The rise of Brazil

By Norman Gall

Commentary, January 1977

We Brazilians possess all the conditions to aspire for a place among the world's great powers. In geographical terms, we have a territory of continental dimensions with a coastline of 4,600 miles leaning out into the South Atlantic, and a greater land frontier, of nearly 10,000 miles, bordering on 10 South American countries. Our coastline, the longest in the South Atlantic, fronts on West Africa. And our territory, the fifth largest national land mass on earth, does not lack natural resources such as fertile soil, hydroelectric potential, and mineral wealth. We are still far from an intensive exploitation of our resources, many of them still undiscovered. Our freedom of maneuver is being proven, day by day, by our mastery of technology and science, applied to the strategy of national development.

—General Carlos de Meira Mattos, *Brasil: Geopolitica e Destino*, 1975

In a relatively short period of time, Brazil has become a new political force in the Western Hemisphere. The world's largest and most important tropical nation, and roughly equal in size, population, and gross product to all the rest of South America, Brazil has developed into the world's tenth largest economy, a major trading partner of the industrial powers, and one of the most rewarding fields of investment for their surplus capital. Since the military seized power in April 1964, the assets in Brazil of U.S. multinational corporations have multiplied sixfold, rising to nearly \$4 billion today, as an economic miracle" unfolded with growth rates averaging 10 per cent annually in the 1968-74 period. -Many foreign statesmen now try to please Brazil's military rulers with glowing words about its future role in world affairs. Last year, for example, Japan's Deputy Premier, Takeo Fukuda, visited Brazil to reassure his hosts of their importance, even in the world recession that followed the quadrupling of oil prices after the 1975 Middle East war. "After the oil crisis, it has become clear that resources are limited. This is an unprecedentedly big event in the history of mankind," the Japanese politician said. "Your country is a power in the 21st century — a resources power." Eager for supplies from Brazil's cornucopia of raw materials in exchange for sales of industrial equipment needed to develop these resources, Japan began investing in Brazilian steel, aluminum, shipbuilding, textiles, chemicals, paper, and agriculture. Last September, Brazilian President Ernesto Geisel visited Japan to sign fifteen different business deals, including construction in the Amazon of the world's largest aluminum smelter complex, \$8 billion in long-term Japanese purchases of Brazilian iron ore and paper pulp, and for Japanese participation in an audacious effort to make a grain producing region of the rolling cerrado scrub forests of Brazil's Central Plateau, embracing an area the size of the Great Plains of the United States.

The awakening interest of other countries aside, the United States remains by far the leading source of financing and technology for Brazil, and has been encouraging its major power ambitions for same time. In 1971, President Emilia Garrastazú Médici

(1969-74), the intelligence chief who became the Sun King of the "miracle," made a state visit to Washington and heard President Nixon announce: "As Brazil goes, so will go the rest of the Latin American Continent." Since then, big talk and big deals have become a matter of protocol in the diplomacy of the major powers with Brazil.

But the diplomats, for diplomatic reasons, may be overstating the case. While foreigners obviously are interested in Brazil as a resource base and a market, it is not clear whether Brazil can stay on the path toward autonomous development in a world economy that is expected to expand less rapidly in coming decades than in the postwar years. At the same time, Brazil has yet to find an enduring political formula, with greater legitimacy than military dictatorship, under which it can reconcile its social conflicts and the competing claims on its wealth while commanding the sacrifices that will be needed for sustained economic development.

I

For four centuries after the first Portuguese settlement was established on the Brazilian coast in 1532, Brazil remained a sprawling and sparsely-settled conglomerate of export enclaves, formed for the production and shipment of a succession of valuable commodities: first, dyewoods for the wool industry of northern Europe, then sugar from the slave economy of the Northeast, gold from the Central Plateau of Minas Gerais and Goias, coffee from Rio de Janeiro and Sao Paulo, and rubber from the Amazon. Busy exploiting their more lucrative enclaves in Asia and Africa, and overcommitted in their overseas ventures, the Portuguese only reluctantly established their first colony in Brazil three decades after its discovery.

By the 17th century the situation was reversed and Portugal was dwarfed economically by Brazil; bath then fell under the successive domination of the Dutch and British until World War I. It was the British who provided financing and railroads to develop the coffee trade, and under whose liberal influence slavery was ended in 1888 and a republic created the following year. That new republic foundered upon a long series of regional revolts against the weak central government, leading a former foreign minister to write privately in 1929: "Brazil, without a navy, without an army, and divided to the marrow, is worth next to nothing in international life,"1 On the eve of World War II, the American strategist Nicholas John Spykman observed: "Brazil is larger than the United States, but most of her territory consists of a tropical forest zone, and the much narrower Ecoastall zone in which her economic life is centered lacks the energy resources and economic productivity necessary to sustain military power."

