CoBANK
OUTLOOK Economic Data and Commentary
February 2015 Volume 12 Number 2

Outlook for Equity Markets

U.S. equity markets continue to demonstrate remarkable strength. Over the past two years, major stock indices have recorded substantial gains: over 30 percent for the Dow Jones Industrial Average, over 40 percent for the S&P 500, and over 50 percent for the NASDAQ. And all three have continued to hit all-time highs in 2015. It has been great news for all sorts of equity investors – from pension funds and other institutions to average Americans with 401(k)s. And the gains have come despite the looming prospect of a rate hike by the Federal Reserve, which most expect will take the some of the air out of stocks by increasing bond yields.

What's next for equities? To answer that question, Outlook turned to renowned stock market observer Burton Malkiel, emeritus professor at Princeton University and the author of *A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing*. The 11th edition of the book was published last month, setting forth Malkiel's long-held belief that markets are unpredictable and that investors cannot consistently beat market averages.

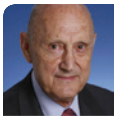
Emphasizing that he has "no idea" how equity markets will perform in the short run, Malkiel believes long-term rates of return going forward are apt to be relatively low due to a variety of factors.

OUTLOOK: What are your views on the economy as we move further into 2015?

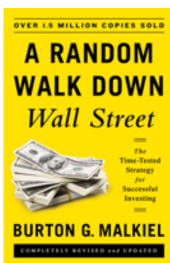
Burton Malkiel: I think the U.S. economy is doing well and the recovery is likely to continue. It's not a gangbusters recovery, but it's a moderate one. I think that we are likely to do about what we had been doing in 2014 – quarters of real growth that exceed 3 percent, helped somewhat by the lower oil prices. Overall, I think the outlook for the real U.S. economy is quite good.

I have more concerns about the global economy. Europe and Japan are not doing well; at best, they have been stagnant. However, a weaker Euro should help make Europe more competitive and lower oil prices are likely to help Europe and Japan even more than in the United States. Here, we're

About this article



Dr. Burton G. Malkiel, the Chemical Bank Chairman's Professor of Economics, Emeritus, and Senior Economist at Princeton University, is the author of the widely read investment book, *A Random Walk Down Wall Street.* The book has played an important role in encouraging the use of "index funds" by institutional and individual investors.



The revised 11th paperback edition of the book was published in January 2015. His book, with Charles Ellis, *Elements of Investments,* revised edition, was published in 2013.

Dr. Malkiel has long held professorships in economics at Princeton, where he was also chairman of the Economics Department. He was dean of the Yale School of Management and William S. Beinecke Professor of Management Studies there from 1981 through 1987. He is a past president of the American Finance Association and the International Atlantic Economic Association.

Dr. Malkiel is a past appointee to the President's Council of Economic Advisors and has served as an advisor to the Securities and Exchange Commission. He is a frequent contributor to *The Wall Street Journal* and the *Financial Times.*

both a consumer and an increasingly important producer, whereas Europe and Japan are primarily consumers and will benefit more simply from the consumer effects – more money in their pockets, which they can spend in other places.

I think Europe and Japan will begin to do a bit better, but I don't think there's any doubt about the fact that they are the weaker areas of the global economy and cause for some concern.

OUTLOOK: Do you expect further improvements in U.S. employment growth? What about the possibility of inflation?

BM: I do. But I am not concerned that we're going to break into a huge inflationary spiral. There remains enormous excess capacity throughout the world. The emerging markets are slowing down somewhat. But the productive capacity that you see in China, Southeast Asia and other parts of the world is enormous. Inflation is not one of my concerns.

OUTLOOK: Help us understand the performance of the stock market over the past few years starting with the recession.

BM: The 2008 financial crisis clearly scared investors. The accompanying decline in the stock market was understandable in the context of concerns about the potential collapse of the entire financial system. Some of our biggest banks were in very deep trouble and the stock market decline reflected worries that we hadn't seen since the late-'20s and early '30s. There was a flight from money market funds and widespread concern that this could lead to a total collapse.

What was not done in '30s, however, were the extraordinary measures taken around monetary policy. Extraordinary measures were needed and I give those measures very high marks. They prevented the collapse, restored confidence, and also basically lowered interest rates to zero.

