

Hedge Funds: *Exeunt Omnes*

Changing circumstances are systematically eliminating the arbitrage opportunities on which these raptors fed; a few unhappy endings.

Scott E. Pardee

One by one, the great managers of hedge funds are leaving the arena of finance. Some are scaling back their operations, reducing their positions and returning capital to their investors. Others are wrapping up their operations entirely, taking their money and employing it in humanitarian and artistic pursuits suitable to their tastes. This is in the finest tradition of financiers over the centuries, who have contributed to the arts and funded entire universities.

At the same time, several hedge fund managers have blown themselves up, leaving themselves and their investors a lot less rich than they were. These last managers usually are seeking new vehicles by which they can arise phoenix-like from the ashes of their own destruction. Meanwhile, they are selling the vestiges of their recent wealth, in the tradition of fallen financiers.

There are three reasons for the departures and their varied circumstances: the markets; the models; and the men themselves.

The markets have clearly changed.

"Hedge fund," of course, is a misnomer. The idea of the hedge is to take offsetting positions, balancing off otherwise unavoidable risks to avoid losses. However, managers of hedge funds seek to use the two positions, long and short, to take certain specified risks from which they hope to profit.

Many such opportunities arose when central banks stoutly defended exchange

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Exchange Strategies

The euro's accelerating bandwagon and the Fed's rate cut; effects of the relative motion factor among the "Big Three."

Brendan Murphy

Maintain strategic positions aimed at euro-dollar parity during the first quarter of 2001. However, be prepared, in tactical terms, for a fair amount of backing and filling. This will occur as markets come to grips with the risk of a U.S. recession on one hand, and the possibility that timely Federal Reserve action may avert one.

Keep laddered sell stops in place under \$0.95, to lock in gains on the euro's recent surge, but also put buy stops in place overhead. That way, you won't miss too much of the next move up, which could come quite soon. Momentum now depends less on technical factors than on sentiment about how steep, deep and long the U.S. downturn will be.

Sentiment is a critical factor in the evolution of the economy as well, given that we may be on the cusp of a recession or in yet another one of those jarring periods of adjustment typical of just-in-time economics. The Fed of course is taking no chances that it might be the former, stating, with its 50 basis point cut in the funds rate on January 3rd, that "the risks are weighted mainly toward conditions that may generate economic weakness in the foreseeable future."

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Highlights of this issue:

Scott Pardee notes that the march of time has placed hedge fund managers in the category of blacksmiths and fletchers.

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Jump on the euro wagon while you can still catch up, urges currency strategist and contributing editor Brendan Murphy.

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IR's weekly "World Value of the Dollar" exchange rate supplement.

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Rates, trends and forecasts for major currency pairs.

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Hedge Funds/Exchange Strategies

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rates at untenable levels, whether the pound sterling in 1992, the Thai baht in 1997, etc. By now fewer currencies are fixed. Also, the euro has extinguished 11 currencies, some of which occasionally provided huge profits to speculators.

Other funds specialized in “convergence trades,” e.g., betting on the convergence of interest rates among European countries in the run-up to the euro. There are fewer such opportunities now, and when they occur, they are in much less liquid markets.

Still others concentrated on interest rate spreads, such as the “yen-carry” trade. Money market rates in Japan are still near zero and U.S. rates are 6 percent *per annum*, but any gain there can be wiped out by swings in the dollar-yen exchange rate, of 6 percent or more, in a day or two.

Even as markets change, models break down.

A trader may still create a quantitative model that gains an edge over the competition. As other traders develop the same model, the creator soon loses that edge. Models based on historical data work poorly when an unusual event happens. Models based on continuous time series fail when the underlying markets become illiquid or close down entirely.

Indeed, the regulators and senior managers of major financial firms now have models, such as *Value at Risk*, by which they have clamped down on some of the free-wheeling traders of the past. It is no accident that most hedge fund

Eventually, successful traders become headstrong, holding on to sour positions that they once would have eliminated quickly.

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That move bolstered market psychology (though punters were fast to book equity gains) and reverberated through the media in such a way as to comfort consumer sentiment, damaged by the long downturn in stocks and the anxious, unsettling presidential election dénouement.

To a great extent, however, first-quarter economic developments are baked in the cake; corporations and other economic agents have been responding to the danger signals for some time and the consequences of their adjustments will play out at least through mid-February (for instance, the collapse in auto sales).

Activity reports for December are mostly declaring themselves negative, so that market makers will be scrutinizing January reports, particularly the weekly unemployment claims, to measure the severity of the downturn. It won't be easy to separate real effects from self-reinforcing effects, i.e., manufacturing cuts based on excessive in-

managers are now out on their own.

The men themselves begin to make mistakes (the masculine reference may not be “PC,” but this has been a *macho* business). Most started out in larger banks and securities companies, learning the business from the bottom up. They worked 24/7 to succeed.

In any profession it is hard to stay at the top for an extended period. Eventually, successful traders become headstrong, holding on to sour positions that they once would have eliminated quickly. They begin to trade markets in which they have little expertise, and hence no competitive edge. They try to groom younger traders as helpmates and eventual successors but quarrel with them over differences in trading styles.

In the months ahead, more hedge fund managers will leave the trading arena. Most will leave with their heads high and their capital intact. Others will be running helter-skelter ahead of angry mobs of disillusioned investors, creditors, and even, perhaps, Federal agents. □

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ventories as opposed to companies looking to get ahead of the curve in here.

Fed's Stitch in Time?

That is, of course, the utility of timely and dramatic Fed action. **Federal Reserve Board** Chairman *Alan Greenspan* was fully cognizant, no doubt, of implications of easing between meetings and by double the usual 25 basis point move.

We are somewhat skeptical that the Fed will pile another 50 basis points onto that ease on January 30th, as some in markets have ventured to predict. More likely it will move incrementally, barring an even more alarming collapse in activity, which we think unlikely given the absence of significant economic imbalances.

The equities correction left many institutional and private investors still holding longer-term gains, while the Internet bubble collapse mainly humbled venture capitalists and unmade some “dot-com” millionaires.

We are somewhat skeptical that the Fed will pile another 50 basis points onto that ease on January 30th, as some in markets have ventured to predict.

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The Treasury and Electronic Trading

An analysis of how corporate treasury departments can optimize gains from on-line trading.

Michael Radin, TreasuryConnect

Since the 1990s, investments in new systems and practices have contributed greatly to treasury automation. These investments were a response to the continuous pressure corporate treasury departments faced to meet ever expanding reporting and processing requirements while simultaneously holding the line on—or even reducing—operating expenses.

Treasury departments have tended to invest in back office and accounting systems first, and front office deal capture and analytical systems later. For many corporations, the next logical step in this “back-to-front” strategy will be to look for ways to automate the entire trade cycle, beginning with price search and deal execution.

Indeed, treasurers express keen interest in trading on-line for their corporate accounts. According to a survey by the *Association of Finan-*

cial Professionals, 40 percent of treasurers have already traded on-line, while 80 percent expect to trade on-line within 18 months.

To meet the anticipated demand for on-line trading, a bevy of Internet trading platforms and *application service providers* (ASPs) have sprung up, to facilitate on-line execution of many of the financial products utilized by corporate treasuries. The list below offers a representative sampling:

- **Foreign Exchange:** Currenex, Atrix, FxAll, CFOWeb
- **Commercial Paper:** CP Markets
- **Credit Derivatives:** CreditEx
- **Interest Rate Derivatives:** TreasuryConnect, Blackbird, SwapsWire

A pattern has emerged among these offer-
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Financial Instruments and Risk Management

Various exposures and various solutions: derivatives and forwards provide the answer to management of common corporate financial/operating risks.

Warren Edwardes, Delphi Risk Management

Derivatives both hedge or eliminate risks, and create risks. “Hedge funds” such as *Princeton Global Management*, which ceased trading in September, 1999, amid accusations of fraud, do anything but hedge. They deliberately take risks in futures markets to generate higher returns.

