

# BRAUDEL PAPERS



Document of the Fernand Braudel Institute of World Economics  
Associated with Fundação Armando Alvares Penteado

## Part 2: Brazil, Japan, Russia **Money, Greed, Technology**

Norman Gall



Part 2: Brazil, Japan, Russia **03**  
**Money, Greed, Technology**

How Contagion Happens **17**



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**Money, Greed, Tecnology**

(Norman Gall)

*“Events are like fireflies in the Brazilian nigh: they shine but fail to light ...”*

**17** How Contagion Happens

(David Folkerts-Landau and Peter M. Garber)

Deutsche Bank\*

*“State of the art market risk management methodology - endorset and...”*

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*“Since the spectacular collapse of Long - Term Capital Management, ...”*

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# Part 2: Brazil, Japan, Russia Money, Greed, Teclogy

Norman Gall

## 1. Buttons, Bubbles and the Yen

“Events are like fireflies in the Brazilian night: they shine but fail to light the way,” Fernand Braudel observed six decades ago, when his car broke down on a lonely road in the back country of Bahia. This certainly is true, of the events issuing from the worldwide proliferation of financial asset that spawned the Asia crisis, leading to the difficulties faced by the world economy today. In the first part of this essay (Braudel Papers No. 19), we observed that some countries face stark choices like that of Argentina in its banking and foreign debt crises of 1980-82, of either defaulting or inflating away the stock of domestic debt or allowing their economies to shrink severely. Since then, the video game of *Money, Greed, Technology* has generated much higher stakes. As fear enveloped the annual meeting of the World Bank and International Monetary Fund (IMF) in Washington, President Bill Clinton warned that “the world faces perhaps its most serious financial crisis in half a century.”

Reaching beyond the light of fire flies, we will try to explore these experiences in more depth and suggest some policy initiatives to deal with dangerous proliferation of financial assets. In recent months, until the typhoon of the Asia crisis attacked Russia and Brazil in August-September 1998, the center of the storm was in Japan. Japan's troubles began with the rise of the yen and the opening of its financial markets, both accelerating in the 1980s. In the winter of 1986, Japan was becoming the moneybags of the capitalist world. Its troubles were beginning when I visited Tanabe, an old castle-town and fishing port (population: 70,000) on the southern tip of Honshu island where buttonmaking began

in the 1880s when a German engineer taught local farmers how to cut and punch holes in shells gathered by fishermen. By the 1930s Japan became the world's leading exporter of buttons.

While Japan's flagship exports before the Second World War were silk and cotton products, the great psychological impact on world markets was created by smaller industries. In 1932, factories with less than 100 workers generated 64% of Japan's exports. Shipments of toys began in the 1890 and buttons in the foreign trade bonanza bred by World War I. By 1935 Japanese microscopes were being landed in Boston for \$1.95 each, duty paid, while the American equivalent wholesaled at \$7.50. In Chile English-style bicycles, made in Japan, were selling for \$8 each, half the price of the cheapest German competitor, as bicycle exports surged from million in 1929 to 23 million in 1937.

In Tanabe, the button industry was caught in one of the typhoons that often attack the Japanese economy and change its face. The “Nixon shock” of 1971 ended the Bretton Woods international monetary system of fixed exchange rates and dislodged the postwar dollar-yen peg (\$1=¥360) that enabled Japan to export so prodigiously. The price of the postwar yen bore no relation to the exchange rate used by Japan to become a major trading nation during the First World War and the Depression. The U.S. military occupation decided politically to peg the yen in 1949, fixing it at 360 to the dollar (US\$50.0028), against a trading average of 40 U.S. cents between the two World Wars. The big difference between the prewar and postwar yen was to compensate



*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 prepared for the international conference on Brazil and the Asia Crisis organized by the Braudel Institute and the Fundação Armando Álvares Penteado (FAAP).*

for wartime and postwar inflation and for the wreckage of the Japanese economy. "We wanted the Japanese to be able to export," Tristan Beplat, a financial affairs officer for the occupation, told me. "We wanted them on our side politically. In 1949 Japan was wrecked by war and ravaged by hunger and inflation. We figured that 90% of Japanese exports could sell at a ¥300 exchange rate, even though some were profitable at ¥200. But we didn't want to be wrong on such an important matter. So we finally set the rate at ¥360. To get exports started, we arranged a bank credit for buying cotton in California and sent trade missions to the Philippines, Indonesia and Brazil to round up other raw materials."

In a dramatic Sunday night televised speech on August 17, 1971, President Richard Nixon announced the end of the dollar's parity with gold as part of a New Economic Program that embraced a wage and price freeze, a 10% import surcharge and tax cuts aimed at protecting jobs while curtailing inflation and the U.S. balance of payments deficits. The postwar expansion of dollar liquidity outside the United States doomed the dollar's link with gold. Treasury Secretary John Connally demanded a 20% revaluation of the yen, then told his fellow finance ministers of his fear that Japanese Finance Minister Mikio Mizuta might commit *hara-kiri* if pressed too hard. After much haggling, Mizuta agreed to a 16.9% revaluation, calling it "the greatest economic shock that Japan had experienced since the end of the World War." By early 1986 the dollar had weakened to ¥175 and the yen's strengthening threatened the survival of traditional export-oriented industries in many small localities. MITI (Ministry of International Trade and Industry) had a long list of them: pins and needles, dishes, fish hooks, toys, Christmas decorations, bicycles, flatware, eyeglass frames, chains, cigarette lighters and buttons.

"I got a telex from America this morning asking for a 20% discount because of the high yen," said Teruo Kanaya, the gray-haired king of Tanabe's button-makers, owner of the factor his father started in 1919, who prided himself on his knack of reacting quickly to changes in the world situation. "After I heard about the Nixon Shock, I got on a plane for America to talk with my customers about billing my shipments in yen instead of dollars. We worked out a 50-50 deal to share the cost of the high yen equally between supplier and customer. But now we can't absorb any more of this cost. In 1955, there were 50 button factories in Tanabe. Now in 1986 there are only 10. In 1968, with the yen still at 360, we exported 60% of our buttons. Last year, with the yen at 230, we exported only 20%. We used only Japanese machinery 20 years ago. Now we use Italian machinery. Now many poorer countries are buying these Italian machines as well. From now on we'll concentrate on the domestic market. We're lucky that the price in Japan is 40% higher than the export price."

Many Japanese manufacturers of buttons and Christmas decorations opened factories in countries like Thailand and China. They switched into new businesses at home while their employees now staff beauty parlors and supermarkets

as part of the worldwide shift of employment from industry into sales, and services. "In 1972 a Spanish button maker visited me and, after years of talks, we set up a joint-venture factory outside Barcelona," Kanaya said. "We are working to build market-share in Europe and maybe export to Africa. You know, Spaniards are very hard workers. Their wages are half what we pay in Japan. And the price of factory land is only one-fiftieth as much. Here in Tanabe, I plan to go into the food business, which is growing."

But many small Japanese manufacturers were left behind in the backwash of yen revaluation. After the dollar fell to ¥150, sales collapsed from \$1 million in 1985 to \$300,000 in 1987 at Takao Suzuki's three-employee machine shop in Tokyo's Ohta Ward, where some 6,000 family-owned workshops bang out parts for big companies like Hitachi and Mitsubishi. Then banks began pressing him to borrow. "Bank of Tokyo-Mitsubishi [then Mitsubishi Bank] came around and begged us to take out a loan," offering \$1.2 million, Suzuki recalled. "I asked, 'What would I use that money for?' The man said: 'Buy stocks!' So I did." Then the stock market collapsed and Suzuki dumped his shares at a big loss. Now he owes nearly \$2 million, more than 10 times his expected sales for 1998, to five banks, four of which have claims on a small building that Suzuki pledged as collateral before property values also collapsed. Instead of foreclosing, the banks keep rolling over Suzuki's loans, cutting interest rates and lending new money. Hundreds of thousands of bad bets like these now burden the economy. So Japanese banks are in deep trouble.

Despite troubles with buttons, Japan was accumulating a large cash hoard from trade surpluses earned by its advanced industries. By early 1995 the dollar cheapened to only ¥80, a 450% devaluation from the Bretton Woods parity, before it recovered to ¥140 in early 1998. By then Japan had sunk into a financial and political malaise in which its elite officialdom displayed little of the agility and realism showed by the button-makers of Tanabe. Japan's nominal per capita income rose from \$138 in 1950 to \$41,000 (\$23,000 in terms of comparative purchasing power) by 1990. Despite its affluence, Japan has been shackled by a mysterious institutional paralysis, now fashionably called "the Japanese disease." Political reform has come and gone in the 1990s, returning power to the faction-ridden leadership of the Liberal Democratic Party (LDP), which has ruled Japan for more than four decades but now cannot contain the decline in respect for Japan's public institutions. The LDP has been disgraced by political and financial scandals, weakening long-revered bureaucratic authority, in the banking crisis of the 1990s that has left Japanese banks with bad loans estimated at \$1 trillion. "The banks have run out of reserves available to write off non-performing loans," observed James Fiorillo of ING Baring Securities (Japan) "In fiscal 1998, Japanese banks will have to write off and set aside ¥10 trillion (\$74 billion). But they can spend just ¥5 trillion. "The shortage of bank funds to tackle the bad-loan problem forced the government to use public money to help banks to reduce bad loans. The bad

loans of Japan's 19 biggest banks average 180% of their equity capital. According to Robert Feldman of Salomon Brothers, "the levels of all three key properties of financial assets - return, safety and honesty- have deteriorated in the Japanese financial system in the 1990s."

The rise and fall of Japanese asset prices in the decade after 1985 was a classic financial bubble, one of the most spectacular in history. The Nikkei stock index surged from 13,000 in December 1985 to 39,000 four years later, only to fall by 60% in 1990-92. In yen terms, stock market capitalization rose to 1.6 times Japan's whole GDP, against less than half of GDP in 1982 and three-fourths in 1985. Stock prices were linked to land prices, which increased by more than Japan's whole national product in 1987. By 1990 the marketvalue of all the

land in Japan was four times the land value of the United States, which covers 25 times the area of Japan. Prices of land and stocks were closely linked, rising and falling together, fueled by credit and investments from the financial system. By 1995, land and stock prices returned to where they would have been on the ascending trend curve set from the mid-1970s to the mid-1980s, as if the bubble were just a dream. However, this dream left a hangover of bad debts that deeply damaged Japan's self-confidence and the credibility of its financial and political institutions. Debts left behind by corporate insolvencies in fiscal 1997, rose 65% to \$116 billion, the most since World War II, only part of the colossal waste of capital.

