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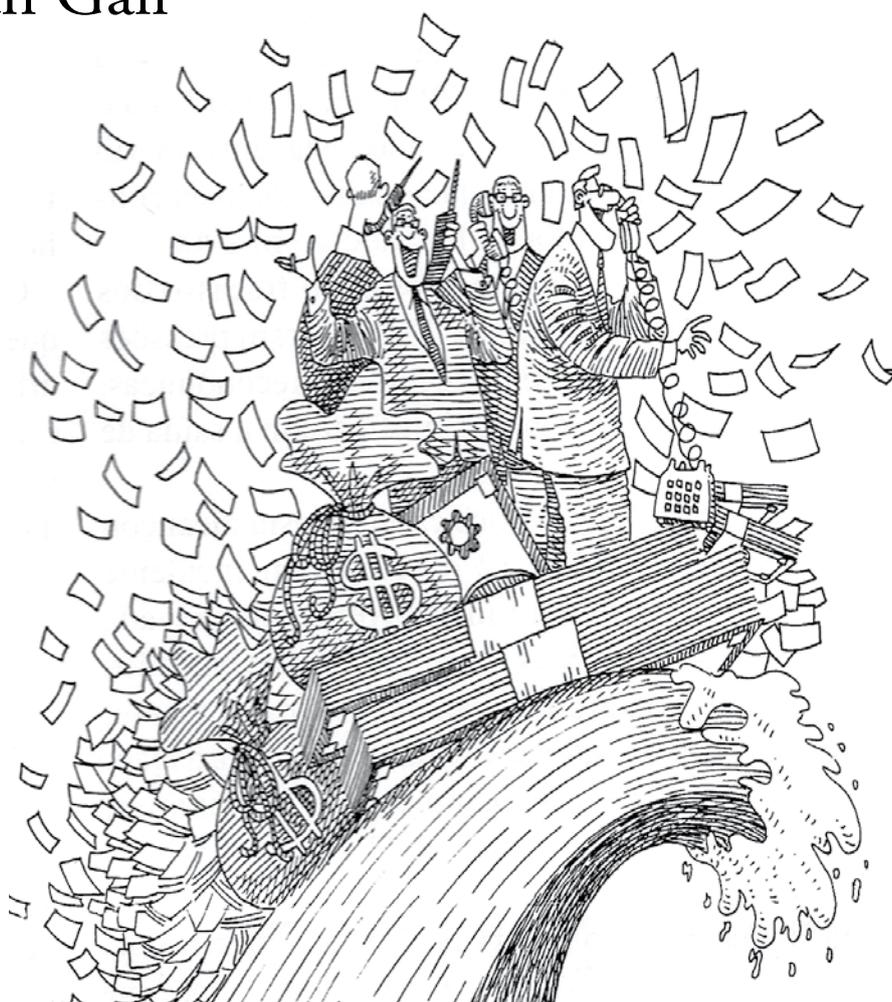


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Associated with Fundação Armando Álvares Penteado

PAPERS

Part 1: Brazil and the Asian Crisis **Money, Greed, Technology**

Norman Gall



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Money, Greed, Technology

Asia and the Crisis of Money **17**



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Institute of World Economics

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Part 1: Brazil and the Asian Crisis

Money, Greed, Technology

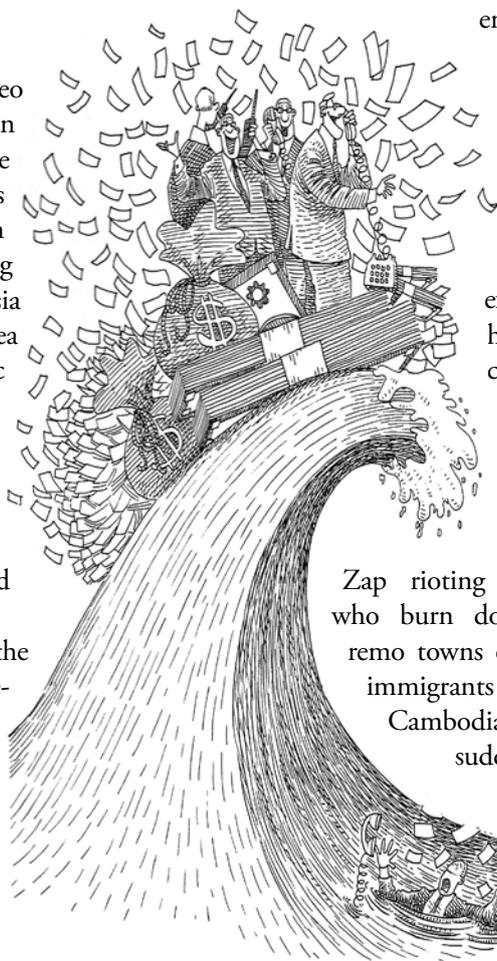
Norman Gall

1. The game

Money, Greed, Technology is a new video game on an old theme. In the monsoon season of 1997, a typhoon erupts in the South China Sea, attacking the customs and artifacts of organized society in an arc of prospering countries stretching from Thailand, Malaysia and Indonesia northward to Hong Kong, South Korea and Japan. This typhoon is not a classic battering of land by nature. It is a sudden, swirling, self-inflicted wrecking of financial and political systems through complex interactions of money, greed and technology unleashed in the restless betting of assets accumulating wildly and driven relentlessly to seek higher yields.

As the storm in Asia rose on the horizon, the Bank for International Settlements (BIS), the central bank for central banks, in Basle, Switzerland, reported that "private capital flows to emerging markets exceeded previous records by wide margins, with international bond issues playing a prominent role. Were these surprising developments the product of fundamental economic forces or, rather, will they be reversed by such forces in the future? One part of an honest answer is that we simply do not know. Rapid technological change and deregulation, which today profoundly affect all aspects of the global economy, increasingly cloud our sense of what is possible and reasonable.

Our video game is a complex affair, testing the tolerance of existing technologies and our capacity for imagination. The typhoon disguises an alien invasion. Our way of life is threatened. Bleak and windy scenarios prevail, auguring catastrophic outcomes. The bad guys are going to win unless someone presses the right buttons, zapping the bad guys without pity or hesitation. But who are the bad guys? Shall we zap the



emissaries of the International Monetary Fund (IMF), those Shylocks of world finance demanding rigid rules of internal order in exchange for dollops of fresh money? Zap the foreign bankers we lent so freely and foolishly and now, with the diplomatic backing of rich countries, demand big fees and extra interest to stretch repayment of the huge loans? Zap the executives of foreign corporations moving into the bankrupt paradise of Asian values to buy land, buildings and companies on the cheap? Blow away Bangkok's traffic jams and Kuala Lumpur's pharonic skyscrapers as blights on civilization?

Zap rioting Muslims, angry rising food prices, who burn down Chinese shops and churches in remote towns of Java? Blow away the hordes of poor immigrants from villages in Bangladesh, Burma, Cambodia, Indonesia and the Philippines, fire suddenly from jobs in factories, kitchens and construction sites in Singapore Malaysia, Indonesia, Korea and Thailand? Blow away the blizzard of promissory notes issued by failing companies

that buries Korea's stock market and banks in swirling drifts of bad debts? Zap the schemers, masters of Crony Capitalism, businessmen whose dirty deals with politicians wipe out decades of hard work and sunk their countries beneath tidal waves of unpayable obligations? What exciting, volatile truths shall our laser beam destroy? Who are the bad guys and who is to pay? This game has many moving targets. Bad guys can be hard to identify because of confusion over who owes what to whom. Both creditors and debtors hide their positions. When Indonesia defaulted on \$73 billion of private foreign debt after its currency lost two-thirds of its dollar value in three months, guesses on Indonesian debts to Korean banks, themselves

Norman Gall is executive director of the Fernand Braudel Institute of World Economics and editor of Braudel Papers. An earlier version of this essay was written for the international conference on Brazil and Asian Crisis organized by the Braudel Institute and sponsored by the Fundação Armando Álvares Penteado. Part 2 of this essay will appear in the next issue of Braudel Papers.

owing \$66 billion in short-term foreign loans, ranged from \$2.5 billion to \$25 billion. Who can zap the perennial menace of Colossal Error? Our game demands discretion, ingenuity and a keen sense of justice.

Our video game carries few new ideas, but poses some basic questions. The central question of our time is whether we have plunged into a breach with the past, a basic discontinuity from the modernization of recent centuries, reviving ancient fears of a plague of relapse. Fear of relapse is driving a shift in the politics of modern communities from a political economy of entitlements, or acquired rights, to a political economy of survival. The shift is only beginning and its implications are coming slowly into view. In coming decades, in many countries, from Russia and China to Peru, from Brazil to Egypt to India and Nigeria, in cities from New York to São Paulo to Budapest and Bangkok, from St. Petersburg and Detroit to Jakarta and Los Angeles, the main task of economic policy will be regeneration.

Amid today's financial turbulence, Brazil is groping for ways to fortify a new culture of low inflation and to continue modernizing its public institutions. Since the launching of the Real Plan in mid-1994, reducing annual inflation from 5,115% in the previous 12 months to 4.7% for all of 1997, Brazil has made modest, decent and difficult progress toward enhancing the viability of fiscal federalism, financial markets and the social contract. However, political rigidities have slowed these advances. The ground will give way under these efforts only if Brazil fails to pursue them coherently, breeding disillusion that could endanger political stability and return Brazil to the pessimism and confusion of its recent decades of chronic inflation. As Harold James observes in his new history of the postwar international monetary system, "a major problem is most easily fixed if all those involved are convinced that they need to act, and this conviction is most likely to be generated by a sharp crisis."

Like Brazil's struggle against chronic inflation, the Asian crisis is a test of institutions. This test bestrides Asian countries embracing enormous differences between them in wealth, economic structure, political freedom, government policy and geography. It is hard to compare Indonesia, an archipelago of 13,000 islands and 200 million people with a long history of colonialism and dictatorial rule, with rich city-states like Hong Kong and Singapore, a continental giant like China and an economic superpower like Japan, used as a model for state-directed industrialization in Korea and Malaysia. The differences between these countries were blurred by high economic growth rates in the recent past. Their present difficulties are bred by failure of their institutions to deal with the risks involved in sudden increases in the scale of financial transactions. Dramatizing these risks was the bankruptcy of Indonesia, leading to a scale of political rioting unseen in Latin America since the Bogotazo of 1948, triggered by assassination of the Liberal leader Jorge Eliecer Gaitan, a key episode in aggravating endemic violence in Colombia over the past half-century. Overshadowing political convulsions is another question posed by the Asian crisis: Given their huge burdens

of unpaid foreign and domestic debts, how many of these countries will be able to maintain viable indigenous financial institutions, interacting with the rest of the world economy, over the next generation?

At the end of the 20th Century, mankind is struggling to overcome the threat of institutional failure in managing problems of scale. These problems of scale appear in the proliferation of financial assets and information flows as well as in the size of enterprises, cities and nations. Sudden changes in the scale of human activity breed institutional demands for applications of knowledge in the form of capital-formation, adaptation, and management. Institutional failure under pressures of scale threatens relapse into more archaic forms of civilization and mortality. Seeking humane outcomes, many governments will seek to preserve civilized cooperation in managing complex societies. Some communities will sustain and speed their development, mastering higher levels of knowledge and organization, while others sink deeper into disease, violence and confusion. Brazil and the stricken countries of Asia share these risks.

