

FRIEDBERG'S

COMMODITY & CURRENCY COMMENTS

Friedberg Commodity Management Inc.



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Back from the precipice?

That was a *Financial Times* headline this past weekend, with nary a hint of a doubt.

We on the other hand, are not so sure. In fact, we believe that the most damaging phase of the dollar crisis is yet to unfold. Why? Because it is precisely now that domestic and international considerations are beginning to conflict. Given the composition of the Fed's Board of Governors, we have little doubt that domestic considerations will take precedence over the US dollar's function as a store of value and its role as *the* international reserve currency.

The Federal funds rate rose from about 3% in 1994 to 6% now, accompanied by official statements that the Fed had moved "preemptively" against inflation: Policy was tightened in response to current indications — i.e., rapid economic growth, high and rising capacity utilization, low and falling unemployment rate — that suggested high inflation in the future.

As we documented in previous issues, the Fed did tighten monetary policy, and the effect began to bite at the start of the third quarter of last year. From that point on, the Fed was successful in applying pressure on commercial bank reserves, which in turn had the effect of forcing commercial banks to liquidate investments in order to accommodate rising loan demand. Growth in the monetary aggregates remained very modest. The decisive operation was rated a success — so much so that the soft landing of the first half of this year was entirely attributed to it.

Many observers concluded that the Fed reacted more strongly in 1994 to a threat of inflation than in the past. A recent Federal Reserve Bank of San Francisco *Weekly Letter* ("Has the Fed gotten tougher on inflation?" — No. 95/13 March 31, 1995) attempts to shed light on this issue by comparing the Fed's behavior in early 1994 to its behavior at different times in the past.

To test its case, the FRBSF uses the reaction functions developed by Mehra (1994) and a policy rule proposed by Taylor (1993). The latter's rule "is designed to insure that monetary policy would achieve an inflation target of 2% in the long run (measured in terms of the GDP deflator), while still being responsive to the business cycle. Under the rule, the real funds rate would rise relative to its long run average of 2% whenever inflation rises relative to its 2% target and real GDP rises relative to an estimate of long run trend level... (Chart 1)...confirms the shift in policy that occurred during the late 1970s and demonstrates that since the end of 1979, the funds rate has been more responsive to changes in output and inflation than it was earlier. It also suggests that the behavior of the funds rate in 1994 was little different from its

behavior over the preceding 6 or 7 years. To the extent that the behavior of the funds rate has changed, the break seems to lie around 1987." Of course, 1987 was the year when Alan Greenspan became Fed Chairman.

The letter concludes "that Fed policy during 1994 was more concerned about inflation than it was prior to 1980. However, it is harder to make the case that the Fed's behavior over 1994 was different from the disinflationary regime established in the 1980s."

So much for the newness of the approach. More importantly, it brings into focus the brewing potential conflict: As the economy slows below its long-run trend level, now estimated around 2.5%, the Greenspan/Blinder Fed would be facing a dilemma that arises out of Taylor's policy rule prescription: to lower the funds rate and thus be responsive to the business cycle or instead to be concerned about an inevitable pick up in inflation — well above its long-run 2% target — and a weak US dollar.

Even as the economy slows down, signs of a pickup in inflation are beginning to appear, most importantly, the upward trends in crude and intermediate wholesale prices (see Chart 2) and the jump in unit labor cost, at a 3.4% annual rate, the fastest rise since the first quarter of 1993.

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Contributions by Albert D. Friedberg, Edison Lee, and Sholom Sanik.

Futures and options trading is speculative and involves risk of loss. Past trading results are not indicative of future profits.

The Fed has already indicated that it might prefer to see *through* near-term price pressures (see our last two issues) as it tries, once more, to strike preemptively — this time to combat a possible recession. Fine tuning at its best. If the Taylor policy rule is behind current Fed thinking — as it appears to be — the Fed is likely to lower the funds rate in the near future.

This Keynesian formulation suffers, however, from three major faults. In the first place, it presupposes that the Fed knows what an equilibrium real interest rate should be for such a complex economy as the US economy. Secondly, it presupposes that it can fix this real variable via a nominal lever. Thirdly, it assumes that rapid economic growth spells an acceleration of inflation, while slower economic growth is disinflationary. If this were truly so, Mexico and Turkey would be experiencing wrenching deflation rather than an inflation of 5% to 10% *per month*. But what is worse is that the Taylor policy rule does not even begin to consider the international role of the US dollar.

Running an international currency that happens to constitute more than 60% of world's central bank reserves requires a wholly different set of rules. The US has become a captive to this status, a status that enabled it to obtain almost unlimited cheap financing for the past 50 years. A persistent current account deficit and sizable private capital outflows, while not enormous *per se* (2%-3% of GDP?) are adding unwanted dollars to a stock of reserves that already is the cause of concern of central banks the world over.

As is always the case, the true determinant of currency value is the private sector: Individuals act, and the public sector, via its central banks, reacts. Dollars accumulate in the coffers of central banks because individuals the world over have disposed of them, having concluded that the risks of holding dollars far outweigh its benefits. Lacking a profit motivation and being innately conservative, central bank bureaucrats have absorbed these disposals. By the same token, however, once a decision to diversify out of US dollars has been made, central bank bureaucrats will be excruciatingly slow in reversing the process.

The day of reckoning thus may not be far off. We estimate that over one trillion US dollars are held in central bank reserves (of which only US\$450 billion are held in the form of Treasury securities) earning approximately 6% per annum but having depreciated more than 15% against the hard currencies in the past year alone.

Capitalizing the "small" current US\$200 billion current account deficit would more than triple this massive dollar overhang — a situation that we believe is unthinkable and unacceptable. Long before this point, we believe, central banks will have liquidated these holdings in favor of better currencies, or even gold.

But this switch cannot be accomplished easily. The private sector must be persuaded to hold dollars — these same dollars that today they are rejecting. Either the holding of dollars must be made profitable (high real rates of return) or US authorities must engineer a dollar shortage via balance of payment surpluses. Both of these alternatives imply a substantial rise in the US savings rate.

There is as yet very little consciousness of this problem at the higher echelons of the Federal Reserve, preoccupied as it is with a domestic policy rule. Only William McDonough, president of the Federal Reserve Bank of New York and a voting member of the FOMC, has expressed some reservations in this area, admitting that there is a risk that the United States may be perceived as mismanaging its responsibilities as the world's reserve currency. And he noted rather cryptically that this "is one of the reasons we ought to fix what we are doing."

Yet he still found it hard to imagine that any other currency or number of currencies can substitute for the dollar as the reserve currency (as reported by Reuters News Service on May 18).

At the other side of the spectrum Fred Bergsten, director of the influential Institute for International Economics continues to advocate a further 10% fall in the trade-weighted dollar to cut the US current account deficit in half, a level that he felt would be sustainable in the long run, thus giving little weight to the disastrous impact that this devaluation may have on the confidence of other central banks.

