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Market Index Futures Contracts

► Investors may soon be able to trade futures contracts in stock market averages. The Chicago Mercantile Exchange plans a contract based on the Standard & Poor's 500 stock index. The Chicago Board of Trade has proposed several market index futures contracts, including one based on an index of its own construction. The Kansas City Board of Trade plans to trade a contract based on the Value Line Composite Index.

The Kansas City contract (VLF) based on the Value Line Composite Index (VLCI) is fairly typical. Each VLF contract would constitute a promise to buy or sell 500 units of the VLCI, measured in dollars. The underlying value of one VLF contract would be roughly \$50,000, since the VLCI currently hovers around 100. Initial margin requirements would be \$2,000 for hedgers and \$4,000 for speculators. Six contracts will trade at any one time, with delivery in March, June, September and December.

Regular commissions on a round-trip transaction in one VLF contract are anticipated to be \$60—only 13 per

cent of the cost of buying and selling a reasonably diversified stock portfolio of comparable value. Since the average monthly change in the VLCI is about 5.2 points, the corresponding change in the value of a VLF contract would be \$2,600 (500×5.2)—about 65 per cent of the initial investment of an investor speculating on margin.

Market index futures contracts will provide the margin speculator with a vehicle for participating in general market movements. He will enjoy both a high degree of leverage and low commission costs. In addition, he will know that the contract—being based on the prices of a large number of securities—will be difficult to manipulate and impossible to corner. But market index futures contracts will also be invaluable to investors (including institutions) who desire to protect themselves against such market movements; the contracts will allow them to take either a long or short position in the shares of a specific company without incurring the commensurate market-related risks. ►

SPURRED ON by the enormous success of the existing futures contracts in bonds and bills, various exchanges are promoting new market index futures contracts that offer a wide array of products of potential interest to anyone whose financial well being is affected by the performance of common stocks. The Kansas City Board of Trade has proposed a futures contract based on the Value Line Composite Index. The Chicago Mercantile Exchange has developed a contract based on the Standard & Poor's 500 stock index. The Chicago Board of Trade has prepared one contract based on an index of their own construction that reflects the stock market as a whole, and several others based on specific industry groups. Overseas, Pierson, Holding & Pierson, N. V., a Dutch investment banking firm, is actually trading a contract based on the Dow Jones Industrial Average. In Maryland, Computer Directions Advisors is developing a market for call option writing by pension funds and call option purchasing by speculators based on the Standard & Poor's 500 contract.

Naturally, the agencies, boards and commissions of

the federal bureaucracy have been wrangling among themselves over jurisdiction of these contracts, and potential competitors, such as options exchanges, have raised substantial opposition. Thus, three years after the first contract was proposed, no definite date for the start of trading has yet been set. Because of the potential profitability of this market for both promoters and customers, however, it is hard to believe that that date is far off.

This article describes the mechanics of market index futures contracts and explores their potential uses and impact. For the sake of conciseness, it focuses on the Kansas City Board of Trade's contract based on the Value Line Composite Index, although most of what it says is applicable to the other contracts as well.* This represents the oldest proposal, dating from 1976, and appears nearest to trading, having

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TABLE I: Changes in the Value Line Composite Index

	Each Day	Each Week	Each Month	Each Quarter	Each Year
Average Absolute Change in Points	0.64	1.93	5.22	10.66	24.74
Average Change on Rises	0.62	1.77	5.44	10.64	17.41
Average Change on Declines	-0.69	-2.09	-5.06	-10.69	-39.39
Percentage of All Rises	52.1	53.1	46.7	48.0	66.6
Percentiles of Changes					
5%	1.29*	3.54	9.76	19.41	23.5
25%	+0.51	+1.6	+4.53	+8.18	+11.17
50%	+0.05	+0.17	-0.64	-1.5	+0.19
75%	-0.47	-1.56	-3.93	-11.22	-17.348
95%	-1.54	-4.24	-12.1	-20.77	-56.8

*Five per cent of the daily closes in the VLCI were +1.29 points or more above the previous close.