2. The Assets

What is seen today as an Asian crisis is merely a surface disturbance of a much bigger problem: relentless and uncontrolled proliferation of financial assets worldwide. The heightened scale and efficiency of financial markets has raised living standards, intensified international exchange and created vast amounts of new wealth. But money became too cheap and the rewards for risk too low. The pace and secrecy of borrowing and lending bred mistrust and dangerous information gaps. Delayed pressure on creditors and borrowers led to changing expectations embodied in devaluations, stock market crashes and political casualties. The breakdown and reshuffling of asset values in Asia came at a climax of global financial expansion that has accelerated, despite a few brief interruptions, throughout the postwar decades. By 1995 conventional financial assets in the core economies of Europe, North America and Japan (bonds, equities, bank assets and official reserves minus gold) had reached \$73 trillion, or three times the total world product. In early 1995 the BIS surveyed derivatives, the newest and hottest game in financial markets, and calculated the "notional value of outstanding commitments" that is, the assets generating the income streams being swapped in derivatives contracts at another \$64 trillion. The combined value of derivatives and conventional financial assets is now roughly five times the world's total annual output of goods and services.

The magic of the market has its sorcerer's apprentice, the hyperactive trader, a new kind of hero in the annals of finance, sweating in the devil's kitchen amid vast arrays of computer screens spawning the delights of instant information: infinitesimal, fleeting spreads within huge and sudden movements of financial assets, creating flickering chances for quick trades. Completing three years of 29% annual gains



in stock prices and hundreds of billions of dollars worth of corporate takeovers and trillions of dollars in derivatives of bewildering complexity, Wall Street was on a roll in 1997. At Goldman, Sachs, 190 partners took home bonuses of at least \$4 million each, with star performers and top managers getting as much as \$25 million, and 215 lower level managing directors receiving an average of \$1.5 million each. Dante classified avarice as a form of incontinence. Gibbon called greed “an insatiate and universal passion.” Yet greed can be useful in encouraging risk and innovation, although the Book of Proverbs tells us: “He that is greedy of gain troubles his own house.” What can be dangerous about greed is the feckless shifting of risk onto society, subverting political systems and distorting the price of risk and reward.

So far, the supply-driven financial expansion of our time has accompanied declining inflation and fiscal consolidation in the major countries, creating a stable international environment. By 1994 the institutionalization of savings in insurance companies and pension and mutual funds in the rich countries had amassed some \$20 trillion in assets, of which only a small portion poured into emerging markets at higher yields. Yet this small portion is enough to flood the institutional and management capacities of poorer economies and to launch something akin to a video game of attack and defense of vulnerable currencies leading to the drama unfolding in East Asia since mid-1997.

Speculative attacks can surprise and overpower on several fronts, while weapons of defense are few and usually are used under severe constraints. Institutional investors, with their huge hoards, are positioned well to mount these attacks, together with highly leveraged hedge funds and proprietary traders, by taking short positions against weak currencies after capital flight has begun, with leveraged bets worth five or 10 times their exposed capital. The obvious targets are countries with overvalued currencies, little exchange rate flexibil-

ity for political or economic reasons, a weak financial system and fiscal regime, big current account deficits, lots of short-term foreign debt and limited international reserves. On most of these counts, Brazil was a prospective target for speculative attacks both before and after outbreak of the Asian crisis.

The classic defense against these attacks is central bank tightening of the domestic money supply, forward selling of dollars, raising local interest rates and government spending cuts. The defending central bank must act quickly to raise the interest cost to speculators of buying foreign currency to force a devaluation. As the stakes rise, the battle becomes more intense and complex, driving the central bank deeper into derivatives markets, restricting foreign activity of commercial banks and burdening the real economy with higher costs. A currency can be attacked in either the spot or the forward market. If no developed forward market exists, a new derivative, NDF (non-deliverable forward) can be created as an over-the-counter offshore contract, like those traded heavily in Hong Kong and Singapore, to circumvent central bank capital controls. NDF speculators bet on the future price in dollars of the currency under attack and settle their bets in dollars.

In October 1997 Hong Kong shares crashed, triggering an international panic that devoured \$10 billion of Brazil’s reserves within a week. In a successful defense, Brazil’s Central Bank decreed the world’s highest real interest rates, 40% above inflation, and sold \$20 billion dollars forward at the current exchange rate to shield its currency, the real, from another attack. High interest rates dampened domestic demand and sucked so many dollars into the Brazilian economy that both reserves and interest rates approached pre-crisis levels within four months. “Never have so many dollars entered the country,” a banner headline exclaimed the newspaper *O Estado de S. Paulo* as reserves approached a new record of \$75 billion, capitalizing mainly on hot money exploiting the huge spread between Brazilian and international interest rates. However, the security provided by these \$75 billion in reserves must be weighed against \$43 billion of annual interest paid by the government, much of it from domestic debt sold to prevent inflows of foreign capital from inflating the money supply, and \$36 billion in foreign short-term borrowing.

Asia’s difficulties gave a healthy warning to the rest of the world, suddenly reversing a steady fall in the price of risk. According to the BIS, “the world financial system seems to have shown greater resilience than during the Mexican crisis in the early part of 1995. The risk premium on Latin American and Eastern European countries foreign currency debt retreated from their late October peak and contagion to their currencies was muted....A large number of investment and commercial banks appear to have been taken by surprise by the virulence of the financial turbulence, announcing heavy losses on their proprietary trading operations,” leading to a 30% fall in international bond market issues in the last quarter of 1997 and record levels of repayments. Nevertheless, temporary and

localized recoil from risk, provoked by regional events in developing countries, is unlikely to stall for long the growth, deepening, specialization and diversification of financial activity.

Distortions and overvaluations always are adjusted. Residual fear and instability are needed in financial markets to contain herd behavior, which aggravates overshooting and panics and makes episodes like the Asian crisis more dangerous. Governmental action or inaction in times of financial crisis often is guided by fear of the unknown. Adjustments sometimes evoke the words of Joseph Schumpeter who, during the Great Depression of the 1930s, wrote that calculations based on inflated assets were “swamped by the torrents of a process of readjustment corresponding in magnitude to the extent of the industrial revolution of the preceding 30 years. People, for the most part, stood their ground firmly. But that ground itself was about to give way.” In explaining the Asian crisis, U.S. Federal Reserve Chairman Alan Greenspan alluded to Schumpeter’s theory of “creative destruction” as “an important element of renewal in a dynamic market economy” that needed, as Asian countries lacked, “an efficient bankruptcy statute to aid in this process, including in the case of crossborder defaults.” Greenspan added: “In an environment of weak financial systems, lax supervisory regimes and vague guarantees about depositor or creditor protection, bank runs have occurred in several countries and reached crisis proportions in Indonesia,” breeding “a visceral, engulfing fear. The exchange rate changes appear the consequences, not of the accumulation of new knowledge of a deterioration in fundamentals, but of its opposite: the onset of uncertainties that destroy previous understandings of the way the world works.” The most obvious danger is the proliferation of financial assets that is unprecedented in speed, scope and scale. Here are the main features of this expansion:

1. Reserves. The simplest indicator of liquidity growth is the value of reserves in gold and hard currency held by central banks. The postwar era began with a “dollar shortage” that was ended by the Marshall Plan and U.S. balance of payments deficits. Reserves doubled in 1951-70, during the “Golden Age” when the world economy grew at an unsurpassed long-term annual rate of 5%.

Since then, economic growth slowed to 3% yearly but reserves multiplied 12-fold. Since 1970 developing countries led this increase, multiplying reserves 31 times, doubling them in the 1990s, to exceed those of the rich countries for the first time in 1997. Half of the \$1.2 trillion in net capital flows to emerging markets in 1990-96 went into official reserves, 70% of them in Asia and 37% in Latin America. As in the 1920s, many central banks offered high interest rates in overvalued currencies to attract and keep reserves. Short-term foreign credits and surging Eurobond borrowing increased Brazil’s hard currency reserves from \$10 billion in 1990 to \$63 billion on the eve of the Asia crisis, sixth-highest

in the world, as the lure of international interest rate arbitrage overcame the threat of chronic fiscal and current account deficits.

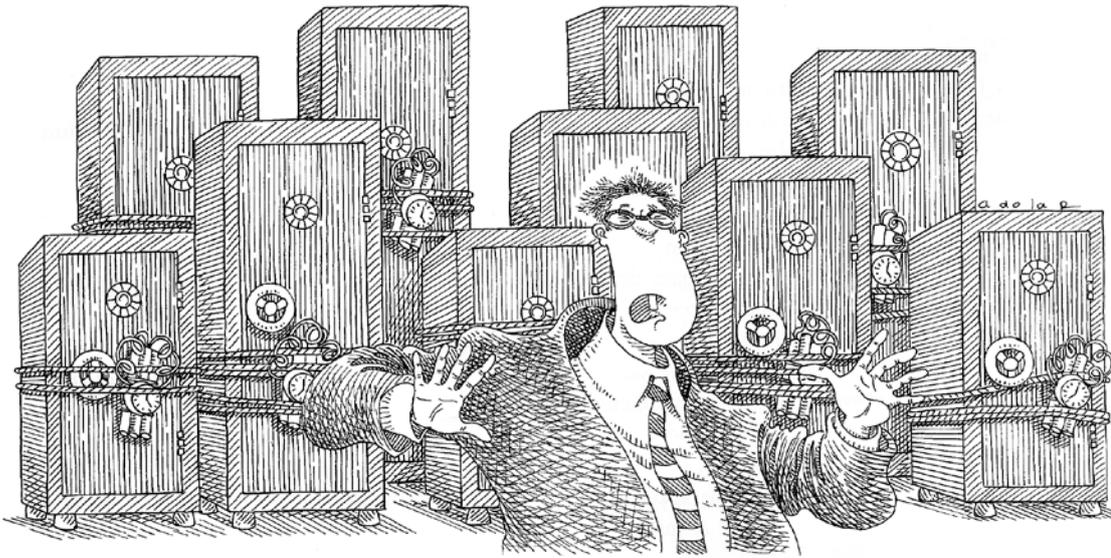
2. Foreign exchange dealings. Daily turnover in foreign exchange markets rose from about \$200 billion in the mid-1980s to \$1.2 trillion, or 20 times the value of world trade in goods and services. Lured by the rising value of the dollar against the deutsche mark and the yen, investors poured nearly \$1 trillion in net capital inflows into the United States in 1995-96, between four and five times the levels of the early 1990s. Many traders and hedge funds borrowed cheaply in yen, then sold yen for dollars to buy U.S. treasury bills and to finance other investments. Some of these dollars were placed in developing countries, whose central banks then used the dollars to buy U.S. treasury debt. Also, international money markets increasingly use repurchase agreements (“repos”) for inter-bank funding, with U.S. treasury securities the main form of collateral. Central banks bought two-fifths of the \$294 billion in foreign net purchases of U.S. treasury securities in 1996 as Japan’s reserves reached \$216 billion, or \$90 billion more than in 1994. Half of the 1996 central bank investments in U.S. government debt came from developing countries trying to manage their exchange rates amid huge and volatile capital flows.

