

## **Create a new profit center by moving against the grain**

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In a time of massive deleveraging, both voluntary and forced, companies around the world find it increasingly difficult to obtain necessary funding to operate in this deteriorating credit environment. Examples of this are numerous, as everyone from major hedge funds like the Carlyle Group to non-bank financial companies such as Bear Stearns melt down due to a lack of liquidity.

While attractive lending opportunities may be tough to find, liquidity should not be a major problem for community financial institutions as the Fed attempts to flood the financial world with bank credit. This trend can be witnessed by the sheer number of rabbits that the Federal Reserve has pulled out of its hat--including everything from lower overnight rates, to \$100 billion worth of new term bank lending facilities, to a \$200 billion Term Securities Lending Facility (TSLF) aimed at bank and non-bank primary dealers. Additionally, the traditional sources of longer-term borrowing, such as the FHLB, remain extremely viable options for banks seeking additional funding options.

However, bankers know well the challenges to growth as losses mount in loan portfolios. While community bank leadership will want to be extremely judicious as to where and how additional funding is spent, the fixed income market offers attractive yields on high quality securities.

Bankers may want to consider moving against the grain, in this time of deleveraging, by adding leverage via low cost funding options and investing in some of the most attractive relative bond valuations in years. Community bankers should find this fresh income generating center a nice layer of protection against rising loan losses and uniquely important in the effort to become a highly profitable and enviable institution envisioned for the future.

### **Evolving macro picture**

For better or worse, I suggested last year in a Financial Managers Society piece entitled, "Knowing How to Successfully Navigate Market Turmoil makes all the Difference," that a deteriorating housing market would likely lead the economy into a near-term recession, possibly ballooning into a full blown credit crunch<sup>1</sup>. I will not spend a great deal of time in this article rebuilding the theory that a

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<sup>1</sup> Financial Managers Society, "Community Bankers: Knowing How to Successfully Navigate Market Turmoil makes all the Difference," Justin Hoogendoorn, March 2007.

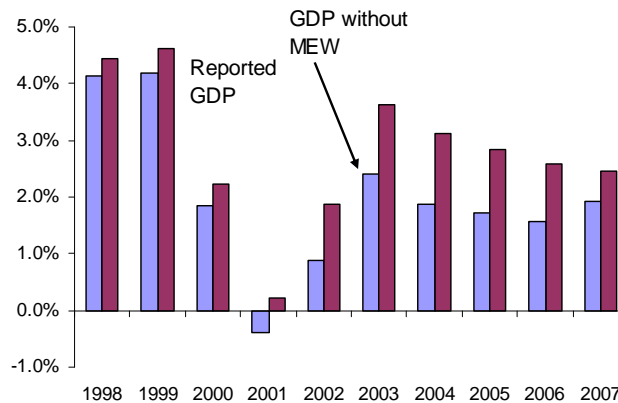
recession will occur or that the financial markets will experience significant dislocations, as those points were argued more than a year ago and are generally well accepted at this point in the economic cycle. However, it may be necessary to lay a bit of groundwork on future economic developments to support our current conclusions.

The housing market began to grow at unsustainable levels in the mid-to-late 90's. During a decade of easy mortgage money, housing stock and housing prices vaulted higher due to historically low rates, growing amounts of option/interest only ARMS, low/no documentation loans, stated income credit, and low/no equity loans. The pace of this trend accelerated as the economy recovered from the recession in 2001. This trend began to turn in 2005 as new and existing home sales began to slow. Over the next two years, these housing measures experienced double digit annual declines. At present, the new home sales measure has dropped nearly 60% from its high water mark and home prices have begun to fall on a national scale for the first time since the Great Depression.