Source: Based on all observations from January 3, 1966 to December 31, 1978. Between 1926 and 1966, Value Line computed its index only yearly.

already been formally proposed to the Commodity Futures Trading Commission.

The VLF Contract

Each Value Line Futures (VLF) contract will represent a promise to buy or sell 500 units of the Value Line Composite Index (VLCI), measured in dollars. Since the VLCI hovers around 100, the underlying value of the stocks covered by the contract will be roughly \$50,000. The initial margin requirements will be \$2,000 for hedgers and \$4,000 for speculators; as with any commodity contract, participants will be able to post this earnest money in cash or in interest-earning Treasury bills. There will be no daily trading limit.

The minimum fluctuation in the contract's value will be \$5.00, which represents a change of 0.01 per cent of the value of the underlying stocks. The change in value of participants' positions will be credited or debited to their equity each day. In case of a profit, participants will be able to remove the increase in equity from their account. In case of a loss, they will have to put up additional capital.

Contracts of three, six, nine, 12, 15 and 18 months will trade, with delivery in March, June, September and December. If trading opened in March 1980, for example, the longest contract would be delivered at the end of September, 1981. As of July 1, 1980, the December 1981 contract would become available, and all buyers and sellers of March contracts who had not closed out their positions would settle with each other. The delivery mechanism calls for all open contracts to be settled at a price of 500 times the VLCI two days before the expiration of trading in the contract.

The average daily absolute fluctuation in the VLCI

*A comment by the present authors describing a DJIA contract appeared in *The Chicago MBA*, Volume 3, No. 1, and is available on request from the authors.

is approximately 0.6. Thus the mean change in the equity of a player long or short one contract will be \$300 (500×0.6). This represents a profit or loss of 15 per cent ($\$300/\$2,000$) for a hedger posting minimum margins. But the change represents only 0.6 per cent of the value of the underlying stocks.

The contract's sponsors anticipate that regular commissions on a round-trip transaction will total \$60.00. This represents a cost of only 0.12 per cent of the underlying value of the contract, or roughly 13 per cent of the cost of buying and selling a reasonably diversified stock portfolio of comparable value. It is also substantially less than an option commission. Even a 0.12 per cent commission can become substantial, however, if turnover over the course of a year rivals that of the typical commodity trader; while the average stock market investment may turn over once every few years, commodity speculators frequently look to a turnover of once every week.

Movements in the VLCI

Table I summarizes statistics on the distribution of changes in the VLCI for the 13 years from 1966 to 1978, inclusive. For all intervals except the yearly period, the distribution of changes is roughly symmetric about zero. Apparently, yearly rises tend to be more frequent than yearly declines, but the declines tend to be larger than the rises.

The mean daily change in the VLCI is 0.64 points. For a week of five trading days, the mean change is 1.93—roughly three times as great. The mean weekly change would be five times as great as the daily change if daily movements were always in the same direction, and only twice as great if consecutive daily movements were completely independent. Thus consecutive daily changes are positively correlated (a fact confirmed by the serial correlation coefficient of 0.16). With the passage of a month, the average change is about 5.2 points; the speculative investor in the contract, who "owns" 500 times the index, would

**TABLE II: Past Duration of Doubling or Wipe-Out
(Fully Levered Trading on Value Line Industrial Index Futures Market)
Hedgers' Margin: \$2,000**

