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The coming (banking) reliquification: Its impact on security prices and inflation

Since early 1984, US commercial banks' total investments have grown 36%. These investments, which act as a cushion, consist primarily of high-quality and highly-liquid holdings, which can be converted into cash almost at will. On the other hand, total bank loans increased at a much more rapid pace — 68% — while off-balance street credit facilities exploded at a multiple of this number. In short, as is traditional in most business expansions, the commercial banks have become relatively less liquid, carried away in their enthusiasm for real estate (loans increased to $636 billion in 1988 from $364 billion in 1984, an incredible rise of 75%) and LBOs while cooling off, understandably, towards LDCs.

What is strange, to say the least, is that this development has taken place against a background of flat adjusted bank reserves — at least for the past 2 years — a rising banking casualty list (last year a record 231 banks failed, and so far this year 167 have done so), and the slow adoption of transitional risk-based standards that will take full effect in 1992 and that are sure to put a premium on capital and risk-free assets. We have little doubt that sooner or later — and probably much sooner — a trend reversal in bank credit will occur that is likely to shake the economy to its foundations.

A more detailed look at these factors will reveal the following. Adjusted bank reserves are the reserve upon which banks can build their portfolios. Being profit-making entities, they will attempt to obtain excess reserves to lend on or to invest at a profitable spread, thus in the process expanding bank credit and its counterpart, money supply. The Fed supplies reserves through open market operations (buying and selling US government securities) and through the discount window. As it happens, they have not been overly generous: From January 1988 through April 1989, total adjusted bank reserves grew at a *negative* 0.4% annual rate.

How come? It does not appear that the Fed is targeting reserves. The minutes of FOMC do not even hint of such a possibility. Nor have some of our discreet inquiries from the academic staff of various Federal Reserve Banks elicited a positive response to that hypothesis.

The Fed, it appears, continues to look at indicators that have been publicly acknowledged and discussed: P-star, the price of gold, the yield curve, a Wicksellian model, and so on (see some of our past issues for a fuller discussion). After examining these various indicators, the Fed sets a Fed funds rate at which it will supply funds (if it threatens to rise above it) or withdraw funds (if it threatens to fall below it).

At this time the Fed funds rate has fallen to 8¾% (see Chart 1). As any student of economics knows, you can control only one variable: price or quantity. By controlling price (the Fed funds rate), the Fed allows reserves, and ultimately money supply, to vary *uncontrollably* (in a strictly technical sense, *not* in the sense of "wildly"). This is crucial to our analysis.

Since adjusted reserves have been flat or falling since the second quarter of 1987, it behooves us to ask ourselves what has caused this puzzling behavior. The answer lies in the level and direction of Fed funds. In the second quarter of 1987, the Fed lifted Fed funds 125 basis points in a dramatic attempt to defend the dollar and curtail inflationary expectations.

As can be seen from Chart 2, this increase marked the end of the 1984-87 downtrend in Fed funds and began a long upswing that *perhaps* ended in April/May 1989. Either the directional change *or* the absolute level of the rate *induced an end to the demand for reserves.* In different words, the Fed had, perhaps unintentionally, achieved a static equilibrium in the supply and demand for bank reserves.

In a Wicksellian sense (see "Professor Wicksell revisited"

In this issue

Hotline Update Number

Enclosed with this issue is a card showing the new Hotline Update number, effective November 6.

in this issue), the Fed may have exceeded the natural rate, thus muzzling continued bank credit expansion. Only a shift in deposits has allowed banks to free "reserves" and expand bank credit.

Short of a *dramatic* downward change in Fed funds (which we do not expect — see Dr. Hanke's article, which follows), the banks are unlikely to demand an increase in reserves. And now comes the rub: Increasingly bankers will be able to accommodate loan demand by liquidating their liquidity cushion, i.e., bank investments (see Chart 3 for a graphic representation of what's happening to the liquidity cushion). Banks will be reluctant to draw down any further their diminished investments, but if they did, they would lower the prices of securities, thus raising interest rates, causing in effect a mini-crunch.

Coming at a time when loan extensions are clearly faltering (see our last issue), the mini-crunch — by maintaining high lending spreads — is likely to hit loan demand further. The deflationary ripple effect could be substantial.

The loss of confidence in lenders from the ever-growing list of failing banks should put an additional restraint to bank lending over the coming years. Besides the 167 banks that have already failed thus far in 1989, 443 banks of 13,000 nationwide have been losing money constantly from 1987 through the first quarter of this year. On present trends, this group will run out of capital by late 1990 according to a study conducted by Texas-based bank analyst William C. Ferguson.

What is more, the FDIC's reserves, which fell in 1988 for the first time in history to $14.5 billion, are actually down to an *alarmingly thin $5 billion* through March of this year if proper adjustment is made for the $9.5 billion required to cover losses at banks that are insolvent or close to it. This means that FDIC fees will have to be raised again in the near future, raising intermediation costs and blocking any potential pass-through of a lower Fed funds rate to the lending rate. As lending margins widen — for reasons of both costs and risks — the economy will become increasingly less responsive to a Fed-engineered drop in rates.

The *coup de grâce* to new lending will come from the implementation of the proposed risk-based standards.

The Basle Committee on Banking Regulations and Supervisory Practices, chaired by former Bank of England associate director Peter Cooke, "cooked up" an agreement that should make bank credit orgies much less likely in the future (at least until the banks have learned to circumvent it). The long and short of the agreement is that banks should have a ratio of 4% of Tier I capital (see Chart 4) and 4% of Tier II capital (see Chart 5) to risk-adjusted assets (see box for a fuller description).

Significantly, *by the end of 1990*, banks are required to achieve a total, risk-weighted capital return of 7.25%. Needless to say, the end of 1990 is around the corner: If capital cannot be easily raised in substantial quantities, banks will be forced to liquidate assets. A foretaste of this shrinkage took place in August, the latest month for which S&L results are available.

Risk weights

On-balance sheet assets are assigned to various categories, and risk weightings are then applied to each category. Assets with virtually no credit risk are assigned a zero weight (that is, they require no capital). Items in this category include cash; balances and claims on the domestic central bank; loans to domestic central governments; securities issued by domestic central governments; and loans and other assets fully collateralized by cash or domestic government securities or fully guaranteed by domestic central governments.

A 20 percent weight is assigned to assets with very limited credit risk, including claims on domestic and foreign banks with an original maturity under one year, claims on domestic banks with an original maturity greater than one year and loans guaranteed by domestic banks, claims on foreign central governments funded by local currency liabilities, and cash items in process of collection. The regulators may assign regional developmental banks to the 0 or 20 percent weight category. Loans to owner-occupiers for residential house purchases fully secured by a mortgage receive a 50 percent weight. A 0, 20, or 50 percent weight may be assigned to claims on the domestic public sector excluding the central government and loans guaranteed by such institutions.