In sum, international monetary considerations are starting to diverge from the purely domestic agenda upheld by the current Board of Governors of the US Federal Reserve. At stake is the prestige of the United States, the value of the dollar, US interest rates, the international payments system, and now the entire post-war liberal trading order that did so much to raise global economic standards.

STRATEGY: *We are eager to reenter the long side of the yen and the major European currencies after having been stopped out of our long June '95 yen at around 117.29 (See Hotline Update for Friday, May 19). Keep in close contact.*

Chart 1

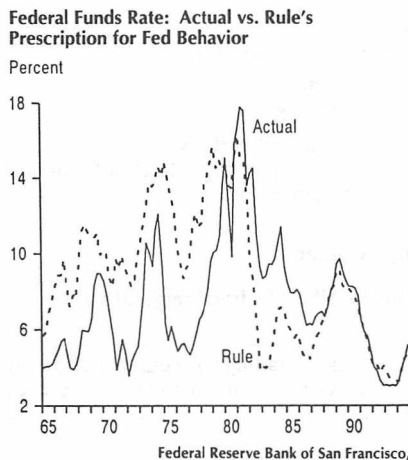
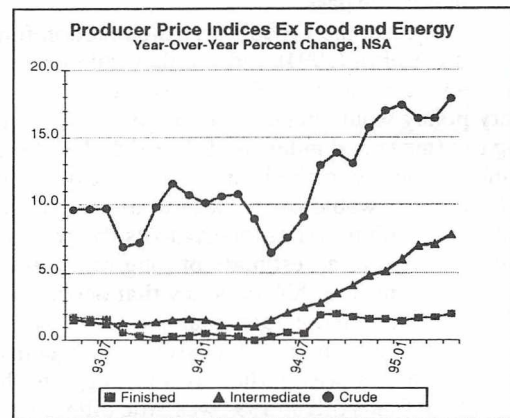


Chart 2



First Chicago Capital Markets, Inc.

US INTEREST RATES

It is a fool's game

Monetary conditions seem to be easing already. The pace of bank credit has picked up recently, led by a continuous acceleration in bank loans and a substantial easing in their rate of security liquidation. (See Charts 3, 4, and 5).

Although the yield curve continues to flatten, speculation in the bond market has been mounting; the "carry" trade is (barely) profitable, but now the emphasis is on capital appreciation rather than on earning 40-60 basis points on no money down. No one seems to sense the looming threat of a

dollar collapse and its implications for interest rates, focused as they are on the Fed's domestic vision (see lead article).

It is a fool's game.

STRATEGY: *There is much more mileage at this time in being short Eurodollars than T-notes or T-bonds. As a result, you are still short June '95 Eurodollars with a stop at 9400, close only, and September '95 Eurodollars with a new stop at 9440, close only.*

Chart 3

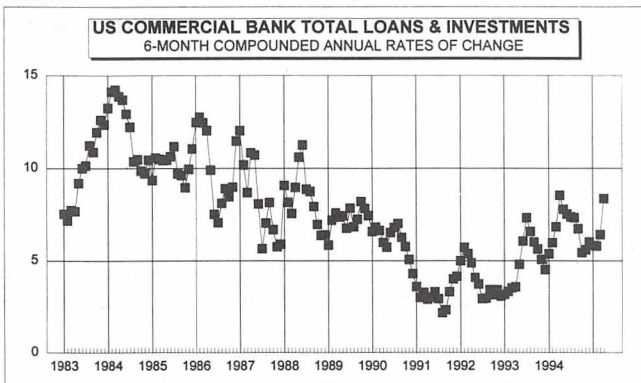


Chart 4

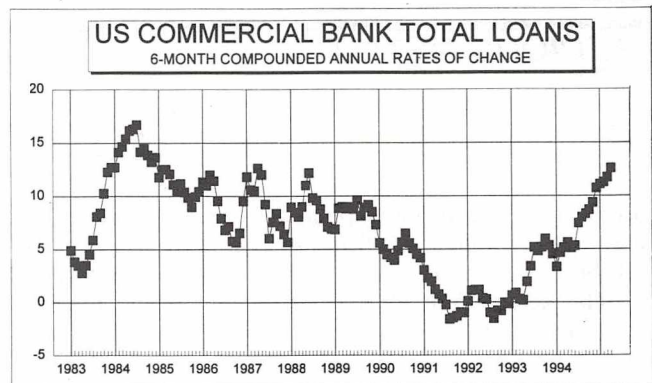
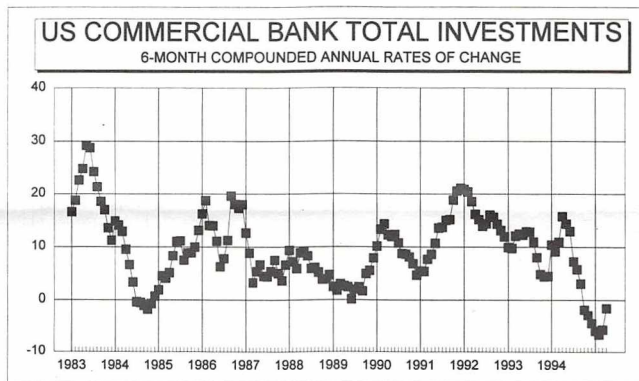


Chart 5



STOCK MARKET INDEXES

The end of the supercycle?

The long 1974-95 supercycle bull market has entered the final phase, a blowoff that will shatter all previous records in overvaluation. Typical of final stage frenzies, the market has rationalized the record-low dividend yield — it is above 0% in real terms and dividend payout ratios are at 5-year lows — record

high price/book ratios (restructuring, remember?), more mutual funds than companies listed on the exchanges, etc., etc.

No doubt, the story is compelling. Corporate earnings are booming, with net earnings, according to a Wall Street survey, up 48% in the first quarter this year over a year ago.

Even allowing for distortions, underlying profits were up some 23% compared with 19% in the last year's fourth quarter. Though slow to get started, the rise in profits in the current cycle is by now a good deal stronger than in the average cycle since the war.

Since the cumulative rise in GDP is lower than the cycle average, the implication is that corporate profit margins have risen faster than in previous cycles. This is attributed in turn to the corporate restructuring of recent years and the resultant improvement in the productivity of labor.

But, as Stephen Roach of Morgan Stanley points out, there are already some fragmentary signs suggesting that the pendulum of global restructuring might already be starting to swing away from the US and back towards Germany and Japan. This has been signalled by an important shift in the mix of corporate layoffs in the industrial world. As an exam-

ple, the layoff rate in the US for the first 3 months in 1995 is about half the comparable 3-month stretch in 1994 and only 1/6 of the annualized pace of 1993.

Moreover, under the protective umbrella of a weak US dollar, there is a chance that business would more easily give in to labor demands. After all, US workers have seen no increase in real wages in more than a decade. Narrowing profit margins and the inevitable rise in interest rates to come (see lead article and also the article on interest rates) should combine sometime this year to take the bloom off this century's most spectacular bull market.

The countdown has begun.

STRATEGY: Assuming that the 1994 consolidation is the mid-point of the total blow-off, we can project a Dow Jones peak of 4900 and an S&P peak of 570. Be patient.

