



E-Money in Hong Kong

Winnie Nip '08

Many people equate electronic money, or e-money, with the digital cash used in Internet transactions, but they are only partly correct. According to the Financial Services Authority in the UK, e-money is a form of monetary value which is stored on an electronic device (e.g. a plastic card with a chip or magnetic strip, or on a computer server), paid for in advance, and accepted as a means of payment by entities other than the issuer itself^a. So apart from digital cash, there is actually *another* less well-known category of e-money: prepaid cards, a.k.a. electronic purses.

In the international financial city of Hong Kong (HK), a prepaid card called the Octopus is enjoying unprecedented popularity. Named one of the “50 great ideas for the 21st century” by *The Independent* in August this year^b, the Octopus card is now owned by up to 95% of HK people aged 16 to 65. Among the approximately 7 million people there, over 13 million cards are now in circulation^c; this averages out at over 1.8 cards per capita. Launched only a decade ago in September 1997, Octopus has already expanded its reach to an amazing array of applications. Beyond doubt, Octopus has become the world’s leading and most pervasive contactless smartcard payment system.

What explains the phenomenal success of Octopus? In one of the most dynamic cities in the world where innovative inventions are encouraged, the extraordinary efficiency and convenience that this contactless prepaid card offers are undoubtedly key to its popularity. But what is more important is the system’s ability to fit perfectly into HK’s rather unique way of life.

Octopus As E-money In Hong Kong

When first launched, as many as 3 million Octopus cards were sold in the first three months alone^d. However, it was a single-purpose stored value card restricted to the payment of

transportation services. Soon, Octopus Cards Limited (OCL), which is the issuer and operator of the card, wished to expand its applications to enhance cardholders’ convenience and to raise its own revenue. But in order to issue multi-purpose stored value cards, OCL had to be authorized as a deposit-taking company under the Banking (Amendment) Ordinance of 1997 and be subject to the regulatory regime of the Hong Kong Monetary Authority (HKMA)—the government authority in HK responsible for maintaining monetary and banking stability. After the necessary authorization has been obtained in 2000, the multi-purpose Octopus officially became e-money in HK. Now, over 383 Service Providers accept Octopus, including public transportation services, convenience stores and phone booths. A total of 9.2 million transactions are processed through Octopus each day, amounting to HK\$25 billion (US\$3 billion) a year^e.

The mission of Octopus Holdings Limited (the holding company of OCL)—“Making Everyday Life Simpler”—captures the very essence of the Octopus system that guarantees its success. Indeed, its user-friendliness and effectiveness in simplifying various domains of everyday life in HK has made this e-money one of the favorite means of payment in the city.

Public Transportation

The Octopus card finds its perfect niche in the city’s existing transportation system. For such an advanced city, 20% car ownership (according to ACNielsen in October 2004^f) is amazingly low. This figure contrasts starkly with a 92% car ownership in the US. Several factors contribute to this phenomenon: high first-time registration tax, costly petrol, heavy traffic and difficulty in finding parking spots. Consequently, over 80% of all trips in HK are made on public transportation, thereby constituting an enormous client base for the Octopus system. Success was sure to follow so long as OCL could capture that client base—and it did.

The contactless Octopus card saves time and simplifies life for millions of public transportation passengers. The Mass Transit Railway (MTR)—HK’s subway system—alone is frequented by an average of 2.4 million passengers every weekday^g. The system’s contactless technology is key. Before the age of Octopus, passengers had to fumble in their bags at the turnstile to locate their prepaid MTR tickets, pull them out, feed them into the turnstile, retrieve them, walk through the turnstile, and slip the tickets back into their bags. Then at the destination, they had to undergo the same hassle. Much to their annoyance, this lengthy process often resulted in long lines at the turnstile during

rush hour. Now, the lines have disappeared. The contactless Octopus smartcard needs not be fed into the turnstile at all. Without even leaving the wallet and the lady's handbag, the card can communicate with the card reader on top of the turnstile, instructing the electronic Octopus system to automatically deduct the correct amount from the card's built-in microchip. In an extremely efficient city such as Hong Kong, it is no wonder such an ingenious time-saving invention skyrocketed in popularity.

Apart from the contactless design, the card's technical compatibility with the complex transportation fare systems is equally remarkable. On most modes of public transportation in HK, the fare is proportional to the distance travelled; different fares are charged for different routes and sometimes even for different sections of the same route. While this is meant to be a fair payment system, it created a lot of trouble for the passengers. Buses, for example, only accept exact change, forcing passengers to carry a heavy assortment of coins unless they were willing to pay extra. But now, because the Octopus system is able to automatically deduct from the card's built-in microchip the exact amount requested for each route or each section thereof, passengers are no longer required to carry bulky coins in different denominations or gather the exact change before boarding the bus.

Payment Culture

Given its early popularity in the transportation system, Octopus easily ascended to the next level as a multi-purpose stored value card and a form of e-money in HK. But its later success must also be attributed to the prominent role of cash in retail payments in HK. Unlike Americans, for example, people in HK seldom settle petty payments with credit cards. If you walk into Seven Eleven in HK to buy half a dozen of Red Bulls in the past, you would almost definitely pay with notes and coins. Now, however, you will no longer have to count your cash or wait for change if you use your Octopus card, because the card reader instantaneously deducts the exact amount from your card at the point of sale.

Time is money. And this is true for both customers and businesses. Five to ten seconds

saved per customer snowballs into many minutes saved per day for more business, and if customers are spared the trouble of waiting in line forever, they will visit the store more often and bring more revenue. This is particularly true for retail firms whose business comes in clustered spurts. For example, the Octopus system could easily double the revenue and efficiency for bakeries during morning rush hour. This is because the time-consuming part is done electronically behind the scenes. With a quick beep of the card reader, transaction information will be uploaded to Octopus Cards Limited (OCL)'s system, which will then send a clearing report to its agent bank for processing. The day after the transaction, the agent bank of OCL will pay the retail firm through Hong Kong's advanced Real-time Gross Settlement system. Once the settlement has been completed, the firm's account will be credited with the correct amount.

Other Advantages

HK's e-money also boasts other advantages. As opposed to the buy-now-pay-later principle of the credit card, Octopus works on the instantaneous debit principle and allows practically no overdraft on the card. While this curbs consumption capability to a certain extent, the inability to significantly overspend implies healthier spending habits in the society.

Moreover, the worst-case consequences of losing an Octopus card are arguably much less serious than those of losing a credit card. The Octopus cardholder will only incur a maximum loss of HK\$1,000 (approx. US\$130), which is the maximum amount one can store on an Octopus card. What's more, if the cardholder has previously registered the card with OCL, s/he can report the loss to deactivate the card and prevent unauthorized use. OCL will refund to the customer any value remaining on the lost card six hours after the loss has been reported. While credit card companies offer similar services, a credit limit which almost certainly exceeds HK\$1,000 exposes the credit cardholder to much greater risks. Thus the above safety feature of Octopus cards makes it possible even for young children to possess their own cards, giving the statistics yet another boost.

Hong Kong's success story replicated?

Within a decade, Octopus has risen to a formidable status in HK. It might even be the only real multi-application card in the world. Is Hong Kong simply lucky to be sharing in the glamor, or does the city play an indispensable role in the success story of Octopus? I believe it is the latter.

For a comparison, consider the probability of Octopus' success in the United States. The small role of public transportation in the lives of the Americans and the relative simplicity of its fare system do not warrant the colossal cost of introducing and monitoring a new form of payment for public transportation in the U.S. In a

wider context, the American society's relatively heavy reliance on credit and the buy-now-pay-later mentality would be one of many obstacles for a prepaid card to gain popularity. Indeed, the credit card has long been a popular substitute for cash in retail payments in the U.S. but not in HK. While paying with a prepaid card is much faster and more convenient than fumbling for cash and waiting for change, it is only marginally more so than swiping a credit card and signing a receipt. Thus the existing payment culture in the U.S. leaves less room for a prepaid card to shine.

