Supplement II

Global Macro Hedge Funds:

Emerging Perspectives on China

"As the party elites and others are trying to get their money out…the American public is trying to buy right in through the IPO market." [231]

- James S. Chanos, Founder, Managing Director and Chief Investment Officer, Kynikos Associates L.P.

Event Horizon Timeline

2009	● **Pivot Capital Management:** Identifies China's dependency on credit expansion and construction of industrial overcapacity to generate GDP growth
	● **Kynikos Associates:** Identifies property and banking sector asset bubbles and China's dependency on construction to generate GDP growth
	● **Corriente Advisors:** Identifies China's economy as dependent on the creation of an enormous and unsustainable credit bubble and rapidly escalating levels of central- and local-government debt
	● **Eclectica Asset Management:** Identifies economic imbalances and systemic risks as endemic to the Chinese economy including massive debt growth used to fund non-economic infrastructure projects
2010	● **Investment Management Associates:** Identifies industrial and commercial property overcapacity and export-manufacturing impacted by declining western demand
	● **GMO Asset Management:** Identifies parallels between Chinese leading indicators and all great asset bubbles occurring over the past 300 years
2011	● **Societe Generale:** Identifies China's growth model as dependent on the most unstable component of GDP
	● **Royal Bank of Scotland:** Identifies credit default swaps referencing Chinese government sovereign debt as the bank's top trade recommendation for 2011
2012	● **Greenlight Capital:** Identifies capital flight as already underway and declares that China is misunderstood and is not an investment opportunity

[231] *"Jim Chanos Speaks on China, and Reveals Another Short Strategy,"* by Joe Weisenthal, Business Insider (May 18, 2011). The article is accessible at: http://articles.businessinsider.com/2011-05-18/markets/30028191_1_china-boom-yuan-ipo-market

2009 ▲ 'Frontier' Hedge Funds Identify Opportunities Embedded in China's Leading Economic Indicators and Begin Re-Positioning Assets to Exploit an Unraveling of the Chinese Economy

PIVOT CAPITAL MANAGEMENT

An influential research report was released by Pivot Capital Management in August of 2009, entitled *"China's Investment Boom: the Great Leap into the Unknown."* [232] The monograph presents a detailed analysis of the nature and dynamics of China's economic growth and concludes that continued GDP growth is largely the product of unprecedented and unsustainable capital investment.

> <u>Excerpt</u>:
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> *[…] we believe the coming slowdown in China has the potential to be a similar watershed event for world markets as the reversal of the U.S. subprime and housing boom. The ramifications will be far-reaching across most asset classes, and will present major opportunities to exploit.*

Pivot offers <u>three principal reasons</u> for their perspective on China's pending economic downturn:

1. China's expansion cycle has already greatly surpassed all prior global capital investment cycles;

2. Recent economic growth is not sustainable and is predominantly the result of massive fiscal stimulus, concomitant with a surge in the growth of credit, none of which is sustainable; and

3. China has substantial overcapacity in virtually every industrial manufacturing and infrastructure sector, causing declining marginal returns on investment.

Pivot's report entailed a comprehensive review and analysis of the structural composition of China's economy and identified significant trends which, as noted above, reveal an unsustainable economic expansion driven largely by capital spending and expansion of credit. A survey of the salient points is presented below.

> *<u>Key Findings</u>:*

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[232] See research report by Pivot Capital Management entitled, *"China's Investment Boom: the Great Leap into the Unknown."* (August 2009). The report is accessible on the world wide web at:
http://www.scribd.com/doc/21544021/PIVOT-CAPITAL-MANAGEMENT-China-s-Investment-Boom-the-Great-Leap-Into-the-Unknown
Pivot's updated report entitled, *"China's Investment Boom: on the Edge"* (September 2011) is accessible at:
http://www.scribd.com/doc/75058489/PGVF-2011-China-Investment-Boom-on-the-Edge
The more recent report provides evidence revealing the continued deterioration of economic fundamentals in China.

- Investors have grossly underestimated both the maturity of China's growth cycle and the degree to which recent growth is related to the global credit bubble. Capital spending is the dominant driver of growth and has accounted for approximately 70% of total growth in 2008 and 90% of total growth in the first half of 2009. The ratio of Gross Fixed Capital Formation (GFCF) to GDP is expected to exceed 50% in 2009. China's capital spending boom now exceeds all historical transformation periods in both duration and intensity, including post-war Germany and Japan.

- China's incremental Capital Output Ratio (ICOR) has significantly deteriorated over the past two decades and continues to deteriorate relative to other high-growth countries in their pre-peak investment stages and has doubled from its 1980s and 1990s average. The rapidly decreasing efficiency of China's investments and declining marginal returns are symptomatic of the increasingly speculative nature of China's capital investments and evidence the likelihood of a hard landing with an abrupt decline in capital spending exacerbated by a banking crisis.

- Credit growth has reached a critical point and is expanding faster than GDP. If commercial lending activity continues to increase at the current rate, China's credit to GDP ratio will attain a similar level as that of pre-crisis Japan (1991) and the U.S. in 2008. Distribution of credit is very poor and remains concentrated in unproductive sectors, as evidenced by the collapse in the effectiveness of domestic credit in generating growth. Generating growth in China has transitioned from an average of $1.5 of credit to generate $1 of GDP growth for the period of 2000 – 2008, to now requiring $7 to generate $1 of GDP growth.

- China's true level of debt is vastly understated, and is much greater than reported in official statistics. Much of China's total debt is off-balance sheet (e.g., liabilities of local governments, estimated at $680bn at the end of 2008; recent stimulus loans for public infrastructure projects guaranteed by local governments, estimated at $350bn for the first half of 2009; $260bn in securitized nonperforming commercial loans previously sold as bonds by China's Asset Management Companies and explicitly guaranteed by the Ministry of Finance and the People's Bank of China; and $400bn of debt issued by China's three "policy banks", which is explicitly guaranteed by the central government).[233] When these $1.7 trillion in additional liabilities are included in China's total public debt, the debt to GDP ratio reaches 62% which is comparable to that of Western Europe.

- China's accumulated foreign exchange reserves are encumbered by the necessity of satisfying claims for the conversion of local currency into foreign exchange, in addition to the transfer of foreign exchange acquired as a part of a liability. Therefore, it is necessary to examine the ratio of international reserves to the supply of domestic money and gross external debt. M2 monetary aggregate in China ($8.4tn) is higher than the U.S. ($8.3tn) and is growing at 28% annually. When adjusted to include total liabilities, China's foreign exchange reserve coverage ratio is comparable to Argentina.

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[233] The report omits mention of China's defaulted full faith and credit external sovereign debt (estimated at somewhere between $260bn and $1 trillion) which the Chinese Communist Party repudiated in violation of settled international law.

● China benefitted substantially from the global credit bubble as it stimulated demand for Chinese exports. China's net exports grew tenfold between 2003 and 2008. The external revenues generated by China's export activity during this period assisted manufacturers in obtaining funding for capital investment to complement the loans. Capital investment has accounted for half of the growth in GDP from 2003.

● Pivot's analysis refutes the belief that there exists significant economic impetus for further expansion of China's manufacturing capacity and demonstrates that China's existing manufacturing capacity greatly exceeds requirements. Pivot identifies three primary destinations for recent capital investment, i.e., manufacturing (citing examples of steel, cement, and aluminum), real estate, and infrastructure, and demonstrates that each example is characterized by significant idle capacity. Thus, further expansion of these sectors will have significantly less effect on growth than in the past.[234]

EXAMPLES:

> **Steel:** Idle capacity in China's steel sector is equivalent to the total steel production capacity of Japan and South Korea combined, and yet China has an additional 60 million tons of steel production capacity presently under construction.

> **Cement:** China consumes more cement than the rest of the world combined. China currently has greater idle capacity in cement production than the entire consumption of India, the United States and Japan combined.[235]

> **Aluminum:** China accounts for over a third of the world's existing capacity for aluminum production, representing a "per capita" capacity equivalent to that of the United States (which has a GDP "per capita" level eight times higher than China. China has idle capacity in aluminum production equal to the entire aluminum production capacity of Brazil or India.

Pivot also notes that China ranks among the world's least efficient consumers of energy, consuming six times more energy per unit of GDP than Italy and three times more than the United States.

● Pivot's report exposes the fallacy of the "urbanization myth", which is often quoted as a fundamental trend expected to contribute to the future expansion of China's economy, and reveals that the application of western standards regarding "urbanization" fail to accurately portray the existing state of urbanization in China, in which 96% of the population lives in just 46% of the territory. China defines an "urban center" as having a population density

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[234] In this regard, the conclusions of the Pivot report are consistent with the conclusions expressed by economist Andy Xie, who noted that "[T]he biggest risk to China's economy is the desire to maintain past economic growth rates by maximizing investments in property -- an unproductive asset. It supports short-term growth by sacrificing long-term growth as capital's average productivity declines over time." Source: *"Trapped Inside a Property Bubble,"* by Andy Xie, Caixin (January 10, 2010). Mr. Xie further states, "[W]hen China's real estate bubble finally bursts while exports become less competitive, the consequences could be severe."
[235] This despite the fact that a month before the Olympic Games, *26* inefficient cement factories located outside the city of Tangshan were dynamited in order to reduce pollution. Source: *"Beijing Considers New Curbs as Pollution Threatens Games,"* Wall Street Journal (July 29, 2008).

in excess of 1,500 persons per square kilometer. Under that definition, cities such as Houston, Texas (U.S.A.) or Brisbane, Australia would not qualify as "cities". According to a recent OECD report, "[T]he scale of China's urbanisation is therefore likely to be considerably understated by official definitions."[236] By western criteria, China is now one of the most urbanized countries in the world and the overall level of urbanization in China may be understated by as much as 20%.

● Foreign investors are reassured in the Chinese government's commitment to investing in new infrastructure. However, the current growth rates for such investments are unsustainable and Pivot's analysis demonstrates that development of China's infrastructure has already reached an advanced level relative to global benchmarks. Pivot observes that in previous infrastructure-driven investment bubbles, the peak in market expectations has coincided with the peak in growth momentum. Pivot also notes that the economic justification for many of China's infrastructure projects is becoming increasingly questionable, and provides the following as examples:

> **Roads, Highways and Bridges:** Due to the relative population concentration in China compared to the U.S., it is not evident that China needs significant expansion of the country's existing road and bridge infrastructure. Since both China and the U.S. are approximately 9.6 million square kilometers in size, Pivot compares the relative population densities of both countries and calculates an effective density ratio for China of .70 (relative to the U.S.). On this basis, China's existing 60,000 kilometers of expressways equals or exceeds the .70 coefficient. Pivot notes that there are currently 250 million vehicles in the U.S. versus 43 million vehicles in China, and China *already* has an equal or greater proportionate amount of highways. There are presently 600,000 bridges in the U.S., of which 450,000 are in use. There are currently 500,000 bridges in China, with 15,000 new bridges constructed annually over the past decade. However, the U.S. has five times more rivers than China. Pivot states that China has already dethroned Japan as the builder of "bridges to nowhere" and notes that six of the world's ten longest conventional bridges, and half of the world's longest suspension bridges, are located in China.

> **Railways:** Utilizing the .70 effective density coefficient of the proportionate model, Pivot calculates that economic justification may exist for China to double the 80,000 kilometers of existing rail stock. The government's 2009-2012 railway infrastructure spending plan calls for the construction of 63,000 kilometers of rail network, meaning that overall capital expenditure growth rates will significantly decline in the wake of the rail expansion program.

> **Airports, Bullet Trains and "Prestige Projects":** Pivot identifies what it calls "prestige projects" and infrastructure projects which are sited in sparsely populated inland areas, as particularly wasteful. Thirty-seven of the forty-four airports constructed between 2005 and 2010 have been or will be built in sparsely-populated western China. Pivot cites the Qinghai-Tibet line and the Shanghai Maglev, as well as plans to expand the bullet train network to remote provinces such as Yunnan and Gansu provinces, as examples of politically-motivated projects.[237]

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[236] Kamal-Chaoui, L., E. Leman and Z. Rufei (2009), *"Urban Trends and Policy in China,"* OECD Regional Development Working Papers (January 2009).
[237] See, for example, the nearly deserted Guangzhou South Station.

Pivot observes that waste and corruption run parallel with state-sponsored mega-infrastructure projects financed by easy loans. As anecdotal examples, Pivot cites the stimulus-financed demolition and reconstruction of a modern elevated highway in Hunan, and the stimulus-financed demolition and reconstruction of a newly-constructed bridge in Sichuan.[238] Pivot's research demonstrates that China is already at a very advanced stage of industrialization even when measured on a per capita basis, so the economic viability of further capacity expansion is limited. Pivot's research also demonstrates that urbanization as a justification for further capacity expansion is vastly overstated, as China is far more urbanized than is reflected in statistical reports. Thus, the effectiveness of capital spending at stimulating growth is diminishing and investment will thereby cease to be the dominant contributor to China's future economic growth.