This article examines the main economic and business risks facing an organization, against which immunization is required.

Currency Risk Management

Ignoring “derivatives” used by ancient cultures and Dutch tulip dealers—often quoted in histories of derivatives—modern financial risk management begins following the collapse of the era of fixed exchange rates and the gold standard. The

process accelerated with global liberalization of foreign exchange controls which, in the UK, occurred with Margaret Thatcher’s election at the end of the 1970s.

The consequent floating and volatile exchange rates in the UK meant that corporate treasurers had to actively manage foreign exchange exposure resulting from international trade. The financial instrument used was the forward foreign exchange contract, which was an agreement to exchange a certain principal amount of one currency for a certain amount of another currency at an agreed exchange rate and on a specified future date.

There are three types of foreign exchange
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Modern financial risk management begins following the collapse of the era of fixed exchange rates and the gold standard. The process accelerated with global liberalization of foreign exchange controls.

Treasury Technology	Risk Management	Snapshots	Currencies	Capital Markets
On-line trading is reliable, widely available and solves a multitude of problems inherent in paper-based dealing, insists this adherent.	A catalog of financial and operational risks for MNCs that can be solved—or mitigated—with derivatives.	Preserving the participation exemption in The Netherlands; a safety net to contain Asian currency volatility.	Indicative options market volatilities for major currencies vs. the dollar and euro.	The Latin regional initiative in private pension funds produced a pool of investment capital—where has it gone?
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Treasury Technology

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ings with respect to the kinds of systems being utilized for different kinds of products.

For commodity-type instruments with large trading volumes (e.g., commercial paper and foreign exchange), systems that “match” buyers and sellers, within preference and counter party requirements, are being used. For complex structured instruments, such as interest rate derivatives, the auction environment appears to be the preferred format.

Regardless of the product and on-line methodology they choose to use, treasurers should be thinking about how they can maximize the value from on-line technologies and take full advantage of all the benefits inherent in electronic execution.

To understand how electronic trading adds value, it is helpful to review some of the shortcomings inherent in existing trading practices based on paper and telephones. Obvious problems include the cumbersome nature of the phone and paper environment. People may be unavailable, trade details can be written down incorrectly, and/or dealers may have different interpretations of customer needs and expectations.

Depending on the complexity of the trade and the volatility of the market, having to call multiple dealers for quotes can hinder price discovery.

A dealer who quoted a rate at 10 a.m. might no longer want to honor it at 10:15. Therefore, time-constrained treasury professionals are unlikely to speak with more than two or three dealers on any given trade. Multi-dealer on-line systems address this problem by accommodating more participants simultaneously.

Errors are another concern. Trade data, for example, can be recorded incorrectly when it is manually copied from paper records to elec-

tronic systems. A recent study by the *International Swaps and Derivatives Association* found a 24 percent error rate for front-end trade ticket details.

Depending on the nature of the trade and the dollar value involved, undetected errors can run to tens of thousands of dollars in tangible and intangible costs. Tangible costs include the time it takes to correct the systems involved, restate accounting and financial reports, missed opportunities, and unanticipated market exposure. Intangible costs include attention from auditors, management, shareholders, and even regulatory bodies depending on your industry.

Another drawback to paper-based systems is that end users cannot readily audit their trades and measure price competitiveness or effectiveness. Since quotes from losing dealers typically do not get recorded or are stored in a haphazard way, a corporate treasurer is unlikely to have data on how well his dealers perform over time.

On-line trading technology addresses many of these issues and delivers benefits at every stage of the trade processing cycle.

From origination to back office accounting, a range of processes—pre-trade analysis, price discovery, trade execution, position update, settlement and confirmation, internal reporting, and accounting—can be accomplished more efficiently, with less potential for error if they are performed electronically.

Electronic Trade Definition

Using the example of a complex instrument like an interest rate swap, even the simple task of communicating the terms of the deal can be frustrating.

Depending on the unique aspects of the

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For commodity-type instruments with large trading volumes (e.g., commercial paper and foreign exchange), systems that “match” buyers and sellers are being used.

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Dutch Participation Exemption Survives Unchanged...for Now

Late last year, The Netherlands' State Secretary of Finance announced temporary withdrawal of proposed legislation that would amend the participation exemption. The multinational consulting and accounting firm **Deloitte Touche Tohmatsu** (DTT) reports that, under the withdrawn proposal, the participation exemption would have been replaced by a credit system for certain EU shareholdings held as portfolio investments.

The participation exemption provides a tax exemption for dividends and capital gains arising from certain qualifying shareholdings in resident and non-resident companies. One of the requirements is that the shareholding of the Dutch corporate taxpayer not be held as a portfolio investment. The participation exemption does apply, however, if the shareholding qualifies for the *EC Parent-Subsidiary Directive*; in that case, the shareholding is treated as meeting all requirements.

Under the proposal, now withdrawn, if a Dutch company owns a portfolio investment in an EU subsidiary that qualifies for the EC Parent-Subsidiary Directive, the participation exemption would not apply. Instead, a credit would be available for dividend income only, equal to the lesser of: (i) foreign tax on profits attributable to the distributed profits; or (ii) Dutch corporate income tax attributable to the gross distribution. Capital gains on passive investments would be fully taxable.

According to DTT, the State Secretary of Finance explained the proposal was being withdrawn because of its likely detrimental effect on competitiveness of The Netherlands' tax regime, as well as the ongoing discussions within the EU on harmful tax competition. A special task force will be established to examine future developments affecting the *Dutch Corporate Income Tax Act* in general and consider proposed changes in a broader context.

The proposal will be resubmitted to Parliament in 2001 so the legislation may enter into effect as of January 1st, 2002, one year after the original date slated for introduction. Although the State Secretary has indicated the proposal would be resubmitted in the same format, depending on the findings of the special tax force, its scope may be changed.

ASEAN Agreement for Currency "Safety Net"

The English-language Japanese business newspaper "Nikkei Weekly" reports activity has begun to implement an accord among Asian nations regarding unusual assistance to combat foreign-currency shortages.

The *Chiang Mai Initiative*, named for the Thai city in which it was launched, involves the 10 members of the **Association of Southeast Asian Nations** (ASEAN), plus Japan, China and South Korea. Its basic framework was agreed at the Singapore summit meeting of the *ASEAN+3* in November; negotiations will soon start to flesh it out into a series of bilateral cooperation pacts.

The framework agreement calls for expansion of a currency swap accord, already existing among five ASEAN members for reciprocal supply of foreign exchange, with a fivefold increase in value to \$1 billion equivalent. A series of bilateral pacts will consist of currency swap agreements and agreements on repurchase deals in foreign-currency bonds. The swap facility will deal with structural balance of payments problems on the one hand and temporary liquidity gaps on the other.

The Chiang Mai Initiative is similar to the **Asian Monetary Fund** (AMF) plan of 1997, proposed by Japan but retracted amid a chorus of opposition. "The new initiative is of the same philosophy as the AMF," said Japanese Finance Minister *Kiichi Miyazawa*. "While it takes the form of bilateral agreements," his aides echoed, "it is in nature similar to multilateral cooperation."

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Risk Management

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or currency exposures: transaction exposure; translation exposure; and economic exposure.

Transaction Exposure

Transaction exposure is risk of depreciation of a foreign currency receivable or appreciation of a foreign currency payable, measured in terms of the home or accounting currency of an entity.

Consider a British car company, **Rover**, exporting cars to Spain. Sales are in pesetas, which, since January 1st, 1999, are a denomination of the euro. In this case, transaction exposure arises from the risk that the euros received through the sale of Rover cars in Spain could depreciate against sterling, and thus wipe out the required profit margin or even lead to a loss.