In *The Migration of British Capital to 1875*, Leland Jenks warned in 1927: "Age-old systems of culture and reflection may at long last owe survival or decay to the manner in which the invested capital is applied." As it accumulated a household savings pile of some \$10 trillion today, 60% of the world's net saving, Japan evoked hopes that it could play a role like Britain's in the 19th Century, generating as much as 10% of its GDP as foreign investment to finance modernization of the world economy. Japan pumped investments totaling some \$1.5 trillion into the world economy since 1985, becoming the world's leading capital exporter, as was the United States in the 1920s. In doing so, Japan collided with the institutional problem of managing fast-escalating financial assets, as did the United States in the 1920s, which is the basic issue behind the Asian crisis today. Japan's problem is wasted financial resources, evoking comparisons not with 19th Century Britain but with 16th Century Spain, which failed to employ its New World silver productively.

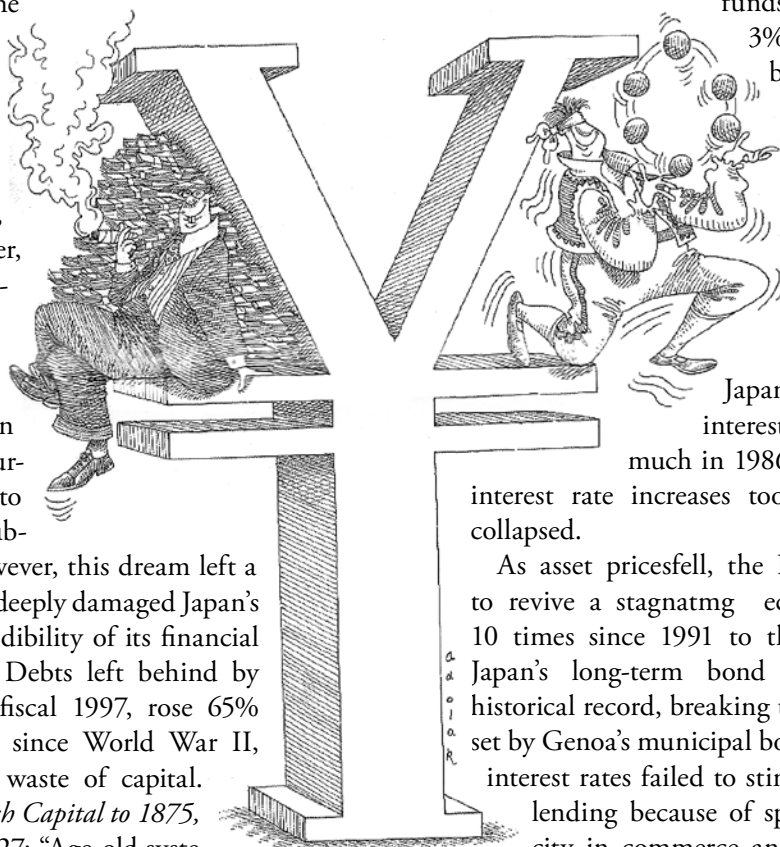
The Japan bubble was an extreme but not an isolated event. Financial liberalization in Japan excited a banking, real estate and stock market boom, as did liberalization in many other COUlltries. Inflation remained low, thanks to the strong yen, as wholesale prices fell by 20% in the decade since 1985. But monetary policy was loose. The broad money supply grew by 10.5% yearly in 1985-89 while the Bank of Japan, worried about the yen appreciating too fast against the dollar, cut its of ficial discount rate five times, from 5% to 2.5%. Trends toward lower interest rates in the United States and Japan reinforced the escalation of asset prices. The dollar lost 40% of its real value after the 1985 Plaza Agreement between leading finance ministers to end overvaluation of the dollar. The U.S. cut its key federal

funds rate from 10% in 1984 to 3% in 1993, spurred further by efforts to save the real economy from the effects of the 1987 stock market crash and an epidemic of bad real estate loans in the banking system. Like the Federal Reserve in the United States before the 1929 crash, the Bank of

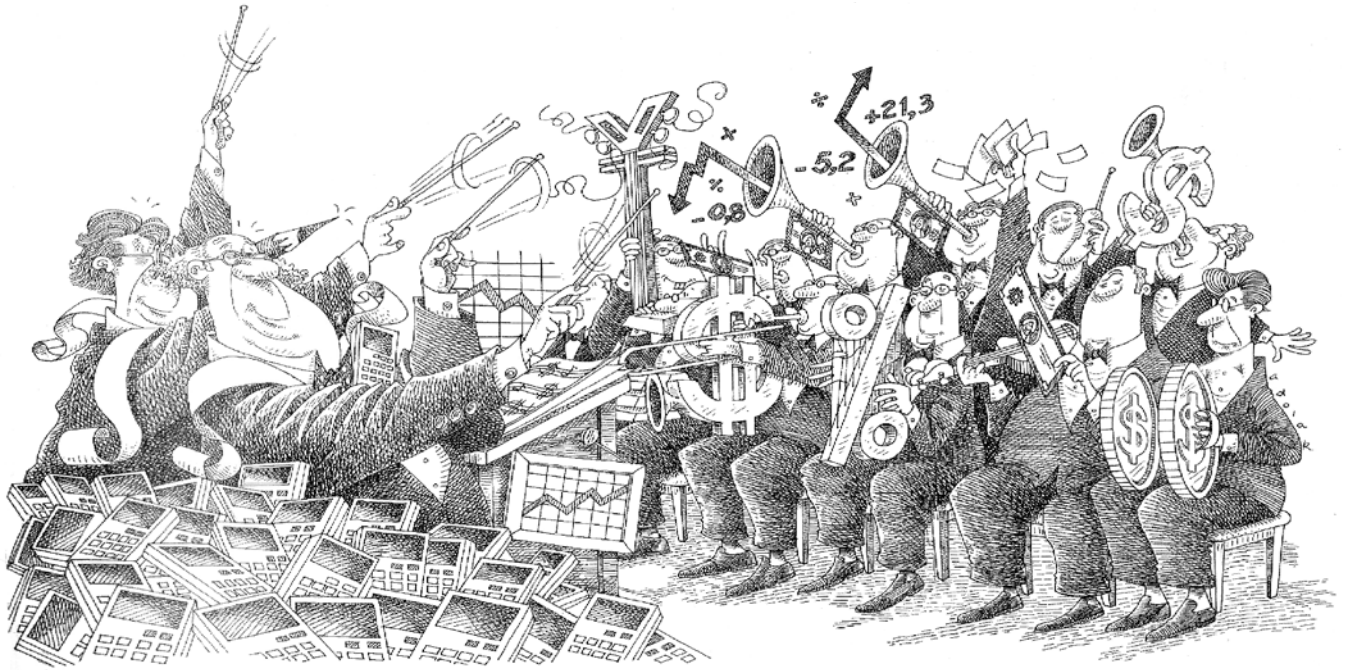
Japan was blamed for cutting interest rates too fast and too much in 1986-87 and then for delaying interest rate increases too long before the bubble collapsed.

As asset prices fell, the Bank of Japan, attempting to revive a stagnating economy, cut interest rates 10 times since 1991 to the current low of 0.25%. Japan's long-term bond rates fell to 1.07%, a historical record, breaking the previous low of 1.125% set by Genoa's municipal bonds in 1618. However, low interest rates failed to stimulate new borrowing and lending because of spreading fear, excess capacity in commerce and industry and deepening institutional concerns that the political system had

failed to resolve. As conditions deteriorated, Japan's regulators helped banks and brokerage firms to hide their problems. In 1991-92, the Finance Ministry adopted a "forbearance policy," allowing banks to hold nonperforming loans without special writeoffs, using creative accounting, in hope that asset prices would re emigre. Banks' dividend payments actually increased despite declines in earnings. In 1995 the Finance Ministry helped Daiwa Bank hide \$1.1 billion in losses that one of its New York bond traders amassed over 11 years, resulting in a Federal Reserve order for Daiwa to close its U.S. operations later that year. Finance companies known as Josef, funded by banks and farm cooperatives, collapsed with real estate prices in ways akin to the U.S. savings & loan failures of the late 1980s and early 1990s. The government paid off the politically-powerful farm cooperatives to recover their loans to the jusen in full and let the banks keep







the bad loans on their books.

Until recently, everyone resisted a distress sale of property to clear the market, as was done by the U.S. Resolution Trust Corporation (RTC) after 1991. As Martin Mayer observes, these distress sales "recreated the markets. The first buyers made immense profits, which brought in new cadres of bidders for subsequent auctions, and the reviving markets launched the great expansion of this decade. The sale of overvalued assets from failed banks, at distress prices, creates sound assets for surviving banks, reviving their willingness to lend." Yukiko Ohara of the Tokyo branch of UBS Securities added: "In the U.S., banks proceed with their restructuring because of strong pressure from the Federal Reserve Board and the stock market as well as pressure to raise funds. But here the government provides public funds and prevents the stock market from falling, thus delaying much-needed restructuring." Finally, under foreign pressure, the Japanese government in July 1998 announced a "Total Plan" to solve the bank crisis by closing failed institutions, turning their clients over to new government-run "bridge banks" to keep credit flowing and accelerating sale at current depressed prices of real estate held as collateral for bad loans. Bank inspection would be intensified and financial disclosure increased. Under this scenario, hopelessly indebted firms like Takao Suzuki's Tokyo machine shop would close, many people would lose their jobs and financiers could be prosecuted for misconduct. "Bridge banks" would be created by a new agency, the Deposit Insurance Corporation, modeled after the RTC, which sold real estate collateral of failed banks in the U.S. savings and loan crisis. They would draw on a huge government bailout fund to pay depositors and subsidize bank mergers. However, the U.S. S&L crisis was spread among hundreds of small banks, while the bursting of Japan's bubble severely weakened big money center banks as well as the small ones, making mergers more difficult. Many observers doubt that these plans will translate into real action and real losses with high political costs. But they were

greeted with enthusiasm by the heavily-indebted construction industry, a major force in mobilizing electoral support for the LDP. This industry generates six million jobs and is set to receive \$5.1 billion in emergency public works contracts as part of the government's monetary stimulus package.

Pressure for decisive action grew after failures and scandals began to multiply in late 1997. The bankruptcy of century-old Yamaichi Securities one of Japan's Big Four brokerages, involved \$2.1 billion in off-the-books debts. Yamaichi's president was seen on television throughout the world profusely weeping and apologizing for the firm's failure. Yamaichi's started shifting losses to subsidiaries and dummy corporations in 1991 after scandal revealed the Big Four compensating privileged clients for stock market losses, a standard practice in the past. Meanwhile, 32 executives of the Big Four and the big Dai-ichi Bank are on trial for making illegal payments to the same financial racketeer of some \$3 million each. The main bank in Hokkaido, Japan's northern island and another securities house, Sanyo, also failed. The Bank of Japan's president and the Minister and Vice Minister of Finance resigned after senior officials were arrested for accepting bribes and lavish entertainment from banks and brokers in exchange for leaks of privileged information. Among those arrested were two Finance Ministry inspectors who were publicly humiliated when shown on television. These embarrassments provoked eight suicides, all by hanging: a Bank of Japan executive director investigating bribery and lavish entertainment of employees, two Finance Ministry officials, a former Finance Ministry bureaucrat who was elected to parliament, a private bank executive and three businessmen in financial distress. In early April, after the Bank of Japan issued a survey of declining business confidence, Sony's president, Norio Ohga, warned: "Japan's economy is on the verge of collapse....I am concerned that if Japan falls into a deflationary spiral it would affect the Asian economies. In that case, not even the U.S. economy would be able

to maintain its healthy state. Japanese politicians only look after their own constituencies, they only work at a purely domestic level. They have to aware of the global picture. If you look at what Hoover was saying at the start of the Great Depression and what [Prime Minister Ryutaro Hashimoto] is saying at the moment, they are very similar."