Assets of normal credit risk are assigned a 100 percent weight. The assets in this category include claims on the private sector, cross-border claims on foreign banks with an original maturity greater than one year, claims on foreign central governments, claims on commercial companies owned by the public sector, fixed assets, real estate and other investments, capital instruments issued by other banks (unless deducted from capital), and all other assets.

Off-balance sheet items are first converted into credit-risk equivalent values based on the type of instrument. The equivalent values for off-balance sheet items are then multiplied by the weights applicable to the counterparty for an on-balance sheet transaction. A credit conversion factor of 100 percent is applied to direct credit substitutes (for example, financial standby letters of credit and endorsements), sale and repurchase agreements, asset sales with recourse, and forward purchases. A 50 percent conversion factor is applied to transaction-related contingent items such as performance bonds, bid bonds, and warranties. A 50 percent weight is also applied to note issuance facilities, revolving underwriting facilities, and other commitments with an original maturity exceeding one year. Similar commitments with an original maturity under one year or which can be unconditionally canceled at any time carry zero weight. Short-term, self-liquidating, trade-related contingencies carry a 20 percent weight.

The regulators of each country are given an option in determining the conversion factor for off-balance sheet items where the credit exposure is contingent on foreign exchange rates or interest rates. To account for potential increases in credit exposure, one option is that the credit risk will be assessed as the total replacement cost (marked-to-market value) of all contracts with a positive value plus a percentage of the notional principal of all transactions. The other option is to apply a straight percentage to the original notional principal without any adjustments for market value. The conversion percentages under this approach are higher than those required when banks are mandated to include the replacement cost in their risk-weighted asset base.

Source: *Economic Review*, March/April 1989, Federal Reserve Bank of Atlanta.

Largely to meet tougher new capital requirements, thrifts reduced their assets *$13.4 billion* in August, by selling such assets as mortgage-backed securities and loans. What is ominous is that $10.1 billion of this total came from S&Ls *not* under government conservatorship. As of August 31, thrifts held $185 billion in mortgage-backed securities.

Clearly, a near-term shortage of available capital will force banks to do the most expedient thing: shift their portfolios from assets that carry a 100% weight, such as normal credit risks, e.g. loans, to assets with little or no weight, e.g. Treasury bills. Alternatively, they will demand substantial lending premiums to compensate for the high reserve requirements, thus once again forcing a widening of spreads and a rationing of loans.

We have thus reviewed three powerful reasons why the banking system — and the economy — will undergo a lending crunch. This crunch could turn into outright debt liquidation, as discussed last month, a major deflation, and perhaps even a severe recession.

The reliquification process, i.e. loan liquidation and the build-up of bank investments, could take several months or several years, depending on the severity of the deflation/recession and the damage done to lenders' psyches.

And therein lies the silver lining. A reliquified banking system may usher in a long period of sane and orderly growth. Not before, of course, some *real* pain.

Chart 1
Federal Funds

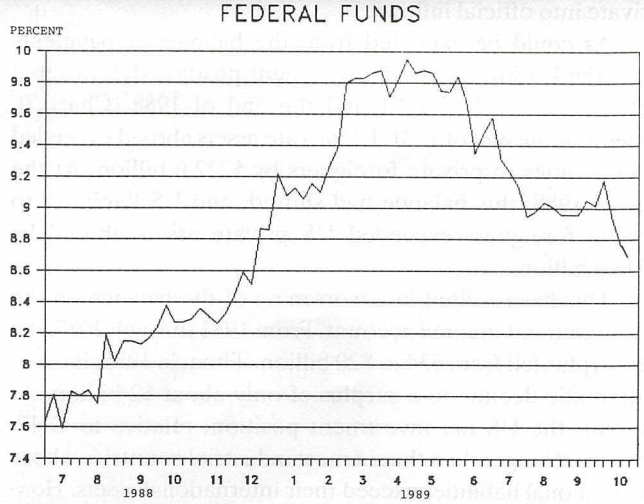


Chart 2

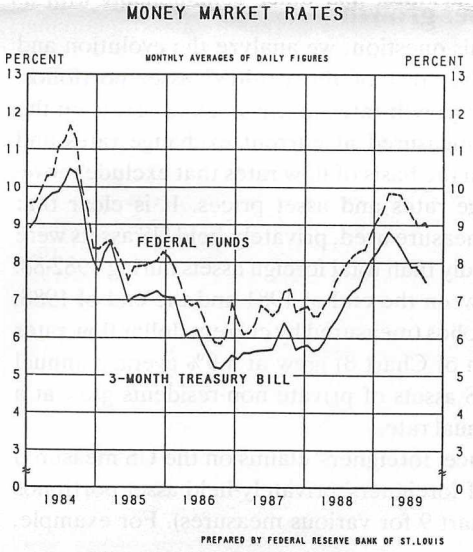


Chart 3

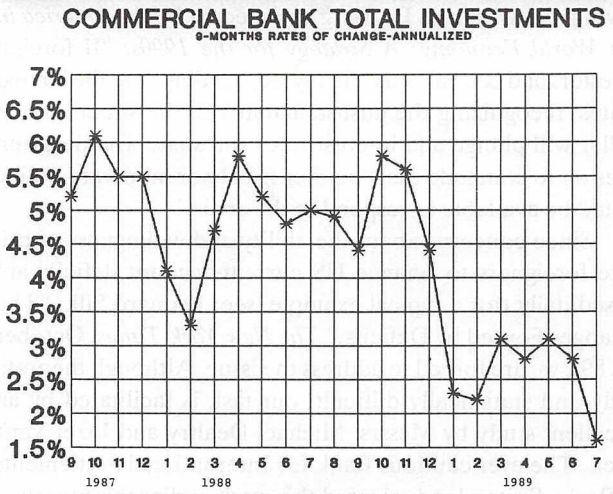


Chart 4

Tier 1 Capital
(Core Capital)

common shareholders' equity
(issued and fully paid)

\+ disclosed reserves
(including retained earnings)

\+ perpetual noncumulative preferred stock

\- goodwill

Chart 5

Tier 2 Capital
(Supplementary Capital)

undisclosed reserves

\+ 45 percent of revaluation reserves

\+ general loan loss reserves
(up to 1.25 percentage points)

\+ hybrid debt capital instruments

\+ subordinated debt
(up to 50 percent of tier 2 capital)

\- investments in unconsolidated subsidiaries

\- investments in other banks' capital instruments
(at supervisor's discretion)

Cannot exceed the total of tier 1 items

THE ECONOMY

No dollar crisis in the cards

The real current-account deficit has fallen dramatically since its peak in the fourth quarter of 1987. This improvement hasn't stopped politicians, journalists, and analysts (who should know better) from wringing their hands over a dollar crisis that they claim is in the cards. These doom and gloomers argue that the crisis will occur because foreigners have overloaded their portfolios with US assets. In consequence, the foreigners will stop financing our current-account deficit.