			Gain of Money		
Dates		No. of Days	VLCI		Rise
From	To		From	To	
10/11/76	– 12/06/76	38	83.50	– 87.98	+4.48
12/06/76	– 12/30/76	17	87.98	– 92.53	+4.55
10/09/77	– 11/11/77	17	88.27	– 92.34	+4.07
11/11/77	– 4/10/78	101	92.34	– 96.45	+4.11
4/10/78	– 4/24/78	10	96.45	– 100.92	+4.47
4/24/78	– 5/12/78	14	100.92	– 105.15	+4.23
5/12/78	– 7/31/78	54	105.15	– 109.73	+4.58
7/31/78	– 8/09/78	7	109.73	– 113.85	+4.12
8/09/78	– 9/07/78	20	113.85	– 118.00	+4.15
10/27/78	– 1/04/79	46	97.44	– 102.00	+4.56
1/04/79	– 1/25/79	15	102.00	– 106.20	+4.20
2/27/79	– 3/13/79	10	101.71	– 105.94	+4.23
3/13/79	– 4/03/79	15	105.94	– 110.08	+4.14
4/03/79	– 6/22/79	56	110.08	– 114.14	+4.06
Average		30 Days			+4.28
			Loss of Money		
6/30/76	– 10/11/76	76	87.83	– 83.50	–4.33
12/30/76	– 10/09/77	203	92.53	– 88.27	–4.26
9/07/78	– 9/20/78	9	118.00	– 113.54	–4.46
9/20/78	– 10/19/78	21	113.54	– 108.00	–5.54
10/19/78	– 10/23/78	2	108.00	– 103.70	–4.30
10/23/78	– 10/27/78	4	103.70	– 97.44	–6.26
1/25/79	– 2/27/79	22	106.20	– 101.71	–4.49
Average		48			–4.81

Note: The first transaction was considered to have started at the close on 6/30/76. Daily losses were noted until a closing price showed a change of at least 4.0 points from the opening transaction. At this point, the transaction was closed out and a new opening transaction undertaken at the current close.

thus incur an average monthly profit or loss of \$2,600 (500 × 5.2), representing 65 per cent of his initial investment.

These swings, while precipitous, are comparable to swings in the actively traded grain futures contracts. Corn futures contracts, the most widely traded, experience an average daily change of approximately 0.6 per cent; the 0.64 point mean daily change in the VLCI represents about 0.6 per cent of its average value.

Table II illustrates another way of using historical data to gauge the likely rapidity of change in the VLCI: How long, on average, will it take a hedger to double or lose his initial stake of \$2,000—that is, how many trading days will it take the VLCI to gain or lose a cumulative four points? During the period from June 30, 1976 to June 22, 1979, the VLCI gained 26.3 points, going from 87.83 to 114.14. It experienced six more cumulative rises of four points than cumulative losses. (In a period during which the index declined overall, of course, losses would be more frequent.)

Over the three-year period, a hedger could have doubled his stakes 21 times, with the average time for a cumulative change of plus or minus four points being 36 trading days. The fastest doubling came in

the seven trading days between July 31, 1978, when the VLCI closed at 109.73, and August 9, 1978, when it closed at 113.85. The fastest total losses took two and four days in October 1978. The longest period without a doubling was the nine and one-third month period between December 30, 1976 and October 9, 1977, when the index hovered around 90. On the other hand, during the five-month period between April 10, 1978 and September 7, 1978, a fully levered hedger buyer could have doubled his entire stake five consecutive times. But this period was followed by one and one-half months during which the hedger would have lost his entire stake on four consecutive occasions.

The major swings in the VLCI show considerable momentum. It also appears that volatility in the stock market, as reflected in the VLCI, is increasing. During the two years ending June 30, 1978, the futures hedger could have lost or doubled his money nine separate times. During the following year, there were 12 such occasions.

A speculator in the VLF contract has to put up twice as much as a hedger; the VLCI must thus change a cumulative eight points to double his money or wipe him out. This futures contract would be substantially

less volatile than most active futures contracts. The fluctuations in the VLICI have been such that speculators would have experienced only five doublings or wipe-outs during the entire three-year period. This lack of action for speculators may dampen their willingness to provide liquidity for those on the hedging side of the market.

While hourly figures on the VLICI are not available, the average absolute Dow Jones Industrial Average (DJIA) change has been running about 1.5 points an hour. This works out to an hourly profit or loss to the hedger of four per cent.

Features of the VLICI

Most averages and indexes of the stock market tend to move together, since all share many of the same individual stocks. Other things equal, the correlation between a part and the whole is positive. The correlation between two stock market averages is stronger still because the moves of the stocks included in only one average are highly correlated with the moves of the stocks contained in both averages. During the two-year period from December 31, 1976 to December 31, 1978, for example, the VLICI and the DJIA moved in opposite directions on only 69 days of the 500. Interestingly, for 45 of these 69 days, the DJIA moved down and the VLICI up. Over the same period, the two indexes moved in opposite directions in only 14 out of the 105 weeks.