- Utilizing case analyses and comparative economic data, Pivot demonstrates that China's domestic household consumption growth cannot substitute for the declining effectiveness of capital investment. Household consumption in China accounts for approximately one-third of GDP and would have to increase by 20% - 30% annually for overall GDP real growth to achieve 10% in the face of declining growth in capital investment. Pivot notes that household consumption is one of the most stable components of any country's national accounts and in post-war U.S., very rarely exceeded 10% and generally averaged no more than 5%. Japan experienced peak consumption growth of 12% in 1961. Japan's average consumption growth during the 1970s was 6%. In the instance of China, real growth in household consumption has historically tracked below the overall economic growth rate.[239] The real consumption growth rate averaged 8.2% for the period 1997 – 2007, a full 1.3% lower than the real GDP growth rate over the same period. From Pivot's analysis, household consumption would have to grow at a rate of 3x – 4x faster than in the past decade in order to compensate for a reduction in capital investment. Such an expectation is rather unrealistic, considering the adverse effect on household consumption resulting from an investment slowdown in conjunction with a protracted sluggish global demand for China's exports.[240] Even with broad-based government subsidies to households, domestic consumption grew 10% during the first half of 2009. As a ratio of GDP, household income has declined in China by 20% from 1999 through 2008. This decline is largely attributable to the migration of economic activity towards heavy industries which are more capital (and less labor) intensive. Further skepticism toward any surge in household consumption is warranted by the state of China's labor market, in which the headline unemployment rate of 4.3% only accounts for urban persons registered as unemployed and excludes vast swaths of the remaining population. A mid-2008 study by the Chinese Academy of Social Sciences estimated the urban unemployment rate at 9.4%, more than double the official report. Even this figure excludes the 140 – 160 million migrant workers as well as unemployed persons in rural areas. China's National Bureau of Statistics ("NBS") estimates the number of migrant jobless at 23 million, adding another 3% to the unemployment rate. However, there are reports of unofficial surveys conducted by the NBS which estimate the total unemployment rate at 27%. Almost 1 million graduates from 2008 remain unemployed, and 60% of the 6 million graduates from 2009 have yet to find a job. A survey of 20,000 households across 50 cities

[238] *"Whither China's Construction Boom?"* Forbes (May 21, 2009).
[239] Growth in household consumption approximated as CPI-adjusted household expenditures.
[240] Pivot estimates that China's household consumption will revert to pre-2005 averages.

undertaken by the People's Bank of China in mid-2009 found that a record low 8.6% of those surveyed considered their income "adequate," which is significantly lower than the 32% figure from early 2007. This trend-line would seem to further dispel as a myth any expectations of an imminent consumption boom in China. Pivot states that China's true overall economic growth will approximate 5% - 6% annually for the foreseeable future and is expected to slow further over time. The consequences of China's slowdown will effect global prices of items imported by China, as it shifts from a consumer of commodities and capital goods into locally-produced consumer goods and services.

- As noted above, Pivot foresees a Chinese investment slowdown as a global market event, which will challenge the prevailing belief of emerging markets leading the world out of the current economic malaise and which will also raise doubts regarding the effectiveness and sustainability of various stimulus efforts recently undertaken by other countries. Pivot expects that China will introduce further stimulus measures as the economic situation unfolds and signs of weakness appear. Irrespective of such measures, Pivot's analysis demonstrates that China has reached an impasse in terms of dependency on capital spending to generate growth. Although the transition from a high-growth economy dependent on investment, to a slower growth model driven by consumption demand may be deferred slightly (at the risk of causing a credit implosion), it cannot be avoided. Pivot notes that anything which is cyclical and dependant on Chinese investment demand will be most vulnerable, including industrial commodities as well as equities and credit of industrial and consumer cyclicals. Pivot expects that a Chinese slowdown would initially be deflationary, given the magnitude of overcapacity already present in various Chinese industries, and therefore a credit negative (as well as adverse to equities). Pivot also warns that depending on the aggressiveness of Chinese policymakers, investors may want to begin focusing on the associated inflationary risks as well.

Conclusion:

Pivot concludes that credit growth in China has reached critical levels and its effectiveness at increasing economic growth is markedly declining at the same time that external inflows are part of a global imbalance that is presently adjusting, with the result that future inflows will not be sufficient to fund the current level of capital expenditures. Pivot's analysis also reveals that China's liabilities are far greater than generally perceived and that its "spendable" foreign exchange reserves are substantially less than generally perceived and cannot be allocated to capital expenditure without undermining its external position.[241] The report offers compelling evidence for a permanent reduction in capital spending activity and predicts that following the inevitable reduction in capital expenditure as a primary driver of China's economic growth, domestic consumption will become the upper boundary of growth and cannot rationally be expected to compensate for the reduction in net new capital investment.[242]

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[241] China's predilection for large-scale capital expenditures is manifest in the country's development of vacant, so-called "Ghost Cities" which are empty of people. The same phenomena is also evident in the pattern of premature demolition and reconstruction of buildings which are nowhere near the point of being functionally, economically, or structurally obsolete.

[242] May 24, 2012 Update: Charles Biderman recently stated his belief that based upon three critical real-time data points (electricity consumption, railcar loadings, and bank loans) that China is probably already in a recession. Source: video clip captioned, "Biderman's Daily Edge," (May 22, 2012). The video is accessible at:
http://trimtabs.com/blog/2012/05/22/bidermans-daily-edge-5222012-is-china-in-recession/
A recession is technically defined as two consecutive quarters of negative economic growth.

KYNIKOS ASSOCIATES L.P.

Kynikos Associates was founded in 1985 by James S. Chanos, who remains Managing Director and Chief Investment Officer. He achieved broad recognition within the investment community for having been the first asset manager to correctly identify the erroneous market perception and valuation of Enron Corporation. Kynikos has $6 billion under management.

Biography

Jim Chanos was born in 1958 in Milwaukee, of Greek origin. He was schooled at Wylie E. Groves High School and Yale, where he graduated in 1980. In business, he developed an investment strategy based on intensive research into stocks looking for fundamental and large market failures in valuation: typically underestimated or previously unreported failings in the business or market of a stock. Followed by committing to a (usually large) short-position which he is willing to hold for long period of time—almost the mirror image of Warren Buffett's reputed "fundamentals + long duration" investment strategy. Because of this model, **his investments function more like those of a whistle-blower than most typical investments**. Examples of this include short-selling companies such as Baldwin-United, and more recently Enron Corporation. He rose to fame in the 1980s as a short seller who had a knack of spotting stocks that he thought to be overvalued.[243]

Perspective on China

In various print media and televised interviews Mr. Chanos states that based upon his investment teams' research, he foresees a collapse of the Chinese economy.

> *"Actually, our team just got back from China, my research team. I think that what my team found [in China], they actually came back saying we are not bearish enough."*[244]
>
> \- Jim Chanos

In various presentations and interviews, Mr. Chanos cites several factors which he considers to be predictive of such a scenario, including the country's economic dependence on new construction, which accounts for 60% of China's economy (versus 10%-15% in western nations) and which is fueling demand globally for industrial commodities, particularly in Australia, Brazil and Canada. Mr. Chanos has stated that China's reliance on property development to produce nearly the entirety of the country's economic growth, rather than appreciable growth in exports and domestic demand, is without historical precedent and is ultimately unsustainable. Mr. Chanos believes that the inefficient and state-directed misallocation of capital has resulted in unproductive and wasteful mal-investment within the Chinese economy, which is essentially a government-sponsored "Jobs Program" and which is encountering the inevitable law of diminishing returns. Mr. Chanos' research also reveals that the Chinese government underreports China's domestic inflation rate by 4% - 5% p.a.[245]

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[243] Source: Hedge Funds Review.
[244] *"Jim Chanos' One Big China Regret",* Business Insider (May 24, 2011).
[245] *"Is China Faking its Economic Growth,"* CNNMoney (February 16, 2012). The article is accessible at: http://money.cnn.com/2012/02/16/news/economy/china_chanos/index.htm

EXAMPLES:

> The substantial amount of industrial and infrastructure overcapacity is worrisome and potentially destabilizing. Such overcapacity, which is continuing to increase even though manufacturers have cut employees by two-thirds, may be contributing to domestic inflation, and may very likely cause future deflation in the form of real economic depreciation attributable to the cost of maintaining fixed asset investments.

June 14, 2011. A police vehicle lies on its side in Guangdong province last week after protests by factory workers.

> The existence of classic pockets of overheating (i.e., "asset bubbles") as a result of economic distortions caused by the unprecedented expansion in commercial credit as a component of the stimulus program undertaken by the government following the 2008 global financial crisis, e.g., the existence of a major credit-fueled property bubble characterized by the construction of vacant office towers and apartment buildings (currently estimated at 64 million empty units with an additional quantity recently announced to be built). The effects of the government's stimulus program and the expansion of credit in particular, have been pervasive throughout the Chinese economy. China's six largest banks increased their aggregate commercial loan book by 42% over the preceding year (i.e., from 2009 into 2010) and remain on track to equal or even exceed an equivalent volume of loan generation post-2010. In comparison, it is revealing to note that the aggregate loan book of U.S. banks increased by just 10%-15% during the boom years of the U.S. housing bubble.

> Local communist party officials control the real estate which comprises their political subdivision, and a substantial percentage of municipal revenues are derived from land sales. The confiscation by local officials of occupied land and land under cultivation by local residents continue to act as a catalyst for escalating incidents of civil unrest, which are turning increasingly violent.

> Mr. Chanos also cites the fact that financial data reported by the central government is unreliable and that the true extent of China's national debt is substantially greater than the official figures. He further notes that the central government will incur a budget deficit for 2011, projected at $150 million, and states that "the only thing keeping China afloat is its trade surplus". Such reliance makes the Chinese economy extremely vulnerable to a trade war including future tariffs enacted by European Union member states or the United States in order to protect their domestic economies during a period of long-duration stagflation, and non-tariff trade barriers such as government policies or regulations.

The blast site near the Linchuan district government building in Fuzhou City, east China's Jiangxi Province on Thursday. The attack by a farmer who had lost land draws cheers, not criticism, from many Chinese netizens, who compare him to a revolutionary hero from the 1940s.

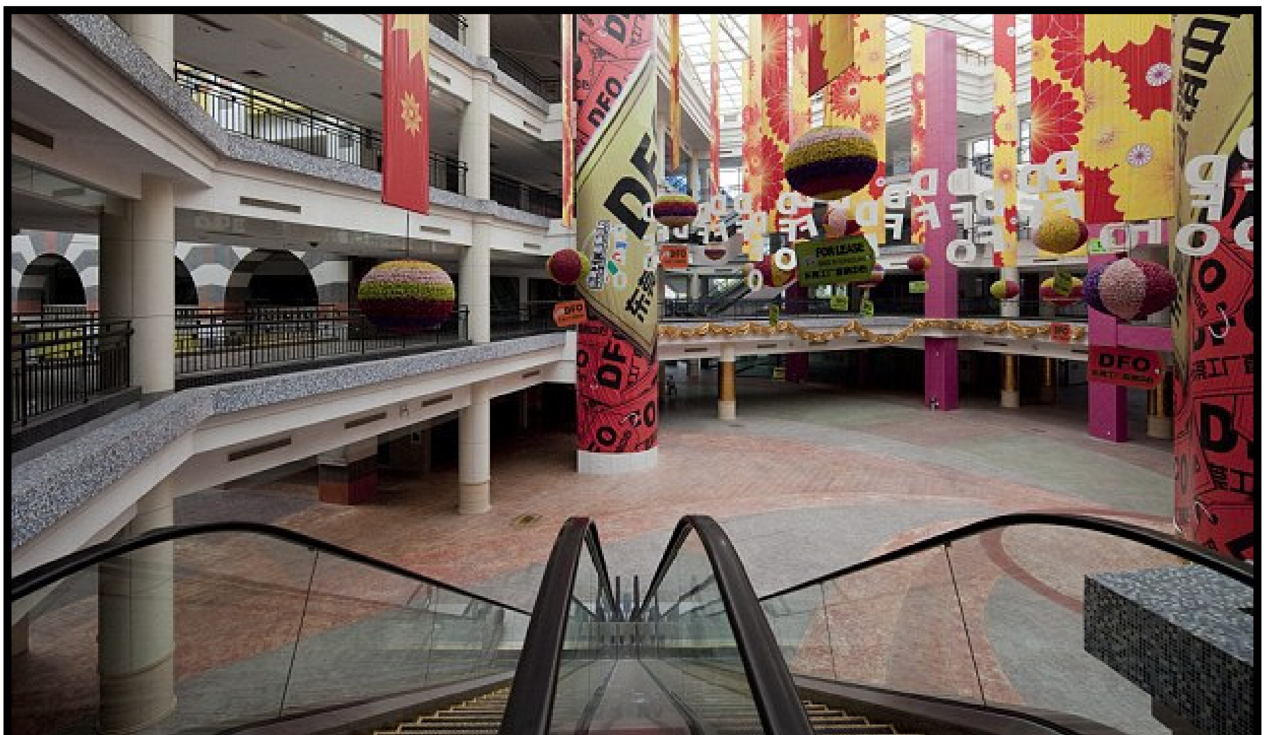
The picture at left shows a screen-grab of Qian Mingqi's account on Sina Weibo, a Chinese Twitter equivalent. A day before the explosions, Qian, who had been petitioning the government after he had lost his land, wrote, "I am forced to take a path I did not want to take."

> Unlike market economies in which economic activity produces GDP, in China GDP is of extreme political significance and it is GDP which drives economic activity, resulting wasteful non-economic activity, e.g., the repetitive cycle of demolition and reconstruction of commercial and residential buildings as a civilian employment program; construction of numerous roads, highways and bridges to nowhere; and the development in remote parts of China of massive and uninhabited "Ghost Cities" at the estimated rate of ten per year (e.g., Bayannao'er; Dantu; Erenhot; Kangbashi; New Oordos; Zhengzhou New District; et al.) and vacant shopping malls (e.g., South China Mall in Dongguan, which is the world's second largest mall, after Dubai). Migration of China's population into urban areas is slowing, with China presently about 50% urbanized and 50% rural. Since fixed asset investment is responsible for the bulk of China's GDP growth, if such investment is non-economic it portends major future problems for China.

Pavement workers in Chongqing

Half the crew digging up the road…

… the other half putting it back together



Abandoned: The New South China Mall built in 2005 is the second largest in the world, with space for 1,500 stores, but has less than 12 shops

© EPA

Vacant Ghost City Zhengzhou New District. Construction of mega-projects represents the easiest manner in which local party officials are able to achieve the target 8% GDP (in contrast to free market economies in which GDP is comprised of consumption; fixed investment; government and net trade).

> The commercial real estate sector of the Chinese economy is presently 20% vacant across every major urbanized area, and new construction in progress is projected to increase the amount of commercial space available by more than a third of the existing stock. The sector is experiencing a major bubble as non-real estate companies have begun entering the real estate development business. Mr. Chanos asks the question, "what will substitute as the GDP-driver when the current projects are completed?"

> The residential real estate market is also experiencing a major bubble, although one sign that prices may be starting to decline is the spectacular report that prices for residential properties in Beijing reportedly slid by over 27% within a 30 day period.[246] Individual Chinese perceive ownership of apartments and condominiums as a store of value to preserve the wealth accumulated by intergenerational saving, and Mr. Chanos has articulated his concern that a significant decline in property values, and thus the erosion or entire loss of intergenerational savings, could constitute a flashpoint for future social unrest.