There was a big rally in the bond market as a result of the financial crisis. Since stocks compete with bonds for investors' dollars and as bond yields declined with the lowering of interest rates, it certainly helped to produce a substantial rally in stock prices that has continued until the present time.

The years-long rally in the stock market has to be understood in the context of the fact that the financial system didn't collapse and confidence was restored. We've had a slow recovery, but a recovery just the same. Certainly, unemployment has stayed high for too long but it has come down steadily based largely on the essentially zero-interest-rate environment.

I think that's the story of the recent stock market. That's why it is performing as it has.

"The stock market doesn't exist in a vacuum. It's extremely important to know what's happening in other markets and, in particular, in the bond market.

OUTLOOK: What economic factors have influenced the recent performance of the stock market?

BM: The first would be the real economy, which is doing quite well. Corporate profit margins are high and profits, in general, are growing very strongly. And competition from the bond market simply isn't there.

To put this in context, think of the Paul Volcker era in the early '80s when – despite the fact that the economy wasn't collapsing – the stock market was very weak. Long term government bond rates ranged from 11 to 13 percent.

Stocks couldn't compete with those kinds of returns. The stock market was very low; price/earnings (PE) multiples were below 10. Today, PE multiples are considerably higher. And they should be because the 10 year Treasury rate is 2.25 percent.

The stock market doesn't exist in a vacuum. It's extremely important to know what's happening in other markets and, in particular, in the bond market. There's no doubt that monetary policy and the Federal Reserve keeping interest rates essentially at zero has been of enormous help to the stock market.

OUTLOOK: You mentioned that profits are strong. What is the correlation between stock market performance and the general economy?

BM: There is a correlation but in the short run, it's very weak. That's because the stock market is basically a forecasting mechanism. It's related to the economic performance that is expected in the period ahead rather than the current period.

Sometimes, the stock market will go up as the economy is getting worse. That has certainly happened on many occasions. The reason is that the stock market isn't reflecting today's economic conditions. It's reflecting expected longer run conditions.

OUTLOOK: Is the stock market an accurate mechanism for predicting future economic performance?

BM: Paul Samuelson – a fellow economist and a Nobel Prize winner – used to joke that the stock market had predicted nine of the last five recessions. So, in general, it is not accurate; but sometimes it is.

S&P 500 INDEX

JANUARY 2008 – JANUARY 2015

Source: Standard & Poor's

The market often gets things wrong. And markets tend to overreact. We're probably seeing that today in the oil market, where oil has fallen dramatically. There are stock market cycles in every free market. Invariably, though, markets tend to overreact.

OUTLOOK: Is that what is often described as the emotional aspect of the market?

BM: Sure, absolutely. Benjamin Graham was a notable investor who is recognized as the father of value investing, which is the process of identifying under-valued stocks. Graham had a significant influence on Warren Buffet's investment strategy. Graham made a very wise remark that, in the long run, the stock market is a weighing mechanism. In other words, it will be able to weigh the strength of economic activity. But in the short run, it's a voting mechanism. In the long run, the fundamentals do come through, but in the short run the votes of emotional participants can rule the day.

OUTLOOK: Some investors believe the current stock market is over-valued and others say that it's reasonably valued. Given these diverse views, how do you expect the market to perform over the next 12 months and the next five years?

BM: I have always believed that nobody, and I mean nobody, can forecast what the market is going to do over a particular period. I have no idea what the market is going to do over the next year.

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However, although they're far from perfect, we are able to make longer run forecasts. That is to say that when valuations are stretched, as they are today, it usually means that longer run rates of return, say, 10 years forward, are likely to be low.

For context, since 1926, the stock market has produced rates of return of about 10 percent. I don't think we're going to see anything like that over the next 10 years. In fact, I think we are probably going to have mid-single-digit returns and we'd be very lucky to have 6 percent returns over the next decade.

People need to understand that stock market returns are not going to be as favorable as they have been in the past. But it's not surprising given that the basis of returns is determined by interest rates, which are at historical lows around the world.

All returns are likely to be lower over the long term. Having said that, what the market does next year is anybody's guess.

OUTLOOK: Are there markets or market segments that you expect to do better than others?

BM: My view is that the best market to have been in over the past two years has been the United States. We've done better than anybody else. I'm not so sure that it's likely to continue. I think people really need to look more broadly and be diversified quite broadly.

