FRIEDBERG'S

COMMODITY & CURRENCY COMMENTS

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A time for truth

"Orchestration is out. Markets are in. For the first time in four years, stunned policymakers are being forced to react to events. Trying to cope with what is about to unfold could turn their dreams into a nightmare.... Awakened from their torpor, markets have begun to articulate their fears. At first they will merely taunt the Fed. Later, they will render it helpless. In the end, they will force the Fed to bite the bullet... the US monetary authorities have aided and abetted in the creation of a monster. The nightmare begins."

So we said on the day fall set in on the Northern Hemisphere (*FC&CC*, September '86, "The market takes command"). Of course, our gratuitous advice went unnoticed. Instead, the Fed indulged in a massive monetary orgy that forced us to repeat, only a short three months later, the obvious: "abundant money makes for cheap money, which makes for a depreciating currency, inflation, and ultimately, rising interest rates."

In the last quarter of 1986, M1 rose at a breathtaking pace of 22% per annum. As markets continued to "misbehave" (see Charts 1, 2, 3, 4 called the Fed "bashers"), the Fed began to relent; for the first four months of 1987, the adjusted monetary base slowed to a 5.9% annual rate and M1 decelerated to a mere 1.3% annual rate of growth.

That this is still not sufficient is evidenced by last week's frantic fall of the US dollar and US bonds, and the spectacular rise of precious metals and other commodities. The Fed *must* show a great deal more determination: Eliminate free reserves; *flatten* the growth of the adjusted monetary base (zero growth, 6-12 months?); raise the Discount Rate *above* the rate on three-month T-bills. The longer the delay, the greater the eventual damage. Why, then, the delay?

As we survey once more the banking mess (see following article), we see a delay possibly because the US banking system may not survive a dramatic tightening of the screw. Monetary policy, in our opinion however, cannot and should not be held ransom (beyond the roles of lender of last resort and "stabilizer" of the money supply) to a crumbling banking industry. (It should be clear that continued easy money policies aggravate the problem because they encourage further risk-taking). In conjunction with the FDIC, the FSLIC, and the Comptroller of the Currency, the Fed should map out a clear, unambiguous and indiscriminating bailout policy that will be able to handle a rapid acceleration of bank and savings and loan failures without causing a general panic.

THE FED BASHERS

Chart 1 — NYFE CRB PR. IND CASH

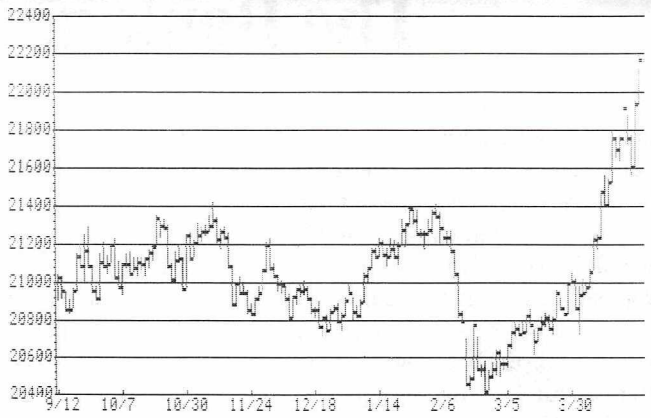
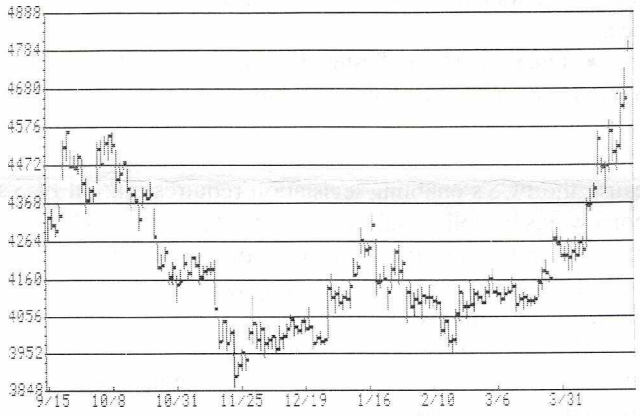


Chart 2 — COMEX GOLD JUN 87



In this issue

The banking mess — Part VI, and the gambling continues: How can anyone doubt the US is facing a banking disaster? We introduce a new variable into the crude oil equation: natural gas. Gold: investors should not disturb long positions. The Canadian dollar: much lower. Contributions by Albert D. Friedberg, Steve H. Hanke, Daniel A. Gordon, and Michael D. Hart.

Chart 3 — CME JAPANESE YEN JUN 87

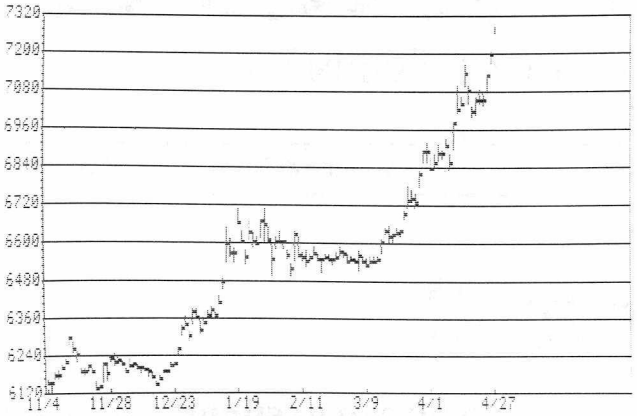
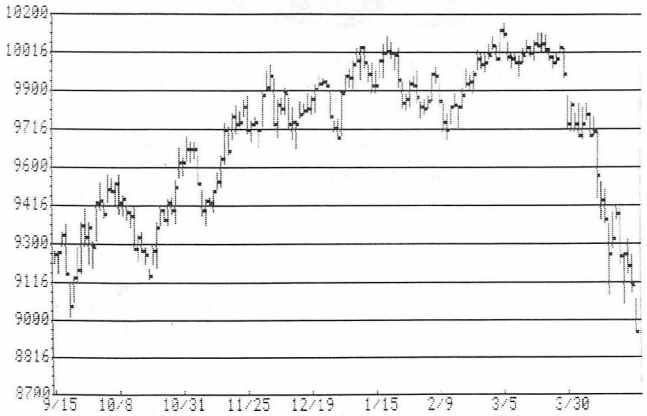


Chart 4 — CBT U.S. T-BONDS JUN 87



The Banking Mess — Part VI

The mess — It has been some time since we directly addressed the so-called banking mess (see *FC&CC* Aug. 18, 1985). In our absence, the mess has become worse. The following items reveal the enlarged scope of the problem:

• The Federal Savings and Loan Insurance Corporation (FSLIC), which is the public fund that insures some of the deposits at savings and loan (thrift) institutions, is facing the greatest crisis in its 53-year history. Since 1980, the number of insolvent thrifts has grown at an annualized rate of 75% (from 16 to about 450). In consequence, the FSLIC's assets, which are designed to insure about $800 billion of deposits, are falling rapidly and are nearly depleted. At present, FSLIC assets are losing value at a rate of about $10 million a day and are worth less than $1 billion. Either bankruptcy or a bailout are near.