Dr. C. Fred Bergsten and his colleagues at the Institute for International Economics have provided most of the fuel for the dollar-crisis thesis. As an example, consider the following remarks from Dr. Bergsten's recent book, *America in the World Economy: A Strategy for the 1990s:* "If foreign investors and central banks finally stop lending... to the United States, recognizing the unsustainability of the situation, the dollar will plunge and interest rates will soar." Dr. Bergsten goes on to conclude that "neither fiscal nor monetary policy would be available to respond to the crisis."

Since concerns about the ability and willingness of private foreigners to finance US current-account deficits are raised daily (for a typical example, see: Leonard Silk, "The Changes Forced by Deficits," *The New York Times*, October 27, 89), we are forced to address the issue. Although theoretically and statistically difficult, our task is facilitated by an excellent study by Messrs. Michael Dealtry and Jozef Van't dack. The ever-cautious Bank for International Settlements in Basle, Switzerland released this work earlier this month.

Capital inflows and the deficit

To begin, let us look at the evolution of the balance of payments and international investment position of the US from 1982 to 1988. Chart 6 shows that current-account deficits, amounting to $671.6 billion, have accumulated over the study period. These have been financed, in large part, by an unprecedented volume of foreign private capital inflows into the US ($665.8 billion). While inflows of private capital were the principal counterpart of the current-account deficit during 1982-88, the causation did not always run from deficits to private capital inflows. Indeed, in 1982-85 and 1988, when the relationship between the current-account deficit and private capital inflows was strongest, the inflows themselves were one cause for the growth of the deficit. The fact that the dollar was appreciating during this period provides evidence to support this conclusion.

In 1986 and 1987, the relationship between the deficits and foreign private capital inflows was not as close as it was in 1982-85 and 1988. In 1986-87, about one third (or $90.6 billion) of the current-account deficit ($276.9 billion) had a counterpart in recorded official financing flows. If this weren't enough, the shift from private to official financing of the US current-account deficits in this period is understated because foreign central banks channeled a significant part of their dollar accruals into the US via banks and brokerage houses in their own countries. In consequence, these inflows were recorded as private, rather than official, inflows.

If these "disguised" official inflows were accounted for, perhaps 50% of the U.S. current-account deficit in 1986-87 was financed by foreign central banks. In 1988, when a shift back to more private financing took place, the private inflows were understated, because a significant amount of the "disguised" official inflows in 1986-87 were converted from private into official inflows.

As could be expected from the balance of payments data, the US international investment position deteriorated between the end of 1981 and the end of 1988 (Chart 7). Indeed, at the end of 1981, US private assets abroad exceeded US liabilities to private foreigners by $222.6 billion. At the end of 1988, this balance had shifted, and US liabilities to private foreigners exceeded US private assets abroad by $343.7 billion.

This has resulted in a worsening of the balance on the US investment income account. From 1981 through 1987, the net surplus fell from $34 to $20 billion. Then, in 1988, it made a dramatic decline to a surplus of only about $2 billion. At present, the US net investment position, relative to GNP, remains stronger than that of most industrial countries whose international liabilities exceed their international assets. However, it is legitimate to question whether continued current-account deficits (which will cause the US international investment position and balance on its international investment income account to continue to deteriorate) can be financed by foreign private capital inflows to the US.

Private US asset growth

To address this question, we analyze the evolution and composition of the "rest of the world's" asset portfolios. Chart 8 shows the growth rates in the stock of assets on the basis of changes measured at current exchange rates and asset prices and on the basis of flow rates that exclude movements in exchange rates and asset prices. It is clear that regardless of the measure used, privately-held US assets were growing more rapidly than total foreign assets during 1982-88. For example, between the end of 1981 and the end of 1988, total private portfolios (measured by current dollar flow rates in the last column of Chart 8) grew at a 9% average annual rate, while the US assets of private non-residents grew at a 19.8% average annual rate.

In consequence, foreigners' claims on the US measured as a percentage of foreigners' privately-held asset portfolios increased (see Chart 9 for various measures). For example,

US assets as a percent of the rest of the world's private foreign assets was only 13.4% at the end of 1981. However, by the end of 1988, the share of US assets in foreign private portfolios had grown to 24.5%.

The percentages in Chart 9 are measured in current dollar terms. In consequence, they do not show how much of the increases were caused by actual purchases of US assets (through private capital inflows) and how much was accounted for by changes in the dollar's value or asset prices. Chart 10 attempts to separate these two influences. The ratios in Chart 10 measure the marginal propensity of foreign private investors in industrial countries to make additions to stocks of assets in the US. The marginal propensities are measured both in terms of current US dollars (A ratios) and in terms of constant dollars (B ratios). The B ratios exclude movements in exchange rates and asset prices. Hence, the B ratios measure the real marginal propensities of foreigners to invest in US assets.

As the B ratios show, foreigners have developed a healthy appetite for US assets. This has resulted from good returns, particularly during periods when the dollar has appreciated, and also because of a relaxation of capital controls throughout the world. It is important to emphasize that capital controls create a pent-up demand for US assets. In consequence, with a liberalization of capital markets, which is still occurring worldwide, portfolios are adjusted, and tilted toward more US assets.

We should note that the real marginal propensities to invest in the US (B ratios) are probably distorted in 1987 and 1988. Due to the "disguised" inflows of official funds in 1987 and their reserves in 1988, the 1987 propensities to invest in US assets are overstated and those for 1988 are understated.

In conclusion, even though private foreign investors have added a massive amount of US assets to their portfolios during the 1982-88 period ($665.8 billion), their appetite for US assets was clearly higher in 1988 (41.2% of each dollar's increase in their total asset portfolios, which is an understated percentage) than it was in 1982 (40.8% of each dollar's increase in their total asset portfolios).

Foreign portfolios hold more US

During 1982-88, there was a considerable absolute and relative increase in the share of US assets in foreign portfolios. Based on specific assumptions, the Bank for International Settlements' study simulates ahead to the end of 1993. This is done to determine the evolution of the share of US assets in the rest of the world's private asset portfolios.