PRECIOUS METALS

More weakness

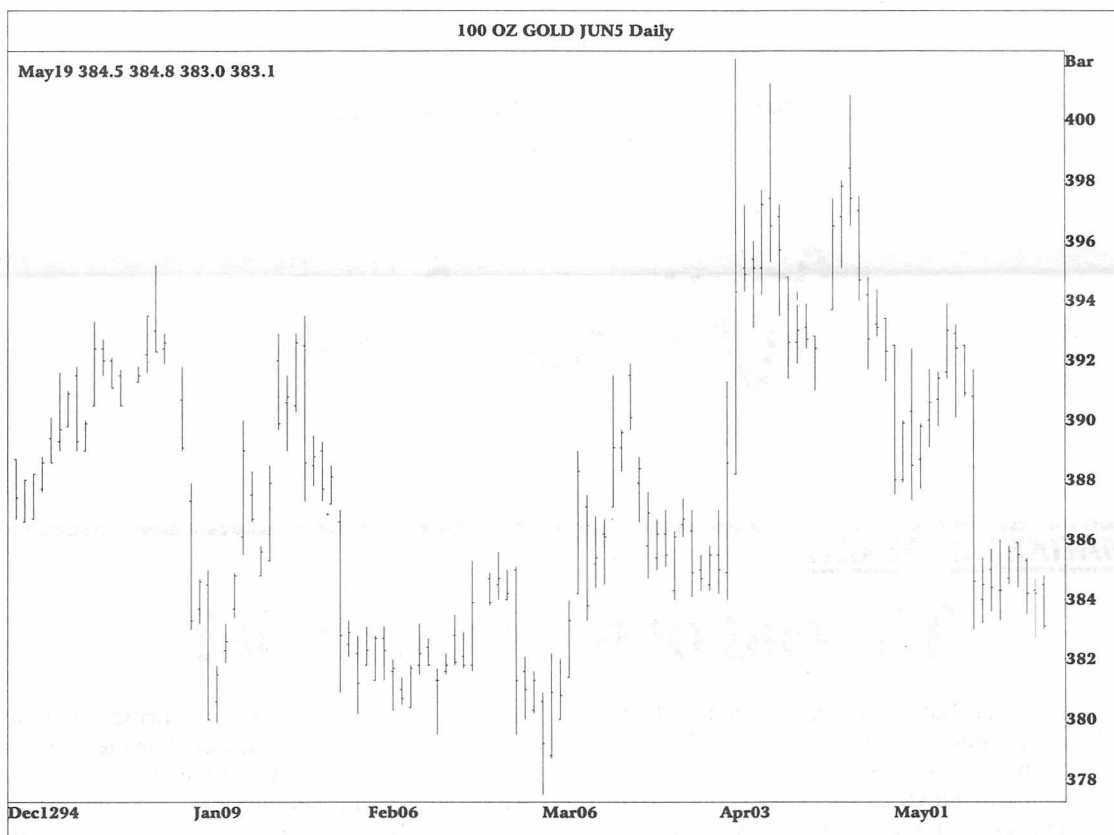
Last month, suspecting manipulation, we advised liquidating long silver positions at \$5.68/oz. Subsequently prices temporarily breached the \$6/oz. level and then collapsed to \$5.10/oz.

The weakness in silver spilled over to other precious metals, triggering our \$440, basis July '95, and \$390, basis

June '95, stops on platinum and gold respectively.

STRATEGY: The erratic pattern of the open commitment and the rapidly falling bullish consensus presages more near-term weakness. Stand aside, for now.

Chart 6 – GOLD



COPPER

Fooling most of the people

Can copper prices turn up just as the economic slowdown becomes so apparent? Why, yes. The market will do what it needs to do to fool most of the people. The technical structure of the market is improving, particularly the rapid build-up in the

open commitment and the re-widening of the backwardation.

STRATEGY: You are long July copper at around \$125.25, as per flash update of May 17.

Chart 7 – COPPER



SOFT COMMODITIES

Cocoa

When speaking of cocoa crops, we tend to focus on the world's largest producer, the Ivory Coast. But Brazil, traditionally also an exporter, has seen its cocoa output declining. And the trend is expected to continue. Farmers have little defense against the ravages of witch's broom disease, which has been largely responsible for dwindling output.

As news of Brazil's importing 5,000 tonnes of cocoa broke, the street was in shock; it was a first. Well, they had better get used to it. Cargill Commodities estimates that by the year 2000, Brazil will be importing 100,000 tonnes of cocoa a year. From a consumption standpoint, this is actually demand-neutral, as the processing end of the industry will simply be buying the same amount of cocoa beans elsewhere.

However, there is a strong bullish case to be made for price. It can be assumed that within the Brazilian industry, there is much mutual back scratching and that processors don't actually pay the prevailing world price for beans. In some cases the growers and processors are the same people.

International cocoa merchants eagerly await the new South American buyers with tales of tight supplies and hard-to-come-by high-quality beans. These tales may be deeply rooted in fact. This past week, E.D.&F. Man raised its forecast for the 1994-95 world deficit to 165,000 tonnes from 89,000 tonnes.

In fact, the deficit could actually be much worse, as Man's report was issued before it was known that the Indonesian Cocoa Association chopped its forecast for 1994-95 Indonesian output to 230,000 tonnes from 280,000 tonnes, because of

floods in the Sulawesi growing region. In addition, the Ivory Coast's mid-crop beans were well below exportable size. (European customers will not accept beans that are too small.) The official minimum bean count for export quality is 110 beans per 100 grams. This year's beans have been reported to be anywhere from 140 to 160 beans per 100 grams.

Bearing in mind that it takes seven years for a cocoa tree to bear fruit, producers cannot be quick to respond to rising prices by cranking up their output. So, unlike other commodities, a bull market in cocoa can be long and exciting.

Coffee

Coffee market participants are monitoring the weather in the coffee growing regions of Brazil with great interest in this potential frost season. The memory of last year's move from 80¢/lb. to \$2.70/lb. is fresh in the minds of traders who were on either side of the market. Some with very pleasant memories; others, well...they'd just as soon not think about it at all.

Producers, ever greedy, are seemingly not happy with a price that is at least 50% higher than the average price they received in the past 10 years. They are trying to engineer another retention plan similar to the one that got the bull market rolling in the first place.

There is a lot of uncertainty in this market. The estimate of the 1995-96 frost-damaged crop ranges anywhere from 12.5 million bags to over 17 million bags. The effect of the higher price on consumers has not been clear either. The one thing we do know is that the price has maintained a lofty level of \$1.70/lb. without the aid of speculation, seen with a very low open interest. If growing conditions are not ideal and demand remains healthy, this market has potential.

Sugar

While the weakness in the price of sugar is not very hard to understand, as bountiful crops continue to register across the globe, the rise in the July/October spread to new highs seems almost inexplicable. It would hardly constitute a scientific

study, but we cannot remember a single example of a commodity whose price lost close to 30% of its value and yet maintained its backwardation at all, much less one whose inversion grew.