Indeed, the amazing market penetration of Octopus in Hong Kong is the product of a magic formula unique to the dynamic city. The HK people's desire for ever higher efficiency, their obsession with convenience and their willingness to embrace new inventions raised the well-designed Octopus card from being a favourite means of payment for its popular public transportation to becoming a form of e-money—a considerably faster and more convenient substitute for cash in retail payments. Unless another society is able to offer a similarly nurturing environment for the development of a prepaid card, HK will continue to boast the world's leading and most extensive contactless smartcard payment system. And who knows what next? With such a popular payment system in place, HK might well become the first cashless society in the world. /A

- a "Consumer Updates: E-money update—the regulation of e-money issuers." Financial Services Authority. http://www.fsa.gov.uk/consumer/updates/updates/e_money/mn_e_money.html
- b "50 Great Ideas for the 21st century", August 6, 2006. The Independent. http://news.independent.co.uk/world/science_technology/article1213576.ece
- c Octopus Cards Ltd. website <http://www.octopuscards.com/corporate/why/statistics/en/index.jsp>
- d Octopus Holdings Ltd. website <http://www.octopus.com.hk/milestones/en/index.jsp>
- e Octopus Cards Ltd. website <http://www.octopuscards.com/corporate/why/statistics/en/index.jsp>
- f Online Consumer Survey of ACNielsen, which polled over 14,100 internet users in 28 countries across Asia Pacific, Europe and the US in October 2004. The countries are: Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand, Vietnam, Austria, Belgium, Denmark, Finland, France, Germany, Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden, UK, US. <http://asiapacific.acnielsen.com/news/20050316.shtml>
- g Mass Transit Railway website <http://www.mtr.com.hk/eng/train/intro.html>

Second Title

Article Title

Alex Sloane '09

Since Deng's Southern Tour in _____, China has been the world's most alluring market for foreign corporations. Picturing themselves as new Andrew Carnegies and J.P. Morgans, CBO's drool at the lucrative prospects that abound in China: the prospect of an untapped and undeveloped base of 1.5 billion consumers seems almost too good to be true. Corporations



Caption goes here

and individuals have therefore rushed headlong to invest billions of dollars in China over the last twenty years. The fear of missing out on what is potentially the world's biggest market has led established companies like AT&T, Boeing, and Motorola to do business in China despite the disadvantageous conditions that generally obtain. Companies are willing to sacrifice coveted technological and managerial trade secrets simply for the opportunity to compete.

In 1984, the Ministry of Posts and Telecommunications was put in charge of modernizing China's telephone system. The goal of the upgrade was to facilitate the wider economic growth of the country. Foreign corporations such as AT&T, NEC Corporation, and Siemens AG, wanting to compete for such a lucrative contract, were forced not only to divulge plans that included technology secrets but also to commit to training the employees of a Chinese "partner" company. For every dollar the foreign corporation received from the Chinese government, they were required to train Chinese employees for a proportionate amount of time. As James McGregor puts it, "The companies knew they were training their future competitors, but what choice did they have? The market was growing too fast, and had too much potential, to ignore. To miss out in China could jeopardize a company's global competitiveness." AT&T went beyond its training requirement in order to create additional goodwill within the Chinese government. The American Company sent almost fifty Chinese executives to an American university and gave them a full year's training at AT&T and Bell labs. They were willing to devote time and capital to Chinese officials simply for the opportunity to work in China.

Boeing's success in China is based on a similar strategy. Airbus predicts the Chinese air market will grow by a factor of ten by the year 2022 to become a \$140 billion market. Boeing has built its 65% market share over the last twenty years by courting favor with the Chinese government. It has, Ted Fishman believes, "played an important role in the development of China's aircraft industry, helping Chinese companies grow into suppliers of key parts of its aircrafts." Boeing, like AT&T, has shown a willingness to help Chinese suppliers by introducing them to its latest technological advances. "Our emphasis," said David Wang, president of Boeing China, "is that these programs should be able to add value to our Chinese partners as much as possible as soon as they can." Boeing, moreover, is not the only aircraft manufacturer that divulges its trade secrets. Airbus, too, has a large presence in China. The Chinese government decides which manufacturer to employ based not only on price, but also on the amount of technology the company is willing to release. In 1999, the U.S. Department of Commerce acknowledged this trend in a report: U.S. aerospace companies,

represented primarily by Boeing... appear to be willing to make significant concessions to Chinese state planners in co-production agreements in return for increased market access." As a result of these stringent regulations, China has become one of the world's most profitable centers for aircraft parts. Boeing is even helping China Aviation Industry Corp 1, a government-owned company, to build its own state-of-the-art jet. China Aviation Industry Corp 1, they predict, will begin selling planes as early as 2018.

In addition, China is already the largest mobile-phone market in the world. There are currently over 300 million cellular phone users in China and almost five million new subscribers every month. Motorola was eager to make up for its past mistakes in the Japanese market and be the first market-mover in China. It was willing to take an enormous risk to equip China with the latest in mobile phone technology by establishing state-of-the-art telecommunications infrastructure. "Galvin [Motorola's CEO at the time] knew that eventually the transfer of [this] technology to China would sow formidable Chinese competitors. Nevertheless, Motorola decided its best strategy was to get into China early." Today, the cellular telephone market is saturated. It includes companies from Germany, Korea, Taiwan, and naturally, China itself.

A further obstacle to foreign businesses seeking to enter the Chinese market arises from the fact that Chinese intellectual property laws are generally ineffective. The lack of patent protection affects many different areas of the economy, but its consequences for the pharmaceutical industry stand out. The chemical composition of drugs is readily available, and many Chinese companies sell drugs on which large pharmaceutical companies, like Pfizer and GlaxoSmithKline, hold patents. Foreign corporations and governments have tried many strategies to force the Chinese government to prohibit such practices, but none have seemed to work. The story of Pfizer's attempt to protect its patent over Viagra teaches an apposite lesson about Chinese economics. Pfizer's patent application was denied because it did not explain in enough detail the power of Viagra's main chemical. Pfizer attempted to challenge the ruling in the Chinese court system. As Pfizer and all other drug companies later found out, however, it is not a good idea to publicly humiliate and challenge the Chinese government. Pfizer not only lost the law suit, but also created significant ill-will within the Chinese government. GlaxoSmithKline, on the other hand, learned from Pfizer's experience. The British pharmaceutical company willingly and publicly relinquished their patent rights to their most successful diabetes drug, Avandia. The company believes that the Chinese government will appreciate its gesture and will reward GlaxoSmithKline with lenient regulations and lucrative contracts in the future.

"The key in China is to stay in the market," says Ted Fishman, "and many companies are willing to make extraordinary bargains to preserve a place."

The Chinese government, however, should not be blamed for leveraging its untapped market as a bargaining chip. Foreign companies choose to sell planes, phones, and drugs to China under these conditions. As Ted Fishman believes, "Without China, perhaps neither would prosper." /A

Interest Rate Swaps

Responsible Investing

Nathan Taylor '08

Warren Buffet, arguably one of the world's greatest investors, claims that on a macroeconomic level: "Derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal."^a Among Buffet's chief concerns with the growing use of derivatives is the difficulty for companies to accurately and responsibly report corporate earnings to their investors. Another major threat reported by Buffet is the ease at which banks can accumulate large amounts of concentrated risk, such as credit risk, through the trading of derivatives. If left unchecked, concentrated risk could leave banks in particularly vulnerable positions during unexpected economic downturns. While these dangers are very real, the growth of Wall Street's derivatives market has not slowed in recent years.

On the other hand, Buffet acknowledged that derivatives carry few dangers on the microeconomic level. In fact, underlying economic theory supports the use of derivatives, explaining that derivatives control risk by allocating it efficiently between corporations, investors, and banks. Interest rate swaps are no exception, transferring interest rate risk from one party to another.

Unlike an interest rate future, which is a public security that is actively traded in a physical exchange, an interest rate swap is a private contract between two parties. Under the contract, the two parties, commonly called counterparties, agree to exchange periodic interest rate payments on a notional principal for a specified period of time. All aspects of the contract vary from product to product. For example, an interest rate swap's size can range anywhere from a notional of \$2 million to a notional of \$1 billion, and its term length can vary from 1 year to 30 years. The interest rates also vary. Defined most broadly, the interest rates are either fixed or floating. Floating rates, however,

are pegged to one of a few different floating interest rate indices, and often counterparties add a spread to an index, take a percentage of an index, or even add a spread to a percentage of an index. One such index commonly used is the London Inter Bank Offered Rate, or LIBOR. It is the rate at which London banks loan money to each other for inter-bank deposits.

As stated earlier, the primary use of interest rate swaps is to transfer interest rate exposure from one party to another. In this way, interest rate swaps give large corporations, government agencies, and non-profit organizations the ability to access large amounts of capital while responsibly avoiding risky interest rate exposure. Many companies choose to raise money through bond offerings, and when issuing bonds, they have the option of issuing fixed rate bonds or floating rate bonds. Fixed rate bonds require the company to pay investors a fixed rate on the bond's principal, and floating rate bonds require floating rate payments on the principal. Because most companies are fundamentally risk-averse, they avoid floating rate bonds. An increase in interest rates could lead to debt service payments that spiral out of control, often causing serious liquidity problems and financial strain. Companies have no expertise in predicting interest rates and would prefer the

stable debt payments associated with fixed rate bonds.