The simulations start with a "no change" scenario that extrapolates the current situation into the future. Specifically, the following important assumptions are made:

- the current-account deficits remain at the 1988 level ($126 billion);
- there are outflows of residential capital from the US that require financing;
- the total stock of privately-owned US foreign assets is assumed to grow at a 6% real rate (based on 1982-88 trend);
- the dollar's exchange value remains at the 1988 level;
- the annual average growth rates of the total value of foreigners' asset portfolios remain at their 1982-88 rates;
- changes in official reserve holdings are assumed to be zero.

Chart 11 presents the results of the basic "no change" simulation. Although the share of US assets in foreign private portfolios would continue to rise, moving from 24.5% of the total at the end of 1988 to 29.7% at the end of 1993, the average rates of increase would be well below those recorded in 1982-88. Indeed, the share of US assets in foreign private portfolios grew at a 9.0% annual rate from 1982 to 1988, and under the "no change" simulation, this annual growth rate would slow to 3.9% during the 1988-93 period. Over this period, there would be a relatively sharp rise in the early years, when foreigners' marginal propensities to make additions to their portfolios in the form of US assets would have to be almost as high as those in the 1982-88 period. However, by the end of the period, the share of US assets in foreigners' portfolios would level off, with the share of US assets in private portfolios growing at an annual rate of 2.8% during the 1991-93 period.

The basic simulation suggests that large future current-account deficits can be financed with only moderate overall increases in the share of US assets in non-US asset portfolios. Small, but significant, variations in the principal assumptions in the "no change" scenario (which we don't report) make little difference to that conclusion. In consequence, unless there is a dramatic change in trends, a dollar crisis caused by the unwillingness of foreigners to finance the US current-account deficits over the next few years is not in the cards.

STRATEGY: *As the foregoing articles make clear, the dollar is not likely to weaken significantly, if at all, in the foreseeable future. On the other hand, economic weakness will force the Fed to engineer another round of interest rate reductions, thus putting a lid on strong upward dollar moves, at least in the short term. As a result, we refer you to a potentially more lucrative area: cross trading. In the interim you may remain short yen with stops at 139.90, basis spot NY close.*

Our last two recommendations, short pound Sterling versus long DM, and short yen versus long DM have been highly profitable (see FC&CC *July 23, 1989, and Sept. 17, 1989). We advised closing out the Sterling cross on Oct. 25. (see Hotline Update), unfortunately one hour before Mr. Lawson's resignation. Still and all, we profited handsomely from the trade, and we now prefer to stay on the sidelines regarding Sterling.*

The short yen/long DM spread remains open and highly profitable. In our opinion it has just begun *to yield results. We would now like to introduce a slight modification in this spread.*

We believe that the Swissie is undervalued in relation to the DM, primarily because of excessive Swiss monetary growth in 1986-88. This overshooting (11.4% growth in M1, versus a more normal 3% to 4%) was due primarily to a technicality: the removal of reserve requirements for banks, which created a "temporary" blind spot. The situation is now back under control, and in fact, money supply growth has recently been negative.

Chart 12 shows a strengthening DM vis à vis *the Swissie; we now believe that the Swissie will regain lost ground and trade down to at least 84-85. We therefore recommend buying Swiss francs and selling DM as a spread. Alternatively for those long DM/short yen, we advise substituting the DM long for a Swiss franc long position, resulting in a long Swiss franc/short yen spread. QED.*

– Dr. Steve H. Hanke

Chart 6

United States: Summary balance of payments, 1982–88
(in billions of US dollars)

Items	1982–88	1982–85	1986–87	1988
	cumulative			
Current-account balance	−671.6	−268.2	−276.9	−126.5
Acquisition of foreign assets by private US residents[1]	−202.2	− 85.5	− 87.1	− 29.6
Acquisition of US assets by private non-residents	665.8	275.3	260.4	130.2
of which:				
Direct investment	209.5	70.1	81.0	58.4
Securities	282.8	136.9	109.3	46.6
Non-bank claims on US banks[2]	73.9	48.3	9.2	16.5
Other[3]	89.6	20.0	60.9	8.7
Statistical descrepancy	85.3	82.8	13.2	− 10.6
Official financing flows	122.7	− 4.5	90.6	36.6
US official assets (− = increase)	− 7.3	− 13.2	9.5	− 3.6
US official liabilities (− = decrease)	130.0	8.7	81.2	40.2

Note: Minus sign indicates a balance-of-payments outflow.

[1] Includes claims of US banks on non-bank foreign residents, as well as net US Government assets other than official reserve assets.
[2] Dollar claims only.
[3] Includes other US liabilities to non-bank foreign residents as well as net interbank flows. The latter include all net flows between US and foreign banks denominated in dollars and all net transactions of US banks denominated in foreign currencies, whether with banks or with non-bank customers.

Source: US Department of Commerce, *Survey of Current Business.*

Chart 8

Estimated changes in portfolios of non-US private investors, 1982–88[1]

Items	End-1981	End-1988	Average annual changes: Stocks at current exchange rates and asset prices	Average annual changes: Estimated flows[2]
	in billions of dollars		in percentages	
World (excluding the United States)				
Foreign private assets	1,750	4,200	13.3	9.0
Industrial countries (excluding the United States)				
Foreign private assets	1,210	3,005	13.8	9.5
Financial assets of the enterprise sector	11,020	31,080	16.0	10.3
Memorandum items:				
US assets of private non-residents[3]	*235*	*1,025*	*23.4*	*19.8*
Of which:				
In other industrial countries	*200*	*875*	*23.4*	*21.2*

Note: Stock figures are rounded to the nearest $5 billion.

[1] Excluding interbank assets.
[2] Balance-of-payments flows and financial flow-of-funds as a percentage of the respective stocks at the end of the preceding year. These growth rates measure the additions to the stocks, excluding the effects of exchange rate changes and changes in asset prices.
[3] The figures on US assets of private non-residents in this table differ from those in preceding chart because of the exclusion of interbank asset stocks and the inclusion of US Government liabilities which are not considered to be official reserve assets of foreign monetary authorities.

