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#### CAMBRIDGE ASSOCIATES LLC

## GLOBAL MARKET COMMENTARY

# THE JIG IS UP: THE END OF EASY CREDIT

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Aaron Costello David Meek

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#### The Jig Is Up: The End of Easy Credit

Events over the past few weeks have rocked global financial markets, causing sentiment to shift rapidly from infectious greed to uncertain fear, with near panic conditions hitting certain segments of the capital markets. While volatility remains high and events continue to unfold, we have already witnessed several large moves with important big-picture implications for investors. Regardless of whether credit market sickness proves sufficiently toxic to infect Main Street or turns out to be no worse than a badly needed correction and re-pricing of risk, market conditions will be materially different than they have been of late because the game is over for all transactions dependent on easy-credit financing.

#### What Is Happening and Why?

While the headlines focus on a credit crunch brought about by troubles in the arcane and alphabetsoup-laden world of U.S. subprime mortgages, asset-backed securities (ABS), and structured products (ABS, CMOs, CDOs, CLOs, etc.), what we are really witnessing is widespread "de-leveraging" by highly levered and overextended speculators now forced to sell liquid assets to cover de facto margin calls on their leveraged low-quality assets. Although each financial crisis is unique, most share certain common characteristics: easy credit together with a benign economic environment engenders excessive risk taking and imprudent lending, eventually sowing the seeds of its own destruction, as seen in U.S. savings and loans (and junk bonds) in the late 1980s; Japanese equities and property in the early 1990s; emerging Asia in the mid-1990s; and U.S. and global tech stocks in the late 1990s.

With central banks having raised interest rates to stem inflationary pressures from robust global economic growth, and lenders awakening to mortgage malfeasance and overextended credit in general, news of mortgage company defaults and massive losses at two Bear Stearns hedge funds triggered what quickly became a classic stampede for the exit. When forced selling spread to higher-quality assets as credit market participants became unable to determine where problems might next emerge and how bad they would be, liquidity evaporated as lenders became increasingly reluctant to fund prospective borrowers, obliging central banks to inject funds into the markets to ensure the basic functioning of the financial system.

For a closer look at the specific mechanics involved and a play-by-play timeline of the unfolding credit crunch, please see our concurrent August 2007 U.S. Market Commentary. In short, what was thought to be a localized problem with U.S. home mortgages (the details of which have been well documented) has morphed into a global concern, as subprime-related exposure continues to appear in unexpected places (European and Asian banks and insurers, pension funds, the commercial paper markets, institutional and retail money market funds). As mortgage companies have folded and some high-profile hedge funds have blown up, the financial health of the large global investment banks (the true epicenters of the credit excess) have been brought into question: who holds what, how much, and how bad is the damage? This uncertainty and rising risk aversion, rather than any one specific event, is causing stress and pressuring the "weak hands" to offload a wide variety of assets. The resulting market volatility seems to have wrong-footed several players (especially those using computer-driven "black box" trading strategies), with the usual complaints of

"25-sigma" and "100,000-year" events (as Goldman Sachs described it to investors) as uncorrelated assets suddenly become correlated, and traditional assumptions and relationships temporarily break down amid a market panic.

In terms of market action, what we have seen so far is a long overdue re-pricing of risk in global credit markets, with high-yield and corporate bond spreads blowing out (but not quite to crisis levels of the past), and government bonds rallying sharply, especially short-term notes, as part of an investor flight to safety. Indeed, concerns over the health of the commercial paper market have seen the sharpest moves in Treasury bill yields and commercial paper spreads since 1989, both in the United States and Europe. Risky positions everywhere have been trimmed; commodity prices have tumbled; and "carry trades" are unwinding, with high-yielding currencies (NZ\$, AU\$, even the £) taking hits, while the currency that has funded the carry trades, the Japanese yen, has snapped backed sharply, sending traders scrambling to cover their shorts. Even gold, traditionally viewed as a safe haven, has sold off. Meanwhile, the US\$ has rallied, likely due in part to the repatriation of funds from overseas assets to help meet US\$ margin calls. Tables A through F try to put these moves in perspective and show the market action as of Friday, August 17.