It is not a total mystery. The demand in the near term is robust, as countries replenish their supplies after two years of poor crops and the resulting deficits. The street believes, however, that as Northern Hemisphere beet crops are harvested in the fall, a flood of supply will swamp the market.

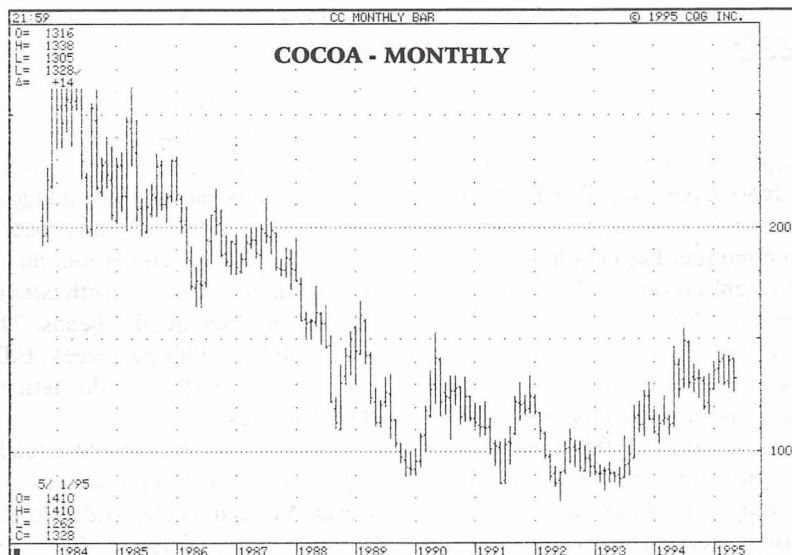
In fact, on May 5 the ISO gave us our first glimpse of a "post-deficit" sugar world with an estimated production/consumption surplus of 390,000 tonnes. Six months ago sugar statisticians were talking about a 1994-95 deficit of close to 2 million tonnes. Three months ago we were looking at an even balance. Now we have a surplus.

Bull markets create bear markets, as high prices induce producers to step up production, ultimately flooding the market with unexpected supplies and driving the price down. Although this may be happening to the sugar market, demand may be keeping pace. The ISO in the same report says that Russian imports should total 2.2 million tonnes, which is well above Russia's own declaration a few months ago of being in the market for only 1.5 million tonnes. China, traditionally a buyer of raws for processing in its own refineries, has for the first time been seen buying refined sugar from an Australian refiner because demand is so robust that the Chinese refiners can't keep up.

However, one catch in the rosy supply picture has developed quietly in the past few weeks. Australian sugar growing regions have been plagued by droughts for five years. The 1994-95 campaign managed to yield a record crop of 5.02 million tonnes regardless, but 1995-96 production is expected to see a return to the drought problems and drop to 4.7 million tonnes. Half a million tonnes lost from the country that is now the world's largest sugar exporter and a lifeline to China's refineries is nothing to ignore.

STRATEGY: Stand aside for now on all soft commodities.
— Sholom Sanik

Chart 8



FRIEDBERG CAPITAL MARKETS

Argentina: swaps working

Issuer: Central Bank of Argentina

Securities: BOCON Pre 1 (Peso) and Pre 2 (US\$)

Maturity: April 1, 2001

Recent prices: \$73 for Pre 1 and \$83 for Pre 2

Yield to maturity: 21.7% for Pre 1 and 18.4% for Pre 2

The first-round victory of President Menem in the May 14 election and the majority position his Peronist Party obtained in congress indicated Argentineans' widespread support of the economic reform and current austerity measures. It brings the market a clear message that Argentina is willing to endure the short-term pain in order to achieve long-term economic success.

The banking system in Argentina further stabilized upon Menem's reelection. Both bank deposits and central bank reserves have increased following the reelection news. As a result, interest rates have declined as capital is flowing back to the system.

The Argentine debt market rallied upon the reelection, and there was some other good news, too: a \$41 million trade surplus in March 1995 (Argentina's first since 1991) and another estimated \$300 million surplus in April. Besides, Moody's announced on May 17 that it was reviewing Argentine government debt for a possible upgrade.

Our swap recommendations in the last issue have enabled investors to take full advantage of the rally. The BOCON Pre 1 has shot up to \$72 from \$56, a 28.6% appreciation. But the BIC V has risen from \$63 to only \$71, representing a mere 12.7% gain. As discussed in our last issue, the rally in the BIC V has been capped by declining interest rates in Argentina. In fact, the annualized coupon rate on the BIC V declined to 28.64% on May 18 from 32.32% on April 25.

Similarly, the BOCON Pre 2 has rallied 13% to \$82.5, whereas the FRB has gone up by only 11% to \$66.75. The spread between the two issues has narrowed to 290 basis points from 400 basis points.

We believe the latest rally has brought the prices of Argentine debt to a level that more fully reflects the recent good news. There should be a short-term consolidation, and another major rally may not happen until the banking reform is completed. We still maintain our view that Argentina will be in a recession for the rest of 1995, the unemployment rate will rise, and banks will see their nonperforming loans go up. Consequently, investors must be prepared for short-term volatility in the Argentine debt market.

Long term, we still find the BOCON Pre 1 and Pre 2 attractive at the current price and yield levels. A comparison among sovereign debt issues of Argentina, Brazil, and Mexico indicated that Argentine and Brazilian debts command a similar sovereign spread, while Mexican debts still command a slightly lower spread than the other two.

The comparison shows that Argentine debt is still undervalued by the market relative to its economic fundamentals. The economic reform in Argentina is much wider and deeper than what we have seen in Brazil and Mexico. Argentina should turn out to be a much more efficient economy with higher growth potential than either Brazil or Mexico. Therefore, long-term investors should hold on to their Argentine bonds.

STRATEGY: Following a strong rally, the current prices of Argentine debt more fully reflect the recent good news. Since Argentina will remain in a recession for the next few quarters, we expect short-term volatility in the debt market. However, Argentina's economic fundamentals are among the strongest in the region, and its debt is still undervalued. Therefore, at the current yield levels, the BOCON Pre 1 and Pre 2 continued to be strong hold for long-term investors.

Fletcher Challenge Ltd.

Securities: A) 10.75% capital notes due 12/15/97

B) 10.15% capital notes due 11/30/98

Recent prices: A) \$102.95, B) \$102.25

Yield to maturity: A) 9.42%, B) 9.32%

Recent stock price: NZ\$4.1 per share

Market cap: NZ\$5.17 billion

(All currency figures are in NZ\$)

Fletcher Challenge (FLC) is one of the world's largest paper and pulp companies with operations in New Zealand, Australia, the US, Canada, Chile, Brazil, and the United Kingdom. It is also the largest oil and gas producer in New Zealand. In addition, its building industries division is involved in forestry and wood products, building materials, and construction activities. FLC has the third-largest market capitalization on the New Zealand Stock Exchange, right after New Zealand Telecom and Carter Holt Harvey.