As prices fall, homeowners lose the ability to borrow money via higher amounts of home equity, taking away a fundamental support of recent economic growth. Mortgage equity withdrawal (MEW) was a key source of spending over the past several years, significantly limiting the depth of the last recession. At GKST, we estimate MEW (or the housing ATM effect) to have added between 1-1.25% to GDP growth from 2001-2006 as equity takeout reached an \$800 billion annual pace at the height of the phenomenon. Chart 1 shows our estimated impact of backing out this growth factor, as GDP growth would have likely hovered around 2-2.25% instead of the reported 3.25-3.5% growth over the period. In any event, this growth driver has been curtailed by the drop in home prices (Chart 2), helping to drive 2007 growth below 2.5% and allowing fourth quarter

**Chart 1: Home equity takeout added an estimated 1.00-1.25% to GDP growth between 2001- 2006....**

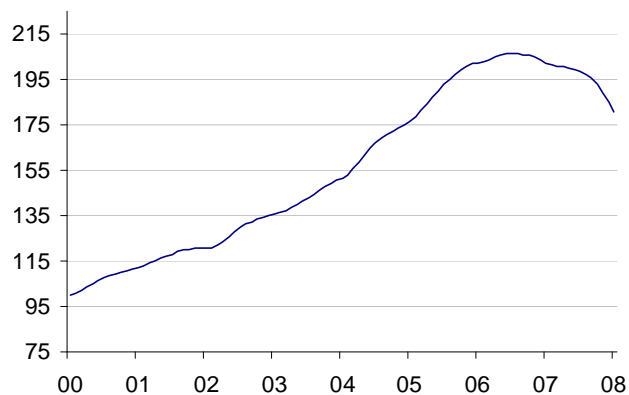
Annual Real GDP Growth with and estimated without MEW



Source: Bureau of Economic Analysis, GKST

**Chart 2: ...this component of growth is now taken away as home prices fall.**

S&P Case-Shiller Composite-20 Home Price Index



Source: S&P/Case-Shiller

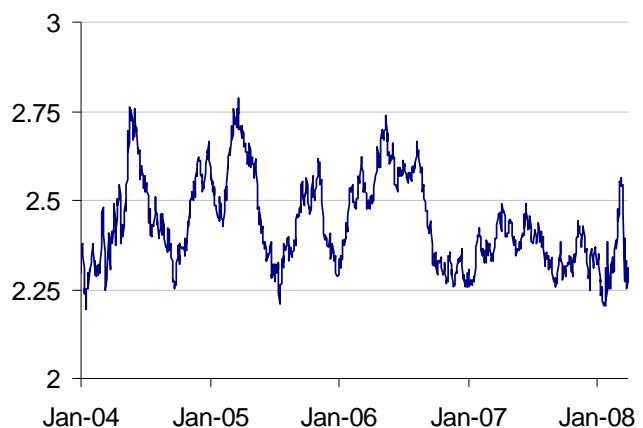
growth to fall to an anemic .6% annualized pace. In fact, this broad based decline in home prices has driven home equity levels to all time lows and consumer debt levels to all time highs. Adding insult to injury, the jobs market has begun to deteriorate. Normally a lagging indicator of economic performance, unemployment has risen and job creation has slowed, suggesting that the 1<sup>st</sup> Quarter of 2008 will likely mark the beginning of a new recession. Employment and inflation remain the mandated drivers of Fed actions. Over the last 8 months, the Fed moved from a somewhat restrictive policy stance of 5.25%, substantially above inflation expectations, to an accommodative policy via a series of rate reductions. The Fed found enough cracks in the economic landscape that it lowered its all important Fed funds rate by 200bps in less than 2 months this year. As deleveraging occurs on a fairly massive scale, the Fed is taking necessary actions to support the financial markets. Currently at 2.25%, the Fed focuses its attention on a problematic growth outlook, while not completely ignoring the inflationary side of the equation.