Because of the high correlation between various averages, speculators and hedgers in market index futures should be able to achieve their goals regardless of the index used. Nevertheless, each average has certain unique features, and participants should be aware of them. The VLICI represents the most broadly based of the major security indexes. It now comprises 1,695 stocks—1,499 industrials, 177 utilities and 19 rails. These include 85 to 90 per cent of the stocks on the New York Stock Exchange and a significant sprinkling of American Stock Exchange, over-the-counter and Canadian offerings. The VLICI includes all of the Standard & Poor's (S&P) 500 and all 30 DJIA stocks.

The VLICI is computed geometrically relative to some base period. The percentages of base-period prices at which the different stocks now trade are first multiplied together. Then one finds the single factor, "A," that when multiplied by itself as many times as there are stocks in the index, comes to the same product. Say that a three-stock index was at one when its stocks were selling at 50, 100 and 200, and the stocks now sell at 40, 150 and 220, respectively. Multiplying the current to base percentages together yields 1.32 ($0.8 \times 1.5 \times 1.1$). Solving the equation A^3 equals 1.32 gives 1.097—the current value of the index.

Although less familiar than arithmetic indexes such as the DJIA or the S&P indexes, geometric indexes

have some interesting properties. Each stock in each period, for instance, gets the same weighting regardless of its value. If the index consisted of two stocks, one at 10, which went up five per cent, and the other at 100, which went up 50 per cent, it would not matter for purposes of computing the index that the higher priced stock appreciated more. An arithmetic index would rise more if the higher priced stock appreciated more. (To increase the importance of a particular stock, of course, a geometric index could always include it more than once.) This equal-weighting feature of the VLICI, combined with its exceptional breadth, makes it a good indicator of overall market performance.

Performances of geometric and arithmetic indexes can be compared only if both indexes weight their stocks equally at the outset. If the geometric index includes each stock once, the arithmetic index must start with an equal investment in each stock. Surprisingly, so long as the stocks on each index do not go up or down by precisely the same percentage—in which case there will be no difference in performance—a geometric index will show less appreciation, or more depreciation, than an arithmetic index. The proof of this statement derives from the concavity of the logarithmic function, and is somewhat complex. As an example, consider two \$100 stocks, with the index at one. One stock goes up to \$160, the other drops to \$40. While the arithmetic index will show a change of zero, the geometric average will be 0.8 ($A \times A = 0.4 \times 1.6$), representing a drop of 0.2.

Three factors determine how the VLICI will perform relative to the DJIA or the S&P 500—breadth of base, geometric versus arithmetic averaging and differences in content. Table III shows that the three indexes can diverge considerably. The geometric VLICI shows a less favorable trend over the 13-year period. In the significant upswing of 1975-76, however, its inclusion of many small, more speculative stocks that had sizable gains, together with the greater relative weighting it assigned to low-priced stocks, enabled it to overcome the comparative downward bias of geometric averaging. Lower priced stocks offer a greater part of their return in the form of capital gains (as opposed to dividends) than higher priced stocks, hence will in general appreciate more (or depreciate less) than higher priced stocks. Thus the VLICI tends to appreciate faster than comparable arithmetic indexes. On the other hand, the more variability between the performances of individual stocks—i.e., some doing well while others do poorly—the more the VLICI will suffer relative to arithmetic indexes.

Given the relatively low margin requirements of all the proposed market index futures contracts, arbitrageurs should be fairly active across all of them. It would be surprising if, in most periods, the VLF contract did not sell at a lower price relative to present

TABLE III: Percentage Changes in Indexes

	<u>Between Year-Ends 1965 and 1978</u>	<u>Between Year-Ends 1972 and 1974</u>	<u>Between Year-Ends 1974 and 1976</u>
Dow Jones Industrials	-20%	-40%	+40%
Standard and Poor's 500	+ 2%	-43%	+43%
Value Line Composite	-30%	-52%	+80%

value than the contracts based on the arithmetic indexes. However, a belief that small companies will outperform large ones will give a boost to the VLCI relative to the S&P 500 and DJIA.