Chart 10

Industrial countries' private portfolio diversification into US assets: estimated additions to claims on the United States as a percentage of changes in different portfolios

Items		1982	1983	1984	1985	1986	1987	1988
Increases in US assets as a percentage of:								
(a) Increases in private foreign assets of industrial countries	A	32.0	114.2	95.9	41.4	30.7	19.5	51.5
	B	40.8	35.8	57.3	78.4	58.7	50.8	41.2
(b) Increases in financial assets of the enterprise sector in industrial countries	A	4.7	19.2	..*	3.2	2.9	1.2	7.5
	B	3.7	3.7	6.5	8.7	6.4	3.9	4.7
Memorandum item:								
Increases in private foreign assets of industrial countries as a percentage of increases in financial assets of their enterprise sectors	A	14.8	16.8	..*	7.6	9.5	6.3	14.5
	B	9.0	10.2	11.4	11.1	10.9	7.6	11.4

A = Flow ratios derived from stock changes valued at current exchange rates and asset prices.
B = Flow ratios derived from balance-of-payments capital transactions and flow-of-funds data.

* The absence of ratio figures is due to the fact that the financial assets of the enterprise sector in industrial countries, measured in current dollar terms, declined in 1984.

Chart 7

US private international investment position, 1981–88

Items	1981	1985	1988
	end-year figures, in billions of US dollars		
US liabilities to private foreigners[1]			
Direct investment	108.7	184.6	328.9
US Treasury securities	18.5	83.6	96.6
Other US securities	75.1	206.2	393.6
Other private non-bank liabilities	30.6	29.5	35.5
US bank liabilities	165.4	354.5	609.5
Total	398.3	858.4	1,464.1
US private assets[2]			
Direct investment	228.3	230.3	326.9
Foreign securities	63.2	112.2	156.8
Other private non-bank claims	35.9	29.0	32.9
US bank claims	293.5	447.4	603.8
Total	620.9	818.9	1,120.4
Net private investment position (− = net liabilities)	222.6	−39.5	−343.7

[1] Foreign assets in the United States, excluding foreign official assets.
[2] US assets abroad, excluding US official reserve assets and US Government assets.

Source: US Department of Commerce, *Survey of Current Business.*

Chart 9

Estimated changes in the share of US assets in the rest of the world's private asset portfolios, 1981–88

Items	End of 1981	1982	1983	1984	1985	1986	1987	1988
US assets as a percentage of the rest of the world's private foreign assets	13.4	13.2	15.7	18.6	21.4	23.0	22.8	24.5
US assets as a percentage of industrial countries' private foreign assets	16.5	17.2	21.0	25.2	28.2	28.8	27.0	29.0
US assets as a percentage of financial assets of the enterprise sector in industrial countries	1.8	1.9	2.4	3.1	3.1	3.1	2.5	2.8
Memorandum item:								
Private foreign assets of industrial countries as a percentage of financial assets of their enterprise sectors	*11.0*	*11.1*	*11.3*	*12.2*	*11.0*	*10.6*	*9.4*	*9.7*

Note: Ratios are derived on the basis of end-year stock figures and therefore include valuation changes in the stock of assets of the rest of the world induced by changes in the exchange value of the dollar vis-à-vis other currencies and changes in asset prices.

Chart 11

Simulated evolution of the share of US assets in the rest of the world's private asset portfolios, 1989–93[1]

Items	End of 1988	1989	1990	1991	1992	1993
US assets as a percentage of the rest of the world's private foreign assets	24.5	26.2	27.5	28.5	29.2	29.7
US assets as a percentage of industrial countries' private foreign assets	29.0	30.9	32.4	33.4	34.0	34.4
US assets as a percentage of financial assets of the enterprise sector in industrial countries	2.8	3.0	3.1	3.2	3.2	3.2
Memorandum items:						
Private foreign assets of industrial countries as a percentage of financial assets of their enterprise sectors	*9.7*	*9.6*	*9.5*	*9.5*	*9.4*	*9.4*
Assumed US financing requirements[2]	..	*172*	*175*	*178*	*181*	*184*
Of which:						
Current-account deficit	*126*	*126*	*126*	*126*	*126*	*126*

[1] The assumptions underlying these simulations are spelled out in the text.
[2] Sum of the current-account deficit and capital outflows of private US residents.

Chart 12 – SF per DM

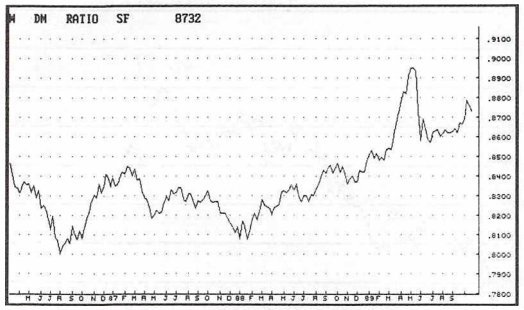


Chart 13 - ¥ per DM

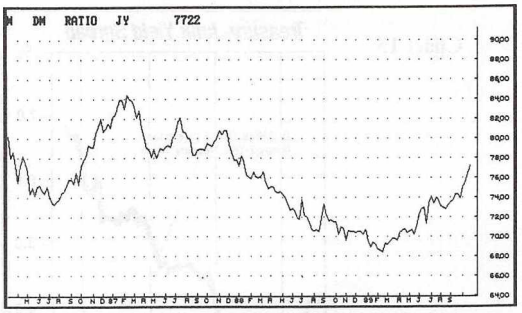
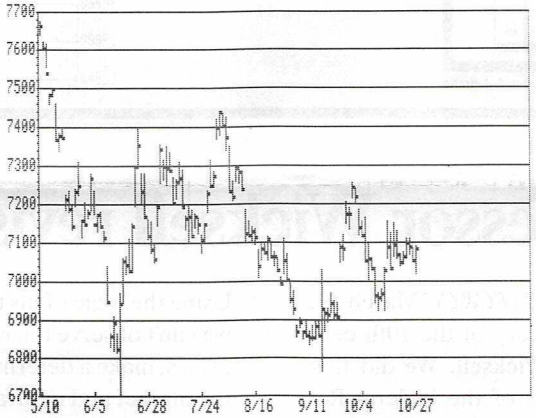


Chart 14

CME Japanese Yen Dec '89



STOCK MARKET INDEXES

In the paws of the bear

A classic bear market is in progress. Incredible complacency at the fact that there was no follow-through panic. Has anyone ever seen panic in the early stages of a bear market? Yes, of course, 1929, but the example is too well-worn. And besides, we did have our 1929 in 1987. The difference is that after the 1929 crash we enjoyed only four to six months of recovery and complacency, while after October 1987, because the public had been too well educated on the 1929 model and because the Fed was slightly more adept at managing crisis, we enjoyed almost two years of bliss.

The "job" was so well done that no one really suspects that we may be, in fact, embarked on a similar voyage. As discussed last month, the key to this market lies with the possibility of debt liquidation. If we are fortunate enough to skirt debt liquidation, then it will be a normal traditional bear market that will see stock quotes drop 40% to 50% over 18 to 24 months. If on the other hand we encounter debt liquidation and its sequence of deflation/recession, then all bets are off.