The flip side of the accommodative Fed coin clearly begs the question of how it is doing in its primary monetary policy mandate, fighting inflation. The significant rise in raw material prices, along with a sharp decline in the dollar, suggests that inflation could be a problem. In fact, one simply needs to shop at the grocery store or fill the car up with gas to feel inflation's bite on the pocketbook. Fortunately, inflation has remained fairly well contained beyond some of the obvious examples of food and energy. As the Fed has only modest control over these volatile,

root pressures, we believe the most important measure of Fed effectiveness is how much of this cost gets passed along in final goods and services. On this front, core inflation by several measures hovers below 2.5%. While this stands marginally above the Fed's stated comfort zone of 1-2%, it is low by historical standards. Additionally, one of the most reliable measures of inflation expectations is the yield differential between a Treasury inflation protected security (TIPS) and a 10-year Treasury, known as the breakeven inflation rate. Chart 3 shows the current 10-year breakeven rate standing at 2.3%, or below 4½ year average levels for this measure of inflation expectations (2.5%). Looking forward, a slowing global growth rate and the movement toward deleveraging should produce more realistic long-term prices across a range of assets, including commodities. Alleviating this pressure from the overall price picture should pull inflation back within the Federal Reserve's comfort zone and justify price levels on long-term bonds.

**Chart 3: Current levels of inflation and inflation expectations remain well contained.**

10-Year Breakeven Inflation Rate (%), 10-Year Nominal Treasury – 10-Year TIP Real Rate



Source: Bloomberg

As the problems multiply, a possible worst case scenario to this liquidity crisis could resemble that of a 1930's style depression; however, we believe that monetary and fiscal policies will limit the damage to a longer than typical recession. Central banks around the world have stepped in to supply ample liquidity in various forms to banks. Our local central bank has offered assistance in the form of Fed funds and discount rate cuts, emergency access to liquidity in the form of term auction funding and term securities lending programs, as well as a fiscal policy chip shot in the form of a rebate check. While these moves have pounded the dollar and muddled the inflation outlook in the short-run, we believe that they are the correct moves to ensure that the economy can eventually return to its long-run growth rate of around 2.5-3%. Furthermore, we believe that current policy will allow the dollar to eventually regain its strong currency status following a period of domestic balance sheet rebuilding.

### Banking environment

Should this economic turmoil continue the question becomes, how can community banks, thrifts and credit unions position to prosper in this environment? While the answer last year was to decrease risk, should banks increase lending or should they retrench and repair a credit exposed balance sheet? Although the answer is not black-and-white, there certainly are a few general rules that we can take away from past experiences.

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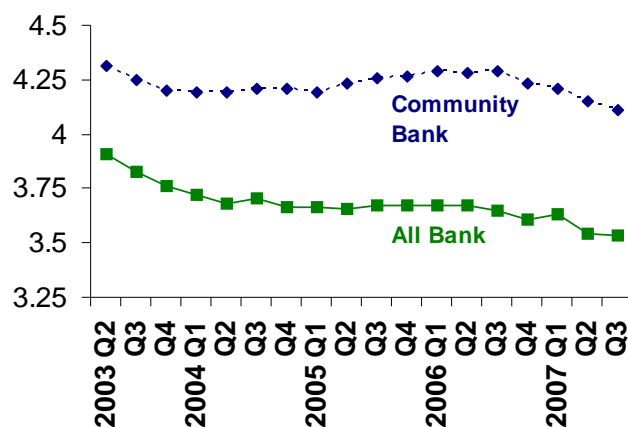
*Community financial institutions have remained stubbornly simple in terms of both the financing and the operational aspects of their businesses. The interesting thing becomes that it is precisely these tenants that should protect the community bank from excessive losses during the current financial crisis.*

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A classic study by Robert De Young and Denise Duffy in 2002 found that, “on average, [community] banks used higher amounts of core deposit funding (evidence of relationship banking), incurred lower levels of noninterest expenses (suggesting that well-managed community banks are more likely to survive the industry consolidation), and generated less noninterest income (indicating that high earnings are available to community banks even if they don't enter nontraditional lines of business)”<sup>1</sup>. Although somewhat dated and not a major surprise, this study indicates that community financial institutions have remained stubbornly simple in terms of both the financing and the operational aspects of their businesses. The interesting

**Chart 4: Net interest margins have declined due to a flat yield curve and competitive loan pricing.**

Commercial Bank NIMS, Community Bank <\$1 Billion Assets



Source: IDC, GKST

thing becomes that it is precisely these tenants that should protect the community bank from excessive losses in the present financial crisis.