• The Farm Credit System (FCS), which is a loosely connected system of quasi-banks that supplies about one-third of the nation's agricultural credit, is close to exhausting its unencumbered collateral. This has profound implications because the FCS's enabling legislation requires that all FCS's borrowings be collateralized with its net loans ("good loans" minus loan loss reserves) plus investments. With no collateral, the $70 billion FCS, according to a new report by the Farm Credit Administration, could be unable to borrow more funds by mid-1988. In consequence, without a government bailout, the FCS would soon be forced to default on its bonds and go into liquidation.

• The balance sheets of many money center banks are much weaker than they might first appear because these institutions are carrying LDC loans at book values that greatly exceed their market value. This weakness is of such concern to Senator William Proxmire, Chairman of the Senate Banking Committee, that he intends to introduce legislation that would require bank regulators to estimate the difference between book and market value for LDC loans that are either sub-standard or "other transfer risk problems." The banks would then be required to build up their loan loss reserves over a 10-year period to reflect the difference between the book and market value for these loans.

• Bank failures have surged from 2.3 to 2.65 to 4.5 per week in 1985, 1986, and 1987, respectively. This experience represents a marked change from that of the post-World War II era. During the 1945-79 period, for example, the US averaged only six bank failures annually. Chart 5 shows that although the current bank failure rate is not high in comparison with that of the Great Depression (during the 1930-33 period, the average rate of bank failures was 12.6% of the total banks per year, with a peak of 4,004 bank failures, or 27.1% of the total, in 1933), it is still above the average rate both before and after the banking crisis in the Great Depression. In other words, a break-out occurred in bank failures rates in 1982.

If the number of current failures weren't bad enough, it appears that banks will continue to fail at an increasing rate in the foreseeable future. This prognosis is supported by data in Chart 6. These data show that the proportion of banks identified as problem institutions has grown steadily from about 2% of all banks in 1982 to almost 10% in 1986.

Furthermore, the problem bank rate is probably greater than indicated in Chart 6 because the limited number of state and federal bank examiners has had to concentrate on the banks that are in serious trouble. This has lengthened the interval between examinations at other institutions. In consequence, the reporting of problem banks has not kept pace with the birth of real problems. The prospects for the 1,500 institutions that are already listed as problem banks aren't good. Most of the large inventory of problem banks will eventually be liquidated and recorded as failures.

The causes — The current deterioration in the banking sector is unusual because, during periods of economic recovery, financial institutions usually become stronger, not weaker. There are, of course, some short-term cyclical factors that account for some of the current banking problems. For ex-

ample, the unexpected weakness in agricultural, energy, commercial real estate and some manufacturing sectors have contributed to banks' woes. However, these short-term cyclical factors don't account for the dramatic magnitude of the banking mess. The major cause of deterioration is long-term and structural in nature.

To understand the underlying structural problems, we must go back to the aftermath of the Great Depression. As a result of the banking crisis that was spawned in the depression, the architects of the New Deal attempted to make banks safer with a combination of regulation and deposit insurance. Regulation was designed to give banks a protected, captive market. With a protected market, banks wouldn't be exposed to the harsh winds of competition. Hence, they could earn safe, cozy profits without taking undue risks. Public deposit insurance, the second element in the New Deal's bank strategy, was designed to protect depositors and eliminate their incentives to withdraw funds from weak banks.

The New Deal policy — like it or not — had a certain logic. That is to say, once the government provided subsidized deposit insurance via the Federal Deposit Insurance Corporation (FDIC) and the FSLIC, it had to regulate banks and control their appetite for risk-taking. To understand this, consider the following policy combination: subsidized deposit insurance and weak regulation. With this mix, banks would have an incentive to take excessive risks and exploit the deposit insurance subsidy for taking risks. The risk-taking incentive would be, of course, perversely strongest for banks that were in the most precarious financial condition. In these cases, stockholders would be protected by limited liability and would have already taken most of the losses that they could. For their part, the depositors would be protected by either explicit or implicit insurance guarantees. The downside losses from excessive risk taking would be visited neither on the stockholders nor the depositors. In consequence, neither stockholders nor depositors would have a strong incentive to monitor managements' risk-taking activities.

When the Reagan Administration deregulated financial institutions, it failed to reform deposit insurance. Hence, most depositors continued to be left with little incentive to select safe banks or monitor bank managers' portfolio selection. Moreover, financial markets became more competitive. In this new environment, banks and thrifts attempted to maintain earnings on equity by increasing their financial leverage (assets on equity) and by going after portfolios that promised higher earnings on assets. In other words, financial institutions increased their risk exposure. Not surprisingly, bank and thrift failures have soared.

To eliminate the new secular cause of our banking mess there are two solutions. One would require that we return to the system in which subsidized deposit insurance was coupled with regulation. The other possibility would require that we retain deregulation and, at the same time, radically reform subsidized deposit insurance. This second possibility would be superior because it would generate the benefits from competition, while eliminating the incentives that are currently generating excessive risk taking.

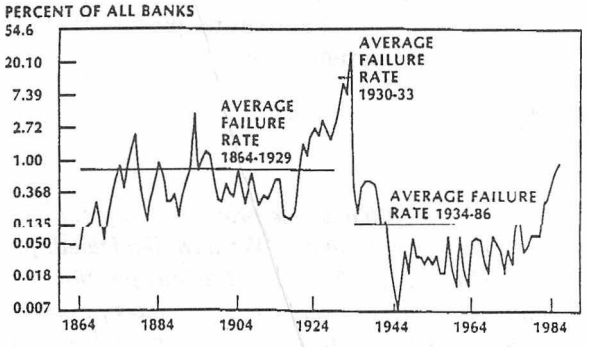
What lies ahead — The problem facing either solution is that both require banking reforms, and reforms take time. In consequence, banks will continue to move, at an increasing rate, into the "bank problem" category and from there to the "bank failure" category.

If this weren't enough, the FDIC and FSLIC have had to begin to institute policy changes that are designed to stretch their meager reserves. For example, the FDIC has traditionally sold failed banks, along with their good loans to solvent banks. The FDIC then assumed the failed banks' problem loans. Without a profit motive, the FDIC has held these loans too long before foreclosing on the collateral. Moreover, when the FDIC has foreclosed, it has held the collateral too long. Both of these policies have tended to prop up asset (collateral prices).

Under its new policy the FDIC has begun to sell failed banks, along with their entire loan portfolios, at discounts. The acquiring banks, who operate with a profit motive, will tend to foreclose on problem loans more rapidly and liquidate the collateral acquired through foreclosure more rapidly than the public insurers. This increased velocity of foreclosures on problem loans and liquidations of acquired collateral will tend to put downward pressure on the prices of the assets involved.

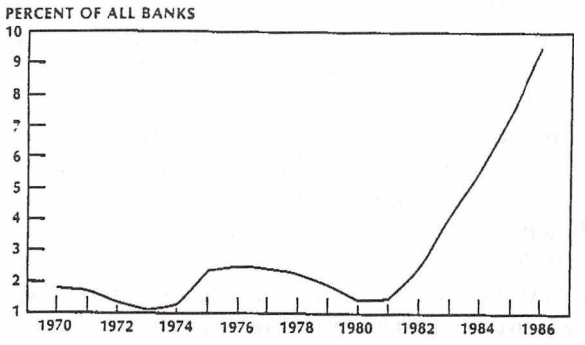
— Steve H. Hanke

Chart 5 — BANK FAILURE RATE



NOTE: Vertical axis scale is logarithmic.
SOURCES OF PRIMARY DATA: Board of Governors, Federal Reserve System. Federal Deposit Insurance Corporation. U.S. Bureau of the Census.