Brazil is taken much more seriously today as a factor in world politics because of some extraordinary transformations. First, a sustained demographic expansion is occurring that is without precedent in human experience. In 1900, Brazil contained only 17 million people, and its main economic problem was said to be a manpower shortage. By 1976 its population had increased to 110 million; according to United Nations projections, it will reach 212 million by the year 2000. History provides no clear precedent for population increase on this scale, save for the 19th-century United States, where immigration played a much larger role. Second, this population increase has accompanied and been supported by the extraordinary performance of the Brazilian economy through most of this century. While reliable data are not available for the early decades, recent calculations indicate that the economy grew in real terms at an annual

average rate of 6.1 per cent for the entire forty-two year period from 1935 to 1974. Third. Brazil's land area in crops has expanded from 16 million acres in 1920 to about 90 million acres a half-century later, one of the world's highest rates of increase, and is expanding even faster in the 1970's as Brazil seeks to become a grain exporter. Fourth, to articulate this expansion logistically, an enormous road-building program has been undertaken to penetrate Brazil's undeveloped interior, multiplying the highway network tenfold since 1945.

None of these changes could have happened without a dramatic reshaping and enlargement of Brazil's energy-consumption patterns. As recently as 1946, 70 per cent of Brazil's energy supply was provided by firewood and charcoal. By the early 1970's, the same proportion was being supplied by oil and hydroelectric power, while the total energy budget quadrupled. In other words, Brazil leaped from a wood-burning to an oil-driven economy in the course of a generation, a transition that Europe had taken three centuries to achieve. At the same time, Brazil's economic rise was abetted by the rapid expansion of the international economy in the years following World War II—an expansion which was favored by a corresponding decline in the real cost of energy and food until the oil crisis and commodity boom of the mid-1970's. Finally, the advance and diffusion of medical technology sharply lowered death rates, especially in tropical areas, generating demographic pressure for exploitation of Brazils virgin resource base, one of the few such large territories left on earth.

All these forces converged in the Brazilian "miracle." The Cinderella year of the "miracle" was 1973, when the national product grew by 11.4 per cent and the commodity boom of the early 1970's roughly doubled the prices of Brazil's agricultural exports. In that year the world economy expanded dramatically, with trade between nations increasing by one-third and the international money supply by 20 per cent. In Brazil the expansion was even more spectacular, with foreign trade and the money supply each growing by half. By then, Brazil had become the leading client of the World Bank, and the second exporter of soybeans after the United States, competing with the latter in the European and Japanese markets. In the decade after the military seized power there were leaps in the production of steel, cement, electricity, paper, television sets, and refrigerators. Foreign money was pouring into Brazil in an almost embarrassing flood, quadrupling its reserves in two years (1972-74) and raising its hard currency holdings to the highest level (\$6.8 billion) ever accumulated by a Latin American country.

Indeed, 1973 was the year when everything seemed possible. Brazil was embarking on a program to triple steel production by 1980. Construction crews with giant earth-moving machinery struggled through dense, endless forests to crisscross the Amazon Basin with new roads, an undertaking far more ambitious than the U.S. Interstate Highway System. The overseas subsidiary of the Brazilian state petroleum monopoly. Petrobras, had made deals for oil exploration in such diverse places as Iraq. Egypt, Algeria, Libya, Iran, Madagascar, and Colombia. Other state agencies were negotiating deals for critical energy supplies from Brazil's smaller neighbors, and an audacious and controversial scheme was being undertaken to build the world's largest hydroelectric dam, Itaipu, on the river frontier shared by Brazil and Paraguay.

THE magnitude of Brazil's economic achievement cannot be grasped without reference to the technology that helped make it possible. Brazil may be the first large country in history to rely almost entirely on the internal combustion engine to develop its economy and to tie together its territory. Its sudden advance has been all the more dramatic because of the logistical backwardness of this sprawling country as recently as the mid-20th century. In 1950 it still cost proportionately as much to ship a sack of grain to market from the "rice frontier" of Brazil's Central Plateau as moving Midwestern wheat to New York before the construction of the Erie Canal in the 1820's. In the early decades of this century Brazil's poor internal communications had prevented suppression of a long series of regional revolts that ate away at the power and credibility of the federal government, leading the American geographer Preston James to report in 1939: "Even in the midst of patriotic proclamations there is an-audible undercurrent of talk in Brazil about the possible breakup of this colossus among nations into smaller and weaker units."

Since then, the automobile, the truck, the tractor, and the helicopter have done for Brazil what the railroad and the reaper did for the United States a century ago. With a population and territory in desperate need of better transportation facilities, Brazil was able to increase private-car registrations from 236,000 in 1950 to more than four million in 1975. Brazil now has the world's ninth-ranking automotive industry, doubling its production between 1970 and 1974 and placing Brazil on the threshold of becoming the first developing country to join the small group of industrial nations producing more than one million vehicles a year. In the late 1940's construction of the Belem-Brasilia highway began to the mouth of the Amazon River through 1,300 miles of jungle and savannas from the central plateau area where Brazil's new capital would be built, starting an expansion of Brazil's road network in the postwar years that would provide ready access to its interior for the first time in history. It was not until this highway-construction effort was in high gear that the heartland capital of Brasilia, envisioned in the first republican constitution (1891), finally could be built in the late 1950's.

Thanks to the tractor, the newly mechanized agriculture on the Brazilian frontier is striving to become a major grain exporter to the world. Thanks to the helicopter, it has become possible to penetrate one of the few large resource bases left on earth that is still relatively intact after four centuries of modern settlement. By adapting Vietnam combat helicopters to civilian use, for example, geological field parties could for the first time reach Carajas, a remote duster of Amazon plateaus that has proven to hold the largest high-grade iron deposit ever found. The discovery of Carajas and of the world's third largest bauxite deposit, Trombetas, on another set of jungle plateaus, led to Project Radam, the first systematic search and inventory of the Amazon's resources, using aerial sidelook radar scanning techniques that were declassified by the U.S. air force in 1970.

