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Economic Report of the President

Transmitted to the Congress
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ECONOMIC REPORT OF THE PRESIDENT

To the Congress of the United States

This is the one-hundredth annual Economic Report of the President to the Congress of the United States. It differs in one respect from its predecessors. Earlier reports focused on the recent past, and the near-term outlook. This report describes changes in the American economy during the past century; its emphasis is historical.

As usual, this summary is based on the Annual Report of the Council of Economic Advisers. Dr. Moolai Kim chairs the Council and serves as a member of my cabinet. She and the members of the Council, Dr. Ngume Bomboaso and Dr. Kirsten Ellenbogen, were aided by the Council's staff of economists and statisticians. Because of its scope, preparation of this centennial report required the assistance of a number of expert consultants.

My report includes a few essential statistics. Details for the century are given in a 450-page appendix to the Council's Annual Report. It shows the extent and rates of change in major economic variables. The complete report is available on a single super compression disk (SCD) which holds the equivalent of 50,000 printed pages. SCDs will be sent to all depository libraries, and may be purchased by others at cost.
THE ERA OF ROBUST ECONOMIC GROWTH

The first year after World War II marked a major turning point in American economic history. After more than a decade of economic decline, followed by four years of wartime austerity, the Nation entered a period of sustained growth. This lasted more than a quarter of a century, and led to profound changes in the lives of most Americans.

Long-term growth was not accompanied by short-term stability. There were several business cycles during that period. Sustained growth refers to the trend around which those cycles of recession and recovery occurred. During the last half of the 20th century most economists referred to any increase in annual output as "growth." That was misleading. Current terminology is based on an older statistical tradition, that distinguishes explicitly between long-term trends and short-term cycles.

For twenty-seven years after 1946 all major indicators followed a rising trend. Prices rose, but aggregate productivity increased faster so there was no inflation. This brief era is recognized as the Nation's Golden Age. No responsible contemporary economist believes there will be a repetition of that short but memorable period.

Robust growth did not lead to Utopia. Many Americans failed to share its benefits. But the view was nearly unanimous, until well into the present century, that if real growth could continue indefinitely the problem of distribution would be mitigated or perhaps even solved. If that goal could be realized, many theorists believed the Nation would have reached a state of equilibrium; a condition under which no one's economic position could be improved without damaging someone else's.
THE IDEA OF ECONOMIC GROWTH RE-EXAMINED

Long after the end of the Golden Age, growth continued to be the major preoccupation of conventional economists. It also remained the primary goal of economic policy. A few doubters asked if it could go on forever. But they were ignored by those in the mainstream.

"Growthmania," as critics labeled the prevailing view, carried the day. Belief in unlimited progress led to exuberant consumerism: the fashion industry flourished; personal credit grew at an unprecedented rate. Lip service was paid to the idea of conservation, but there was no concerted effort to minimize waste.

Since the time of Adam Smith, the purpose of economic activity had been viewed as the satisfaction of consumer wants. This was to be accomplished by the efficient use of scarce resources for which there were unlimited and competing uses. During the era of growthmania, however, scarcity quietly dropped out of the picture. The idea of "unlimited substitution" took its place. This was the notion that scarcity was not a growth constraint in a society with advancing technology. If one resource (say, iron ore) ran out, simply substitute another (plastics, for example). Unfortunately, as subsequent events were to prove, that comforting concept was based on wishful thinking rather than scientific analysis. For unlimited substitution to work there would have to be an unlimited supply of cheap energy. For more than three decades, however, energy prices have increased faster than the general price level, reversing an earlier trend. The concept of unlimited substitution has now joined the scrap heap of other economic fallacies of the past.

Robust economic growth ended in 1973. But the central role of growth in traditional economic theory was not abandoned until we were well into the 21st century, and it remained the central goal of economic policy long after most economists recognized that it was unattainable.

The first amendment to the law establishing the Council of Economic Advisers called for a
national commitment to full employment and balanced growth. That amendment was adopted five years after the era of robust growth had ended.