Chart 6
PROBLEM BANK RATE
(Includes Commercial and Mutual Savings Banks)



SOURCES OF PRIMARY DATA: Board of Governors, Federal Reserve System. Federal Deposit Insurance Corporation.

And the gambling continues...

Back in August 1984 (*FC&CC*, Aug. 19, 1984, "what if...") in the second of a series of articles on the banking mess, we featured Financial Corporation of America, the nation's largest savings and loan. We marvelled at the S&L's exponential rate of asset growth: to $35 billion in mid-1984 from $1 billion in 1979. Along the way, Charles Knapp, its guiding light, deviated from normal banking practice so as to maximize returns and engaged in rank speculation. Loans began to go sour, threatening FCA with insolvency. The authorities moved in and replaced Knapp with the highly touted William J. Popejoy. A run on the S&L had been averted.

At first, Popejoy shrank FCA's assets, made enormous provisions for loan losses, charged off hundreds of millions of dollars of loans, and *attempted* a better match of assets and liabilities. But somewhere along the way the temptation to gamble was too great. Net worth had been wiped out (it is still positive — at least as of March 31 — to the tune of $314 million *after accounting for $1 billion of goodwill in the purchase of other financial institutions*), lending margins were not improving (FCA still had to pay somewhat more than other S&Ls), loan delinquency was still rising.

There was only one bright spot: The decline in interest rates and the consequent bull market in mortgage-backed securities provided the necessary capital gains to keep the S&L alive. Mismatching was back in fashion: FCA would pledge, regularly, its portfolio of mortgage-backed securities and borrow short-term funds, a technique commonly known as a reverse repurchase agreement. In the last few months, FCA has played the reverse repo song to the tune of $17.4 billion of mortgage-backed securities. The carrying profits (with a sharply positive yield curve, it pays to "carry" long-term securities financed with short-term money) could be substantial. The same can be said about accepting short-term deposits from the public for the purpose of purchasing a portfolio of long-term securities.

FCA speculated with 1% margin (the questionable $314 million net worth to assets of $34 billion). Asked about the rumor that last week (with the collapse of bond prices) FCA had suffered unrealized losses of $480 million (and would therefore wipe out the capital), Mr. Popejoy, in the grand tradition of Charles Knapp replied: "We don't mark our portfolio to market, so I don't know how to intelligently respond to that." FCA has been underwater and continues to sink deeper and deeper, speculating desperately with taxpayers' money in the hope of staving off the inevitable.

The FSLIC has been unable to find a buyer for FCA: It simply does not have enough money to pay a potential acquirer for what is probably the most spectacular failure since Continental Illinois.

Incredibly, the FSLIC has not forced FCA to shrink in size. Instead, *insured depositors* unaware and/or unconcerned with the plight of FCA have maintained and even increased their deposits.

Regulators, afraid to bite the bullet, are prolonging the agony. Can anyone truly say that the US is not facing a banking disaster?

A consensus problem

For the past four weeks, the bullish consensus on precious metals has been extraordinarily high, while in mirror fashion, the bearish consensus on financial assets and the US dollar has been historically low.

This presents us with a problem. While on one hand we believe that these markets have been following the correct fundamentals, sentiment has suddenly become massively one-sided and agreeable to the unpopular notions that we have exposed for so many months.

We should be flattered but, instead, we are worried. Why such premature consensus? In the past, this very high (and very low) level of consensus in a particular market has proven to be a turning point. Are we close to a turning point?

If the Fed tightens further, as we have been suggesting, and stays the course for long enough to correct the monetary explosion of the past four years, these markets *will* reverse. In short sequence, interest rates will soar, the US will enter a recession, the current account will improve, the US dollar will recover, long-term bonds will recover, commodity prices will fall.

Half-hearted measures, on the other hand, will puncture, but will not reverse, present trends. And perhaps our very extreme consensus readings are only the precursors of a sharp correction, but *not* a turning point.

STRATEGY: *Our concern with the sentiment indicators has forced us to adopt strong defensive measures (see Hotline Update).*

We have accepted handsome profits on half our T-bonds and Eurodollar short positions. We have liquidated, prematurely, but with solid profits, our entire long position in silver and platinum. We have covered S&P 500 short positions. We have tightened considerably our stops on long DM, SF, and yen positions.

Stock Indexes

We have preferred to treat this market as a trading affair (see Chart 8) despite the strong evidence that stock prices are grossly overvalued (see last month's *FC&CC*) and therefore likely to undergo a severe bear market in the not-too-distant future. Our reluctance to join the selling in the past few days relates to the overly bearish sentiment prevailing particularly in the bond market (see the article "A consensus problem"), which could give way to a sudden and sharp upward reaction.

STRATEGY: *We are assuming that the next bear market will be prolonged and quite dramatic. When it comes, we should have plenty of time to take advantage of it without incurring the risk of calling a top. In the meantime, we are concentrating our efforts on identifying medium-term fluctuations. Keep posted to the Hotline service.*

Chart 7 — CME S&P 500 INDEX NOV 87

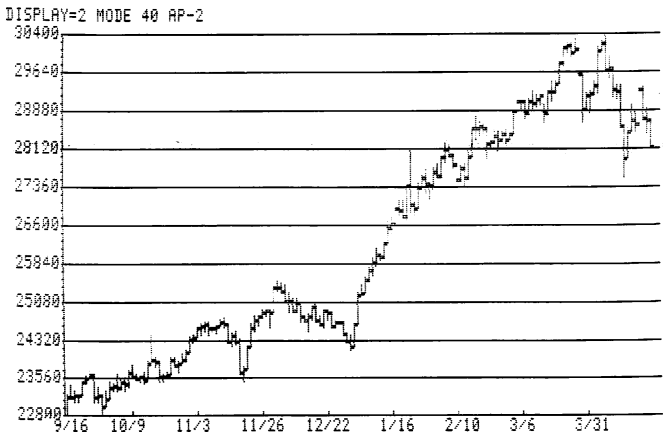


Chart 8

Date	Long	Short	P/L(in US$)
Mar.27		300.00	
Mar.31	292.60		+3,700.00
Apr. 1	292.70		
Apr. 9		293.10	+ 200.00
Apr.13		293.00	
Apr.16	288.90		+2,050.00
			+5,950.00

Crude Oil

With the Saudis continuing to play the role of swing producers, Opec has managed to maintain production at or below its self-imposed ceiling of 15.8 million barrels per day (b/d). Saudi Arabia's production has stayed well below its 4.13 million b/d quota in the first quarter of 1987, with March production averaging 3.3 million b/d.

The latest threat to Opec's cohesion lies in Iraq's rising production. From mid March, Iraq increased export of crude by 250,000 b/d from the Saudi terminal of Yenbo. This means that it can now pump to the full capacity of its spur pipeline, which connects to the Kingdom's transpeninsula facility.

Furthermore, a second line, to Ceyhan, on Turkey's Mediterranian coast with a capacity of 500,000 b/d should be completed on schedule in June of this year. It will raise Iraq's export capacity to 2.2 million b/d from the 1.46 million b/d quota pact reached in December and which Baghdad rejected.

Everything else being equal, Iraq's two-step production increase will primarily affect Saudi Arabia, threatening to bring its production to 2.5 million b/d — the very same level that in the summer of 1985, caused King Fahd to turn away from the role of swing producer. In terms of *revenues,* not output, Saudi Arabia's present predicament is as critical as the one experienced in August 1985. A further drop in output cannot be tolerated.