Translation Exposure

Transaction exposure is a function of revaluation of assets and liabilities. Translation exposure, therefore, is risk of depreciation of a foreign currency-denominated asset, or appreciation of a foreign currency-denominated liability.

Continuing an analysis of Rover, it is a British company, but is wholly owned by Germany's BMW. To the best of my knowledge, Rover's balance sheet is denominated in sterling, while BMW has a balance sheet denominated in German marks, like Spanish Pesetas a denomination of the euro.

Even if Rover proves profitable in sterling terms, if sterling depreciates against the euro, the value of the company, an asset in BMW's books, will fall and BMW would incur a translation loss.

Translation exposure is not a bookkeeping statistic. Real exposure materializes, leading to cash losses, when an asset is sold or liquidated, or a liability is repaid at maturity.

In the early 1980s, **Laker Airways**, a small UK airline, went into liquidation partly through such exposures. The company had a substantial LIBOR-linked, dollar-denominated loan, raised to pay for new DC10 aircraft. The airline's year-by-year profitability was dominated by foreign exchange gains, as sterling had appreciated against the dollar, from \$1.50 to \$2.40, and so its management was not persuaded by its bankers to hedge the company's translation exposure.

Sterling duly fell back from \$2.40 toward \$1.50. The airline not only suffered through higher interest charges in sterling, but also was liable to raise more sterling to pay off its dollar debts.

More recently, I was asked for advice by the

bursar of an Asian university, regarding fund raising for a hospital wing. Foreign exchange borrowing controls were about to be lifted and the university was considering borrowing in low-cost Dollars, rather at higher domestic interest rates.

Dollar borrowing may indeed have cost less in the short term but, had they executed such a strategy, they would have faced a substantial appreciation in their liability when their currency fell in the Asian economic crisis of late 1997.

Economic Exposure

If Rover were to hedge transaction exposure in EU exports through sales of euros, it would lock in the proceeds of its cars in sterling terms. Say, then, the euro appreciates strongly against sterling. Because of its hedging activity in the foreign exchange market, Rover would not be in a position to pass on the benefit of lower costs in euro terms.

Perhaps **Saab** is a close competitor in Spain. If the Swedish krona depreciates against the euro, Saab could reduce its euro prices to Euroland and undercut Rover. This constitutes currency-related economic exposure for Rover.

Now, if the krona does not depreciate against the euro, Rover could still suffer economic exposure in its competition with Saab cars. Saab is a subsidiary of **General Motors**, which owns Vauxhall in the UK. General Motors could switch production of Saab cars from Sweden to Luton, England, which, as a result of currency developments during the 1990s, had become a relatively low cost production base.

Recall, Rover has already locked in the value of euros in sterling terms and cannot take advantage of the higher value of the euro. This is also economic currency exposure, which is commonly known as "competitive currency exposure."

Because of appreciation of sterling vs. the euro over the past couple of years, **Honda UK** has been reported to be turning attention to exporting to the American market instead of the EU. ("Honda delay blamed on strong Pound," *BBC Online Business News*, October 31st, 2000, and "Currency Worries Force Honda to Change Plans," *Financial Times*, November 1st, 2000)

The strategy sounds ingenious, but Honda could be in for a nasty surprise. If production costs of British made cars are now, say, 20 percent more than European made cars when sold in Europe, selling to the U.S. or elsewhere does not help.

On the same assumption of a 20 percent sterling uncompetitiveness versus the euro,

If a UK company exports to Euroland, euros received from sales could depreciate against sterling, and thus wipe out the profit margin or even lead to a loss.

Translation exposure is not a bookkeeping statistic. Real exposure materializes when an asset is sold or liquidated, or a liability is repaid at maturity.

production costs do not change. They are now also exactly 20 percent more in the UK than in Euroland for cars sold to the U.S., Japan, South Africa or South America. There is no refuge from an overvalued currency if the UK produces directly comparable products in a competitive market.

Changing marketing strategy quickly if currency conditions change, i.e., shipping CR-V production to the U.S., only makes sense if there is no similar Euroland-made product sold in the U.S.

Nevertheless, considering purely foreign exchange exposure, it makes sense for Honda to continue to invest in the UK as a means of currency diversification. It could hedge itself by paying its employees partly in euros and organize employee shopping trips to France, not just to Auchan for beer but also to Ikea for furniture!

Interest Rate Management

In contrast to the UK and other economies, which have a substantial international component to their economies, foreign exchange exposure has been of relatively little importance to U.S. treasurers. On the other hand, interest rate management came to the fore when *Paul Volcker*, then chairman of the **Federal Reserve Board**, raised interest rates from about 5 percent to 21 percent, and then all the way back down again to 6 percent in the time span of about a year.

Interest rate exposure is the risk that interest rates will rise, leading to a rise in interest liabilities of borrowers, or that interest rates will fall, leading to a fall in the interest rate income of floating rate investors.

Fixed rate bond investors also have an interest rate exposure, as the value of their assets is determined by present value of a future stream of income. As interest rates rise, so do discounting rates used to calculate the present values and therefore the value of their investments fall.

UK mortgage borrowers have traditionally borrowed for house purchase at floating rates, but over the past decade, fixed rate mortgages have become commonplace. Retail borrowers thereby avoid risk by passing it on to the mortgage banks that use a variety of derivatives products to hedge the risk in the market.

A form of interest rate risk is *interest rate basis risk*. It applies when a borrower raises finance linked to one market, but hedges in another market in the same currency. The resultant risk between the two markets is basis risk. An example would be borrowing in the U.S. commercial

per market and using LIBOR-linked derivatives.

Equity Risk Management

“Equity risk” refers to the risk the share price of a firm will rise or fall. It also refers to a possible change in the market value of a basket of shares.

Expected return on equities is greater than on bonds, because of the higher risk. In the event of liquidation, bond holders are paid before equity holders receive anything. Accordingly, equity investments are considerably more volatile.

However, banks have issued deposit structures that include linking to various stock market indices, thus introducing broad-based equity market linking with a view to taking advantage of the historical high growth in the equity market. These are hedged using equity derivatives.

Equity risk also applies to firms planning to issue shares in the market to raise working capital or release value for the start-up owners. In 1987, the UK government launched its privatization of **BP**. Between announcement of the offer price and closing, there was a worldwide crash in stock markets—“Black Monday” intervened.

Commodity and Inflation Risk Management

Commodity risk management probably existed even before the advent of financial risk management. There were active futures markets in oil, gold, copper, and a variety of agricultural products well before futures markets in financial risk. Pension funds, in particular, have bought instruments linked to inflation, to be able to meet their indexed liabilities.

Utilities around the world also require inflation hedging. The annual price increases they negotiate with their regulators are generally a few percentage points above or below inflation. However, inflation risk is no longer taken very seriously given that inflation around the world has fallen to levels of half a century ago. □

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Banks have issued deposit structures that include linking to various stock market indices; these are hedged using equity derivatives.

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trade, an interest rate swap could have dozens of fields that need to be transmitted (usually faxed) to dealers in order to get a price. An on-line system that offers standardized and validated electronic term sheets, as well as providing a faster, more concise, and error free means of communicating trade request information.

While data confusion is less of an issue for deals like foreign exchange and commercial paper, the need for accuracy is common across all instrument types.

Price Discovery/Market Transparency

Multi-dealer on-line trading systems promote market transparency by making it practical to invite several dealers to participate simultaneously in a trade.

The problem with getting simultaneous quotes over the telephone is a logistical one. It may be possible to serially call three or four dealers, and record and compare their prices, all within a few minutes. However, in the event that the market is moving, it may be impossible to get an "apples-to-apples" price from all of the dealers.

An electronic execution system can manage prices from any number of dealers simultaneously, with real-time comparisons and rankings. By allowing more dealers into the competitive process, corporate traders increase their chances of finding a dealer who is favorably inclined to make their trade.