Uses and Impact of Market Index Futures Contracts

Trading in market index futures contracts could prove beneficial to virtually everyone who invests in equities, for whatever purpose. Some traders—from the lowliest prospective pensioner to the highest flying seller of puts and calls or the corporation planning to issue additional stock—will use such contracts for hedging. These contracts also present speculators with a new opportunity that is particularly attractive because it offers significant leverage.

Hedging Against Market Declines

The commonest motive for hedging is to guard against a market decline that would diminish the value of stocks already held. Selling the VLF contract short will prove a highly effective tool in this respect, since the value of the short position and the value of the stocks will move in opposite directions.

Consider the investor who feels that the market is entering a period of substantial volatility but is himself uncertain which way it will turn. (Haven't all investors found themselves in this situation at one time or another?) If the market is weak, he knows he cannot unload several thousand shares of individual stocks except at disastrous price concessions. He can reduce his risk, however, by selling a VLF contract short. He will thus insulate himself from both decreases and increases in the stocks' value, since a full hedge is roughly comparable to getting out of the market by selling one's stocks, except one retains title to the hedged stocks. When the period of uncertainty passes, the hedger may choose to buy the contract back.

Short sellers need not be sophisticated or wealthy institutions or hedgers who already own substantial pools of stock. Consider Professor Brown, who intends to retire in three months. His most significant assets are tied up in his retirement fund, the value of which is closely tied to the stock market. Professor Brown estimates the value of his nest egg at roughly \$150,000 at current market prices. He wishes to purchase a condominium now under construction, and will be financially able to do so as long as his nest egg does not decline in value more than 10 per cent. Consulting the type of statistics presented in Table I,

Professor Brown is understandably disturbed: The chance that the VLCI will decline more than 10 points—the critical 10 per cent—in the next three months is about one in four. He decides he must put off purchase of the condominium.

A market in VLF or other market index futures contracts will give Professor Brown a new option. He can sell three contracts short. While he may, of course, still lose his \$6,000, it will take a 20 point swing to put him in a position where he can no longer afford the condominium. The chances of this happening in a three-month period are only one in 20.

Dr. Jones, a graduate school classmate of Brown's who pursued a more lucrative career, has just sold the stock of his closely held corporation to a major food company for 100,000 shares of stock currently valued at \$2.5 million. Because of Securities and Exchange Commission registration and pooling of interest requirements, Jones must hold for a period of two years. He can hedge against a market decline, however, by selling a VLF contract short. In this way, he can ensure for his beneficiaries a sizable nest egg, provided the stock of the diversified food company moves with the market as a whole. Of course, if Jones did not take this precaution for his beneficiaries, they could make the investment themselves. Any person of moderate means with the expectation of a future windfall in stocks might take a similar tack.

A brokerage house with a net long position in a number of stocks, incurred perhaps to accommodate its customers, may also wish to protect itself, since a substantial decline in the overall market could prove disastrous. The VLF contract would offer an excellent and economical hedge. In fact, once such contracts begin to trade, brokerage houses should be more willing to accept long and short positions in connection with their market making.

Hedging Against Rises

Market index futures contracts, like most futures contracts, will initially be used to hedge against a decline in value more often than an increase. But some stock market participants, including those who have a current or future obligation to deliver stock or a product whose price is highly correlated with stocks, must also protect themselves against market rises. In the active grain markets, the volume of hedging against price increases frequently exceeds the volume of hedging against declines.

Many pension funds accrue contributions on a continuous basis, but receive the proceeds only periodi-

cally. A long investment in a VLF contract would assure that beneficiaries do not lose out if the market rises rapidly between the date of accrual and investment of the proceeds—an important advantage in an era when accountability in pension fund management is receiving considerably more attention.

For a firm that plans to grow by acquisition, a general market increase could carry target companies' stocks beyond the firm's ability to pay for them. But a firm that purchased a VLF contract could protect its acquisition potential. Similarly, the seller of a company whose deal is fixed in total dollars might wish to maintain future stock purchasing power by buying a VLF contract.