While overall Opec *crude* production hovers around planned levels, refined products *coming from Opec producers* have been flooding the market. As a result, refining margins have been squeezed severely, a development that augurs poorly for crude price stability.

Crude prices hinge, once again, on Saudi determination and staying power. While the former cannot be dismissed easily, the latter can be computed. At the present rate of production, the Saudis are drawing down reserves by approximately $2.25-$2.50 billion per month. Can the end be far off?

The elements for a second leg of the great bear market in oil are in place: The backwardation is steepening (see previous issues for a discussion of this market structure and its impact on Opec production); cheating is on the rise via refined products; the Iraqis are weeks away from increasing production another 500,000 b/d; and the Saudis are ever closer to financial insolvency.

STRATEGY: *It is* ***extremely*** *important that short positions should continuously be rolled forward to the 5-6 month position (see Chart 9).*

Chart 9

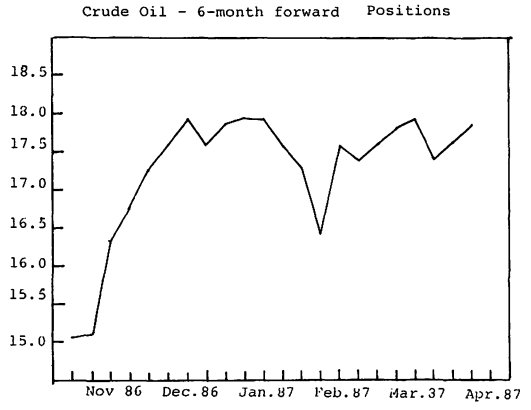
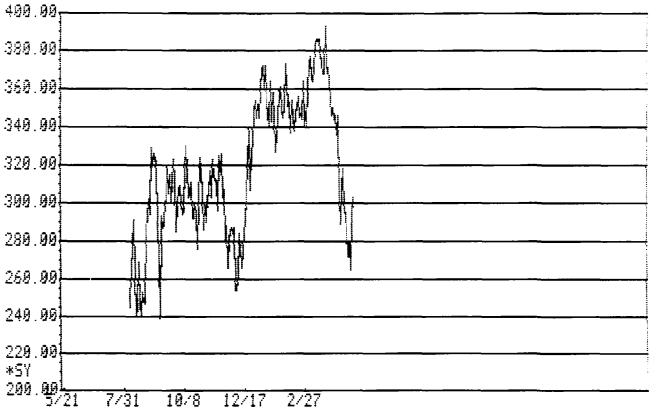


Chart 10 — CRACK



Natural gas: a sleeping giant

In the last two issues of *Friedberg's Commodity & Currency Comments*, we demonstrated that the discount rates used by Middle East oil producers to discount future oil profits to present value should be adjusted upward. These upward adjustments are necessitated because of the risks of holding nondiversified portfolios (largely oil reserves) and portfolios that are subject to the threat of property expropriation. Since high adjusted discount rates drag down the present value of future profits, we concluded that economic forces are at work that should tilt oil production away from the future and toward the present. To put it in other words, high discount rates should tend to make the Saudis favor a sort of take your money and run approach to oil production. Chart 11 provides a summary guide to our analysis.

Although King Fahd appears to be unmoved by economic analysis, recent evidence suggests that some of the Kingdom's 5,000 princes are making economic calculations and are putting pressure on the King to increase oil production. For example, Crown Prince Abdullah, who heads the National Guard, and Prince Sultan, who is the Defence Minister, think that production restraint is not in the Saudis' interests. They appear to share the views that got Sheikh Yamani sacked. However, the two princes, and other members of the royal family may not be as easy to neutralize as was Sheikh Yamani. If cash from oil sales is not available, Crown Prince Abdullah and Prince Sultan may seek more oil-for-weapons barter deals, such as the deal to purchase the Tornado aircraft from the British. Other ministers who have had their spending programs slashed might also be tempted by such barter arrangements. If this weren't enough, some members of the royal family haven't taken kindly to having their personal budgets squeezed. In consequence, they have been selling oil on their own accounts, and often at a discount.

One factor that could change the economics of crude production, as well as the attitudes of some of the renegades in the royal family, is the prospect of soaring oil prices in the future. For example, if the real price of oil is expected to grow at the Saudis' real discount rate of about 29% (see Chart 11), then King Fahd's current low output level would be economic.

However, there is strong economic evidence to suggest that real oil prices will trend downward, rather than soar upward. If the oil market evolves toward a more competitive market, which we anticipate, prices will be pulled down by very low costs. For example, by 1995, Opec could easily increase its current capacity of about 28 million barrels per day (b/d) (note that the current quota is about 16 million b/d and current output is less than 15 million b/d) to about 63 million b/d. This could be accomplished at incremental development plus operating costs of between $0.30 and $4.66 per barrel (see Chart 12). With competitive markets and these costs, a price of about $5 per barrel in 1995 would not be unrealistic.

Some might question whether the oil market will evolve into a competitive environment, with real oil prices hovering at about $5 per barrel in 1995. They simple don't think the markets will evolve to allow the full magnetic pull of low crude costs to be felt. But, even if we accept their view of the market's evolution, there is a sleeping giant that is beginning to stir. This giant is natural gas. As it awakens, it will put a lid on any rapidly escalating oil prices. In fact, as natural gas production increases, it will act to weaken the demand for Opec oil and increase the likelihood of $5 per barrel oil.

There are roughly three regional markets for natural gas: the Far East, North America, and Europe. Looking ahead over the next 10 years, natural gas in the Far East market, which is primarily Japan, will hold its share of the energy market (7%) or possibly increase slightly. The primary reason for this assessment is that most of the trade in this region is in liquefied natural gas, which is relatively high cost. However, there are huge gas deposits in the region. If oil prices started to move up, these supplies would kick into the market, capping any significant oil price increases.

In North America, gas will also hold its own and possibly nibble away at market share. As an indicator of how the North American gas market is becoming more competitive, all we have to do is look at Canada. Having refused to sell gas at $5 per thousand cubic feet (Mcf), Canada is now selling briskly at $3 per Mcf. Earlier this month, the Canadians announced a gas export deal to the northeastern US that is valued at $1.9 billion. With Pierre Trudeau's retirement, the Canadians finally figure out that gas in the ground is not worth more than money in the bank. Furthermore, if the Canadians ever figure out that the "acid rain" exported from the US to Canada could be reduced if the US would burn more natural gas, perhaps the Canadians would unload even more gas into the US market.

While natural gas supplies in the Far East and North America will keep a lid on significant oil price increases, gas will exert its most powerful pressure on Opec in the Western European markets. Until recently, Western Europeans have treated natural gas reserves as a precious commodity that must be used frugally. Hence, they priced this "boutique fuel" at a large premium to oil and at a level significantly above cost. In consequence, huge excess supplies developed.

To appreciate just how powerful the gas supply overhang is in Western Europe, observe Chart 13. It represents the marginal cost or supply curve for Western European gas, which is supplied by Algeria, the Netherlands, Norway, the United Kingdom, and the USSR. The supply curve represents the amounts of gas now available. The costs range from essentially negligible to $3.50 per Mcf.