The benefits of increased market transparency are often underestimated. Many corporate traders are convinced that dealer margins are so thin to begin with, that more aggressive price discovery would not lead to material eco-

nomical gain. However, given the billions of dollars in revenue that trading operations generate, it's clear that trading floors are huge profit centers for major investment banks.

A treasurer or corporate trader needs to answer two questions:

- where are those profits coming from, and
- why are my dealers so eager to trade with my company?

Again, using the case of interest rate swaps, the gains from better pricing can be significant.

For example, swaps users doing \$1 billion of annual notional value would save \$250,000 over five years if rates quoted to them improved by just one-half of one basis point. Customers using the *TreasuryConnect* platform have frequently reported spreads of two to three basis points on any given trade.

Straight-Through Processing

Another great benefit of on-line trading is the opportunity for trade data integration and straight through processing (STP).

Given that the cost of executing and processing a financial transaction can be as much as \$1,000 per trade, significant cost savings can be achieved by electronically interfacing trade data between front and middle office systems, and back office systems, including risk management, accounting, and other financial systems without the need to re-key data.

New technologies, based on *Extensible Markup Language* (XML) are making the goal of STP increasingly achievable. XML-based formats, such as *FpML* for interest rate derivatives, are rapidly filling the need for standard

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Foreign Exchange Market Options Data

Provided by *Bank of America*

	1/ 8/01	Year Ago	% Chg. \$ Value	Implied Volatility for At-the-Money Options						Implied Volatilities
				1 Week	1 Month	2 Month	3 Month	6 Month	1 Year	
EUR/USD	0.9492	1.0228	7.20%	14.8/15.8	14.9/15.2	14.6/14.9	14.4/14.7	14.1/14.4	13.9/14.2	The options market again opens with higher prices but little trade flow. This has been a recurring feature for the past several days; it seems the general uncertainty surrounding the U.S. economy might be the key component keeping implied vols high. GBP/USD and EUR/GBP were the major movers on the back of M&A activity. With all the interest in the cross, EUR/USD vols were quiet in comparison. However, watch for some curve flattening in the next few days as spot becomes more comfortable at these new levels.
USD/JPY	116.34	105.08	9.67%	10.0/11.0	10.3/10.6	10.5/10.8	10.6/10.9	10.9/11.3	11.5/11.8	
GBP/USD	1.4999	1.6366	8.35%	10.5/11.5	10.7/11.1	10.7/11.0	10.6/10.9	10.5/10.8	10.5/10.8	
USD/CAD	1.4970	1.4552	2.87%	6.8/ 7.8	6.7/ 7.1	6.5/ 6.9	6.4/ 6.7	6.2/ 6.5	6.1/ 6.4	
AUD/USD	0.5661	0.6560	13.70%	14.5/15.7	14.5/14.9	14.1/14.4	13.9/14.2	13.1/13.4	12.3/12.7	
USD/CHF	1.6099	1.5720	2.41%	13.3/14.3	13.7/14.0	13.6/13.9	13.6/13.9	13.5/13.8	13.5/13.8	
USD/MXN	9.4200	9.4420	-0.23%		9.9/11.1	10.9/11.7	11.6/12.4	12.6/13.4	14.5/15.3	
USD/BRL	1.7650	1.8160	-2.81%		7.9/ 9.2	8.5/ 9.6	9.2/10.2	9.9/10.9	11.5/12.5	
USD/HKD	7.7810	7.7781	0.04%		0.0/ 0.5	0.1/ 0.6	0.3/ 0.7	0.7/ 1.0	1.0/ 1.5	
EUR/JPY	110.47	107.45	-2.81%	17.0/18.0	16.8/17.2	16.4/16.8	16.2/16.5	16.0/16.3	15.7/16.3	
EUR/CHF	1.5281	1.6082	4.98%	5.5/ 6.5	5.3/ 5.6	5.2/ 5.5	5.2/ 5.5	5.1/ 5.3	4.9/ 5.3	
EUR/GBP	0.6329	0.6245	-1.35%	11.5/12.5	11.6/11.9	11.5/11.8	11.4/11.7	11.3/11.6	11.3/11.6	

ized and flexible formats between systems. Software vendors and the dealer community have been very supportive of efforts to develop these formats because they recognize the value of system integration.

Reducing Errors

The benefits of STP include the operational efficiencies of not having to re-key data and a reduction in processing errors and failed trades. The costs associated with recording errors fall into three categories: administrative, market, and intangible.

The administrative costs of failure—risk of cash overdraft, trade correction, accounting restatement and management reporting—generally range between \$2,000 and \$10,000 per incident.

Market costs, which include missed investment opportunities, excessive borrowing, portfolio misallocation and unintended risk exposure, can easily exceed \$10,000.

Even considering these potentially substantial savings, avoiding the intangible costs of operational mistakes—increased management scrutiny and decreased confidence—may be the biggest benefit of all to treasury managers.

Data Mining and Post-Trade Analysis

On-line technologies can also be used for data mining and post-trade analysis. The automatic capture of trade data, including benchmark rates and competitive quotes, creates a detailed trade history that can be used to analyze trade patterns. Using the information, a treasury manager can generate reports and graphs highlighting dealer participation and trading patterns.

Over time, a treasury department can aggregate a database of details that can be used for pricing research and trade analysis. Mining data on bids, spreads, retractions, deal types, credit profiles, dealer profiles and participations can provide answers to a variety of questions:

- Which dealers provide the best prices (ratio of quotes to wins)?
- Which dealers are most consistent with their quotes?
- What is the cost of credit?
- What is the cost of collateral?
- What is the cost of doing a large swap and moving the market?
- What is the optimal number of dealers to ask for various structures and sizes?

- What is the best time of day to trade (e.g., tightest range of bids)?

Armed with this information, a corporate trader can make better decisions regarding which dealers to trade with for different kinds of instruments. Additionally, he or she can assess how to structure transactions to get the best pricing and terms.

Relationship Management

Successfully managing corporate relationships with financial service providers depends on a variety of factors, including accurate information. On-line trading systems contribute to the relationship management process by accurately recording all trade opportunities and their results.

This information can be very helpful to treasury managers when meeting or negotiating with the corporation's banks and dealers. Having dealer "batting averages" readily available can help them make decisions regarding how to utilize these financial services providers in the future.

Summary

Given the continual need of treasury departments to improve operational efficiency, on-line trading is not a matter of "if," but a matter of "when."

The AFP study notes that the vast majority of corporations already use the Internet for research and communication; trading is a logical next step. Viable trading platforms are already active for financial products ranging from foreign exchange to interest rate swaps and other derivatives.

While these platforms offer multiple benefits for treasurers, their value is derived from the entirety of what they offer rather than any single feature. Integrated solutions that can offer a total solution for improving operational efficiency in the trading process are likely to gain the greatest acceptance. □

*Michael Radin is a Senior Vice President at **TreasuryConnect.com**. TreasuryConnect operates an Internet-based institutional trade communication and execution platform for OTC derivative products. Readers wishing to obtain further information about on-line trading can contact Ellis Simon, Vice President, in the company's New York office, by telephone at (212) 830-4560 or by e-mail at simon@treasuryconnect.com.*

Avoiding the intangible costs of operational mistakes—increased management scrutiny and decreased confidence—(via on-line trading) may be the biggest benefit of all to treasury managers.

On-line trading systems accurately record all trade opportunities and their results; this can be very helpful when meeting or negotiating with the corporation's banks and dealers.

Show Me the Money?

Where has the increasing pool of capital from private Latin pension funds gone to find a return? How can local companies capitalize?

An interview with José García-Cantera, Salomon Smith Barney

Chile launched the world's first privately-managed, mandatory pension fund system in 1981, and although other Latin American countries were slow to follow the Chilean example, the region has seen many advances in private pension funds in recent years.

Argentina, Colombia and Peru began their own optional private pension plans in 1994, followed by Uruguay in 1995. In 1997 Mexico introduced a mandatory pension system that has been the most dynamic in Latin America.