The details of the changes that occurred in 1973 are given in the Council's report, and will not be elaborated here. No single economic indicator can tell the whole story, but one of the more important is aggregate productivity. Between 1946 and 1973, output per hour of all employed workers rose 111 percent, or 4.1% annually. For the next 27 years it increased 27 percent, or one percent per year. At the turn of the century, a slow but perceptible decline began. Changes in this key indicator were sufficient to lead to a critical examination of the concept of economic growth.

Traditionally, economic growth was defined as an increase in real Gross Domestic Product (GDP); the total output of goods and services produced domestically in a given time, adjusted for price changes. That definition is now obsolete. It has been replaced by "real GDP per employed worker." When this measure followed a rising trend the economy was growing. When the trend turned downward, as it has been for the past half-century, the economy is contracting. More labor time is now required to produce a unit of identical output than was true in the past.

After more than seventy years of discussion and debate, there is less than complete agreement among economists about why a number of key economic variables which had moved together for a quarter-century began to diverge. There is no disagreement, however, that those divergences, which started in 1973, have continued. The net effect has been a significant decline in productivity. A few dissenters remain, but a majority of economists expect that trend to continue into the foreseeable future. The reasons for this are spelled out in later sections of this report.
Ideas are important when they influence public policy. In spite of evidence that domestic output per worker has been declining for several decades, a few Federal policies remain growth-oriented. One of the great thinkers of the 20th century, the British economist John Maynard Keynes, provided an insight into why this is so: "The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds [General Theory, 1935, p. viii]." That aphorism probably is more important today than it was in Keynes's time.

POPULATION

The century under review was one of exponential population growth, with profound social and economic consequences. There were about 2.4 billion souls on the planet in 1946. Global population grew at a rate of 1.5%, compounded annually, to 10.6 billion today. It is expected to peak, at approximately 12 billion, before the year 2100, then enter an era of slow but sustained decline.

The notion of "limits to growth," imposed by the scarcity of resources and energy, was widely debated in the mid-1950s. Technological optimists of that period scornfully rejected the notion. It is, however, no longer a debatable topic. Most analysts believe global limits have been reached. Many Americans think this is true of our Nation as well, although that view is not shared by the residents of more crowded countries, nor by the United Nations.

In 1946, the United States had 141 million inhabitants. Last year that number reached 458 million. The growth rate, compounded annually, was 1.2%. Every year since 2010, the natural rate of increase, births minus deaths, has been zero or negative. Almost 200 million U.S. residents, or 43% of the total, are first or second generation immigrants. A large, but unknown number have entered the country illegally. The majority comes from Latin America and Asia. In
spite of efforts to enforce restrictive measures the number of illegal immigrants has increased. Population growth stemming entirely from immigration has changed the Nation’s ethnic composition. The United States was overwhelmingly a society of European immigrants and their descendents in 1946. Last year, the Bureau of the Census estimated that 38% of U.S. residents were of Hispanic origin; 31% had European backgrounds; 22% were of Asian descent, and nine percent were Blacks who trace their lineage to Africa or the Caribbean area. Trends for the past century are given in the chart headed "Ethnic Changes."

The age composition of American citizens also has changed dramatically. In 1946, the median age was 27.5 years. Last year, half of all residents were 41 or older. Americans are living longer, due mainly to medical advances. Life expectancy at birth, in 1946, was 64.6 years. Now it is 83.5. The aging of the Nation has profoundly affected labor force participation, education, the delivery of health care; virtually every aspect of our lives.
Throughout the past century, the labor force and employment increased at slightly faster rates than that of population. And for the past three decades the Nation’s non-institutional population (NI) has declined as a percentage of total population. This stems in part from improvement in measurement techniques but primarily that is the result of reforms in penal and mental institutions. Those are discussed in detail in the Council’s report, and are summarized in the chart titled "Population."