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[246] *"Beijing House Prices Fell,"* by Chen Si, China Daily (April 12, 2011). The article is accessible at: http://www.china-daily.org/China-News/Beijing-house-prices-fell-19/

Mr. Chanos observes that command economies are effective at marshalling resources to generate annual GDP growth for years, thereby ultimately infusing the economy with capital, which is the current stage of China's economy.[247] Mr. Chanos further observes that China's political economy is such that local as well as central government officials are incentivized to produce unreliable data including the "double counting" of statistics, consistently reporting 9% growth for every quarter, every year. Mr. Chanos also considers the central government's unfunded liabilities to dwarf its $2 trillion in foreign exchange reserves and further notes that domestic consumption, as a driver of GDP, is actually declining (which may be partially attributable to China's adverse labor demographics (i.e., an aging workforce). Mr. Chanos likens the pending state of the Chinese economy to "the dot com bust writ large." Mr. Chanos states that "China plays by China's rules" and frequently unilaterally abrogates existing agreements and contracts on an arbitrary basis, and cites as examples the cancellation of McDonald's Corporation's lease of the commercial premises adjacent to Tiananmen Square so that the Chinese People's Liberation Army could establish a PLA-owned hamburger restaurant in the same location; charges of espionage brought by the Chinese government against executives of the Australian mining company Rio Tinto when Chinese government officials were dissatisfied with price negotiations involving the purchase of iron ore; China's failure to honor derivatives contract to which it is a counterparty; and the recent and widely-reported instance involving Google Corporation's China operations.

Positions

Mr. Chanos advocates that rather than attempt to identify the precise timing of the occurrence of a marked decline in asset prices, it is instead preferable to seek to identify those risk factors which are causative to the future direction of the subject economy and then assign probabilities to such factors, as they will become evident before manifesting an impact in the earnings streams of investable assets. Accordingly, Kynikos has taken direct exposure to China's economy via the following disclosed positions:

- Short equity positions on building materials companies globally which sell products into China;

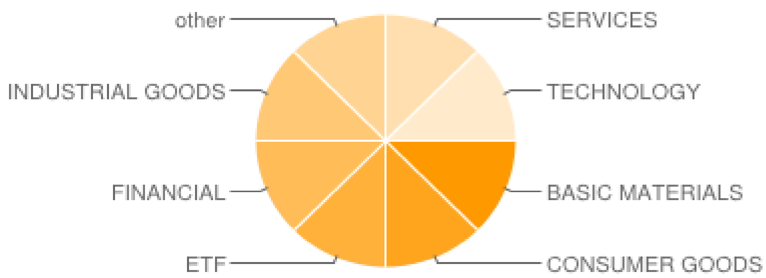
- Short equity positions on the large banks in China and Chinese property development firms listed on western financial markets; and

- Short equity positions on Chinese corporations listed on the Hong Kong market.

Kynikos recently affirmed that it will continue to maintain short positions on Chinese property development companies, citing among factors such companies' extensive raw land inventories in the face of a major price bubble.

[247] For additional references on this aspect, see the following essay entitled, *"The Myth of Asia's Miracle,"* by Paul Krugman, Foreign Affairs (Nov./Dec. 1994; Vol. 73, Iss. 6; pg. 62, 17 pgs). The essay is accessible at: http://media.ft.com/cms/b8268ffe-7572-11db-aea1-0000779e2340.pdf
See also the memorandum to the Minister of Finance for India entitled, *"A Memorandum to the Government of India,"* by Milton Friedman (November 05, 1955), published in 1992 by the East-West Center of the University of Hawaii in the proceedings of a 1989 conference captioned, "The Modern Political Economy of India." The memorandum is accessible at: http://indiapolicy.org/debate/Notes/friedman.htm

Q1 2012 Portfolio Allocation:



Source: Kynikos Associates SEC Form 13F Filing

Within the hedge fund community, there is an emerging consensus that the smart money in China is investing outside of China while the American public is being asked to buy in through IPOs. In an interview with Bloomberg TV on May 24, 2011, Mr. Chanos stated that his "one big regret" has been "the inability to short Chinese IPOs in the US, many of which have been dogged by accounting issues and have plunged in value" (see the section of this report entitled, "Exchange-Listed Chinese Company Fraud" for additional coverage of this aspect).[248]

> *"The fact that people are even talking about the government stepping in to shore up the banks, when two months ago people thought there was nothing wrong with the Chinese banks, should tell you just how seriously this situation is deteriorating."* [249]
>
> - Jim Chanos

Mr. Chanos also offers a cautionary note to prospective investors entering the late stages of the 'Chinese Miracle' that western investment banks (i.e., the "sell side" of the finance industry) continue to issue "buy" recommendations referencing Chinese assets in an attempt to monetize their Chinese exposure, i.e., by simultaneously selling off their equity and real estate assets to investors.

> *"If we assume that China will grow total credit this year between 30% to 40% of GDP, and half of that debt will go bad, that is 15% to 20% (of GDP). Say the recoveries on that are 50%. That means that China, on an after write off basis, may not be growing at all. It may be having to simply write off some of this stuff in the future* ***so its 9% growth may be zero."*** [250]
>
> - Jim Chanos

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[248] Id. at 243. Comparatively, it is interesting to note that at the 2011 Ira Sohn Investment Conference in New York City, Mr. Chanos stated that his fund was short Vestas Wind Systems and First Solar, which companies' shares subsequently lost 72% and nearly 87% of their value, respectively.

[249] Bloomberg Television interview (October 11, 2011).

[250] Bloomberg Television interview (September 20, 2011). During the interview, Mr. Chanos stated, **"We see that the debt in China, implicitly backed by the Chinese government, probably has gone from about 100% of GDP to about 200% of GDP recently. Those are numbers that are staggering. Those are European kind of numbers if not worse."** Mr. Chanos also notes that the debt of the Chinese government's state-owned enterprises, local governments and ancillary borrowing vehicles is growing at a very rapid rate, and that, "local government have every incentive to just keep the game going." Mr. Chanos further notes that the Chinese government itself stated that it expects half of local governments' debts to go bad. In reference to the Chinese property bubble, Mr. Chanos mentions that, "The CEO of Komatsu said last week that he is having trouble getting paid for his excavator sales in China." He pointed out that Chinese property developers are turning to the shadow banking system (entailing interest rates of 30% - 100%).

Recent Performance of Positions Held by Kynikos Associates

From December 31, 2011, the largest 10 'long' positions held by Kynikos have generated a weighted average yield of 19%, versus 12% for the S&P 500 Index.[251]

Videos of Investment Strategy Presentation and Interviews

Interview	Presentation	Interview
"China's Treadmill to Hell"	**"Mal-investment: Overheating and Overindulgence"**	**"One Big China Regret"**
		
http://money.cnn.com/video/news/2010/11/12/n_jim_chanos_china.fortune/	http://www.youtube.com/watch?v=99HNFCn5RP8	http://www.bloomberg.com/video/70128022/

January 25, 2010
China's Monumental Property Bubble:
http://www.youtube.com/watch?v=5D9DC0QhmGg&feature=player_embedded

January 26, 2010
Mal-Investment: Overheating and Overindulgence: http://www.youtube.com/watch?v=99HNFCn5RP8

April 08, 2010
China's Treadmill to Hell: http://www.youtube.com/watch?v=XqGrI_gyG0U

April 15, 2010
The China Bubble: http://www.charlierose.com/view/interview/10960

January 19, 2011
China's Yuan May be Overvalued: http://www.youtube.com/watch?v=zDBawjNAXoc

February 01, 2011
Why Jim Chanos is Short China: http://video.ft.com/v/772837551001/Why-Jim-Chanos-is-short-China

May 18, 2011
The China Bubble: http://www.youtube.com/watch?v=h2K5LjvnQ8c&feature=player_embedded
Notes: China's centrally planned economy has no pricing mechanism which is leading to shortages. Mr. Chanos states that China is a $5 trillion economy that is investing $3 trillion a year to keep the economy going, a truly unprecedented event.

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[251] These are the positions Kynikos holds 'long' in order to hedge the fund's 'short interest' exposure. Kynikos' Q1 2012 SEC Form 13F-HR is accessible at:
http://sec.gov/Archives/edgar/data/1446440/000114420412029460/0001144204-12-029460-index.htm

May 24, 2011
One Big China Regret: http://www.youtube.com/watch?v=_J4g-H--5yg

September 20, 2011
China's Debt is Worse than Europe's Debt:
http://www.zerohedge.com/news/jim-chanos-debunks-myth-china-worlds-white-knight
http://bloom.bg/pQri3J#ooid=Rkb2d0Mjozv9gLMgye9RTDc0cRmztpkx
http://www.youtube.com/watch?v=6HKaR52ciG8&feature=player_embedded
Note: China's credit growth = 3x to 4x economic growth rate.

October 11, 2011
Chinese Banks Deteriorating:
http://www.bloomberg.com/video/77291424-chanos-on-china-banks-real-estate-u-s-politics-oct-11.html

October 28, 2011
China is on a Bigger and Faster Treadmill to Hell:
http://www.bloomberg.com/video/79081596-chanos-on-china-economy-property-europe-debt.html

November 23, 2011
Bloomberg Television Interview:
http://www.fundmymutualfund.com/2011/11/video-hedgie-jim-chanos-returns-from.html

November 24, 2011
Chinese Banks Built on Quicksand:
http://www.bloomberg.com/video/81455126-chanos-says-china-bank-system-extremely-fragile-nov-23.html

February 16, 2012
Is China Faking its Economic Growth?: http://money.cnn.com/2012/02/16/news/economy/china_chanos/index.htm

February 16, 2012
Chanos shorts China construction and goes long corruption: http://www.youtube.com/watch?v=b2L3IURLdhY

February 16, 2012
China's Construction Whoopie Cushion:
http://money.cnn.com/video/news/2012/02/15/n_chanos_housing_bubble.cnnmoney/

May 01, 2012
Bloomberg Television Interview: http://www.bloomberg.com/video/91763771/

May 01, 2012
The Chinese Economy: http://www.youtube.com/watch?v=8hr7cFEBnHc&feature=player_embedded

Interview Notes:

Mr. Chanos mentions that China's centrally planned economy lacks a pricing mechanism, leading to shortages, and that the Chinese economy requires $3 trillion of capital investment each year to remain afloat. He also references the fact that China's credit growth is approximately 3 to 4 times the economic growth rate, resulting in an unprecedented credit bubble. Also, new construction continues to outpace demand, which skews GDP figures, e.g., China's GDP statistics do not reflect actual sales of housing units, but rather production of units, so an unsold unit contributes to GDP. Mr. Chanos also notes that while China has had the fastest GDP growth of any emerging market, investors have largely been unable to participate since the drivers of growth has been the wealth which has accrued to the 'insiders' and the state-owned enterprises rather than to Western investors, and he noted China's failure to enforce intellectual property rights and patent protection.

CORRIENTE ADVISORS L.L.C.

Corriente Advisors is a hedge fund management company founded in 2001 by Mark Hart III, who presently serves as chairman and chief investment officer. As of 2010, Corriente reportedly managed approximately $1 billion in assets.[252]

Biography

Mark Hart III graduated with honors from the University of Texas and is the son of a prominent Fort Worth attorney. He achieved industry recognition by having correctly identifying and positioning against the market for U.S. subprime mortgages, as well as successfully predicting and profiting from the European sovereign debt crisis. Mr. Hart was one of the very first fund managers to recognize the U.S. subprime mortgage bubble. He launched the Corriente Subprime Credit Strategies Funds in 2006, designed to capitalize on the subprime mortgage market dislocation and which reportedly generated an estimated 600% return between 2006 and 2008. At the end of 2007, Mr. Hart was the first fund manager to establish a dedicated fund (the Corriente European Divergence Fund) to exploit rising sovereign credit spreads in advance of Europe's sovereign debt crisis (where he correctly identified Greece, Portugal and Spain as prime risks). Having already distributed a sizeable portion of the profits to investors, Mr. Hart continues to maintain positions in credit-default-swap contracts referencing the debt of various European countries including Greece, Portugal and Spain. Although hedge funds typically charge investors a fee of 20% of the increase in value of their investments irrespective of whether or not they ultimately exit at a profit. Corriente only takes a fee when it exits a specific trade and investors receive a profit. An industry peer describes the prescient Mr. Hart as **"far ahead of the game"**.[253] Mr. Hart recently established the Corriente China Opportunity Funds to profit from opportunities resulting from the collapse of the Chinese economy.

Perspective on China

Mr. Hart has publicly stated his assessment, based upon his team's research, that China is generally misperceived (and therefore mispriced) as a perpetual "economic miracle," when in fact the reality is that the country's economy is a credit-fueled bubble.

"China is in the late stages of an enormous credit bubble." [254]

- Mark Hart

Mr. Hart states that he expects an "economic fallout" that will be as "extraordinary as China's economic out-performance over the last decade." He also observes that "complacency among market participants regarding China is eerily similar to the complacency exhibited prior to the United States subprime crisis and European sovereign debt crisis."

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[252] Source: Corriente China Opportunity Funds investor presentation (2010).
[253] Source: Sixteenth Annual Ira Sohn Investment Conference, New York City (May 25, 2011). Unless otherwise noted, the statements appearing in this section which are attributed to Mr. Hart comprise his remarks articulated at this conference.
[254] Id.

In describing China as "an enormous tail-risk," Mr. Hart also cites the familiar themes of overcapacity in raw materials and property construction, dubious accounting practices among banks and misleading government statistics. He also notes that demand in China is not market-based but is instead manufactured by the government, and various sectors of the Chinese economy are presently experiencing growth in asset bubbles due to artificially low interest and exchange rates.

EXAMPLES:

> **Raw Materials:** China has consumed just 65% of the cement it has produced in the last 6-7 years, after exports. China also has 200 million tons of excess steel capacity, which is greater than the European Union and Japan's entire 2010 production. China produces more steel than the next seven largest producers combined.

> **Property Construction:** Excess floor space exceeds 3.3 billion square meters and an additional 200 million square meters is added each year.

> **Property Prices:** The price to rent ratio is 39.4x versus 22.8x in the U.S. prior to the housing crisis. The lack of alternative investment vehicles acts to channel excess corporate, government and household liquidity into property, driving home prices to unsustainable levels.

> **Banking:** Banks are concealing their credit exposure through the use of Local Investment Vehicles ("LIVs"), which are shell entities created to borrow from Chinese banks and invest in fixed assets.[255] Mr. Hart projects that non-performing loans will equal 98% of total Chinese bank equity if the non-cashflow producing LIC loans are recognized as non-performing. Mr. Hart further believes that the central government lacks the resources to bail out the banking system.

