Myrmikan Performance Update

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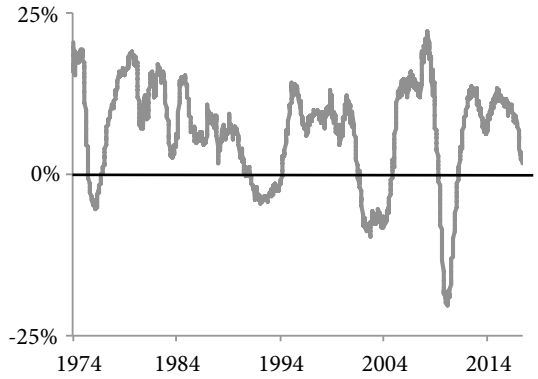
Daniel Oliver
Myrmikan Capital, LLC
doliver@myrmikan.com
(646) 797-3134

A True Hedge

The Bloomberg Investment Summit earlier this month achieved a general consensus among the storied experts that traditional macro indicators are no longer relevant due to the sophistication of the primary market operators. One could summarize: this time it's different. And a lucky thing, too, because a debt-based economy can only grow with the creation of additional debt, and commercial and industrial loan growth is collapsing. The only times that this series has behaved similarly has been at the onset of major recessions, such in 1974, 1992, 2000, and 2008.

Commercial and Industrial Loans, All Commercial Banks
(% increase YoY)



Note, as well, that the troughs on the chart above keep getting deeper. As the overall level of debt grows, debt revulsion becomes more pronounced and requires ever greater efforts from the central bank to resist the natural liquidating tendencies of the market.

Another place macro-indicators no longer matter, apparently, is China. Glenn Youngkin, the President and Chief Operating Officer of The Carlyle Group, forged another consensus that there are two Chinas, one public one private—or, as Deng Xiaoping said about Hong Kong: "One country, two systems." The former, everyone knows, is bloated, debt-laden, inefficient, and unproductive. The latter is dynamic, innovative, and expanding. As long as investors concentrate on the latter, and China lets a billion flowers blossom, then harmonious growth is assured.

This story is doubtless correct in some measure. The existence of a healthy, entrepreneurial class in China should not surprise even China bears. As Adam Smith wrote three centuries ago:

> The uniform, constant, and uninterrupted effort of every man to better his condition, the principle from which public and national, as well as private opulence is originally derived, is frequently powerful enough to maintain the natural progress of things towards improvement, in spite both of the extravagance of government and of the greatest errors of administration. Like the unknown principle of animal life, it frequently restores health and vigour to the constitution, in spite, not only of the disease, but of the absurd prescriptions of the doctor.

Smith's optimism may pervade every time and every place, yet crises do happen, especially when Keynesian doctorates are writing the prescriptions. What causes a credit bubble to collapse is not a malfunctioning entrepreneurial impulse, but an artificial lengthening of production and overcapacity in fixed assets induced by the fractional reserve banking system. Everyone who keeps funds in the market or in a bank is vulnerable, since it is cash deposits that banks use to fund the reckless expansion. When the banking system blows up—as it must—conservative savers lose their savings just as surely as ardent speculators: that is the real horror and also why the existence of a dynamic sector in the economy does not change the credit bubble analysis. Authorities save the system by showering newly printed money on the most visible problems: half-built ship yards and airports and office towers and houses. Printing money cannot create capital or purchasing power—but it can reallocate it . . . from the dynamic and productive parts of the economy, from the private to the "public good." And how many systems are there now in Hong Kong?[1]