![Population, Labor Force, Employment Chart]

**ECONOMIC PERFORMANCE**

Gross Domestic Product (GDP), in current dollars, was $90 trillion last year, a gain of less than one percent over 2045. Since 1946, when GDP amounted to $190 billion, there has been a staggering increase in this indicator. Most of it was not real. It was the result of unrestrained inflation between 1973 and 2032. To obtain a more meaningful figure, GDP is expressed in 1992 dollars, a year relatively close to the midpoint of the century under review.
Real GDP in 1946 was $1,846 billion. It grew at an average annual rate of 7.6% until 1973, when it reached $4,216 billion. From that year to the end of the 20th century the annual growth rate dropped to 2.3 percent. As the millennium ended, real GDP stood at $7,022 billion. The growth rate then dropped to 0.15% bringing last year’s real GDP to $12,149 billion. Details are shown graphically in the figure titled "Gross Domestic Product."

The number of employed workers increased by an average of 1.6% per year during the past century. In 1946, employment averaged slightly more than 55 million. It had increased to 247 million by last year. A century ago, the value of an average worker’s output was $33,738 expressed in 1992 dollars. It increased at an average rate of 2% until 1973 when it amounted to $51,190. Since that peak year real GDP per employed worker has declined. Last year, it amounted to $34,879. This is $1,141 more than the 1946 level. It is, however, $16,311, or 32%, less than its counterpart in 1973, the end of the Golden Age of Growth.
Real GDP per employed worker is an aggregate economic indicator. It should not be confused with average earnings or per capita income. Those measures are discussed in a later section. It is, however, the best indicator of overall economic performance, or aggregate productivity, yet developed. A comparison of trends in GDP per employed worker, and GDP per capita, during the past century, is given in the chart headed "GDP Averages."

In spite of slow decline, the Nation does not face a crisis. We are an adaptable people. It was easy to adapt to the "Age of Affluence," as it was labeled by a leading economist of the 1950s. Regrettably, many believed affluence could last, if not forever, well into the foreseeable future. That belief was sustained for many years by those who gained most from rampant
consumerism, the advertising and fashion industries. It had the intellectual support of most economists who were among the last to admit that robust growth had finally come to an end.

It has been more difficult to adapt to stagnation and slow decline. For the past quarter-century, however, our citizens have been given realistic appraisals of the current economic situation and future prospects by the Nation's political leaders. We acknowledge that serious problems of equity remain, and they must be dealt with in ways that will not adversely affect incentives to work and invest.

**INCOME, EARNINGS, AND INFLATION**

The average earnings of nonsupervisory, nonfarm workers amounted to $2,274 in 1946. Last year's average was $72,850, an annual increase of 3.12%. Expressed in constant dollars, the 1946 figure is $12,599. Last year it was $12,004. Real earnings for these workers, who account for most of the employed work force, declined almost five percent over the past century. The reduction since 2032 is too small to be statistically significant. This shows that the Cost Containment Act passed in that year is working as well as its supporters said it would.

Current dollar per capita income in 1946 was $870. Last year's counterpart was $108,180 but the "gains," were illusory. These figures are given only to stress the magnitude of inflation during much of the past century. In 2032, per capita income stood at $106,449. It has gone up only 1.6% in the last fourteen years, further proof of the efficacy of the containment Act. Expressed in constant dollars, per capita income was $3,398 in 1946. It increased to $18,197 in 1997. Since then it has declined at an average annual rate of 0.07% and stood at $17,562 last year. These changes are summarized in the "Per Capita Income" chart.
Between the 1980s and the second decade of the 21st century, members of Congress argued incessantly about federal deficits and the need for a balanced budget. In retrospect, it is obvious that the real villain of public finance was inflation engendered by a long period of reliance on "free market" policies. Congress recognized this when it enacted the Economic Stability Act of 2020, which, among other things, introduced a rational system of national income accounting. The details of this important policy shift are given in the Council’s Report.

Passage from economic growth to slow decline is not a phenomenon unique to the United States. Japan and Germany, whose industrial economies were nearly obliterated during World War II, rebounded strongly after 1946 thanks to the generous aid of the United States. They, as well as other developed nations; Great Britain, France, Italy and the Scandinavian countries, for
example, enjoyed resurgent post-World War II prosperity. But during the final quarter of the 20th century, growth rates in all industrial nations declined, some more than others. Their situations in recent decades have been similar to that of the United States.