The rising levels of assets managed by private pension funds has coincided with declining liquidity in the local capital markets. Strict investment limits placed on the funds in order to minimize risk have made it difficult for emerging companies in Latin America to access these

for a long time had the only significant private pension fund system in Latin America.

When one looks at the evolution of the Chilean market from 1983, after the 1981-82 financial crisis, until the present time, there have been many structural changes in addition to the creation of the private pension plan that may contribute to the development of the local capital markets.

However, when one also looks at Argentina and more recently Mexico, we see a clear relationship.

Recently, the Mexican government announced the creation of a second fund by Mexican private pension fund companies. The same day the announcement was made, the equity market in Mexico went up something like five percent.

Similarly, we have seen a significant flow of funds from private pension funds directly into equity markets or into other types of local capital markets in Argentina. So there is a relationship, but clearly there are other variables at work. Private pension funds have limitations in terms of how much they can invest in each type of asset.

The local securities and exchange commission equivalent must be able to provide liquidity and there must be good corporate governance rules. You don't only need the pool of assets; you also need the channels that connect that pool of assets to the people who are demanding funds.

Ten-Year Lag Period

IR: *Should Venezuelan companies expect easier access to capital if Venezuela goes ahead with its plans for a private pension fund?*

García-Cantera: It would take many years for corporations to see the effect. To use Argentina or Mexico as examples, they created private pension plans back in 1994-95, and because of investment restrictions by the authorities, most of the investments initially went to government securities.

The introduction of private pension plans has two short-term effects: one is a lower dependence

One school of thought is that there is no evidence a relationship exists between private pension funds and the development of capital markets.

new pools of assets. As investment restrictions are eased, the effect of these assets on corporate finance will become more significant.

IR discussed the development of private pension funds in Latin America and their effect on capital flows with *José García-Cantera*, Managing Director, Latin America Equity Research in the New York office of **Salomon Smith Barney**. For the past four years he has authored that firm's annual report "Private Pension Funds in Latin America," which is updated at the end of the year. The report provides comprehensive data on each country's private pension system as well as analysis of emerging trends and assessment of performance.

IR: *Has the savings pool generated by private pension funds helped to develop the local capital markets?*

García-Cantera: One school of thought is that there is no evidence that a relationship exists between private pension funds and the development of capital markets. This argument is largely based on an analysis of markets in Chile, which

on international capital flows and another is a decrease in the cost of capital because the government is able to place its debt at a lower interest rate. But because the pool of assets remains relatively small for about ten years, it is a long time before companies can benefit from the pool of assets managed by pension funds.

Only a Few Companies Benefit

IR: *Are private pension funds investing in emerging private companies?*

García-Cantera: To use Chile as an example, private pension funds are only allowed to invest a very small percentage of their assets in non-listed securities, projects, or companies because the risk profile of these pension assets has to be kept at very low levels.

One of the major problems that Chilean funds have found is that because of these very strict limitations, they don't have enough companies in Chile to buy at reasonable prices. If the funds invested in Chilean equities even to the permitted limit, they would drive valuations to excessive levels. So over the last three years there has actually been a drop in the level of investments by Chilean funds in the local equity market.

Most of the funds that could be invested in local equities have been invested abroad. Pension fund companies in Chile cannot invest in private equity funds. So to answer your question, private pension funds are not directly contributing to the creation of businesses and companies.

IR: *Are the authorities likely to permit pension funds to invest more in international capital markets?*

García-Cantera: It is very clear that as these pension systems grow, they need to find alternative investments. However, many regulators do not care if the return could be 200 points higher than it is. What they care about is not the upside, but the downside.

The obligation of pension fund companies is not to obtain the highest return, but to limit the downside, because in 10 years from now if the funds are not able to provide the minimum pension, we will have a social revolution.

Chile was the first country to create a private pension fund system and the limits were twofold at the time. First, the private pension fund companies could only offer one fund, and second they would have to comply with very conservative investment limitations imposed

by the authorities. Pension funds in Argentina, Peru, and some other countries, were created following exactly the same rules.

Later Mexico introduced several changes. Private pension fund companies would be allowed to offer more than one fund. At the time, they proposed three types of pension funds: a pure fixed income fund, a fixed income plus inflation index investment fund, and an equity fund. Furthermore, they introduced significantly more liberal investment limits. So the Mexican authorities have been thinking about these questions.

In Chile, assets under management represent over 40 percent of the country's gross domestic product, and the equity market is very limited. Some of the companies are being delisted as they have been acquired by Spanish companies like **Telefónica**, **BBVA**, and **Banco Santander**, so the ability of Chilean pension fund companies to invest in Chile will be increasingly limited.

Over the last couple of years, the funds have been increasing the limits for investments outside the country but they haven't changed the profile of the investments.

In all cases, pension funds must be invested in listed securities, and there are also some limitations in terms of liquidity. Are we going to see further changes, for instance in Chile moving closer to Mexico so that the companies will be allowed to offer more than one fund? That's possible; the authorities are discussing this. But we don't see this happening in the very short term.

Restrictions: Designed to Benefit Government or Protect Investors?

IR: *Some say that the Latin American pension fund restrictions on investments are designed to make it easier for governments to borrow money easily, at the expense of local capital markets. Is this a legitimate criticism?*

García-Cantera: The question of competition between the government and private companies in Latin America is unresolved.

It has been argued that this is one of the reasons that these countries have developed more slowly than anticipated. It is very difficult to demonstrate that this is actually the case, but the answer is probably yes. The question is, where would these funds invest their money if they didn't have investment limits? Would they buy government securities, or would they

Private pension funds (in Chile) are only allowed to invest a small percentage of their assets in non-listed securities, projects, or companies because the funds' risk profile has to be kept at very low levels.

Are we going to see further changes, for instance in Chile moving closer to Mexico, so that the companies will be allowed to offer more than one fund?

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prefer to fund private projects?

We don't know, because we haven't had the chance to operate in an environment without investment limits.

IR *Why are some Latin American countries seeing a greater movement of companies to de-list?*

García-Cantera: When you look at flows of funds into Latin America and when you look at the evolution of the performance of these countries, you see that there has been a tiering in the region.

Mexico and Brazil are pulling away from the rest, and the rest are becoming increasingly peripheral for capital markets issues and for flows of funds. If you own a company in Peru and you see that the market is not providing you with the benefits that it should by being listed and you know your valuation is very low, it would probably make sense to de-list the company.

A different issue is why the pension funds are not providing liquidity, and again this is because initially the pool of funds that these

In Chile, where the market has been functioning for almost 20 years, local investors are even more important than foreign investors.

companies can invest in the markets is very low compared with international flows.

For instance, in Chile where the market has been functioning for almost 20 years, the pool of assets is very strong, and local investors are even more important than foreign investors. In other countries, this is not the case yet.

If you have a negative perception toward Argentina, even if local pension funds decide to put more money into equity markets, some of these companies' valuations might not be attractive enough for owners to continue to have them listed. If valuation is low, the owners might decide that it is a good investment to buy out the minorities.

IR: *What kinds of companies do you expect to see going public in the next two years?*

García-Cantera: The appetite of the markets over the last year-and-a-half has principally been concentrated on the new economy companies.

If you are a high-tech company in Argentina, why are you going to list in the local equity market when you are going to be paid a higher price and have a higher profile if you

list in NASDAQ? If you are the owner of this company you will probably decide to list in the U.S. rather than locally.

The appetite has been extremely limited for traditional-economy companies in recent years, and we don't really know what will happen with the new issuance of equities in the region when the market recovers. There is a pipeline of companies that are ready to come to the market. We will see what happens then.

Funds Have Pushed Up Company Values

IR: *Has the growth of pension funds increased company valuations?*

García-Cantera: Yes. If you have a pool of capital that by law has to be invested locally and there are a limited number of companies, supply and demand rules tell you that higher valuations would occur, and this has actually been the case.