However, fixed rate bonds are often more expensive to issue than floating rate bonds. This was especially true in the early 21st century with short-term interest rates at record lows. An alternative to issuing the relatively expensive fixed rate bonds is issuing "synthetically" fixed rate bonds. During this process, the company issues floating rate bonds in the usual manner and then partially or fully hedges its exposure to floating interest rates with a floating-to-fixed interest rate swap.

In a floating-to-fixed interest rate swap, the company pays its counterparty a fixed rate based on an agreed upon notional principal in exchange for receiving a floating rate on the same notional principal (see Figure 1). The inherent flexibility of the interest rate swap allows the company's floating receipts from the counterparty to match its payments on its floating rate bonds. The swap becomes effective when the bonds are issued and terminates when the last debt service payment is made. The swap is also arranged so that the notional principal of the swap decreases in line with the bond's amortization schedule. This strategy allows companies to issue cheaper floating rate bonds while maintaining the security of fixed rate bonds.

Traders at most banks are willing to enter interest rate swaps with companies. Once they finalize an interest rate swap, they try to hedge this position with another interest rate product. For example, if a trader arranges an interest rate swap in which he or she pays a floating rate of 1-month LIBOR and receives a 4.05% fixed rate, the trader will try to hedge the exposure with an offsetting interest rate swap in which he or she receives 1-month LIBOR and pays 4.00%. If the notional amounts on the swaps are roughly equivalent, the trader will make profit in a risk-less position. The floating rate receipts and payments cancel each other, and the trader is paying 4.00% and receiving 4.05%, netting a 0.05% spread on the notional principal.

There are two primary interest rate indices used for the floating rate in an interest rate swap. The first index is LIBOR, which is briefly introduced above. The other index is the Bond Market Association Municipal Swap Index, commonly referred to as BMA. Designed as a swap index, BMA is calculated from municipal bond returns. Because of the high correlation between BMA and bond payments, BMA is an ideal index to use for interest rate swaps.

The principal difference between BMA and LIBOR is that LIBOR is taxable and BMA is nontaxable. Because of this difference, BMA is usually about 67% of LIBOR. For example, if LIBOR is 6.00%, BMA has historically averaged around 4.00%. This difference, or spread, fluctuates with the market, and occasionally market conditions are just right for companies to use this spread to reduce their debt payments.

The low yield environment of the early 21st century presented companies with one such opportunity. When interest rates decreased, the spread between BMA and LIBOR became relatively small, and BMA was high relative to LIBOR. This relationship is typical in very low interest rate environments. In March of 2003, BMA was 1.14% and 1-month LIBOR was 1.30%. Instead of the historical 67%, the ratio of BMA to LIBOR was 86.43%. Many companies that were receiving BMA under a current interest rate swap entered into an additional swap in which they paid BMA and received a version of LIBOR, such as LIBOR minus 50 basis points, or 0.50% (see Figure 2). An interest rate swap in which one floating rate is paid in exchange for another floating rate is called a basis swap. With BMA high relative to LIBOR, it was cheap for companies to enter into a basis swap in which they willingly paid a relatively high BMA for a low LIBOR.

Companies knew they would initially lose money on the basis swap, paying 1.14% and receiving 0.80% (LIBOR of 1.30% - 0.50%). However, when interest rates began to rise in 2005, the BMA/LIBOR ratio returned to its historical level, and the swap began to make money. In January of 2006, the BMA/LIBOR ratio was 65.67%, and companies that used the basis swap to take advantage of the low yield environment paid BMA at 2.93% and received 3.90% (LIBOR of 4.40% - 0.50%). Because there is no reason to believe that interest rates are going to decrease to the levels of the early 21st century, companies are likely to continue making money for the duration of the swap.

The current investing environment gives companies another opportunity to use interest rate swaps to create savings. Presently, the yield curve is extraordinarily flat. The yield curve, which shows bond yields (or, in this case, interest rates) on the y-axis relative to maturity periods on the x-axis, is historically upward sloping. This shape shows that interest rates are higher for longer maturity periods, reflecting the fact that it is riskier for an investor to have his or her money tied up in a bond for longer periods of time. With a normal yield curve, short-term interest rates of 1, 3, and 6 months are less than long-term interest rates of 5, 10, and 30 years, but when the yield curve is flat, as it is currently, short-term interest rates are roughly equivalent to long-term interest rates.

A company can use a Constant Maturity Swap (CMS) to take advantage of today's flat yield curve. In the CMS, a company pays its counterparty a short term interest rate of 1-month or 3-month LIBOR in exchange for receiving a long term interest rate, such as 10-year LIBOR (reset monthly). Because the 10-year rate has been larger than the 1-month rate 95.80% of the time since 1989, the company will receive either a percentage of 10-year LIBOR or 10-year LIBOR minus a spread.

Companies often have a number of swaps

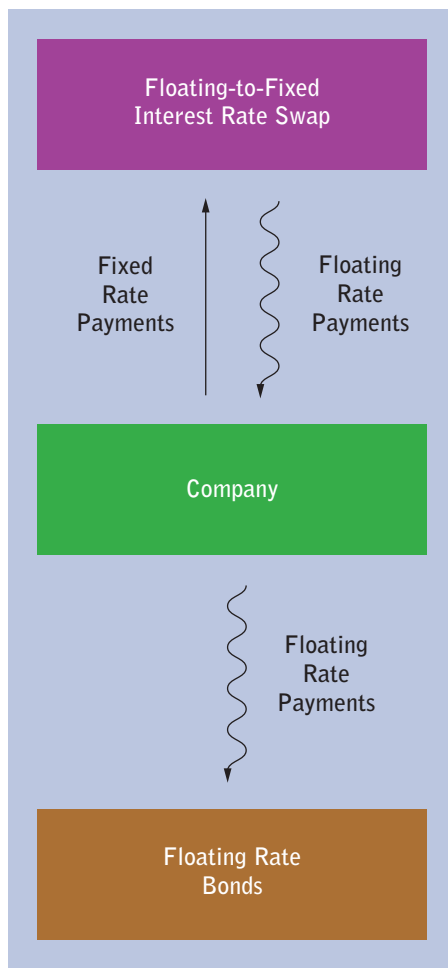


Figure 1

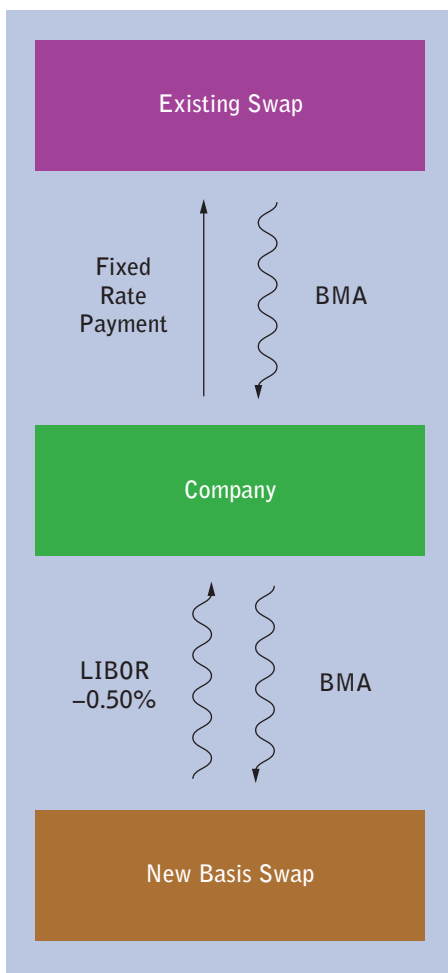


Figure 2

on their books, and if they are receiving 1-month LIBOR from one of their current swaps, the CMS is done either as an amendment or an overlay. In an amendment, the existing 1-month LIBOR receipt is switched to 10-year LIBOR. In an overlay, an independent CMS swap is added to the company's list of swaps. The 1-month LIBOR that the company currently receives is canceled by its 1-month LIBOR payment under the CMS, and the company receives a version of the larger 10-year LIBOR.