Poor Herbert Hoover! This unlucky and muchmaligned President of the United States, one of the most brilliant statesmen of his generation, tookoffice onlyseven months before Wall Street's Great Crash. Throughout the 1920s, as Secretary of Commerce, Hoover warned against dangerous stock market speculation and preached government anti-recession policies and mobilization of private energies to reduce economic pain and raise efficiency. He used new statistical and business cycle research that found their way into official pep talks and exhortations. When the 1929 Crash came, Hoover was ready with a plan. He quickly went into action with a threeprong program to sustain demand and keep the economy moving: (1) more public works spending at all levels of government; (2) low interest rates to ease business investment and homebuilding (3) keeping wages high to prevent a collapse of consumer purchasing power. Within weeks of the Crash, Hoover launched into the most forceful government effort to curb economic crisis ever seen in modern times. He got Congress to cut taxes, got business and labor leaders to hold the line on prices, wages and capital spending and got the Fed to ease credit by lowering interest rates from 4% to 1.75%, the lowest on record. As the Depression deepened, he created the Reconstruction Finance Corporation, which tried to recapitalize banks by buying their preferred stock. "The ideas embodied in the New Deal legislation were a compilation of those which had come to maturity under Hoover's aegis," wrote Rexford G. Tugwell, a key adviser to President Franklin D. Roosevelt [1933-45]. "The Hundred Days [of aggressive reform as soon as Roosevelt took office] was the breaking of a dam rather than the conjuring out of nowhere of a river."

In fairness, it must be said that former Prime Minister Hashimoto enacted some emergency measures that Hoover took at the start of the Depression, but with a difference reflecting the depth of Japan's institutional crisis. The LDP announced a \$120 billion fiscal stimulus package, the seventh in six years and the biggest yet, all of which failed to revive the economy but pumped money into troubled construction companies that have been big campaign contributors to the LDP. Local governments, running big deficits, also refused to spend more on public works. By October 1998 the stimulus effort was stretched to issuing \$220 gift vouchers to each citizen and decreeing "happy Monday" holidays to give people more time to shop.

By then Japan had launched its Big Bang: scores of financial reforms, embraced in a 10-pound, 2,132-page tome working its way through parliament that, ending traditional protectionism of financial markets, would allow Japan's citizens to invest freely abroad, using foreign securities firms. So \$20 billion monthly has been flowing from Japan into overseas

accounts as th Big Bang provides access to higher-yieldin, mutual funds as an alternative to individual savings accounts yielding annual interest of onl 0.25%.The new rules also abolish functions barriers between banks and brokerages, encourage insolvent institutions to close down an allow brokers to start their own mini-exchange to compete with the Tokyo Stock Exchange Despite all this action, Hashimoto was caught between efforts of some LDP factions to drive him from office and Keynesian nostrums o foreign politicians, economists and journalists to do more to revive the Japanese economy. So Hashimoto announced another \$16 billion in tax cuts, but wavered in their implementation Japan's politicians and public still refused to pa the short-term political and fiscal cost of closing insolvent banks. Why? Because survival of so many people and companies is at stake. Not onl banks are in trouble, but thousands of businesse as well. Under intense foreign pressure, the Diet in October 1998 finally passed a \$500 billion bailout of the banking system without clear provisions for how the money will be used.

Some Japanese journalists called the U.S. im position of a stimulus package a "second defeat. Television coverage of U.S. Deputy Treasur Secretary Lawrence Summers's arrival at Narit; airport in June 1998 was mixed with old file clips of General Douglas MacArthur landing at Atsugi airfield in 1945. U.S. foreign economic policy is run by the best and brightest of Wall Street (Treasury Secretary Robert Rubin of Goldman, Sachs) and academia (Summers of Harvard), both of whom were publicly scornful at what they saw as Hashimoto's dithering in response to foreign pressure to clean up the banks and stimulate demand.

In preaching to Japanese politicians, foreign economists may not understand that they are assigning them a difficult if not impossible task. A government cannot concurrently "stimulate the economy" while collapsing much of the financial structure as it '-cleans up the banks," wiping out hundreds of billions of dollars of dubious assets approaching 30% of GDP and breeding big increases in bankruptcies and unemployment. The recipe of tax cuts and more deficit spending could make problems worse, aggravating an already critical fiscal problem and further undermining the credibility of public institutions. It is hard to weigh the influence of Washington's ire on the LDP's poor showing in theJuly 1998 election for the Diet's upper house, prompting Hashimoto's resignation. In what normally is a low-turnout kind of election, urban voters cast ballots massively against the LDP, which failed to win a single seat in Japan's four biggest cities (Tolyo, Osaka, Yokohama and Nagoya), overwhelming the LDP's traditional base of rural and elderly voters. "The message voters wanted to send in the upper house election," observed political scientist Yoshiaki Kobayashi, "is criticism of the Japanese-style system of redistribution in particular criticism of excessive spending that leaves the check to future generations." If voters wanted an end to deranged economic transfers, that is not what they apparently got. Hashimoto's successor was Keizo Obuchi, a member of the LDP's biggest faction, led by Noboru Takeshita, which is backed

by the construction industry. Both Takeshita and the new Finance Minister, 78 year-old Kiichi Miyazawa presided over the bubble economy of the late 1980s as Finance Minister and Prime Minister. We do not know if financial troubles in the near future will disrupt the gerontocracy that governs Japan's corporate and political affairs, rooted in a population with more adults over age 65 than children under age 15.

Given these rigidities, we cannot agree with those economists who think they can make variables dance in the way a symphony orchestra responds to a conductor's baton. The economics profession performs useful tasks of measurement, history and theory, but often has been confused and contradictory in recommending economic policy. J.M. Keynes, not a humble man himself, urged humility on his profession: "If economists could manage to get themselves thought of as humble, competent people, on a level with dentists, that would be splendid!" Nevertheless, one of the stars of the profession, MIT's Paul Krugman, intrepidly recommends a policy of sustained inflation to the Japanese government. In his widely read home page on the internet, Krugman argues: "Japan is in the dreaded liquidity trap," with excess savings, near-zero short-term interest rates and the Bank of Japan expanding its balance sheet at a 50% annual rate. So what does Japan need? More liquidity, of course! According to Krugman, "the simplest way out of the slump is to give the economy the inflationary expectations it needs. This means that the central bank must make a credible commitment to engage in what in other contexts would be regarded as irresponsible monetary policy -that is, convince the private sector that it will not reverse its current monetary expansion when prices begin to rise!" Thus inflation would make interest rates negative, discouraging savers from holding financial assets and driving them to consume. Krugman then parades a series of mathematical equations to impress and persuade the cognoscenti. But he writes himself an escape clause at the end of his essay: "Of course, it is not necessary that Japan do anything....A dynamic analysis makes it clear that [the liquidity traps] is a temporary phenomenon -in the model it lasts only one period, although the length of a 'period' is unclear (it could be three years, or it could be 20). Even without any policy action, price adjustment or spontaneous structural change will eventually solve the problem. In the long run Japan will work its way out of the trap, whatever the policy response."

Krugman's discussion is important for two reasons. First, it revives the old idea, familiar to us in Latin America, that a little inflation is a good thing. The trouble with this idea, which some economists incorporated into development theory in the 1950s and 1960s, is that inflation creates powerful vested interests and institutional mechanisms of its own and, once unleashed, is very hard to control. If the idea were to become fashionable again, endorsed by fashionable economists like Krugman, desperate politicians and their adopter in economics profession could undo the long and so far successful struggle to institutionalize price stability and democracy in countries like Argentina, Bolivia, Brazil, Chile, Mexico and Peru. This would be a terrible price to pay for a

temporary expedient.

Secondly, Krugman's fallback position ["Even without any policy action, price adjustment or spontaneous structural change will eventually solve the problem."] also carries a lesson. An overdue retrenchment has stopped a worldwide expansion and proliferation of financial assets bred on a scale and duration never before seen. This retrenchment has left financial businesses with large amounts of excess capacity pending readjustment of asset values, impacting other forms of economic activity. Readjustment must work its way through the system. Fortunately, we are not dealing with a synchronized collapse of asset values in all major countries as in the Great Depression. However, as Japan's recent experience shows us, failure to allow markets to adjust asset values and shrink balance sheets will only prolong the crisis. A lesson of the Great Depression is that artificial stimuli are of marginal use without deeper economic reorganization.

Economists and politicians are so obsessed with analogies between Japan's recent bubble and collapse with those of the 1920s and 1930s that they ignore closer parallels with the greed and credulity of an earlier "bubble economy," the South Sea Bubble of 1720, when much of the English power elite "ministers, landowners, members of parliament, even the king's mistresses" took part in an orgy of speculation and swindles, so much that a major political mobilization had to be mounted to preserve the monarchy. The South Sea Bubble spurred a century of administrative and political reforms that made English government more honest and responsible. In Japan today, as in England then, reform on this scale is unlikely to be an overnight affair, as so many foreigners demand. Murray Sayle, a veteran Australian journalist who has lived with his family for the past two decades in a mountain village 60 miles from Tokyo, blames Japan's institutional paralysis on "ethno-economics":