> **Government Debt:** Corriente calculates the ratio of China's government debt to GDP is actually 107%, which is fivefold the officially reported figure. Corriente's analysis used "conservative assumptions" and states that **the real figure may be as high as 200%** (exclusive of China's defaulted external full faith and credit sovereign debt which is estimated at $750 billion to $1 trillion owed to both the U.S. government and private U.S. creditors, and as much as $10 trillion owed to defaulted investors worldwide, and which remains outstanding as a liability of the People's Republic of China as the internationally recognized government of China).[256]

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[255] Such entities are also known as Local Government Financing Vehicles ("LGFVs"). We first noted reference to the issue of off-balance sheet (or "shadow") lending by Chinese banks in our research note pertaining to the Agricultural Bank of China IPO (released in mid-2010). See related article entitled, *"Uncertain Future of China's State Banks: Implications of the Agricultural Bank of China IPO,"* by Kevin O'Brien, Sovereign Advisers (July 25, 2010). The article is accessible at: http://www.globalsecuritieswatch.org/Uncertain_Future_of_China's_State_Banks
The research note is accessible at:
http://www.globalsecuritieswatch.org/gswupload/AgBank_Research_Summary.pdf

[256] *"China's Secret? It Owes Americans nearly $1 Trillion,"* by Richard Parker, McClatchy-Tribune Washington Bureau (May 18, 2012). Under settled international law, the PRC inherited the repayment obligation for this debt when it achieved international recognition as the government of all China on October 25, 1971 by majority vote of the United Nations General Assembly (Resolution no. 2758). The article is accessible at:
http://www.mcclatchydc.com/2012/05/18/149159/chinas-secret-it-owes-americans.html

Although China has been the recipient of an immense amount of foreign investment, in order to achieve such a high level of investment the government has grossly expanded the money supply to prevent the Yuan from rising significantly in value. M2 money supply is presently at least $12 trillion, which is far in excess of the U.S. economy. Another fact which is not commonly understood is that China's foreign exchange reserves are not equivalent to national "savings." Rather, foreign exchange reserves are reserves held to cover conversion exposure from the monetary base and existing debt, and also to purchase dollars in order to keep the value of China's currency artificially low. The M2 figure in comparison to reserves is even worse than most of the other Asian economies prior to the 1998 Asian crisis. China is presently at 25% in comparison to an average of 28% in the 1998 crisis. Mr. Hart has stated that "China's bust will be much larger than the Asian crisis in the 90s."

Truckers strike in Shanghai to protest rising fuel prices

Mr. Hart also reiterates the fact that China's 12 year expansion in fixed asset investment, which comprises 60% of GDP, is unprecedented both in terms of duration as well as the relative share of the economy. Mr. Hart states that although on the surface Chinese banks appear healthy, the continued servicing of existing loans depends largely upon property sales. Mr. Hart's research demonstrates that Chinese banks are extremely undercapitalized, and a KPMG report reveals that non-performing loans (NPLs) may already comprise **30%** of China's banking assets, with some of China's commercial banks estimated to have NPL ratios of over 50%, prior to the government's stimulus lending program.[257] Mr. Hart's investment team's research also reveals that domestic inflation in

[257] See KPMG report entitled, "China's City Commercial Banks: Opportunity Knocks?" (©2007): http://www.kpmg.com.cn/en/virtual_library/Financial_advisory_services/Chin_comm_bank/Opportunity_knocks.pdf. The report cites reference to another research report entitled, "China Financial Services Background" prepared by the Economist Intelligence Unit (2005).

China far exceeds the level publicly reported, and Mr. Hart has said that inflation will end China's credit growth.

As inflation undermines China's economic growth, Mr. Hart foresees devaluation of the yuan, explaining that while much of the past impetus for appreciation of the yuan has been derived from the substantial inflow of foreign money and once such inflows begin to recede, the pressure for yuan appreciation will evaporate.

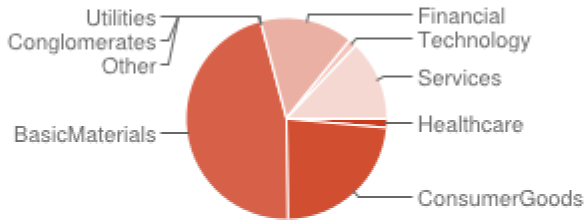
Uninhabited Chinese Ghost Town

Positions

- Sovereign and corporate credit default swaps;
- Interest rate options;
- Foreign exchange options; and
- Purchasing put options on the renminbi currency.

Mr. Hart has stated that he and his research team are sufficiently confident in their conclusions that the China Opportunity Master Fund is prepared to burn through 20% of fund principal per year to maintain a "China short" position.

Q4 2011 Portfolio Allocation:



Source: Corriente Advisors SEC Form 13F Filing

Recent Performance of Positions Held by Corriente

Mr. Hart appears to have been remarkably prescient yet again, as evidenced by the soaring interest in credit default swaps referencing China as concerns regarding the inevitable nationalization of bank NPLs and municipal indebtedness, in conjunction with a growing central government operating deficit, has resulted in a substantial increase by institutions and credit traders with exposure to China seeking credit default protection, as demonstrated by the following charts:

Widening Trend: China Credit Default Swap Spreads [258]

Coincidently, the Royal Bank of Scotland issued a research note in December 2010 which identified China CDS as one of the bank's top trade recommendations for 2011.[259]

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[258] Source: *"Guide to China CDS,"* by Lisa Pollack, Financial Times (September 30, 2011). The articles is accessible at: http://ftalphaville.ft.com/blog/2011/09/30/690041/a-guide-to-china-cds/

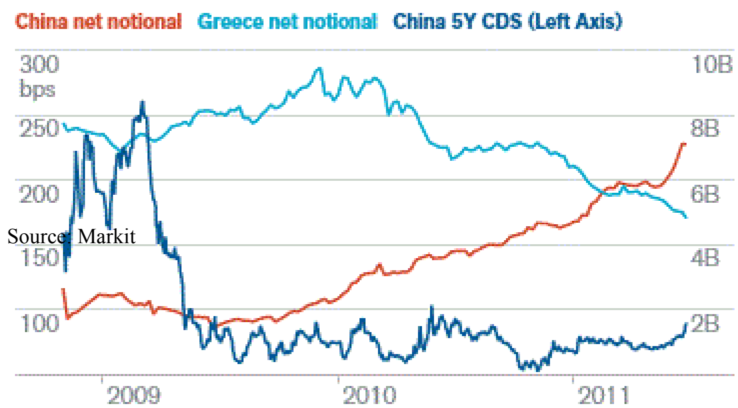
[259] "China's Credit Bubble on Borrowed Time as Inflation Bites," by Ambrose Evans-Pritchard, The Telegraph (December 05, 2010). The article is accessible at: http://www.telegraph.co.uk/finance/comment/ambroseevans_pritchard/8182605/Chinas-credit-bubble-on-borrowed-time-as-inflation-bites.html

Societe Generale's Patrick Legland also issued a research note identifying China CDS as a trade recommendation.

The entities with net notional outstanding in CDS markets which are at or near their largest in history include China and Chinese Banks.[260] Parties with trading relationships involving China are increasingly active buyers of CDS protection as they seek to create a hedge against China's dismal economic prospects, as attested by the Markit iTraxx Australia index.

In mid-2011, Corriente Advisors was ranked as the best hedge fund in the United States based on performance.[261]

CDS Exposure to China Began Rising in Q3 2009



CDS spreads for China widened by 25% over the second quarter of 2011 as it moved in rank from the 227th position of net notional outstanding into the top 10 ranked sovereigns. Exposure to the sovereign quadrupled between mid-2009 and 2011 and continues to increase. Markit's metrics show that bid/ask spread for China CDS has been tightening steadily, an indicator of rising liquidity.

China's Sovereign Credit Deterioration Continues through Q2 2012 [262]

Sovereign Credit Deterioration

Ticker	Name	5Y Today	Daily Chg (%)	Daily Chg (bps)	Weekly Chg (bps)	Monthly Chg (bps)
EGYPT	Arab Rep Egypt	612	0.9%	5	-2	43
SWED	Kdom Sweden	58	0.6%	0	0	16
CHINA	Peoples Rep China	113	0.2%	0	0	7
JAPAN	Japan	95	0.1%	0	-2	-3
AUSTLA	Comwlth Aust	77	0.1%	0	-3	5

Source: Markit / URL: http://www.markit.com/assets/en/docs/commentary/markit-movers/2011/BigMovers010512.pdf

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[260] http://www.zerohedge.com/sites/default/files/images/user3303/imageroot/2012/01/20120124_CDS.png
[261] *"Editor's Eye on Dallas: Mark Hart's Corriente Advisors is Best Hedge Fund,"* by Julie Armstrong, Citybizlist.com (July 08, 2011). The article states: "Fort Worth-based Corriente Advisors ran the best hedge fund in the United States in the second quarter, according to Insider Monkey, a website that tracks more than 300 hedge funds and several other prominent investors." The article is accessible at:
http://dallas.citybizlist.com/16/2011/7/8/Editor%E2%80%99s-Eye-on-Dallas-Mark-Hart%E2%80%99s-Corriente-Advisors-is-Best-Hedge-Fund.aspx
Corriente Advisors' Q4 2011 SEC Form 13F-HR filing is accessible at:
http://www.sec.gov/Archives/edgar/data/1406718/000090514812000421/0000905148-12-000421.txt
[262] CDS data including pricing (five year tenor): http://www.markit.com/cds/most_liquid/markit_liquid.shtml
Comprehensive CDS tracking data is available from the Depository Trust and Clearing Corporation:
http://www.dtcc.com/products/derivserv/data_table_i.php?tbid=5
Recommended article regarding CDS and sovereign risk dislocation is accessible at:
http://www.zerohedge.com/news/sovereign-risk-dislocation-trade-means-black-clouds-coming-risk-free

ECLECTICA ASSET MANAGEMENT

ECLECTICA ASSET MANAGEMENT

Eclectica Asset Management was founded in 2005 by former partners of Odey Asset Management, including Hugh Hendry. The fund's mission is performance-driven absolute return investing and with current assets under management of approximately $600 million, Eclectica manages European and Global mandates.

Biography

Hugh Hendry serves as managing partner, chief investment officer and principal portfolio manager at Eclectica Asset Management, a firm which he co-founded along with other partners of Odey Asset Management. Mr. Hendry leads both the investment strategy and research teams. A graduate of Strathclyde University in Glasgow, Scotland, Mr. Hendry has 18 years of investment industry experience with Baillie Gifford, Credit Suisse Asset Management and Odey Asset Management. At Odey, Mr. Hendry managed a range of funds including a $1 billion long-only European mandate; the award winning Odey Continental European Fund; and the Odey Eclectica Fund.[263] He was named Fund Manager of the Year in 2003 by a hedge fund industry publication. In 2008, Mr. Hendry's fund achieved a 31.2% return. The Eclectica Fund's performance ranked it 8th among 235 global macro hedge funds in 2010, when the prescient Mr. Hendry outperformed over 80% of rival hedge fund managers, partly as a function of his foresight in anticipating the Eurozone sovereign debt crisis and taking successful positions in interest-rate options. The substantial investment returns generated by Mr. Hendry's positions subsequently drew the ire of European parliament member and former Danish prime minister Paol Nyrup Rasmussen.

Perspective on China

Mr. Hendry identifies parallels between the present situation in China and that of Japan in the 1920s when economic imbalances ultimately caused the entire system to collapse and foresees 'a dramatic collapse' of the Chinese economy as the inevitable result of the inherent instability resulting from massive debt growth to fund infrastructure projects which is 'unprecedented in 400 years of economic history' in conjunction with a structurally flawed political economy in which gross domestic product growth is not matched by domestic wealth creation. China's creation of $2 trillion in new loans between January 2010 and April of 2011 represents an amount larger than the economies of South Korea, Taiwan and Hong Kong combined, resulting in industrial capacity expansion in a manner similar to how Japanese credit built capacity during and after the First World War, after which the Japanese economy collapsed as a result of excess global industrial capacity and a contraction in exports. China's dependence on exports to the U.S. mirrors the Japanese experience, creating exposure to potential contraction or stagflation of the U.S. economy.

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[263] Sources: Eclectica Asset Management website (last visited August 22, 2011):
http://www.eclectica-am.com/template.aspx?target=people
Morningstar website (last visited August 22, 2011):
http://www.morningstar.co.uk/uk/snapshot/snapshot.aspx?tab=4&id=f000000gri

Exacerbating the economic imbalance is the likelihood of a protracted softening of demand for Chinese exports as economic growth stagnates globally. Mr. Hendry also cites China's commercial property development binge as a contributing factor to an economic collapse.

> *"Remember all economic policies in China are predicated on maintaining the Communist Party's hold on power The true nightmare for the Chinese has to be a prolonged Japanese style recovery in the west where U.S. nominal GDP fails to grow beyond its debt fuelled peak of 2007/8."* [264]
>
> \- Hugh Hendry

The Care City Shopping Mall in southwest Beijing, constructed during a national building binge, has few shoppers. (Photo by David Pierson, Los Angeles Times / August 17, 2011)

During a recent tour of the Central Business District of Beijing, Mr. Hendry observed relatively little private sector economic activity other than state-sponsored construction of large vacant office towers, some of which have remained unoccupied for at least three years.

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[264] Source: The Eclectica Fund *Manager Commentary* (December 2010).

Official Flag of the
Chinese Communist Party

The Chinese Communist Party (the "CCP") is the central governing body of the People's Republic of China. The CCP was founded in August 1920 and held its first Party Congress in July 1921. The CCP originated from the May Fourth Movement of 1919, in which political systems such as anarchism and Communism were embraced by Chinese intellectuals. The revolution led by Mao Zedong culminated in the founding of The People's Republic of China on October 1, 1949 and was notionally predicated upon principles of Marxism-Leninism. Beginning in 1978 and continuing throughout the 1980s and 1990s, Deng Xiaoping enacted economic reforms which were formally incorporated into the Party constitution in 1997 as Deng Xiaoping Theory. Ruling power is consolidated within the nine member Politburo Standing Committee.[176] View 50th anniversary celebration of the founding of the PRC

> *"The Chinese are at the same time nursing an unprecedented income gap between the haves and the have-nots. QE2 undoubtedly exacerbates these social disparities even further."* [266]
>
> \- Hugh Hendry

Mr. Hendry also foresees continued domestic inflation in China, including food price inflation threatening social cohesion, and observes that the government's failure to transform export earnings into revenue generating projects within China's domestic economy (in conjunction with the economic burden of immense maintenance expenses inherent to both industrial and real property overcapacity) as further destabilizing influences.