Global equity markets have also tumbled, with the financial sector leading the way down (Table B). However, despite the gloom seen in the headlines and the carnage among some hedge funds, the equity selloff has so far been modest, with only about a 9% pullback in the MSCI All Country World Index—barely on the cusp of a technical "market correction" and largely in line with last summer's market tumble (which was driven by inflation fears, not a financial sector meltdown). High-beta emerging markets have suffered the worst, although again in line with last year's down move (roughly 15%), as stretched participants have sold their winners to meet margin calls on their losers. Also of note, U.S. equities have held up better than their European and Asian counterparts, despite the United States being viewed as the epicenter of the turmoil. Although the losses so far have been relatively mild, this masks the dramatic rise in market volatility to levels well above last summer's shake out. The CBOE VIX Index, the so-called *fear gauge* that measures the option market's expectations of the volatility of the S&P 500 Index, has jumped from 15.0 to 37.5, its highest level in five years, which has whipsawed equity markets, with large intra-day moves and reversals.

Given the somewhat muted response thus far from equities, can we assume that the current market turmoil is the garden variety "sell in May and go away" correction, and that when (not if) central bankers come to the rescue, it will be back to business as usual? We are extremely hesitant to take the "buy on dips" view of the current environment, as the credit markets remain in turmoil, many players are still in the process of unwinding losing positions, and the unknowns (more so than usual) at this juncture far outweigh the knowns.

#### What We Don't Know

#### Where Are the Exposures and How Will They Unwind?

This is the key issue, as the markets are on edge because no one (not the banks who sold them, nor the regulators) knows exactly who holds what, nor are all market participants forthcoming with such information. While estimates of subprime-related exposure vary in size, they are generally deemed to be small in comparison to the larger credit markets and economy, with the Federal Reserve estimating net losses of \$50 billion to \$100 billion. Yet this is beside the point as the securities in question are opaque and extremely hard to value, while the risks have now spread well beyond the subprime mortgage sector. In essence, the crisis is fueled by uncertainty that prevents lenders from pricing credit risk because they feel they can no longer assess the financial health of prospective borrowers. The holdings of hedge funds and their symbiotic relationship with the investment banks further complicates the scenario.

#### What Will Be the Impact on Economic Growth?

So far we are witnessing a *financial crisis*, not an *economic* one. Indeed, the global economy remains robust, with uncommon strengthening in the emerging world (usually the weakest link), although U.S. growth looks sluggish and figures coming out of Europe and Japan have softened of late. While turmoil in the financial economy may yet spread to the "real" economy and the risk of recession has certainly risen sharply, central banks have focused on trying to ensure that dislocations in the financial sector do not result in a prolonged liquidity crunch that would cause the wheels of Main Street commerce to grind to a halt. Unlike other lending debacles, the bad debts are concentrated among financial players and not mainstream companies, which have the healthiest balance sheets in decades, are cash-rich, and are generally *under*leveraged. Consequently, although job losses in the financial services sector are to be expected and weakness in this sector (i.e., a Wall Street recession) will certainly have an adverse effect on growth, it is too soon to assume that Main Street will also contract. However, until we see how business and consumer confidence is impacted (i.e., will firms and households cut back spending and begin to horde cash?), we cannot estimate the likely impact on the overall economy.

#### **How Will Policymakers Respond?**

Already central bankers have injected liquidity into the inter-bank markets to help facilitate shortterm borrowing. Despite howls of "bailout" from the peanut gallery, this was the correct course of action, as central banks are charged with ensuring the proper functioning of the financial system. When companies and banks cannot finance their payments and short-term debts, old-fashioned bank runs can occur, and financial and economic calamity ensue. What we do not know is how soon, and to what extent policymakers will take further measures. For central bankers, the tightrope act is to provide sufficient liquidity to ensure that markets function, but not so much as to rescue those who should bear the consequences of their risk-seeking speculation. The U.S. Federal Reserve has thus far announced a 50 basis point lowering of the discount rate (the interest rate at which banks may borrow directly from the Fed) noting that "the downside risks to growth have increased appreciably" and that current financial disruptions have the "potential to restrain economic growth going forward." However, no central bank has yet to officially cut policy rates in response to market conditions, nor should they until it has become apparent that economic growth has been impacted. That being said, regulators in Germany have already stepped in to bail out two banks with large positions in dubious U.S. mortgage-linked securities (perhaps engaging in hyperbole when they claimed to have averted the biggest German financial crisis since the 1930s). The speed at which other regulators react (or are deemed to fail to react) to perceived threats of systemic failure will be a major influence on markets going forward, as will the manner in which the current emergency liquidity is removed from the system once the financial seas calm down (as occurred following the Long-Term Capital Management bailout and the Y2K scare).