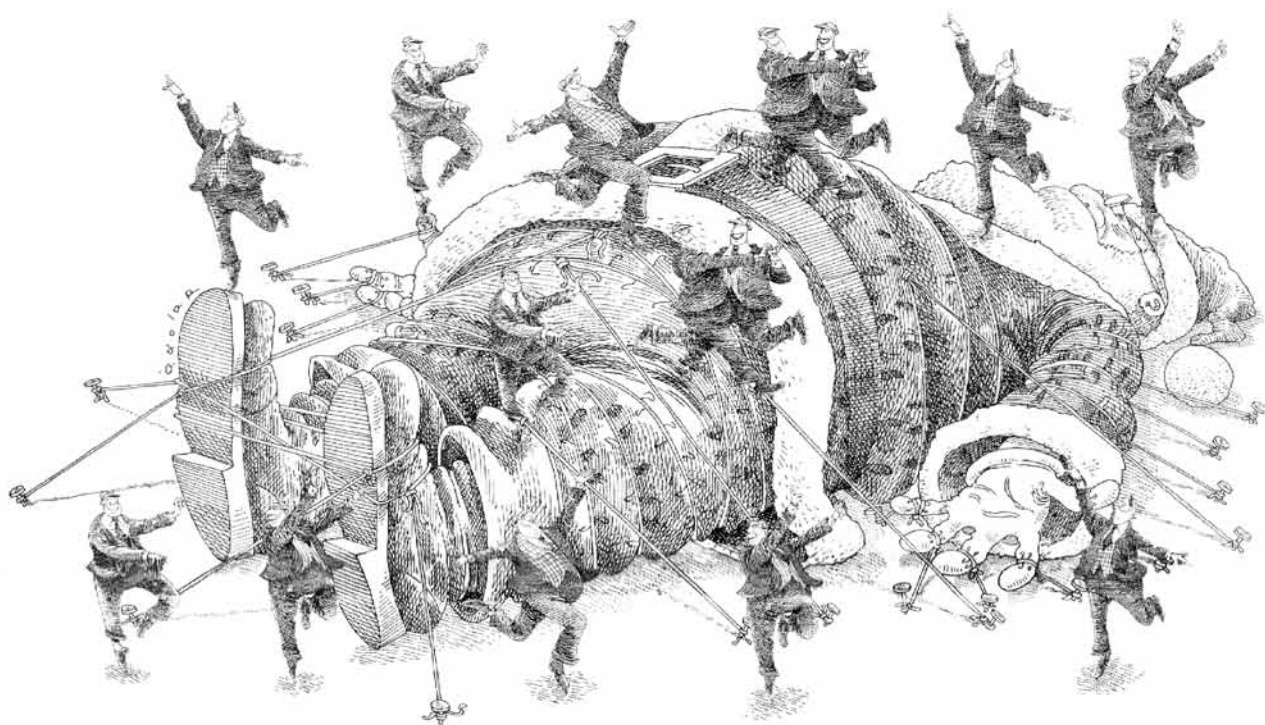
*The uglier aspects of the system, which so astonish non-Japanese, all come from the same idea of Japan as one big family. Bid-rigging on private and government contracts is all but universal. Big firms get the big jobs, little ones the scraps, but everyone in the family stays in lousiness. Japan has far too many banks, bars, building contractors mom-and-pop retailers and even post offices for economic efficiency tout they provide a living for other Japanese. Why are Japanese companies obsessed with market share and unconcerned about profits? Because market share means jobs for Japanese, while mere shareholders have no right to meddle in management or demand dividends. Owning up to the load depots would have shattered the dwindling public faith in the parliamentary façade, the scandal-plagued LDP, whose share of the overall vote was slipping. Only a strong united government can ever make real reforms anywhere; Japan's was, and is, weak and divided, still feebly trying to please everyone in the family.*

As the political reformer Ichiro Ozawa suggested in 1992, Japan may need a renewal akin to the Meiji Restoration, when some samurai under the aegis of a young Emperor overthrew the feudal Tokugawa shogunate (1600-1868) and sought contacts with the West to acquire technological and



institutional equipment to resist foreign interference and to launch Japan on its longterm path of modernization and high economic growth. But the incumbent power structure still may be too powerful for radical renewal. Also, the aging of Japanese society may preclude bold initiatives. In Murray Sayle's village of Hanbara, some 350 houses spread along a mountain stream, a cult is made of neighborliness and mutual help, but the village is dying. Last year saw 17 funerals but only one wedding and one birth in Hanbara. Fewer babies were born in Japan in 1996 than in any year since 1897, when the population was only one-third as large. Half of all women under 30 remain unmarried. Japan's elderly population over 60 is projected to grow from 21% in 1996 to 30% in 2010. Enormous sums are being spent in building nursing facilities. Care for old people absorbs more and more investment and manpower while working-age population shrinks by 1% yearly. Birth rates fall in almost all urbanized societies, but Japan's severe birth dearth is aggravated by perverse incentives. Childbirths are not covered by Japan's health system, so parents often must pay the doctor \$3,000 in cash before they can take their baby home. Education is

fiercely competitive and very expensive, if the cost of the nearly universal after-school cram courses is included. Despite decades of public debate and worrying about aging population and declining births, little has been done to remove these perverse incentives. Foreigners clamor for more fiscal stimulus and deficit spending, even though government deficits already are at 7% of GDP, three times the average of other major economies, and public debts approach 100% of GDP and would be much higher if bank losses and government debts to the postal savings system were included. Meanwhile, many Japanese take a relaxed view of economic decay. "repeople complain about the bad economy," says Mitsuo Okura, who runs a small plastics factory in a town 200 miles from Tokyo. "But when I look around the house, I've got everything I want. I've got three cars, and most people around here have two or three as well. I've got a washing machine and refrigerator, and so do all my neighbors. Even if no one sees a bright future, there's no feeling of crisis. Deregulation is inevitable. The challenge is to figure out what to do with people like me. But if we just say that new things are no good, then Japan itself will be no good."



## 2. "Santa Claus is Dead"

Japan's banking problems, at the core of the Asia crisis, must be viewed in broader perspective. Some \$1.1 trillion of bad debts being carried by Japan's banks are huge in both absolute and relative terms, at nearly 30% of GDP, exceeding nonperforming assets in most recent banking crises around the world. As cross-border financial activity expanded and intensified since the 1970s, banking crises erupted in some 40 rich and poor countries. Strikingly, the colossal failures of Brazil's Banespa (\$24 billion) and France's Credit Lyonnais (\$32 billion) in 1995 involved neither a currency crisis nor a stock market crash. [See "King Kong in Brazil,"

Braudel Papers No. 15]. It also is striking that the world economy has continued to grow and to reduce inflation despite the financial turbulence of recent decades.

This overall stability does not mean that our times have been free of risk or loss. By the time Mexico defaulted in 1982, foreign debts of developing countries totaled \$720 billion, or one-third of all Eurocurrency assets. They embrace more than two-thirds of international bank loans today. The cost of Mexico's current bank bailouts is officially estimated at \$65 billion, or 16% of GDP, but private appraisal

sals run much higher. In Chile, private losses from the 1982 banking crisis totaled 28% of GDP. In the United States, some 1,300 banks and 1,400 savings institutions failed or were merged in 1980-91, against only 210 closures in 1945-79. In 1991, assets of failed U.S. banks totaled \$66 billion, the most since the 1930s, including 11 banks with assets of at least \$1 billion. According to Andrew Sheng of the Hong Kong Monetary Authority, these failures embody "massive problems of moral hazard in almost every country. Bank management could and did take risks far beyond prudential levels because losses were ultimately borne by the state. Under perverse incentives and poor supervision, even good bank managers became bad managers, engaging in speculation, excessive spending and ultimately fraud."

What is our margin of security? Our method of security is cooperation. "Prosperity has no fixed limits," U.S. Treasury Secretary Henry Morgenthau argued at the start of the Bretton Woods conference in 1944, which created the postwar international financial system. "We know now that economic conflict must develop when nations endeavor separately to deal with economic ills which are international in scope. To deal with the problems of international exchange and of international investment is beyond the capacity of any one country, or of any two or three countries. These are multilateral problems, to be solved only by multilateral cooperation."

Six decades later, as panic spread following Russia's devaluation and debt default in August 1998, Federal Reserve Chairman Alan Greenspan observed that "it is just not credible that the United States can remain an oasis of prosperity unaffected by a world that is experiencing greatly increased stress... We take for granted that contracts will be fulfilled in the normal course of business, relying on the rule of law, especially the law of contracts. But if trust evaporated and every contract had to be adjudicated, the division of labor would collapse. A key characteristic, perhaps the fundamental cause of a vicious cycle, is the loss of trust. We did not foresee such a breakdown in Asia. I suspect that the very nature of the process may make it virtually impossible to anticipate. It is like water pressing against a dam. Everything appears normal until a crack brings a deluge."

Our margin of security is embedded in the institutional facilities provided to support countries in trouble. These facilities are neither fool proof nor infinitely elastic. The United States led every successful international rescue effort from the Dawes Plan of 1924 to the Asian bailouts of 1997-98, yet caused major disturbances when driven by domestic pressures, at which time it killed the Bretton Woods system of fixed exchange rates in 1971 and raised interest rates in 1979 to stop inflation and defend the dollar. "Santa Claus is dead," Treasury Secretary George Schultz said in 1972, meaning that the United States would not act as a global monetary savior if this meant weakening the reelection prospects of President Nixon.

Every international financial crisis of the post war decades has been animated by fear, recrimination and maneuvers to shift the burdens of adjustment from one protagonist to

another, as Britain did in the 1920s, persuading the United States to lower interest rates, facilitating the Wall Street stock market bubble, so the Bank of England would not have to raise its own rates to sustain an overvalued pound. Nevertheless, institutional cooperation continued to evolve from one crisis to the next. First came the original haggling over the terms of the Bretton Woods agreement of 1944, establishing the IMF and the World Bank. Then came the Cold War launching of the Marshall Plan and creation of the OECD, followed by the U.S. balance of payments deficits of the 1960s and French President Charles de Gaulle's denunciation of the "exorbitant privilege" used by the United States to print dollars that enable U.S. companies to buy European companies. These frictions contributed to the end of Bretton Woods fixed exchange rates. Next came the two oil crises of the 1970s and the recycling of petrodollars, breeding the debt crises of the 1980s. A new generation of problems were posed by the end of the Soviet empire, while proliferation of financial assets produced the Mexican peso crash and bailout of 1995, and the East Asian crisis, beginning with the collapse of Japan's bubble in 1990 and then today's troubles of Thailand, Korea, Indonesia, Malaysia, Russia and Brazil. "The world and its leaders tend to lurch dangerously between two opposite poles: either an exaggerated belief in the intractability of problems or an overconfidence as to their solubility," observes Harold James international Monetary Cooperation since Bretton Woods (1996). "Hubris and despair chase each other in quick succession.... The task of international institutions, and of the surveillance process, is to ensure that both are avoided and that problems are analyzed, understood and then tackled."