> *"China's at the mercy of a credit bubble. Once you've unleashed the genie it's out there. They are ultimately unstable and it's that instability that creates their demise."* [267]
>
> \- Hugh Hendry

Mr. Hendry speculates that western credit leverage may have stimulated an over-investment cycle in China, and notes the prospect of a sudden and sharp reversal in asset prices occurring when a credit bubble economy experiences a reduction in marginal credit. He suggests that the prevailing situation represents an environment that is "rich in policy error contingencies" and therefore offers opportunistic prospects.

Mr. Hendry likens the absence of vibrant internal private sector economic activity in China to that of the former Soviet Union which was also characterized by government-funded employment programs, noting that China is set to set to follow the same path as "investors who

[265] Persons interested in learning more about the contemporary Chinese Communist Party are encouraged to peruse the following authorities: *"Nine Commentaries on the Communist Party,"* by The Epoch Group Editorial Board (Broad Press Inc., February 15, 2005); The Party: The Secret World of China's Communist Rulers," by Richard McGregor (HarperCollins Publishers, 2010); "Bloody Harvest," by David Matas and David Kilgour (Seraphim Editions, October 01, 2009); and "Deng Xiaoping and the Transformation of China," by Ezra F. Vogel (Belknap Press of Harvard University Press, September 26, 2011).

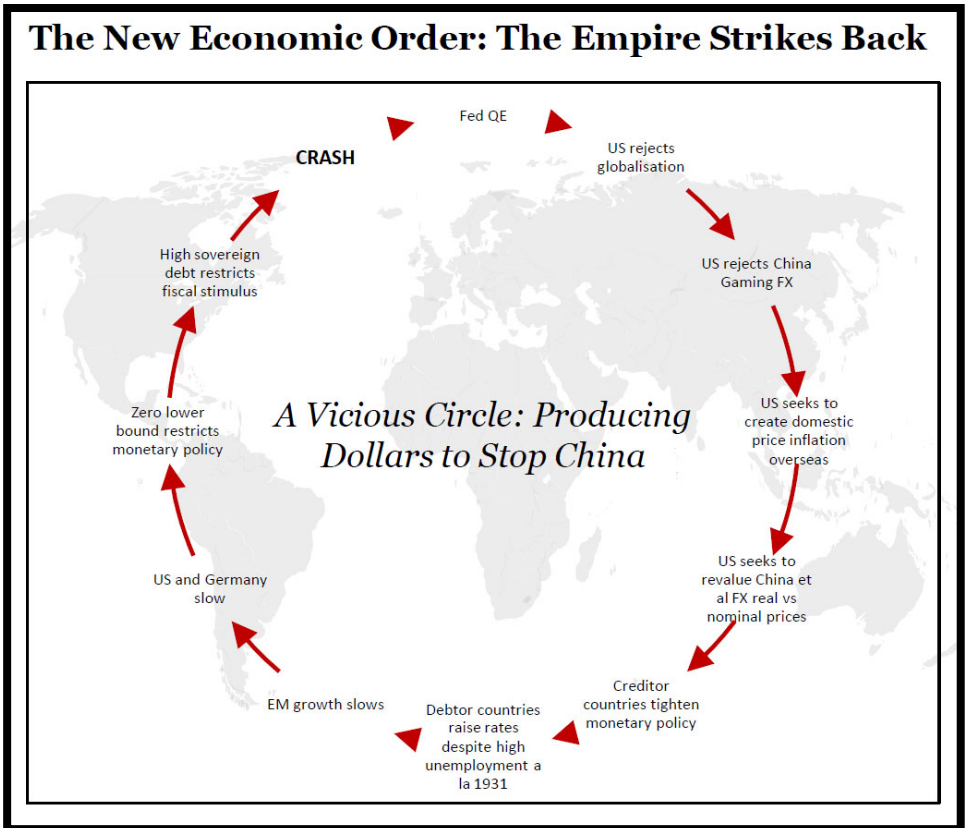
[266] Source: The Eclectica Fund *Performance Attribution Report* (February 28, 2011).

[267] Source: Interview with Bloomberg News Service (May 17, 2011). Mr. Hendry's comments echo similar statements by Harvard University professor Kenneth Rogoff and Citigroup Inc. economists Willem Buiter and Shen Minggao.

have been dazzled by China's economic growth ignore the country's problems in creating individual wealth." [268]

Positions

Mr. Hendry has stated that he avoids taking direct positions in Chinese banks because of the potential for unlimited losses and has instead identified Japanese industrial companies which he anticipates will experience a decline in earnings resulting from a slowdown in China's construction activity. Mr. Hendry believes that Japanese banks have mispriced the risk of default and is therefore acquiring credit default swaps which he considers to be undervalued. He prefers to construct positions utilizing credit market options so that risk exposure is constrained by the premium paid for specific options. Mr. Hendry is quoted as stating, "[B]ecause the euro problem is known, the cost of insuring against it is very high. If I defray into Asia, I think I'm buying something very similar but at 80 to 90 percent less".[269] He stated that any losses on his positions referencing China will not exceed 15% for the fund.



Mr. Hendry has constructed a portfolio that targets Japanese corporate credits as some of the instruments likely to be worst affected. The fund has taken short positions through credit default swaps, whose prices reflect the solvency position of issuers, against 20-30 single-name corporate bonds, the majority of which are Japanese.

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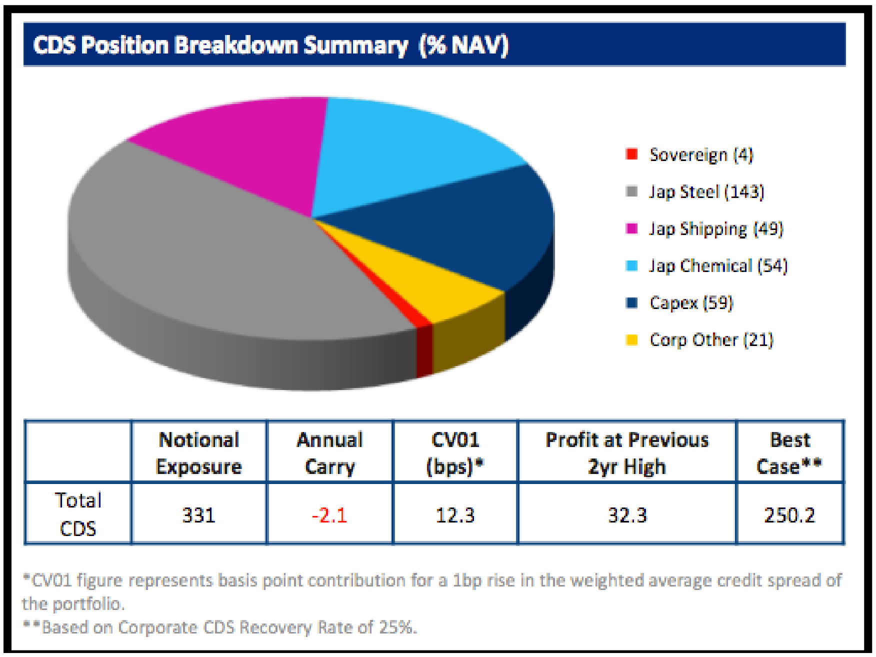
[268] Source: Article entitled, "Eclectica's Hendry Turns Greece Profit into China Failure Wager" Bloomberg News Service (January 09, 2011.)
[269] Id.

Mr. Hendry explains his rationale thus:

> *"Being short China is difficult. I could go to China and short equities, but that's too volatile and I have unlimited loss. I could short commodities like copper, but that would be unlimited loss too, so I don't like it. I could look for ways to be short Australia or Brazil, but there's not enough optionality there. Japan is the most exposed economy industrially."*
>
> \- Hugh Hendry

Mr. Hendry's strategy for shorting the Chinese economy:

- Purchase of credit default swaps referencing debt issued by Japanese industrial companies with significant exposure to a collapse of the Chinese economy from a reliance on exports to China (e.g., JFE Holdings Inc. and Nippon Steel Corp.);



	Notional Exposure	Annual Carry	CV01 (bps)*	Profit at Previous 2yr High	Best Case**
Total CDS	331	-2.1	12.3	32.3	250.2

*CV01 figure represents basis point contribution for a 1bp rise in the weighted average credit spread of the portfolio.
**Based on Corporate CDS Recovery Rate of 25%.

Source: The Electica Fund Performance Attribution Report (February 28, 2011)

Mr. Hendry has stated that maintaining the option positions entails an annual expense equal to approximately 1.5% of net asset value.

> *"There is a near consensus that China will supplant America this decade. We do not believe this. We are also more pessimistic on Chinese growth than ever."*[270]
>
> \- Hugh Hendry

[270] *"Manager Commentary,"* The Eclectica Fund (April 2012). Mr. Hendry's letter to investors is accessible at: http://www.scribd.com/doc/91764042/April-2012-TEF-Commentary

Recent Performance of Positions Held by Eclectica

In contrast to John Paulson's Advantage Plus Fund's half-billion dollar loss on its Sino-Forest position, Mr. Hendry's CDS positions provided his 'China short' fund with an increase in value of over 52% during 2011.[271] The gains compare to a loss for the average hedge fund of 4.37% over the same period (January through November of 2011) according to data released by Hedge Fund Research.[272]

> *"The most dangerous people to your wealth are establishment figures who wear suits and pontificate and sound conventional. Conventional minds are a disaster at profound turning points in economic history."* [273]
>
> \- Hugh Hendry

Investment Strategy Presentation and Videos of Recent Interviews

Central Business District Walking Tour (Vacant Glass Towers):
http://www.creditwritedowns.com/2009/07/hugh-hendry-china-the-emperor-has-no-clothes.html

Slide Presentation (2011):
http://www.businessinsider.com/hugh-hendry-short-china-japan-cds-presentation-2011-2#hendry-is-shorting-china-via-japanese-cds-so-he-doesnt-think-japans-credits-are-investment-grade-at-all-1

Interview (2002): http://www.youtube.com/watch?v=ektMQGbW3wk

Interview (2009): http://www.youtube.com/watch?v=ektMQGbW3wk

Interview with King World News (September 28, 2010):
http://kingworldnews.com/kingworldnews/Broadcast/Entries/2010/9/28_Hugh_Hendry.html

Interview at GAIM International Conference (June 28, 2011):
http://www.youtube.com/watch?v=PR9d6LRIbuI

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271 "Hendry's 'China Short' Fund Makes Big Returns," by Sam Jones, Hedge Fund Correspondent, Financial Times (December 12, 2011). The article is accessible at:
http://www.ft.com/intl/cms/s/0/dc342280-24cc-11e1-ac4b-00144feabdc0.html
Related article: "Hugh Hendry Makes Big via His 'China Short' Fund," by Bob Luochang Yu, Insider Monkey (December 13, 2011). The article is accessible at:
http://www.insidermonkey.com/blog/hugh-hendry-makes-big-via-his-china-short-fund-9214/
Related article: "Huge Year for Hugh Hendry's Anti-China Fund," Zero Hedge (December 12, 2011). The article is accessible at: http://www.zerohedge.com/news/huge-year-hugh-hendrys-anti-china-fund

272 Id.

273 "Eclectic View of a Hedge Heretic," by Stephen Wilmot, Financial Times (January 07, 2009). The article is accessible at: http://www.ft.com/intl/cms/s/2/dde497ca-dc5b-11dd-b07e-000077b07658.html

2010 ▲ Investment Managers: Perspectives on China's Economic Outlook

VITALIY KATSENELSON / CONTRARIANEDGE

Vitaliy Katsenelson is Chief Investment Officer at Investment Management Associates, Inc. In this presentation, Mr. Katsenelson identifies and examines the three stages of China's massive state-funded investment in infrastructure projects and concludes that China is in the final stage of an over-investment bubble, and that "this time will be no different" as to the inevitable outcome.

Mr. Katsenelson has compiled his research into a slide presentation entitled "China: the Mother of All Black Swans".[274] As used by Mr. Katsenelson, the term 'Black Swan' is defined as possessing the following three attributes:

1. It is an outlier, as it lies beyond the realm of normal expectations;

2. It causes an extreme impact; and

3. Despite its outlier status, human observers attempt explanations for its occurrence after the fact, making it appear explainable and predictable.[275]

In the instance of China, the term 'Black Swan' applies since the popular perception of the Chinese economy does not truly comprehend the magnitude of structural imbalances and the potential impact resulting from the government's past and prevailing policies. Mr. Katsenelson demonstrates that adhering to the belief in the perpetual growth of the Chinese economy (i.e., that past growth will continue in perpetuity) is both unrealistic and delusional, and he identifies the following as the principal causative factors of an economic reversal of the Chinese economy:

- Industrial and commercial property overcapacity.

- Export manufacturing supported by western credit-based consumer demand, which was largely the product of credit excess.

- Deleveraging in the U.S. and Europe leading to reduced consumer demand.

- Unemployment resulting from an economic reversal.