#### What Will Be the Fate of the Dollar?

While the fate of the dollar has been a perennial worry for the past few years, it takes on pressing importance now. Should deteriorating domestic conditions force the Fed to slash U.S. interest rates, the dollar would lose the support provided by its relative interest rate differential vis-à-vis other major currencies at the same time as foreign lenders might lose their confidence in US\$-denominated assets and bolt for the door. A run on the dollar would surely hit U.S. growth and destabilize financial markets. Paradoxically, although all market participants would lose from such a development, it might still be entirely rational for individual participants (including countries) to dump their dollars. However, we should stress that we do *not* expect such an outcome and would add that any attempt to read the currency tea leaves under current circumstances is mere guesswork; for example, further revelations of credit problems among European or Asian institutions might precipitate additional flows to the dollar based on its perceived safety as a global reserve currency. Longer term, however, we continue to believe that the headwinds facing the U.S. economy indicate continued dollar weakness—especially versus Asian currencies—as the most likely course.

#### What We Do Know

#### This Isn't Just a U.S. Problem

As the losses incurred by France's BNP Paribas and Germany's IKB and Sachsen banks indicate, the United States has successfully exported its credit market problems, with investors across Europe and Asia suffering as a result. Many French and German voters, in particular, will almost certainly regard this as insult added to the injuries already inflicted upon them by globalization.

#### More Bad News Is to Come

We do not know if the worst is over, but we do know that more bad news is certain to come. Hundreds of billions of dollars worth of U.S. mortgages are due to reset to higher interest rates in coming years (\$370 billion worth in 2007 alone), which will more than likely result in increased defaults and foreclosures. While markets have calmed somewhat in recent days, the unwinding process is far from over, and will likely come in waves. Markets will be shaken again as more exposures come to light and institutions announce write-downs and increased bad-debt provisions. Similarly, we expect more hedge fund collapses, as skittish investors exercise their 30- to 45-day redemption options. One of the biggest clouds on the horizon is the eventual capitulation of the credit ratings agencies and the impact of debt downgrades. In general, there has been a loss of confidence in these rating agencies as a result of their role in the securitization process, which will only intensify as mortgage losses worsen in the coming months. If a significant volume of ABS are downgraded, many pension fund and insurance company holders will sell automatically, in order to maintain the quality of their portfolios. Similarly, when Basel II capital requirements come into effect in January, banks will be increasingly reluctant to hold lower-quality debt since the new reserve requirements are increasingly onerous the larger one's holdings of such assets. Prospectively, therefore, we think it likely there will be continued, periodic pressure on lower-quality credits and concomitant defaults of companies—financial or otherwise—that have depended on access to such credit to fund operations.

#### The Debt Party Is Over

In other words, regardless of the direction of interest rates, the era of cheap credit on easy terms is over. The U.S. mortgage party is certainly over: no-documents, no-money down, interest-only mortgages have gone the way of the dodo (at least for this credit cycle) as has the whole subprime mortgage segment, and with it any hope for an imminent rebound in the U.S. housing market. Lending standards are being tightened in general and corporate lenders are pushing back on "covenant-lite" loans, payment-in-kind notes, high debt-to-EBITDA ratios, and other developments that had favored borrowers over lenders. Meanwhile, the specter of government regulation is looming, putting further pressure on lenders to demonstrate "responsibility." While this may not prevent further leveraged buyout (LBO) deals from taking place, the euphoria is now over, as is the idea that any company, no matter how large, can be bought. The cost of debt capital has risen, putting pressure on both the takeover boom and debt-funded share buybacks, both of which have been tailwinds to the markets, especially in the United States and Europe. Although the continued influx of capital to private equity firms will likely continue, the "anything goes" terms of the past few years are history. Debt-to-equity ratios will shift in favor of more equity and prospective returns will shift commensurately lower.