The Asian crisis was deepening in September 1997 when financial officials and financiers met in Hong Kong for the annual meetings of the IMF and World Bank, when the IMF Interim Committee endorsed an eventual move toward capital-account convertibility -unrestricted movement of money between countries. As the trouble of Thailand, Indonesia, Korea, Malaysia and Japan worsened, this idea drew an angry response from some leading economists. Professor Jagdis Bhagwati of Columbia University, a distinguished analyst and advocate of free trade in goods and services, questioned the legitimacy and wisdom of free capital movements among crisis-prone financial markets, under the umbrella of a "capital myth" created by "what one might christen the Wall Street-Treasury complex.... a definite networking of like-minded luminaries among powerful institutions -Wall Street, the Treasury Department, the State Department, the IMF and the World Bank most prominent among them. Indeed, discussion revived of an opposing idea: restoration of capital controls. According to Professor Dani Rodrik of Harvard University: "TOW can imagine cases where the judicious affliction of capital controls could have prevented crisis or greatly reduced its magnitude. Indonesia and Thailand would have been far better off restricting borrowing from abroad instead of encouraging it. Korea might just have avoided run on its reserves if controls on short-term borrowing had kept its short-term exposure to foreign banks at, say, 30%, rather than 70% of its

liabilities. Which of the recent blowups in international financial markets could the absence of capital controls conceivably have prevented?" Krugman proposed in an article in *Fortune* (September 1998) that Asian countries use exchange controls to deal with financial troubles, a policy that Malaysia adopted a week later. The crux of this debate lies in the different goals of modern states and markets. Harvard's Richard Cooper contrasts the "myopic behavior" of markets to the role of modern states as guardians of welfare and stability. "Because financial systems are not intrinsically robust," he adds, "governments must concern themselves with system maintenance."

IMF stabilization programs today follow the basic pattern established in emergency loans by the League of Nations in helping European countries, some of them created after World War I, to overcome hyperinflation in the 1920s. The League's small but brilliant staff of economists included three future Nobel laureates. Of 24 countries suffering high inflation then,

only six (Austria, Hungary, Bulgaria, Danzig, Estonia and Greece) entered League of Nations programs

to stabilize. Also, Germany, Britain, Belgium, France, Italy, Romania and Poland received bilateral credits from central banks. Nevertheless, in his classic study of *The Course and Control of Inflation: A Review of Monetary Experience in Europe after World War I* (1946), Ragnar Nurske concluded that "the role of foreign financial assistance in insuring the technical success of exchange stabilization was a relatively minor one. Loans and credits from abroad were neither sufficient by themselves to bring about effective stability of a country's exchanges, nor were they always necessary to that end."

The IMF has been caricatured cruelly in dealing with the Asia crisis. Jeffrey Sachs argues that "the IMF was having too much fun running 80 countries in the world to take heed" that international institutions "have proved technically ill-equipped for the challenge" of reviving troubled economies. While the IMF may be criticized for secretiveness and details of policy, no other agency has taken on the frustrating and dirty job of stepping into chaotic situations, where national governments have failed, trying to overcome economic insanity and financial insolvency and to protect the international payments system. As bailouts under IMF programs since the outbreak of Asia's troubles neared \$180 billion, skeptics questioned the financial and political capacity of the IMF to deal as generously with future crises.

Russia's default, shortly after a \$23 billion IMF-led rescue package was announced, bred new fear. "The investors' panic at the end of August 1998 came from perception that confidence in the lender of last resort in the world financial system, the IMF, was at an end," observed Marcelo Allain of Sao Paulo's Banco BMC. The idea of a lender of last resort has an old pedigree, going back to the Bank of England's rescue of investors in the South Sea Bubble of 1720. In his classic study of *The Great Depression, 1909-1939*, Charles Kindleberger

argued that "if the [bank] runs [in 1931] on Austria, Germany and Britain had been halted by timely international help on a massive scale, the basic recuperative powers of competitive markets would have prevented the depression from going on so long and so deep." However, financial distortions in both the 1920s and 1990s were allowed to grow so big that they defied institutional capacity for rescue operations.

Long before default on its public debt crash of the ruble, Russia's bankruptcy was telegraphed by the surge of mortality that followed the collapse of the Soviet Union, impacting both sexes and all age groups, especially men of working age. Male mortality rose by 53% in 1990-94, reaching the levels of the most backward African countries. Mankind rarely has experienced mortality surges on this scale, associated historically with wars, plagues and famines. A modest recovery took place after 1995 as desperation and new opportunities brought forth extraordinary efforts by people

trying to survive the collapse of communist central planning. Starting from almost nothing, commercial network develop-

## Eath international financial crisis animates fear and recrimination.

ped fast. The clearest sign of them was the sudden proliferation of pre-fabricated kiosks outside subway stations and in other open spaces in Russian cities. Moscow's huge subway system became one of Russia's main commercial arteries. Escalators were crammed and often damaged by people dragging luggage carts loaded with goods from one city location to buy and sell in small arbitrage deals. The corridors at busy subway entrances and transfer points were lined with people of all ages holding up for sale pathetic quantities of cooking oil, soap, electric wiring, bread and old books and magazines. Their tenacity and bravery were as impressive as their desperation. Millions of people went without pensions and salaries as the government struggled to defend the currency and hold down inflation, even as top managers and financial "oligarchs" appropriated public assets in rigged privatization deals. Russia's chief auditor confirmed that billions of dollars in international aid was stolen. Suffering from \$500 million to \$2 billion in losses in Russian debt and derivatives, Credit Suisse First Boston accused Russian companies of generating \$66 billion in capital flight in 1994-97. Russia's tax system yielded only 10% of GDP, falling to 6% in the last quarter of 1998, less than Bolivia's level of taxation on the eve of hyperinflation in 1985, clearly not enough to fund a shaky government apparatus spread over 10 time zones on the Eurasian land mass. So central government crumbled. As ice closed in on Arctic Siberia for the winter, supply ships stopped delivering food for isolated communities because they had not been paid. With most Russians facing a hungry winter, Prime Minister Yevgeny Primakov appealed for foreign food aid. Meanwhile, regional bosses fill the fiscal and power vacuum, raising questions of whether the Russian federation will break up, as the Soviet Union did in 1991. Governors of oblasts (states) hold back tax transfers to Moscow, decree regional price controls and mana-



ge their own foreign relations, forming partnerships with local military commanders who ignore orders from their nominal superiors. Analysts speak of “feudal principalities” forming around the stronger oblasts and republics. The Cold War’s “balance of terror” between two nuclear-armed superpowers is replaced by nuclear blackmail paid by the outside world to maintain central authority over a huge territory containing 30,000 warheads.

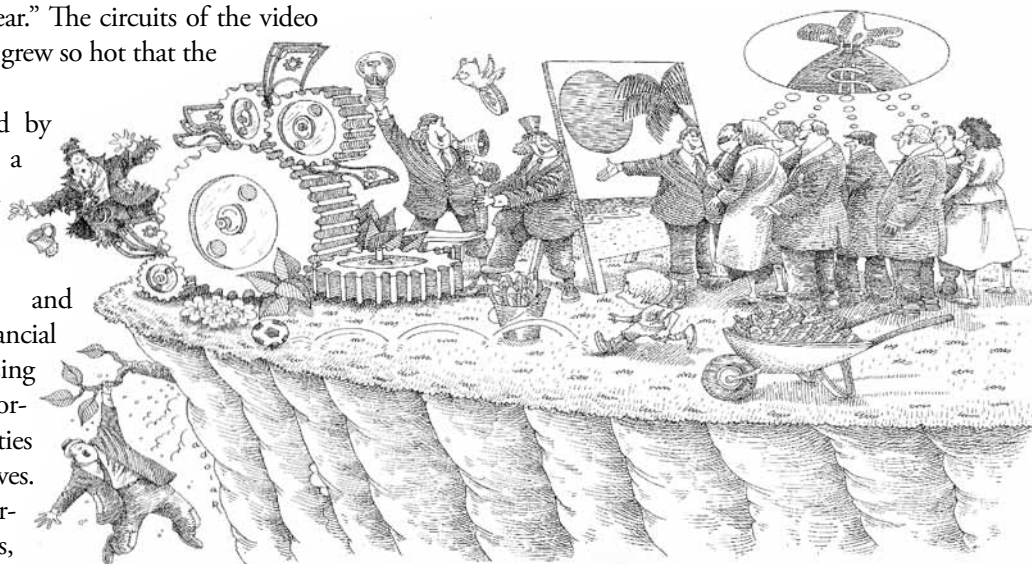
In both Russia and Brazil, foreign investors were tempted foolishly by astronomical interest rates on government debt, 120% in Russia and 43% in Brazil, each absorbing the bulk of surging money flows to Eastern Europe and Latin America in early 1998. “Greed prevails over prudence,” said former Fed chairman Paul Volcker. Foreign banks accepted as collateral Russian government bonds that went into default on August 17, the date of Clinton’s grand jury testimony in the Monica Lewinsky sex scandal. Weeks before Russia’s default big firms like Goldman Sachs, Chase Manhattan, JP Morgan and Deutsche Bank arranged \$10 billion in government bonds and syndicated loans for Russian companies that were oversubscribed by banks, securities houses and hedge funds, those curiously misnamed betting pools for big investors, placing enormous bets that the ruble would be stabilized by the IMF loan. Goldman used \$550 million of its own capital to pump up demand for the \$1.25 billion in Russian bonds it was promoting, part of the proceeds going to repay its \$250 million share of a bridge loan it made earlier, then quickly sold off its own exposure shortly before Russia’s collapse, saying later that its losses were “absolutely minimal.” Panic spread throughout the world after the IMF on July 20 withheld \$800 million of its initial \$5.6 billion loan disbursement because Russia failed to meet its fiscal commitments. “Selling against Brazil commenced immediately,” according to Deutsche Bank. International investors, many having borrowed heavily to make their bets, lost \$95 billion in emerging market securities, according to JPMorgan, which in 10 days recorded a 25% fall in its Emerging Market Bond Index. Greenspan said Russia’s default triggered a “fundamental shift in attitudes, towards risk-aversion pretty much throughout the world, as exhibited mainly in the financial markets,” creating “a broad area of uncertainty or fear.” The circuits of the video game Money, Greed, Technology grew so hot that the machine nearly exploded.

The explosion was threatened by failure in September 1998 of a hedge fund quaintly named Long-Term Capital Management, driven by hyperactive traders, economists, mathematicians and computers searching global financial markets to find and bet, using borrowed funds, on market correction of fleeting abnormalities in pricing bonds or derivatives. Prodded by the Federal Reserve Bank of New York, 15 banks,

having lent \$100 billion to the hedge fund, poured another \$3.6 billion into Long-Term Capital to prevent more panic. This illustrated what Joseph Schumpeter, in *Business Cycles* (1939), called “the way in which financial facilities are provided for the purposes of providing financial facilities, accommodation for providing accommodation, [as] we move still further away from the motor forces of our process.”