Yet the technology that helped make the "miracle" possible may also contribute to Brazil's undoing, for the key to it all has been the availability of cheap energy. Because of the accidents of geology, no other continental nation is believed to be so deficient as Brazil in economically useful deposits of fossil fuels. Petrobras has never been able to supply more than one-fourth of the country's needs from its domestic operations. In the 1950's and 1960's, decades which saw the demand for energy supplies grow fivefold,

Brazil could take advantage of the low price of imported oil. After the price of oil quadrupled in 1973-74, the entire course of its future economic growth was suddenly jeopardized. Since that time its debts have multiplied, with foreign capital increasingly being siphoned away from the development projects to compensate for huge trade deficits caused by the increased cost of oil imports.

Brazil's urgent efforts to develop its energy, mineral, and agricultural resources call for investments of roughly \$100 billion over the next decade. For instance, the miningindustrial complex in the Amazon—embracing open-pit mines, a 600-mile railroad, new port facilities, the world's largest aluminum smelter and steel mill, and a huge hydroelectric plant to power these operations— will cost more than \$10 billion to build. The plan to triple steel production by 1980 will cost \$6 billion and the railroad expansion program in progress another \$7 billion. To meet the demand for commercial energy supplies, Brazil is trying to double hydroelectric capacity in the next eight years, at a cost of \$20 billion, or one-third of the world's projected investment in power dams. Another \$5 billion is to be spent by Petrobras in its struggle to reduce oil imports by finding and developing Brazil's own offshore oil reserves. If fully implemented, a nuclear agreement with West Germany, which has provoked intense controversy because it would provide a commercial framework for general nuclear-weapons proliferation, would cost another \$10 billion for reactors and fuel facilities. (In late 1976, however, the financial pressures of the energy crisis led the government to announce some major cutbacks in this diversified investment program and more may come.)

As did the United States and Czarist Russia a century ago, Brazil is trying to pay for its imports of capital and technology by exporting raw materials and food. But just as the finding and developing of new mineral resources for export has become hideously more expensive on account of the new price of energy, so too does Brazil's ambitious agricultural program hinge on its ability to pay for the petroleum-based technology not only tractors and trucks, but fertilizer too—that made the program possible in the first place. Brazil's increases in agricultural output have come not from higher yields on already cultivated land, as in India and Mexico, but from farming ever more extensively. The problem with this policy of extensive cultivation is that, as the frontier pushes further into the interior, the quality of soils becomes poorer, and farming, which only twenty-five years ago was still being carried out almost entirely by hand, using hoes and primitive digging sticks, requires greater energy and logistical subsidies. Development of large areas of the Brazilian frontier will pose an enormous economic challenge, involving subsidized inputs of machinery, fuel, fertilizer, pesticides, and research. An unanswered question is whether this kind of economic development can continue at the new price of oil.

BUT the high cost of energy is only one factor that threatens to undo the Brazilian "miracle," Another and potentially more explosive one is the human factor, namely, the uncontrolled movement of people in search of land and jobs, the rate of population growth, and Brazil's traditional failure to invest in what might be called human capital.

In the frontier states, where levels of human fertility are among the highest in history, approximating those of the American West a century ago, subsidized agricultural mechanization and the consolidation of large holdings have driven rural workers into the Cities, where there are insufficient job opportunities, and into more remote parts of

the frontier. Only human labor has not been subsidized in the process by which labor-intensive coffee cultivation has been replaced by machine-harvested soybeans, corn, and wheat. Tens of thousands of rural families have been expelled from fazendas in the southern state of Parana, which only two decades ago was Brazil's richest frontier area of terra roxa (red volcanic soils) and which still produces the bulk of the coffee crop. Others have wandered into the Amazon, hearing of free land there, become truck drivers, or part of the floating population that works on the roads and hydroelectric dams being built throughout Brazil.

The movement of people in the frontier regions has become so intense and wide-ranging that its force can be contained only with the greatest difficulty. Close by the huge Itaipu hydroelectric construction site, for example, a project five times larger than Egypt's Aswan Dam, Brazilian settlers are pouring across the Parana River into the uninhabited forests of eastern Paraguay to clear one of the few virgin belts of prime cropland remaining in the Western Hemisphere. Though this area is still legally part of the Republic of Paraguay, many Brazilians and foreigners say that it already has been absorbed into Brazil's economic and cultural orbit. Similarly, the Federal Territory of Rondonia in the Amazon, 2,300 miles north of Parana, has received tides of settlers from the more densely populated southern states who arrive in trucks and buses that bounce sluggishly along the new dirt highways. From a helicopter, Rondonia still looks like a dense and hazy ocean of green, threaded by the crazy meanderings of jungle rivers, where, until recently, only forest Indians and isolated seringueiros (rubber gatherers) used to live. Increasingly, however, the primeval vegetation is scarred now by charred clearings that push further into the jungle from the new roads, with grass, huts, and incipient crops sprouting amid felled, blackened trees that are Strewn about the clearings like matchsticks. A land boom has developed in Rondonia and throughout the Brazilian frontier. Immense tracts of jungle have been bought for speculative purposes and for large agricultural schemes by big companies based in Rio and São Paulo. The same land changes hands over and over, often under fictitious titles, leading to conflicts over rival claims and the eviction of squatters and freeholders, plaguing the frontier with escalating violence that has begun to resemble Brazil's backland wars of the late 19th and early 20th centuries.