A firm that has committed to issue its shares on an installment basis, perhaps as part of a profit-sharing plan, might be happy to accept the risk that it will do well. But it may not want to get trapped into giving away excessive dollar value should the stock market as a whole have a favorable run. In that case, it should purchase a VLF or similar contract.

Foreign investors frequently plan to invest substantial funds in the U.S. but, for one reason or another, wish to defer action—perhaps because of restrictions against liberating their funds or because they expect the price of their currency to rise relative to the dollar. In the interim, they may wish to invest in the U.S. market; it simply looks more promising than anything at home. Purchase of a VLF contract would protect them against the loss of an attractive opportunity.

Another potential beneficiary of the VLF contract is Arnold Goldbug. Believing that excessive government intervention will ruin the U.S. economy, Goldbug has purchased ample supplies of freeze-dried foods, secured his rural retreat, placed most of his funds in Swiss savings banks bearing negative real interest, and is long on hordes of gold and silver. He has only one worry: Disaster may not arrive as soon as his international advisers forecast. To maintain purchasing power until the advent of calamity, he could purchase a VLF contract, thereby also guarding against the possibility of massive inflation. On the other hand, if he believes the same set of circumstances will lead to a massive deflation similar to that of the 1930s, he could short the contract.

Speculators

In many cases, investors eager to go long or short market index futures contracts as hedges against the risks acquired in the course of their other investment activities will be accommodated by speculators in such contracts. The VLF and similar contracts are a splendid vehicle for individuals who like to bet that they can predict market movements.

Numerous speculators in the options market trade options for a lack of a better vehicle to play the market. The VLF contract will offer them the volatility they seek. As Table I shows, the VLICI changes

0.64 points per day on average. With the VLICI at 100, and a leverage factor of 12.5, a speculator who happens to be on the right side can achieve a return of eight per cent a day. Hourly rates of return from a correct prediction of direction should run about five per cent; exact figures are not available, since the VLICI is not tabulated on an hourly basis. Furthermore, in contrast to the options market, the market index futures market will always be thick, quotations will always be relatively easy to secure, and there will be no danger of a short squeeze.

The market index futures contract will also enable option traders and other speculators to hedge certain aspects of their other investments. Speculators will be able to create preferred portfolios that focus their stakes on the gambles they really wish to make and eliminate the risks that were previously unavoidable byproducts of investing. The ability of option traders to hedge against the risk of market movements should improve the liquidity of the options market, hence increase public participation in that market. Market index futures contracts may also encourage activity in other speculative vehicles, since they will free up capital for speculation elsewhere.

VLF contracts offer even small-scale speculators an easy and inexpensive way to put their predictions to the market test. Such speculators will be able to get into and out of \$50,000 worth of the market for a small amount—\$60, at a minimum—and should save on research costs, since they will not have to inform themselves about particular stocks. In this respect, the VLF contract offers the advantages of an index fund, plus the possibility of selling short. Because of the volatility of the VLF, however, small speculators who cannot face total loss with impunity would probably be foolhardy to establish a position with the minimum margin; some may purchase the contract directly, putting up the full margin.

Furthermore, only the most astute speculators should be encouraged to trade VLF and similar contracts if they intend to turn them over as frequently as they do other commodity futures contracts. Studies of the performance of the public in commodity markets show that between 70 and 90 per cent of speculators who are not brokers or dealers lose money. The main reason appears to be the high cost of commissions and bid-asked spreads relative to the absolute magnitude of gains and losses.

Tax Planning and Convenience

Ephraim Middleguy caught the market just right and has made a small killing. He would prefer to consolidate his gains by selling out now, but if he does, his tax penalties will be considerable. He wants to hold out until his profits qualify for favorable tax treatment as long-term capital gains; he would also like to hold his position until next year, thereby gaining some float from the IRS. But by doing so, he takes

the chance that the value of his holdings will decline as he waits, and he is strongly risk-averse. He can protect himself by selling a VLF contract short.