3. International bank lending. Gross crossborder bank lending quadrupled since 1992 while international issues of bonds and notes by financial institutions multiplied eight-fold, absorbing nearly two-thirds of all net dealings. Analyzing the Asian crisis in November 1997, the BIS found that “first and foremost” was “the question of why the evidence of growing economic and financial imbalances was ignored for so long by the market.... In contrast to the Mexican crisis of 1995, which was heavily biased towards public sector debt, the recent Southeast Asian currency turmoil involved a wide spectrum of actors and instruments,” meaning that “it will be increasingly difficult for official financial assistance to insulate creditors and debtors from the adverse consequences of poor investment decisions.” As the Asian panic spread, \$9 billion in net capital inflows in 1996 to the countries most affected Indonesia, the Philippines, Malaysia, Korea and Thailand became net capital outflows of \$12 billion, removing a chance of orderly recovery.

4. Bonds. Foreign net purchases of long-term U.S. government and corporate bonds reached new record in 1996, 70% more than the previous high set in 1995. According to the IMF, “the United States is playing the role of a global intermediary: it attracts international capital by providing relatively safe, liquid instruments (U.S. government and high-grade corporate securities) at relatively high returns and then reinvests them through international markets in less liquid vehicles for higher returns.” In proportion to GDP, crossborder transactions in bonds and equities by U.S. investors rose from 4% in 1975 to 35% in 1985 to 164% in 1996,

Residual fear and instability are needed in financial markets to contain herd behavior

RESERVES



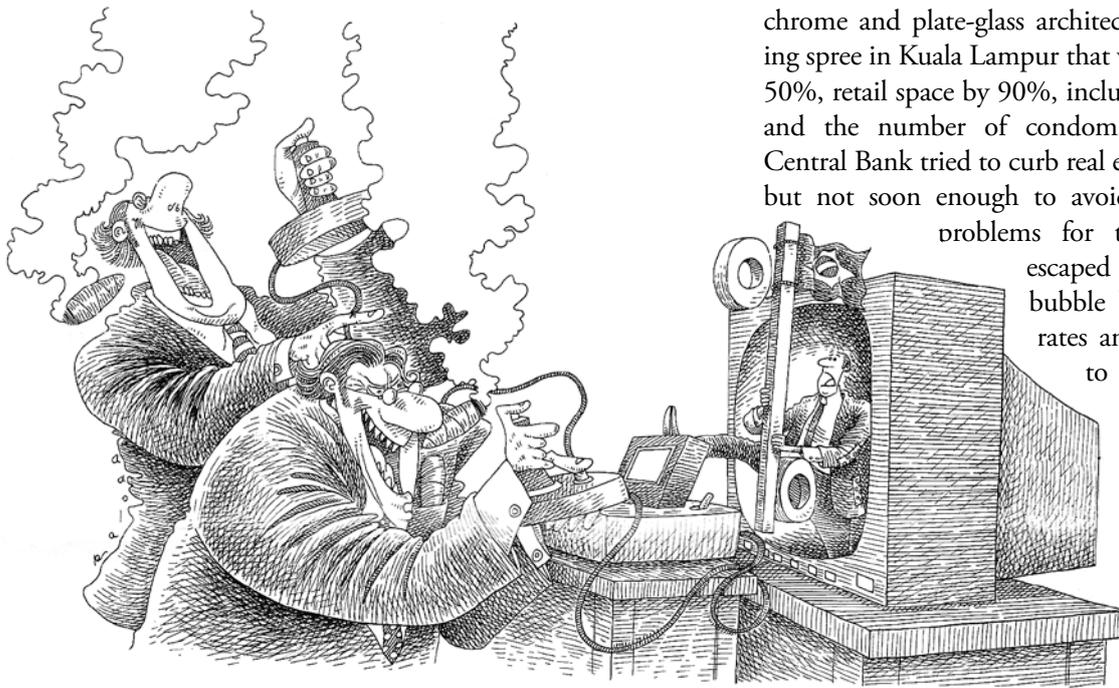
while German activity mushroomed from 5% to 200% in the same span of years. Japan's international financial dealing grew even faster, from 2% in 1975 to 156% in 1989 before falling to 60% by 1994 after collapse of its domestic stock market and real estate bubble, which erased more than \$5 trillion in wealth, equivalent to a year of national Output. According to the BIS, international financing through Eurobonds and bonds grew much faster than domestic securities markets: "Issuance of international debt was fueled by investors searching for higher yields in a context of ample global liquidity, further development of securitization, the migration of fund-raising activity away from domestic markets and the appearance of new borrowers. In their attempts to enhance returns, international investors again showed a willingness to move down the credit spectrum and explore new niches," producing "the rapid increase in the international issuance of low-rated debt that... is now being followed by a rise in the number of defaults." Unlike loans, bonds "lack any mechanism for achieving an agreed rescheduling," observed John Williamson, a member of the Fernand Braudel Institute of World Economics. "Ironically, it was precisely this difficulty that made bonds popular with lenders during the 1980s. While it was possible for distressed debtors to maintain service on bonds when these were a minute fraction of their total obligation, it will be impossible to do the same if difficulties arise in a country with a large proportion of its debt in the form of bonds. These creditors are living in something of a fool's paradise."

5. Short-term debt. The most dangerous proliferation of assets is in short-term debt. Foreign lending to both Asia and Latin America moved toward shorter maturities and more credits to non-financial companies instead of to banks and governments, especially in Indonesia, Korea, Thailand, Brazil, Mexico, Chile and Argentina, with short-term borrowing (maturities of less than one year) far more prevalent in Asia than in Latin America. Thailand's debt to foreign banks leaped from \$29 billion in 1993 to \$69 billion by mid-1997, 70% of

which was short-term. Confusion and desperation over short-term foreign debts in Korea, Indonesia and Thailand since mid-1997 evoke the quagmire of short-term loans to Central and Eastern Europe in the 1920s, after U.S. bankers poured money into Germany to finance recycling of war debts and reparations. The \$200 million Dawes loan in 1924 began a flood of high-interest, short-term loans on a scale that was not understood until the Great Depression touched bottom.

In July 1931 the Creditanstalt, the 'Rothschilds' Vienna bank and Austria's biggest, failed after the French pulled their loans in protest against a planned customs union between Germany and Austria. Half the Creditanstalt's \$145 million deposits were by foreigners. By the time the Creditanstalt closed, the panic had spread to Germany, which lost one-third of gold and foreign exchange reserves in two months, forcing its whole banking system to shut down. The BIS found that \$10 billion of short-term debt was floating around the world, with \$5 billion in Central Europe, a much bigger share of total international assets than the \$212 billion in developing country short-term debt discovered at the time of the Mexico default in 1982 or today's Asia crisis. Fed officials at first told President Herbert Hoover (1929-33) that U.S. banks made only \$500 million of these short-term loans but Hoover, checking further, found that the real amount "probably exceeded \$1.7 billion," enough to destabilize some large U.S. banks, blaming this on "artificially low interest rates and expanded credit in the United States from mid-1927 to mid-1929 at the urging of European bankers. Some of our bankers had been yielding to sheer greed for the 6% or 7% interest offered by banks in the European panic area. "As so, London bankers had borrowed short-term in French francs at 2% and lent the funds, changed into reichmarks, to German industry and local governments at 8% in loans totaling \$3.6 billion, more than five times the gold reserve of the Bank of England.

As in Korea and Indonesia today, half of Germany's foreign debt in 1931 was in short-term loans. Collapse of the German financial system spread panic all over Eastern Europe, shifting enormous pressure onto the gold standard British banks. In July 1931 Britain lost 19% of its gold reserves. Withdrawals of foreign deposits from London grew until Britain left the gold standard in September. That event shook the world and shifted pressure to the United States. While political conditions now differ from those of



billed as the world's tallest building, an arresting creation of chrome and plate-glass architecture, presiding over a building spree in Kuala Lumpur that would increase office space by 50%, retail space by 90%, including 26 new shopping malls, and the number of condominiums by 80%. Malaysia's Central Bank tried to curb real estate lending in March 1997, but not soon enough to avoid enormous oversupply and problems for the banking system. Brazil escaped an Asian-style real estate bubble because of high real interest rates and low levels of bank lending to the private sector, resulting from both chronic inflation and the rigors of stabilization under the Real Plan.

7. Derivatives. "A derivative is a bet, not an investment a bet on the direction, limension, duration and speed of the changes in the value of another financial instrument [mainly currencies, interest rates and stock prices]," writes Martin Mayer, a member of the Fernand Braudel Institute of World Economics, in *The Bankers: The Next Generation* (1997). The notional value of exchange-traded derivatives contracts grew over the past decade at an annual rate of 32%. However, the market share of exchange-based deals was overwhelmed by direct over-the-counter (OTC) sales by financial institutions that grew at a 45% annual rate. The IMF explained this buying and selling of risk in terms of "an increased understanding by financial and nonfinancial institutions of the capabilities these instruments offer for repackaging and reengineering major cyclical and balance-sheet risks, in tandem with technological, analytical and numerical advances in pricing and evaluating the risks of derivative contracts." This reasoning supports technical facility while overlooking basic questions about the changing nature of credit and risk. The Asian crisis, triggering big currency devaluations and stock market losses, ruptured the mathematical premises for calculating potential risks. Writing on derivatives in the Asian crisis, Jan Kregel of the University of Bologna argues that "it is precisely the role of most derivative packages to mask the actual risk involved in investment and to increase the difficulty of assessing the final return on funds provided."

In the United States at the end of 1996, the top eight banks alone generated 94% (\$19 trillion) of all OTC outstandings. According to Mayer: "Something like a fifth of the total 1993 profits of the largest American dealers in such instruments JPMorgan, Bankers Trust, Chemical Chase, Citibank, First Chicago, Bank of America, Merrill Lynch, Salomon, Goldman Sachs, Bear Stearns, Morgan Stanley came from creating, selling and trading the great zoo of futures, forwards, structured notes, collateralized mortgage options, swaps, swap-tions, collars and so forth that carry the label 'derivatives'."

The danger of derivatives is that small sums of money can

Europe in the 1920s, the role of short-term foreign loans in deepening the Depression leads to worries about the impact of short-term debt today. As Greenspan warned: "Short-term interbank lending, especially crossborder, may turn out to be the Achilles heel of an international financial system that is subject to wide variations in financial confidence." The *Financial Times* went further: "If there is one lesson from the experience of the last two decades, it is that banks are disastrous vehicles for large-scale capital flows across frontiers. The short-term money they provide is unsuitable for finance of long-term investment; the expectation of help from their home authorities makes them willing to take on excessive risk; and their attempts to take their money out impose intolerable pressure on exchange rates of the capital importers. It would be far better for international intermediation to be based, as a century ago, on long-term finance: direct investment, portfolio equity and long-term bonds."

6. Real estate speculation. inflated asset values in countries infected by the "Dutch disease" as overvalued currencies drove lending and investment into nontradeables, contributing to bubbles and banking crises in Argentina, Chile, Malaysia, Norway, Sweden, the United States, Britain and Japan. In most countries real estate forms the bulk of bank collateral, with real estate lending peaking at 37% of all loans in Malaysia and 42% in the United States, three or four times bank capital, before the collapse of real estate prices a decade ago wiped out much of the banking system's capital.