Out to 2.5 trillion cubic feet (Tcf) per year, the curve reflects the negligible costs of production at the Groningen field in the Netherlands. The next relatively flat stretch indicates additional low-cost reserves and expansion within already existing pipeline capacity. The subsequent slight increase represents known and partly or fully developed fields that have transportation constraints, such as the need to hook up to an existing pipeline. The final sharp rise reflects new fields where production is costly, new pipelines are needed, or liquefaction facilities must be built to prepare the gas for transport.

The supply curve's most striking feature is the low cost of gas up to and well beyond the 7.6 Tcf per year, which was the amount consumed in Western Europe in 1985. For example, at 7.6 Tcf per year, the marginal cost is about $0.50 per Mcf, which amounts to an oil equivalent of only about $3 per barrel. Considering only costs, oil will never recapture the European market at any price. Oil will have to be very price competitive just to hang on to its share of the European market. At $2.50 per Mcf ($12-$15 per barrel oil equivalent), producers can profitably supply 10-15 Tcf annually from non-Soviet Western European fields alone and perhaps much more from Soviet fields — more than anyone expects to be consumed even into the next century.

Natural gas will, at the least, keep a lid on any significant oil price increases. In fact, it is more likely that gas will increase its market share, particularly in Western Europe. This will weaken the demand for oil and put downward pressure on oil prices.

Without the prospect of soaring oil prices and high discount rates, economics dictate that the Saudis should tilt their production toward the present and away from the future (see Chart 11). More is better than less, a lesson that some of the Saudi princes have learned well. In the coming weeks and months they will, no doubt, share their economic insights with King Fahd and the Kingdom's oil values will open further.

— Steve H. Hanke

Chart 11

Crude's Production Equation

The Production Equation

(P-V) = MC, where

P = the present market price of a barrel of oil,

V = the present value of a barrel of reserves. V is determined by discounting to present value the net profits from liquidating a barrel of oil in the future, rather than at present.

(P-V) = the gross value of current production, which takes into account the fact that current production uses up reserves that will not be available for future production.

MC = the present marginal recovery cost (operating cost) of a barrel of oil.

Production Rules

1. If (P-V) equals MC, the current rate of prodution is economic because it maximizes the present value of oil resources.
2. If (P-V) exceeds MC, it pays to increase current production, until (P-V) equals MC.
3. If (P-V) is less than MC, it pays to reduce current production, until (P-V) equals MC.

A Rough Application to Saudi Arabia

To determine whether the Saudis' current production rate is economic, we must evaluate the elements in their production equation. P is about $17 per barrel and MC is about $0.10 per barrel. If the present value of the Saudis' reserve (V) is about $16.90 per barrel, then the Saudis' current production level is about right. If V is less than about $16.90 per barrel, (P-V) exceeds MC, and the Saudis should increase their current production.

To determine V, we must discount to present value net profits from liquidating a barrel of oil in the future, rather than now. This requires the use of a discount rate. As we showed in the February 15 and March 22, 1987, issues of *FC&CC*, a realistic, real discount rate for the Saudis is about 29%. This rate is equal to a 2% risk free rate, plus an 8% market risk premium, plus a 10.4% risk premium for lack of a diversified Saudi portfolio, plus an 8.6% risk premium for a 50% chance that the Saudis will have their property expropriated within 10 years.

To illustrate that V is much less than $16.90 per barrel and that Saudi production is too low, suppose that the net profit, in 1987 dollars, from producing a barrel of oil in five years is expected to be $30, which is a high number. In this case, V, which is the discounted present value of $30 at 29%, is only $8.40. If expected profit per barrel in five years is $7, then V is only $1.96. To reach a V of $16.90, net profits per barrel in five years would have to reach a staggering $60.37 in 1987 dollars.

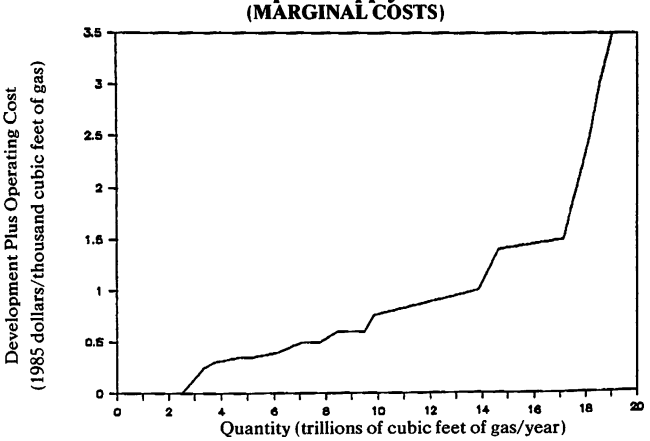
Chart 12

Supply Curve (Marginal Costs): Opec 1995 (1985 Cost Levels)

Producer	Development Plus Operating Cost per Barrel	1995 Potential Capacity (MBD)	1995 Cumulative Potential Supply (MBD)
Iraq	$0.302	5.0	5.0
Kuwait	0.397	12.0	17.0
Indonesia	0.535	1.2	18.2
Libya	0.601	2.9	21.1
Saudi Arabia	0.616	23.0	44.1
Iran	0.677	7.0	51.1
Qatar	1.296	0.4	51.5
Algeria	1.376	1.2	52.7
Abu Dhabi	2.023	4.0	56.7
Venezuela	3.285	3.6	60.3
Nigeria	4.656	2.3	62.6

Data Source: M.A. Adelman, *The Competitive Floor To World Oil Prices*. M.I.T. Energy Laboratory Working Paper No. MIT-EL 86-011WP, April 1986.

Chart 13
European Supply Curve
(MARGINAL COSTS)



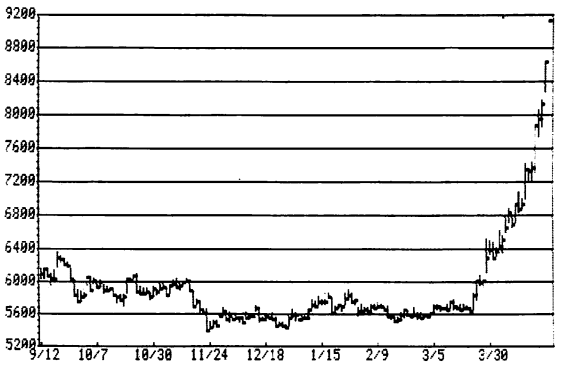
Source: M. A. Adelman, Michael C. Lynch and Jeffrey A. Stewart, *Natural Gas Supply in Western Europe*, M.I.T. Energy Laboratory, December 1986.

Gold

Having broken out of the September '86-January '87 downtrend at around $420/oz., gold prices spurted upwards to better their 1986 highs and thus maintain intact the bull market that began in early 1985.

STRATEGY: *Near-term swing objective of $500-$508oz., basis nearby, is attainable. High bullish consensus clouds the short-term picture, especially on the heels of a dramatic and artificial explosion of silver prices.* Traders *may consider placing stops on June '87 gold at 439, good anytime; investors should not disturb their long positions.*

Chart 14 — COMEX SILVER JLY 87



Canadian dollar

Japanese investors outdid themselves. They purchased more than $25 billion of Government of Canada bonds in the remarkably short span of six months, trampling in the process all over each other and driving the Canuck buck to an absurd 77¢. They now own almost one quarter of all long Canadas outstanding. For all practical purposes, they are trapped — in the currency and in the bonds.