For the fiscal year ended June 1994, pulp and paper, and forestry together accounted for 46% and 24% of FLC's total revenue and earnings before interest and tax (EBIT), respectively. Oil and gas contributed only 10% of revenue but 39% of EBIT, reflecting its relatively high profit margin.

FLC's earnings are highly sensitive to commodity prices and, hence, to the economic cycle. It suffered from the trough in the commodity cycle during 1991 and 1992, but has been recovering strongly since the second half of 1993. In 1994, pulp and paper prices have staged their strongest rally ever. For example, the price of market pulp has doubled between the end of 1993 and March 1994. In a business with extremely high operating leverage, FLC has greatly benefited from such price increases. The EBIT margin of its pulp and paper division improved to -1.8% in fiscal 1994 from -2.8% in fiscal 1992. In the six months ended December 1994, it jumped to 4.5%.

The building industries division (forestry, building materials, and construction) also improved significantly over the last two years owing to the strong economic recovery in New Zealand-Australia and other major markets. Its EBIT margin increased to 8.3% in fiscal 1994 from 0.6% in fiscal 1992. It rose further to 9.8% in the first half of fiscal 1995.

FLC's oil and gas business also has benefited from the recovery of oil price since its trough in 1993. It has recently expanded its gas operations by acquiring gas exploration properties in the US and Canada. The continued economic strength in most parts of the world and the increasing importance of natural gas as an oil substitute will bode well for FLC's energy division for the next few years.

The key determinant of FLC's profit outlook is the trend of commodity prices in general, and pulp and paper prices in

particular. While there has been some debate on whether the pulp and paper cycle has peaked, we believe it should have another one to two years to go. Our optimistic outlook is based on little new capacity coming on line in the next two years and continued economic growth in North America, Europe, Latin America, and the Pacific Rim (excluding Japan).

Although growth in New Zealand and Australia should slow down over the next two years, a recession is still not in sight. The recent decline in New Zealand bond yield may fuel a recovery in construction activities. Therefore, we continue to expect healthy growth in FLC's building industries division.

FLC has aggressively restructured its balance sheet in the past two years. It has sold non-core businesses (e.g., Methanex) and spun off some current businesses (e.g., Fletcher Challenge Forests and Fletcher Challenge Canada). The proceeds were used to pay down debt and fund capital expenditures. As a result, FLC has improved its balance sheet and financial position substantially. Its senior unsecured debt is currently rated A1 by Moody's.

The above-mentioned capital notes are junior unsecured in nature and rank below all other liabilities of FLC. The due dates on these notes are different from the traditional definition. On the due dates, FLC will reset the interest rates on the notes and extend the due dates, depending on the market condition and the company's needs. However, at each due date, holders of the notes who do not want to hold on to them may choose to convert their holdings into FLC's common stock at 98% of the market price of the stock. FLC, on the other hand, has to right to pay cash instead of issuing shares to those noteholders who choose to convert.

The two notes are currently trading at a spread of 180 to 190 basis points over comparable New Zealand government bonds. Based on an analysis of the yield spreads of bonds issued by companies in the same industries (paper and forestry, building materials, and energy), we estimated the fair yield spread of FLC's capital notes to be 130 to 140 basis points. Therefore, the capital notes not only provide a nice yield pickup over comparable government issues but also potential capital appreciation when the spread tightens.

STRATEGY: *Fletcher Challenge is a well-run natural resources conglomerate that is benefiting substantially from the strong cyclical uptrend in pulp and paper prices and building activities. Its operating performance and financial position have been steadily improving. The 10.15% and 10.75% capital notes of FLC provide a nice yield pickup at very low risk. A comparison with its North American counterparts indicated there should be further spread tightening opportunities. We rate them a strong buy in the low-risk category.*

Safeguard Scientifics, Inc.

Security: Common stock
Exchange: NYSE (symbol: SFE)
Recent price: \$28.75
52-week range: \$12.7 - \$30.375
Market cap: \$273 million

Company Profile

Safeguard Scientifics is a unique venture capital operation that invests mostly in information technology companies or companies that will benefit substantially from utilizing information technology. Its objective is to acquire and develop businesses that have high growth potential.

Safeguard is different from typical venture capital companies in that it usually does not invest in start-up operations. It looks for businesses with real products and established market positions. Typically, annual revenue of its target companies is between \$10 million and \$30 million. It aims to provide substantial value enhancement upon acquiring these partnership companies.

The value enhancement comes in the form of strategic and financial support. Safeguard's management work with the entrepreneurs at these "partnership companies" to identify and implement steps necessary to improve existing operations and further grow the businesses. On the other hand, it also utilizes its expertise in financial structuring to arrange the least expensive and most flexible form of financing for their subsidiaries. In some cases, Safeguard will inject further capital into the companies subsequent to the acquisitions.

While Safeguard is always an active investor, it does encourage the original management of its subsidiaries to stay and retain a significant ownership interest in the business. In so doing the entrepreneurial managers will be motivated to achieve objectives that are consistent with Safeguard's. Safeguard prefers to be partners, rather than owners, of these businesses. Therefore, it will give the right managers a high degree of autonomy.

Since most subsidiaries are in the information technology industry, Safeguard conducts two senior partner meetings every year, inviting senior staff of all Safeguard's partnership companies to share ideas and experiences. Such activities can ensure that innovative ideas developed in one subsidiary can flow to and benefit other subsidiaries, and thus reduce the burden of Safeguard's management.

The most common exit strategy is to take a subsidiary public. The average investment time horizon is two to five years. However, in some cases, Safeguard will sell the company to a third party if that is the best way to maximize value. A recent example is Micro Decisionware, which was sold to Sybase last year for approximately \$25 million with a \$10.7 million gain. Safeguard's involvement does not necessarily end after its subsidiary goes public. Its participation in management will phase out only when the company is on a sustainable growth path by itself. For example, Safeguard is still closely involved in the management of CompuCom Systems (63% ownership) and Tangram Enterprise Solutions (73% ownership), both of which have gone public.

Safeguard's investment track record is outstanding. Chart 9 lists the majority of subsidiaries that it has taken public in its recent history. Novell, Inc. is the most outstanding example. Since it went public in July 1985, the value of Novell has gone up over 3,700%. Safeguard has reduced its holdings gradually during this period, to 150,000 shares at the end of March 1995. Its gain should be even higher because its investment in Novell should be substantially below the initial public offering price.

The only investment that went public and turned sour is CenterCore, which is an office furniture and security system manufacturer. Continued weakness in the government market has led to substantial losses. Safeguard is negotiating to sell most of its equity interest to CenterCore's management and provide advances to meet short-term funding requirements. All the liabilities of CenterCore are without recourse to Safeguard, except for a \$2.4 million guarantee on bank debt.

Rights Offering Process

One unique aspect of Safeguard is its rights offering practice. Whenever Safeguard takes a subsidiary public, the initial public offering (IPO) will be made available to existing shareholders

of Safeguard by way of a rights offering. At a pre-determined ratio, Safeguard shareholders will receive rights to subscribing to a certain number of new shares of the subsidiary. There is usually a 35-day period before the rights expire, during which the rights trade publicly. If the shareholders do not want to participate in the IPO, they can sell the rights during the 35 days, or just let them expire worthless.