If you look at the Chilean equity market from 1990 to 1995 or 1996, it showed among the highest valuations of emerging markets around the world. You could argue that it was because the country was doing very well. It was growing at 5 to 6 percent a year, and foreign direct and indirect investment had significant impact on the country's accounts and the valuation of securities.

But clearly another consideration was the fact that local pension funds had to buy local equities, and the number of companies was limited, which actually caused a higher valuation. We have seen something similar in Argentina.

The performance of the Argentine economy has been very weak over the last couple of years, yet we believe that because the local private pension funds continue to grow and by law are required to buy into the local equity market, valuations have been higher than probably could be justified fundamentally.

Just to give an example, local private pension fund companies in Argentina were putting about \$100 million a month into the local equity market last year. That is quite a lot of money for Argentina, which has very limited liquidity of shares that are listed. As a consequence, we have seen the banks in Argentina trade at 1.6 to 1.7 times book, yet based on fundamentals they would probably need to trade at 1.2 to 1.3. So clearly there has been a 20 percent premium, in some cases, and we think this is because these private pension fund compa-

nies have influenced the valuation.

IR: *If too much money is chasing too few companies in some of the local equity markets, will this have the effect of reducing market swings that might otherwise be a useful indication of fundamental changes in valuations?*

García-Cantera: The volatility of the equity markets in the region is very high, but clearly private pension funds tend to help decrease volatility. That is not necessarily bad if it is associated with the intrinsic value of the companies.

What you are suggesting is something rather different, which is that those companies that don't merit the lower volatility are actually showing that lower volatility. I think private pension funds in the region are sophisticated enough to contribute to the volatility of the market if that's deserved.

I'm thinking about Chile, for instance, and the electric utility sector in recent years. It has probably been one of the worst performing sectors in Latin America, and the reason is that local pension funds that were heavily invested in this sector have been selling shares because they also saw that the performance of the sector was not going to be very good.

Do pension fund investments tend to decrease volatility? Yes. Are the fund managers sophisticated enough to know when that is not deserved? I also think that's the case.

IR: *Have the pension funds helped to bring about better corporate governance?*

García-Cantera: Very clearly, private pension funds have contributed to an improvement in corporate governance issues wherever they occur. There were two instances in Chile in which private pension funds played a very active role in M&A transactions. One was **Endesa Chile** and the other one was **CDC** with Telefónica in Spain.

More recently, in Argentina, they also played a very active role with **Banco Galicia** and actually obtained a change of the initial terms of the transaction, which was more favorable to the interests of pension fund managers.

Brazil May Create Private Pension Funds

IR: *What are the biggest challenges for the Brazilian pension fund system?*

García-Cantera: There are three types of pension funds in Brazil right now. Closed pension funds are being offered by companies to

employees. Almost all of these are defined benefit programs that currently have a significant deficit, and unless they are able to obtain very good returns going forward they may eventually have a significant problem.

Open funds, which are not only for employees, offer a guaranteed return of six percent in real terms. As inflation and interest rates go down, this will be increasingly difficult to obtain, so we might have some problems here with companies having to offer lower returns or run up deficits in these funds.

Apart from these, the government is trying to introduce a system that will be similar to those existing in other countries, but it will not replace the social security that currently exists. In other words, the system will co-exist with a "pay-as-you-go" system run by the state.

The government has implemented some changes in this direction, such as **FAPÍ**, which was created to try to provide an incentive for voluntarily saving for retirement.

Will Brazil move a step forward and create a private pension fund system similar to those of other countries? Probably not until the next administration, which will be installed after the general elections take place in 2002.

The current government is more likely to focus on other issues like constitutional reform and fiscal reform rather than social security reform or labor reform.

IR: *So you do not see any upward pressure being exerted on the capital markets in Brazil as a result of the pension plans there?*

García-Cantera: That's the million dollar question, probably the billion dollar question, because that is exactly why Brazil had pressures back in 1998 and had to devalue in 1999.

Basically, what the market said at the time was "you're fine in your macroeconomic performance but you haven't done anything about the structural reforms that you promised." The question is will the market eventually focus on those issues again and ask Brazil why it is not moving forward faster with respect to these structural reforms. It might.

This is something that I don't know, but obviously they cannot do everything at the same time. Eventually the market might say that social security reform is more important than the alternatives and then put on pressure for reform, but we don't see that happening in the short term. □

Clearly, private pension funds tend to help decrease volatility. That is not necessarily bad if it is associated with the intrinsic value of the companies.

Private pension funds have contributed to an improvement in corporate governance issues wherever they occur.

Bank of America's World Value of the Dollar as of January 5th

The table below gives the rates of exchange for the U.S. dollar against various currencies as of Friday, January 5th, 2001. The exchange rates are middle rates between the buying and selling rates as quoted between banks, unless otherwise indicated. All currencies are quoted in foreign currency units per U.S. dollar except in certain specified areas. All rates quoted are not intended to be used as a basis for particular transactions. *Bank of America* does not undertake to trade in all listed foreign currencies, neither does *Bank of America* assume responsibility for errors.

EUR=\$0.9490 SDR=\$1.30683 3-month LIBOR 5.695 3-month SIBOR 5.75 6-month LIBOR 5.5163 6-month SIBOR 5.55