Shaky Japanese banks are stuck with boarded-up lots and half-built apartment and office buildings, unsalable in today's depressed market, that were taken as collateral for defaulted real estate loans. Japanese investors who bought luxury hotels, banks, office towers and golf courses in the United States in the 1980s have been selling \$3-\$5 billion of this property annually in the mid-1990s. The flagship of Malaysia's real estate boom is the 88-story Petronas Towers,

be used to leverage big bets on interest rates, currencies, commodities and shares, exposing players to gains or losses that can multiply their original stake hugely in periods of volatility. Potential losses can be multiples of maximum gains. These bets emanate an aura of complexity dressed in the mumbo-jumbo of high technology, using computer-generated calculations based on advanced mathematics often custom-designed for each client, giving the bank a big information advantage in each deal. Some of the 'end users' whose risks were supposedly being controlled by these instruments suffered losses of more than a billion dollars each. The list includes Showa

Shell in Japan, Bank Negara in Malaysia, Barings in Britain, Metallgesellschaft in Germany, Orange County in California, Sumitomo and the New York branch of Japan's Daiwa Bank. After Orange County filed for bankruptcy in 1994 with losses of more than \$1.6 billion in risky investments mainly derivatives, Merrill Lynch and Credit Suisse First Boston paid \$34 million to settle suits by investors and the SEC. In March, Japanese beverage company, Yakult Honsha revealed \$812 million in derivatives losses it gambles to make up for stock market losses after the "bubble economy" collapsed in 1989.

8. Foreign direct investment. Since the mid 1980s, annual flows of foreign direct investment (FDI), the most stable and productive form of asset-creation, multiplied four-fold, from \$7 billion to \$349 billion in 1996. Total FDI inflows have doubled worldwide since 1991-92. While trade in services is more restricted than trade in goods, the fact that services is the largest sector of the world economy has enabled it to generate half of all FDI stock and nearly two-thirds of FDI flows. Both trade and foreign investment are concentrated in a few countries. UNCTAD's World Investment Report 1996 shows that the 11 biggest host countries (10 OECD members plus China) received two-thirds of all FDI inflows and generated 78% of all outflows in 1995, while the 100 least-favored countries received less than 1%. The trend is toward more concentration. Nearly 90% of the increase in FDI inflows in 1995 went to developed countries, with their share rising

Golf and Asian Values



Asia's real estate boom reached its most insane heights not with office towers, shopping malls, luxury apartments and hotels but with golf courses. There were only 45 golf courses in Southeast Asia in the 1970s. Now Thailand alone has about 100 of them, with another 100 planned when its currency crashed in July 1997. "Where else on earth," Thailand's Prime Minister asked rapturously, "can you get three caddies when you are golfing one to hold an umbrella for you, one to carry your bag and another to massage your back?" Many caddies are pretty young girls. In Japan the number of golf courses rose from 200 in 1960 to more than 2,000 in 1995. As Japan's real estate boom peaked, its golf clubs had 2.6 million members and 200,000 employees, with the price of club memberships averaging \$327,000 in 1990. When the bubble burst, 100 golf courses went bankrupt and memberships lost 80% of their peak value. Members of bankrupt clubs demanded return of their refundable deposits, which promoters had used to finance new golf courses.

from 59% in 1994 to 65% in 1995, far exceeding their portion of world output. The bulk of FDI growth among developed countries is in mergers and acquisitions (M&As), often for investment in new production capacity. In 1995, U.S. companies spent \$38 billion to buy majority stock in cross-border M&As, or 90% of the equity in FDI outflows from the United States, a spillover from the domestic merger fever of the 1980s, when \$2 trillion was spent to buy 55,000 U.S. companies. Of the \$1.6 trillion in M&A deals worldwide in 1997, 45% were outside North America. Spurred by this surge of M&A activity, Latin America received 11% of global

FDI in 1996, nearly triple its falling share of world exports.

9. Stock markets. Until the typhoon struck Asia, Brazil's stock market, trading mostly nonvoting shares in government-owned companies, rose 70% in the first eight months of 1997. For all of 1997, emerging Asia's stock markets lost 56% of their dollar value and Japan's lost 30%, even as Wall Street stocks gained 31% for the year, European bourses rose 24% and shares in Brazil and Mexico, despite losses late in the year, advanced by 35% and 51% respectively. Throughout Asia, losses were concentrated in the last quarter of 1997, when stock markets in Bangkok, Jakarta, Kuala Lumpur and Seoul fell by 29%-31%. Companies sank beneath enormous burdens of debt, mostly short-term and in dollars or yen, with chances of repayment receding as local currencies lost value in the panic each day or week.

Emerging markets were riding the boom of Wall Street. After seven years of steady growth and low inflation, the United States has been enjoying an expanding sense of what is possible and reasonable. In its 1997 report on the U.S. economy, the Organization for Economic Cooperation and Development (OECD) suspects, "an increased appetite for risk on the part of investors and financial institutions," echoes Greenspan's warning against "irrational exuberance" bred by one of the biggest bull runs in stock market history. Since 1982 stock price multiplied tenfold at a compound annual rate of 16.5%, exceeded in speed only by the 29% yearly

risers in 1923-29 and in duration by the 10.5% annual growth from 1942 to 1966.

Increased appetite for risk also could be seen in shrinking yield spreads between U.S. Treasury debt and emerging market bonds, which fell to new lows in early 1997, even after bank supervisors warned of risky syndicated loans. The OECD observed that historical experience shows that "an increased cyclical willingness to bear risk is hallmark of an expansion nearing its end."

In the United States, mutual funds now manage nearly \$5 trillion, reflecting higher stock market prices, compared with only \$62 billion in 1980 and \$602 billion in 1990. In 1970-9, the number of mutual funds multiplied from 361 to 6,500 and individual accounts from 11 million to 151 million. The \$5 trillion in mutual funds equals three-fifths of gross domestic product (GDP), more net assets than those held by banks, pension funds or insurance companies. More than half of the 96 million U.S. households were believed to own shares, either directly or through mutual funds, twice as many as in the early 1980s, enabling the net worth of all households to more than quadruple since 1985.

The Asian typhoon has revived solemn and urgent words of warning. "We are past the stage of denial," warned Alfred Ho, associate director of Ivesco Asia in Hong Kong after prices of Asia currencies and stock markets, with few exceptions, collapsed in the last quarter of 1997. "We are at the stage of bankruptcies and jail sentences. When the currency moves 10% a day, company's liabilities go up 10% a day. At the levels of interest and currency rates, everyone bankrupt. No legitimate businesses can function." Words like these have been spoken many times before. Writing in 1934 on *The Great Depression*, the British economist Lionel Robbins warned: "We eschew the sharp purge. We prefer the lingering disease. Everywhere, in the money market, in the commodity markets and in the broad field of company finance and public indebtedness, the efforts of central banks and governments have been directed to propping up various business positions."

Six decades later, as the Asian crisis intensifies in the final weeks of 1997, Greenspan urged the "companies should be allowed to default, private investors should take their losses, and government policies should be directed toward laying the macroeconomic groundwork and structural foundations for renewed expansion; new growth opportunities must be allowed to emerge. Similarly, in providing any international financial assistance, we need to be mindful of the desirability of minimizing the impression that international authorities stand ready to guarantee the external liabilities of sovereign governments or failed domestic businesses. To do otherwise could lead to distorted investments and could ultimately unbalance the world financial system."

Time and time again, in many nations, two complications blocked obedience to these sound principles. First, financial institutions and their public regulators never learned to deal systematically with the problem of overshooting, embodied in the metabolism of all markets. Second, political considerations get in the way and seem to rule most of their deci-

sions. Political considerations drove big bailout operations of recent years in many countries. Political and economic logic are in danger of colliding again today.

3. Brazil and Korea

Modernization in Brazil and Korea is threatened by misuse of financial resources that we may call deranged economic transfers. These financial problems are surface features of deeper institutional difficulties, with common elements reaching across cultural and geographical distances. These distances and common institutional difficulties join, at the same crossroads of crisis and time, a relatively self-sufficient continental nation of 170 million people, covering half of South America's land mass, with an ancient "hermit kingdom" of East Asia that since World War II and the Korean War emerged from isolation and colonial submission to become the world's 11th-ranking exporter. Despite its spectacular success as an export platform, Korea has only begun to emerge from cultural isolation over the past decade. Japanese and Korean ideals of ethnic purity contrast sharply with the polyglot diversity of peoples within the Chinese empire and with Brazil's experience in the New World.

Brazil's peculiar regionalism gave it one of the world's most decentralized federations, in which state governors wield power in national politics with little accountability, much in the way that Korea's *chaebols* (a Korean adaptation of the Japanese word *zaibatsu*, meaning conglomerates) wield economic power. In both countries the private sector was dominated by family firms, which received huge government transfers. In 1983, in the worst phase of Latin America's debt crisis, the World Bank called Brazil "a transfer economy to distinguish it from the market and centrally planned economies." In 1982 transfers to individuals and businesses, including government corporations and the cost of financial subsidies, totaled 17% of GDP. Only 16% of the loan portfolios of the Central Bank and the Bank of Brazil carried positive real interest rates, while the liabilities of these institutions were high real interest obligations absorbing 78% of their resources. For decades, Korea threw money at privileged private companies as military governments drove the family-run *chaebols* into "strategic" areas of activity: shipbuilding, machine tools, steel, chemicals, semiconductors, car-making and construction and then bailed them out of financial difficulties after being rewarded by gigantic expansion of manufactured exports. While government support of the *chaebols* may have declined recently as the *chaebols* became more powerful with greater access to private loans, these credits embody massive transfers of resources from households to the corporate sector, which has failed to recover its capital costs. In 1997 the top five *chaebols* absorbed 15% of all bank credit. The Korea Development Institute estimated corporate debts, foreign and domestic, including operating and foreign exchange losses, at \$650 billion at the end of 1997. According to the McKinsey Global Institute, "while Korean companies

recorded profits on an accounting basis, they were destroying value since the profits generated were lower than the cost of financing the capital investments (i.e., Korean companies suffered from extremely low capital productivity)."

In most of the world, transfer economies are sinking under the stress of fiscal burdens, political conflict and international competition. Large-scale fiscal transfers are common to nearly all modern economies. These transfers become deranged, as weapons of self-destruction, when they grow to rival market mechanisms, when they develop a life of their own, when their scale can no longer be controlled without injuring or destroying important niches within the community. Brazil and Korea are not alone in spawning deranged economic transfers, driven by perverse incentives, but have carried them much farther than most countries.