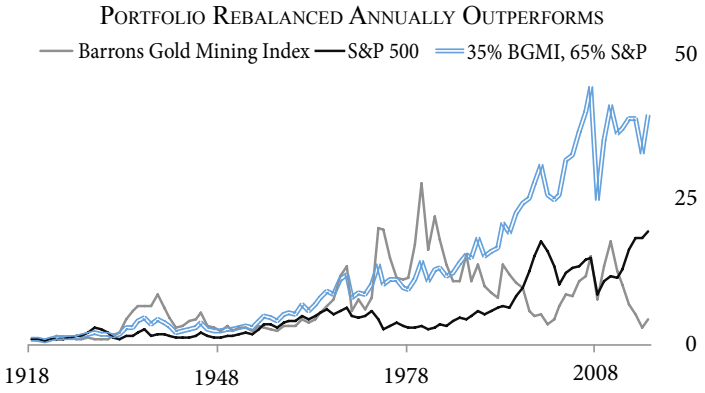
Holding gold is the best way to keep capital out of the "system" in order to preserve purchasing power during credit crises, for there is no means for the authorities to redirect the purchasing power and liquidity of gold, save confiscation—the reason gold has so often been confiscated. We likely remain distant from that outcome. In a more innocent time, such as the 1930s, the general belief that the government was here to help led to a widespread acquiescence of state power. No one believes that anymore. People support the state only in proportion to their share in the spoils, and gold hoarding at present is likely too small a phenomenon to whip the public into enough of a frenzy to jettison the Fifth Amendment (even Roosevelt provided compensation at the then-prevailing price).[2]

Gold mining shares are the other way to protect against a general credit collapse. On the one hand, they are not as safe as bullion—mining operations have great volatility, mines can be seized or easily taxed, and the very market on which the shares trade can become impaired. On the other hand, their enormous leverage to gold enables a much smaller amount of capital to be deployed for the same protection, making

1 Answer from Wang Zhenmin, legal chief of the law department at Beijing's Central Liaison Office in Hong Kong: "The more Hong Kong fails to actively defend the sovereignty, national security and development interests of the country in accordance with law, the more wary the country might be on Hong Kong's high degree of autonomy and the 'two systems'. There would be less room for its autonomy."

2 Theoretically, the state could a) use its authority to "regulate" the value of money under *Perry v. United States* to stipulate that a dollar be equal to an ounce of gold, b) order the surrender of all gold under the Trading with the Enemies Act (that Roosevelt used), c) compensate the holders at that rate, d) return the dollar to the *status quo ante*. Even then, however, the decision in *Perry* relied on the holding that "Plaintiff has not shown, or attempted to show, that, in relation to buying power, he has sustained any loss whatever." No doubt, the Court with its sophisms could formulate an argument, but such a visible overreach is likely only in the most dire of circumstances.

shares an efficient way to gain economic insurance. Nor do gold shares function only during civilizational stress: the annual standard deviation of a portfolio comprised of 87% the S&P 500 and 13% the Barrons Gold Miners Index and rebalanced annually since 1918 is 17.4% versus 18.4% for the S&P 500 alone. This reduction in volatility does not come at a cost—in fact, the return of the rebalanced portfolio is 70% higher than the S&P 500 alone. If we dial up the rebalanced BGMI component to 35%, then the volatility matches the S&P 500, but the excess return increases to 102%.[3]



These outcomes are quite incredible because over time the BGMI has been a very poor performer. From 1918 to 2016, the BGMI had a CPI-adjusted return of just 4.3 times, versus 18.4 times for the S&P 500, and 37.9 times for the 35% rebalanced portfolio. Mark Spitznagel, one of the more sensible voices at Bloomberg's conference, described this as a mathematical puzzle: how adding a vastly underperforming asset can increase the return of a rebalanced portfolio. It works because of the power of compounding. As long as the underperforming component adds value during market weakness, the rebalanced portfolio experiences reduced drawdowns and, therefore, compounds at a higher rate over time. Most investors sensibly look only for opportunities with the highest returns, but Spitznagel's point is that long-term returns greatly depend upon having uncorrelated (or, even better, violently anti-correlated) components, even if those components have a low return (or even no over-all return).

Gold bullion, for example, is much less volatile than the BGMI, but did a much poorer job protecting a market portfolio. The optimal gold portion of an annually rebalanced portfolio since 1918 (ignoring taxes and the fact that Franklin Roosevelt made owning gold a felony for four decades) was 26%, yet boosted returns by only 32%. However, bullion does excel at squelching volatility: a 48% rebalanced portfolio reduced the standard deviation of the S&P 500 from 18.4% to 12.7% and still added 10% to overall returns (assuming no friction costs).