There are two important considerations: not to prejudge the scenario and not to be seduced by cheap prices. The first one will be statistically observable: If you detect banks as a whole liquidating their loan portfolios and building up liquidity, stay out of the way. The second consideration is more subtle: When is "cheap" cheap enough? Then only *psychological* factors will be of help in answering the question. The answer: When desperation is universal.

Monitoring the progress of this bear market is not all that difficult. The list of new 12-month lows is expanding. This week it ran 4-1 versus new highs. A sign of naiveté and misplaced confidence is the rallying attempts made by stock prices each time a new rumor surfaces about a UAL acquisition. In the meantime, one deal after another is falling apart with the collapse of the junk bond market. Junk bond rate spreads to Treasuries (Chart 15) continue to widen, and of course, the index does not contain the already insolvent issues (Integrated, Southmark, etc.) or the highly illiquid ones. It is quite unlikely that we will see new LBOs — for a long time to come.

And therein lies the difference in stock market valuation. As an LBO, the market is worth *grosso modo* almost double what it is worth as an investment; UAL is a case in point: $300/share as an LBO and trading at $170/share and on its way to $120/share as an investment. Since the S&P 500 contained in good measure a sizable LBO premium (70% of the way ?), it is only proper for prices to experience a downward readjustment with the exhaustion of the LBO phenomenon.

STRATEGY: *Implied volatilities in options have been increasing ever since we advised purchasing puts around the 15% mark. Should they reach excessive levels, we will consider taking profits. In the meantime keep posted, as the market should work its way lower.*

Chart 15

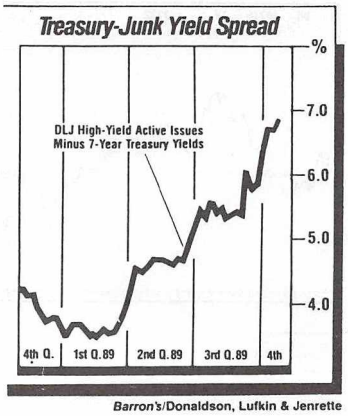


Chart 16 – CME S&P 500 Index

INTEREST RATES

Professor Wicksell revisited

In our piece, "Old Wine in a New Bottle" (*FC&CC* March 19, 1989), we introduced the monetary theory of the 19th century Swedish economist, Prof. Knut Wicksell. We did this because we thought that key members of the Federal Reserve's Board of Governors were neo-Wicksellians. Since then, we have confirmed, through personal discussions with the relevant Governors, that this is, indeed, the case. In consequence, at this key economic turning point, it is prudent to focus our attention on Prof. Wicksell's theory and its implications for the future course for inflation and Fed policy.

Two interest rates

The central element in Prof. Wicksell's analysis, which has also been employed by members of the Austrian School of Economics, is the sharp distinction between two interest rates: (1) the money or market rate, and (2) the natural or equilibrium rate. The former is the rate charged on loans in the money market. The latter is the internal rate of return on newly created capital, or stated differently, it is the rate that equates aggregate demand for real output with available supply.

According to Wicksell, as long as the market rate is equal to the natural rate, aggregate demand will equal supply, and there will be price stability. If the market and natural rates diverge, there will be either inflation or deflation. For example, if the market rate is less than the natural rate, aggregate demand will exceed supply, and inflation will occur. Conversely, if the market rate exceeds the natural rate, aggregate demand will fall short of supply, and prices will fall.

To stabilize prices, it follows that a central bank should pursue a monetary policy that attempts to keep the money rate equal to the natural rate. There is, however, one problem with this Wicksellian policy rule: It requires knowledge of the natural rate of interest. This creates a practical problem precisely because the natural rate is a non-observable variable that is incapable of objective measurement.

This practical problem didn't deter Wicksell, however. Using the logic of his theory, Wicksell noted that even though we can't observe the natural rate, we can observe commodity prices, make a determination about the relationship between the market and natural rate, and adjust monetary policy so as to stabilize prices. For example, when commodity prices are rising, the market rate is less than the natural rate and the central bank should increase the market rate. Conversely, when commodity prices are falling, the market rate exceeds the natural rate and the central bank should reduce the market rate.

While adopting Prof. Wicksell's theory, the modern Wicksellians at the Federal Reserve have slightly reformulated the professor's operating rules. When commodity prices are rising, yields on long bonds are rising, and the dollar's value is falling, the money rate of interest is below the natural rate, and monetary policy is too loose. Hence, the Fed should raise short rates. Alternatively, the money rate of interest is above the natural rate and monetary policy is too tight when commodity prices are falling, yields on long bonds are falling, and the dollar's value is rising. Hence, the Fed should lower short rates.

Money supply growth rate falling

In consequence of the Fed following the neo-Wicksellian policy-setting model over the past few years, the rate of growth in the nation's monetary base and money supply (M2) have fallen sharply. We should emphasize that with neo-Wicksellian policy rules, changes in the monetary base and money supply are not policy objectives. Rather, changes in these monetary magnitudes are the consequence of the Fed's attempts to set the money rate of interest equal to the natural rate.

Even though the Fed's policy-setting rules do not target the monetary base or money supply, changes in the money supply do have consequences for inflation. We address the money supply (M2)-inflation linkage. Changes in prices (inflation or deflation) are dominated by changes in the quantity of money per unit of output. Moreover, it takes roughly two

years for a change in the rate of monetary growth to affect significantly the behavior of prices.

For the past two years, monetary growth rates have been 4.2% and 4.1%. Following Professor Milton Friedman, we subtract three percentage points (roughly the real growth in the economy during the last quarter-century). This yields implied inflation rates (measured by the GNP deflator) of 1.2% and 1.1% for the years ending in the first quarters of 1990 and 1991. Hence, the sharp fall in the GNP deflator from the second quarter (4.6%) to the third quarter of 1989 (2.9%) was not an anomaly. Indeed, we anticipate that this trend will continue and is already in the monetary pipeline.

Implications

With inflation coming down, long bond yields will come down, and the dollar will remain firm. Given the Fed's neo-Wicksellian operating rules, the Fed will continue to gradually ease credit by letting short rates come down to the natural rate.

– Dr. Steve H. Hanke

STRATEGY: *We remain bullish on T-bonds as we see them trade up to 117 (around a 6.5% return). Should a full deflation occur, T-bonds should do even better.*

Retain call options on both T-bills and T-bonds.

