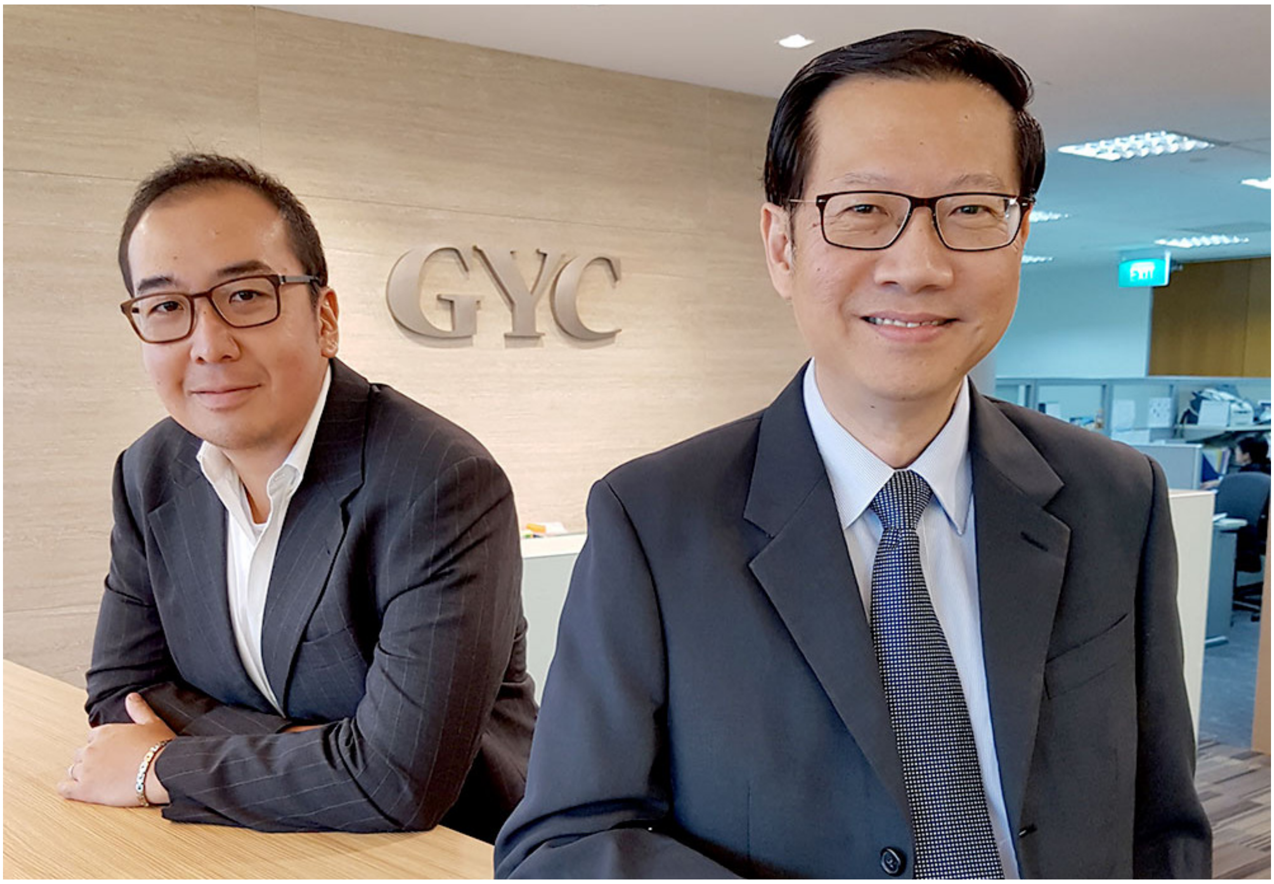
28 July 2016

Beating the markets by systematically avoiding deep losses

by GYC Investment Team



A version of this article was featured in the 25 July 2016 issue of The Edge Singapore.

Most fund managers strive for better returns. GYC focuses instead on averting losses to outperform the market in the long-term.

The Great Financial Crisis of 2008 crippled investors with a fall of more than 50% in the markets. It wiped out savings, derailed many investment plans and resulted in years of financial devastation as people struggled to recuperate their assets. Recovering to normal meant needing a 100% gain to double the monies previously halved. It was eight years before portfolios returned to where they had been in late 2007.

That crisis was the catalyst for us at GYC Financial Advisory to try and find out how to avert such huge losses in future. We knew that trying to forecast market conditions was not the answer. "Sell-side analysts and economists are rarely correct," says Carl Chay, our Investment Specialist. "Economic reports are usually not forward-looking, and everybody also tries to keep their forecasts in line with everyone else's, because if they're too different, it can be a career risk."