On the other hand, this does not protect the community financial institution from traditional balance sheet and income pressures. Moving into this cycle, net interest margins (NIMS) stood at the lowest levels since 1988, as a flat yield curve, competitive loan pricing, and the difficulty in gathering core deposits each contributed a portion to the downward path. Chart 4 shows the migration of NIMS at commercial banks, with the FDIC marking the average fourth quarter NIM at 3.3%<sup>2</sup>. While community banks (assets less than \$1 billion) have held the line on this important measure better than larger banks, institutions of all shapes and sizes felt the pressure for improved profitability. Understanding these pressures, managers may have felt compelled to chase higher risk loans and higher priced funding to offset compressed net interest margins. In defense of these actions, bankers entered the cycle with excellent balance sheets and very low loss levels. However, this picture appears to be changing dramatically.

The FDIC expects a rising number of bank failures, projecting 100 banks to fail in 2008. Some analysts project around 200 bank failures over the next couple of years, which would match the S&L crisis of the late 1980's. Absent a major underpinning of the banking system by the Fed, we would not be surprised to see the actual number of bank failures rise above current projections. The Bank of England's rescue of Northern Rock is a prime example of a major financial institution failing due to excessive exposure to the subprime market and poor managerial decision making. To be sure, the majority of losses in the fourth quarter of 2007 centered on large institutions, similar to Northern Rock, with big subprime mortgage lending platforms. While these money center bank examples will make the news headlines, it is the smaller operational missteps that will plague our community organizations.

While our nation's community banks and financial institutions have avoided much of the subprime debacle, many have a great deal of concentrated exposure in the residential real estate (highest noncurrent loan levels in 17 years) and real estate construction and development (noncurrent loans increased by 73% in the fourth quarter) markets. It is precisely these areas that present the most potential for substantial losses at our community banks. A heavy majority of failures will likely arise out of areas hardest hit by the auto industry (Michigan and Ohio) and areas most prone to a drop in home values (the coastal areas). In the most recent FDIC problem institution report, it classified 76 institutions as problematic, while recording 3 failures in 2007, the first bank failures since 2004<sup>3</sup>.

In the most recent FDIC Quarterly Banking Profile (4Q 2007), net operating incomes at FDIC-insured institutions fell by 76% in the fourth quarter and 24% for the year versus 2006 comparisons. While interest income had grown on a year-over-year basis by around 13%, higher interest expenses and record loan loss provisions wiped out these gains. The FDIC reported return on assets to be a paltry .18% in the fourth quarter, the lowest level since 1990. This data clearly suggests that the situation is deteriorating and that our community organizations must find a way to increase profitability without sacrificing credit quality.

## Building an investment hedge

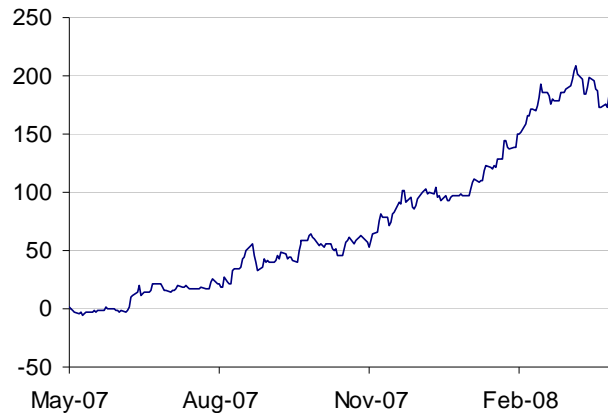
Banks of all sizes will need to focus on ways to rebuild the income cushion. As quality lending opportunities diminish, bankers should turn their attention to the investment portfolio. Over the past 5 years, investment portfolios have fallen from about a third of bank assets to around a quarter. While this made sense as loan opportunities were abundant and income opportunities on bonds were marginal, the picture has clearly changed. Not only have quality loan options diminished, but fixed income offers better value for a couple of reasons.