On a visit to Rondonia in late 1974, I spoke with Captain Silvio Faria, a former army officer who has worked in the Amazon for twenty-five years and now heads the regional office of INCRA (Instituto Nacional de Colonizacao e Reforma Agaria). "Our basic objective is to populate the frontier," he said. "All these people come here from the South, from the states of Santa Catarina, Parana, Rio Grande do Sul, and Minas Gerais. They come here because of the frosts that have blasted one coffee crop after another, because of the rising price of land at home, and, above all, because of the illusion that the Amazon is the El Dorado of the 20th century. It is not so, unfortunately. This year, INCRA will distribute 10,000 new properties of 250 acres each. But what good does this do, if by the north-south road alone, an average of 4,500 people arrive here each month?" Brazil's neighbors already have become concerned about its highly mobile rural population of 44 million. It is twice the size of the entire population of Argentina, Brazil's largest neighbor and rival in South America, whose people are much more sedentary and concentrated in a few large cities far from Argentina's borders. One Argentine analyst predicted in 1970 that Brazil's population pressure "should be distributed along all its frontiers, but we think the center of this political pressure will be the South, along the limits with Argentina, Paraguay, and Uruguay, where the best and largest population of Brazil is concentrated."

In addition to the uncontrolled movement of people, Brazil must contend with a high rate of population increase. The country is racing to stay ahead of a demographic cyclone that already is making heavy demands on its capital resources and its political system. Population is growing at 2.8 per cent annually, faster than any large country except perhaps Indonesia. While the "miracle" lasted. Brazil's rulers could gaze unflinchingly at projections of a population stabilizing at around 390 million in the second half of the 21st century. Finance Minister Antonio Delfim Neto (1967.74) said that "the question of birth control should not occupy our attention in the present phase of Brazilian development If we are condemned [emphasis in original] to grow economically at a rate of 9 to 10 per cent a year, nothing is gained by wasting time on speculations over a social phenomenon as destimulating as this."

THE geopolitics of population growth has been complicated by the intensifying political debate over income distribution. In 1972, the year Brazil's population reached 100 million, this controversy began with an article in the American Economic Review by Albert Fishlow, a leading development economist. Using census data, Fishlow found that the share of the wealthiest 3.5 per cent of Brazil's earning population rose from one-fourth to one-third of national income, while the income share of the poorest 48 per cent declined from 11 per cent in 1960 to 8 per cent in 1970. Citing the same data, Robert McNamara, president of the World Bank, observed publicly: "In GNP terms, the country did well. The very rich did very well. But throughout the decade the poorest 40 per cent of the population benefited only marginally."

The ensuing national debate brought forth a series of statistical studies from opponents of the regime on rising infant mortality in some of Brazil's principal cities that was said to be linked to a decline in the real value of the minimum wage. Enormous differences were reported between regions as well as classes in nutritional levels, per-capita energy consumption, literacy, income, and productivity. The government was accused of imposing a confiscatory forced-savings program on wage earners in order to finance investments in the big state corporations and the private sector, and then fiddling with the price-indexing system designed to protect these savings against inflation. Fishlow argued that the military regime's economic policies were aimed at "destruction of the urban proletariat as a political threat, and reestablishment of an economic order geared to private capital accumulation."

The industrialists of São Paulo, which consumes half the country's electricity and produces 56 per cent of its industrial goods, compare their relationship to the rest of Brazil with a locomotive pulling a train of empty boxcars. The empty boxcars have become a major issue in Brazil, but the fact remains that the country's economic and demographic expansion in this century could probably not have occurred without enormous distortions, especially in a society where slavery was not abolished until 1888. There is little doubt that economic policy has favored the rich since 1964. However, the real problem is the extensive and absolute nature of Brazilian poverty, which helps to create a Calvinist state of mind among the high consumers. While the number of private cars and television sets in use has increased at the spectacular rate of 14 per cent annually since 1960, the extension of more basic amenities such as meat and newsprint consumption and the number of homes using electricity has averaged roughly

3 per cent, considerably less than the rate of urbanization. Such is the extent of poverty that the present Finance Minister, Mário Henrique Simonsen, could bluntly state Brazil's choices in this way: "A transfer of income from the richest 20 per cent to the poorest 80 per cent probably would increase the demand for food, but diminish the demand for automobiles. The result of a sudden redistribution would be merely to generate inflation in the food-producing sector and excess capacity in the car industry."

The dilemma facing the Brazilian government was dramatized by the commuter-train riots that occurred in Rio de Janeiro last year. The riots were the fruit of Brazil's traditional reluctance to invest in human capital, even where direct economic benefits could be obtained, such as workers arriving at their jobs on time and in condition for a full day's effort.

The 500,000 people who must use the century-old Central Railroad of Brazil to get to work every day dwell in the Baixada Fluminense, or Lowlands, a region of outer darkness north of Rio where a population of. three million inhabit what was once a vast orange grove, occupied now mainly by favelas, or shantytowns, that are growing in population at about 12 per cent a year. Most of the inhabitants come from the forgotten backlands of the Northeastern sertão and make their way as janitors, housemaids, watchmen, street vendors, construction workers, store clerks, schoolteachers, and minor bank employees. Because of the extremely crowded and irregular passenger service on the Central Railroad of Brazil, many commuters from the Lowlands must leave their homes between 2 A.M. and 3 A.M. to reach downtown Rio in time for the day's work.

