Although the use of national income accounting to allocate resources between military and civilian needs was the most important contribution of economists to victory in World War II, it was not their only one. Economists played a major role in several wartime agencies, including the Office of Price Administration (OPA), the Office of Strategic Services (OSS), and the Statistical Research Group (SRG).

The OPA was established by executive order in April 1941 and then by congressional act in January 1942. Its mission was to control ceilings on all prices other than agricultural commodities and to otherwise ration scarce supplies of such important consumer products as tires, shoes, nylon, sugar, gasoline, coffee, and meats. Much of this rationing was done by the issuance of food stamps to consumers, who

had to present the coupons along with money to purchase rationed items such as meat.

The first head of the OPA was Leon Henderson, an adviser to Roosevelt on economic issues. John Kenneth Galbraith was second in command from 1942 to 1943, when he was forced out by conservatives in Congress who disliked the style and content of his policies (John Kenneth Galbraith, in discussion with the Fogels, 1990).

The OSS was the predecessor to the current CIA. Its aim was to collect and analyze all information bearing on national security. The agency was divided into three divisions responsible for specific geographic regions: Europe-Africa, the Soviet Union, and the Far East. Each regional division had an economics subdivision. In addition, the deputy director of the OSS, Edward Mason of Harvard University, was an economist. The table of organization included a unit that created national income estimates for the German economy as a tool to evaluate the Nazis' productive and military capacity. The OSS economists' estimates proved to be highly accurate (Guglielmo 2008).

The SRG at Columbia University was focused on the practical application of statistics to military problems. Among the eighteen professionals were two economists who would later become Nobel Laureates in economics, Milton Friedman and George Stigler, and two statisticians, W. Allen Wallis and Abraham Wald. Wallis's contributions included the invention of several new statistical techniques as well as the elevation of statistical analysis in graduate business programs. He was also the chairman of the committee that recommended that the recruitment to the armed forces should be based on well-paid volunteers rather than low-paid draftees. Wald is best known for his book *Sequential Analysis*, which provides answers to the question, How many successive observations of a new weapon are needed to make a sound decision about the effectiveness of its design? (Wald 1947; see also Guglielmo 2008; Warsh 2003).

Milton Friedman looked at the problem of the optimal number and size of pellets in an aircraft shell, finding that a large number of small pellets was optimal. He also studied proximity fuses, which are tiny radars built into antiaircraft shells that cause the shell to explode within a predetermined distance of an aircraft. The problem was to

avoid being too close to the plane, because then the shell might miss, or too far, because then the pellets of the shell would be going too slowly to do much damage. As a result of this work, the effectiveness of shells was more than doubled (Guglielmo 2008).

Restoring Europe

Europe was devastated immediately after the close of World War II. Blanket bombings destroyed major cities, with factories especially hard-hit. Also hit-hard were railways, bridges, and docks, and much merchant shipping had also been destroyed. Labor was malnourished and in disarray. Food was particularly short during the severe winter of 1946–47, and millions of refugees were kept alive with food supplied by the United Nations.

Impeded by labor strikes, the recovery was slow. In 1947, European economies were well below prewar levels and stagnating. Agricultural production and industrial production were more than 10 percent below their 1938 levels, and exports were off by over 40 percent. Housing shortages were severe, partly because of the large amount of housing that had been destroyed, and partly because of the stream of refugees flowing into Western Europe from Eastern Europe.

By the middle of 1947, the Truman administration realized that it could not let the German economy continue to deteriorate under the regime of deliberate economic neglect that it had been pursuing. It concluded that economic recovery in Europe required the contribution of a healthy German economy. In July 1947, when Gen. George C. Marshall became secretary of state, the decree that aimed at punishing Germany was scrapped. The new decree stated that a prosperous Europe required a productive and stable Germany. Some of the restrictions placed on German heavy industry were lifted. By the end of 1947, the United States declared that a general revival of German industry was of primary importance to U.S. national security.

On June 5, 1947, in a commencement address at Harvard University, Marshall proposed that American financial aid should be offered to assist in the European recovery. The offer was rejected by the Soviet Union and the Eastern Bloc countries but cautiously welcomed

by the West European nations. In the ensuing negotiation, the Europeans were encouraged to develop their own plan for how U.S. aid would be used. Congress allocated $12.4 billion to be spent over four years, beginning in 1948.