The bleak fundamentals are beginning to reassert themselves: a substantial current account deficit; an enormously bloated public sector; and a confidence crisis in the country's political leadership. The recipe for a much lower dollar.

STRATEGY: *Sell June '87 Canadian dollar at market; place stops at 75.60, good anytime.*

Chart 15 — CME CAN. DOLLARS JUN 87

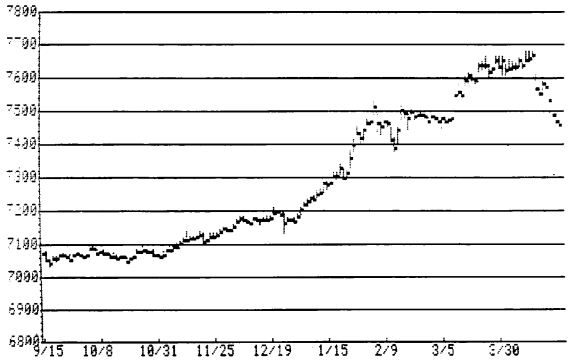


Chart 16 — CME DEUTSCHE MARK JUN 87

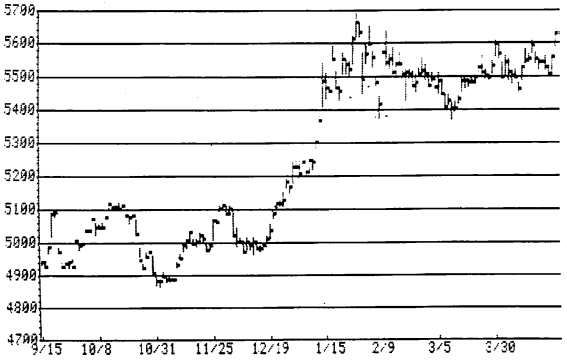


Chart 17 — CME BRITISH POUNDS JUN 87

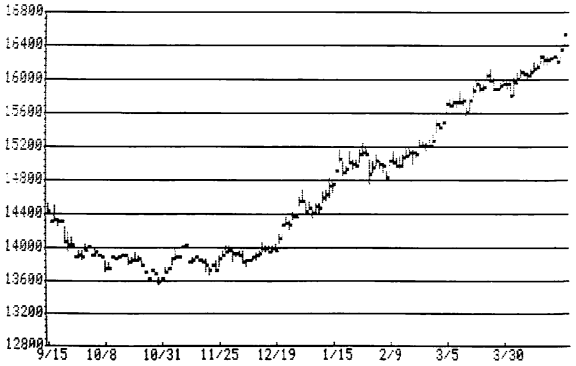
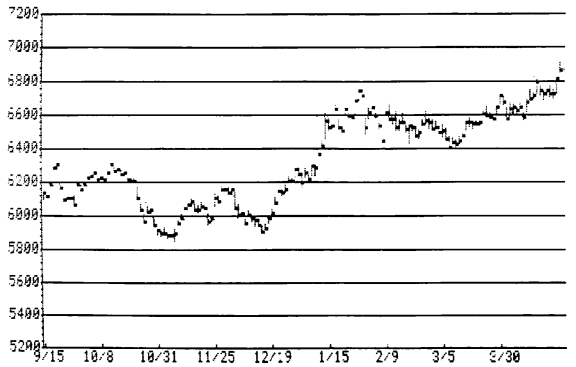


Chart 18 — CME SWISS FRANCS JUN 87



Friedberg Capital Markets

High nominal interest rates combined with prospective falling inflation figures, and a government in the process of unleashing the market forces makes New Zealand-dollar denominated bonds attractive to international investors. So alluring are they that in fact the NZ Eurobonds have attracted about NZ$2 billion. However, the more recently established New York market for NZ dollar bonds has also attracted about NZ$2 billion.

Both the Euro and Yankee markets have found that investors have a healthy appetite for Kiwi bonds, but there are some slight differences between these markets. Eurobonds trade principally out of London, have annual coupons, and have interest and principal paid in NZ dollars. The Yankee NZ bonds trade out of New York, have semi-annual coupons, and the issuers convert the interest and principal payments into US dollars, usually at a rate five business days before the pay date. For practical purposes, the two markets allow for arbitrage, which is always a welcome additive to financial instruments. However, because Yankee NZ bonds convert interest coupons, investors can reinvest only if they want to convert back to NZ dollars. If this is a disadvantage to the investor, he can console himself with the fact that Yankee NZ bonds yield 150 basis points (1.5 percentage points) higher than comparable quality and maturity Euro NZ bonds.

This discrepancy exists because the Euro NZ bond market caters mostly to retail investors, requiring bearer bonds, and since the market is retail oriented, it can accommodate only small underwritings. Yields in this market are therefore lower than NZ Treasuries. On the other hand, the Yankee NZ bond market is driven by swaps requiring much larger quantities and at unexpected periods, making placement in the New York market imperative. Therefore, yields in this market are much more competitive; at this time they yield 50-100 basis points over NZ treasuries. We expect yield differentials to narrow significantly over time as the market for NZ paper attracts a broader interest.

Friedberg Capital Markets offers two Yankee NZ bonds that pay interest semi-annually:

Eastman Kodak 17% 15/2/89 currently yielding 18.94%.

Wells Fargo 16⅛% 12/5/89 currently yielding 19.94%.

*Current annual yields to maturity.

Chart 20

Foreign Currency Bonds

DATE: April 24, 1987

We offer the following Bonds subject to change without prior notice:
Minimum amount U.S.$5,000 (Cdn.$7,000).

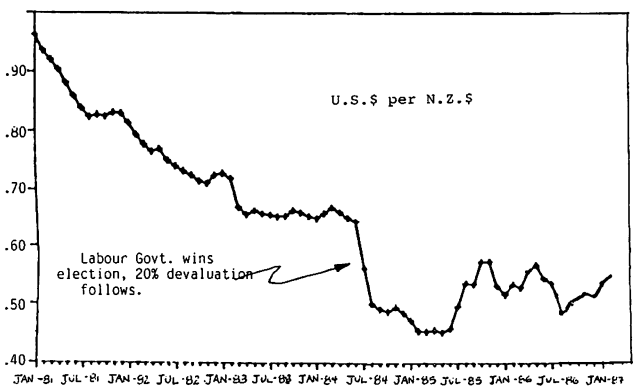
ISSUER MTY. DATE/COUPON	BID		OFFER	CURRENT ANNUAL YIELD TO MTY.	CURRENT COUPON PERIOD
NEW ZEALAND DOLLAR DENOMINATED BONDS					
COCA COLA FIN. CORP. 16/6/89 18%	101¼	-	102	16.71	16/6/86-16/6/87
HONDA INT'L 20/9/89 16 3/8%	96	-	96 3/4	17.78	20/6/86-20/9/87
HONDA INT'L 28/5/90 16%	94½	-	95¼	17.73	28/11/86-28/5/88
TOURIST HOTEL CORP.(N.Z.) 4/6/93 zero coupon	42 3/4	-	43½	14.63	matures 4/6/93
BANK OF NOVA SCOTIA 15/9/89 18¾% RRSP eligible	101 3/4	-	102½	16.94	15/5/86-15/9/87
WELLS FARGO (semi-ann.) 12/5/89 16 1/8%	94⅛	-	95¼	19.94	12/11/86-12/5/87
KODAK (semi-ann.) 15/2/89 17%	97½	-	98¼	18.94	12/2/87-15/8/87
TORONTO DOMINION 2/4/90 18% RRSP eligible	102	-	102 3/4	16.69	2/4/87-2/4/88
AUSTRALIAN DOLLAR DENOMINATED BONDS					
CAN. IMP.BANK OF COMMERCE 13/3/91 13% RRSP eligible	95 3/4	-	96½	14.20	13/3/87-13/3/88
DEUTSCHE MARK DENOMINATED BONDS					
REPUBLIC OF PORTUGAL 19/6/94 6 5/8%	95 3/4	-	102 5/8	6.15	19/6/86-19/6/87
GOVT. OF BELGIUM 29/4/96 5¾%	95.35	-	96.10	6.07	29/4/86-29/4/87
QUEBEC HYDRO 1/5/96 5¾% RRSP eligible	94 3/4	-	95¾	6.16	1/5/86-1/5/87
SWISS FRANC DENOMINATED BONDS					
GOVT. OF AUSTRALIA 30/10/98 5%	101 3/4	-	102½	4.71	30/10/86-30/10/87
JAPANESE YEN DENOMINATED BONDS					
GOVT. OF CANADA 23/7/93 5 5/8% RRSP eligible	106 7/8	-	107 5/8	4.20	23/7/86-23/7/87