The railroad's rolling stock looks like old New York City subway cars, with the difference that the crowded trains regularly run with their doors open. The overflow passengers, called pingentes (literally, 'pendants"), hang on outside the cars from doors, windows, and rooftops. The tracks used by the suburban line also carry a heavy traffic of mineral and freight cars headed for the interior that often are granted right-of-way priority because of their strategic importance. The overloading of the line, the antiquated rolling stock, and the poorly maintained ties, roadbeds, and signal system, have taken a heavy toll in accidents over the years, both major crashes and the much more frequent cases of pingentes falling from moving cars, especially when two trains pass each other from opposite directions.

At 6:30 A.M. on June 24, 1975, crowds of people traveling to work from outlying communities to downtown Rio de Janeiro suddenly began pillaging, breaking, and burning the trains, platforms, ticket windows, snack bars, and cargo warehouses along the suburban line of the Central Railroad of Brazil, until order was restored by shock troops of the army and military police. Three weeks later, on the evening of July 17, 14 people died and 376 were injured in Rio's worst train disaster in nearly two decades. An outbound commuter train, forty years in service and carrying 1,200 passengers, was taking a sharp curve at excessive speed when its first five cars went off the track. Three of the cars crashed onto the practice court of the Imperio Serrano Samba School, where a rehearsal was in progress for last year's carnival. President Geisel cancelled a trip to the Northeast and fled instead to Rio to spend all day inspecting conditions on the Central Railroad. He told the railroad's president and board of directors: "I want immediate results, the people want immediate results," then fired them all two weeks later. On the day after their dismissal Geisel opened a new session of Congress with a chilling televised speech that showed how badly the government was shaken:

The participation of subversive agents has been proven in the pillage and destruction which occurred recently in the suburban trains of Rio de Janeiro, and the probable hypothesis is being examined that acts of sabotage were committed there. ... The security organs pursue preventive measures against pronouncements and preparations leading to internal subversion. In different regions, individuals belonging to illegal organizations have been jailed, submitted to police investigation and subsequent judicial action as violators of the security law. The intelligence services carefully follow Communist infiltration in organs of communications, organs of class [labor unions], the public administration, particularly in the teaching area, and also in the political parties.

Ш

GEISEL'S remarks were a tactical retreat from his campaign for a "decompression" of Brazil's dictatorship. When he took office in March 1974 to begin Brazil's second decade of military rule, Geisel could easily have used the financial burdens of the new price of oil as an excuse to combine economic austerity with continued political repression. Although they all initially had promised political liberalization, each of the three generals who ruled before him since 1964 had ended his term presiding over a more repressive system than the one he inherited, mainly as a result of confrontations with army hardliners imposing the overriding priorities of internal security and economic development. But what has been most surprising about Geisel's Presidency is the intense purpose with which this tall, white-haired, taciturn military bureaucrat has carried forward his project of political "decompression" — despite the considerable backing and filling that has been necessary to steer clear of the kinds of confrontation that had wrecked previous efforts at liberalization.

"Decompression" in Brazil faces enormous difficulties, though, both political and economic. Any real democratization, first of all, would mean such a large transfer of wealth to improve the consumption levels of the poor as to deprive the country of the capital needed for intensive economic development. Brazil is not unique in this, of course, as the conflict between the interests of consumption and capital formation also may pose one of the main challenges to the coherence and survival of advanced industrial democracies in future decades. This friction will become increasingly important, and will increasingly affect countries like Brazil, as huge slims will have to be saved and mobilized to finance the more complex technologies and organizations needed to maintain the flow of food and raw materials over greater distances to markets from soils and deposits that are less accessible or less productive naturally than those which have met the world's more modest needs in the past.

It was the tendency to overlook these realities that contributed to inflationary pressures which have grown throughout the world as more and more people have risen above the subsistence level of economic activity, traded with paper money rather than in bartered goods, moved to towns and cities, acquired education and the vote, and made political and economic demands that radically increased the cost and complexity of national life. Countries like Brazil that originally were at the periphery of the world economy, consuming little while exporting wealth to the metropolitan centers, have become themselves centers of consumption, competing for resources with the older core areas. While world population is expanding at 1.9 per cent annually, the number of middle-

class consumers in the world has been growing at 4.7 per cent in recent decades, straining the productive apparatus of many societies?

ENJOYING rapid economic growth in the postwar years, several Latin American nations were tempted to overlook resource and productivity limitations by resorting to inflation. Such were the fashions of the times that trendy economists looked upon inflation as a miraculous way of temporizing in conflicts over resource allocations while reaching for rapid economic development. However, the playing of this game led to inflation of 80 per cent in Brazil and more than 300 per cent in Chile and Argentina, ending in political and economic repression by military regimes.