I think emerging markets have been relatively good the last couple of months, but just relatively. They haven't done nearly as well as the developed markets despite the fact that their long term growth prospects are much better – and in large part because of their demography.

We're aging rapidly in Japan, Europe, and even in the United States. The emerging markets, typically, have much younger populations and I think there's going to be more long run growth there. The valuations are better. I think there's better relative value in emerging markets than there is in developed markets.

I also think that we shouldn't write off Europe. It's been flat on its back, but I think it will start to do a little better. Again, cheap oil is going to help them and the decline of the Euro will help, too.

BRENT CRUDE OIL PRICE

JUNE 2014 - PRESENT ($ PER BARREL)

Source: NASDAQ

OUTLOOK: How are stock valuations in Europe – undervalued, overvalued? Where do they stand relative to U.S. stocks?

BM: I prefer not to use words like undervalued or overvalued, because they assume that somebody knows exactly what the valuations should be. I've written that God Almighty doesn't know what the proper price/earnings multiple is for any stock or market. I'd rather put it in terms of relative valuation. That said, on a relative basis, stock valuations are better in Europe than they are in the U.S.

For example, let's take two multinational companies that have very similar businesses – General Electric in the United States, and Siemens in Germany. GE sells at 19 times earnings. Siemens sells at 14 times earnings. All things being equal, Siemens would be the better investment.

OUTLOOK: Help us understand your random walk theory.

BM: The idea of a random walk is that markets are really very efficient. That efficiency makes them unpredictable. The basic idea of a random walk is that you can't predict what the market is going to do next week, next month or even over the next year.

That follows from this idea of efficiency. What efficiency means is that when news arises, it is reflected in the stock market without delay. The stock market will change upon the receipt of new news, but true news is unpredictable.

In other words, if there is a headline that says "Consumers getting ready for Christmas," that's not news. But if there is a major unpredictable event that occurs – if terrorists run planes into the World Trade Center – that's news. That moves markets. But true news is unpredictable and, therefore, changes in market prices are unpredictable.

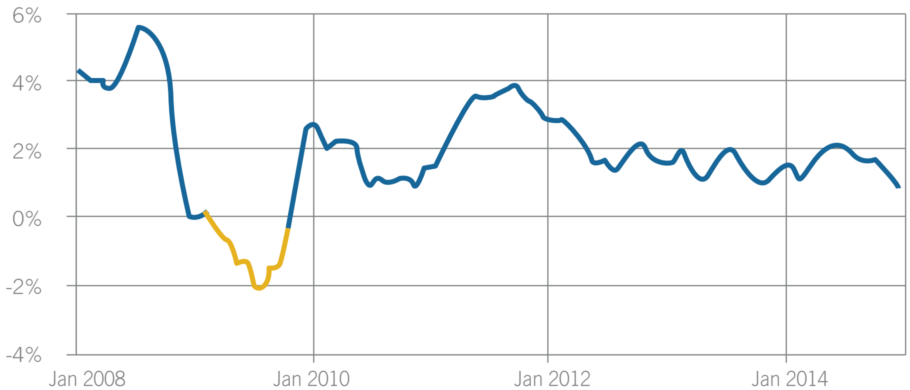
Basically, random walk says markets move with news. Don't trust anybody who tells you they know that the market is going to rally tomorrow, next week or next month.

OUTLOOK: What are your thoughts on the interest rate environment? Most observers expect the Fed to raise short-term rates in 2015.

BM: I think the Fed will raise rates this year because the real economy will do better, but I believe that the increase will be quite moderate. I don't think it's going to kill the stock market. If rates went to where they were in 1980s that would kill the stock market.

U.S. INFLATION RATE

ANNUAL CHANGE IN CONSUMER PRICE INDEX



Source: www.tradingeconomics.com I U.S. Bureau of Labor Statistics

I think the increase will be moderate because there still is, and will likely continue to be, a lot of excess capacity throughout the world. I'm relatively optimistic about Europe. It won't be gangbusters growth there, but we might have a little positive growth.

In my view, the key component is the enormous amount of excess capacity. Because of that, any rise in interest rates is likely to be moderate.

OUTLOOK: If it's not in the stock markets, what are the biggest implications of an increase in rates?

BM: The housing sector is typically quite interest rate sensitive. An increase in rates could slow down housing, which has been recovering.