First, the yield curve has steepened. The yield differential between the 2-year and 10-year Treasury was inverted as recently as 9 months ago. Chart 5 shows the current spread pick-up between these segments of the curve pressing from zero to 185bps in a matter of months. The yield curve provides a natural way to build back the income advantage.

Second, the massive deleveraging in the market forced spreads on both mortgage backed bonds and municipal bonds to very attractive levels from a historical basis. Mortgage spreads, for example, pressed to multi-year wide levels. Both option adjusted spreads and nominal spreads moved from around 100bps during the first half of 2007 to levels well north of 200bps. Several sources reported mortgage spreads hitting the widest levels since 1986 in early-March<sup>4</sup>. Although spreads have begun to tighten as new sources of demand emerge, Chart 6 shows that spreads stand at eye-

### Chart 5: A steeper yield curve....

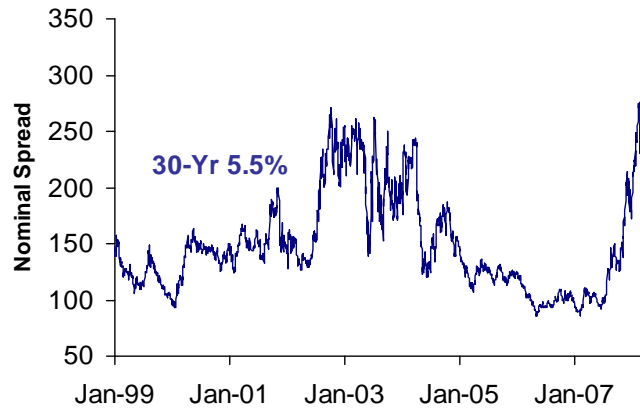
Yield Spread (Basis Points), 10-Yr Treasury – 2-Yr Treasury



Source: Bloomberg

### Chart 6: ...along with wider spreads on mortgages...

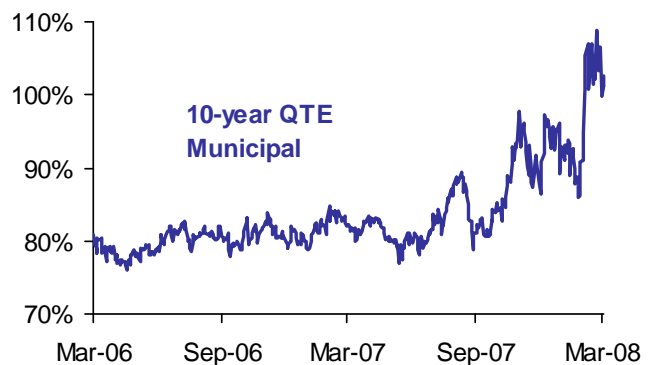
Nominal Yield Spread, 30-Year 5.5% MBS -



Source: JP Morgan, GKST

### Chart 7: ...and extremely attractive municipal valuations allow a leverage strategy to produce high income.

10-Year Bank Qualified Municipal % of 10-Year Treasury



Source: GKST

catching levels. Municipal bonds offer similarly attractive valuations. Although absolute yield levels have recovered from the very high rates experienced early March, municipal percentage of Treasury comparisons hold near multi-decade high levels (Chart 7). The steeper yield curve and wide spreads on high quality assets, along with a plethora of available low cost funds from traditional sources, suggest it worthwhile for bankers to review leverage opportunities.

While all leverage programs contain a degree of market risk, not all strategies are created equal. Investors contemplating a leverage program should consider the relevant risks and purchase securities that offer the highest margins within an acceptable absolute level of risk<sup>5</sup>. In addition, market valuations can make certain security risks worthwhile, while disparaging other investments. One popular strategy over the past several months has been to take advantage of the historically attractive relative yields in mortgages and municipals as these traditionally popular bank asset classes happen to offer extremely compelling valuations.