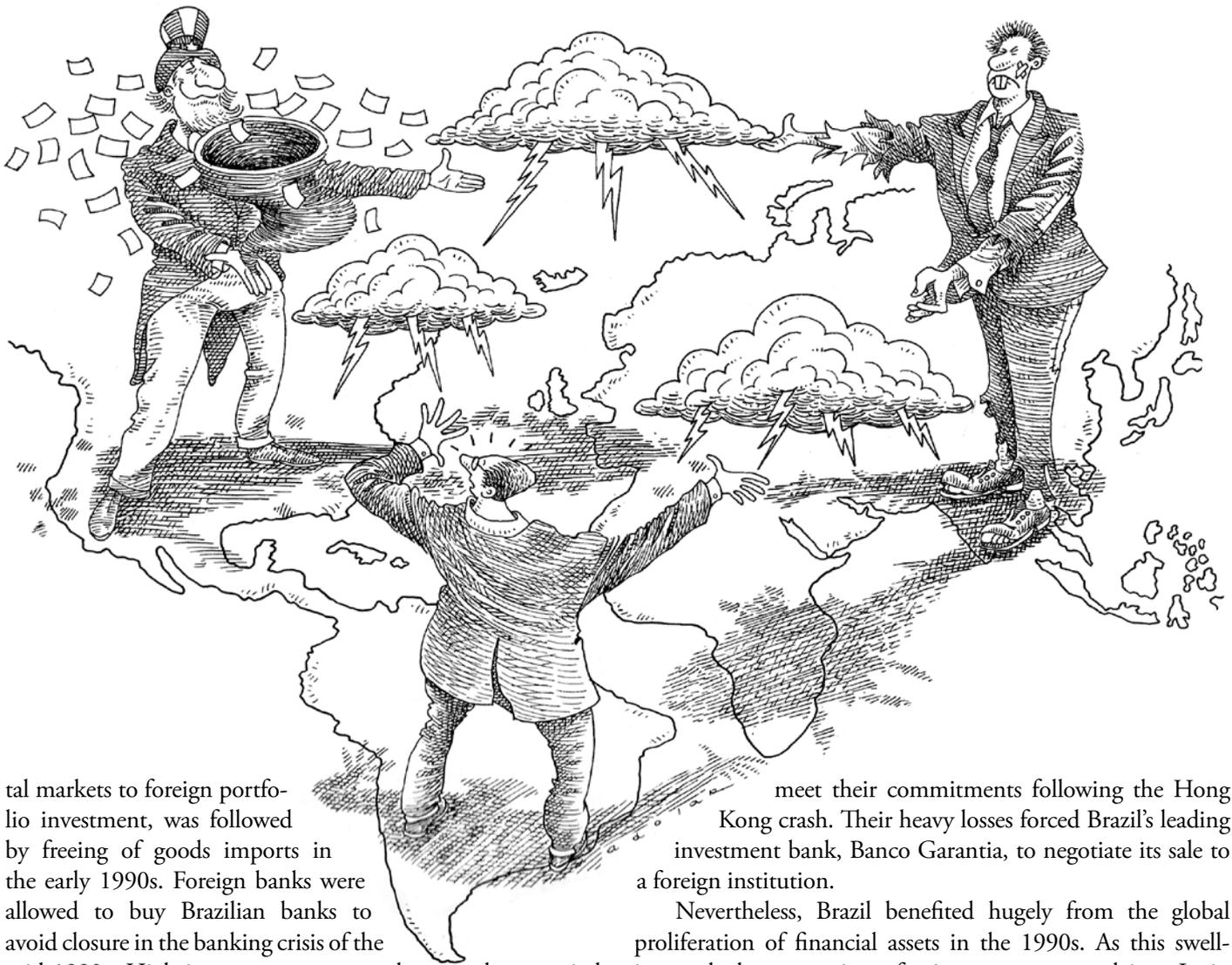
Korea's antiquity as a unified state goes back 1,200 years, its independence broken only by brief conquests by the Mongols in the 13th Century and the Japanese in this century. A stranger to large-scale warfare, Brazil is a more recent creature of Europe's mercantile capitalism, based on plantation agriculture and extractive industries, its culture shaped by slavery and European immigration. The floating world of Brazilian inflation was animated by a fantasy of infinite expansion, peculiar to the frontier societies of the Western Hemisphere. The returns to labor remained low because of weak political and economic organization over a vast national territory and meager investment in infrastructure and human capital. Yet the promise of the frontier remained vibrant in view of Brazil's cornucopia of natural resources and its experience as the world's fastest-growing national economy for most of the past 120 years. Brazil is a cosmopolitan society while Korea, despite its spectacular recent development, is struggling now with inbred and xenophobic culture developed in response to periodic incursions by more powerful neighboring civilizations. Fear of foreign dominance has shaped Korean resistance to foreign investment and to foreign investors' purchase of land. Memories persist of Japanese property seizures and of farmers being forced off their land when Japan ruled Korea as a colony (1910-45). By 1918 the Japanese owned 40% of Korea's land area. Only now are bans on foreign land ownership, under a law passed in 1948, being relaxed under terms of a \$58 billion bailout pact with the IMF in late 1997, which commits Korea to open its economy to foreign investment.

Brazilian experience knows nothing like Korea's love-hate dependence on Japan. The interface between these two peoples arises from the mists of ancient history and legend. Southern Japan probably was peopled by stone-age migrations from Korea. As late as the 15th Century Korea exported advanced products to Japan (pottery, cotton thread, textiles) in exchange for raw materials (copper and sulphur) amid the tumult of military invasions and endemic piracy. Park Chung Hee, South Korea's military dictator (1961-79), was trained at Japanese military schools. His Heavy and Chemical Industries drive, mobilizing and financing the chaebol to industrialize Korea, was modeled after similar

drive of Japan's military regimes of the 1930s. In the post-war decades Korea became dependent on Japanese loans and capital good to modernize its economy. "We now are seeing generational change," said Professor Woo Tac Kim of Hallym University (Seoul). The old politicians, bureaucrats and military, educate in Japanese colonial schools, are moving out. Younger people, with an American-style schooling, are moving in. Korean bureaucrats did nothing to solve the mess in our financial system because they copied Japanese bureaucrats, who also did nothing to solve their own financial mess. One thing the Asian crisis may prove is that the Japanese model no longer is good for us."

Despite political instability in recent decades Brazil and Korea have developed strong international ambitions and a new vocation for democracy. In both countries military rule ended in the mid-1980s in the face of popular clamor for free elections, but in Brazil democratization was planned and executed by its military rulers over a 10-year period. Both now struggle to emerge from the cultural and economic models of state-driven industrial development that flourishes under decades of anti-communist military rule. These statist models were more fashionable world-wide in the 1960s and 1970s than they are today producing high growth rates that citizens of both countries took for granted.

In Brazil and Korea, banks formed part of the support system for goods industries that were heavily protected from international competition. Both countries tried financial liberalization in recent years, with Brazil going much further. Their experience shows how hard it is to free credit markets without also freeing goods markets. Commercial banks in Korea were privatized in 1957, renationalized by President Park in 1961 and then reprivatized in the early 1980s, with the government controlling appointment of all bank presidents until 1993. The kind, direction and rates of bank lending fell under Japanese-style "window guidance" by government, which steered loans to big companies while depriving individual savers of credit for housing mortgages and personal loans, giving banks little chance to gain experience in credit evaluation. Liberalization of this system took place in small steps in the 1980 and early 1990s. While by the mid-1990s turnover on the Korean stock market was sixth highest in the world, foreigners still were restricted to 15% ownership of Korean companies at the time the currency and stocks crashed in late 1997. As in Korea, the bulk of the assets of Brazilian banks are loans by government financial institutions. However, despite the domination of credit markets by huge public banks, and the waste and disorganization perpetuated by multi-billion dollar bailouts, Brazil's banking system embraces a wider variety of institutions from big and profitable private banks, like Bradesco and Itau, with national branch networks, to investment banks and medium-size commercial and regional banks to state government banks that serve as political cash boxes and are rescued recurrently from collapse by the Central Bank. Moreover, financial liberalization moved in step with trade liberalization. The opening of the foreign exchange market in the late 1980s, and of local capi-



tal markets to foreign portfolio investment, was followed by freeing of goods imports in the early 1990s. Foreign banks were allowed to buy Brazilian banks to avoid closure in the banking crisis of the mid-1990s. High interest rates attracted huge capital inflows. Reserves multiplied. The inflows also bred a boom in a stock market mainly trading non-voting shares in government corporations. The price of shares in Telebras, the federal telecoms monopoly which accounts for half of the capitalization of the Sao Paulo stock market, soared from \$2 in 1991 to \$150 on the eve of the October crash provoked by the Asian crisis.

By then, globalization of financial markets had gone so far that Korean banks and companies held 15% of the \$36 billion in outstanding Brazilian Brady bonds, a heavily-traded debt instrument, partly backed by U.S. Treasury securities in renegotiating developing countries debts to foreign banks. Korean investment banks and brokers were running over 100 offshore investment funds, of which some 40 had derivatives business with JPMorgan. Of JPMorgan's \$3.6 billion total exposure to Korea, \$2 billion was in derivatives contracts. JPMorgan's suit against a Korean counterparty to a "notional" \$250 million currency swap derivative claimed a real loss of \$189 million. When the Koreans dumped their Brazilian Bradies on Wall Street to get dollars to pay their own debts, the price of these bonds crashed. After borrowing heavily to buy Bradies upon receiving inside information that the government would drive up prices by buying its own debt, Brazilian banks dumped their own Bradies to raise dollars to

meet their commitments following the Hong Kong crash. Their heavy losses forced Brazil's leading investment bank, Banco Garantia, to negotiate its sale to a foreign institution.

Nevertheless, Brazil benefited hugely from the global proliferation of financial assets in the 1990s. As this swelling peaked, more private foreign money poured into Latin America and Asia in 1996 alone than in the entire decade of the 1980s. At the climax of this expansion, two Brazilian officials told how their government used surging world liquidity in the 1990s to enable the Real Plan to drastically reduce annual inflation. "Our strategy was to use the moment of extreme international liquidity to advance in disindexing the economy, improving our fiscal accounts and restructuring production," wrote Jose Roberto Mendonça de Barros and Lydia Goldenstein. "The advantage of using international liquidity made possible a less traumatic fiscal adjustment. We gained time to adjust little by little while productive restructuring advanced, allowing us to return to higher growth rates and, consequently, absorption of deeper adjustments by the society." In the 1990s, they added, Brazil's productive restructuring was pushed forward by three "competitive shocks": (1) an export drive to overcome domestic recession; (2) opening the economy to imports to compete with domestic production bred by protected import-substitution programs of the past, (3) privatization of state-owned mining, transportation, electricity and telecommunications industries, raising foreign direct investment to new levels. The Real Plan also abolished the culture of indexation that perpetuated chronic inflation. Since 1990, annual gross inflows of foreign capital rose from \$5.4 billion to \$129 billion. Over the past two years gross

flows doubled and foreign direct investment (FDI) multiplied five-fold to \$17 billion, three times its share of poorer countries' exports. In 1996 Professor Celso Martone of the University of São Paulo viewed the process more skeptically:

What the Real Plan essentially did, besides changing the name of Brazil's currency, was to use foreign money instead of inflation to finance government deficits. Favorable conditions in the world economy, especially the emerging markets boom of the early 1990s, made funds available to enable Brazil's government to replace the domestic inflation tax with foreign savings as the primary source of financing its deficits. The current account deficit in the balance of payments and the fiscal deficit today amount to the same share of GDP. Two policy tools have been used to produce the shift in government funding: the exchange rate and domestic interest rates. The exchange rate policy tries to keep the rate of inflation low by linking domestic prices to world prices, while monetary policy maintains very high real domestic interest rates to attract enough foreign capital to finance the current account deficit. Over the past two years however there has been no public sector adjustment to eliminate the deficit and end the danger of resurging chronic inflation.