We also still have too much unemployment, which is another consideration. We're doing a lot better, but we're quite far from full employment, which many people say is 4.5 percent. We still have people who have not been able to find work and I don't believe the Fed is going to let interest rates rise sharply or in such a way that would endanger the recovery or put a huge dent in the housing market.

OUTLOOK: What would be the risks of leaving interest rates as they are?

BM: If I were sure that interest rates were going to stay near zero for an extended period, I might then bid up the price of stocks even higher than they are today. That would create the risk of asset price bubbles, which eventually would collapse.

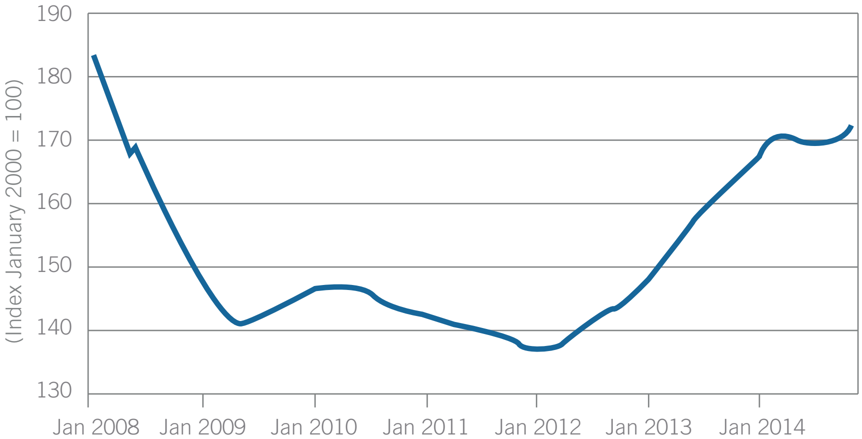
There are also problems related to a very unnatural zero interest rate environment. It's not good for retired people, who are naturally bond investors. It's pretty tough if you're very conservative, which retirees tend to be.

OUTLOOK: How has the low interest rate environment affected capital spending and loan demand?

BM: Intuitively, low interest rates should be helping. But capital spending has not been strong at all and it's another one of my worries.

There has been some capital spending in the oil sector, in limited places like North Dakota where oil production has developed rapidly. However, while lower oil prices are good for consumers, they're also likely to make capital

S&P/CASE-SHILLER 20-CITY COMPOSITE HOME PRICE INDEX



Source: S&P Dow Jones Indices LLC

spending even weaker than it is. The energy sector comprises about one-third of total capital spending for S&P 500 companies, so the effect may be significant.

I think low loan demand is a reflection of that weakness in the economy and capital spending. Relative to our history, it has been quite weak.

OUTLOOK: Is that a reflection of business confidence in the economy – are businesses hesitant to invest?

BM: There may be something to that, but I think it goes back to what I said was really the problem of the world economy. We're in an era where there's a tremendous amount of excess capacity; not just in the U.S. but globally.

We're seeing it in China. We're seeing it all over the world. You don't build a new plant when there are vacant plants all over the world ready to produce the same output. I think that's the key.

OUTLOOK: Is there anything else the Fed should be doing to stimulate the economy?

BM: In general, I would give the Fed very good grades. A lot of people say the Fed's behind the curve. But I think the Fed has been exactly right to keep monetary policy very loose. It's one of the reasons why we've been doing better.

They will need to normalize interest rates over time, but I think they're going to want to do it very gradually. When they start raising interest rates, it will not be with any sharp increases but with very slow increases and making sure that the economy is still perking along.

Will they make mistakes? Of course they'll make mistakes. But I would thus far tell you that they've been doing the right thing.

OUTLOOK: What are your thoughts about Congress and the rest of the government? Are they helping or hindering economic growth?

BM: My view is that we are very much over regulated. We're not as bad as Europe –which is one of the reasons why we're doing better than Europe – but I do think that government is part of the problem.

A lot of people say, "You can't say that we're over regulated. Look at the financial crisis. Wasn't that because we didn't regulate enough?" My answer is that the financial crisis had little to do with regulation. Rather than needing more regulation, it just demonstrated to me how poorly the existing regulations – such as the need for adequate capital – were implemented.