**ENERGY AND THE ECONOMY**

The transformation of the American economy since 1973 cannot be explained by a single cause. One of the most important, however, is the rising cost of energy both in terms of itself and in money. The former is called the **own** price of energy. It includes all energy consumed in the production of a particular type of energy to its end-use. In the case of oil, for example, that means drilling, transporting, refining, and all other activities involved in moving oil from its underground source to the engine or boiler which will consume it. If this amounts to, say, one-hundredth of a barrel it will be highly profitable to produce oil and its price will be low, relative to other prices, encouraging profligate consumption. The most accessible oil is always the first to be drilled. As it becomes necessary to go deeper, more energy is required to pump a barrel to the surface. Eventually, because of diminishing returns, it will require **more than a barrel of oil** to pump another one to the surface. At that point the oil field is abandoned. Billions of barrels of oil might remain deep in the bowels of the earth. No rational person, however, will use more than a barrel of oil to produce another barrel. The same reasoning applies to coal, natural gas, uranium, or any other non-renewable source of energy. Indirectly, it also applies to solar, water, wind power and other renewable sources because they cannot produce a surplus to replace capital equipment as it wears out. In the long-run, all sources of energy are subject to diminishing returns.

Scientists and engineers have pursued the goal of "cheap" energy relentlessly. Each technical breakthrough has been hailed as the discovery which would usher in an age of
abundance. When atomic energy was being developed to fuel power plants, some scientists said electricity would be so cheap there would be no need to meter it. The same claim was made for fusion energy during its developmental phase. The first fusion plant went on line about a decade ago; several now serve the Nation's heavily-populated areas. Experience shows that fusion is the most costly form of energy ever developed. It is necessary, however, to base as much economic activity as possible on nuclear and fusion plants. All but small amounts of petroleum, and all coal reserves, have been earmarked for the military, and the small fleets of airliners still in commercial operation.

The first "energy crisis," in the 1970s, was artificially engendered by an international cartel. Energy prices rose sharply until the early 1980s, when the cartel fell apart. They then declined, relative to other prices, until the beginning of the 21st century. The demand for fossil fuels continued to increase while supplies contracted. Since 2010, energy prices have increased almost twice as fast as the general price level. All projections by experts in this field show a continuation of that trend.

HOUSING AND TRANSPORTATION

Habitats and modes of transportation have been altered by events of the past century. Twelve years of depression and four years of war had curtailed residential construction. There was a surge starting in 1946 which continued for the next quarter-century; one of the forces fueling robust economic growth during that period. Affluent urban dwellers moved to expanding suburbs, and developed a new life style centered on the family car or cars. The automobile industry, which had expanded capacity during the war to produce tanks and other weapons, quickly converted its production lines, and turned out a steady stream of new vehicles. A system of interstate highways was built to relieve congestion, and soon was congested itself.
Meanwhile, the commercial air transport system expanded steadily. The only laggards were America's railroads, once the centerpiece of the Nation's transportation system. By the end of the 20th century many believed that passenger railroads would soon be historical curiosities. The future, they thought belonged to airlines and private automobiles. That the Age of Affluence would continue was simply taken for granted.

At the turn of the century there were more than 100 million housing units in the Nation. Of these, 64 percent were owner-occupied, and most were single-dwelling units. The Bureau of the Census estimated 189 million occupied units last year; 51 million, or 27 percent, were owner-occupied. Fewer than half are detached houses, the rest are condominiums or owned apartments. Most Americans live in small apartments in large rental complexes. About two-thirds of the latter are publicly-owned. Rents on these apartments are determined by maintenance and amortization costs. Rents on privately-owned apartments are higher. In principle, this reflects quality differences.

The spatial distribution of dwelling units has changed. From their early days until well into the 21st century, towns and cities grew extensively. Farmland gave way to suburban development. As energy prices spiraled upward, however, the trend was reversed. Towns and cities occupy less space today than they did fifty years ago, but contain twice as many residents.