Over the four years of the Marshall Plan, the European economy grew vigorously. These years witnessed the fastest rate of increase in European history, with industrial production rising by 35 percent. There has been considerable debate over whether the Marshall Plan was necessary for this swift recovery. In any case, the rapid growth continued for another two decades.

Economic historians now refer to the years between 1950 and 1973 as an economic golden age for Western Europe. Per capita income grew at a rate of 3.4 percent, well above the rate for any previous or subsequent period of similar length for the region. During this period, Western Europe, which had already recovered its prewar level by 1950, more than doubled its per capita income (Maddison 2006).

The American Century

In February 1941, Henry R. Luce, publisher of both *Time* and *Life* magazines, wrote an editorial predicting that the decades ahead would be an American century, with respect to both the nation's political influence and its economic influence. The nineteenth century had been a British century, a century in which British economic and political influence spanned the globe and it was said that the sun never set on the British Empire (Luce 1941).

Luce's vision was not contradicted by subsequent developments. Unlike Western Europe, the U.S. mainland was spared from bomber attacks and the destruction of its industrial base. Consequently, while in 1950 per capita income in Western Europe stayed at its prewar level, in the United States it was nearly 50 percent above its 1939 level. In 1950, with only 7 percent of the world's population, the United States produced 25 percent of the world's GNP (Maddison 2006).

Despite the high performance of its economy between 1940 and 1950, there was a widespread belief that America was going to return to the massive unemployment levels of the Great Depression. That

foreboding was particularly intense in 1943 and 1944 in anticipation of the demobilization of over 11 million soldiers from the armed forces and some 9 million or more workers in defense industries who were simultaneously being let go. So there were about 21 million people about to be thrown into a job market of about 60 million, including the armed forces and the defense establishment (U.S. Bureau of the Census 1955, table 220).

But, as it turned out, the recession of 1945 lasted only eight months and was followed by a robust expansion that lasted thirty-seven months. Moreover, the recession of 1949–50 lasted only eleven months and was followed by another robust expansion that lasted forty-five months. The peak came in 1953 after the economy had already absorbed 20 million potentially unemployed workers, and unemployment was below 3 percent by 1953. Total civilian employment was up by 15 percent over the wartime peak (U.S. Bureau of the Census 2003, table 771; cf. Bratt 1953).

Nevertheless, concern over a return to massive unemployment continued into the 1960s and was strong in the 1970s and 1980s. Although unemployment exceeded 5 percent during some of the years of the long 106-month Kennedy-Johnson expansion, it dropped to 3.5 percent in 1969. Yet, even a quarter of a century after the war, there were still economists (Kuznets 1971a; Maddison 1995; Crafts and Toniolo 1996) who believed that the United States could not have an economy with both growth and low unemployment unless there was a very big government sector. This belief persisted despite much contrary evidence. The United States and other rich countries were well into the post–World War II expansion, the golden age, with growth rates twice the long-term average of the other world leaders. Measured by per capita income, the long-term average growth rate was about 1.9 percent per annum, but the growth rate during the golden age was, for Western Europe, about 3.8 percent. Over the whole period 1950–99, growth rates for GDP averaged between 3.3 and 3.4 percent in Western Europe and the United States.

The wide-ranging debates over the causes of the accelerated growth rates of the golden age suggested some points of consensus. These included the reduction of barriers to international trade, successful

macroeconomic policies, and opportunities for catch-up growth following the end of World War II, especially in France, Germany, and Italy. The destruction of much of the prewar capital stock, the reconstruction aid that rebuilt industry with more advanced technology, the successes of macroeconomic policy, the elasticity of the labor supply, high levels of education, and the weakness of vested interests have all been advanced as explanatory factors (Abramovitz 1990; Mills and Crafts 2000; Crafts and Toniolo 1996; Denision 1967; Maddison 1987, 1991, 1995; Olson 1982).

The eventual fading away of the stagnation thesis, of the notion that there was something in the operation of capitalistic economies that made them inherently unstable, brought to the fore several new concerns. These included the growing gap in income between developed and less-developed nations and a new emphasis on cultural and ideological barriers to economic growth in poor countries. In contrast to some of the early theories that suggest that poor countries would grow rapidly if there were large injections of capital from rich countries, by the 1960s the emphasis was that the export of capital would fail to promote growth unless the deep cultural barriers that made these countries unreceptive to the conditions needed for economic growth were somehow overcome. Some commentators, most notably the Nobel Laureate Gunnar Myrdal, said that India would have difficulty sustaining high growth rates because it promoted asceticism and thus undermined the acquisitive culture that spurred Western Europe (see Myrdal 1968).