An illustrative example is USDATA Corp., a factory automation software company 30% owned by Safeguard. Safeguard is in the process of taking USDATA public. According to its announcement, USDATA will be offering 2.65 million shares in the IPO at \$5 a share, and 2.55 million shares of which will be offered to Safeguard shareholders through a rights offering. One right (to buying one share of USDATA at \$5) will be issued for every four Safeguard shares owned. After the rights are issued, Safeguard shareholders will have 35 days to decide whether they want to be direct shareholders of USDATA.

The purpose of the rights offering practice is to give Safeguard shareholders the opportunity to directly own the subsidiaries' shares and, therefore, directly benefit from any capital appreciation of such shares. In theory, Safeguard's shares should also appreciate when its subsidiary does well after going public, because the investment will then be carried at market value instead of at cost.

Nevertheless, the discount on asset value imposed by the market on most investment holding companies would sometimes prevent Safeguard shareholders from fully reaping the gain. In addition, the rights offering will ensure that Safeguard shareholders obtain a certain number of shares in the IPO, which may otherwise be difficult for a "hot issue." Consequently, we believe the rights offering practice effectively provides a route for Safeguard shareholders to participate meaningfully in the upside potential of the parent company's investments.

Current Investment Portfolio

Safeguard's investment portfolio can be divided into publicly-traded companies, privately-owned subsidiaries, and venture capital funds. Charts 10, 11, and 12 give a brief overview of the companies in each category. As the charts show, most investments are related to information technology, except Pioneer Metal (a very early investment) and Nichols Company.

Its real estate investments are the other lackluster performers in Safeguard's portfolio, following CenterCore. These investments were carried at \$18.4 million on Safeguard's books at the end of 1994, with offsetting debt of \$17.6 million. Management of Safeguard indicated that the market value of its real estate assets was currently slightly below the related liabilities. However, all debts are at the subsidiary level, and only \$1 million is with recourse to the parent. Safeguard has agreed to transfer three properties to the mortgage holders in full settlement of the related debt, and is waiting for the right opportunity to dispose of the remaining real estate assets.

Furthermore, the three venture capital funds are limited partnerships organized by Safeguard to invest in high-technology companies. For all three partnerships, Safeguard receives an annual management fee of 2% of the assets. For Radnor and Technology Leaders I, Safeguard is entitled to a 6% share of any capital appreciation after the initial capital is returned to investors. Payment of the 6% carried interest in Radnor Venture Partners has already started, but not yet in Technology Leaders I because of its later commencement.

Valuation

Owing to the investment holding company nature of Safe-

guard, traditional valuation measures such as earnings and revenue multiples are not applicable. The most practical valuation approach is to estimate the value of its various investments. However, this is more difficult than it seems, because no information is available on the privately-owned subsidiaries, and the majority of them are equity-accounted in Safeguard's financial statements.

Therefore, our approach is to use the publicly-traded subsidiaries as a starting point. We used their trading prices as references and adjusted the value for such factors as block sale discount, lack of marketability discount (if the securities are privately placed), and control premium. Such adjustments should enable us to derive a conservative estimate of the realizable value of these investments. Chart 13 shows the results. The adjusted total value is approximately \$32.5 per Safeguard share.

The next step is to estimate the value of Premier Solutions and Pioneer Metal Finishing. Both subsidiaries are wholly owned by Safeguard and fully consolidated into the parent's financial statements. Hence, we are able to discern their respective financial data from the parent's segment report. Based on comparable company analyses, we estimated the value of Premier Solutions to be between \$2.9 and \$3.4, and Pioneer Metal to be between \$3.9 and \$4.9, per Safeguard share (Chart 14). Together they would add between \$6.8 and \$8.3 to Safeguard's per share value. These numbers could be conservative because no control premium has been taken into account.

The last step is to value the unconsolidated privately-owned subsidiaries and contributions from the venture capital funds. We believe this step is not feasible because of lack of information. Any estimate is bound to have a wide margin of error. In addition, this step may not be necessary in this case, because even without this portion, the net asset value of Safeguard is already well above the current stock price (Chart 15).

One simple and conservative way is to assume that these investments are worth only their costs. The unconsolidated private companies were carried at approximately \$30 million on Safeguard's book at the end of 1994. That would add another \$3 per share to Safeguard's stock. The venture capital funds' contribution, on the other hand, would be negligible if we assume the 6% carried interest never kicks in.

Consequently, our estimated total asset value of Safeguard is between \$42 and \$44. After we deduct \$6 per share of debt at the parent company level, the fair value per share should be between \$36 and \$38, which is 24% and 31% above the current share price, respectively. Even at the estimated fair value, investors can pick up for free the upside potential coming from any future IPOs of its privately-owned subsidiaries and the venture capital funds. Given the outstanding investment record of Safeguard and the rights offering practice, we rate the stock a strong buy for speculative investors.

STRATEGY: *Safeguard Scientifics has an excellent track record in generating huge profits from its investments in information technology companies, including Novell. Shareholders can directly participate in the capital appreciation of its investments through rights offerings. At the current price level, the stock is trading at a 15% discount to the adjusted market value of Safeguard's publicly-traded investments and, therefore, investors can effectively pick up Safeguard's private subsidiaries for free. Our conservative estimate puts the stock's fair value at \$36 to \$38. Any further public offering of its successful private subsidiaries will push up return to way beyond that level.*

— Edison Lee, CFA

Chart 9
Safeguard Scientifics
Investment Track Record

Company	IPO Date	IPO Share Price	Recent Share Price	Percentage Change
Novell	July 1985	\$0.56	\$21.75	3,767
CompuCom	March 1988	\$2	\$4.4	119
CenterCore	May 1990	\$1	\$0.16	-84
Cambridge Technology Partners	April 1993	\$4	\$33	725
Coherent Communications	August 1994	\$5	\$24.75	395

Chart 12
Safeguard Scientifics
Profile of Venture Capital Funds Managed

Partnership Name	Business	Initial Assets (\$ million)	Safeguard's Ownership	Life*
Radnor Venture Partners	Invest in high-tech companies	33	13.7%	3 years left, started in 1988
Technology Leaders I	Invest in early-stage companies in IT, biotech & health care	60	3.3%	4 years left, started in 1991
Technology Leaders II	Same as above	80	5%	7.5 years left, started in 1994

* Information provided by Safeguard's management.

Chart 10
Safeguard Scientifics
Profile of Publicly-Traded Investments

Company	Business	Safeguard Ownership	Stock Symbol
Cambridge Technology Partners	Systems integration & IT consulting	23%	Nasdaq: CATP
Coherent Communications	Voice enhancement products for wire & wireless systems	40%	Nasdaq: CCSC
National Media Corp.	Home shopping infomercial	Preferred stock & warrants	NYSE: NM
CompuCom Systems	PC reseller and service provider to Fortune 500 companies	63%	Nasdaq: CMPC
Tangram Enterprise Solutions	Mainframe & LAN enterprise-wide data management products & services	73%	OTC: TESI
CenterCore	Office furniture & security systems	65%	Nasdaq: CCOR*
USDATA	Factory automation software	30% (28.3% post IPO)	IPO in progress
Novell	System & software products for computer network	below 0.1%	Nasdaq: NOVL
Sybase	Client/server-based database software	0.5%	Nasdaq: SYBS

* Delisted from Nasdaq from May 5, 1995.