Changes in land-use patterns have had both positive and negative effects. More land is now available for cultivation, and the increased production of food necessitated by the continued growth of global population. On the negative side are problems long associated with urban congestion.

Regrettably, many dwellings are sub-standard. Housing space is at a premium. In some areas water is rationed, and electricity used sparingly. Elevators in some older high-rise
structures are often inoperative. Adequate heat and air-conditioning, taken for granted by middle-
income families in the past, are typically found now only in upper-income apartment units. This
has been especially hard on the elderly during periods of temperature extremes.

This Administration and Congress are giving these problems top priority. We hope that a
year from now we will be able to report that measurable progress has been made.

Changes in housing patterns, and rising energy costs, caused a transformation in
America's transportation system. Fifty years ago, 147 million automobiles were registered in the
United States; almost 1.5 per household. An additional 45 million busses, trucks, and taxis
crowded roads and highways. Last year auto registrations were down to 37 million, a decline of
75% since the year 2000. Today, we estimate that one household in five owns a motor vehicle,
most of which are electrically-powered. In spite of efforts to improve efficiency, the average
electric auto travels less than 200 kilometers between recharges. Meanwhile, the number of
trucks, busses, and taxis grew to almost 61 million, an increase of 35%. With large battery packs,
which can be exchanged at recharging stations, trucks and busses make regular inter-city runs. A
limited amount of coast-to-coast truck traffic has survived, primarily to carry priority mail.

As the age of the combustion engine began to wind down, the Nation was caught with a
major shortage of railroad capacity. The Department of Transportation has regulated rail and
airline systems since 2028 when the travel crisis became acute. Space on trains and airliners is
limited to business travelers, and those who must travel because of family emergencies. No
expansion of airline capacity is anticipated due to fuel limitations, but rail capacity is steadily
increasing. Within a few years American railroads should equal the performance of those in
Japan and western Europe. Rationing will then be discontinued. The decline in automobiles
would have led to a crisis in short-distance travel had there not been a timely increase in public
rapid-transit systems, and a large increase in the use of bicycles. Technology has radically altered the design and capability of the latter. This was demonstrated last June when Mrs. Ada Argus, of Avis, Ohio, rode her 23-speed, auto-shift, titanium bicycle 75 miles in less than four hours, then went square dancing to celebrate her 70th birthday. The Department of Transportation estimates that there are more than 130 million active bicycles of this class.

TECHNOLOGY AND PRODUCTIVITY

Economic Reports from the 1970s to 2020 dwelt extensively on growth. Research and technological progress, those reports asserted, led to increased productivity; the prime mover of growth. Leading economic journals echoed that theme. The necessity and feasibility of continuous growth were firmly established articles of faith among traditional economists.

The President's Report of 2021 was the first to challenge the alleged linkage between technological progress and economic growth. By then the changes described in the present report were too obvious to be ignored. Authoritative data showed clearly that there was significantly more scientific and technical progress between 1973 and the end of the 20th century there had been between 1946 and 1973. Yet there was robust growth during the earlier era, and economic stagnation during the latter. The 2021 report also concluded that there are forces external to the economic system which government policy cannot override. An example is the pressure of an expanding population on dwindling resources. This, most economists now recognize, is the major cause of economic decline. Contraction is exacerbated by a downward trend in aggregate productivity partly due to the long-run shift from a production to a service economy. There are no magic "policy levers" which political leaders can manipulate to shield the economy from such external or historical forces.
During the era of economic growth the dependence of progress on science and technology was taken for granted. Federal support of scientific research required no justification. Scientific progress does not guarantee economic growth, but scientists and engineers will have significant roles to play in learning how to do more with less if we are to avoid non-catastrophic decline. Maximizing utility while minimizing waste has become the new technological imperative.

The federal government will continue to support "pure" research, and the public must know this is not a waste of taxpayers' money. The annals of science record numerous cases where research once regarded as "useless" provided the basis for later discoveries of vast benefit to humanity.