Never has a country emerged from decades of chronic inflation so painlessly as Brazil since the launching of the Real Plan in July 1994, thanks to these huge inflows of foreign capital. The Real Plan is Brazil's eighth try at economic stabilization since two decades of military rule ended in 1985. During this period 13 Finance Ministers and 15 Central Bank Presidents succeeded each other as the currency changed names six times. Like other economists who prepared the Real Plan while President Fernando Henrique Cardoso (FHC) was Finance Minister in 1993-94, Edmar Bacha has become an investment banker. During the crisis he logged onto the Internet every afternoon to read the next day's Korea Herald so he could tell executives from Merrill Lynch and Fidelity Investments where Brazil is headed. "I get very worried on days when the Koreans don't seem as worried as I am," Bacha said. "Let's face it, if Korea or Indonesia goes and Japan is hit, then who cares about fiscal adjustment in Brazil or anywhere else? Everyone's out of here and into United States Treasury Bills." Until recently, comparisons with Korea inspired shame and envy among Brazilians:

- Infant mortality of 44 per 1,000 live births in Brazil, against only 10 per 1,000 in Korea.

- Only 31% of Brazilian adolescents enrolled in secondary school, with high failure rates, against 92% of Koreans.

- Annual inflation of 5,115% in Brazil as recently as mid-1994, against only 5% in Korea. In the early 1990s, Korea ran general government surpluses averaging 2.7% of GDP, against Brazil's deficits exceeding 50% of GDP as governments printed money to keep the economy moving on the treadmill of chronic inflation. Korea's wage bill at all levels of government since 1970 was 15% of total spending, against 60% in Brazil.

- Brazil's income distribution is the worst recorded by the World Bank, with the richest 10% of the population taking 51% of all income and the poorest 20% only 2%, while Korea's richest tenth absorb 28% and the poorest fifth get 12%.

- Since 1980, Brazil's economy has grown at an annual average rate of only 2.7%, while Korea's has grown by nearly 9%. Korea's per capita income multiplied from \$150 in 1964 to \$10,600 in 1996.

Then the Asian typhoon struck. "We're in big trouble," President-elect Kim Dae Jung told heads of the top chaebols. "We went on a spending spree on borrowed money, and we've only ourselves to blame for the mess." Korea's \$100 billion in short-term debts at the end of 1997 were 25 times its official reserves, which evaporated after its Central Bank lent its own hard currency recklessly to finance overseas

expansion of the chaebols. The 1998 renegotiation of short-term debt of Korean banks excluded \$40 billion in foreign loans owed by the chaebols. Overseas subsidiaries of Korean firms owe \$50 billion.

Never has a country emerged from decades of chronic inflation so painlessly as Brazil

Brazil has some big local business groups, but nothing like Korea's *chaebols*. In 1992, the chaebols embraced 78 groups and their 1,056 subsidiaries, linked both by ownership and a maze of cross-guarantees of debts by companies within the same group. The top five groups had an average of 42 subsidiaries (including four non-bank financial companies) operating in 30 industries. The top four chaebols—LG, Hyundai, Samsung and Daewoo—generated 60% of the sales and 78% of profits of the 30 biggest groups, whose debts rose to 519% of equity in 1997. The chaebols' huge debts became entrenched in Korea's political economy since the 1960s. Some Korean economists find that cross-shareholding between firms in the same chaebol is "imaginary capital," which would make realistic debt-equity ratios even higher than the alarming levels currently reported. Daewoo became the biggest foreign corporate investor from developing countries when the Asian typhoon struck, leaving it with debts of \$3 billion, or six times equity.

Korea was the golden boy of the debt crisis of the 1980s. In January 1980, three months after the assassination of President Park and 28 months before Mexico's default, Korea launched a drastic stabilization effort that embraced a 20% currency devaluation, tight money, a 60% rise in gasoline prices, commitment to a flexible exchange rate and a \$600 million balance of payments loan from the IMF. By 1983, thanks mainly to fast growth of manufactured exports, Korea cut its current account deficit by three-fourths. Creditors were ecstatic. JPMorgan announced: "Korea's achievements in adapting its economy to the turbulent world of the 1980s exemplify the benefits that can flow from an outward-looking, market-oriented strategy for economic adjustment and development similar to that now being urged on many other developing countries."

As critics in the U.S. press and Congress insisted that

the IMF rescue loans to Asian countries should not simply cover a bailout of foreign banks, JPMorgan sued Korean banks and brokers for \$480 million in New York courts after declaring \$589 million in loans and derivatives in Indonesia, Korea and Thailand as non-performing assets. Some two-thirds of Korea's foreign debt were loans to local banks by foreign banks, \$55 billion of which were short-term, posing big risks for major U.S., Japanese and European banks. Aside from Korea's huge foreign arrears, its companies are struggling with some \$300 billion in domestic debt, mostly short-term. Korean banks are left with \$52 billion in government-ordered policy loans to favored companies on their books, 56% of which are non-performing. The Korean and Brazilian banking crises of 1995-98 confirm the findings of Andrew Sheng of the Hong Kong Monetary Authority, in a study of bank failures in many countries since the 1970s, arguing that "the unwillingness of governments to allow banks to fail for fear of systemic failure (bank capital is negative systemwide) has meant that implicit and explicit government guarantees exist for almost all banking liabilities. Consequently, a central problem of the global banking system is that, irrespective of public and private ownership of banks, commercial bank losses in excess of capital have become de facto quasi-fiscal deficits."

After signing agreement with the IMF in late 1997, Korea is trying to become the Comeback Kid of the Asian crisis. Koreans foreign debt of \$187 billion is nearly the same share of GDP as in 1980. With surprising realism and decisiveness, President-elect Kim, a veteran leftist politician who survived imprisonment and attempts by military regimes to kill him, hired former high-level U.S. officials to advise in rescheduling \$24 billion in short-term loans to Korean banks at lower interest rates than foreign banks demanded, in exchange for government guarantees. In the first quarter of 1998, Korea ran an \$8.6 billion trade surplus, thanks to shrinking imports, against Brazil's continuing trade deficits, as Korean reserves recovered to a two-year high of \$32 billion from a low of \$4 billion in December. In April Korea's government sold \$4 billion in junk-rated global bonds, at lower interest spreads above U.S. Treasuries than Brazil was able to borrow a week earlier, in the opening shot in Korea's drive to tell \$9 billion in bonds during 1998. To open its economy, trying to overcome a widespread sense of failure and resentment sometimes bordering on xenophobia, the government" scrapped limits on foreign ownership of Korean stocks, ordered more transparent and consolidated financial statements by companies and sent missions abroad to attract foreign investment, targeting 222 overseas companies, and plans.

As foreign investors looked for bargains in Korea, its citizens won sympathy in late 1997 a television screens around the world showed then lining up to sell \$2 billion worth of gold jewelry exported as bars to back the local currency. As the currency wilted, domestic prices jumped. Flour rose by 60% and cooking oil by 56%. Factories lacked basic raw materials such as aluminum, cotton, hides, scrap iron and copper. Hospitals lacked imported vaccines and X-ray film. University students, unable

to pay tuition, left their studies to join the army. Before his inauguration in February, Kim persuaded Korea's militant unions to accept changes in labor laws that would enable failing or merging firms to fire one million workers if Congress strengthens the social safety net. But union militancy revived as manufacturing job losses rose sharply in early 1998, partially offset as in Brazil by growth in informal services. Open unemployment rose from 2.3% in October 1997 to 6.7% in March 1998 and could rise to 10% by the end of the year. The number of suicides rose by 36% in the first quarter of 1998 over the same period last year. As in Lima during the economic collapse of the late 1980s, jobless youths stole sewer caps to sell as junk. Robberies in Seoul rose 45%, their numbers swollen by older housewives shoplifting in supermarket and burglaries by laid-off workers, dubbed a "IMF survival crimes" by the press.

Pessimism deepened after an initial recovery in early 1998. Officially 13,971 firms went bankrupt during 1997, among them eight big chaebols with combined debts of \$21 billion. The Korean Institute of Finance says that another 50,000 firms will fold in 1998, with a new surge of bankruptcies expected to start in August. "We're headed for the full meltdown of the financial sector," said Stephen Marvin, research director at Seoul's Ssangyong Investment & Securities. "There will be nationalization of the banking system." So far, however, most bankrupt firms continue operating in limbo, with the four bankruptcy court judges in Seoul swamped by a flood of cases as banks, carrying \$91 billion in bad debts and worried about providing for losses, pumped another \$1.5 billion into 11 troubled firms. Meanwhile, the three firms controlling two-thirds of Korea's \$100 billion in trust funds lost \$2.6 billion and may have secretly diverted another \$10 billion into their own accounts. Bankruptcy of some of Korea's most reputable firms made banks increasingly reluctant to discount promissory notes, traditionally a much-abused form of business payment. The Encyclopedia Britannica in 1910 reported that promissory notes "have long existed in Korea":

They took the form of a piece of paper about an inch broad and five to eight inches long on which was written the sum, the date of payment and the name of the payer and payee, with their seals; the paper was then torn down its length, and one half given to each party. The debtor was obliged to pay the amount of the debt to any person who presented the missing half of the bill. The readiness with which they were accepted led to over-issue, and, consequently, financial crises.

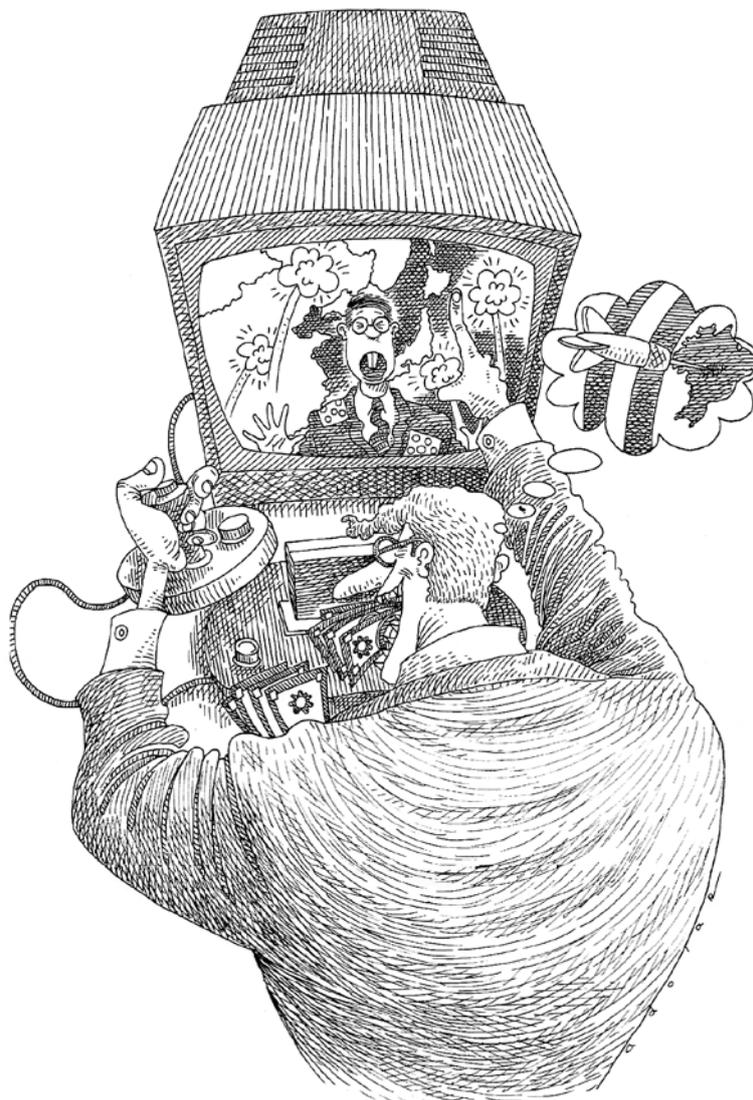
On the day that Korea's financial troubles became world news, Brazilian newspapers inconspicuously reported that the Senate in Brasilia approved a \$44 billion federal loan to rescue the state government of São Paulo from its spiraling debt to Banespa (State Bank of São Paulo), which was racing neck-and-neck with France's Credit Lyonnais for the Grand Prize of becoming the biggest failure in the history of world banking. (See "King Kong in Brazil: State bankruptcies and bank failures," Braudel Papers. No. 15 [1996].) Banespa and Credit Lyonnais were bailed out at a huge cost to taxpayers.

ers by their national governments. While the IMF was mobilizing \$118 billion to rescue Korea, Thailand and Indonesia from their debts, Brazil was showing the world that it needed no help from the IMF because its transfer economy had spawned a more generous and less complaining IMF of its own. In 1995-97 Brazil's federal authorities mobilized some \$150-\$200 billion, or from one-fifth to one-quarter of a year's GDP, to contract public debt to sterilize the monetary impact of inflows of reserves and to bail out failed banks and bankrupt state governments.