Chart 13
Safeguard Scientifics
Estimated Value of Publicly-Listed Investments

Investment	No. of shares held	Adjusted value (\$ million except per share value)
Cambridge Technology Partners common shares	3.1 million	86.96
Cambridge Technology 8-yr warrants exercisable at \$6 per share	300,000	8.1
Coherent Communications common shares	2.9 million	61
Sybase, Inc. common shares	240,000	5.61
Novell, Inc. common shares	150,000	3.26
CompuCom Systems common shares	21.2 million	92.75
CompuCom 6% preferred stock convertible at \$6.75 per share	2 million	12.75
Tangram Enterprise Solutions common shares	10.4 million	16.9
National Media Corp. preferred stock convertible at \$4 per share	50,000	3.68
National Media Corp. 7-yr warrants exercisable at \$4.8 per share	1.95 million	5.18
USDATA Corp. common shares	3.39 million	14.42*
Total value		310.61
Total value per Safeguard share		\$32.4

* Based on \$5 per share as announced by Safeguard.

Chart 11
Safeguard Scientifics
Profile of Privately-Owned Investments

Company	Business	Safeguard Ownership	Location
Diamond Technology Partners	IT & business reengineering consulting	23%	Chicago, IL
Interactive Marketing Group	Establishes joint marketing ventures using computerized databases & develop proprietary products	20%	Wayne, PA
Micro Dynamics	Develops mid to high volume turnkey document imaging systems	54%	Silver Spring, MD
Multigen	Develops real-time 3D modelling software for visual simulation	31%	San Jose, CA
New Paradigm Ventures	Forms partnerships with branded product/service companies to create new consumer businesses	33%	South Norwalk, CT
Professional Training Services	Educational consulting, training center management & licensing of training software	4%	King of Prussia, PA
Sanchez Computer Associates	Develops proprietary software for financial institutions	41%	Malvern, PA
XL Vision	Develops front-end applications for electronic imaging	16%	Sebastian, FL
Sky Alland Marketing	Provides interactive one-to-one marketing services to Fortune 500 companies	49%	Columbia, MD
Premier Solutions	Develops software for managing multi-currency investments at financial institutions	99%	Malvern, PA
Pioneer Metal Finishing	Finishes aluminum & other metal parts for various applications	100%	Minneapolis, MN
Nichols Company	Owns, leases & manages commercial & industrial real estate	40%	Horsham, PA

Chart 14
Safeguard Scientifics
Estimated Value of Consolidated Private Subsidiaries

Company	Annual Revenue (\$ million)	EBITDA	Low Valuation (\$ million)	Value per Safeguard share	High Valuation (\$ million)	Value per Safeguard share
Premier Solutions*	22.46	3.53	28.2 (8X EBITDA)	\$2.94	33.7 (1.5X revenue)	\$3.52
Pioneer Metal	31.14	4.7	37.4 (1.2X revenue)	\$3.90	47.3 (10X EBITDA)	\$4.94

* Premier Solutions' revenue and EBITDA are FMG estimates.

Chart 15
Safeguard Scientifics
Estimate of Total Net Asset Value

	Aggregate Value (\$ million)	Per Safeguard Share
Publicly-traded investments (as per Chart 5)	310.6	32.4
Premier Solutions (as per Chart 6)	28.2 - 33.7	2.9 - 3.5
Pioneer Metal (as per Chart 6)	37.4 - 47.3	3.9 - 4.9
Sub-total before unconsolidated private subsidiaries	376.2 - 396.1	39.2 - 40.8
Less: long-term debt of Safeguard at the end of March 1995	(57.4)	(6.0)
Total net assets before unconsolidated private subsidiaries	318.8 - 338.7	33.2 - 34.8
Book value of unconsolidated private subsidiaries	30	3.1
Total net asset value	348.8 - 368.7	36.3 - 37.9

Chart 16 – FOREIGN CURRENCY BONDS

DATE: May 19, 1995 We offer the following Bonds subject to change without prior notice: Minimum US \$5000 (CDN \$7000)