Such outbreaks of inflation, followed by economic and political repression, reflect the resource constraints that were ignored in the rapid expansion of the world economy in the postwar years. This expansion may have been the climax of the Industrial Revolution of the past two centuries in which, increasingly, people have tended to forget how much the virgin resource base of the New World contributed to the political and economic organization of the West. Walter Prescott Webb wrote a generation ago in The Great Frontier:

In the presence of the frontier, capitalism and democracy could exist side by side, but when we penetrate below the surface we see that in reality the frontier subsidized both of them in a way we may not like to admit. It must be remembered that ... during all the time that democracy and capitalism were making their rapid progress the sovereign was dispensing the frontier to the people and to the capitalists with a lavish hand and on practically a free basis.

What the sovereign had in the frontier was land, and because a considerable amount of work was involved in digging it up for the minerals, or clearing it of timber for farm homes, and because the process of dispensing it went on over a long period of time, everybody concerned lost sight of the fact that the proceedings were extraordinary and that the greatest dividend in the history of the world was being declared to people who had made no considerable investment.

With the disappearance of the frontier in other areas, Brazil's giant resource base, internal dynamism, and low consumption levels equipped it to play an increasingly important role in the latter 20th century. At the same time, with considerable U.S. support, Brazil became the classic example of a rapidly-developing low-wage economy in the postwar period. These comparative advantages were accentuated in the political and economic repression and geopolitical strategy of the military regime which seized power in Brazil in 1964, with substantial middle-class support.

One of the most disturbing aspects of the triumph of authoritarianism in Brazil has been the spawning of little Brazils elsewhere in Latin America. The military government established in 1964 was widely regarded, even by the generals themselves, as "exceptional," a temporary departure from the prevailing Western ideal of Constitutional democracy. Of the nine other South American republics, only the two most backward — Paraguay and Ecuador — were then under military rule. Today, however, there are only two civilian governments in the same group of nations. The Brazilian "model" seemed so successful to outsiders — in promoting economic growth, in reducing inflation, in crushing leftist insurrection, in limiting mass consumption, in

controlling social tensions and political mobilization — that its influence has spread over the past dozen years to other armies of the region. The newest and most brutal of these dictatorships are the three most "European" of Latin American republics, Chile, Argentina, and Uruguay, each of them highly urbanized and literate, with low rates of population increase, progressive political traditions, and a large middle class. In each of these countries, as in Brazil, the army seized power following ruinous waves of inflation, reflecting the inability of political leaders to make difficult decisions to keep rising levels of personal consumption within the limits of the nation's productive capacity.

THE ominous spread of dictatorship over the past decade among the relatively simple economies of Latin America has been accompanied by the rise of state capitalism as the dominant mode of economic organization. Direct state control of banking and basic industries in Latin America has been widely adopted both as an instrument of forced savings and priority access to capital and as a political counterpoise to the influence of foreign corporations. This trend has gathered momentum over the past half-century along with the growth of a middle class and the formulation of development ideologies, beginning with the creation of a state petroleum company in Argentina in 1922 and the nationalization of the foreign oil companies in Bolivia and Mexico in the late 1930's.Ia In Brazil, the most authoritarian elements of the army have proved to be the most influential advocates of statist, nationalist economic policies since the 1930's, when the powers of the central government were expanded radically under the Estado Novo dictatorship of Getúlio Vargas.

By 1972, 60 per cent of all loans to the Brazilian private sector came from government financial institutions, derived largely from forced savings deducted from payrolls. The government share of total fixed investment has risen from 15 per cent just after World War II to 50 per cent today. State corporations now either monopolize or dominate such basic industries as oil, petrochemicals, electric power, steel, and mining, often taking in multinational companies as minority partners. Some of these giants have achieved world ranking in their fields—the Rio Doce state mining conglomerate is the biggest exporter of iron ore, Eléctrobras is carrying out the largest hydroelectric program anywhere, and Petrobras ranks twenty-first among industrial firms outside the United States. Meanwhile, these companies are spinning off many subsidiaries in related fields. Of 145 firms owned by the national government, two-thirds were formed over the past decade.

These developments have led to a glorification of the state by technocrats and army hardliners, who always have defended their actions in the name of a conception of democracy rooted in the statist principles of Roman law. Thus the new commander of Brazil's Fourth Army, which controls the Northeast and has compiled a long record of political repression, recently told his troops: "The democracy we foresee is not necessarily tepid, neglectful, crawling, craven, inert, and defenseless, trembling at prefabricated slogans speciously based on liberty and human rights. The traffickers of this line purposely forget that liberty and rights emanate from the state. The state grants these privileges to man and therefore cannot be subordinate to these prerogatives, lest it be plagued by anarchy."

Still, while the military rule Brazil for the moment, and for the foreseeable future, they cannot administer such a complex enterprise alone and they seem to be continually

divided over what to do with it. One shrewd scholar a few years ago characterized military rule in Brazil as "an authoritarian situation rather than an authoritarian regime," one which would continue to go through "constant and indecisive experimenting with various alternatives, and a series of coups and quasicoups."t3 Politicking seems to have so wearied the officer corps that, after visiting several army bases in mid-1968, one observer reported "a growing fatigue and frustration at the responsibility of government ... Often expressed was the desire for the military to withdraw from politics by inaugurating a civilian President in 1970." But then came student street demonstrations in late 1968, the attack on the military by a young Congressman, the closing of Congress by presidential decree, the suspension of habeas corpus, imposition of press censorship, another round of political purges, and the kidnapping of the U.S., German, and Swiss ambassadors in 1969-70 as part of an urban guerrilla insurrection in Brazil's principal cities. Ironically, it was the brutality employed in crushing the leftist insurrection that then backfired among the military into the movement toward political "decompression."