For our leverage example, we model an investment in mortgages and municipals, while borrowing from the FHLB by using a similar average life set of assets and liabilities<sup>6</sup>. The similar average life of the securities should help to

## Chart 8: Asset and Liability Program Details

GKST Estimated Market Prices as of 3/26/2008

### ASSETS

Par (000)	Issuer	S&P	Mdys	Cpn	Maturity	Call Date	Avg Life	Market Price	Market Value (000)	Market Yield	FTE Market Yield*	Effective Duration
<b>10,000</b>	<b>Total Portfolio</b>	<b>AGY</b>	<b>AGY</b>	<b>5.300</b>	<b>22.32</b>		<b>6.53</b>	<b>102.753</b>	<b>10,293</b>	<b>4.84</b>	<b>5.19</b>	<b>6.27</b>
<b>8,000</b>	<b>Total Mortgage (78.6%)</b>	<b>AGY</b>	<b>AGY</b>	<b>5.375</b>	<b>24.31</b>		<b>5.59</b>	<b>100.826</b>	<b>8,095</b>	<b>5.12</b>	<b>5.12</b>	<b>5.21</b>
2,000	FNMA POOL - 256803	AGY	AGY	6.000	07/01/27		3.92	102.550	2,059	5.16	5.16	3.90
2,000	FHLMC GOLD POOL - C91161	AGY	AGY	5.000	02/01/28		6.25	100.000	2,007	5.01	5.01	5.89
2,000	FNMA POOL - 256552	AGY	AGY	5.500	01/01/37		5.50	101.000	2,028	5.24	5.24	4.72
2,000	GNMA POOL - 004026	AGY	AGY	5.000	09/20/37		6.75	99.703	2,001	5.07	5.07	6.39
<b>2,000</b>	<b>Total Municipal (21.4%)</b>	<b>AAA</b>	<b>AAA</b>	<b>5.000</b>	<b>14.99</b>		<b>10.00</b>	<b>109.850</b>	<b>2,198</b>	<b>3.81</b>	<b>5.46</b>	<b>10.18</b>
2,000	15-YR CUSHION QTE MUNI	AAA	AAA	5.000	03/21/23	03/21/18	10.00	109.850	2,198	3.81	5.46	10.18

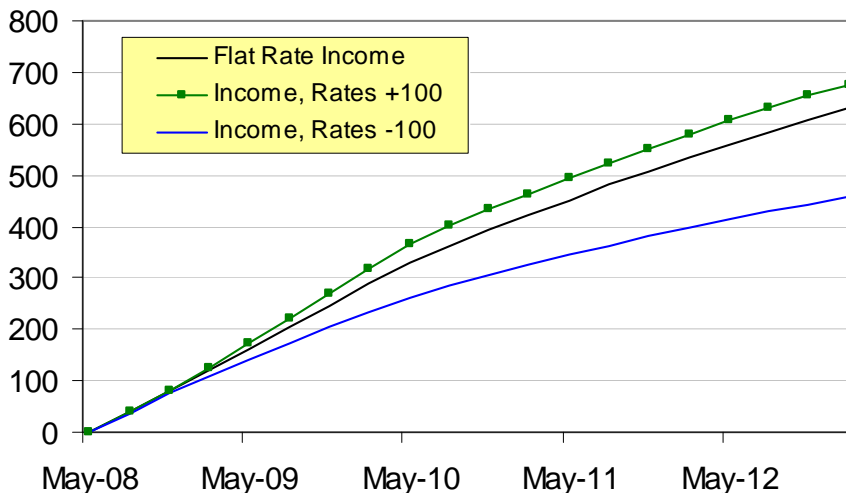
\*Assumes 34% Federal Tax, 20bps TEFRA, where applicable

### LIABILITIES

Par (000)	Issuer	Rate	Maturity	Average Life	Market Value (000)
<b>10,000</b>		<b>3.69</b>	<b>5.70</b>	<b>5.70</b>	<b>10,000</b>
2,500	FHLB 2-year Fixed Rate	2.73	02/28/10	2.00	2,500
1,000	FHLB 3-year Fixed Rate	3.09	02/28/11	3.00	1,000
1,000	FHLB 4-year Fixed Rate	3.48	02/29/12	4.00	1,000
2,000	FHLB 5-year Fixed Rate	3.73	02/28/13	5.00	2,000
3,500	FHLB 10-year Fixed Rate	4.57	02/28/18	10.00	3,500

### Chart 9: After creating a 150bps margin, the leverage strategy performs well on an income production basis in various interest rate environments.