Because the company receives less than 10-year LIBOR (either a percentage of 10-year LIBOR or 10-year LIBOR minus a spread), the CMS is likely to produce a negative result for the first year. In the market as of early August, with 1-month LIBOR at 5.41% and 10-year LIBOR at 5.63%, a company that receives 10-year LIBOR minus 60 basis points under a CMS will lose 0.38% of the swap's notional principal. However, since 1981, 10-year LIBOR has averaged 1.14% greater than 1-month LIBOR.^b As one can see in Figure 3, a company with a CMS can expect its receipts to be at least 1.00% higher than its payments when the yield curve returns to its historical shape. In the end, the CMS uses the same financial concept as the BMA / LIBOR swap described above. Both swaps take a position on a spread when it deviates from historical levels, and they produce returns when

the spread returns to these levels.

The natural flexibility of interest rate swaps allows products to be designed and traded in any interest rate environment, and their use helps companies, cities, states, and nonprofit organizations access the capital markets responsibly by controlling interest rate exposure. Although some bankers and investors agree with Warren Buffett's statement that derivatives, such as interest rate swaps, could cause massive instability problems for Wall Street and the world economy, the use of derivatives has increased consistently.^c All that the investing world can do is sit back and hope that this time, a Warren Buffett prophecy is wrong. /A

- a Buffett, Warren. Berkshire Hathaway Inc.: 2002 Annual Report. 15.
- b Data from 1-month LIBOR and 10-year LIBOR is available going back to 1985 and 1988, respectively. A proxy of the Federal Funds Target Rate + 15 basis points is used for 1-month LIBOR, and a proxy of the 10-year Treasury Note + 50 basis points is used for 10-year LIBOR.
- c Jung, Jayne. "Growth in Derivatives Trading Speeds Up, Says BIS." Risk, July 2006. 10.

Second Title

Value Investing Revalued

Kevin Klein '02

"To distill the secret of sound investment into three words, we venture the motto, Margin of Safety."^a With these words, an investor by the name of Benjamin Graham explained the essence of his hugely successful approach to investing in the 1973 book, *The Intelligent Investor*. Now, years later, his method is still being used and refined, and is known as "value investing." The method was made famous by Warren Buffett, the world's second richest man, as he both took classes with Graham and later worked for him. Unfortunately, however, the world is a very different place than it was 50 years ago, and, for the most part, good, well-

run companies no longer sell for pennies on the dollar. Our task, then, is to revalue value investing for the 21st century in a way that works with today's more efficient markets, and that provides superior returns over the long-run.

The most fundamental objective of a value investor is still to purchase assets at discounts to their intrinsic values—to buy things for less than what they are worth. The difference between the price and the asset's true value is the investor's margin of safety. Graham believed this to be the most important aspect of investing for the simple reason that the market is unpredictable. No matter how much research the investor does or how many people he talks to, there always remains a chance that some unforeseeable event will destroy an otherwise sound investment. A margin of safety helps protect against such situations by serving as a sort of price cushion for the investment. This is in contrast to investments that aren't selling at discounts and are instead trading at very high multiples in anticipation of future growth. If the event of an unpredictable downturn, these "growth investments" have much more to lose than value investments that are already trading for less than what they are worth.

To say this, however, is not to say that value investors don't care about growth, or that they prefer stagnant companies. Instead, growth is merely a component of value, not its entire focus. For example, if an investor buys into a company for less than its current earnings power (explained below) he gets any potential growth for free. Essentially, the bet is that the price will eventually right itself to reflect the company's earnings *as they are today*, and any profitable improvement in operations is an extra bonus. This is one of the main goals of the value investor: to avoid predicting the future, and instead focus on the tangible, namely, what the company is achieving right now. This makes the investor's decisions much more certain, as he doesn't have to worry about arbitrarily forecasting out margins, revenue growth, etc.

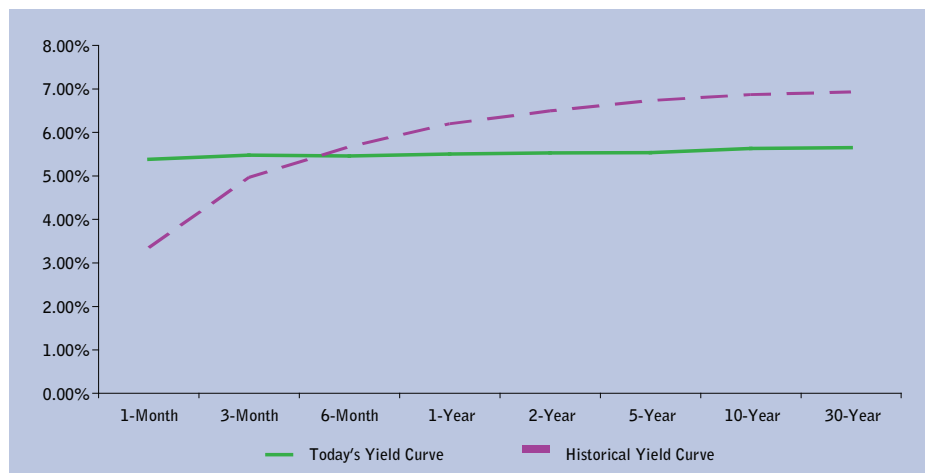


Figure 3 Today's Flat Yield Curve

The problem that confronts us today is how we find such investments, and how we adapt Graham's approach to today's markets. Several decades ago, the stock market was far more arcane and unobserved, technology and information were limited, and techniques were cursory. Now there are thousands of hedge funds with intricate pricing models and fast-money trading programs that arbitrage away small inefficiencies. The internet makes information a public commodity, and computers allow individual investors to trade stock in between eating lunch and taking out the trash. The upshot is that companies no longer trade at price-to-earnings multiples of 1 or for a third of the cash assets on their balance sheets. And as a result, the line between value investments and poorly-run businesses is more blurred now than it has ever been.

Today's value investor, then, must accept the fact that he will be investing at higher multiples than his 1950's counterpart. Any company that now sells for a P/E of 1 or 2 is likely having very serious problems and probably has a good chance of going into bankruptcy quite soon. While such investments might be cheap, they are by no means safe or wise. Instead, we might now look at relative multiples—whether the company in question is cheaper or more expensive than a business that is comparable to it and in the same industry. The value investor needs also to focus on intangible assets, items like brand loyalty and technological advantages. Warren Buffett and Charlie Munger pioneered this approach, investing in companies with very strong brands like Coca-Cola and Sees Candy. The list could go on, but the basic idea is that while the goal of modern value investing remains the same, it must now look at more abstract items—rather than just hard assets—in order to find reasonable margins of safety. Perhaps this is best illustrated with a recent example, and then categorized into two methods.

A few years ago, Kmart went into bankruptcy as a failing retailer. Most people thought that the company's operations were worthless and that it would end up having to liquidate its assets. Edward Lampert, however, thought otherwise. The face value of Kmart's distressed debt was covered by the company's valuable real estate holdings, and there was potentially ample room to cut costs and improve margins. Lampert thus bought up the company's debt in Chapter 11, using its real estate as his margin of safety. If the post-bankruptcy reorganization fell through, he could have sold off Kmart's assets to recoup most of his initial investment—all potential upside from growth, restructuring, and new management was essentially free.

And that's exactly what happened: the discounted future prospects became reality. Kmart increased profits by managing margins and costs, revamped its product line with the help of outside counsel, and sold off a lot of

valuable real estate to amass a pile of cash. The result was a stock price that skyrocketed from \$15 to \$110 in 18 months.^b Granted, Lampert, as Kmart's controlling shareholder, did have the additional advantage of being able to oversee the reorganization from the outset. But even after jumping to \$50, the shares still contained a significant margin of safety, as the company had around \$22 per share in cash and another \$30 or so in real estate^c, leaving the individual ample profit opportunity.

This also reveals the importance of approaching value investing in today's markets with the mindset of a businessman, and not a fast-money, over-levered trader. Graham wrote, "Investment is most intelligent when it is most *businesslike*. It is amazing to see how many capable businessmen try to operate in Wall Street with complete disregard of all the sound principles through which they have gained success in their own undertakings."^d By doing this, the investor turns what many view as a disadvantage into his most important asset: market volatility. Rather than anxiously selling in fears of further losses when a stock drops 20%, and of losing unrealized profits when it rises 50%, the businessman waits patiently for his value to be fully realized. Lampert could easily have sold his stake when the stock hit \$30 or \$40 for a nice profit—indeed, most traders would have taken advantage of the liquidity and done so. Lampert didn't, realizing that there were many other long-term changes that could be made to unlock additional value, such as a merger with Sears. As a result, Sears Holding Corp. is now a thriving retailer that still has the potential of being undervalued, and Edward Lampert is a billionaire several times over.