The Brazilian elite has been divided over whether the system of combined military dictatorship and economic statism can and should be maintained indefinitely. Key elements of the military leadership, headed by Geisel, believe that social injustices must be remedied to some extent, lest they breed unmanageable tensions. Intellectuals and professionals, including many members of the bureaucracy, tend to criticize the system on grounds of social justice, democracy, and human rights, but say little about state control of the economy. On the other hand, while the Brazilian business community benefits enormously from government largesse, its leaders outspokenly resent the rapidly expanding government ownership of basic industries. However, the same business leaders want continued political and economic repression to prevent strikes, which have been banned since 1964, and to maintain their privileged access to Brazil's economic surplus. Last July ex-President Medici seemed to support their views in his first political speech since leaving office. Geisel replied a week later in an improvised speech, explicitly reaching over the heads of the growing opposition of business and military hardliners to call for a popular mandate for continued reform. "Give us your confidence and judge us carefully," he told workers at the big São Paulo steel mill. "If this judgment is positive, then support us with the supreme prerogative that you have, which is the vote."

Geisel sought a popular mandate from this past November's nationwide municipal elections, or at least enough votes for the government party to show the hardliners that he fully controlled the political process. While the opposition, as expected won majorities in the major cities, the government controlled the backland vote sufficiently to achieve its goal. However, inflation has been raging again at nearly 50 per cent in 1976, thanks to Geisel's efforts, implicit in his electoral strategy, to postpone the choice between income distribution and the huge investments demanded by Brazil's development program. With the elections now out of the way, Brazil may be moving into a new period of economic austerity and political control.

In recent months, moreover, a series of right-wing vigilante actions have taken place in an apparent effort to discourage any political mobilization in favor of liberalization. There have been unsolved bombings at a social-science research institute in São Paulo and at the offices of the lawyers' and journalists' associations in Rio, which have been linked to the kidnapping in September, by a group known as the Brazilian Anti-

Communist Association, of the fifty-eight-year-old bishop of Novo Iguacu in the Lowlands outside Rio. The bishop was stripped naked by his abductors and his body painted red before he was dumped in a vacant lot several miles away. His car was filled with explosives and then blown up the same night in front of the downtown Rio headquarters of the National Council of Brazilian Bishops. The bishop later suggested that all these events "might represent a hardening of the political system." A week earlier President Geisel, toward the end of his triumphal state visit to Japan, had repeated his frequent warning that political "decompression" can work in Brazil only if it is a "secure and gradual" process. "We are not living in the times of Montesquieu," he said. "There cannot be a democratic regime where there are favelas and people dying of hunger."

IV

BRAZIL'S search for a viable and coherent political formula in the years ahead will certainly affect the course of its economic development and the major power ambitions of its rulers. Just as the United States, Russia, and Japan did in time 19th century, Brazil has become a heavy borrower of capital and technology while trying to adapt its institutions to the needs of rapid growth. The international importance of Brazil, as with the United States and Czarist Russia a century ago, derives less from military strength than from the influence generated by its population, resources, and industries and from their effective demands on the available pool of capital and technology on world markets. Yet whereas the other major powers consolidated their development over a period of at least 100 years, Brazil rocketed into prominence even as it was barely organizing control of its own territory, and laying tile groundwork for sustained economic development. Now it looks as if the critical phase of Brazilian development may have to take place during much less expansive times for the world economy amid much more intense competition for capital and resources.

The oil price increases have led to some daring financial improvisations throughout the world that will be hard to sustain under the cumulative impact, year after year, of the large trade deficits experienced by several countries. Although the impact of oil prices has been diluted somewhat by inflation as the United States and the principal European governments have more than tripled their deficit spending since 1973 to Sustain economic activity, the developing countries have been forced into desperate borrowing abroad to support their participation in the international economy. Because of its potential, money is still pouring into Brazil — over the past decade its debt, now \$27 billion, had doubled every three years, and since 1973 it has been able to continue borrowing at the rate of \$400 million monthly, less for development now than to ease the burden of oil imports. Still, while Brazil has been able to attract from abroad the highest rate of capital inflow in the world, a Citibank executive told a meeting of foreign investors in Brazil this year that "the large increase in external debt in Brazil and less-developed countries in general has given rise to fears of default. These fears have been aided and abetted by the media and demands by some countries at international conferences for debt forgiveness or moratorium. Brazil, therefore, must face the fact that in this overall environment the question is asked of how Brazil is going to repay all this debt."

Depending on how well it meets the challenge of more restricted access to outside capital and energy resources, Brazil could be a power or a shambles by the year 2000.

Brazil's resources and low-cost labor will give it a competitive advantage in the international economy if it can adapt, innovate, and maneuver with enough skill to avoid being ruined by the new cost of fuels. In recent decades it has been very successful in absorbing technology from the centers of innovation in the United States, Europe, and Japan, although its development efforts recently have stumbled over shortages of trained manpower. If adequate capital and knowledge are invested in the development of its resources, Brazil could expand its role as a provider of food, industrial goods, and raw materials to a world increasingly constrained by resource limitations. On the other hand, if it is unable to balance the equation, to feed its people and make badly-needed investments for future growth, the Brazilian "model" could be rapidly transformed into a more repressive dictatorship.