#### There Will Be an Impact on Financial Sector Earnings

Even if the current storm blows over without any deep crisis or bank failures, financial sector earnings will certainly take a hit. With the securitization bonanza over, and the LBO/merger and acquisition (M&A) pipeline on hold for the immediate future, the boom in financial sector earnings is likely over too. Whole sources of revenue will begin to dry up, losses will be booked, and provisions set aside: some analysts have warned of near 50% declines in financial sector earnings growth over the coming quarters, while others see outright contraction. Whether or not such forecasts come to pass, the prospects for financials, and especially the large investment banks, are relatively dim. Given that this sector accounts for 30% of total stock market earnings in the United States and Europe, the impact on stock markets will be substantial. This brings into question the strength of the earnings cycle in general. While the global economy may be able to avoid an outright recession, the earnings cycle has peaked, with much of the most recent earnings strength attributable to the financial and energy sectors. While earnings in the technology sector have been robust, a broad-based rebound in market earnings is highly unlikely at this juncture.

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#### What Does it All Mean and What Should Investors Do?

It means we are probably in for a bumpy ride. Market volatility will remain high as the deleveraging process unfolds. Both economic and earnings growth will weaken, although to what degree and duration is still unclear. Markets are likely to experience short but powerful rallies, and equally abrupt sell-offs. Given the current level of equity valuations, we think the downside pressures will prove to be more forceful—a 10% correction seems inadequate to redress the current imbalances. We do not think the deleveraging process will result in credit market implosion, since central banks will provide the necessary lubrication to keep the engine running. Nevertheless, credit will be more expensive-especially for lower-quality borrowers—and banks and prime brokers will be less cavalier in funding leveraged investors. Early in this cycle (i.e., 2003-05) strong earnings growth from depressed levels drove shares higher, but in the past 18 months, the markets have been driven more by LBO/M&A speculation and corporate share buybacks. With this tailwind fading, equity markets will again have to rely on global growth (and/or multiple expansion) if they are to resume their upward trend. There is, of course, the risk that liquidity injections by central banks will fuel renewed speculation, but it is already clear the Fed, Bank of England, and European Central Bank are keen to avoid this and are likely to shape their policies in response to conditions in the "real economy" rather than in the capital markets alone (although that distinction is increasingly hard to maintain). Consequently, we would anticipate the withdrawal of any "excess" liquidity once the emergency that provoked its infusion has passed.

In summary, we continue to think equities face significant headwinds and advise investors to maintain the relatively defensive posture we have been recommending for some time. As noted in our March 2007 paper, *It's Getting Late—Risks are Rising*, we regard global mega-cap stocks as offering both the best value and greatest protection in the equity markets, and continue to stress diversification and rebalancing among all sorts of equity assets. In addition, we believe investors should maintain an allocation to high-quality (preferably sovereign) bonds of intermediate to long duration as insurance against further weakness in the equity markets and the economy at large.