Country	Currency	Value of U.S. Dollar	Country	Currency	Value of U.S. Dollar	Country	Currency	Value of U.S. Dollar
Afghanistan	Afghani (c)	4750.00	Germany	Mark	2.0609	Pakistan	Rupee	59.225
Albania	Lek	140.00	Ghana	Cedi	7175.00	Panama	Balboa	1.00
Algeria	Dinar	72.11	Gibraltar	Pound *	1.5005	Papua N.G.	Kina	3.1646
American Samoa	US\$	1.00	Greece	Drachma	358.654	Paraguay	Guarani (d)	3545.00
Andorra	Peseta	175.3277	Greenland	Krone	7.8225	Peru	Nuevo Sol (d)	3.517
Andorra	Franc	6.9121	Grenada	E. Car. \$	2.70	Philippines	Peso	51.00
Angola	Kwanza	17.098	Guadeloupe	Franc	6.9121	Pitcairn Island	NZ Dollar	2.2185
Antigua	E. Car. \$	2.70	Guam	US\$	1.00	Poland	Zloty (o)	4.0785
Argentina	Peso	0.9984	Guatemala	Quetzal	7.8315	Portugal	Escudo	211.2561
Armenia	Dram	552.18	Guinea Rep.	Franc	1855.00	Puerto Rico	US\$	1.00
Aruba	Florin	1.79	Guinea Bissau	Franc	691.2086	Qatar	Riyal	3.6408
Australia	Dollar	1.7565	Guyana	Dollar	180.50	Rep. Macedonia	Dinar	64.535
Austria	Schilling	14.4998	Haiti	Gourde	21.00	Rep. Yemen	Rial (a)	161.458
Azerbaijan	Manat	4456.00	Honduras	Lempira (d)	15.10	Ile de la Reunion	Franc	6.9121
Bahamas	Dollar	1.00	Hong Kong	Dollar	7.7995	Romania	Leu	26001.00
Bahrain	Dinar	0.377	Hungary	Forint	278.612	Russia	Ruble	28.439
Bangladesh	Taka	54.01	Iceland	Krona	83.99	Rwanda	Franc	359.0281
Barbados	Dollar	2.00	India	Rupee (m)	46.715	San Marino	Lira	2040.3267
Belarus	Ruble	1180.00	Indonesia	Rupiah	9485.00	Sao Tome/Principe	Dobra	2390.98
Belgium	Franc	42.5078	Iran	Rial (o)	1752.50	Saudi Arabia	Riyal	3.7506
Belize	Dollar	2.00	Iraq	Dinar (o)	0.3124	Senegal	CFA Franc	691.2086
Benin	CFA Franc	691.2086	Ireland	Punt *	1.205	Seychelles	Rupee	6.291
Bermuda	Dollar	1.00	Israel	New Shekel	4.0993	Sierra Leone	Leone	1899.095
Bhutan	Ngultrum	46.715	Italy	Lira	2040.3267	Singapore	Dollar	1.7345
Bolivia	Boliviano (f)	6.395	Jamaica	Dollar (o)	45.10	Slovakia	Koruna	46.094
Bolivia	Boliviano (o)	6.07	Japan	Yen	116.575	Slovenia	Tolar	223.91
Bosnia Herz.	Konv. Marka	2.0609	Jordan	Dinar	0.71	Solomon Is.	Solomon \$	5.1059
Botswana	Pula	5.305	Kazakhstan	Tenga	145.48	Somali Rep.	Shilling (d)	2620.00
Bouvet Island	Krone	8.6905	Kenya	Shilling	79.14	South Africa	Rand (c)	7.4964
Brazil	Real	1.9435	Kiribati	Aus. Dollar	1.7565	Spain	Peseta	175.3277
Brunei	Dollar	1.7345	Korea, North	Won	2.20	Sri Lanka	Rupee	83.125
Bulgaria	Lev	2.0496	Korea, South	Won	1263.30	St. Christopher	E. Car. \$	2.70
Burkina Faso	CFA Franc	691.2086	Kuwait	Dinar	0.3052	St. Helena	Pound *	1.5005
Burundi	Franc	774.2665	Kyrgyzstan	Som	48.237	St. Lucia	E. Car. \$	2.70
Cameroun	CFA Franc	691.2086	Laos	Kip	7600.00	St. Pierre/Miq'lon	Franc	6.9121
Canada	Dollar	1.5039	Latvia	Lat	0.6151	St. Vincent	E. Car. \$	2.70
Cape Verde Is.	Escudo	116.5105	Lebanon	Pound	1511.00	State Cambodia	Riel	3835.00
Cayman Is.	Dollar	0.8333	Lesotho	Maloti	7.4964	Sudan	Pound (c)	2560.00
Cent. Af. Rep.	CFA Franc	691.2086	Liberia	Dollar	1.00	Sudan	Dinar	256.00
Chad	CFA Franc	691.2086	Libya	Dinar	0.5437	Suriname	Guilder	981.00
Chile	Peso (m)	571.33	Liechtenstein	Franc	1.6025	Swaziland	Lilangeni	7.4964
Chile	Peso (o)	571.94	Lithuania	Litas	4.0013	Sweden	Krona	9.3455
China	Renminbi	8.2775	Luxembourg	Franc	42.5078	Switzerland	Franc	1.6025
Colombia	Peso (o) (1)	2246.02	Macao	Pataca	8.0569	Syria	Pound	53.50
CIS	Ruble (m)	28.439	Madagascar	Franc	6240.00	Taiwan	Dollar (o)	32.872
Comoros Rep.	Franc	518.0465	Malawi	Kwacha	80.10	Tanzania	Shilling	802.65
Congo Rep.	CFA Franc	691.2086	Malaysia	Ringggit	3.80	Thailand	Baht	43.258
Congo Dem. Rep.	Franc (4)	4.4999	Maldives Is.	Rufiyau	11.77	Togo Rep.	CFA Franc	691.2086
Costa Rica	Colon	318.40	Mali Republic	CFA Franc	691.2086	Tonga Is.	Pa'anga	1.9693
Cote d'Ivoire	CFA Franc	691.2086	Malta	Lira *	2.3174	Trinidad/Tobago	Dollar	6.24
Croatia	Kuna	7.9681	Martinique	Franc	6.9121	Tunisia	Dinar	1.3569
Cuba	Peso	1.00	Mauretania	Ouguiya	254.33	Turkey	Lira	663670.00
Cyprus	Pound *	1.6523	Mauritius	Rupee	27.78	Turks & Caicos	US\$	1.00
Czech Republic	Koruna	36.9475	Mexico	New Peso	9.7464	Tuvalu	Aus. Dollar	1.7565
Denmark	Krone	7.8225	Moldova	Lei	12.3084	Uganda	Shilling	1790.00
Djibouti	Franc	174.50	Monaco	Franc	6.9121	Ukraine	Hryvnia	5.4567
Dominica	E. Car. \$	2.70	Mongolia	Tugrik (m)	1096.00	United Kingdom	Pound *	1.5005
Domi. Rep.	Peso	16.12	Montserrat	E. Car. \$	2.70	Uruguay	Peso (m)	11.392
Ecuador	Sucre (o) (2)	25000.00	Morocco	Dirham	10.474	U.A.E.	Dirhan	3.673
Egypt	Pound	3.84	Mozambique	Metical	17350.00	Uzbekistan	Sum	775.00
El Salvador	Colon (d)	8.755	Myanmar	Kyat	6.5108	Vanuatu	Vatu	141.80
Eq'tl. Guinea	CFA Franc	691.2086	Namibia	Rand	7.4964	Vatican City	Lira	2040.3267
Estonia	Kroon	16.4037	Namibia	Dollar	7.5308	Venezuela	Bolivar (d)	698.33
Ethiopia	Birr (o)	8.238	Nauru Is.	Aus. Dollar	1.7565	Vietnam	Dong (o)	14522.00
Faeroe Is.	Krone	7.8225	Nepal	Rupee	74.691	Virgin Island BR	US\$	1.00
Falkland Is.	Pound *	1.5005	Neth. Antilles	Guilder	1.79	Virgin Island US	US\$	1.00
Fiji	Dollar	2.1608	Neth. Antilles	Florin	1.79	West. Samoa	Tala	3.3058
Finland	Markka	6.2653	Netherlands	Guilder	2.3221	Yugoslavia	New Dinar	11.6095
Fr. Pacific Is.	Franc	125.6742	New Zealand	Dollar	2.2185	Zambia	Kwacha	4631.42
France	Franc	6.9121	Nicaragua	Gold Cordoba	12.90	Zimbabwe	Dollar (6)	55.10
French Guinea	Franc	6.9121	Niger Rep.	CFA Franc	691.2086			
Gabon	CFA Franc	691.2086	Nigeria	Naira (m)	110.24			
Gambia	Dalasi	15.40	Norway	Krone	8.6905			
Georgia	Lari	1.96	Oman Sultanate	Rial	0.3849			

(n/a) Not Available. * U.S. Dollar per national currency unit. (a) Parallel. (c) Commercial. (d) Free market. (f) Financial. (m) Market. (o) Official. (1) Colombian peso allowed to float freely on 9/27/99. (2) Ecuador introduces dollarization, 25,000 sucres to the dollar. (3) Greek drachma incorporates 3.5 percent revaluation on 1/15/00. (4) Congo Democratic Republic, formerly Zaire Democratic Republic, Congolese franc is new currency. (5) Angolan kwanza revalued on 12/13/99. (6) Zimbabwe dollar delvalued by approximately 24 percent on 2/8/00.

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So we find ourselves perfectly in agreement with the prognosis of **Citibank's** economists, quoted by Citi's currency guru, *Robert Sinche*, in his weekly strategy digest. The bank's economic team concluded that "the present challenges are cyclical or temporary not structural. The Fed highlighted the idea that the longer-term productivity story remains upbeat, and that fact should support expectations that returns on U.S. risk-based assets will be highly competitive."

Based on this, Sinche himself concludes that "the Fed easing and (U.S. dollar) correction, combined with reductions in future tax rates, should pave the way for improved economic performance during (the first half), with real growth returning to its 4 percent potential pace."

This outlook suggests that the dollar's period of decline could also be relatively brief, Sinche continues, i.e., "a likely dollar recovery by yearend 2001." Nonetheless, that makes 2001 the year of the euro, which is consistent with our own belief: euro appreciation is not only warranted by the dramatic shift in relative and prospective U.S. and European growth and interest rates, but is also merited on grounds that the decline in the euro since its debut in January, 1999, was excessive. Thus, it is time for the euro to recover fair value.