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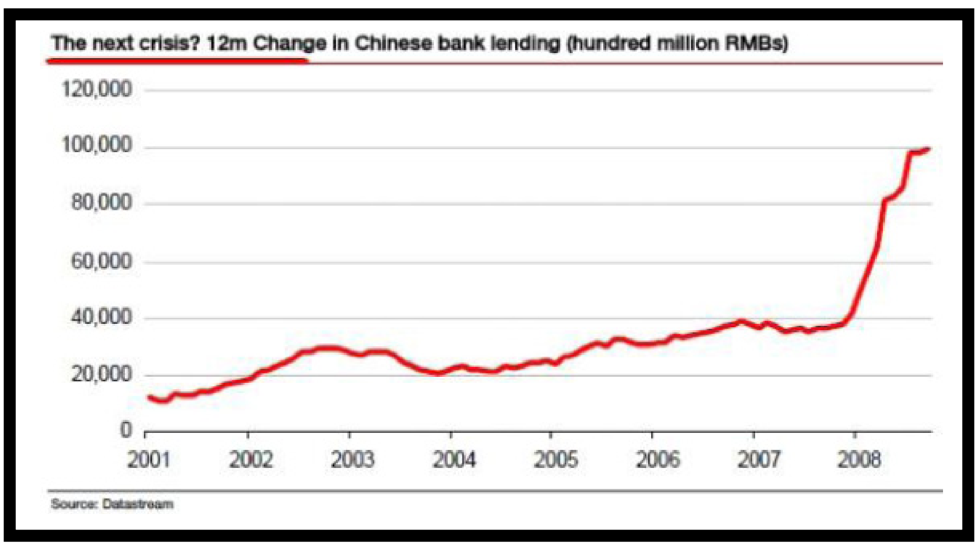
[274] The slide presentation may be viewed on the world wide web at:
http://contrarianedge.com/2010/02/12/china-the-mother-of-all-black-swans/
An updated version (October 03, 2011) of the presentation is available at:
http://www.scribd.com/doc/39288120/China-the-Mother-of-All-Grey-Swans-Japan-Past-the-Point-of-No-Return-October-2010-By-Vitaliy-Katsenelson

[275] The use of the term 'Black Swan' in the context as described herein references the book entitled, "The Black Swan: The Impact of the Highly Improbable", authored by Nassim Nicholas Taleb and published by the Random House Publishing Group, a division of Random House, Inc. (2007).

Mr. Katsenelson states that compulsory lending mandated by the central government was at the core of China's economic growth, and points out that loans grew over 30% per year over the past few years, leading to escalating inflation. For a developing country, inflation can be catastrophic as household discretionary income is insufficient to accommodate food price inflation. The result is hunger which leads to social unrest and political instability. In the event that the government is able to constrain rising inflation, the result will lead to an economic slowdown and high unemployment, producing social unrest and political instability.

> *"Party rulers in China are trapped in a position that chess players deeply fear — zugzwang — where any move made puts you at disadvantage. In China, the potential cost of both action and inaction is economic collapse."* [276]
>
> - Vitaliy Katsenelson

Mandatory loan origination and property development produced the vast majority of the growth in GDP over the past few years, resulting in the creation of massive amounts of debt. International accounting firm Ernst & Young estimates that approximately one-third of the $700 billion in loans to local governments may face repayment problems.[277]



The People's Bank of China estimates that Chinese banks' exposure to local government loans is $2.2 trillion. Mr. Katsenelson states that when mandatory lending is terminated, property prices will no longer appreciate and likely collapse. The overcapacity in the industrial sector and commercial and residential real estate will also become apparent.[278]

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[276] Source: *"The Chinese Black Swan"* (Business Insider, July 05, 2011). The original article is accessible on the world wide web at: http://www.businessinsider.com/the-chinese-black-swan-2011-7

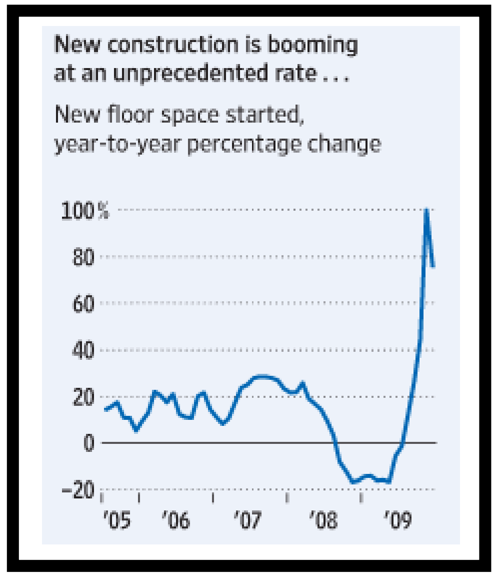
[277] Source: *"State Units May Default on Loans of 4.7 Tr. Yuan"*. South China Morning Post (June 16, 2011). The article is accessible on the world wide web at: http://www.onenewspage.com/n/Business/74moxuph0/State-units-may-default-on-loans-of.htm

[278] Due to inflation and low domestic interest rates, The Chinese consumer has experienced a 4% annual loss of purchasing power on savings held as bank deposits. In order to compensate, a large segment of the Chinese population purchased real estate as an expected store of value. At the point when real estate values decline, the people who purchased overpriced homes, and the relatives who lent them the money to do so, will lose their savings.

In his presentation, Mr. Katsenelson reveals that in contravention to expectations consistent with a contracting global economy; Chinese exports down over 25%; tonnage shipped by rail in China down by double digits; and declining electrical power consumption (which is at the lowest since 1987), the Chinese government instead fabricates economic statistics including reported GDP numbers. The Chinese economic model favors growth at any cost, even when it is profitless and comprised of bad loans and uneconomical projects. Mr. Katsenelson points out that the previous 30+ years of China's growth does not equal future growth, and that China is operating at high operational leverage; high financial leverage; and thus high total leverage, all in the face of significant overhang from overcapacity; future bad debt; and lower demand from the U.S. and Europe.[279]

"estimates from electricity meter readings that there are about 64.5 million empty apartments and houses in urban areas of the country, many of them bought up by people wagering on a constantly rising property market."

- Yi Xianrong, an economist at the Chinese Academy of Social Sciences, a government think tank in Beijing



Actual debt is not so low:

- **$1. 5 Trillion debt of local governments**
- **$1 Trillion debt of "policy" banks guarantee**

- Source: Victor Shih, Northwestern University

"Despite the rest of the world still battling recession and its exports declining, China started to grow, but this growth is completely stimulus-driven." [280]

- Vitaliy Katsenelson

Mr. Katsenelson states his belief that when the wealth produced by the labor of more than one generation is lost, that is the kind of pain that leads to political unrest. Mr. Katsenelson's presentation also specifically references the South China Mall, the world's second largest mall which was built in 2005, and which with 7.1 million square feet remains 99% empty. He provides another example of overcapacity in the form of Ordos, China's empty ghost city located in Inner Mongolia, which was built "on spec" for 1 million residents and which remains devoid of persons.

[279] Mr. Katsenelson foresees the global consequences of China's economic collapse to include a substantial decline in global commodity prices and a concurrent decline in the demand for industrial goods.

[280] Id. at 274.

GMO

GMO is a global institutional asset management company with $106 billion under management, founded by Jeremy Grantham and located in Boston, MA. Edward Chancellor is a member of GMO's asset allocation team and has authored a white paper entitled, "China's Red Flags" (March 2010). Mr. Chancellor's research reveals that China presently exhibits many characteristics of great speculative manias. He identifies 10 red flags with respect to the Chinese economy, which have historically and without fail coincided with economic collapse.

> *"Classic manias have often been accompanied by a compelling growth story and an uncritical faith in the competence of the authorities. They are exacerbated by moral hazard and accompanied by rampant corruption."* [281]
>
> - Edward Chancellor

Mr. Chancellor divides his research into two sections. **Section One** is devoted to an analysis of the characteristics of great bubbles occurring over the past 300 years, and identifies leading indicators which signal speculative manias and impending financial crises.

Key Findings:

● Great investment debacles generally start out with a compelling growth story, e.g., railways in the 19th century, radio in the 1920s, and the recent internet/dot.com experience. Mr. Chancellor notes that early growth spurts are often exaggerated and then extrapolated into the distant future.[282] He also describes how a country's economy may become the subject of investment mania, particularly the theme of potential ascendancy to economic dominance, and references past instances involving France in 1719 and Japan in the late 1980s (which was predicted to displace the United States as the world's leading economic superpower).[283]

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[281] *"China's Red Flags,"* by Edward Chancellor, GMO (March 2010). The report is accessible on the world wide web at: http://www.scribd.com/doc/28824145/GMO-White-Paper-China

[282] Mr. Chancellor adds emphasis to this point by citing reference to the common belief and oft-repeated statement during the dot.com bubble that internet traffic was doubling every three months. This erroneous belief, which had become entrenched in popular media, had its origin from a rather brief period of traffic growth from 1995-1996. Mr. Chancellor states that believing popular fables of astronomical growth rates can be dangerously misleading and extremely costly to investors.

[283] The Japanese economy of the 1980s and the subsequent decades provides an interesting analog to today's commonly held perception of China. It was argued that Japan's policies were superior to those of the U.S. and Europe, and several best-selling books touting the theme of Japan's economic supremacy appeared, including *"Japan as Number One,"* authored by Ezra F. Vogel and published by Harvard University Press (1980). At the time, the Economist magazine commented, "Nothing could illustrate this better than the contrast between the scramble by western businessmen to trade with China, and the lack of interest still shown by many towards the far more powerful and lucrative economy of Japan." In an article published on the 30th anniversary of Mr. Vogel's book, the Economist reviewed the outcome and asked rhetorically what went wrong. The article commented, in regard to Japan, **"But growth was driven by financial leverage and overinvestment. Property and share prices bubbled, rising as much as six-fold. The bubble's collapse, beginning 20 years ago this December, led to almost two decades of economic doldrums."** See article entitled, *"Land of the Setting Sun"* at: http://www.economist.com/node/14861545

● Another common characteristic is blind faith in the competence of the authorities. As examples, Mr. Chancellor cites reference to the 1920s when investors believed that the recently established Federal Reserve had brought an end to "boom and bust" cycles. Thus, stocks were considered to have become less risky and valuations increased exponentially. A repeat occurred during the mid-1990s when the Greenspan-led Federal Reserve was widely believed to have tamed the business cycle. Mr. Chancellor states that the typical rationalization (i.e., delusion) subscribed by investors who wish to believe in the prevailing deception is that "this time is different."

● A general increase in investment typically precedes financial distress. Capital is generally misallocated during episodes of euphoria. Mr. Chancellor notes that "only during the bust does the extent of the misallocation become clear." He cites reference to the words of famed nineteenth century economist John Mills, who observed, "Panics do not destroy capital; they merely reveal the extent to which it has been previously destroyed by its betrayal in hopelessly unproductive works." [284]

● Great economic booms are invariably accompanied by a surge in corruption.

● Strong growth in the money supply is another robust leading indicator of financial fragility. Low rates encourage investors to follow higher yielding and riskier investments.

● Fixed currency regimes often generate artificially low interest rates, which are then likely to produce economic booms which subsequently end in busts. Mr. Chancellor notes that this fact was ignored by the creators of the European Monetary Union, which brought low rates and real estate booms to its smaller members, e.g., Spain and Ireland. He further notes that a fixed exchange rate regime also contributed to Asian crisis of 1997, and observes that large capital inflows constitute another leading indicator of financial instability.

● Crises generally follow a period of rampant credit growth. During phases of economic expansion, liabilities are contracted which cannot subsequently be repaid. Economists at the Bank for International Settlements have determined that sharp deviations of credit growth from past trends have predicted financial crises with an 80% success rate.

● Moral hazard is another common feature of great speculative manias. Credit booms are often taken to extremes due to a prevailing belief that the authorities won't let bad things happen to the financial system.

● Rising levels of debt are not the only cause for alarm; during periods of prosperity, financial structures become precarious. Investments financed with borrowed moneys do not generate enough income to either service or repay the debt ("Ponzi finance"). As a result,

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Similarly, the rise of the Chinese economy has spawned a wave of books touting the superiority of Beijing's policies and predicting that China will attain economic primacy over the west. See, e.g., *"When China Rules the World,"* authored by Martin Jaques and published by Penguin Press (2009).

[284] Mr. Chancellor also notes that the October 2009 IMF World Economic Outlook observes that countries with a high investment share of GDP tend to suffer the steepest and most prolonged economic downturns.

the financial system becomes increasingly vulnerable to what would otherwise be insignificant events, such as a small rise in interest rates or a decline in asset prices. The recent proliferation of subprime CDOs is a classic example of Ponzi finance.

- Loans of questionable quality are typically secured against collateral, most commonly real estate. **Thus, unrestrained credit growth in conjunction with rapidly rising property prices constitute a reliable leading indicator of dramatic financial busts**.[285] Real estate collapses are intensified in circumstances in which a large amount of new building construction has occurred.

Mr. Chancellor concludes Section One by noting that researchers find that rapid credit growth is the most important leading indicator of financial instability, and the presence of an asset price bubble is second most reliable crisis indicator. **Section Two** is devoted to a comparative analysis of the above leading indicators to the developing situation in China.

<u>*Key Findings*</u>:

- **Compelling Growth Story:** Mr. Chancellor describes the allure of the "China Dream" to potential investors and notes the popular perception the China will continue to experience 8% annual growth in perpetuity. This suggests an uncritical attitude by analysts as regards China's growth forecasts. Mr. Chancellor cites the fact that China's current urbanization rate is distorted because many designated rural areas in China already have a high density of population by Western standards.[286] Local and regional government officials are rewarded on the basis of GDP growth per capita in their districts, so they are effectively incentivized to distort residency statistics. Mr. Chancellor cites studies which show that although migrant workers have provided China with cheap labor to sustain its export growth and build its infrastructure, "equating the expansion of the urban population with the growth of the middle class is simplistic." [287] China's population is set to decline beginning in 2015, and the labor force participation peaked in 2010. It is this segment of the population that tends to move to the cities and which has provided China with relatively cheap labor. China's international competitiveness will start to erode as a consequence of wage inflation.

- **Faith in the Competence of the Authorities:** China's centrally planned export-oriented economic policies have resulted in an imbalanced economy which is dependent upon growing its trade surplus with the west, and which is therefore vulnerable to trade protectionism. This is a particularly acute risk given the prevailing state of the global economy. Another example is Beijing's imposition of GDP growth targets on local governments, resulting in localized initiatives designed to produce artificial "growth". This is especially pronounced since in China, unlike the west, GDP growth is not the outcome of economic processes but is rather the

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[285] *"Asset Price Booms and Monetary Policy,"* Carsten Deks and Frank Smets, ECB Working Paper, May 2004.
[286] The author cites reference to a Morgan Stanley Research note entitled, *"One Country, Three Economies: Urbanization as a Primary Driver of Growth,"* authored by Qing Wang and Steven Zhang (March 03, 2010). Excerpt: "One of the criteria that China uses to define an urban centre is population density of above 1,500 people per square kilometer, but this is too high a threshold and leads to the urbanization rate in China being understated, because based on this criterion, many metropolitan areas in western countries would be technically classified as rural areas."
[287] Kam Wing Chan, *"Measuring the Urban Millions," Chinese Economic Quarterly*, pp 21-26, March 2009.

objective.[288] It is observable that numerous local infrastructure and real estate development projects are undertaken for the express purpose of enabling local officials to meet the growth targets mandated by Beijing (i.e., allocation of resources based on "making the numbers"). Mr. Chancellor cites evidence that Beijing's policies are stifling private, non-governmental enterprises in China, which are only able to access credit outside of the formal banking system and at higher costs, unlike the state-owned enterprises which have access to favorable rates at China's state-owned banks. A recent study by the Hong Kong Monetary Authority found that more than half of all private businesses had no access to bank credit.[289] Since the 1980s, China has shifted from entrepreneurial capitalism to state-directed capitalism with a focus on domestic fixed-asset investment and reliance on foreign direct investment and exports.[290] As a result of such policies, economic development has produced rising income inequality, a decline in the consumption share of GDP, and decreasing innovation (as measured by patent issuance in Shanghai). Although the state can marshal resources quickly (relative to the private sector), the quality of investment is lower and thus China's rapid growth is deceptive.