Notable men ran Long-Term Capital as a partnership of high-tech gamblers. Their leader was John Meriwether, who was forced to resign as Salomon Brothers’ vice chairman, with the rest of top management, because Salomon hid a 1991 fraud in U.S. Treasury bond dealings. Heading the Federal Reserve role in investigating the Salomon fraud was David Mullins, a former Harvard Business School professor who resigned as Fed vice chairman in 1994 to become a founding partner of Long-Term Capital. The hedge fund’s board was adorned by the intellectual authority of Myron Scholes and Robert Merton, who shared the 1997 Nobel prize in economics for their work on derivatives. As hedge funds are free of government regulation, Long-Term Capital could use \$2.2 billion in investors’ funds as collateral to buy \$125 billion in securities and pyramid this paper as collateral in exotic transactions worth \$1.25 trillion. After reaping profits exceeding 40% in 1995-96, returns fell to 17% in 1997, with the start of the Asia crisis. As the news worsened in 1998, Long Term Capital’s capital withered from \$4.8 billion in January to \$2.3 billion after Russia’s default in August to \$200 million just before its bailout in late September. After years of bowing to Long-Term Capital’s refusal to reveal its risk exposure, bankers in the bailout, poring over the hedge fund’s systems, learned how outmoded its computer model was in being able to test investment outcomes in rough markets.

Nobody knew the risks being run by financial institutions. Noting “fragmentary” information,” the IMF surveyed a global total of 1,100 hedge funds with combined capital of \$10 billion, observing that “hedge fund capital pales in comparison with capital of other institutional investors [\$20 trillion in mature markets].” George Soros, the most famous hedge funds operator called the business “a daisy chain with many intermediaries, and each intermediary has an obligation to his



counterparts without knowing who else is involved.” After losing \$2 billion on Russian bets, Soros shut down his Quantum Emerging Markets Fund, which fell 31% in 1998 after making huge profits in previous years.

Systemic problems came from the banks’ mimicking of the “risk management” strategies of the hedge funds to which they lent indiscriminately. The risks became clearer after Russia’s derail and the collapse of Long-Term Capital. UniCredit Bank of Switzerland, Europe’s biggest bank declared a \$684 million loss on its 15% share in the hedge fund, which added to other losses of major firms since Russia’s default: Credit Suisse First Boston (\$400 million; Salomon Smith Barney, Nomura Securities, Bankers Trust and Bank America (about \$350 million each), and Merrill Lynch (\$135 million). Other big losers were Deutsche Bank, Dresdner Bank, JPMorgan Barclays, Bankers Trust and Bank Austria. Floating in this stream of bad news was the discovery that Italy’s central bank invested \$250 million in Long-Term Capital before the hedge fund amassed a \$49 million position in Italian government bonds. “There is worse to come,” said an analyst in London. “We are going to see a fairly steady stream of announcements of warnings, problems and retrenchments in coming quarters.”

Brazil then became what bankers called “the firewall,” the “line in the sand” to defend against spreading financial contagion. “Brazil is the lynch pin of the world financial system right now,” said one investment strategist. “No matter what happens, Brazil cannot go down.” Brazil’s Ambassador in London told the BBC: “This is Brazil’s first crisis that is not our fault.” That is not quite true. President Fernando Henrique Cardoso, his prestige enhanced by stopping chronic inflation, missed two big chances to cut Brazil’s dependence on short-term inflows of foreign funds by strengthening the country’s public finances. The first chance came when, after his landslide election victory in October 1994, he waited six months before sending a fiscal program to Congress, even though all of Latin America was under financial pressure from the Mexico crisis and Cardoso had just been Finance Minister for years, basing his Presidential candidacy on economic stabilization. The second chance came in November-

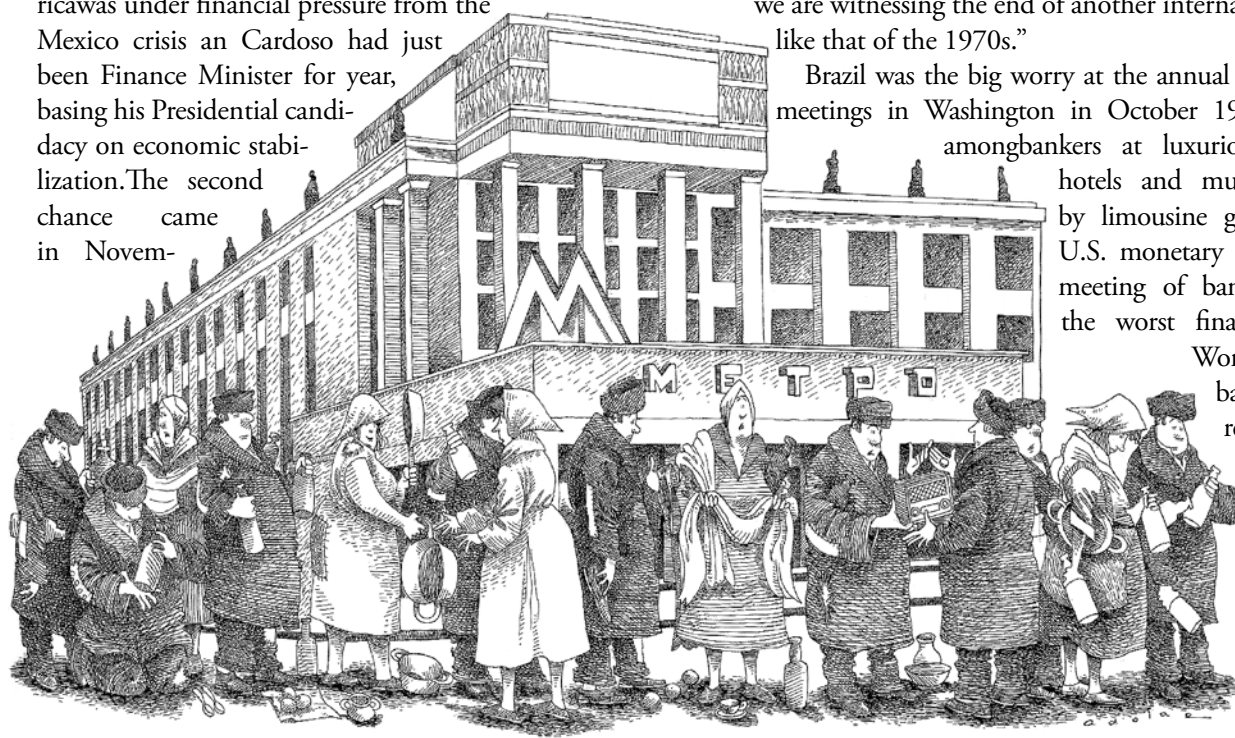
ber 1997, after a speculative attack on the Hong Kong dollar sowed panic in financial markets around the world. To defend Brazil’s currency, Cardoso’s economic team decreed big increases in taxes and interest rates and big cuts in public spending. Taxes and interest charges rose but government spending did not fall. Public deficits rose from 6.1% of GDP in 1997 to 7.8% in 1998. The Bank for International Settlements (BIS) warned: “In the absence of an improvement in the country’s fiscal and current account deficits, the unprecedented inflows of banking funds to Brazil in the first quarter [1998] may have raised the vulnerability of the country to an abrupt reversal of market sentiment,” as 64% of its foreign bank debt at the end of 1997 was for less than a year. The \$37 billion in foreign investment from privatization auctions in 1997 was nearly offset by panicked outflow of \$30 billion from Brazil in the weeks after Russia’s default. Brazil may finish the year with less than half its peak hard currency reserves of \$74 billion of April 1998. The amount of reserves usable in an emergency is unknown because of secret future sales of dollars and purchases of Brazil’s own discounted debt by the Central Bank and the Bank of Brazil. Under mounting pressure, the government escalated its sale of short-term dollarized public debt, payable in local currency at the going exchange rate, with bonds akin to the tesobonos that precipitated the December 1994 Mexican crash. Interest on public debt now consumes 6% of GDP.

“For the past four years Brazil lived a fantasy of monetary stabilization without pain,” observed Professor Celso Martone of the University of São Paulo. “The Real Plan replaced inflationary finance of the public deficit with foreign financing, fed by the emerging markets boom. Worst of all, politicians and the government came to believe in their own fantasy, with a gigantic fiscal expansion. In 1998, the public sector is spending at a historic record of 40% of GDP, despite revenues also at a record high of 32% of GDP. Easy access to international credit postponed the stabilization crisis. With the Asian crisis, we are witnessing the end of another international credit cycle like that of the 1970s.”

Brazil was the big worry at the annual IMF World Bank meetings in Washington in October 1998. Panic spread

among bankers at luxurious receptions at hotels and museums connected by limousine gridlock. A senior U.S. monetary official told a big meeting of bankers that this is the worst financial crisis since

World War II, that banks must lend regardless of risk and regulators must relax prudential standards. “I woke up this morning an optimistic man,” said David





Komansky, chairman of Merrill Lynch, which had \$1.4 billion of exposure to Long-Term Capital and whose executives six months earlier invested \$22 million in the hedge fund in a deferred compensation plan. "By the end of the day, I wanted to jump out the window. What I've seen is fear and people frightened. It's probably gone to a great extreme. But people are concerned and frightened and that fear kind of feeds on itself." To add to the consternation, on the last day of the IMF-World Bank meetings, the dollar fell to 4112, nearly one-fourth below its August peak against the yen. The panic was curbed by the second quarter point cut in interest rates by the Fed in two weeks, giving stock markets an excuse to recover, as news of plans for a \$30 billion IMF-led bailout of Brazil circulated in financial markets and Brazil's policymakers leaked news of their latest emergency fiscal package. When \$23.5 billion in tax increases and spending cuts finally were announced on October 28, financial markets were skeptical that these measures would be passed by Congress. Brazilian politicians reinforced this skepticism with protests against new social security taxes and restrictions on state and local government spending. Brazil and several other stricken countries face huge foreign debt payments during 1999 that are unlikely to be refinanced in the climate of fear now pervading financial markets.

The fear may be overdone. Yet the Asian crisis and its repercussions elsewhere may be another episode in a shift of power relationships not yet solidified nor clearly understood. In the decade following the collapse of the Soviet bloc we have seen eruption of local financial and political disorders, until recently checked by the forces engaged in the Cold War, that are multiplying too fast for any single power or international bureaucracy to manage or contain. The savagery that we have seen in Somalia, Rwanda, the Sudan, the Congo, Algeria, Bosnia, Albania, Kosovo, Afghanistan, the Ukraine, Azerbaijan, Armenia, Georgia, Turkmenistan, Uzbekistan, Tajikistan, Chechnya and Dagestan is not easily influenced by trans-oceanic military or financial intervention.