We also recognize that some technological developments have had few positive social or economic impacts. The widely touted "information revolution," which peaked early in the 21st century, is a case in point. Speeding the transmission of information, and integration of the global computer network with television, have had some commercial and educational applications. Those developments also made it possible for heads of state to work more closely together, and with the United Nations. Some resources, however, were diverted from productive uses to entertainment, mostly at a juvenile level. The integration of computers and television networks produced dazzling technical results, but did not slow the rate of long-term economic decline.

Another example of unwise resource use was the manned space program. Until early in the 21st century, NASA, and its counterparts in the former USSR (and later Russia) spent huge sums on manned space flights and the construction of small space stations. Those programs were discontinued during the recession of 2011 after a detailed analysis by the General Accounting
Office revealed that the cost of manned space flight far exceeded any conceivable benefits including highly-publicized "spillover" effects. NASA's budget was reduced to 25% of its pre-2011 level. The unmanned space program continues to be highly productive. It is an excellent example of cost-effective scientific research.

COMPETITION OR COOPERATION

The earliest economists, Adam Smith and his followers, stressed the virtue of competition. They thought in terms of vigorous efforts by producers to increase efficiency so prices would fall and markets would expand. If each producer were free to maximize his or her private interests, Smith postulated; the best interests of the commonweal would also be served.

Traditionally, management paid lip service to "the free market", but avoided price competition. What business leaders wanted was not the free market Smith had in mind, but freedom from any form of government intervention. Individual sellers tried to maximize revenue by "differentiating" brand names in the minds of potential buyers by advertising, frequent style changes, and real or imaginary "upgrading" of old products. Hucksterism reached its zenith during the 2020s, a period some analysts call the "Era of Free Market Madness." The move toward deregulation, which started in the late 1970s, continued until passage of The Economic Stability Act of 2020. That Act, and several subsequent laws, which culminated in the Price-Cost Containment Act of 2032, did much to curb economic instability, reduce waste, and stimulate resource conservation. The basis for this major policy shift, which reflected a change in public attitudes, deserves brief discussion.

In 1940, the American economy was slowly beginning to recover from the paralysis of the Great Depression that started in 1929. By 1942, the Nation was fighting a war on two fronts, and the economy was operating at full capacity. Millions of young men and women, eventually a
total of 12 million, entered the armed forces. And millions of women, with no prior labor force experience, were employed in mills, factories and offices. Weapons and military supplies were produced in volumes no one could have imagined a few years earlier. This transformation of the economy could not have been accomplished if energy and idle resources had not been available in abundance.

What is remarkable about that period, from an economic point of view, is that the wartime economy operated at full capacity with almost complete stability of wages, prices and profits. There were scarcities of consumer goods: gasoline, meat, and sugar, for example, had to be rationed. Die-hard critics said the system wouldn't work. Black markets would develop, they asserted, to undermine the entire effort. They were as wrong as those economists who had predicted a short recession after the stock market crash of 1929. Not only did the American economy work; it worked better than it had at any time in the past. No one today doubts that this remarkable achievement was due to the substitution of cooperation for competition. Americans united as never before to achieve the goal of military victory. Unhappily, for later generations, the success of this unique experiment did not deter business interests from moving quickly to discard the cooperative system so they could take advantage of pent-up demand, and a huge volume of wartime savings, as soon as the war ended. A pliant Congress was only too willing to accede to the wishes of the business community. Together, they ushered in the age of consumerism; one of the factors which brought the Nation to the verge of collapse early in the 21st century. Another was reliance on monetary and fiscal policies that made sense a half-century earlier, but which were totally unworkable in an economy characterized by slow but steady decline.
The political apathy of the 1990s and the early years of this century gave way to rising political unrest. There were frequent clashes between citizens and the police. Unchecked, those episodes could have led to the nihilism and anarchy now rampant in a number of by-passed nations (once referred to as "third-world" countries).