Chart 17 – CME 90 Day T-Bill Mar '90

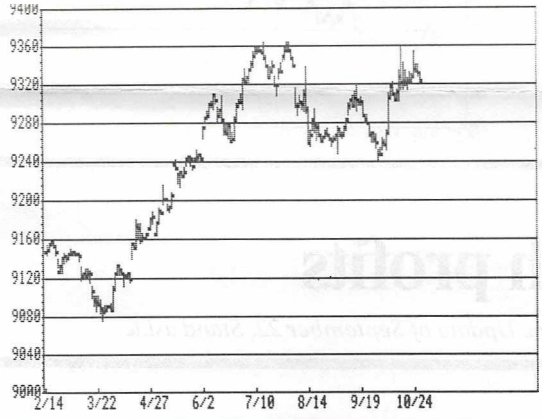
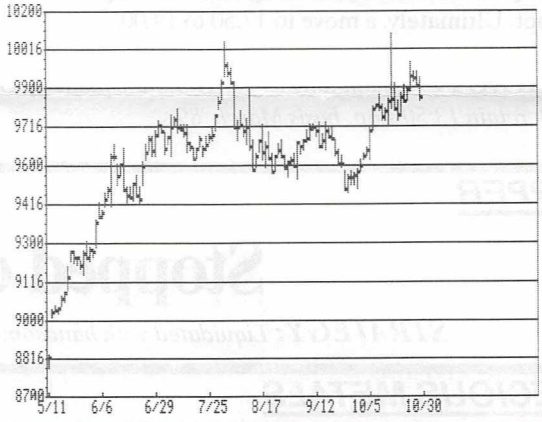


Chart 18 – CBT T-Bond (Day) Mar '90



LONDON 3-MONTH DEPOSIT RATES

The last straw

The recent hike in the Base Rate to 15% was the proverbial straw that broke the camel's back. It was unnecessary from an economic point of view (as we analyzed it last month), given that the UK had already begun a recession. It cost Chancellor of the Exchequer Nigel Lawson his job, damaging seriously Mrs. Thatcher's credibility.

The trade balance should soon begin to show the impact coming from a collapse in imports, while unemployment, typically a lagging indicator, will begin rising by the turn of the year.

We firmly believe that the Bank of England will begin lowering rates as early as the first visible impact in the trade balance, and that may be as early as December.

STRATEGY: *While the Banks may move only in one-half point reductions so as not to damage Sterling, the March '90, trading at 86.10 (implying a 13.9% Base Rate by late March), is an outstanding buy. Each point represents £25. Our target is a profit of 390 points per contract (a 10% rate on three-month deposit rates).*

Chart 19 – LIF Short Sterling Mar '90

SUGAR

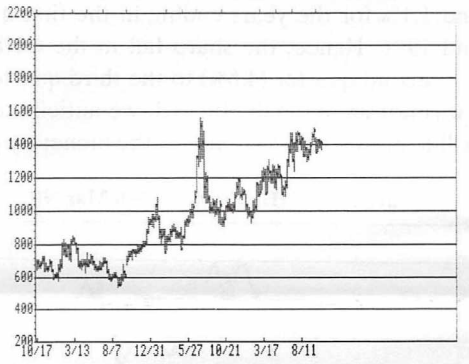
Getting ready for a breakout

The game of chicken continues. Those who need sugar try to mask their intentions, but they seem to be less and less capable of "fooling" the market. Supplies are tightening, as evidenced from the narrowing price movements and the substantial amount of hedge lifting (open interest has fallen quite dramatically).

The market is getting ready for a major upside breakout. First target: the recent 15.64 highs on the expired October contract. Ultimately, a move to 17.50 to 19.00.

STRATEGY: *Remain long as per Hotline Update of October 13; retain 13.50 stop, basis March '89.*

Chart 20 – N.Y. #11 Sugar



COPPER

Stopped out with profits

STRATEGY: *Liquidated with handsome profits per Hotline Update of September 22. Stand aside.*

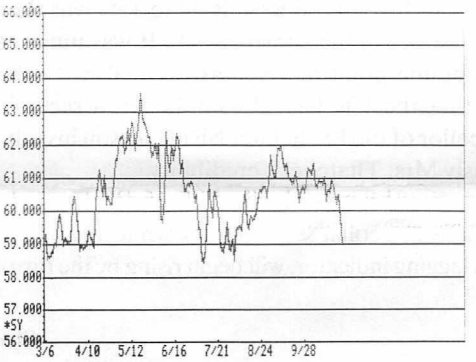
PRECIOUS METALS

Deflation bearish for gold

Gold has gotten a little ahead of itself, followed by nervousness in the junk bond market. The deflationary verdict is bearish for gold.

STRATEGY: *Retain long CRB/short gold spread, leaving stops at .58.*

Chart 21 – CRB/Gold Ratio



FRIEDBERG CAPITAL MARKETS

Diceon Electronics

We are adding yet another US-dollar-denominated convertible bond to our selection.

Diceon Electronics Inc.
Coupon: 5.5% (semi annual)
Due: 01/03/12
Yield to maturity: 13.21%
Price (subject to change): 46½
Traded: US over-the-counter market.
Conversion terms: 25.316 shares per $1,000 bond, or convertible at $39.50 per share.
Recent stock price: $7.

Diceon Electronics Inc. is the leading independent producer of high technology, multilayer circuit boards for the electronics industry in the United States. The company serves a customer base made up primarily of original equipment manufacturers in the data processing telecommunications and instrumentation industries.

Net Earnings have been consistent until 1989.

(000s) 1989	1988	1987	1986
-2,132*	9,858	9,535	7,083

*for 9 months ended July 1, 1989

However, cash flow available to support debt service has been excellent.

	1988	1987	1986
Net income before income tax	15,757	17,835	13,736
Add back:			
Interest expense	2,011	1,431	486
Depreciation and amortization	7,835	4,761	3,691
Total	25,604	24,027	17,913
Debt service	2,041	1,431	486
Excess	23,593	22,596	17,427
Coverage ratio	12.73:1	16.79:1	36.86:1

Other relevant statistics (fiscal 1988)

Net sales	$140,685,000
Current assets	44,023,000 (July 1, 89)
Long-term debt	14,913,000 (July 1, 89)
Book value	33,200,000 (July 1, 89)
per share	($9.39 Sept. 88)
Earnings per share	$1.62 (Sept. 88)
Long-term debt as % of total capitalization	37.8% (July '89)
Total Debt — tangible equity	47.9% (July '89)
Bonds outstanding $32,000,000	(issue size $32,000,000)
Investment value	44.9 (source: Merrill Lynch)
Rating:	B2 (Moody's)
Shares outstanding	5,811,000

Results for the first nine months of 1989 were very poor due to insufficient order level, weak demand from the computer industry, and major price deterioration. The company does not expect outside conditions to change in the near term and has therefore made adjustments internally to reduce their costs, including reducing its number of employees by approximately 500. Moreover, in 1988 the company also initiated an internal management restructuring.