In general, today's value investor must find his margin of safety in either the assets or the earnings power of a company. "Asset plays" are investments that are selling for less than the replacement value of their assets. An important distinction that must be made in this case is whether the company is to be valued on a liquidating or a going-concern basis. The reason for this is that a company with future prospects possesses intangible assets that a bankrupt concern does not: brand recognition, proprietary research, customer loyalty, etc. If the company's industry is becoming obsolete, if its earnings can no longer support its interest obligations, if its margins are nonexistent—these are all good reasons to value the company as if it were to sell all its assets tomorrow. And in such situations, any intangible value the company managed to create over the years is immediately worthless. Generally, however, the prudent value investor stays away from these businesses no matter how cheap they are, as too many things could go wrong and there is too much competition from distressed-debt hedge funds.

Asset plays, therefore, should mostly be limited to situations in which the investor

believes the company to have a reasonable chance of continuing its operations for many years to come. In these cases, the basic question that the investor sets out to answer is, how much would it cost to create another, identical company to compete with the business in question? To illustrate, let's consider an unrealistically simple business called Value Inc. Value Inc. has \$500 million in cash and marketable securities, \$100 million in receivables, and \$4 billion in property, plant, and equipment. In addition, Value Inc. has very strong brand recognition and technology, as it has spent \$250 million on marketing and advertising, and \$100 million on research and development over the past three years. The \$500 million in cash can be taken at face value because cash is cash and therefore deserves no discount. Let's assume that in the past Value Inc. has only managed to recover 80% of its receivables—this gives a value of \$100 million \times 0.80 = \$80 million. If the investor were ambitious, he could hire an appraiser to put a proper value on the \$4 billion in property, plant, and equipment, but to be conservative, let's assume that 50% of these assets are outdated, yielding \$2 billion. So far, then, we have a total of \$2.58 billion—this is the amount of tangible assets a startup would have to reproduce in order to compete with Value Inc., and the amount that Graham would have stopped at several years ago.

But we have to go further than Graham, and put a value on the company's intangible assets. In addition to its hard assets, Value Inc. has built up a loyal customer base that is willing to pay a premium for its products. If a competitor wants to go up against Value Inc., it's going to have to commit a substantial amount of capital to its advertising campaign in order to replicate Value Inc.'s product recognition. Taking the brand value at 75% of its three-year marketing expense, we estimate that the amount of advertising money a potential competitor would have to raise is around \$188 million. At the same time, Value Inc. has spent \$100 million on research and development over the past three years that has improved its product technologies, manufacturing processes, and distribution capabilities. A competitor that didn't replicate such advancements would be at a distinct disadvantage. Using the same 75% factor as we did when estimating the brand value, we get a value of \$75 million for Value Inc.'s research investment. Adding this to the brand value of \$188 million and tangible value of \$2.58 billion, we get a total of \$2.84 billion for the whole company. If the stock is selling at a market value that is significantly below this amount, Value Inc. may be an attractive investment.

On the other hand, many more investments derive their values from their earnings powers. These are usually companies that have very high returns on their assets, which exceed the returns required by investors (the businesses' so-called weighted average costs of capital). Investors use

various different metrics to gauge a company's profitability, such as its return on assets, its return on invested capital, and its return on equity. Most companies are unable to sustain returns higher than 15% or 20%, so those that can must have some sort of competitive advantage. We call such companies "franchises," and their values come primarily from the intangibles that make customers willing to pay premiums for its products. Perhaps the most famous example is Coca-Cola, as its soda is known throughout the world. Unlike a lot of businesses, franchises don't necessarily employ a large amount of capital, as they can use a smaller amount of assets to produce a greater return. If a company is able to do all of this and do it consistently, it is likely a very good business that deserves the investor's attention. The problem, of course, is that most of these companies sell at very high multiples, so the trick is to find a company with a return of, say, 20% and a price-to-earnings ratio of 10, and then make sure it isn't failing or going out of business.

The most basic earnings-power valuation capitalizes a company's annual "normalized earnings" at a conservative multiple. A company's normalized earnings are just the current year's earnings plus any nonrecurring charges minus the appropriate tax correction. For example, say Earnings Inc. earns \$50 million after tax but has a \$200 million restructuring charge. The \$200 million charge has nothing to do with the company's operations, so in order to find out what the company's operations should be expected to earn in any given year—assuming no growth—it should be added back to the \$50 million. You must also then subtract \$60 million for the tax allowance, which nets \$190 million for the company's normalized earnings. The investor then capitalizes this amount by a conservative multiple—say, 10—to get an estimate of \$1.9 billion for the company's earnings power. If the stock's market value is meaningfully less than this (or if it's about the same—you'd be getting any future growth prospects for free) it may be an attractive investment.

This, however, is the very simplest way of valuing earnings. Many professionals employ discounted cash flow models to forecast the results of operations out for a decade and then discount them back to arrive at a fair value for the company. Still others use sensitivity analyses to determine how the earnings would change if the company were to increase margins, accelerate growth, or bump up prices. This tool, however, is used primarily by investors who have some sort of direct control over the company's operations, as they can influence the strategy the business pursues. Regardless of the complexity of analysis, however, the objective remains the same: to purchase companies for less than their normalized earnings powers.

These two changes—intangible asset valuation and franchise earnings power—are

the focal points of value investing today. As long as the investor adopts the mindset that Graham set out long ago and supplements his approach with these two techniques, it should be reasonable for him to expect satisfactory returns. Its essence, however, is still the margin of safety. The difference between Graham's approach and modern value investing, therefore, is not so much an entirely different style as it is a reevaluation: the principles are the same; there are just a few more techniques that help the investor achieve those principles. So while the points and methods explained in this article are indeed useful in today's markets, as long as the investor does his own research, and is confident—no matter what his approach—that there exists a margin of safety in his investment, he will do very well. /A

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- b Berner, Robert. "Eddie's Master Stoke." 11/29/2004. http://www.businessweek.com/magazine/content/04_48/b3910041_mz2011.htm
- c Cramer, James. "Blue Light Special." 6/7/2004. <http://newyorkmetro.com/nymetro/news/bizfinance/columns/bottomline/9220/index1.html>
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Second Title

Wall Street and The Academy

Brandon Adams, HBS

Finance academics were enthralled by market efficiency for thirty years, and during this time they were more or less ignored by Wall Street. The rise of behavioral finance has brought about a much tighter connection between academic finance and The Street that can be expected to continue in future years. Academic research, or so many firms are finding, is dangerous to ignore—and vice versa.

Thus far this increased integration between theory and practice have been good for both. Leading quantitative funds are constantly synthesizing new academic research to come up with the best possible models. The top banks and hedge funds also engage in their own proprietary research along behavioral finance grounds, in order to better gauge their target markets. Likewise, the academics have more interest than ever before in what money managers are doing, knowing that professionals in the financial services are becoming increasingly better at ridding the market of inefficiencies. The academics are also excited by Wall Street's interest in their research—but not so much so that they are giving up their academic posts en masse for the Street. Financial research will continue to advance quickly on both ends, and it

is likely that there will be a resurgence of finance journals that are meant to appeal to a mix of academics and money managers, similar to the old *Journal of Portfolio Management*.

In general, there is a distinct difference between the kind of research performed by practitioners and that by academics. Academics are typically hard-liners when it comes to issues of statistical inference. A phrase like "significant at the 6% level" is not likely to be read sympathetically by the editors of an academic journal. Some economists have a flexible view of statistical inference and are perfectly willing to accept "significant at the 6% level," provided that the test was sufficiently biased against finding results and that the initial hypotheses were well-motivated. On the whole, however, the field has advanced using the same tough approach to statistical inference that is used in, for example, medicine, where one patient can mean the difference between a drug being disapproved or becoming a global blockbuster. Finance practitioners can afford a flexible approach to statistical inference because they are in search of small edges and can afford to be wrong a high percentage of the time. They care little about the underlying cause or theory, because all they really need is to be able to generate profit.

But, in recent years, we can see an increasing intersections between research of academics and that of the private sector. For example, there has been a large increase in practitioners co-authoring papers with academics. Moreover, there is a huge increase in the number of "white papers" circulating through emails and on the web. "White papers," which are quasi-academic papers released by various firms, analyze market anomalies or potential investment strategies or some other aspect of financial markets. The motivations for releasing these "white papers" differ, but one of the primary motivations appears to be the desire to alert the world at large that the author's firm is doing careful, high-quality work.