There was also a shift from worries about oversaving, which never caught on at certain universities. The concern did not catch on at Chicago or at Columbia. Nor did it catch on at the NBER. Analysts such as Kuznets thought that savings were not a threat to but a necessary condition for economic growth because savings were needed both to build infrastructure in developing countries and to get a thriving public sector growing (Kuznets 1961a; Colm 1962; Paul Samuelson, in discussion with the Fogels, 1992).

There was, about this time, a new emphasis on export-led growth. The practice of poor countries selling their exports to rich countries got a bad name during the interwar period and was widely viewed

as exploitation of these countries by imperial powers. The later view, looking at the Canadian and American experiences, was quite the contrary. Selling raw materials and other labor-intensive products to the rest of the world is a way to get capital and entrepreneurship from the developed countries to provide those same talents and qualities to the less-developed countries. Thus, at the outbreak of World War I, foreign capital owned one-third of the bonds of American railroads (North 1966; Colm 1962; Ripley 1915; Paul Samuelson, in discussion with the Fogels, 1992).

One of the great discoveries of economic historians during the 1960s—which was confirmed in the 1980s and 1990s—was that the thesis that English coupon clippers got rich from investments in poor countries such as India and then withdrew large sums of annual earnings was wrong. After the computer revolution, it was possible to put the whole late nineteenth-century portfolio of British overseas investments into machine-readable form. It turned out there was a strong correlation between a country's per capita income and the share of the British overseas portfolio invested in it. The United States received the largest share, followed by Canada and Argentina (which at the turn of the twentieth century had one of the highest per capita incomes in the world). Of course, that did not stop die-hard critics of Western imperialism, who denounced Britain for *failing* to have invested in more underdeveloped nations (Simon 1970; Davis and Huttenback 1986; Stone 1999).

There was also about this time (the late 1960s and early 1970s) a new concern about rapid population growth smothering the potential for economic growth in the less-developed countries. It reached the peak with the warning in *The Limits to Growth* (Meadows, Meadows, Randers, and Behrens 1972) of the Club of Rome, which, like Malthus, envisaged that the world population was getting so large so quickly that it would soon outrun global capacity. That was not a view shared by demographers since they believed that, with a lag of about twenty or so years, the fertility rate would follow the death rate down. The world would reach a low-level rate of population increase at low levels of the death rate and birth rate in the same way that there had been low-level growth at high birth and death rates. An acceleration in the

growth of the world's population was a transitory phenomenon, owing to the lag in the decline of the birth rate behind the death rate. This forecast became known as the "theory of the demographic transition."

Within two decades, there were many countries with total fertility rates below replacement. Of course, Kuznets never worried about excessive population growth in the West; indeed, he argued that a condition for modern economic growth was that the rise in per capita income had to be accompanied by an increase in population. That was one of his central tenets in his 1966 *Modern Economic Growth*, and he repeated it again in his Nobel address (Kuznets 1971b).

A related concern with the world population taking off in an unprecedented way (with population doubling in less than half a century) was the belief that the production of food could not keep up, and in 2013 we are worried about the global epidemic of obesity. One of the countries that was supposed to be starving was China, which increased its per capita food supply by over 70 percent in four decades. For the world as a whole, calories per capita have grown by 24 percent during the same period, despite the doubling of the population (Fogel 2005).

As remarkable as what was widely forecast in the post–World War II years were the things not foreseen in the 1940s, the 1950s, or even the early 1960s. One of these was the extraordinary economic growth in Southeast and East Asia, beginning first with Japan, which in four decades went from a poor, defeated country to the second largest economy in the world, increasing per capita income tenfold. This was a feat that took leaders of the industrial revolution about 150 years to accomplish. The economic miracle of the high-performing Asian economies other than Japan was also unforeseen, and that state of mind persisted into the 1970s. It was not that economists did not know that per capita income was rising in such countries as Singapore, South Korea, Taiwan, and China. There was, however, a widespread opinion that it could not last, that somehow it was a fluke.