On a medium-term equilibrium view, fair value may lie just under parity, but dollar parity is a reasonable goal—particularly given the

catch-up in productivity which Europe seems to be experiencing at present.

Brief Euro-Dollar Consolidation

Closer in, there is good reason in technical terms (notwithstanding our comment above on the relative influence of technicals and broad-market sentiment) to look for a consolidation here. According to **Commerzbank** technical analyst *Joseph Klettner*, quoted by **Market News International** (MNI), January 3rd's high—around \$0.9573—completed a wave three advance under Elliott analysis. This laid the groundwork for euro-dollar to enter a consolidation that should, however, not progress beneath \$0.9262.

Following consolidation, the pair could rally again toward the June, 2000, peak of \$0.9702, Klettner adds.

David Solin at **FX Analytics** tells MNI that euro-dollar is approaching a long-standing target around the \$0.9675 to \$0.9700 level, with important resistance seen at \$0.9725/75. That resistance is based on the upper end of a long-term downtrend channel from \$1.1290.

Solin is looking for a couple of weeks of correction with potential for a three to four cent downside slide. Therefore, Solin recommends "lightening up on medium-term longs on approach to the aforementioned resistance levels," MNI reports.

An anonymous MNI source says that fail-

The dollar's period of decline could also be relatively brief; Citibank expects "a likely dollar recovery by yearend 2001."

Actual and Forecast FX Ranges, IR Outlook for Major Currency Pairs (Exchange Rates from Thomson Financial/IFR, Boston)

Currency Pair	Prior Range	Forecast Range	Last Week	Last Seen	Change (%)	Two-Week Outlook
USD/Euro	0.9260–0.9595	0.9275–0.9725	0.9250	0.9535	+3.08%	Positive
DEM/USD	2.0384–2.1121	2.0111–2.1087	2.1144	2.0512	-2.99%	Negative
JPY/USD	113.50–116.95	113.75–117.75	114.55	116.10	-1.35%	Cautious
JPY/Euro	105.15–111.70	107.75–112.25	106.05	110.70	-4.38%	Positive
JPY/DEM	53.76–57.11	55.09–57.39	54.22	56.60	-4.38%	Positive
USD/GBP	1.4880–1.5095	1.4750–1.5150	1.4895	1.4990	-0.64%	Positive
GBP/Euro	0.6210–0.6375	0.6200–0.6400	0.6205	0.6350	-2.34%	Neutral
DEM/GBP	3.0680–3.1495	3.0560–3.1546	3.1520	3.0800	+2.28%	Neutral
CHF/USD	1.5900–1.6320	1.5750–1.6250	1.6445	1.5990	+2.77%	Cautious
CHF/Euro	1.5105–1.5325	1.5100–1.5350	1.5210	1.5250	-0.26%	Neutral
SEK/Euro	8.8540–8.9580	8.6500–8.9500	8.8555	8.8955	-0.45%	Cautious
CAD/USD	1.4895–1.5045	1.4850–1.5150	1.5055	1.4975	+0.53%	Neutral
USD/AUD	0.5545–0.5725	0.5525–0.5875	0.5535	0.5715	-3.25%	Neutral
MXN/USD	9.5700–9.8560	9.5500–9.9500	9.6050	9.7570	-1.58%	Cautious
BRL/USD	1.9290–1.9550	1.9250–1.9750	1.9510	1.9550	-0.21%	Cautious

Foreign exchange pairs given per U.S. convention. Percent change refers to numerator in respective currency pair; positive change means that the denominator, or base currency, has gained. Outlook refers to base currencies, with the exception of the Canadian dollar, Mexican peso and Brazilian Real; in those cases it refers to the two-week outlook for the CAD, MXN or BRL against the USD.

Commerzbank suggests that January 3rd's (euro) high laid the groundwork for euro-dollar to enter a consolidation phase.

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ure by euro-dollar to move through resistance at \$0.9570, established off the 365-day moving average, could be the trigger for consolidation.

We would amalgamate these views by setting stops at \$0.9450, \$0.9350 and \$0.9250, heaviest on the last. However, as noted above, we would quickly reset tactical positions at levels 25 pips over these stops. The reason for this is that the consolidation maneuver could be completed fairly quickly, with the market pressing on to \$0.9700.

Troublesome Dollar-Yen

Dollar-yen presents much more difficulty to the risk manager looking into 2001.

We are glad that readers had stops in place above ¥113, given the move last week to a high of ¥116.95, settling back to ¥116.10 at week's end. We would be more cautious about stopping out of these positions on a correction—or at least be sure to place orders to reset on a subsequent move up again, as sentiment on Japan has turned even more negative than in late 2000.

The research community has detected a loss of supply-side momentum with the pace of industrial production stalling, from a 9 percent trend pace in the period from August through October to 3.2 percent in the three-month period through November, according to **J. P. Morgan** economists *Masaaki Kanno* and *Mariko Mentani*.

"The virtuous circle, driven by accelerating capital expenditure riding a boom in corporate profits, appears to have faded in the face of weakening exports," Morgan's Japan team writes. Meantime, public works and private consumption demand have weakened and momentum in capital spending growth has been lost.

The electronics industry, which, in Morgan's view, has been "the mainstay of the recovery," has experienced a loss of confidence, suggesting that small manufacturers have been hit hard by the retrenchment in exports.

Despite the lack of evidence of excess inventories and some optimism among manufacturers, the overall pattern is discouraging. A 2.1 percent decline in real spending by worker-headed households reflects troubled consumer sentiment.

Such patterns have translated into increased market expectation that the **Bank of Japan** (BoJ) could be obliged to return official interest rates to zero, particularly in light of

governmental efforts to institute fiscal restraint. **Salomon Smith Barney** (SSB) economist *Tomoko Fujii* writes that "expected fiscal drag of nearly 0.5 percent of gross domestic product likely will keep economic growth below 2 percent" in fiscal year 2001, starting April 1st.

Monetary policy will have to remain easy for quite some while to come, and SSB suggests that the BoJ "may consider new monetary easing."

To this mix, we would add the subtle indications that, although the Bush administration is unlikely to hold a strong dollar as a cornerstone tenet of its macroeconomic policy, it is also less likely to use yen strength as a means of pressuring the Japanese to accelerate restructuring. In short, we would at this point look for the next administration to adopt a *laissez faire* or agnostic attitude with respect to dollar-yen. This approach would give Tokyo a green light to encourage yen depreciation as a means of sustaining even today's anemic growth levels.

In practical terms, therefore, we would reckon with the possibility that dollar-yen could be headed through ¥120, even as euro-dollar heads back through parity. The euro's march will perhaps be led by gains in euro-yen, with consolidations in euro-dollar letting the greenback catch up in dollar-yen.

At the same time, however, we continue to see risks that dollar-yen gains could be unwound this quarter, once Japanese participants start dressing balance sheets for the March 31st fiscal year-end through the repatriation of assets into the yen. Risk managers face something of a juggling act in dollar-yen: trade tight tactical ranges with significant stops at big figures.

Now that dollar-yen has moved through ¥115, for example, we would be prepared to trade in what might be called a "micro-range" of from ¥115 to ¥120, triggering significant sell stops on a move under ¥115 or above ¥120 (say, ¥114.60 and ¥120.40), with appropriate resets going the other way.

Readers might incur heavier than usual trading fees on volatility, but at least won't miss the next train. We should consider, though, that dollar-yen may simply have found a new medium-term range of ¥110 to ¥120. □

Foreign exchange analysis and recommendations by Brendan Murphy, Curragh Publishing, New York. Market News International, New York, and Thomson Financial-IFR, Boston, have provided information and data for this report.