Taxable Equivalent Income Growth Chart (34% Tax, 20bps TEFRA), In Thousands of Dollars on a \$10 million investment



Source: GKST

match the cash flows and limit the income volatility for our leverage program. We structured the assets to consist of a \$10 million investment in a combination of QTE municipals and in 20-year and 30-year mortgage backed paper. On the liability side, we used a series of fixed rate FHLB borrowings, from 2- to 10-years, with an average rate of 3.69%. Chart 8 displays the details on these securities. This strategy provides a relatively stable and very attractive 150bps margin of the assets over the cost of the liabilities (taxable equivalent). Initially, we held rates unchanged (our base case) to calculate expected income return over a 5-year period. Our analysis projects that the leverage program would add \$656 thousand in taxable equivalent income (34% Federal tax, 20bps TEFRA) over this period. In order to gain a level of comfort regarding the performance in various rate environments, we shocked the curve higher and lower by 100 basis points over the next year. The leverage program performed even better by adding more than \$700 thousand over the 5 years in an up 100bps rate environment (gradual, parallel shift over the next year). Finally, the program performs well even in a falling interest rate environment by adding \$472 thousand to net income. Should the financial institution need to liquidate the investments after 2 years, the strategy should continue to be profitable with interest rates higher by 50-75bps. Therefore, we find the projected addition to net income from the leverage program compelling, while finding the potential risks from the program well controlled.

As managers of our community financial institutions look for ways to add value, we recommend taking advantage of an accommodative Federal Reserve by implementing leverage at the same time that most of the world is forced to downsize balance sheets. By moving against the grain, community banks should be able to counterbalance negative market trends and rising loan problems with a new income generating, high quality, and profitable center for future growth.

For further information or inquiries, please call Justin Hoogendoorn, Chief Investment Strategist at GKST, 312-441-2636.

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**About the Author:**

Justin Hoogendoorn is the Chief Investment Strategist for GKST, responsible for reviewing client portfolios and developing investment strategies, including yield curve analysis, sector/security trends and strategic outlooks, as well as relative value trading opportunities across all sectors. Prior to joining GKST in October 2003, Justin served as a fixed-income portfolio manager with Northern Trust from 1995 to 2003.

**About the Company:**

Griffin, Kubik, Stephens & Thompson, Inc. is a Chicago-based, full service broker/dealer specializing in debt securities, including municipal bonds, U.S. Treasury debt, agencies, and mortgage-backed securities.

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<sup>1</sup> Economic Perspectives, "The challenges facing community banks: In their own words," Robert DeYoung and Denise Duffy, 4Q/2002.

<sup>2</sup> FDIC Quarterly Banking Profile, Fourth Quarter 2007.

<sup>3</sup> FDIC Quarterly Banking Profile, Fourth Quarter 2007.

<sup>4</sup> Bloomberg News, "Agency Mortgage-Backed Bond Spreads Reach Highest Since 1986," March 5, 2008:  
<http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aMEg5MYWBCSE>

<sup>5</sup> Although we believe that leverage strategies can add value to bank ROA, ROE, and income levels, these strategies also present a variety of risks. The FDIC outlines these risks in a Supervisory Insights article on its website. We have attached a link to this article:  
[https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin07/examiners\\_desk.html](https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin07/examiners_desk.html)

<sup>6</sup> As we make certain assumptions in this analysis, we advise that banks consult trusted experts in the areas of tax, accounting, and regulatory impacts prior to implementing such a strategy. We use FHLB Chicago rates on fixed rate term loans.

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