Western oil companies are trying to make deals to build pipelines across the dangerous southern fringe areas of the former Soviet Union,

along ancient trade routes, formerly known as the Silk Road, that was secured first from endemic banditry by Chinese armies some 2,100 years ago. In the coming decade, interventions to contain local conflict and disorder may be much more selective than in the recent past and more closely aligned with specific interests of the major powers. Priorities are being sorted out as East Asia's troubles spawn small secondary crises in Malaysia and Hong Kong and potentially bigger ones in Indonesia, Russia and China. At issue is whether Indonesia can remain a unified state, whether China can peacefully accommodate market mechanisms and whether Russia can overcome its historic ambivalence between westernizing and autarchic/ autocratic cultures. The contention between command and market economies has not been decided. The resur-

gence of piracy, using speedboats and modern weapons, in the South China Sea and the Straits of Malacca recalls the endemic piracy in these waters evoked by Herman Melville in *Moby Dick* (1851): "Time out of mind the piratical proas of the Malays, lurking among the low shaded coves and islets of Sumatra, have sallied out upon the vessels sailing through the straits, fiercely; demanding tribute...." If Indonesia, fractured in to several island polities, proves powerless to control this violence, then an arc of petty states, some of them evolving into gangster satrapies, will be forming along much of the southern tier of the Eurasian land mass, breeding international conflict.

The kind of strategic shifts in power relationships and trade that we see today are permanent features of the world economy. Nearly three centuries ago Daniel Defoe observed in *The Complete English Tradesman* (1726):

*How frequent it is to hear an old tradesman say, Trade is quite altered since I knew it; the methods are changed; the manufactures are changed the very places where they are made are changed the manufacturers remove from town to town, and the places know them no more; the markets remove where they are sold, and even the demands of them both abroad and at home; the very nations, to which particular goods were exported in former times, take none of them now; and nations which formerly made no use of them, are now the particular staple market for them!... The various changes which trade has suffered, may be attributed to the several turns given to the manufactures by the invention of men; the violent removings of the manufactures, and the markets of them, from one city to another, and from one nation to another, by wars; the convulsions of nations, the fall of old empires and states, and the rise of new ones upon their ruins.*

Today what may be called normal shifts and turbulence in the world economy are aggravated by heightened proliferation of financial assets. Brazil, Russia and many other national economies became dependent on short-term flows of foreign capital. When the Dow Jones industrial index

peaked at 9,338 on July 17, 1998, half of U.S. households owned stock, either individually or in mutual funds, against only one-fourth during the 1987

## The Asia crisis means a shift in power relationships.

Wall Street crash. In 1998 investors poured billions of dollars into Internet stocks yet to show any profits. Yahoo! Inc., with its internet search software, was valued by the stock market at \$9 billion, or 300 times earnings. In *An Essay on Projects* (1697), Defoe wrote of "fair pretences of fine discoveries, new inventions, engines [that] have raised the fancies of credulous people to such a height that, merely on the shadow of expectation, they have formed companies, chose committees, appointed officers, shares and books, raised great stocks, and cried up an empty notion to that degree that people have been betrayed to part with their money for shares in a new nothing; and when the inventors have carried on the jest till they have sold all their own interest, they leave the cloud to vanish of itself...."

While derivatives, overvalued currencies, real esta-



te and stocks and multiplication of shortterm credit may fit Defoe's description of "pretences" deceiving credulous people, the financial turmoil that followed the collapse of the Russian ruble in August 1998 has more to do with institutional failure. The tension between market and command economies is a major test of human adaptation. For robust markets to prevail in contention with command economies they must deal with overshooting more effectively than they have so far in the Asian crisis. With too much money chasing too few viable business opportunities, the value of financial assets must be scaled down to the real value of opportunities. This means shrinking balance sheets and reducing debts to realistic dimensions, giving shaky economies a viable alternative to inflation, exchange controls and protectionism.

While crashes may come from proliferation and overtrading of financial assets in our time, we must remember that capitalism has seen many financial crashes, but only one Great Depression. The Depression was an especially severe collapse of inflated asset values that damaged payments systems and wrecked many kinds of economic activity. Most politicians and economists of the day correctly believed that the inflation of these asset values was a consequence of World War I. The most important inflated assets were Wall Street stocks, German war reparations obligations and the British pound. The overvaluing of all these assets was sustained by credit from the U.S. financial system. The Great Depression haunts us as no other event in mankind's economic experience. Despite the turbulence of recent months, there seems little risk today of Japan or the United States or the world economy as a whole suffering calamity on the scale endured in the 1930s. From 1929 to 1933, the U.S. gross national product [GNP] shrank by nearly half [46%] in current dollars or by 31% in constant dollars after price declines of 22%. Nonfarm employment also fell by 22%. The number of unemployed multiplied eightfold, from 1.6 million in 1929 to 12.8 million in 1933, or from 3.2% to 25.2% of the civilian labor force. The business failure rate rose by half. Bankruptcy liabilities doubled by 1932. The prices of farm products fell by half and industrial raw materials by 23%. In early 1933 machine tool orders were 5% of their 1929 level. In the oil patches of Texas and Oklahoma, crude was selling for a nickel a barrel. The price of wheat in 1932 was 38 cents a bushel, less than one-third its 1926 level. Federal government revenues fell by half, covering only 41 % of spending in 1932 creating a budget deficit of 4.7% of GNP, about the same as the Reagan deficits of the 1980s. Big cities like New York, Chicago, Philadelphia and Detroit went broke. The financial problems of hundreds of states and municipalities, plagued by tax shortfalls and collapsing real estate values fed into local economic crises that led to 9,096 bank closings in 1930-33. Among industrial countries, the U.S. and Germany suffered most because they spawned the biggest credit expansions that were very vulnerable to economic contraction. Britain, France and Japan suffered less because Britain was stagnant throughout the 1920s, France was running a tight ship after a 1926 stabilization crisis and Japan was recovering from a 1927 banking panic

that purged speculative fever enough for Japan to expand again in the 1930s.

Looking backward over the past 120 years, despite episodic setbacks in individual nations and groups of countries, the only big output losses for the world economy as a whole came from wars. In 1945-46 the fall in production was bigger [18%] than in 1930-33 [17%]. According to Angus Maddison, a leading analyst of longterm trends in the world economy: "The aggregate stability in the collective output in peacetime has been quite impressive." In the 43 years from 1870 to 1913, there were only two years [1893 & 1908] of output loss for the advanced countries, the only long-term statistical proxy available for the world economy as a whole, and since 1947 only two more years [1975 & 1982]. Smoothing of business cycles persisted despite stock market crashes and bank crises in 1968, 1970, 1973-74, 1982-84 and the 1990s. History is on our side, unless we go to great lengths to foul things up and ignore obvious dangers.

In his book, *The Crash and Its Aftermath*, Barrie A. Wigmore, a Goldman Sachs partner, spelled out one of the main lessons of the Great Depression: "Lenders were unwilling to adjust the debts due to them for the severe price level changes, and interest rates could not be said to have declined at all. Creditors accordingly had to bear debt burdens much greater in real terms than they bargained for. In the real estate, farm and commodities businesses, these debt burdens bankrupted the debtors. Thus, the financial system stuck to its practices as price levels changed, and the economy was required to adapt." In Latin America's debt crisis of the 1980s, readjustment of obligations came only after a decade of recrimination and delay as well as relaxation of monetary policy in the United States and Japan. After that, the \$ 156 billion in outstanding Brady debt-reduction bonds became one of the hottest items in securities trading, with a 1996 turnover of \$2.7 trillion, or 17 times face-value. With this experience under their belts, the enhanced creativity of investment banks and hyperactive traders may find profitable opportunities in bringing to life more comforting scenarios than the ones currently programmed in the video game Money, Greed, Technology.

The recent economic trouble in Russia, Brazil, Japan, Indonesia, Venezuela, Korea, China, Malaysia and Hong Kong dramatizes unsuspected difficulties embedded in reform programs inspired by economists and politicians outside the countries where reform is supposed to take place. Unrealistic expectations were awakened by giant financial rescue packages negotiated by the IMF. We do not know if the technological and entrepreneurial power of globalization will advance or recede in conflict with local institutional and political obstructions. Market-oriented reforms succeeded in intensifying economic activity and raising living standards in Latin American countries racked by chronic inflation and in East European states reorganizing their politics and economies after the collapse of the Soviet bloc, but faltered when entrenched interests in other countries faced less desperate challenges. After the resignation of President Suharto, Indonesia faces economic shrinkage for 1998 of 13%-20%, with riots,

food shortages, massive unemployment, bank failures and default on its foreign debt. In EastAsia, soup kitchens and rice lines are appearing. Boulevards and parks are being occupied by squatters as people are evicted from their homes for non-payment of rent. Output is falling by 6%-7% in Korea and Thailand, 4% in Hong Kong and 2% in Malaysia, according to projections by their respective governments, with private estimates of losses running much higher.

The Asian crisis shows us that changes must be made in the international financial system to better manage the multiplication and diversification of assets. There are no magic or permanent formulae for doing so. Only blunt instruments can contain collective madness in international financial markets. Each specific and meaningful proposal to regulate and restrict excesses of volatility and promiscuity will generate controversy, costs and limited effects. However, a battery of thoughtful measures together might reduce the waste and dangers bred by unbridled proliferation of financial assets. Useful steps, to be taken by agreement among the member central banks of the BIS, might include initiatives like these:

1. Limit short-term lending to a certain percentage, fixed by the BIS, of foreign assets of lending countries and foreign liabilities of borrowing countries, making allowance for normal provision of trade credits.
2. Limit leveraged trading of financial assets by banking institutions.
3. Eliminate offshore financial centers by international agreement, with the United States and Britain taking the lead in refusing to enforce contracts registered in these

jurisdictions.

4. Restrict sales and trading of derivatives to public futures exchanges where contracts are registered, records of large positions are kept and prices published under regulated capital-adequacy provisions. Banks and other financial institutions should be required to allocate capital to support derivatives bets, with courts assigning them the same legal status as gambling debts.

5. Banks should not be allowed by regulators to supervise their own risk profile with "risk control" software, which can generate dangerous macroeconomic effects by failing to anticipate political and credit risk as well as random events.

In the end, if Santa Claus is dead, assuming that he ever lived, then countries must solve their own problems. In the challenge facing Brazil and the stricken East Asian countries, this means pursuing modernization of institutions to achieve more efficient use of capital and to reduce dependence on episodic floods of short-term money issuing from the worldwide proliferation of financial assets subject to severe and sudden interruptions. The Asian crisis has shown both the strength and limitations of the international system. Never before have debtor countries received so much support so fast from foreign governments and international institutions. This story is not over and troubles are sure to come. These countries' basic institutional problems are not amenable to short-term solutions, but a start has been made. What will decide their future is their capacity to respond to shocks and to adapt to changing conditions of economic life.



# How Contagion Happens

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State of the art market risk management methodology - endorsed and imposed by industrial country regulators- is a primary source of contagion effects of a crisis. Risk control systems may require, for example, that bond index funds hold only investment grade securities. A downgrade of a country's credit rating leads to an immediate sell-off of its bonds and an inability to approach the market for more funding. Risk control systems require that margin calls in foreign exchange be made on domestic counterparties whose derivative positions (perhaps established as a risk-reducing hedge) take losses from market price movements. A volatility event in one country automatically will generate an upward re-estimate of credit and market risk in a correlated country, triggering automatic margin calls and tightening of credit lines. In short, they are the mechanism by which the rhetoric about unified, global markets are realised in practice.