While deranged economic transfers in Korea were embodied in overinvestment that proved wasteful and self-destructive, the transfer economy in Brazil bred huge burdens of fiscal parasitism leading to chronic underinvestment. After long delays and tortuous negotiations, under pressures bred by the Asian crisis, Congress amended the populist 1988 Constitution, curtailing social security and public employment entitlements to save most of the public sector from bankruptcy. These reforms are watered-down versions of government proposals to be tested in their fiscal effect by years of political negotiation. Pension reform has stalled in Congress and constitutional changes curtailing job security for public employees still must be implemented by ordinary legislation. The payrolls of most state governments absorb more than 70% of total spending, but several governors announced their refusal to use their new powers to dismiss employees. The Cardoso government is carrying out a huge program of pruning public enterprises to improve efficiency of basic infrastructure, increase savings and foreign investment and reduce the cost of doing business in Brazil. Privatization provided federal and state governments with \$50 billion of windfall revenues since 1991, with another \$50 billion expected for 1998-99. However, much of this money is being used by some state governments to finance election campaigns instead of reducing public debt on which the government pays heavy interest charges. Albert Fishlow of the Council on Foreign Relations, a veteran analyst of Brazil's economy, argues that the success or failure of the Real Plan hinges on the use or misuse of privati-

zation revenues. "The government will succeed if, in an election year, it manages to use privatization income to reduce its debt," Fishlow adds, enabling the economy to generate more savings and investment.

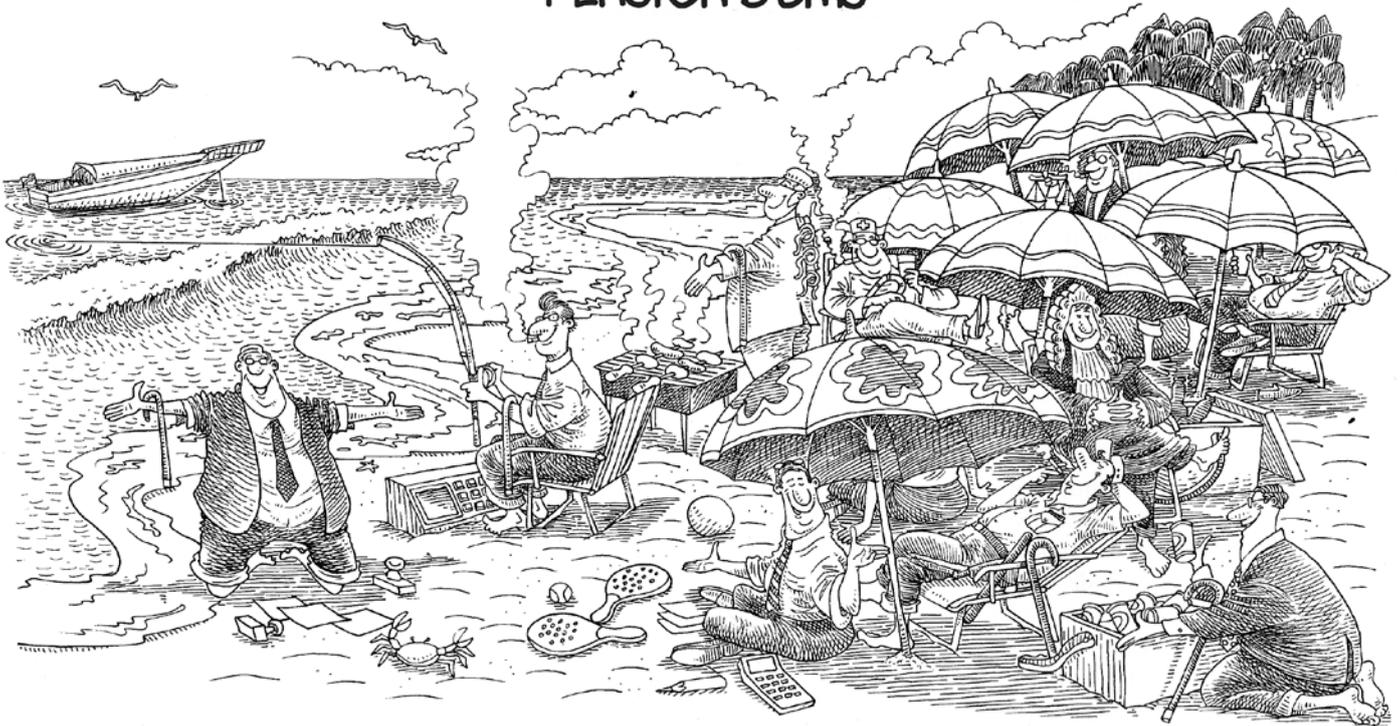
"Brazil has maintained the same savings rate for 40 years. Without an increase, Brazil will not grow." But the privatization program, one of the biggest ever attempted, has run into trouble, while the public deficit surged to 6.5% of GDP in early 1998 and is expected to rise to 8% despite a 27% increase in tax revenues passed by Congress as part of new stabilization package responding to the Asia crisis. "Spending has risen in all areas, as if the government has lost the will to control its outlays," said Raul Velloso, a leading fiscal analyst. These public deficits exclude increases in outlays by government banks such as the National Bank for Economic and Social Development (BNDES) and the Caixa Econômica Federal (CEF) during the election campaign. Meanwhile, the



privatization program has become increasingly dependent on government pension funds and loans to purchasers from the BNDES to sell state corporations at inflated prices, creating another form of fiscal parasitism. The broader scope and weight of fiscal parasitism can be illustrated by two more examples:

- **Federal transfers to states and municipalities** rose enormously under Brazil's 1988 Constitution. A tripling of municipalities' share of public spending led to creation of some 1,322 new municipalities to harvest these transfers. Nearly all this new money went to hire new local employees. The legislative and judicial branches of federal and state governments, guaranteed "autonomy" by the Constitution, gave themselves generous salary increases and pensions, while teachers, who are one-third of all public employees, continued to earn the lowest pay as the quality of schooling fell. States and municipalities hired aggressively, with people with less than four years of schooling generating nearly half the increase. "The public administration clearly tended to pay its poorly qualified employee much better than the private sector and did the opposite with its best-trained people," a study by the government's economic research institute (IPEA) reported. While the

"PENSION BUMS"



number of public employees in Brazil is low compared with rich countries, it is high in many communities depending on central government transfers, salaries and pensions for survival. Of Brazil's 5,500 municípios, 95% derive less than 20% of their spending from local taxes. This dependence of transfers shaped Brazilian political culture and gave it its extraordinary resilience. Over the past decade, it also spawned growing public debts that threaten to bankrupt the government and to end economic stabilization.

• **Public pensions in Brazil** absorb 12% of GDP, about the same as in most of Europe, a big burden for a young population, roughly equal to all federal tax revenues. With nearly half of the labor force informally employed, its pool of contributors is shrinking. The average retirement age has been 49 years for length of service (nominally 30 years). Early retirees (16% of all pensioners) get 37% of all social security spending. Young retirees will receive pensions for more years than they worked. Public employee pensions absorb 40% of spending at all levels of government.

Pensioners form two classes: plebes and nobles. The plebes are 87% of the retirees, most of whom retire at age 60 with a monthly social security payment of roughly \$ 120, equal to the minimum wage. The nobles are the other 13%, getting one-third of all benefits as members of politically influential professions, who can retire under "special regimes" as early as ages 45 or 50, with monthly pensions that can run from \$7,000 to \$20,000 or more, beyond the dreams of all but the wealthiest retirees in the United States or Europe. Many officials accumulate several pensions during their careers. Some 100,000 retired public employees get monthly pensions exceeding \$8,000. In Minas Gerais, one of Brazil's biggest and wealthiest states, a rush to retirement, prompted by fear of change in the

social security laws, expanded the ranks of pensioners by 49% over the past five years. The state's pension burden embraces 27 police colonels and 19 treasury inspectors for each colonel and inspector on now active duty. Monthly pensions for police colonels can run to more than \$20,000. Falsified work histories and disability claims breed widespread fraud to obtain benefits. One gang of lawyers, judges and social security officials looted the system of \$531 million in fraudulent disability claims in 1988-91. Evasion of social security payroll taxes is 40% of contributions owed, with many private firms and public agencies keeping salary deductions for themselves. President Cardoso called those who retire before age 50 "bums in a country of poor people" who "enrich themselves on social security." Under the proposed constitutional amendment, workers still could retire under a monthly pension ceiling of \$12,700 that Social Security Minister Reinhold Stephanes, himself a pensioner since age 46, called "too high. The ideal would be something between \$5,000 and \$6,000, as in any other country in the world."

Fiscal parasitism in Brazil grows from rapid expansion of the political system in recent decades. In the 19th Century, democracy was practiced only at the top of the pyramid. Endemic violence and fraud plagued elections. In 1872, only one million of nine million Brazilians were eligible to vote and only 20,006 did so. The historian Steven Topik observed: "The total of federal, state and local employees in 1920 was about 200,000. That equaled the number of votes necessary to win the 1919 presidential election." However, in the half-century since 1945 the electorate has grown 17-fold, from 5.9 million to 100 million. Despite flaws in the political system that developed since the end of military rule in 1985, there have been few reported cases of violence and fraud. But the

costs of competition and the number of insiders and minor political parties multiplied. Until 1994, the political system's deformities were financed by chronic inflation. Now they are being funded mainly by foreign money.

Korea's chaebols and Brazil's state governors share common dependence on deranged economic transfers. Neither in Brazil nor in Korea can government funding of their bad debts last

much longer. The Asian crisis may or may not curtail proliferation of financial assets worldwide. But it is forcing debtor countries into political decisions and institutional changes that they have avoided so far. As we shall see in the second part of this essay, to appear next issue of *Braudel Papers*, the need for new political decisions and institutional changes is casting a shadow over the future of Japan.