Current commodities contracts offer some intrinsic tax advantages: While other capital assets must be held for a full year to qualify for long-term capital gains treatment, a long position in a futures contract requires only six months. The market index futures contract may thus offer stock market participants a unique opportunity to achieve long-term capital gains tax treatment. The potential in terms of more efficient tax planning for market participants is significant.

As noted, the market index futures contract also offers a convenient, readily monitored, readily marketable and potentially highly levered instrument for participating in market movements, and transaction costs will be relatively low. For example, an individual seeking diversification by purchasing and selling 100 shares of just 30 of the 1,700 odd companies comprising the VLCI would have to purchase 3,000 shares of stock at an average price of \$45, for a total investment very close to the underlying value of three VLF contracts. In addition, the in-and-out commissions on the 30 round lots would total roughly \$4,400; by contrast, the commissions on the VLF contracts would be about \$180.

Even the largest institutional investors might find the purchase of a VLF or similar contract a convenience. The time and brokerage commissions required to invest in individual stocks on a continuous basis are burdensome. Purchase of VLF contracts would reduce commissions paid, tighten spreads between bid and asked prices and save valued time of executive decision-makers. Mutual funds in particular will find that such contracts provide an economical and prudent hedge against risk; 85 per cent of the variability of the returns in individual mutual fund portfolios is explained by movements in the averages.

VLF contracts may also offer significant cash flow advantages. By purchasing the contract on a regular (say, weekly) basis, a cash-short company can remain current with the market, while investing only a small fraction of the funds that would be required to achieve comparable positions through outright stock purchases. When funds became available, the company could sell the contract and purchase equivalent amounts of securities.

Conclusion

We have discussed only the most direct and obvious advantages of market index futures contracts. They will offer many subtle and secondary benefits as well. From the standpoint of the investor, the contract's key advantages are its low transaction costs and the fact that it can be purchased with a considerable degree of leverage. This alone should lend market index futures markets exceptional liquidity, which may even eventually exceed the liquidity of the spectacularly suc-

cessful interest rate futures market. Indeed, the market in such contracts may even have a favorable impact on the liquidity of the stock market itself.

Market index contracts could drain a great deal of speculative activity away from stocks that move strongly in concert with the market, hence represent a considerable risk that cannot be hedged. The net result may be much greater stability in the markets for these securities; a whole range of volatile stocks may be expected to act in a much more orderly fashion. Any sell-off or run-up associated with market index futures contracts would involve assets whose total value would be measured in the hundreds of billions of dollars; scared investors, or over-committed investors, even by the thousands, could not drive these contracts into a speculative spin. The type of movements observed in the options expiration week of April 1978 and the Labor Day week of September 1978—attributed by many observers to the rush to cover by naked call writers—will not occur as frequently.

Of course, we must recognize that market index futures contracts may never realize their full potential. Continued regulatory intrusion or tie-ups due to unresolved jurisdictional disputes, for example, could keep these contracts from being traded as freely as would be desirable. It is even more difficult to predict which among the several contracts being offered will prove to be the most significant. The Kansas City contract in the VLCI has the advantage of being the broadest based and the most likely to be first on-line at a major stock or commodities exchange. The Chicago Board of Trade index, on the other hand, will enable hedgers and speculators to trade off risky positions in industries. And the Chicago Mercantile Exchange contract will use the more widely known and disseminated S&P 500 index. The DJIA contract, though limited in its availability, has the singular advantage of that venerable index as its base.

Despite seemingly interminable delays and dashed hopes, it appears likely that market index futures contracts will eventually trade. A futures contract in a market index represents an investment vehicle that can enable investors to neutralize the massive tidal movements of equities markets. Its potential economic benefits for speculators and hedgers, small and large, to those planning their taxes or securing their futures, are staggering. Most importantly, such contracts, by providing a sought-after investment vehicle with significant properties not now offered by other investment instruments, will further the primary aim of capital markets in our society—the efficient allocation of resources and risk. Significant economic benefit is not a force that can forever be denied, particularly if there are organizers who can expect fair recompense for their work. By the time you read this article, market index futures contracts may be a reality. ■