ISSUER / COUPON / MATURITY DATE	BID	OFFER	YTM	CURR. COUPON	NEXT INTEREST PAYMENT DATE
DEUTSCHE MARK DENOMINATED BONDS					
Bank of Nova Scotia 5 5/8% 7/5/96 RRSP eligible	99.75	100.60	4.95		May-07
World Bank 5 7/8% 4/02/97 RRSP eligible	102.45	103.30	3.81		Feb-04
World Bank 7 1/4% 13/10/99 RRSP eligible	104.95	105.80	5.70		Oct-13
World Bank 9% 13/11/00 RRSP eligible	114.55	115.40	5.63		Nov-13
Kingdom of Denmark 6 1/8% 15/04/98	100.65	-	-		Apr-15
Argentina 8% 5/10/98	98.45	99.30	8.24		Oct-05
Bk. Foreign Eco. Affairs 7% 29/3/96	96.60	97.45	10.18		Mar-29
Kgdm. of Spain (Floating) 29/6/02 (semi)	99.13	99.43	-	5.4375	Jun-29
FINNISH MARKKA DENOMINATED BONDS					
Rep. of Finland 11% 15/6/95	99.55	100.40	1.80		Jun-15
ITALIAN LIRA DENOMINATED BONDS					
Nordic Inves. Bk 12 3/8% 19/04/96	100.30	101.15	10.83		Apr-19
SWISS FRANC DENOMINATED BONDS					
General Electric 4 3/4% 2/7/98	99.60	100.45	4.59		Jul-02
DANISH KRONE DENOMINATED BONDS					
Kgdm. of Denmark 9% 15/11/96	102.25	103.10	6.67		Nov-15
ECU DENOMINATED BONDS					
United Kingdom 9 1/8% 21/02/01	106.25	107.10	7.54		Feb-21
BRITISH POUND DENOMINATED BONDS					
Kgdm. of Sweden 8 3/4% 29/5/96	100.65	-	-		May-29
FRENCH FRANC DENOMINATED BONDS					
Credit Lyonnaise 9 1/2% 23/12/96	102.85	103.70	6.89		Dec-23
JAPANESE YEN DENOMINATED BONDS					
World Bank 5 3/4% 7/8/96 RRSP	104.25	105.10	1.42		Aug-07
CANADIAN DOLLAR DENOMINATED BONDS					
Ontario Hydro 10 7/8% 8/01/96 (semi) RRSP eligible	101.25	102.50	6.66		Jul-08
Eksportfinans 7 3/4% 5/11/97	99.25	-	-		Nov-05
Royal Bank of Canada 9 1/8% 7/1/97 RRSP eligible	101.65	-	-		Jan-07
SOUTH AFRICAN RAND DENOMINATED BONDS					
ESCOM 12% 1/5/96 (semi)	97.05	97.90	14.49		Nov-01
AUSTRALIAN DOLLAR DENOMINATED BONDS					
Commonwealth Bk. of Australia 9 3/4% 15/5/96	101.10	101.95	7.57		May-15
NEW ZEALAND DOLLAR DENOMINATED BONDS					
World Bank 12.5% 25/7/97 (semi) RRSP eligible	108.90	109.75	7.54		Jul-25
New Zealand Gov't 10% 15/7/97 (semi)	103.70	-	-		Jul-15
New Zealand Gov't 8% 15/7/98 (semi)	100.55	101.40	7.49		Jul-15
Fletcher Challenge 10.75% 15/12/97 (semi)	102.10	102.95	9.42		Jun-15
Fletcher Challenge 10.15% 30/11/98 (semi)	101.60	102.45	9.32		May-30
Corporate Investment Ltd. 13 1/2% 19/6/95 (semi)	87.85	-	-		Jun-19
Tranz Rail Ltd. 10% 15/10/99 (semi)	102.00	102.85	9.19		Oct-15
DB Group 7% 30/6/96 (semi) matures @ 85	91.10	-	-		Jun-30
Seabil Ltd. 9% 27/6/99 (semi)	87.15	-	-		Jun-27
ARGENTINEAN PESO DENOMINATED BONDS					
BIC V Fixed/Floating 1/5/2001 Callable in full on every interest date	69.85	71.85	20.62	IRR	4 th day of mth.
Bocon Pre 1: 1/4/2001 starts paying May '97	71.20	73.20	21.72		May-01-97
MEXICAN PESO DENOMINATED BONDS					
Government of Mexico "CETES" 11/5/95		available on request			every 2 weeks
U.S. DOLLAR DENOMINATED FIXED CONV. BONDS					
Burnup & Sims 12% 15/11/00 CV@16.79 p/sh (semi)	97.25	98.75	12.32		Nov-15
Atari Corp. 5 1/4% 29/4/02 CV@16.31 p/sh	49.25	50.75	18.38		Apr-29
Coeur D'Alene 6% 10/6/02 CV@26.00 p/sh	90.25	91.75	7.55		Jun-10
Glycomed 7 1/2% 1/1/03 CV@14.06 (semi)	58.5	60	17.09		Jun-01
California Microwave 5 1/4% 15/12/03 CV@28.44 p/sh (semi)	115.25	116.75	3.01		Jun-15
U.S. DOLLAR DENOMINATED FIXED RATE BONDS					
O.K.B. 7 3/8% 11/5/2005	102.00	-	-		May-11
World Bank 7 1/8% 27/9/99 (semi) RRSP eligible	102.10	102.95	6.33		Sep-27
Farm Credit Corp 7 3/4% 10/06/96 RRSP eligible	101.55	102.40	5.31		Jun-10
T.W.A. 10% 3/11/98 (semi)	63.5	64.75	23.87		
U.S. DOLLAR DENOMINATED FLOATING RATE NOTES					
Kgdm. of Denmark 25/3/97 (Gold call, JY.put), (semi)	71.00	72.00	-	8.45	Sep-25
United Kgdm. 30/9/96 3 mo.LIBID-1/8 (qty), callable @100	99.86	100.16	-	6.00	Jun-30
Bocon 1/4/01 (30 day LIBOR) starts accruing May 1,1997	82.25	83.10	18.39		May-01-97
Argentina: Series L.FRB 31/3/05, 6 mo. LIBOR+13/16 (semi)	66	67.5	15.48	7.3125	Sep-29

GOLD (in ounces, at market prices, can also be held in your bond account) client eligibility determined at point of sale.

Chart 17 – Recommended current portfolio allocations

1. New Zealand (8%) '98 Gov't	30%	4. World Bk 7 1/4% '99 DM	20%
2. Fletcher NZ\$	15%	5. Pre-1/Bocon	20%
3. Tranz Rail NZ\$	15%		

HOTLINE UPDATE

Tuesday, April 25, 1995:

Good afternoon for Tuesday, April 25. We have one new recommendation. Change the stop on long July sugar positions from 11.31, good anytime, to 11.31, stop close only. The market letter is in the mail. Have a great trading day.

Friday, April 28, 1995:

Good afternoon for Friday, April 28. There are no changes or new recommendations.

The following is a recap of this week's recommendations: On Tuesday, we advised to change the stop on long July sugar positions from 11.31, good anytime, to 11.31, stop close only. Have a great trading day.

Tuesday, May 2, 1995:

Good afternoon for Tuesday, May 2. We have 3 new recommendations:

Lower stops on short July copper to 128.50, close only.
Raise stops on long June Japanese yen to 118.96, close only.

Raise stops on long July wheat to 341, good anytime.
Have a great trading day.

Friday, May 5, 1995:

Good afternoon for Friday, May 5. We have three new recommendations:

Sell October cotton at the market, placing stops at 8800, good anytime.

Buy June Canadian dollar at the market, placing stops at 72.45, close only.

For those of you short June Eurodollars, as per our March 7 update, place stops at 94.00, close only.

The following is a recap of this week's recommendations: On Tuesday, we advised to lower stops on short July copper to 128.50, close only and to raise stops on long July wheat to 341, good anytime. Have a great trading day.

Tuesday, May 8, 1995:

Good afternoon for Tuesday, May 8. There are no changes or new recommendations. Have a great trading day.

Friday, May 12, 1995:

Good afternoon for Friday, May 12. There are no changes or new recommendations. Have a great trading day.

Tuesday, May 16, 1995:

Good afternoon for Tuesday, May 16. We have no changes or new recommendations. Have a great trading day.

Wednesday, May 17, 1995:

Good morning for Wednesday, May 16, 9:20 am. This is a flash update.

We have two new recommendations:

Cover short July copper positions at the market, cancelling the 128.50 stop.

Go long July copper outright. Buy July copper at the market, presently trading at 125.25. Have a great trading day.

Friday, May 19, 1995:

Good afternoon for Friday, May 19. We have one new recommendation: Place stops on long July copper positions at 123.25, close only.

This is a complete summary since our last market letter dated April 23, of all liquidations of open positions and new recommendations that remain outstanding:

On Tuesday, April 25 we advised you to change the stop on long July sugar to 11.31, stop close only. The stop was executed on May 11 when the sugar closed at 11.18.

On Tuesday, May 2, we advised you to raise stops on long June Japanese yen to 118.96, close only. The stop was executed on Thursday, May 11, when June yen closed at 117.29.

On Friday, May 5, we advised to sell October cotton at the market, placing stops at 8800, good anytime, and buy June Canadian dollar at the market, placing stops at 72.45, close only. On Monday, May 8, October cotton opened at 85.30. June Canadian dollar opened at 73.65.

On Wednesday, May 17, via flash update, we advised to cover short positions in July copper and then to go long July copper at the market, trading at 125.25.

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