Asia and the Crisis of Money

Andrew Sheng

The political reason why resolution of banking and financial crises is so complicated is that they involve distribution of losses, not the easiest of democratic trade-offs. Each group wants to shift blame and avoid losses. So these crises tend to be protracted and politically difficult if not impossible to resolve. Two lessons from the 1980s are "the sooner-the better" and "the problems are always worse than expected".

The Asian crisis occurred when world trade and economic activity were growing vigorously, with declining inflation. In 1996 and early 1997, Asian economies had high growth and savings, low inflation and, excluding Japan, no overall fiscal deficit. The only worries were frothy asset markets and widening current account deficits in the stricken countries.

Despite ample experience from the banking crises of the 1980s, including those in the United States and Scandinavia, both Asians and the international community were shell-shocked that in a matter of months, three of the strongest economies in Asia went into IMF programs bringing \$120 billion in support. The asset wealth losses are some of the largest on record: U.S. Fed Chairman Alan Greenspan said that equity losses, excluding Japan since June 1997, exceeded \$700 billion, of which foreign losses were estimated by the Institute for International Finance at \$80-100 billion. Bond losses cost another \$10 billion and additional provisions of foreign banks to these economies another \$10 billion.

A financial crisis is a sharp wealth lost by an economy. Its symptoms are asset price collapses that threaten the stability of the currency and the banking system. Other macroeconomic effects include less growth and more unemployment. The most complex issue of a financial crisis is that these wealth losses must be allocated. They can be shifted to different classes of potential loss-bearers: interest rate (depositors and borrowers); exchange rate (foreigners); tax rate (taxpayers); inflation (consumers, through the inflation tax); asset prices (wealth holders

in shares securities, land); wages (workers' unemployment and wage reduction); inter-generational transfers (through government debt).

The potent mix of high liquidity lulled Asian policy makers to the flattery of capital inflows. Many borrowers used this liquidity to consume or invest in bubbly stock and real estate markets. Speculation against some Asian currencies first appeared in late 1996. The rest is history.

One scapegoat of the Asian crisis was the exchange rate regime. Some observers felt that Asian policy makers hung on too long to the U.S. dollar peg. What most failed to notice was that the two economies least affected by the Asian crisis were Hong Kong and Singapore, with sound fundamentals and deep financial markets, each running a different exchange rate regime - Hong Kong with the fixed exchange rate link and Singapore a managed float. All this seems to prove Charles Kindleberger's dictum that with sound fundamentals and flexible factor markets, the choice of the nominal exchange rate regime is immaterial. It is not the nominal exchange rate, but the real effective exchange rate or basic productivity that is at stake in Asia. What the Asian crisis displayed is the soft underbelly of money. Even though inflation may be low, the purchasing power of money is also set by asset prices and the quality of bank credit.

Global players no longer can measure productivity in traditional Asian terms of exports in manufactures or commodities. Competitiveness demands policy flexibility and the efficacy of national risk management through an efficient financial system. The straw that broke the Asian camel's back was poor financial intermediation and inadequate risk management.

While central bankers tend to focus on consumer price inflation as a target to protect the value of money, asset price bubbles can also threaten monetary and financial stability. There is no wholly satisfactory explanation of why bubbles occur. But we know that undue exuberance does occur from time to time in various markets. This

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exuberance is most dangerous when supply inelasticities combine with liberal bank credit. Since bank credit is the main driver of broad money, more non-performing loans mean a “softer” currency. In closed economies, raising interest rates may deflate asset bubbles. But in an open economy, if investor sentiment wants the bubble to continue, higher interest rates would only attract capital inflows that sustain the bubble, creating illusions of prosperity as both exchange rates and asset prices rise. The music stops when both reverse.

While central bankers try to maintain a stable value of money, modern investors now have very sophisticated tools, such as Value at Risk models, to protect the value of their assets. Such tools attempt to measure the risks inherent in a portfolio and, therefore at the aggregate level, result in major portfolio shifts that create the volatile capital flows that we have witnessed in the last decade.

Incomplete information causes volatility in market value. Fears of faulty contracts worsen that risk. Unfortunately, as we have learnt from the Asian crisis, markets do not work well with *incomplete information and incomplete contracts*. Indeed, lack of relevant information and fear of imperfect laws of bankruptcy further eroded the value of assets in Asia, causing panic bank runs and capital flight. Volatility also was aggravated by the power of leverage.

Leverage is at the heart of contagion. Markets behave “normally”, as long as private participants are solvent. However, as finance theory tells us, private agents maximize returns by using leverage. The higher the leverage, the higher are the risks and returns. At certain levels of leverage, the market participant crosses the risk-return frontier and losses are socialized. Market uncertainties

are worsened by poor disclosure, so that neither the regulators nor market participants know when an insolvent player begins to double up losses.

Modern finance theory teaches us that the value of an asset is not only a function of its *risk* profile, but also its *liquidity* and *volatility*. We know that the value of an asset is correlated with its duration and the level of interest rates. The longer the duration, the larger is the decline in asset value due to an increase in interest rates. This may be summed up in what I call the law of changing duration: Under conditions of uncertainty, the duration of a financial institution’s liabilities shortens and the duration of assets lengthens.

A liquidity crunch becomes a solvency crisis, thanks to the loss avoidance behavior of investors. Shortening duration of financial contracts to increase liquidity breeds fragility. Compression of the duration of asset portfolios leads to a liquidity crisis, causing sharp increases in interest rates that further compress asset values.

Global financial markets now dwarf single economies in size. Capital flows to developing countries so far account for less than 0.4% of the \$50 trillion of bank, bond and equity assets globally. In the 21st Century, the amount of capital flows will increase rather than decrease. Capital flows simply reflect portfolio adjustments as funds seek the highest returns with acceptable risks. To deal with these flows, financial systems need to be much more resilient, robust, well-capitalised and supervised than ever before. The world is inexorably converging towards global standards. In 1873 Walter Bagehot, the great editor of *The Economist* observed: “money will not manage itself, and Lombard Street [London] has a great deal of money to manage.”

Indonesia’s Journey From Boom Bust

Iwan Jaya Azis

Indonesia’s misery will affect most East Asian countries, now exposed to either the contagion from the chaotic situation in Indonesia or the paralysis of the fractured financial sector in Japan. To many Asian countries, Japan is like what the United States was to Mexico when it recovered from its crisis in 1994-95 with a boost from the strong U.S. economy. Asia can hope for no such boost from Japan at this moment.

The output losses for Indonesia in 1998 may reach 8% just as the recession elsewhere in Asia begins to bite harder. Even more menacing to smaller neighbors like Singapore and Malaysia is the surge of refugee movements and the spread of piracy. The most recent major incident was the hijacking

by Indonesian pirates last month of the Petro Ranger, a Malaysian tanker. Korean and Singapore banks have heavy exposure to Indonesia while wealthy Indonesians have been big buyers on Singapore’s flagging property market.

The final episodes of the Suharto era were to be the last shrewd political game played out by President Suharto behind the opaque screen of a Javanese shadow puppet play. But the students said no. They even called for mass demonstrations on May 20, the Indonesia National Day of Awakening, to mark the anniversary of the formation of the country’s nationalist movement to fight against the Dutch colonial administration in 1908.

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The floating of the rupiah in August and the failure of three IMF stabilization plans bred mounting pressures from government critics demanding economic, legal and political reforms, which meant the removal of Suharto. The new government promised elections within a year.

By mid May the Indonesian politics reached a turning point. On May 12 a bloody incident took place in a private university ('Trisakti') in Jakarta. Six students died when real bullets hit them during student demonstrations. On the next day, bigger demonstrations spread across the nation. All this occurred while Suharto was in Egypt attending the G-15 summit in Cairo.

On May 14 the mob took over. More than 5 00 people were killed, many of them looters burned to death. That one-day tragedy cost estimated material losses of around \$250 million. The stock market plunged and the rupiah tumbled to 11.500 to the dollar.

Upon his hasty return from Egypt, President Suharto tried to respond by proposing two things: rescind the planned increase of fuel and electricity prices, and reshuffle the cabinet. As expected, such a decision was rejected by the students and the public.

On May 18, student protests escalated. Thousands of them managed to enter the parliament compound, demanding an immediate special session of the People's Consultative Assembly (MPR) and Suharto's resignation. By 15.30, under massive pressures, the Speaker of the House, Harmoko, flanked by two deputy speakers, announced that the top leaders of the parliament are calling on Suharto to step down for the sake of national unity. The students cheered but the hope was quickly diminished when in the evening of the same day the armed forces commander, General Wiranto, said that Harmoko had spoken as an individual and that his call for the President's resignation had no legal power. But Suharto finally stepped down, leaving Indonesia in deep disarray.

Losses from the May 14 violence are probably underestimated. Around 5,000 buildings were damaged or burnt, close to 2,000 vehicles torched, 220 bank branches destroyed and about as many automatic teller machines damaged. Many stores were closed for several days, as were businesses and banking operations. Money transactions blocked by banks' closure in Jakarta alone reached some \$3 billion daily. The impact across the country was devastating since the economy of many regions depend upon money flows from Jakarta.

The inter-regional and inter-island distribution of basic commodities was also upset by limited availability of transport. This put further pressures on the already sharply incre-

ased prices of many food products. Again, the poor are the most seriously affected by food price increases.

However, the most serious damage was the exit of money and capital especially owned by the Indonesian Chinese (ethnic Chinese control around 70 to 80 percent of the assets of Indonesia's top 300 companies). In an economy thirsty for foreign money, further capital outflows were surely harmful. The exodus of expatriates and foreigners also bruised the country's image and made the prospect for economic recovery gloomier.

As in most crises, the worst sufferers are urban poor and middle income people. Inflation attacks transportation services. The price hike of vehicles parts, up to 300%, forced many public transport operations to close down. Until the end of March, more than 30% of public transport stopped working, cutting off the mobility of millions of medium and low income workers.

Today's crisis evolved in stages. In the first stage, devaluation of the Thai's baht on July 2, 1997 frightened many global investors. Mutual fund managers and corporate treasurers began to sell local currencies, setting off a tumble not only in local currencies but also in stock markets as well. Then depreciation expectations created nervousness among local businessmen who scrambled to buy dollars to pay their enormous loans, many of which were unhedged, short-term and used to finance long-term projects or high-risk schemes, as in real estate.

The trend of private borrowing is alarming. Total private foreign debt in Indonesia, excluding offshore bonds and commercial paper, was \$55.5 billion in 1996, or 25% of GDP. Of that, \$34 billion was shortterm. More recent data show that out of the total debt of \$140 billion, 65% is private. Unlike Korea, most private foreign debts are owed by hundreds of companies. At exchange rates exceeding \$1= Rp8000, both banks and the corporate sector are bankrupt. In the recent crisis it has exceeded Rp10,000.

The next chapter in the Indonesia's journey is full not only of economic challenges but also political bets. The triumphant opposition groups may divide over how to unite and over how they deal with the team of the new President, B.J. Habibie, an old crony of Suharto. Equally interesting is to see to what extent Habibie can manage to consolidate the old and new elements in his government. Last but certainly not least is the question of military's role: To what extent the internal struggles within the army can lead to a unified stand as to how they will deal with this dramatic transition of government?