The increased integration between academics and practitioners has brought about a better understanding of the nature of markets on both sides, but it has also brought about, in our opinion, an investment environment where it is more difficult than ever before to generate alpha (risk-adjusted excess returns). There are signs that we could be moving towards the "hyperrational" markets described by Mark Rubinstein in his paper "Are Markets Rational? The Affirmative Case." In such markets, the inefficiencies that finance professionals thrive off of begin to dwindle. It is quite possible that it is more difficult to generate alpha now than ever before, and that alpha generation will only become more difficult over time. Will the field of behavioral finance be ruined by its own success?

Let us explore this in more detail. In today's investment world, fund flows are extremely sensitive to performance (alpha generation).

This is primarily due to the increased popularity of hedge funds. Investors expect hedge fund managers to generate substantial levels of alpha; if they don't, investors would be unwilling to give away two percent of assets and twenty percent of performance. When investors fail to see substantial alpha generation in their current fund, they are quick to transfer to other funds that have higher historical returns.

This tendency of funds to flow quickly from low alpha funds to high alpha funds means that money is becoming concentrated in the best funds. Since alpha sums to zero across all market participants (tautologically, the average investor cannot return more than the market after adjusting for risk), the market can increasingly be seen as a competition among the best of the best alpha-generators.

Alternatively, one could subdivide the investment world into various segments and ask, "Who are likely to be the losers in this game?" In other words, where will the positive alpha come from? In the late 1990s, one could readily point out a large number of stupid investors in the market who were likely to supply alpha to the market's more intelligent investors. This transfer of alpha took place on a dramatic scale. The flow of alpha might have gone from smart investors to dumb investors in the 1997-March 2000 period, but then the flow reversed, and with unprecedented speed, alpha flowed from dumb investors to smart investors in the March 2000 to late 2001. This flow continued after 2001 in the same direction but a slower pace. The massive flow of wealth from dumb investors to smart investors that occurred in 2000 and 2001 was perhaps underappreciated because both sets of investors were losing money; the smart investors just lost less of it.

From today's vantage point in mid-2006, it's not clear who the dumb money is. The pockets of dumb money that exist are, unfortunately, not very big. Thus, as hedge funds become more important players in the investment scene, they will increasingly be battling one another for alpha, rather than battling other types of market participants. Hedge funds are in danger of becoming victims of their own success.

Another piece of evidence that is suggestive of an overall higher level of rationality in the market is the systematically lower implied volatility that we have seen in markets in the last five years. One options trader told me why his firm believes this is the case: basically, the increased prevalence of quantitative funds in the market has led to a different regime in implied volatility. His argument is that there are a lot of players in the market who have quantitative models assessing the value of security x , and when the market price of x deviates strongly from the value generated by their model, they are quick to step in and buy or sell as necessary. Hedge funds are increasingly willing to go short when they believe a security

is overpriced; furthermore, they have high incentive to uncover every conceivable type of value-relevant information. The result is that, for individual stocks, price discontinuities around information events of all kinds (lawsuits, accounting irregularities, clinical trials, etc) are lower now than they have ever been before. A decline of implied volatility is inevitable, given these conditions.

But, although there is strong reason to believe that the observed inefficiencies of the market during the late 1990s contributed to a more rapid acceptance of behavioral finance theories, it doesn't seem likely that a return to more rational markets will dethrone theories of behavioral finance. Markets wax and wane between more or less rational regimes over fairly short intervals. Traditional finance does not deal well with the pockets of observed inefficiency that will always be present in markets in greater or less degrees. To understand these inefficiencies, one needs a complete theory of markets; behavioral finance provides such a theory, and as such, it will continue to bring together Wall Street and the Academy for years to come. /A

Second Title

On Markets, Volatility And Poker

Ravi Mehta '07

In 1999, Nassim Taleb wrote a book called *Fooled by Randomness*, in which he argues that it is impossible to know whether past performance is a result of skill or luck. Take the classic example of a set of 10,000 investment managers (a reasonable assumption given that 8,000 hedge funds exist today) who play the game every year. Let's assume that manager returns are distributed around zero. This means that $10,000/2^n$ managers will have made money in each year after n years. For example, after 10 years, there will be 9 managers who make money in every single year due to randomness alone. The laws of probability say that this has to happen. This result shouldn't be surprising. After all, we all know a coin flip can appear heads several times in a row. Of course this result does not imply that managers with the best performance have no skill. It just means that some managers have outperformed solely because of luck. The problem is that these two cases are hard to distinguish.

Taleb argues that randomness plays a much larger role in markets than this. In the same way that clients do not understand the influence of randomness on performance when evaluating managers, similarly traders do not understand

how random markets really are when evaluating asset prices. Taleb cites a Eugene Fama study to support his view. Fama's study reveals that five-sigma events, which should occur once every seven thousand years, happen once every few years in financial markets, due to the irrationality of the participants.

For example, consider the -20.7% one-day move in the S&P cash market on Black Monday, October 19, 1987. A proprietary trader at one of the best-performing desks on the Street explained to me that the z-score corresponding to this one-day return was over 15, making it an event that should occur once over several instances of the universe, as the partners from LTCM would have argued. Yet this event came only several decades after the 6-sigma 1929 crash. Because markets are driven by greed and fear, investors herd and cause price bubbles. Then they all run and a flight to quality ensues, as we saw with the LTCM crisis in 1998. These behavioral inefficiencies explain at least some of the excess volatility that Professor Robert Schiller of Yale has proven exists in financial markets. Fama's study is good evidence that return distributions have fat tails.

Taleb calls these extreme events black swans, whose probabilities he believes are underpriced in the market. As such, he is systematic buyer of deep out-of-the-money options hoping for several-sigma moves to bring his bets into-the-money.

Because the five-sigma move is a *rara avis*, Taleb usually loses money on a given day. In his article *Blowing Up*, Malcolm Gladwell makes an interesting point—the human psyche is wired to precisely avert this behavior. We are okay with taking on a lot risk as long as we are making a small bit of money every single day. As humans we would hate to repeatedly lose a small amount of money for an extended period of time waiting for that day when we get paid.

Interestingly, this is *precisely* the approach I have used to playing poker. I play moderately low-blind (to guarantee my opponents call when they shouldn't) cash games to eliminate some of the second-order game theoretical strategies that tournament poker introduces. I am perfectly happy bleeding away my blinds and waiting for that hand to which I am willing to seriously commit. To offer an example, I took a trip to Foxwoods in the spring of 2006.

I sat down at a small-blind no limit table. When you are playing eight-handed, you usually need the best hand to win given the probability that somebody has an exceptionally strong hand is decently high. I was bleeding away blinds and the rake (a transaction cost). My suited connectors and mid-pocket pairs never justified committing 25-35% of my capital on a given hand. About 3.5 hours into my 4 hour session, I was down to 30% of my original capital. And I was perfectly okay with it. One such example is a hand where I folded 10-10 when it ended up that two people had pocket aces!

Suddenly randomness played into my favor. I won some small hands to increase 50% to come back to 45% of my reference point. After I out two-paired someone to basically come back to flat, things were fine. I continued to lay low, bleeding away. Fate would have it that my next rare bird came pretty shortly after my 2-pair blockbuster. The flop came QJ9. There were a few rounds of betting and a Q and a 2 showed up. When all was said and done, three of us were all in.

The first guy at the table was way behind with his J9. The next guy turns over a Q9, thinking he has taken down the pot. But he hasn't. I flip over QK, outkicking him. And that is my rare bird. I triple my capital on the hand. I play a few more hands. Satisfied, I leave. After a four-hour session, I leave with a 400% return. Of course the assumption is that you have enough capital to continue waiting for black swans. I was talking about this with my great friend and superb competitor Bobby Lazarony, a rising options trader from the Midwest. Once your capital goes to zero, you are out of the game. (Again: I believe this idea of waiting for the *rara avis* works only in low-blind cash games devoid of second-order game theoretical strategies for reasons I won't get into here.)

But how long do I bleed away my blinds waiting for that royal flush on the laws of probability alone? Is my brain able to bear the negative feedback that each of these small losses generates? Should I be able to withstand the jealousy of bleeding away to the idiot at the table who seems to make money consistently? Should I bear the career risk of doing nothing while his prestige soars and I stay too attached to my model?