- **Investment Boom:** Mr. Chancellor notes that in market economy, investment would be expected to decline during periods of economic uncertainty. In China, fixed-asset investment increased by 30% during 2009 and contributed 90% of total economic growth for the year.[291] Investment rose to a record 58% of GDP.[292] Many industries continued investing despite low levels of capacity utilization, e.g., cement industry capital spending which increased by two-thirds despite capacity utilization of 78%. A government agency report identified overcapacity in shipbuilding, flat glass, iron, steel, cement, poly-crystalline silicon, and wind power.[293] The National Development and Reform Commission warned that construction of the proposed high-speed railroads would face problems in recouping costs and "might not be able to achieve its minimum passenger loads to break even".[294] China's dependency on ever-increasing investment inputs to generate economic growth is subject to diminishing returns, as evidenced by the efficiency of investment (as measured by incremental GDP growth per unit of investment) being on a downward trend.[295]

- **Corruption:** In China, land used for real estate development is frequently seized illegally and without compensation to former occupants.[296] The banking sector is plagued by kickbacks.[297] Local officials condone the use of substandard building materials and grant exemptions

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[288] Mr. Chancellor cites reference to Goodhart's Law which states that whenever an economic indicator becomes a target for conducting policy, then it loses the information content which otherwise qualifies it as an indicator. See Goodhart, Charles (1975), *"Monetary Relationships: A View from Threadneedle Street."* Papers in Monetary Economics (Reserve Bank of Australia).

[289] See *"Honor Thy Creditors Before Thy Shareholders: Are the Profits of Chinese State-Owned Enterprises Real?"* Giovanni Ferri and Li-Gang Liu, Hong Kong Monetary Authority (April 2009).

[290] See *"Capitalism with Chinese Characteristic,"* Yasheng Huang, Cambridge University Press (2008).

[291] CLSA (February 03, 2010).

[292] National Bureau of Statistics of China: http://www.stats.gov.cn/english/statisticaldata/monthlydata/t20100301_402623481.htm and http://www.stats.gov.cn/english/statistical data/Quarterlydata/t20100301_402623502.htm

[293] *"Overcapacity in China: Causes, Impacts and Recommendations."* European Chamber (November 2009).

[294] South China Morning Post (March 03, 2010).

[295] For example, every RMB 5 of investment generated less than RMB 1 of growth during 2009. Twenty years previously, the incremental capital-output ratio was double (2x) the input.

[296] The Ministry of Land Resources determined in 2005 that half of the land used for development had been acquired illegally.

[297] See *"China's Trapped Transition: The Limits of Developmental Autocracy," by* Minxin Pei, Harvard University Press (2006).

to regulatory enforcement in exchange for bribes.[298] While China is the fastest growing market for luxury goods, an estimated 50% of such sales are used for bribes.[299] Harvard University professor and China scholar Minxin Pei cites China as an example of "decentralized Predation" and notes that "endemic corruption steadily increases a country's systemic risks. As a result, its financial system is fragile, its environment degraded and vulnerable, its law enforcement establishment tainted and ineffective, its infrastructure insecure, its public health service unresponsive, and its regulatory system creaky."[300]

- **Easy Money:** Mr. Chancellor notes that Nobel Laureate Friedrich Hayek stated that asset price inflation was the result of excessively low interest rates, which leads to monetary and credit expansion and causes inflation, ultimately resulting in misallocation of resources ("mal-investment").[301] Generally in western economies, interest rates coincide at or slightly above the level of medium term economic growth.[302] In contrast, since 1990, the Chinese prime rate has averaged around 9% *less* than GDP. Beijing maintains low interest rates and loose monetary policies in order to provide a subsidy to state-owned enterprises (many of which would show no profit if bank loans were excluded), and also to encourage Chinese households into speculating in stocks and real estate as fear of inflation and a desire for higher returns acts to foment bubbles in China's asset markets.[303]

- **The Fixed Exchange Rate and Capital Inflows:** Mr. Chancellor observes that the Chinese renminbi currency (which is artificially pegged to the U.S. dollar) has provided China with an undervalued exchange rate and thereby increasing exports, maintaining low interest rates and encouraging massive capital inflows in the form of foreign direct investment. He also notes that China's immense foreign exchange reserves are useful, e.g., for defending a currency under attack, such reserves cannot cure the type of problems which normally follow the collapse of an asset price bubble such as a broken banking system or extensive mal-investment. Interestingly, the only two countries which have previously accumulated such large foreign exchange reserves relative to Global GDP were the United States in 1929 and Japan in 1989.[304]

- **The Credit Boom:** As a response to collapsing export demand resulting from the global financial crisis, Beijing ordered China's state-owned banks to increase lending activity. In 2009 alone, bank lending increased by the equivalent of almost 30% of GDP.[305] The loans were used mostly to fund infrastructure projects, property development and state-owned enterprises. It is doubtful that commercial lending could have expanded so rapidly and on such a scale without a decline in underwriting standards, resulting in a massive amount of non-performing loans. This scenario will be especially pronounced in the event that China's economy begins to collapse as a result of other fundamentals.

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[298] The People's Republic recently slipped to 79th ranking in Transparency International's 2009 Corruption Perceptions Index, just below Burkina Faso: http://www.transparency.org/policy_research/surveys_indices/cpi/2009
[299] New York Times (March 13, 2009).
[300] Id. at 297.
[301] In this statement, Mr. Hayek differed from rival economist J.M. Keynes, who argued that bubbles were the result of turbulent "animal spirits."
[302] In the U.S., for example, the prime rate has averaged 1% greater than the rate of nominal growth over the past forty years.
[303] The Chinese government increased the money supply by nearly 30% in 2009 alone.
[304] *"The Myth of China's Blithe Consensus,"* Michael Pettis, http://mpettis.com (January 26, 2010).
[305] National Bureau of Statistics.

● **Moral Hazard:** The major Chinese banks are owned by the government, and their primary purpose remains "policy lending," i.e., to fund implementation of the central government's socioeconomic policies versus risk-based profit-oriented loan generation. Investors appear to believe that the central government will bail out the state banks whenever the need arises.[306] The present situation is comparable to that of the major Japanese banks during the 1980s, which acted as policy instruments of the Ministry of Finance and which enjoyed the largest market capitalizations in the world. Such faith turned out to be misplaced. During the subsequent decade, Japan's banks generated losses equivalent to twice their initial capital. Moral hazard and state influence over financial systems are also blamed for poor lending decisions by several other Asian countries immediately prior to the 1997 crisis.[307]

● **Risky Lending Practices:** The recent global financial crisis (2007 – 2008) exposed the poor lending practices of U.S. and European banks, which had reduced their underwriting standards in the expectation of continued asset price appreciation. When the asset bubbles burst, these ponzi finance structures blew up. Recent lending in China appears to fit this category. It is estimated that half of bank loans during 2009 were contracted by local government funding vehicles, and were used to finance infrastructure projects which enabled local officials to meet Beijing's GDP mandate, but have little or no cash flows.[308] Off-balance sheet lending, wherein bank loans are resold to retail investors, understates the true level of banks' credit exposure and provides banking institutions with the appearance of remaining within official limits.[309] Chinese banks appear particularly reluctant to report problem loans. Ernst & Young published a 2006 report that estimated non-performing loans at $900 billion.[310] This report was subsequently withdrawn. Interestingly, the reported level of non-performing loans declined in 2008 as the stock market imploded and exports collapsed. Fitch has suggested Chinese banks have been rolling over, or "ever-greening," problematic loans.[311] A loan officer who reports problem debts is liable to have his salary reduced to below that of a migrant worker.[312]

● **The Bubble:** Mr. Chancellor identifies three trends in China which are consistent with classic speculative manias: equities (stocks); residential real estate; and commercial real estate. He notes the following:

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[306] A decade ago, non-performing loans at China's state banks were estimated at 50% of total outstanding loans. The bad loans were transferred to newly-created "asset management companies" which acquired the bad loans via issuance of government-backed notes to the transferring bank. As the 10-year notes matured, the banks holding the notes have quietly rolled them over.

[307] An interesting contrast is found between the behavior of China's state-controlled banks and that of Hong Kong banks operating on the mainland. While the state banks increased lending at Beijing's request during the first half of 2009, five leading Hong Kong banks reduced new lending on the mainland by 13.2% (date from Citigroup).

[308] Bank of America Merrill Lynch, David Cui, January 28, 2010. Another report from Goldman Sachs entitled, *"China Banks"* authored by Ning Ma and Richard Xu (October 2009) states that cash flows from infrastructure projects may not cover interest payments on the debt incurred to finance such projects, and mentions that subsidies from local governments are usually a substantial source of project revenues. The report cites the example of Hefei City Construction Investment Corporation, whose revenue is comprised entirely of a local government subsidy. Land sales currently account for half of local government revenues; if the property development market weakens, local governments will have difficulty providing subsidies sufficient to repay infrastructure loans.

[309] *"Chinese Banks – Annual Review and Outlook,"* Charlene Chu, Fitch Ratings (December 2009).

[310] *"Global Non-Performing Loan Report,"* Ernst & Young (2006).

[311] *"Asset Quality Under Pressure as Credit Cycle Turns,"* Charlene Chu, Fitch Ratings (January 9, 2009).

[312] Bank of America Merrill Lynch, David Cui (January 21, 2010).

> Equities Speculation: The surge in credit provided by the government's stimulus program has reinvigorated the prices of shares traded on the Shanghai Composite Stock Exchange, which experienced one day in July of last year in which trading volume exceeded the combined trading of the New York, London and Tokyo stock exchanges. Chinese companies accounted for seven of the ten largest recent IPOs in the world and accounted for nearly two-thirds of global issuance by market value in the third quarter of last year.[313] New issues were frequently oversubscribed. In October of last year, an exchange modeled on the Nasdaq opened in Shenzhen. On the first day of trading, shares increased between 76% and 210%, attaining price-earnings ratios averaging 150. High stock turnover, an increasing number of new share issue, strong early trading gains, and the establishment of new stock exchanges typify instances of speculative euphoria.[314]

> Residential Real Estate Speculation: Mr. Chancellor explains that in comparison to the volatility associated with speculation in equities, real estate is the preferred asset class for Chinese savers. The national rise in home prices over the past decade, averaging 8& annually, has fostered the perception on the part of the populace that "property prices can only go up." Beijing's recent stimulus program targeted housing as a key element. Interest rates were reduced; loan origination was ramped up; the maximum "loan to value" ratio for mortgages was increased; second home buyers were granted discounted mortgage rates; and additional tax benefits were extended to home purchasers. State-owned enterprises and local governments entered the residential property market, offering free housing vouchers and residency permits to homebuyers, and contributing nearly one-half of the funding for new developments.[315] The stimulus measures proved effective, increasing residential property sales by 87% over the previous year.[316] Some local markets experienced housing price gains in excess of 20%.[317] Construction of new residential properties is estimated to have increased by nearly 40% from 2009 through 2010.[318] Mr. Chancellor sees an oversupply of new residential housing as a likely outcome from the stimulus program, as migrant workers cannot afford the prevailing prices in the large cities where housing ownership is already at 70%.[319] Residential completions in Beijing have grown faster than the city's population, with much of the excess held off the market by investors. A recent survey found that nearly one-fifth of all recently sold properties were vacant.[320] Morgan Stanley estimates that that despite the requirement for large down-payments, servicing a new mortgage consumes approximately 43% of average incomes. Nationally, home prices have increased to 8x income. In Beijing, the home price to income ratio is over 15x. Mr.

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313 *"Global IPO Report,"* Ernst & Young (October 2009).

314 However, Mr. Chancellor believes that stocks are really only a "sideshow" to the frenetic activity occurring in China's property markets, characterized by (1) a compelling growth story based on the expectation of continued urbanization and high rates of future economic growth; (2) the building boom assists the government in achieving its GDP growth target; (3) inexpensive credit flows into the real estate sector; (4) pervasive corruption; and (5) moral hazard is implicit to the widely-held belief that the government will support the property market from a future collapse.

315 The National Bureau of Statistics ranks the sources of property funding by category. The category marked "internal sources," i.e., local governments, contributed 48% of total funding in 2009, an increase from the previous year's 40%.

316 Morgan Stanley, China Property, March 02, 2010.

317 CLSA, China Realty Research, (January 27, 2010).

318 CLSA, Greed and Fear, December 11, 2010.

319 Deutsche Bank, Jun Ma, July 06, 2010.

320 CLSA, China Realty Research, Property Monthly, February 10, 2010.

Chancellor observes that in comparison, Tokyo condominium prices peaked 1990 at 9x average household incomes. He also notes that first-time buyers reportedly borrow from family members to finance down-payments, and that inter-generational mortgage loans were also endemic to Japan's property market in the late 1980s.

> Commercial Real Estate Speculation: The commercial property market in China is in a similar state. Developers have assumed more debt to bolster land purchases as commercial real estate investment grew 21% over the past year. Commercial lease rates in China's principal cities are expensive relative to international standards. Prime space in Shanghai and Beijing is approximately the same as in New York City, despite per capita output of workers in Manhattan being 4x greater than metropolitan Chinese workers. Local governments own title to all land in China and have benefitted greatly from the property bubble. Land sales accounted for approximately half of their revenue in 2009, equivalent to 40% of Beijing's stimulus program and 5% of GDP.[321] Some of these proceeds have been re-lent as loan to developers for the purpose of acquiring additional land.[322] The expansion of commercial high rise construction activity is occurring at a time when vacancy rates are already quite high.[323] In the Pudong District of Shanghai, construction of new commercial space continues to increase despite vacancy rates of 50%. This is possible because pre-leasing is uncommon in China and developers finance new projects with seven-year bullet loans.