© GYC Financial Advisory Pte Ltd - All rights reserved. Not to be distributed, reproduced or copied without permission.

So we looked elsewhere. Chay started by delving into the wealth of academic research on financial stress indicators that signalled market weakness and a potential crash ahead. "Many triggers for these stresses have been identified," he says, "but some of these stresses can exist for many years without anything bad happening, so we had to fine-tune the data for when a downturn could happen."

That data was submitted to rigorous analysis and testing until we finally created a model with four major components, each of which had over 20 inputs:

1) **Financial Conditions and Stress Model**
This model indicates the level of financial stress across all asset classes in global markets.

2) **Market Technical Model 1 & 2**
These models use technical analysis to determine levels of market stress.

3) **Financial Stress and Correlation Model**
This is a risk model that combines financial stress, volatility and asset class correlation. It was developed by our partner, an established fund house in Singapore, and serves as a confirmation signal from an external independent source.

4) **Financial, Monetary, Sentiment and Technical Model**
This is a proprietary composite index created by a well-known and established quantitative research firm. It comprises market momentum indicators, investor and market sentiment data, liquidity and monetary data and various valuation metrics. It produces a bullish or bearish signal to help identify risk on or risk off periods.

For easy readability, we then consolidated the output from these models into a colour-coded 'traffic light' system: green means to stay invested, amber is an intermediate signal, and red tells us to sell all our equities and hold cash until circumstances improve.

We call this system the Risk Matrix.

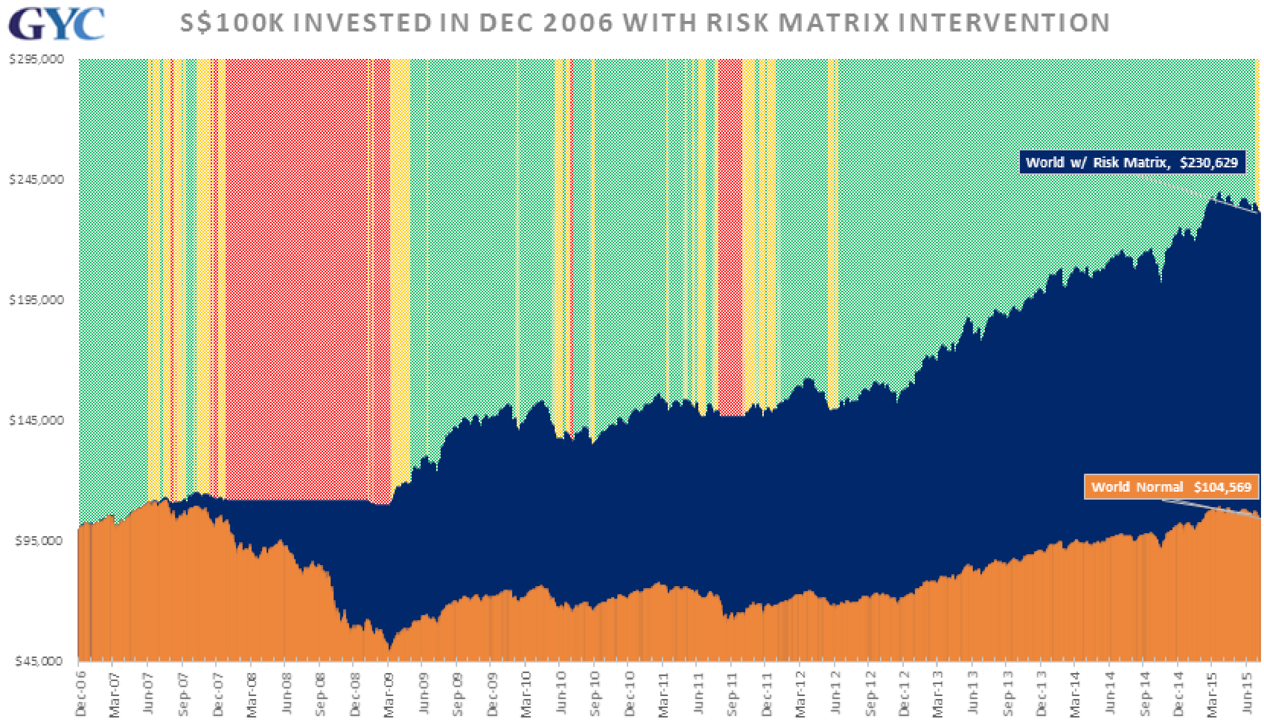
The Risk Matrix's goal is solely to warn us if a crash seems imminent. It does not attempt to time the market. "It doesn't identify the market tops and bottoms," says Chay. "What we wanted to do was ensure that we never have to go through the 40% to 50% loss of another GFC again, or even the 20% losses of a normal bear market. We also did not want our emotions to affect us when we had to make important asset allocation decisions, hence a model with accurate market information works perfectly for us, compared to watching financial news or reading financial analyst reports, which are inherently biased."