U.S. DOLLAR DENOMINATED FLOATING RATE NOTES

ISSUER	MAT.		BID		OFFER	CURRENT COUPON	NEXT COUPON DATE:
SANTA BARBARA SAVINGS & LOAN (fully collateralized)	18/12/95	pays 1/8% over 3 months LIBOR (quarterly)	99.73	-	100.03	6 5/8%	18/6/87
LINFIN SAVINGS & LOAN (fully collateralized)	14/11/95	pays 1/8% over 3 months LIBOR (quarterly)	99.70	-	100	6 11/16%	18/5/87
WELLS FARGO	3/4/2000	pays 1/8% over 1 month LIBOR (monthly)	98.20	-	98.50	7%	17/5/87

For further information current prices please call: FRIEDBERG CAPITAL MARKETS (416) 364-2700

Chart 21



The Exotics

New Zealand dollar

Last month we expressed serious reservations about the Lange government's determination to pursue an increasingly restrictive fiscal policy. Using government estimates, we projected a 1986-87 budget deficit of NZ$2.9 billion, equalling roughly 6.5% of GDP, revised upwards from an originally estimated NZ$2.45 billion deficit. This large gap was pushing domestic spending well beyond the country's earning capacity, thus necessitating a widening current account deficit.

Just five weeks later the government managed to surprise all financial observers, including themselves, by announcing a budget deficit for fiscal 1986-87, end March, of NZ$1.95 billion, around 3.8% of GDP and the lowest deficit as a percentage of GDP since 1977. Finance minister Roger Douglas said that expenditures were almost exactly on target, while total tax revenues at about NZ$17.4 billion against NZ$14.2 billion in 1985-86 were about NZ$1.2 billion above the budget forecast. Douglas reiterated his forecast for a NZ$2.2 billion budget deficit for the current fiscal year and expressed the view that despite the improvement, the deficit was still too high.

This encouraging news lends a new lease on life to the Lange government's reform program.

STRATEGY: *In the medium term our outlook remains constructive for the currency and the bond market. During the past month, we advised liquidating half of the New Zealand dollar position via the Hotline Update. We now recommend reinstating once again the full position.*

Hong Kong dollar

The Hong Kong dollar has been touted many times as a potential candidate for a revaluation given
a) the large bilateral trade surplus with the US, and
b) the inability of speculators to get to the "true villains," Taiwan and South Korea, due to their strict foreign exchange controls.

The Hong Kong dollar is pegged to the US dollar at HK$7.80 to the US dollar since 1984. The Hong Kong authorities have played by the rules of the old gold standard game: Whenever downward pressure appeared on the Hong Kong dollar (for example in the 1997 Chinese syndrome in the early part of this decade), interest rates were hoisted to offset unfavorable capital flows and the trade deficit; when upward pressure appeared (in mid-1985 and again earlier this year), interest rates were lowered to induce offsetting capital outflows. These interest rate changes, of course, reflect themselves in the forward Hong Kong dollar rates; high relative rates mean forward discounts, and therefore discourage further bearish speculation; low relative rates mean forward premiums, dampening bullish speculator sentiment. (See Chart 23.)

Overall Hong Kong's merchandise trade balance (see Chart 22) does not indicate a chronic undervaluation. The 1986 merchandise trade surplus was a relatively paltry US$73 million, down from an equally modest surplus of US$479 million in 1985.

STRATEGY: *In our view, currency speculators should bet on the continuation of the peg. Consequently, relatively large discounts (more than 2% per annum) should be bought, and relatively large premiums should be sold.*

Chart 22

EXTERNAL TRADE STATISTICS

YEAR	TRADE WEIGHTED HONG KONG $ (1972 Base)	IMPORTS Millions H.K.$	% CHANGE ON PREVIOUS 12 Months	EXPORTS Millions H.K.$	% CHANGE ON PREVIOUS 12 Months	MERCHANDISE TRADE BALANCE Millions U.S.$	% CHANGE ON PREVIOUS 12 Months
1977	110.8	48,701	12.49	44,833	7.88	-829	
1978	99.4	63,055	29.47	53,908	20.24	-1952	-135.4
1979	91.1	85,837	36.13	75,934	40.86	-1979	- 1.4
1980	90.8	111,650	30.07	98,242	29.38	-2694	- 36.1
1981	86.3	138,374	23.94	122.162	24.35	-2898	- 7.5
1982	85.5	142,892	3.26	127,381	4.27	-2554	+ 11.8
1983	72.6	175,442	22.78	160,699	26.15	-2439	+ 4.5
1984	71.1	233,370	27.32	221,440	37.80	- 247	+ 89.8
1985	75.0	231,419	3.60	235,152	6.19	+ 479	+294.0
1986(1)	67.6	55.671	1.97	53,149	1.65	- 323	- 14.9
1986(2)	66.1	67,663	4.94	65,255	2.51	- 308	-133.0
1986(3)	64.5	71,103	12.06	75,321	8.84	+ 541	+133.0