Thus apparently bizarre operations that connect otherwise disconnected securities markets are not the responses of panicked green-screen traders arbitrarily driving economies from a good to a bad equilibrium. Rather, they work with relentless predictability and under the seal of approval of supervisors in the main financial centers. "Contagion" is the other side of the coin of risk control in the industrial countries.

Modern risk control methods, pushed heavily by the BIS and national regulatory authorities, are liquidity-hungry. They trigger heavy demands for cash, collateral, and capital on a systemic level when asset prices move significantly. Such methods have now created a clear tension between the thrust of prudential regulation of industrial country supervisors and the lender of last resort responsibility of G-7 authorities. How this tension is resolved will determine the dynamics of the unwinding global crisis.

Credit and currency control events are poison for such systems of market risk management: these break the netting and hedging vision under which most traders and risk managers work. If funds cannot be moved across borders easily or if a piece of a portfolio defaults, then risk-control methods fall apart. Positions must be regarded from a gross and not a net basis, with considerably higher capital costs than may be justified by the risk-return tradeoff of a given security.

Of course, risk management must also account for default risk and transfer risk, but the formal risk control apparatus for these risks is not nearly as developed as for market

risk. Risk control in these areas generally takes the form of pre-specified position limits that puts inequality constraints on the portfolio choice that market risk control methods might generate. While market risk control methods are fine-tuned enough to provide continuous responses to price movements and some continuity in portfolio choices, credit risk and transfer risk control respond in a much more discontinuous, bang-bang manner.

Consider the trader in the example above who hedges ruble paper by shorting rubles in an offshore forward market - i.e. the trader is hedged against an anticipated devaluation on the ruble. In effect, the trader is content to provide credit to the Russian government and avoid the currency risk. The impact of the initial Russian restructuring program threatened both of these positions. First, the trader takes a loss on the ruble paper, receiving ten cents on the dollar. Second, the forced restructuring and additional controls - if they had been run properly - should have had the effect of keeping the

exchange rate from depreciating by much. If the forward contracts had been bought at a discount, the trader may also then have a loss on them, depending on the settlement

rules. The restructuring scheme then hits the previously contented lender on both legs of its position.

Now consider the response of investors who had put funds onshore into another country's large government securities market and hedged the currency risk with a forward contract. The Russian restructuring provided a wakeful call. It signalled a new environment in which their hedge might be worthless. The discontinuous change in the risk-return calculus causes investors to pull their funds offshore unless the yield on domestic securities rises sufficiently to compensate them. They will be less likely to roll over their funds on maturity even if there are higher rates because this now marks them as speculators deserving of rough treatment.

Even if, as outright holders of the positions, they wanted to keep their funds onshore, they may have funded their positions through repurchase agreements or swaps. The marking to market of these positions again imposed by the state-of-the-art risk control methodology required by industrial country regulators will generate margin calls and reduce the capital of the investor, thereby forcing a sale.

Inevitably, a time would come when the private lenders would be forced to stay in unpalatable locations at punitively low yields. That point was reached in Russia. Russia was

## The moral hazard problem cannot be cheaply exorcized

\*Adapted with permission from "Capital Flows from Emerging Markets in a Closing Environment", in Global Emerging Markets. London: Deutsche Bank October, 1998.



from the advent of IMF involvement a “moral hazard” poster child. The initial fund program in 1992, for example, has to be characterized as one of the more optimistic in Fund history. It was well recognized that Russia was a special case because of its strategic position.

Then two wires crossed: (1) the official sector was running out of funds and was fruitlessly approaching taxpayers for more authorizations; and (2) it was perceived that the large inflows into the emerging market countries had been driven by the moral hazard problem. Indeed, the moral hazard problem meant that when trouble came there would likely be an unstoppable outflow of funds from a country regardless of the amounts reasonably available in an adjustment program.

Again, the market response to the disastrous Russia policy switch was not a panic. It was as predictable as clockwork. When the Russian government announced the details of its debt restructuring plan on August 25, 1998, valued at no more than 20 cents on the dollar of the preconversion value of the domestic debt, an immediate sell-off occurred in Brazilian shares and domestic and foreign debt. Bowman foreign exchange reserves began to fall steadily. The lesson for investors in emerging markets was immediate: in any country with a Russia-like profile, it might again be fair game to force the foreign investor into a conversion of domestic government debt into worthless paper. Indeed, that confiscation might be necessary to satisfy fiscal targets and fill financing gaps.

After the collapse of the Russian markets and the imposition of Malaysian controls, classes of risk that had been assigned low probability suddenly became dominant. Inconvertibility, forced restructuring of debt, or even expropriation have now become more likely, if not expected.

This has led to a general distrust of emerging markets, especially in domestic currency denominated onshore issues, where enforcement of claims in bankruptcy is problematic. Adjustments due to the marginal balancing of risk and return are no longer the force driving emerging markets. Rather, presence in a market has suddenly become a corner decision as the market standard risk control paradigm has crumbled - and the compensation offered for staying has proven inadequate for many participants. Thus the Russian crisis was visited immediately on Latin America, which had been the only emerging market region remaining relatively intact.

The dynamics of the emerging market crisis turned Russia into a watershed country. Once the expropriation of foreign creditors commenced, there was no way that any manager of emerging market funds could ignore the cross border problem. The rush out of domestic emerging market debt turned into an avalanche. The myth that there really were viable domestic currencies in emerging markets without capital controls and IMF backing was destroyed. Investors in Latin America absorbed the lesson much faster than the official sector that had taught it: the crisis now roosted in Brazil.

For policy makers, the market reaction has shown that the moral hazard problem cannot be cheaply exorcised. In a mark to market universes the price realignments that such an event causes will cause bankruptcies to erupt in unexpected places, as in the recent bailout of a major hedge fund (Long-term Capital Management). Withdrawal of industrial country fiscal support from the international lender of last resort business only throws the problem into the laps of the industrial country money printers.

## The rebirth of euphoria is premature

**Peter L. Bernstein**

Since the spectacular collapse of Long-Term Capital Management, sowing panic in international financial markets, hedge fund bashing has become very popular. However, hedge funds are the messengers of volatility, not the message. What we should be worried about is the compulsive spread of liquidity that breeds great foolishness among clever men.

The fetish of liquidity in the stock market is at powerful, if not more powerful, than ever. With the elimination of fixed brokerage commissions in the 1970s, the advent of the computer and off-market transacting, and the explosion in trading in derivatives and equity futures, the cost of buying and selling financial assets is now a fraction of what it was only 25 years ago. Reduction of transaction costs became a powerful incentive for hyperactive trading among investors.

As a result, listed shares of stocks are turning over at annual rates of better than 50%” an average holding period is less than two years” and that does not even include the high rate of turnover in the markets for derivatives. The appetite for short-term trading has spilled over into the once-staid fixed-income markets and has created a whirling dervish in the markets for foreign exchange.

As Walter Bagehot, the great editor of *The Economist*, observed in Lombard Street (1873): “Every great crisis reveals the excessive speculation of many houses which no one before suspected, and which commonly had not begun, or had not carried very far those speculations till they were tempted by daily rise of price and the surrounding fever.”

The focus on hedge funds is like looking at the trees instead of the forest. The entire environment of the long business

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expansion and the bull market in stocks led inevitably to one massive overshoot, as the magnitude of the debris left in its wake makes painfully clear. The climate of exuberance led to floods of short-term capital in all directions, borrowers increasingly unable to resist the torrent of money thrown at them by lenders, a classic wave of overinvestment in the real economy around the world, a hungry and often badly-executed search by investors for tricky alternatives to bread-and-butter investing in record-high stock markets, a strong dollar that relieved other economies from pressures for structural reform, a growing sense of certainty that the policy-makers could control the heaving animal of their creation before anything would hit the fan, and, most important and powerful of all, the bull market in stocks in every nation of the world except for poor Japan.

Many - perhaps most - people today look around and feel lost. Given the magnitude and scale of the disasters, who can understand and grasp what has happened? History provides no good frame of reference for this unique sequence of events. As Alan Greenspan has put it on several occasions, nothing frightens people more than the sense that they have lost their understanding of how the world works. Who knows how best to mend the rips and tears in the short run to prevent renewed outbreaks of discontinuity before the world is once again on the roar to sustainable global economic growth? In a global game whose objective is to transfer losses to the other: fellow, the range of outcomes has to be wide.

People were fooling themselves when they believed they understood the driving forces of the upswing side of the cycle. They did not, but they did not care because everything felt so good and natural just as now everything seems scary and unnatural. The upswing was also a unique series of events for which history provided no good frame of reference.

Who can predict effects when causes are indistinct, heterogeneous, and often nonlinear in their impact? Surprise is normality, in bad outcomes and good outcomes in equal measure. In a sense, both are our just deserts, because each is the ultimate cause of the other. Only the timing of the inevitable shift remains concealed. Goofing up is our destiny, not some kind of perverse anomaly, just as great times are also our due.

Worldwide enthusiasm has greeted Mr. Greenspan's decision to reduce Fed funds without waiting for a Federal Reserve Open Market Committee meeting. Much of the enthusiasm is justified, as the impact on the rest of the world is likely to be on balance positive, although not necessarily significant. For the rest of the world it is imperative that the U.S. should remain the importer of last resort, a role that depends upon a buoyant U.S. economy more than anything else. At the same time, the associated turn toward strength in the yen eases exchange rate pressures on the rest of Asia, including China.

The decision is not riskless, however, as Mr. Greenspan would acknowledge more readily than most observers. Of all the major players around the world, he has shown the least degree of hubris. Following so soon after the attempted rescue of LTCM, this decision is Mr. Greenspan's second admission that he finds the environment frightening and unstable even if others are reluctant to take it that seriously. If we may coin a phrase, which motivates much of our own lines of reasoning: Old forecasters never die, they just nurse the memories of how often they were wrong. There are significant risks to the dollar in lower interest rates. The dollar is the most overowned asset in the world. The volume of our dollar-denominated liabilities grows every single day. If ever there were an accident waiting to happen, this is it. We are unable to identify what could trigger a dollar crisis, precisely what form such a crisis might take (where would the money go?), or when it might occur, but the consequences would topple many precious applecarts. Currency crises lead to self-reinforcing panic, for which the only therapy is a punishing hike in interest rates followed by humbling promises of rectitude and moderating behavior by all concerned.

There is the risk that the easing in U.S. monetary policy is a pebble thrown into a tumultuous ocean, a condition in which calibrated policy responses are too feeble to matter at all. The rush for liquidity has by no means subsided. Responding to a cry of "Fire!" in a crowded space, there are just not enough exits for everybody who wants out. We cannot calculate the long-term effects of that kind of panic on the spirit of enterprise that is essential for a sustainable recovery.