What we didn't have was enough capital. It was as simple as that. If I'm risking my own money, I'm going to be very cautious. But if I'm leveraged 33:1, as Lehman was, the mindset is, "I'll take a big bet. Heads, I win. Tails, somebody else will lose." That sort of environment breeds reckless bets.

There is a big difference between the amount of regulation and the quality of regulation. I don't believe that it was lack of regulation that put us in the soup. Rather, it was poor regulation. The one area that should have been regulated properly – making sure that people had adequate capital – wasn't. The response, however, was to create thousands of pages of new regulations in Dodd-Frank. I think that is where government can be a part of the problem.

Interest Rates and Economic Indicators

The interest rate and economic data on this page were updated as of 1/31/15. They are intended to provide rate or cost indications only and are for notional amounts in excess of $5 million except for forward fixed rates.

KEY ECONOMIC INDICATORS

Gross Domestic Product (GDP) measures the change in total output of the U.S. economy. The Consumer Price Index (CPI) is a measure of consumer inflation. The federal funds rate is the rate charged by banks to one another on overnight funds. The target federal funds rate is set by the Federal Reserve as one of the tools of monetary policy. The interest rate on the 10-year U.S. Treasury Note is considered a reflection of the market's view of longer-term macroeconomic performance; the 2-year projection provides a view of more near-term economic performance.

ECONOMIC AND INTEREST RATE PROJECTIONS

Source: Insight Economics, LLC and Blue Chip Economic Indicators

				US Treasury Securities	
2015	**GDP**	**CPI**	**Funds**	**2-year**	**10-year**
Q1	2.90%	-0.60%	0.13%	0.66%	2.16%
Q2	2.90%	2.00%	0.16%	0.93%	2.37%
Q3	3.00%	2.20%	0.29%	1.20%	2.57%
Q4	2.90%	2.30%	0.44%	1.45%	2.75%
2016	**GDP**	**CPI**	**Funds**	**2-year**	**10-year**
Q1	2.80%	2.20%	0.62%	1.68%	2.94%

PROJECTIONS OF FUTURE INTEREST RATES

The table below reflects current market expectations about interest rates at given points in the future. Implied forward rates are the most commonly used measure of the outlook for interest rates. The forward rates listed are derived from the current interest rate curve using a mathematical formula to project future interest rate levels.

IMPLIED FORWARD SWAP RATES

Years Forward	3-month LIBOR	1-year Swap	3-year Swap	5-year Swap	7-year Swap	10-year Swap
Today	0.25%	0.41%	1.04%	1.44%	1.68%	1.91%
0.25	0.32%	0.54%	1.16%	1.52%	1.74%	1.92%
0.50	0.44%	0.70%	1.31%	1.61%	1.82%	1.98%
0.75	0.64%	0.91%	1.44%	1.73%	1.91%	2.08%
1.00	0.79%	1.06%	1.54%	1.79%	1.96%	2.11%
1.50	1.18%	1.41%	1.75%	1.96%	2.09%	2.22%
2.00	1.46%	1.63%	1.90%	2.06%	2.16%	2.24%
2.50	1.64%	1.78%	2.00%	2.14%	2.23%	2.30%
3.00	1.82%	1.94%	2.11%	2.22%	2.29%	2.36%
4.00	2.01%	2.13%	2.25%	2.32%	2.37%	2.43%
5.00	2.18%	2.26%	2.31%	2.42%	2.44%	2.47%

HEDGING THE COST OF FUTURE LOANS

A forward fixed rate is a fixed loan rate on a specified balance that can be drawn on or before a predetermined future date. The table below lists the additional cost incurred today to fix a loan at a future date.

FORWARD FIXED RATES

Cost of Forward Funds

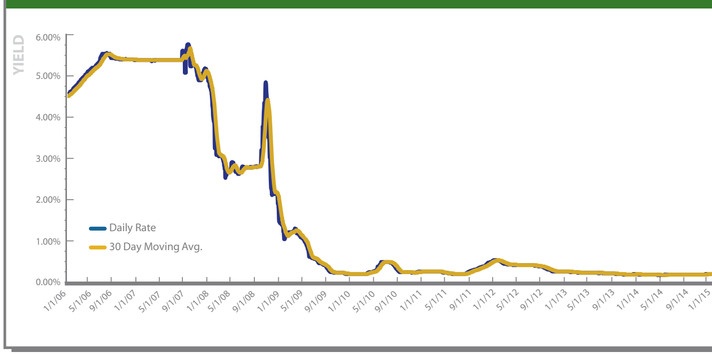
Forward Period (Days)	Average Life of Loan			
	2-yr	3-yr	5-yr	10-yr
30	7	6	6	5
90	15	15	13	10
180	28	28	24	18
365	62	57	49	35

Costs are stated in basis points per year.