Trade-weighted Hong Kong dollar
Above 1.00 = overvalued
Under 1.00 = undervalued

Source: Hong Kong Monthly Digest of Statistics

Chart 23

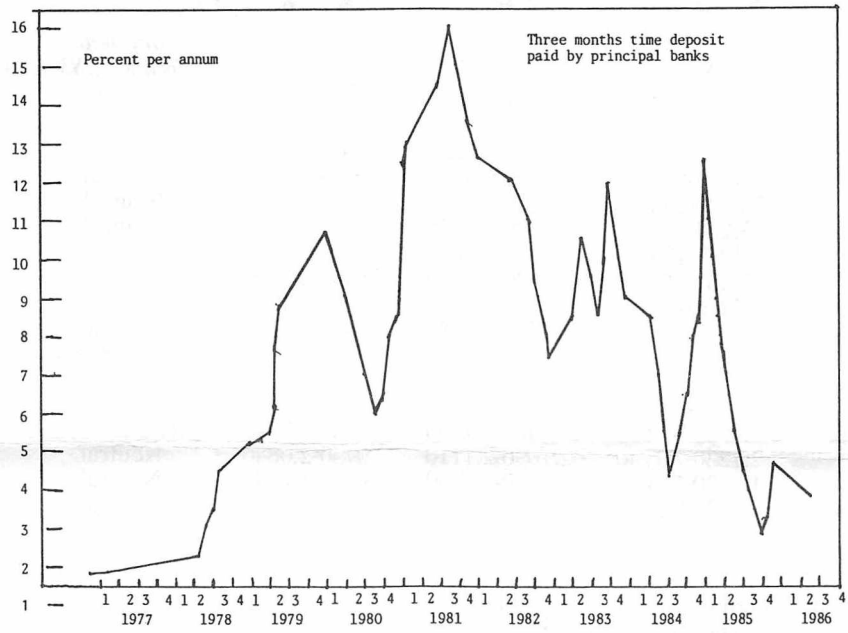


Chart 24

YEAR	EXCHANGE RATE VS. U.S.$ (Period Aug.)	MONEY SUPPLY Millions Hong Kong $	% CHANGE ON PREVIOUS 12 Months
1977	4.662	-	-
1978	4.685	-	-
1979	5.003	-	-
1980	4.976	23,076	-
1981	5.593	23,748	2.9%
1982	6.072	26,086	9.8%
1983	7.273	28.277	8.4%
1984	7.818	33,351	17.9%
1985	7.791	41,806	25.3%
1986 (1)	7.807	41,850	15.8%
1986 (2)	7.804	42,854	10.9%
1986 (3)	7.804	45,603	10.2%

Source: Hong Kong Monthly Digest of Statistics

Chart 25

SPOT	1 - Month	3 - Month	6 - Month	12 - Month
7.8000 7.8010	7.7900 - 7.7930	7.7720 - 7.7760	7.7580 - 7.7640	7.7250 - 7.7460

Forex Rates & Update

Currency	*Spot*	*3-Month*	*12-Month*	*Comments vis à vis US$*	*Comments vis à vis DM (Spot DM: 1.7900)*
*Australian dollar	.7090-.7095	.6964-.6972	.6632-.6647	Remain long one half position	Remain long one half position
Belgian franc	37.16-37.21	37.13-37.23	37.03-37.23	Neutral	Remain long
Danish krone	6.74-6.75	6.79-6.81	6.93-6.96	Neutral	Remain short
Dutch guilder	2.0200-2.0210	2.0100-2.1200	1.9800-1.9850	Neutral	Remain long
Greek drachma	132.00-132.25	136.00-138.25	150.50-159.00	Neutral	Remain short
Italian lira	1279-1281	1280-1283	1283-1287	Neutral	Neutral
Kuwaiti dinar	.27000-.27040	.26900-.27000	.26450-.26600	Neutral	Remain short
Malaysian ringgit	2.4710-2.4720	2.4520-2.4560	2.4210-2.4620	Neutral	Neutral
*New Zealand dollar	.5825-.5835	.5538-.5558	.5010-.5070	Remain long (see "The Exotics")	Remain long (see "The Exotics")
Norwegian krone	6.66-6.67	6.78-6.80	7.11-7.14	Neutral	Neutral
Portugese escudo	139.75-140.25	141.75-144.25	148.75-159.25	Neutral	Neutral
Saudi Arabian riyal	3.7500-3.7510	3.7480-3.7500	3.7490-3.7540	Remain short	Remain short
Singapore dollar	2.1230-2.1240	2.1090-2.1110	2.0730-2.0840	Neutral	Neutral
Spanish peseta	125.20-125.40	127.20-128.60	133.70-134.90	Neutral	Neutral
Swedish krona	6.24-6.25	6.28-6.31	6.38-6.40	Neutral	Neutral
Venezuelan bolivar	23.80-24.00	24.50-25.00	26.00-27.00	Neutral	Neutral

Explanatory Notes

*Indicates change in recommendation from last issue

Currency expected to firm against both currencies.	Buy	Buy
Currency expected to strengthen against US $ and weaken against DM.	Buy	Sell
Currency expected to weaken against both major currencies.	Sell	Sell
Currency expected to weaken against US $, but strengthen against DM.	Sell	Buy
Term used to liquidate short position but does not imply a new buy recommendation	Cover	
Term used to indicate sale advice of previous long position, but does not imply a new short sale recommendation.	Liquidate	

Hotline Update

Tuesday, March 24: No changes.

Flash update, Friday, March 27, 1:40 p.m.: We'll try the short side of the S&P 500 once more. Sell June S&P at market, placing stops for today only at 302.60. Starting Monday, place protective stops at 305.75 good anytime. This flash replaces the regular broadcast barring any further recommendations.

Flash update, Monday, March 30, 9:57 a.m.: Lower stops on all S&P short positions put on at approximately 300.00 even, basis June, on Friday to 292.60 stop, good anytime.

Tuesday, March 31: As per our recommendation on yesterday's flash update, we lowered our stops on short S&P positions to 292.60, basis June, good anytime. We were stopped out profitably today. Stay posted.

Flash update, Wednesday, April 1, 3:50 p.m.: This is not a joke. We now advise going *long* the June S&P at the market, risking 287.80 stop, good anytime.

Friday, April 3, A review of the week's activities: 1) We covered on Tuesday profitably (approximately 700 points) our short position in June S&P as per our flash update on Monday, which lowered stops to 292.60. 2) A flash on Wednesday advised going long the S&P with a stop at 287.80. You entered at approximately 292.70. We now wish to raise that stop to 293.10, basis June, good anytime. Stay long and stay posted.

Tuesday, April 7: Lower stops on short June T-bonds to 101.00, good anytime. We remind you to maintain stops on long June S&P positions of 293.10, good anytime.

Friday, April 10: A review of the week's activities and recommendations: 1) As per our upward revised stop of 293.10, basis June S&P, issued Friday, April 3, you were stopped out yesterday. You are now flat. 2) On Tuesday, April 7, we lowered stops on June T-bond short positions to 101.00, good anytime. Lower them again to 9701, basis June, good anytime. 3) New recommendation: Tighten stops on short Eurodollar positions to 9340, basis June, good anytime. 4) Tighten stops on long Japanese yen and DM positions to 6800 and 5430, respectively, basis June, good anytime. There will be a tape Monday, April 13, to replace the regular Tuesday, April 14, bulletin.

Flash update for Monday, April 13, 12:00 noon: Unless there is a further notice in the next few hours, this update will replace our regular Tuesday night update. We like to reenter the short side of the S&P. Sell June S&P at market, placing stops at 295.50, good anytime. Next regular update will be Wednesday, April 15.
(Due to technical problems there was no tape on April 15.)

Flash update, Thursday, April 16, 10:30 a.m.: A number of important recommendations: 1) Cover all short S&P positions at market. This short position was taken on Monday as per our flash update at around 293.00. 2) Cover one half of all short positions in T-bonds and Eurodollars. 3) Take profits on all long silver and platinum positions; long term trades do not, repeat, do not disturb long gold positions despite any potential near-term weakness. 4) Liquidate one half of all long positions in Australian and New Zealand dollars.

Thursday, April 16: Repeat of above.

Wednesday, April 22: Traders raise stops on June Comex gold to 439.00, good anytime. Otherwise, no changes.

Friday, April 24: Market action in interest rate futures, precious metals, and currencies has become frantic. Rumors circulate about a Fed Discount Rate increase. Under the circumstances, we prefer not to suggest any changes until we have had a chance to analyze the Fed's action. Keep posted for such developments.

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