FINALLY there is the question of Brazil's relation to the United States. Brazil is rooted culturally and ideologically in the West, albeit as what was once a vast and sparsely settled colonial dependency of one of the most backward nations of Europe. Now, under the pressures of the energy crisis, as Brazil seems to be in danger of regressing into even more authoritarian political forms, it is also drifting away from its traditional friendship with the U.S. and pursuing a course of "ecumenical pragmatism" in its foreign policy. In a lecture last year in London, Foreign Minister Antonio Azeredo da Silveira explained this new diplomacy: "During the cold war, a rigid alignment with the leader of the Western bloc was required of the nations of the developing world that share the basic values of the West. The reason for this, or, if you like: the pretext, was ,that the future of the entire system was at stake and that unity was the price of survival." Observing that "these realities no longer apply to the final quarter of this century," Silveira announced that "an emergent power, with a wide range of interests in many fields, cannot allow rigid alignments, rooted in the past, to limit her action on the world stage."

This "ecumenical pragmatism" simply may be a revival, under different circumstances, of the "independent foreign policy" of Brazil's elected governments in the late 1950's and early 1960's that was reversed temporarily by the 1964 military coup. With strong ties to both the industrialized and developing nations, Brazil has been trying to exploit the structural ambiguity of its position while shying away from suggestions by the major powers that it play a mediating role in the "North-South" dialogues between the two camps. At a state banquet inaugurating an agreement for semi-annual consultations between the foreign ministers of the two countries, Secretary of State Kissinger observed; not without irony:

Brazil, by virtue of its size, of its history, of its traditional friendship with the United States, can conduct a foreign policy free of complexes. Brazil is conveniently divided into two parts — one part which is superdeveloped, and one part which is slightly underdeveloped — and, therefore, can conduct a foreign policy as it chooses, either joining the industrial nations or leading the Third World, whatever is most useful at the moment.

Since 1973 Brazil has reoriented its entire foreign policy in a single-minded effort to secure imported energy supplies and to develop ways of paying for them. It has made deals with its neighbors for Bolivian natural gas, Colombian coking coal, and hydroelectric power from joint projects on the border rivers with Paraguay, Argentina, and Uruguay. It also has opened its territory for the first time to exploration by foreign

oil companies, while Petrobras has made discoveries in Iraq and Algeria this year under service contracts negotiated in the early 1970's.

In 1975 Brazil made three dramatic foreign-policy moves that strained its relations with the United States. One was immediate diplomatic recognition of the fait accompli created by Cuban troops using Soviet weapons in Angola, where Petrobras had been dickering for oil concessions since 1968. This was a hasty reversal of Brazil's past support of South African and Portuguese colonial interests in hope of consolidating a geopolitical "condominium" in the South Atlantic. The second major move was the deal with West Germany for construction of up to eight nuclear power plants in Brazil, plus facilities for enrichment and reprocessing of uranium that would provide the technological base for producing nuclear weapons. Then, in a demonstration of its "ecumenical pragmatism" that was bitterly attacked at home and abroad, Brazil stood with only three other Latin American nations in joining the UN General Assembly majority last year in declaring that "Zionism is a form of racism and racial discrimination." There has been increasing speculation, moreover, that Brazil's anti-Communist military regime may reopen diplomatic relations with Cuba if it comes into conflict with the new Carter administration over questions of human rights, nuclear proliferation, trade, and debts.

During World War II, the United States was able to mobilize almost unanimous support in Latin America for the Allies, largely because American democracy was the prevailing political standard for the hemisphere; the rise of Brazil and the spread of dictatorship in the region suggest that this no longer may be true. An increasing divergence of objectives and standards has made for difficulties with Brazil which may in turn condition our future dealings with the rest of Latin America. This year, for example, the U.S. Congress voted a statutory ban on all military and most economic assistance to Latin American nations showing "a consistent pattern of gross violation of internationally recognized human rights." A more serious problem for the future is the fact that the United States probably will have less capital available for foreign investment in coming decades due to our own domestic capital requirements, especially in tile energy field.

Meanwhile, Brazil is beginning to compete with the industrialized countries for exports of some manufactured goods, such as light aircraft and automobiles. As part of its intensive import-substitution drive over the past two decades, Brazil already has received a wide range of standard industrial technology by forcing multinational companies to make their products in Brazil in order to keep selling in the Brazilian market. The same companies are then induced, by pressures and incentives, to compete with plants back home by exporting from their Brazilian factories. This new technological reach is also helping Brazil dominate the South American heartland along the lines of force emanating from the megalopolis of São Paulo.

There are strong pressures building in the United States for much greater selectivity in future technology exports. At the same time, however, it has become extremely important that scientific cooperation and technology transfers continue in certain critical areas, such as food and energy. A growing body of scientific opinion believes that Brazil's energy crisis could become a catalytic agent for development of new plant-based fuel cycles, using photosynthetic processes, that could develop into one of mankind's great adaptations, especially in tropical areas where there is abundant

vegetation, sunlight, land, and rainfall." Whether any such development would provide for humane political forms depends in part on a certain amount of economic leavening in Brazil. Despite enormous difficulties, there are forces at work for political decency there that should be encouraged by all possible means. For all these reasons, the rise of Brazil has provided mankind with many challenges, not the least of which is preserving the character of the New World as a region of hope.