Conclusion:

Mr. Chancellor states that China's investment and credit surge has failed to cure the structural imbalances endemic to the Chinese economy and has instead further exacerbated such imbalances. He notes that China's property sector evidences the classic symptoms of an asset bubble, including overvalued real estate; rampant speculation; and frenzied new construction. Mr. Chancellor cites a study which indicates that real estate investment accounts for 12% of China's GDP.[324] He also notes that domestic construction is the main source of demand for many of China's heavy industries, and that the China Securities Regulatory Commission reports that approximately 20% of new bank loans have gone directly to the real estate market.[325] Local governments rely on property sale for a significant portion of their revenues, and in fact Beijing obtained 20% of its 2009 tax revenues from the property sector.[326] The repayment of infrastructure loans appears to be largely dependent upon revenues derived from government land sales. The majority of lending to state-owned enterprises is secured by real property collateral. An unknown degree of additional lending activity exists outside China's formal banking system.

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[321] Merrill Lynch Bank of America, David Cui, February 10, 2010.

[322] In this regard, note the comment by former Morgan Stanley economist Andy Xie: *"When state-owned enterprises borrow from state-owned banks and give the money to local governments at land auction, why should the prices be meaningful?"* Source: *"China Counts Down to the Next Bubble Burst,"* Andy Xie, Caijing, (August 05, 2009).

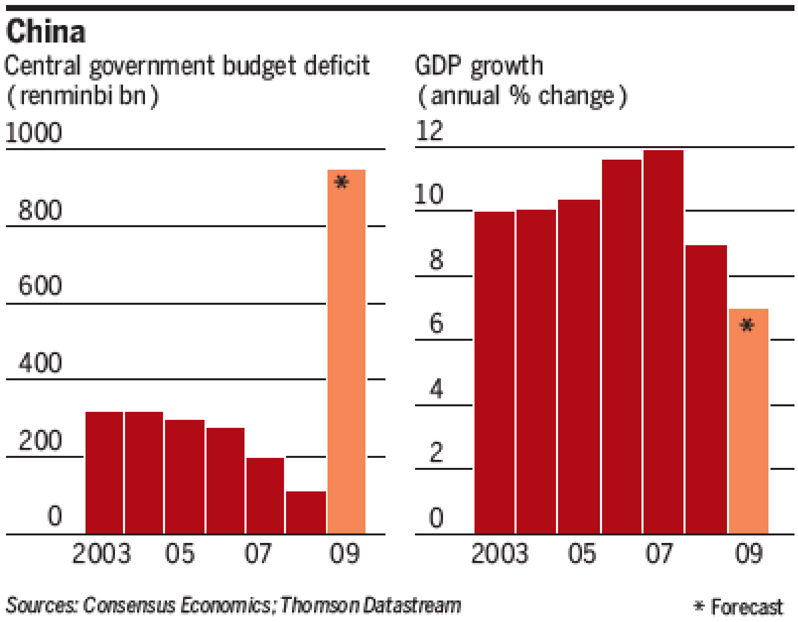
[323] Estimated vacancy rates in the third quarter of 2009 were 15% in Shanghai and 22% in Beijing according to CB Richard Ellis(MarketView, *"People's Republic of China,"* Third Quarter 2009).

[324] Macquarie Equities Research, *"The China Data Diviner"* (March 08, 2010).

[325] Bloomberg, February 05, 2010.

[326] Id. at 324.

Mr. Chancellor observes that China's real estate market, its economy, and its financial system have all been developed upon the belief that past rates of economic growth will continue into the future. He notes that such an assumption justifies more investment, which then spurs the growth, leading to still more investment. Mr. Chancellor compares China's current situation to the late stages of the dotcom bubble, when investors extrapolated past rates of growth into the future and were enthused by the size of the prospective market. As occurred during the internet frenzy, a surge of investment creates a demand that appears to justify the most optimistic predictions. He states that China has become a field of dreams; a build-and-they-will-come economy.



> ***"In the past, whenever an economy has exhibited the 10 red flags listed in this paper there has been an unpleasant outcome."*** [327]
>
> - Edward Chancellor

Mr. Chancellor concludes that China is showing many of the classic symptoms of a great speculative mania in conjunction with several leading indicators of financial fragility.

> *"One commentator compares China to the Hollywood thriller, Speed, in which a bus has been planted with a bomb set to detonate if the vehicle slows to below 50 miles per hour. This seems apt. Were China's economy to slow below Beijing's 8% growth target, bad things are liable to happen. Much of the new infrastructure would turn out to be otiose; excess capacity would linger in many industries; the real estate bubble would burst and the banking system would face a rash of non-performing loans. Investors who are immersed in the China Dream ignore this scenario. When the China juggernaut eventually stalls, they face a rude awakening."* [328]
>
> - Edward Chancellor

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[327] Id. at 281.
[328] Id. at 281.

2011 ▲ Macroeconomic Analysts: Perspectives on China's Economic Outlook

Royal Bank of Scotland identifies China sovereign credit default swaps as a top trade recommendation for 2011: China CDS rise from 227th-ranked sovereign to top ten

"China's investment-to-GDP ratio is off the scale: China is basing a growth model on the most unstable part of GDP" - Albert Edwards

China increased credit by 50% of GDP from 2009 through 2010 - Societe Generale: *The Dragon Which Played with Fire*

Additional Research Reports (2011-2012)

Bank of America Merrill Lynch [329]	China's Systemic Risks
Societie Generale [330]	The Dragon Which Played with Fire
Societe Generale [331]	China Losing its Shine

[329] The two-part report is accessible at:
http://www.zerohedge.com/news/bank-america-charts-four-crash-landing-systemic-endgames-china
And at: http://www.zerohedge.com/news/here-comes-china-hard-landing-full-bank-america-presentation-slides
[330] The report is accessible at:
https://docs.google.com/viewer?a=v&q=cache:ZssansSLilQJ:www.investireoggi.it/forum/attachments/piazza-affari/98740d1295509394-soc-gen-su-cina-inflazione-e-strategie-operative-interessante-7c4bddedafdf0905c125781d00631e1e_en1.pdf+socgen+the+dragon+which+played+with+fire&hl=en&gl=us&pid=bl&srcid=ADGEESg7iK7fL-dPmFtXvdxAYJxBl1X-z5w7_G8EdB0fjqo-aAhc1tBertCJG2OTHgv24YHZRpnAYZakTmwk-S4nE5LVcoSaud_zyBIVL8BC_N2DAT6tFIliKwkCyaNLk71Ye7tKqzvL&sig=AHIEtbRJt_bFM1STRWbBsYzewVVUd0rkvw
See related article: *"SocGen Crafts Strategy for China Hard-Landing,"* authored by Ambrose Evans-Pritchard, The Telegraph (January 20, 2011).
[331] The report is accessible at: http://www.scribd.com/doc/77975203/SocGen-China-Losing-It-Shine
The escalation in the number and scale of incidents of social unrest in China prompted Mr. Edwards, to previously warn in a January 15, 2009 research note that the global economic slowdown may destabilize China's communist government.

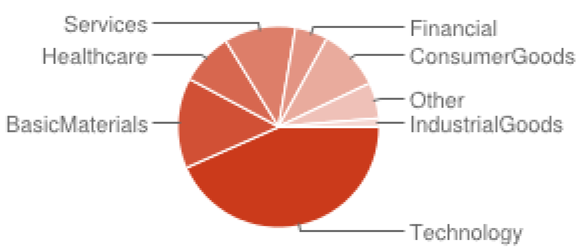
2012 ▲ Leading Hedge Fund Abandons China as an "Investment Opportunity"

GREENLIGHT CAPITAL

Manager: David Einhorn
Fund: Greenlight Capital, L.P.
Funds Under Management: >$5 Billion

David Einhorn

David Einhorn grew up in Milwaukee and graduated from Cornell University. He learned the hedge fund business from Gary Siegler and Peter Collery, who jointly managed the SC Fundamental Value Fund. Mr. Einhorn is one of the most successful long/short equity hedge fund managers of the past decade and foresaw the collapse of Lehman Brothers well in advance. Mr. Einhorn's Greenlight Capital returned 15.9% in 2010, and 21.5% since its inception in 1996. Greenlight Capital's market beta is around 0.5, meaning if they didn't have any stock picking skill, they would have returned about half of the market's return.



Portfolio Allocation (12/31/2011):

"We try to find things that are misunderstood," says Einhorn. "And then if we think something is misunderstood then we figure out if it's misvalued. And if we figure out that it's misunderstood and misvalued, then we tend to invest".

Perspective on China

Speaking at the seventeenth annual Ira Sohn Investment Conference held in New York City on May 16, 2012, Mr. Einhorn presented a markedly negative perspective on China, stating that **China is misunderstood and is not an investment opportunity**.[332] He stated that capital flight has already started and that money is leaving the country, noting the slowdown in export growth and how inflation has tempered the influx of hot money. He stated that Chinese elites are taking money out of the country and that banks are facing liquidity issues.[333]

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[332] *"Listing David Einhorn's Likes and Dislikes,"* Zero Hedge (May 16, 2012). The article is accessible at: http://www.zerohedge.com/news/listing-david-einhorns-likes-and-dislikes

[333] *"At Sohn, Einhorn Picks Include a Spanish Grocer; He Pans Martin Marietta,"* by Polya Lesova, MarketWatch (May 16, 2012). The article is accessible at: http://blogs.marketwatch.com/thetell/2012/05/16/at-sohn-einhorn-picks-include-a-spanish-he-pans-martin-marietta/

Addendum

Is the Chinese Government on the Brink of Bankruptcy?

Larry Lang, chair professor of Finance at the Chinese University of Hong Kong (Wu Lianyou/The Epoch Times)

During a speech before an audience in Shenyang City in northern Liaoning Province on October 22, 2011, the chair of the finance department at the Chinese University of Hong Kong, who is also a popular television host, stated that the Chinese regime was in a serious economic crisis and on the brink of bankruptcy, stating “in China, every province is a Greece.” [334]

Dr. Lang’s assessment is premised upon five primary conclusions:

1. Government debt totals approximately $5.68 trillion, including debt owed by local governments (est. at $3 trillion) and state-owned enterprises (est. at $2.5 trillion). The annual interest on the debt is unsustainable.

2. The government’s official inflation rate is fabricated, and the real inflation rate is 16%.

3. Substantial excess capacity exists within the Chinese economy and private domestic consumption comprises only 30% of economic activity. Based upon China’s Purchasing Managers’ Index (“PMI”), Dr. Lang believes that China’s economy is already in recession.

4. The government’s official GDP statistics are fabricated, and Dr. Lang’s data reveals that China’s GDP has actually decreased 10%. He attributed the government’s figures to infrastructure investment which he stated accounted for up to 70% of GDP in 2010.

5. Taxes are too high: during 2010, direct and indirect taxes on Chinese businesses were equivalent to 70% of earnings, and individuals are taxed at the rate of 51.6%.

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[334] *“Chinese TV Host Says Regime Nearly Bankrupt,”* by Matthew Robertson, The Epoch Times (November 13, 2011). The article is accessible at:
http://www.theepochtimes.com/n2/china-news/chinese-tv-host-says-regime-nearly-bankrupt-141214.html
Although the lecture was a ‘closed door’ event and Dr. Lang specifically requested that the audience not record his speech, an audio recording nevertheless surfaced and is accessible at:
http://www.youtube.com/watch?v=comHcv7qSBg

Dr. Frank Xie, a professor at the University South Carolina, broadly agrees with Dr. Lang's findings, commenting that "in reality, China's economy is in recession." [335]

Notably, during a recent interview with Chris Martenson, Gordon Chang, an international attorney, author and Forbes columnist who has lived in China for nearly twenty years, stated that during 2009 alone, the Chinese leadership injected an additional $1.3 trillion into what was at the time a $4.3 trillion economy in a bid to generate growth.[336] This increase in M2 stimulated asset price bubbles and inflationary pressures, resulting in economic, social and political instabilities.

The following is an excerpt of Mr. Chang's comments from the interview:

> Starting at the end of next year, the Communist party is going to change the officers of their Politburo Standing Committee, the apex of political power in China. We are going to have a new General Party Secretary. And then in the early part of 2013, the government officers change. And sometime after that, the all-important Central Military Commission has a revamp of membership. And so at this time of political transition, the important economic decisions are not being made. But it is even worse than that, because corruption indeed is engulfing the political system. It is causing so much friction in society. The Communist Party is not able to mediate conflict and its only answer is to increase coercion.
>
> And that is why you have survey after survey of the rich and the super-rich, they talk about leaving China. It is not the poor who are going, which we have seen in many waves throughout the last couple hundred years, now the rich are thinking of getting out. They are getting passports, they are putting their families offshore, and this is of concern because **this is a leading indicator**.
>
> If you go about 25 miles south of where I live, and go to Princeton, New Jersey, you will see a lot of beautiful homes. I mean, they are all paid for, they have got a wife there, they have kids, and they have one or two Mercedes in the driveway. It is the perfect American family, except one thing is missing, and that is Dad. Dad is a senior official in Beijing and he is stealing as much money as he can. And at maybe not the first sign of trouble, but perhaps the second sign of trouble, he is on the United flight to New York, because he is not going to stay to defend a regime that is shaking. And that is one of the reasons why I think we have to be concerned about the way the Chinese economy is going, because the Chinese rich are starting to see the signs and are beginning to bail out.
>
> We are talking about the people who have benefited the most from this system. And they can see the problems at the top of society. We have now a weak General Party Secretary, Hu Jintao, and he is going to be followed by probably by someone who is just as weak, especially in his beginning years, Xi Jinping. This is a political system that will not be able to make the decisions and to implement them that everyone knows have to be made. And that is why, for instance, we have not seen much in the way of reform over the last five years. In fact, we have seen a reversal of reform. And most of the conditions that have given rise to China's extraordinary growth either no longer exist or are disappearing fast. And so this is an economy in trouble.

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[335] Id.

[336] Gordon Chang interview (November 18, 2011). A transcript is accessible at:
http://www.chrismartenson.com/page/transcript-gordon-chang
An audio recording is accessible at:
http://www.youtube.com/watch?v=PCi2MN1J3Mo&feature=player_embedded