Americans have been fortunate in times of crisis. The emergence of charismatic leaders has led to orderly rather than violent change. In the 1930s President Roosevelt's New Deal stabilized our democracy when other nations were turning to totalitarian systems that ultimately failed. In 2014, David Orson Correll emerged as leader of the Democratic Party. Two years later he was elected president with the largest majority ever recorded in this country. His party also won strong majorities in both houses of Congress during a period of national political rejuvenation. The percentage of eligible voters casting ballots increased in each of the past six elections, as did the proportion of women in Congress. The latter now stands at 44% in the House and 37% in the Senate.

Under President Correll's guidance, Congress established the Commission on Economic Stability in 2017. It included representatives of every major interest group in the Nation. The assigned task of its 217 members was to develop a cooperative system to guide the economy.

Critics maintained the Commission was too large and unwieldy to accomplish anything. They were wrong. Its report, published in July 2019, was given wide publicity by the print and electronic media. Congress considered responsible public feedback, and after extensive debate passed the Economic Stability Act of 2020. It was amended a number of times then re-written as the Price-Cost Containment Act of 2032. This law, which remains in force, established The Cost-Price Administration (CPA), which carries out the mandates of Congress. It has succeeded beyond the expectations of its most ardent supporters.
The philosophy behind current Federal economic legislation owes much to the World War II experience. President Correll, and his successors, convinced our citizens that the economic problems of this century require the same concerted effort that led to victory in the last global war.

It is impossible in this brief summary to describe in detail how the CPA develops its programs to maximize output while maintaining price-cost stability. The method employs the latest version of the "input-output" model developed by Wassily Leontief, for which he was awarded the Nobel Prize in 1973. It is a form of economic planning, but the program is entirely noncoercive. There are no required quotas or controls. No enterprise is forced to become involved in the process. It is noteworthy, however, that during the 14 years this program has been in effect no major producer has failed to participate.

Problems persist. The national distribution of income and wealth, for example, is still unacceptable. Income inequality has been substantially reduced in recent decades, as the federal income tax has become increasingly progressive. Still, 15% of all households enjoy rising real incomes; 10% break even, while the purchasing power of 75% declines. The burden of decline should be reversed; made heavier at the top and lighter at the bottom, until remaining inequities are minimized. This is not a plea for equal distribution of income. That would be neither desirable nor feasible. Inequality is a matter of degree, however, and we must continue to adjust taxes until a workable balance between equity and the inducement to invest is achieved.

During the first decade of the 21st century, voters sent a clear signal to Washington demanding a system of universal health insurance. The American Medical Association warned that the proposed system would fail, but for more than thirty years the arrangement that evolved has worked smoothly and efficiently. Moreover, medical research has thrived, and medical costs,
which had spiraled upward for a half-century, have been contained. There are more than enough qualified applicants for medical schools willing to work for a moderate income to assure a sufficient supply of qualified doctors. And the availability of adequate medical care for everyone has compensated to some degree for the uneven burden of economic decline.

PROBLEMS AND DILEMMAS

The appeal of 20th century growth economics is easy to understand. When a significant proportion of the population lived in affluence there was hope that, in time, everyone would share that abundance. In a 1930 essay entitled "Economic Possibilities for our Grandchildren," John Maynard Keynes wrote: "...assuming no important wars, and no important increase in population, the economic problem may be solved, or at least within sight of solution, within a hundred years. This means that the economic problem is not -- if we look into the future -- the permanent problem of the human race." [Essays in Persuasion, 1931].

Keynes's prophecy was taken seriously by leading growth theorists long after the era of economic growth had ended. In retrospect, however, it is seen to be fatuous. His major error was to assume that global population would stabilize at the level existing at the time he wrote; about two billion souls. There has been a five-fold increase since then, however, and the end is not in sight.

More than a century before Keynes's utopian projection, Thomas R. Malthus, a British clergyman, published an Essay on the Principles of Population. He predicted that, periodically, population would outrun the means of subsistence. For centuries, academic economists denigrated the "Malthusian devil." Malthus erred, they said, in overlooking the offsetting effects of technology. Malthusianism, however, is enjoying a long overdue revival in scientific circles.
For more than two centuries, critics overlooked the fact that diminishing returns would eventually apply to technology as well as to natural resources.