#### Table A

#### **CAPITAL MARKET RETURNS**

#### Local Currency

#### As of August 17, 2007 (Close)

	Total Return (%)				Date of:	
	Month	Quarter	Year	YTD Max	YTD	YTD
Global Equities	To Date	To Date	To Date	To Close	Maximum	Minimum
MSCI All Country World Index	-4.66	-6.87	1.59	-9.49	7/13/2007	3/5/2007
MSCI World Index	-3.93	-6.87	0.75	-9.10	7/13/2007	3/5/2007
MSCI EAFE Index	-7.00	-10.02	-1.51	-11.37	7/16/2007	3/14/2007
MSCI All Country Asia ex Japan Index	-13.56	-7.52	7.52	-15.86	7/24/2007	3/5/2007
MSCI World Small Cap Index*	-7.23	-11.27	-3.77	-13.07	7/13/2007	8/16/2007
MSCI EAFE Small Cap Index*	-11.57	-13.64	-5.54	-14.89	7/9/2007	8/17/2007
Developed Markets Equities						
S&P 500 Index	-0.49	-3.57	3.14	-6.74	7/19/2007	3/5/2007
Russell 2000® Index	1.34	-5.59	0.49	-8.06	7/13/2007	8/15/2007
Russell Top 200® Index	-0.13	-2.94	2.98	-6.09	7/19/2007	3/5/2007
FTSE All-Share Index	-4.40	-7.58	-0.58	-9.50	6/15/2007	8/16/2007
MSCI Europe ex U.K. Index	-5.00	-8.18	2.13	-9.90	6/1/2007	3/14/2007
MSCI Europe Small Cap Index	-8.58	-10.45	-0.59	-13.08	6/1/2007	8/16/2007
MSCI Japan Index	-13.30	-16.55	-11.04	-17.77	2/26/2007	8/17/2007
Tokyo Stock Exchange (TOPIX) Small Index	-14.01	-16.38	-11.46	-18.63	2/26/2007	8/17/2007
MSCI Pacific ex Japan Index	-8.51	-8.73	2.01	-11.89	7/24/2007	1/10/2007
Emerging Markets Equities						
MSCI Emerging Markets Index	-11.65	-7.36	6.77	-14.64	7/23/2007	3/5/2007
MSCI Emerging Markets Asia Index	-13.97	-7.41	8.66	-16.38	7/24/2007	3/5/2007
MSCI Emerging Markets Europe & Middle East Index	-8.42	-4.85	1.52	-12.11	7/23/2007	3/5/2007
MSCI Emerging Markets Latin America Index	-9.14	-9.01	9.04	-14.28	7/23/2007	3/5/2007
MSCI South Africa Index	-9.45	-8.99	0.13	-14.67	4/23/2007	1/5/2007
Real Estate						
FTSE EPRA/NAREIT Global Real Estate Index	-2.91	-8.95	-11.10	-20.03	2/22/2007	8/17/2007
Global Real Estate ex North America Index	-7.49	-11.48	-10.47	-19.36	2/23/2007	8/17/2007
FTSE NAREIT U.S. Equity Index	3.24	-4.82	-10.42	-20.79	2/7/2007	8/15/2007
FTSE EPRA/NAREIT Asia Real Estate Index	-9.56	-11.91	-3.90	-17.24	6/4/2007	8/17/2007
FTSE EPRA/NAREIT Europe Real Estate Index	-3.68	-10.70	-20.02	-24.68	2/19/2007	8/16/2007
Commodities						
Dow Jones - AIG Commodity Total Return Index	-4.56	-2.58	1.77	-6.17	6/15/2007	1/9/2007
S&P GSCI	-5.53	-0.29	6.30	-5.53	7/31/2007	1/18/2007
Crude Oil (\$/bbl)	-7.98	1.82	17.88	-7.98	7/31/2007	1/18/2007
Gold (\$/troy ounce)	-1.19	0.97	3.51	-5.10	4/20/2007	1/5/2007

Sources: Bloomberg, Dow Jones & Company, Inc., Frank Russell Company, FTSE International Limited, Morgan Stanley Capital International, National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Datastream. MSCI data provided "as is" without any expressed or implied warranties.

Notes: Total returns for MSCI developed markets indices are net of dividend taxes. Total returns for MSCI Emerging Markets and All Country indices are gross of dividend taxes.

\* Capital change only.



Note: Chart shows financial sector performance relative to the broad market as defined by MSCI.





**CBOE VIX INDEX** 

#### Table D

#### U.S. AND EUROPEAN CORPORATE AND HIGH-YIELD BOND OPTION-ADJUSTED SPREADS (OAS)

**Cumulative Change in OAS (bps)** 

#### May 31, 2007 - August 17, 2007

**High-Yield Bond OAS** 



#### **Corporate Bond OAS**



Source: Merrill Lynch.

#### Table E

#### CUMULATIVE CHANGE IN GOVERNMENT BOND YIELDS

June 30, 2007 - August 17, 2007



Source: Thomson Datastream.





# **EXCHANGE RATE MOVEMENTS**

July 17, 2007 - August 17, 2007

Note: Nominal trade-weighted exchange rates provided by J.P. Morgan.