Fixed charges coverage is far superior to popular junk bonds.

As can be seen, the risk at these price levels (46½) is relatively small when compared with investment value, while providing an attractive 13.21% return, thus paying very little for a 23-year call option.

Alliant Computer: continued profitability

For the recently-released second-quarter report (June 30 '89), the company reported that revenues were up from the same period a year ago by almost 20%.

The significant investments made by Alliant in 1988 are paying off. In the past year, Alliant expanded worldwide sales and support operations, acquired Raster Technologies, and committed a significant percentage of revenues to research and development efforts ($5.224 million for first six months of 1989 alone).

The bond has not moved up in price since our initial recommendation at 48¼ (May 21, 1989). At present levels, the bond yields 16.29% and is considered even more attractive.

Chart 23
Breakeven exchange rates for US$ – based investor

This analysis shows a "snapshot" of the relationship between interest rate differentials and rates of exchange. The breakeven rate measures how far the foreign currency has to devalue (for NZ$, A$, DKr) or revalue (for DM, SF, JY) before the interest rate advantage/disadvantage is overcome by currency depreciation/appreciation.

	U.S. $	NEW ZEALAND $	AUSTRALIAN $	DEUTSCHEMARK	SWISS FRANC	JAPANESE YEN	DANISH KRONE
1 year	7.79%	McDonald's 16¾ 15/8/90 yields 14.36% (.5584 NZ/US)					
2 year	7.79%		CIBC 13% 13/3/91 yields 16.3% (.6679 A$/US)				Stockholm 10⅝% 10/11/91, yields 10.99% (7.616 US/Dkr)
4 year	7.81%	Tourist Hotel 0% 4/6/93, yields 13.87% (.476 NZ/US)				Canada 5⅝% 23/7/93, yields 5.42% (129.7 US/JY)	
7 year	7.88%			Hydro Quebec 5½% 1/5/96 yields 7.24% (1.766 US/DM)			
9 year	7.88%				Australia 5% 30/10/98 yields 6.3% (1.412 US/SF)		
Spot Exchange Rate	N/A	.5925	.7775	1.841	1.6125	141.90	7.1835

**For example, in parentheses, since a US$ based investor would receive 657 basis points (1436-779) by holding the McDonald's NZ$ bond, the NZ$ can depreciate to .5584 NZ/US from the present spot exchange rate of .5925 NZ/US over the next 1 year for the NZ$ investment to break even with current US$ rates of interest. Assumes that bonds are held to maturity, and coupons are reinvested.

FOREX RATES & UPDATE

Currency	Spot	3-Month	12-Month	Comments vis à vis US$	Comments vis à vis DM (Spot DM: 1.8300)
Australian dollar	.7787-.7794	.7607-.7616	.7134-.7148	Neutral	Neutral
*Belgian franc	38.35-38.45	38.43-38.56	38.65-38.90	Cover	Neutral
*Danish krone	7.1575-7.1675	7.2055-7.2105	7.3175-7.3345	Cover	Buy
*Dutch guilder	2.0640-2.0650	2.0623-2.0638	2.0605-2.0625	Cover	Neutral
Greek drachma	164.10-164.20	168.60-173.20	178.60-195.20	Remain short	Remain short
*Hong Kong dollar	7.8090-7.8100	7.8040-7.8070	7.8100-7.8220	Neutral	Liquidate
*Irish punt	1.4485-1.4500	Not available	Not available	Cover	Neutral
*Italian lira	1344-1346	1357-1361	1396-1403	Cover	Neutral
*Kuwaiti dinar	.29950-.29990	.29900-.29980	.29850-.30000	Cover	Neutral
Malaysian ringgit	2.6950-2.6960	2.6790-2.6830	2.6450-2.6600	Neutral	Neutral
New Zealand dollar	.5915-.5925	.5838-.5851	.5625-.5650	Neutral	Neutral
*Norwegian krone	6.8775-6.8825	6.9225-6.9335	7.0535-7.0725	Cover	Neutral
*Portugese escudo	157.40-157.50	159.90-160.35	168.20-171.70	Cover	Neutral
Saudi Arabian riyal	3.7510-3.7510	3.7485-3.7505	3.7480-3.7500	Remain short	Remain short
Singapore dollar	1.9610-1.9620	1.9470-1.9510	1.9115-1.9265	Neutral	Neutral
*Spanish peseta	116.60-116.70	118.40-118.60	122.90-123.20	Cover	Neutral
*Swedish krona	6.3900-6.4000	6.4450-6.4500	6.6000-6.6150	Cover	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

Flash update, 11:50 a.m.: Monday, September 18:
Liquidate long March sugar positions at market, accepting profits. Please note, the market letter which was published today, *did not* include this recommendation.

Tuesday, September 19:
As per our flash of yesterday, you have liquidated long sugar positions, accepting profits. The market letter is in the mail.

Friday, September 22:
Liquidate long copper positions at market. Also as per our flash update of Monday, 11:50 a.m., we have liquidated long sugar positions, accepting profits.

Tuesday, September 26:
No changes or new recommendations.

Friday, September 29:
No changes or new recommendations.

Tuesday, October 3:
No changes or new recommendations.

Flash update, 12:45 p.m., Thursday, October 5:
Reinstate immediately all short positions in JY futures at market. Place initial stops at 139.90, basis spot NY, close only.

Friday, October 6:
This is a repeat of Thursday's message. Reinstate immediately all short positions in JY futures at market. Place initial stops at 139.00, basis spot NY, close only.

Tuesday, October 10:
No changes or new recommendations.

Friday, October 13:
No changes, *but* it is important that you retain all S&P put options and all T-bill and T-bond call options in view of the action in today's markts. One new recommendation: Buy March sugar at market. Place initial stops at 1350, close only.

Tuesday, October 17:
No changes or new recommendations.

Friday, October 20:
No changes or new recommendations.

Tuesday, October 24:
No changes or new recommendations.

Wednesday, October 25:
Liquidate Sterling cross, that is, cover short British pound and simultaneously liquidate long DM positions at market. The trade has been quite profitable. Next regular update will be Friday, October 27, 1989.

Friday, October 27:
Review of this past week's recommendations. On Wednesday, October 25, we liquidated our Sterling cross, that is, covered the short British pound and simultaneously liquidated the long DM positions at market. There were no other changes or new recommendations.

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