A growing number of economists, in and outside of academic circles, now accept the basic principles of Bioeconomics. It has been the guide to federal economic policy since the administration of President Correll, who was strongly influenced by the ideas of its founder. This revision of earlier economic theory is an amalgam of biology, thermodynamics, and economics. Its basic principles were formulated by Nicholas Georgescu-Roegen in 1971, in his classic treatise *The Entropy Law and the Economic Process*. The long hiatus between the appearance of that book and its acceptance by the American economics profession is a graphic illustration of Keynes's previously quoted observation. The difficulty was not so much that of accepting the logic of Bioeconomics, which has proved to be irrefutable, it was giving up the comforting idea that continuous economic growth is possible in a finite environment. European economists and political leaders were far ahead of us in accepting the new economics of Georgescu-Roegen, and adapting their policies accordingly.

One problem confronting this session of Congress has been with us for years; it is the national policy of restricting immigration. The United Nations, as well as a number of countries acting independently, have voted sanctions against the United States. Those sanctions are of little economic significance, but our policy of trying to limit entry to our shores has been denounced as immoral. At present, twenty-seven sovereign states, all of them small, poor, and densely populated, have discontinued diplomatic relations with us. Our citizens are not welcome in their borders even as tourists. That also has had little economic impact since the high and rising cost of transportation has sharply reduced international tourism. Moreover, severely depressed areas never have been a major tourist attraction.
Although criticism of our immigration policy will continue, voters have let us know they wish it to remain in effect. There are no plans to change our current law, although it is generally recognized that hundreds of thousands of illegal immigrants will manage to gain entry each year, and that most—or at least their children—will eventually be absorbed by our society.

A REALISTIC LOOK INTO THE FUTURE

Economic conditions have changed dramatically during the century reviewed in this Report. When Harry S. Truman wrote the first Economic Report of the President the idea of progress was widely accepted. Simply stated, that was the belief that each generation would live better than the one before. In 1946, the American economy was stronger than it had been at any time in its history. President Truman could state confidently that the economic future would be one of further progress. Unfortunately, that message was being reiterated by several presidents after the evidence showed conclusively it no longer was true.

President Correll was the first to accept realistic projections. The introduction to his initial report was a personalized account of economic changes he had observed in his lifetime. He recounted visits to the home of grandparents in the 1990s. They lived in a large, suburban house, had two automobiles, multiple television sets, and other appurtenances of 20th century affluence. His parents, he continued, lived on a more modest scale. Except when he was small, and needed his mother's attention, both parents worked at high-level jobs. They lived in a small urban house, had a single car, and few of the amenities they had known as children. The average standard of living of his generation, he noted, was a cut below that of his parents. And the present generation is adapting to shortages our parents were not concerned about.

Adaptation to slower economic decline should not be construed as suffering or deprivation. Primarily, it has required changes in attitudes. A half-century ago, for example, the affluent spent
heavily on annual changes in wardrobes, discarding, or consigning to charity, perfectly good garments. The style and fashion industries thrived on waste and rapid obsolescence. Now we stress the importance of durability. Waste and conspicuous consumption are to be avoided. Thrift, as it was in the 18th century, is again regarded as a virtue.

Are we less "happy" than the affluent generations that used nature's dowry of resources with reckless prodigality? Not according to several renowned social psychologists. They feel that the revival of activities more akin to those of the 19th than the 20th centuries has had a salubrious effect. Medical evidence supports that finding, with declines in neuroses, alcohol and drug abuse, and other pathological manifestations of excessive affluence.

The Council of Economic Advisers has projected a continuation of the downward trend in GDP per employed worker at a rate slightly lower than the average of the past 20 years. This projection will be an integral part of the indicative plan to be prepared during the coming year. Realistic projections should not be misinterpreted. There is no crisis in the offing. Cooperatively, we will make the marginal adjustments needed to maintain equilibrium between our collective needs and the slowly dwindling stocks of resources needed to satisfy them. And we will keep in mind that future generations have as much claim on those resources as we do.

Cecelia Gonzales-Rodriguez

President of the United States

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