Obviously. Taleb has bled for years and years waiting for these extreme events. He has eliminated emotion from the investment process by using little discretion and staying attached to his models. Unlike humans, computers cannot feel greed and fear! Because he is an empiricist, Taleb follows the words of Scottish philosopher David Hume: "No amount of observations of white swans can allow the inference that all swans are white, but the observation of a single black swan is sufficient to refute that conclusion."

Taleb shares this empiricist proclivity with fellow trader Victor Niederhoffer. But that is where the similarity ends.

Niederhoffer is a systematic seller of the options that Taleb buys, meaning that every day Taleb bleeds away is another small and consistent profit for Niederhoffer. He believes that the concavity of the utility function means that investors overpay for insurance. Participants are willing to pay a premium that is slightly more than the actuarially fair price in order to reduce the state-dependency of their payoffs. So Niederhoffer provides this insurance to the market by selling options. And on the few occasions he blows up, Taleb makes an absolute

killing. A spike in implied volatility is Taleb's royal flush off of which he can bleed until the next black swan comes.

This same spike marks disaster for Niederhoffer. When the market dropped 8% in October 1997, Niederhoffer had to buy SPX from the counterparties to whom he sold SPX puts at very high strikes. Because he was leveraged, Niederhoffer could not cover his obligations. He ran through \$130 million in a single *day!* Vic got desperate—he mortgaged his mansion in Connecticut, sold his silver collection, and even borrowed from his kids in a last ditch attempt to stay alive. But it failed—disgraced, he didn't have enough money to continue playing the game. Niederhoffer has described the event as "one of the worst things that has happened to me in my life, right up there with the deaths of those closest to me."

But that didn't keep him out of the market. He came roaring back a few years later, only to blow-up *again* after September 11th. The old adage goes: "Fool me once, shame on you. Fool me twice, shame on me." How about getting fooled three times? He is back again managing a Fund called Matador, which has seen returns for a few years in the 40-50% range. But with the volatility spike in mid-2006, his fund is down more than 30%. So why do people keep investing in this strategy?

Because it's incredibly profitable. The returns from a strategy that consists of shorting deep OTM SPX options three-month-out and holding cash look as expected. On most days the strategy delivers consistent and reliable profits. When there is a volatility spike however, the strategy gets creamed. As long as strategy is positioned to survive the blow-up and not have to meet margin calls, etc., the period immediately following an extreme event generates even better returns. And this continues until the next blow-up. And the cycle repeats itself. The key is to be able to sustain the shocks. As long as you can do that, it's a winning strategy.

The seeming clash between these two brilliant and successful investors has intrigued me. A friend and highly successfully portfolio manager has offered a view that might reconcile these two strategies. Taleb buys options because he bets on highly unlikely extreme events *actually* happening to bring his options into the money. In a slightly different trade, Niederhoffer sells options because he believes implied vol is systematically lower than the market believes. But this does not mean he is expressing a view on a specific event happening like Taleb is.

So who's right? Maybe they both are. /A



Lessons from a China Expert

Mike Hoer

In 1979 our company, ContiGroup Companies, Inc. (at that time known as Continental Grain Company), established what was probably the first company in the Shenzhen Special Economic Zone; in fact, our business registration number was #0001. Since then, we have established nearly 30 agribusiness companies throughout China. Today, Conti is one of the largest foreign feed companies in China.

At Conti, we have a unique understanding of and appreciation for China both economically and socially. Although we have several companies in major cities, we work extensively in the countryside, where roughly 70% of China's population resides—so we tend to see events and situations from a different perspective than those companies confined to the cities. In addition, our core business, unlike most foreign corporations operating in China, is selling to the local markets. We purchase raw materials in China, we add value to those materials in China and then sell finished goods back to customers in China—and we generate a profit doing so.

As one of the first foreign companies in China, we, at Conti, have been at the forefront of market innovation and have had a large role in establishing favorable business conditions in China. We were one of the first companies to borrow funds in 'Ren Min Bi' (People's Currency). Years before

the official exchange rate for the Ren Min Bi was scrapped, we were able to obtain permission from local tax authorities to report our profits using a market exchange rate that we calculated ourselves. Conti was one of the first companies to establish a supply chain for McDonalds in China. We are now one of the largest suppliers of both poultry meat and feed in China.

Overall, we have been successful and pleased with our investments in China. Although China is continually changing and any "China Expert" is in danger of becoming outdated if he/she does not stay abreast of new developments on a daily basis, I would like to share eight enduring factors which have contributed to our success in China.

Set a good foundation

There are three common methods of establishing a company in China: Contractual Joint Venture, Equity Joint Venture, and Wholly Owned

Foreign Enterprise. When we were invited to invest in China, we were pressured to enter into a joint venture. We didn't succumb to this pressure and I believe this has been one key in our success. Many companies believe that they need a local joint venture partner for help with purchasing or sourcing, help with financing, help with connections or government approval, help with hire of local employees, help with land negotiation, etc.

I believe any organization that intends to do business in China for the long term, not only can do these things better themselves, but in fact *must* learn to do these things if they are to be successful. Those companies that do take on a joint venture partner will soon learn that their partner's objectives can be vastly different from their own—and often do not involve earning a profit. In fact, the majority of all complaints from foreign partners in a Joint Venture structure are

In 1979, Michael A. Hoer was one of the first group of 17 students to study in China after China and the United States normalized relations and in 1982-83 taught and consulted at the Xian University of Metallurgy and Construction Engineering in China. He holds a BA in Chinese and an MBA from Brigham Young University. Married with four children, he has resided in Hong Kong for the last 16 years, and has also lived and worked in Taiwan, China, Japan, and Singapore. He is active in community affairs and speaks fluent Chinese and Japanese.

Mr. Hoer is Managing Director of ContiGroup Companies Inc.'s ContiAsia Division (formerly Continental Grain Company), and President of Continental Enterprises Limited. He manages ContiGroup's Asian operations, including over 40 wholly-owned and joint venture investments in Asia. ContiGroup's China investments are primarily in Agri-business (integrated meat processing plants, feedmills, swine and poultry farms) that supply major restaurant chains and other food companies in China.

about their Chinese partner.

If you are already in a joint venture, my recommendation is to negotiate to buy your partner out. Because China's joint venture law and local government protection provide extensive power and protection to local partners, a foreign company is much better off with full 100% ownership. A Chinese joint venture partner with only 5% to 10% ownership can exert a troublesome amount of influence on company operations. In addition, most local governments now realize wholly owned enterprises can generate growth and jobs without requiring Chinese capital. In one particular city, we had a complicated joint venture with three local Chinese partners, but the city Mayor and Party Secretary supported our buy-out of the Chinese partners because they trusted us to continue employing local workers and possibly expanding our operations in the area.

Even if you feel you must rely on a Chinese party for land or some critical raw material or service, do what you would do in any other country: sign a supplier's contract or land lease contract, but don't give up the advantages of being a wholly owned enterprise so quickly -- which brings us to the second key factor.

Negotiate a solid contract

As a wholly owned company, (or joint venture) you will still need to negotiate contracts. The day you must rely on a contract in China to settle a dispute, you'll lose, but that does not diminish their importance. Allow me to suggest three key points on China contracts, which I have learned from years of negotiation. I refer to these as the "three ps" of contract negotiation:

Purpose The purpose of an ideal Chinese contract is to outline a general statement of ideas and agreements, and establish a basic foundation for conducting business, in contrast to a Western contract, which is an all-encompassing document that addresses a course of action and remedy for every possible future situation. The Chinese believe that an honorable partner should be willing to renegotiate a contract if the business environment significantly changes. Unless you think you can modify the customs of 1.3 billion people, then you are better off accepting the Chinese way of doing business and adapting accordingly. Therefore, with regards to contracts, your primary focus should be on the structure of the agreement and your secondary focus should be on the contract. For example, in a typical buy/sell transaction, we make sure we are holding the product or the money at any given time—we never allow ourselves to be in the situation where the other party is holding the product and the money and we are holding a (worthless) piece of paper—the contract. The structure of the agreement is your security, not the legal remedies you believe the contract affords you.

Patience The Chinese are famous for being extremely patient in contract negotiations. Usually, the party that can wait the longest will obtain what they want. Let me suggest one way we have used to turn the tables on patience. First, we sign a simple one or two-page agreement, which basically commits us to build something and the Chinese party to supply something, usually land. We then hold a big banquet and signing ceremony with lots of photographers -- so the Chinese partner will "lose a great deal of face" (incur public embarrassment) if they ever consider backing out. In our simple agreement, we make our initial investment, payment of rent, or commencement of construction contingent on the signing of a general agreement. You'll be surprised how patient you can be when your land is secured but you're not paying rent -- and how impatient and eager the Chinese party becomes to conclude the general agreement. This arrangement gives you fantastic negotiating leverage.