Myrmikan's thesis is that if the miners represents a more efficient means of protecting a portfolio than gold, then the junior miners should represent a more efficient means still. Since there are no long-term junior gold mining indices, and since Myrmikan's inception was a mere seven years ago, and since there has yet to be a credit crash, it is too early to assess the strategic success of Myrmikan's thesis.

3 Note that these numbers are theoretical: the indices compared are not total return, and there are rebalancing costs. Nevertheless, the after-tax difference between reinvested dividends from the S&P 500 and the BGMI is likely to have been small (especially given very high income tax rates during much of the 20th century), and the S&P 500 itself changes, requiring switching costs just to stay in the index, reducing the relative cost of rebalancing between indices. Note further than pre-1938 BGMI data represents Homestake Mines and Dome Mines.

Nevertheless, interim results look good. Unlike gold and the GDXJ, a small, rebalanced allocation to Myrmikan has already boosted overall portfolio returns.

97%/95% S&P 500 Rebalanced Annually (since inception of Myrmikan)	Cumulative Return	Standard Deviation
3% Gold	- 1.7%	- 0.6%
5% Gold	- 2.9%	- 0.9%
3% BGMI	- 3.7%	- 0.3%
5% BGMI	- 6.2%	- 0.5%
3% GDXJ	- 2.9%	- 0.7%
5% GDXJ	- 4.9%	- 1.0%
3% Myrmikan	+ 2.7%	- 0.1%
5% Myrmikan	+ 4.2%	+ 0.3%

These results are notable because the event against which Myrmikan is designed to insure—a global credit collapse—has not yet occurred. Moreover, because Myrmikan is designed to be a far smaller component to a portfolio than the senior shares or bullion, the rebalancing costs are far smaller (i.e., the friction of rebalancing 3% or 5% is much smaller than rebalancing 35% or 48%). In addition, Myrmikan's tax attributes have further enhanced real returns: from inception to April 2017, even though Myrmikan returned 8.26%, the fund realized an estimated 12.7% in tax losses (6.4% in short-term gains and 19.1% in long-term losses) which are passed through to investors annually.

A gold fund manager at a recent Grant's conference likened buying gold shares to buying fire insurance. The analogy is false. The chances that a house burns down in any given year stays the same—most houses never burn down. All credit bubbles, on the other hand, liquidate. Buying gold stocks, then, is more like buying life insurance. Moreover, for reasons explained in these pages previously, gold underperforms during credit bubbles, which means that credit-bubble insurance gets progressively cheaper as the payoff nears. It would be as though MetLife were offering you cheaper terms on your centenarian great-grandfather than on your spouse. And he has kidney failure, which is more or less where stands the current credit bubble, the most virulent the world has even known.

While blind rebalancing into gold stocks improves long-term performance materially, even a rough sense of timing can boost returns vastly more. For example, in 1969, the Federal Reserve's gold backed the monetary base by 10% and M2 by 1.4%, and the ensuing decade was enormous positive for gold and gold equities. In 1980, gold back the monetary base by 92% and M2 by 9.7%—that was a good time to be underexposed to gold. Today gold backs M2 by 2.4% and the monetary base by 7.3%—gold is cheaper on that metric than it was in 1969 at $35 per ounce. The weight of history and theory suggest now is a good time to carry an overweight position.

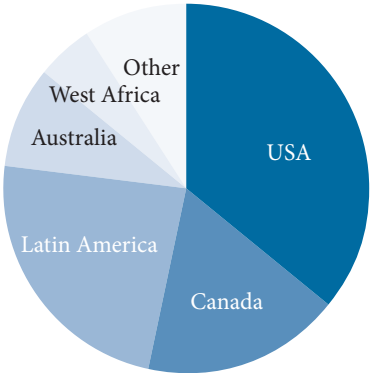
MYRMIKAN CAPITAL LLC

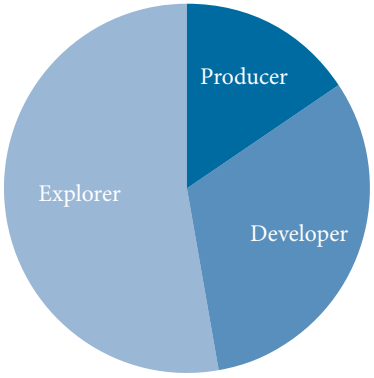
Investment Purpose

Myrmikan Gold Fund is designed to provide insurance against a global credit collapse through speculations in the equity of operationally levered gold mining companies. Any investment should be considered a premium, the value of which decays over time until and unless the insured event occurs. Investors should be prepared to lose substantially all of their investment should the insured event not occur. Please see the Confidential Offering Memorandum for additional details.