SHORT-TERM INTEREST RATES

This graph depicts the recent history of the cost to fund floating rate loans. Three-month LIBOR is the most commonly used index for short-term financing.

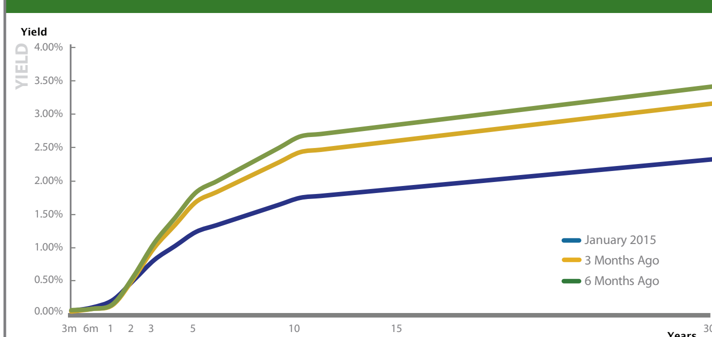
3-MONTH LIBOR



RELATION OF INTEREST RATE TO MATURITY

The yield curve is the relation between the cost of borrowing and the time to maturity of debt for a given borrower in a given currency. Typically, interest rates on long-term securities are higher than rates on short-term securities. Long-term securities generally require a risk premium for inflation uncertainty, for liquidity, and for potential default risk.

TREASURY YIELD CURVE



CoBank Donates $250,000 To NRECA International Foundation

Gift Will Support Rural Electrification In Developing Countries

CoBank has contributed $250,000 to the National Rural Electric Cooperative Association (NRECA) International Foundation to fund the development of NRECA International's rural electrification projects in Africa, as well as Central and Latin America.

Robert B. Engel

"We are proud to support the mission of NRECA International," said CoBank CEO Robert B. Engel. "Its tireless efforts over many decades have improved the quality of life for more than a hundred million people in developing countries by providing them access to safe, reliable electrical power. Electrification is one of the most critical steps on the path to sustainable economic growth for emerging economies, and it is a privilege to partner with NRECA International in this important work."

"We are deeply grateful to CoBank for this generous and timely contribution – the largest single corporate gift in our foundation's history," said National Rural Electric Cooperative Association CEO Jo Ann Emerson. "There are more than one billion people around the world without access to electricity. Just as electrification transformed the U.S. rural economy in the 20th century, we hope to share that prosperity with other nations. This gift will help accelerate the pace of electrification around the globe."

Over the last fifty years, NRECA International has provided 110 million people in 42 countries access to safe, reliable and affordable electricity. The organization has pioneered low cost rural electrification in design, construction, application of standards, and has a wealth of experience in the planning and operation of various generation technologies including renewable resources. Comprehensive training programs are implemented in all aspects of utility operations and management to ensure that local institutions can effectively and efficiently operate and administer a functioning and economically viable utility. NRECA International projects and programs have created more than 250 successful rural electric enterprises in Bangladesh, Bolivia, Costa Rica, the Dominican Republic, Guatemala, Haiti, Pakistan, the Philippines, South Sudan, Tanzania, and Uganda.

About CoBank

CoBank is a $102 billion cooperative bank serving vital industries across rural America. The bank provides loans, leases, export financing and other financial services to agribusinesses and rural power, water and communications providers in all 50 states. The bank also provides wholesale loans and other financial services to affiliated Farm Credit associations serving farmers, ranchers and other rural borrowers in 23 states around the country.

CoBank is a member of the Farm Credit System, a nationwide network of banks and retail lending associations chartered to support the borrowing needs of U.S. agriculture and the nation's rural economy.

Headquartered outside Denver, Colorado, CoBank serves customers from regional banking centers across the U.S. and also maintains an international representative office in Singapore.

For more information about CoBank, visit the bank's web site at www.cobank.com.