Perspective Often the Chinese party will tell you that the concession you seek is illegal or not allowed by virtue of some "internal regulation". However, these internal regulations may actually be nonexistent or may change overnight. Therefore, try to anticipate items that may not be available today but might become available tomorrow. In 1979, selling in local currency was illegal, but we negotiated the right to conduct Ren Min Bi transactions if this privilege ever became allowable under Chinese law. At the time, the Chinese didn't even argue. Later, when China changed its laws, we were the first to begin selling products in local currency, which was key to opening the domestic market.

In summary, don't back your partner into a corner, even if you have a temporary advantage. The tables can turn quickly. Keep negotiations friendly, constructive and moving along. Above all, as in any negotiation, do your homework and find out what can reasonably be expected.

Negotiate everything

Business laws and practices are slowly becoming standardized in China, but in the meantime, you should be prepared to negotiate everything. The Chinese will expect you to haggle over most issues and in the first instance, will almost never give you their final price or position. In China, nothing is easy, but almost anything is possible. I assume even written laws and regulations are not fixed, but simply the Chinese starting negotiation positions. In one situation, we were building a feedmill on a pier. Written regulations stated that each new facility should have "15% green area". We questioned this regulation because no other companies on the pier were forced to allocate scarce land for green area, but officials emphatically stated the regulation must be followed. As is often the

case in China, the most effective negotiating tactic is not to fight head on, but rather use a healthy dose of creativity and never allow your opponent to say 'No'. (If you sense a 'No' may be forthcoming, back away, and approach from a different direction.) Therefore, our negotiator proposed that we would fix planters on the roof of our office building to meet the required 15% green area. The Chinese official waffled, but then agreed. Several months later during the construction period, our negotiator pointed out that the regulation did not specifically identify "green area" as actually being "plants"; therefore he proposed that we would paint the roof green to meet the regulation (since nobody could see the planters anyway and watering plants on the roof could potentially flood the building). To our surprise, the official agreed! In the final stage of construction, the same official told us we could "forget the green paint and forget the regulation". I can relate many similar stories, but remember that you have nothing to lose—and everything to gain—by negotiating everything.

Location, Location, Location

The Chinese say, 山高皇帝遠 (Shan Gao Huang Di Yuan)—"The mountain is high and the emperor is far away", meaning the government cannot easily control what goes on far away. Many companies make the mistake of setting up in Beijing or Shanghai simply because it is 'the place to be', when in fact, they should consider locating "far away". Beijing, Shanghai and China's other mega-cities are now significantly more expensive in terms of land, personnel, and support expenses than lesser-developed locations. In addition, China's infrastructure has now progressed to the point that these large cities do not hold any particular advantage over other areas. China's "second tier" cities are more willing to offer better terms for investment and a higher degree of personal attention and service. Ultimately, a company entering China should locate near suppliers, customers, transport or other factors critical to the business—but all other factors being equal, a company should not restrict its choices to the main cities.

Closely related to where you establish your company in China is deciding what you should sell. Many companies use China as a production shop to produce export products -- and overlook the local market. Even companies that are primarily focused on exports should strongly consider selling products in China. If your company is involved in a product line or industry that is desired by China, your entry into the local market will be easier, but the demand for many other brand-name products is growing in China and many high-quality products have become desired items. (If your company has multiple products, China is particularly interested in foreign investment in energy, transportation, communications, high technology, and raw material production.) Any company newly

entering, or already in China should reconsider almost all of our ingredients and raw materials re-emphasizing its focus on the local market.

Participate in local markets

When we first entered China, we purchased almost all of our ingredients and raw materials abroad. We used foreign banks to finance our business in US dollars. We imported foreign-made equipment to install in Western made pre-fabricated buildings. I well remember one executive visiting our first swine farm in central China. As he surveyed the scene he said, "It looks like a piece of Nebraska has been flown over to China!" Although this observation was meant as a compliment, I realized at the time we were not taking advantage of local Chinese strengths. Building a shiny state-of-the-art facility in China had other downsides as well. The local villagers blocked the gates of our farm in protest, complaining that the pigs in Conti's air-conditioned farm had better living conditions than the villagers! After that experience, we began to convert to local supplies. In some cases, we invested and trained suppliers to produce to our specifications. Today we source 100% of our raw materials in China. We developed relations with local banks and now finance all projects with local currency supplied by Chinese banks. With time and effort, we have converted completely to locally produced and maintained equipment. These measures have made us one of the lowest-cost producers in the business.

Of course, not all Western business practices should be abandoned, but many companies enter China expecting to conduct business exactly as they would at home. This approach may ignore valuable cost savings or other efficiencies. Although I cannot suggest an exact formula, the best method is to use the best of both Western and Chinese business practices. Often, potential Chinese contributions are completely ignored.

Develop people

Initially, people who understand and enjoy working in China will be critical to the success of getting your business started in China. Long term, local Chinese employees will be equally important. Unfortunately, one reason companies finally break down and enter a joint venture arrangement is because they rationalize a joint venture may be the only way to obtain Chinese workers and expertise. In fact, this assumption

is not true. Most Chinese have a high sense of loyalty and therefore, you should realize that workers from a Chinese partner injected into a foreign joint venture will remain loyal to the partner company—and will *not* be loyal to the joint venture company. Although the process is slower, a foreign company must hire, train and develop its own loyal Chinese employees. One common mistake made by many foreign companies is hiring employees based on their ability to speak English (or the home language of the corporation), not perform the job. A second common mistake is reserving the best management positions for expatriates. We have promoted several local Chinese employees to the position of General Manager. Once a few local Chinese have been promoted to the top positions in your company, you will be able to retain talented PRC employees at the lower levels. Most of our mid-level supervisors have been with our company for 10 to 15 years. Why do they stay? Because they know that they have a fair opportunity to become the next General Managers.

Make true connections

Most business executives have heard that China is run on "guanxi" or "connections". To understand the importance of guanxi, one must understand the typical work environment of a Chinese official. If an official sits back and does nothing, then nothing will happen to him. He may not be promoted, but he will never be demoted or fired (which is usually the more important concern). By dealing with you, the official takes a risk. The Chinese have a saying, "First become friends, then conduct business." In China, effective business transactions are conducted between friends; therefore you and your staff must become friends with your customers, suppliers, and regulators in order to conduct business successfully. Many western companies talk about "guansi" but completely miss this key point. Guanxi doesn't just mean knowing the right people, it means being good friends with them.

Learn the culture

One final item is critical to success in China—and that is understanding the culture. In my opinion, the knowledge of Chinese culture makes implementation of the other items mentioned

above possible. Much has been written about Chinese culture, but if I were to sum it up in one word, that word would be 'respect'.

The Chinese are very proud of their culture—and painfully aware of their shortcomings. They don't need you or me to point out these problems and weaknesses. The next time you're at dinner and somebody cuts down China (it will probably be a Chinese person) you should surprise your hosts by showing respect for China. (The most common Chinese comment is a polite statement to the effect that "China is so backward compared to your country". You should respond, "Well that statement may have been true years ago, but certainly is not true today!") Your PRC counterparts will not forget this gesture quickly.

Any executive from your company that will be dealing with, or visiting, China should select one aspect of Chinese culture that he/she can demonstrate an understanding. For example, an executive can learn about one famous Chinese poet or painter then mention this person in conversation. Food is extremely important to the Chinese. When they greet one another they don't say "Hello", they say, "Have you eaten?" If you like food, ask your Chinese host how to cook a dish (and make sure to eat everything served to you). Of course, the ultimate emersion in Chinese culture is to learn the language. Unlike some nationalities, the Chinese are very patient and love to help people learn Chinese—and they offer great encouragement, including telling you that your Chinese is "wonderful" after you speak only 20 words.

In summary, don't be overwhelmed by the cultural and political complexities of doing business in China. A common phrase heard in China is "Meiyou Banfa", which translated literally means, "No Way". This phrase can be heard on a daily basis from high-ranking government officials down to farmers in the field. If unchallenged, "Meiyou Banfa" becomes the default response to any difficulty in China—and essentially nothing is accomplished. On the other hand, one of our company slogans, which can be found hanging on the walls in many of our executive offices, is "You Ban Fa", or "There is a Way", which, although rarely heard, is the exact opposite of "Meiyou Banfa".