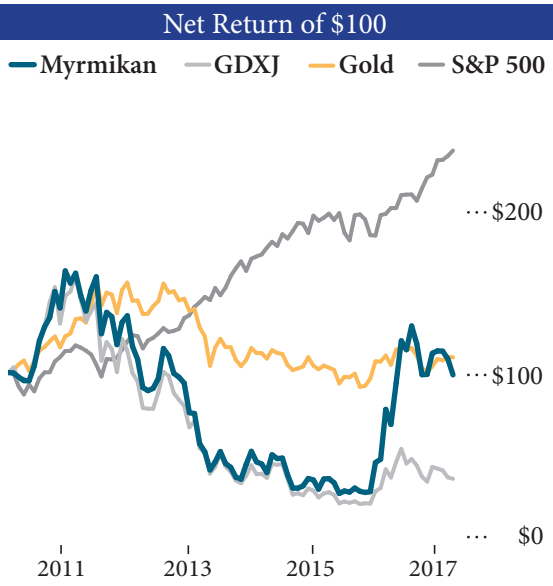
Annualized	3-Year	5-Year	ITD	Alpha	(Annual)	Beta	Sharpe	Positions	(Largest)	(Top 10)
Myrmikan	25.4%	-6.4%	-0.2%	Benchmark:			0.25	30	12.1%	70.3%
GDXJ	-7.4%	-23.1%	-13.5%	1.78	23.5%	1.11		73	4.2%	35.0%
S&P 500	9.4%	15.7%	12.7%	0.55	6.8%	0.51		506	3.6%	19.1%

Portfolio Holdings





Net Return of $100



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	ITD
2010				-0.3%	-2.5%	-2.2%	-0.1%	9.5%	14.7%	7.1%	4.5%	11.8%	**49.3%**	**49.3%**
2011	-6.7%	16.2%	-4.6%	3.9%	-8.5%	-6.4%	9.2%	5.5%	-21.9%	10.5%	-1.9%	-12.7%	**-21.6%**	**17.1%**
2012	11.6%	2.3%	-13.8%	-6.7%	-15.8%	-2.1%	1.5%	6.4%	18.9%	-3.8%	-9.78%	-2.3%	**-16.7%**	**-2.8%**
2013	-3.7%	-19.2%	-0.7%	-24.5%	-8.6%	-21.2%	11.9%	13.8%	-14.1%	-5.1%	-14.1%	-3.42%	**-63.8%**	**-64.8%**
2014	25.6%	17.9%	-12.3%	-2.9%	-11.6%	27.5%	-4.6%	0.6%	-21.3%	-21.2%	6.5%	-2.2%	**-11.6%**	**-68.9%**
2015	14.4%	-2.6%	-15.9%	21.2%	0.5%	-7.2%	-19.6%	5.6%	-2.6%	9.3%	-12.8%	-2.4%	**-18.5%**	**-74.6%**
2016	1.9%	74.8%	9.1%	57.2%	-11.8%	36.6%	27.6%	-4.6%	12.6%	-8.4%	-16.0%	0.2%	**289.4%**	**-1.1%**
2017	13.0%	1.3%	-0.1%	-4.2%	-8.9%								**-0.3%**	**-1.4%**

Performance data presented is as of April 30, 2017, is unaudited, represents past performance, and does not guarantee future performance. The investment return and principal value of an investment will fluctuate and the member's interest, when withdrawn, may be worth more or less than original cost. The current performance may be lower or higher than the performance data quoted. The GDXJ represents the Market Vectors Junior Gold Miners ETF, which is marketed as a low-fee way for investors to gain exposure to junior gold mining equities. The S&P 500 acts as a benchmark for many investors.