But does the Risk Matrix work? The next step was to put it through its paces by back-testing it in historical simulations of past financial events. We tested how well a hypothetical investment of $100k would perform if it adhered to the Risk Matrix signals from 1981 to the present day.

The results exceeded our expectations. Not only did the Risk Matrix accurately inform us of the major financial crises of the past three decades, the resulting portfolio more than quadrupled in value against the MSCI World Index. Protected by our Risk Matrix, that $100k would have been transformed into over $3 million by the end of those 35 years – compared to the mere $675k if it had been invested using the standard buy-and-hold strategy. Volatility would have also fallen to 9.6% from 14.2%, with mean annualised returns at 10.2% instead of 5.5%.

Narrowing the window to just the period of the Great Financial Crisis, the Risk Matrix would

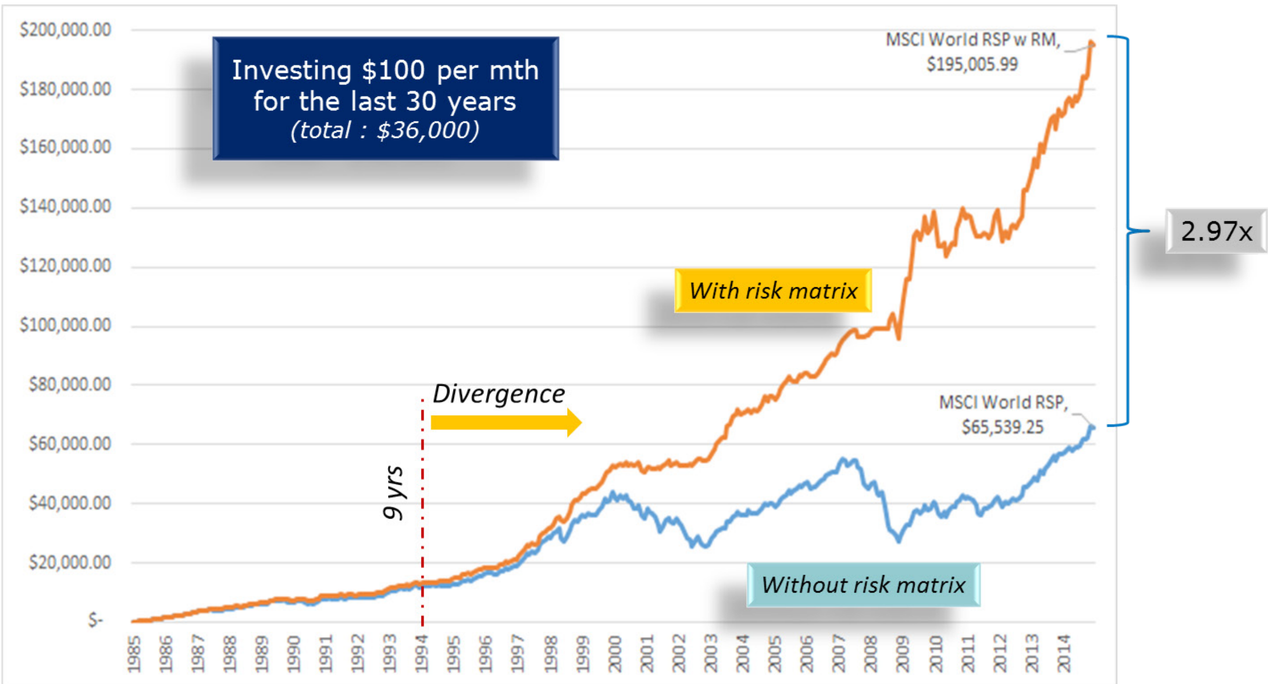
© GYC Financial Advisory Pte Ltd - All rights reserved. Not to be distributed, reproduced or copied without permission.



have let us turn that $100k into $225k from end 2006 to 2015, compared to the $99k that a buy-and-hold investor would have ended up with.

Our back-tested Risk Matrix briefly flashed red in the third quarter of 2011, due to a worsening of the Eurozone debt crisis and the US losing its triple-A rating. However, it remained green for the rest of the time. “Along the way, there was volatility of 5% to 10% and sometimes up to 15%,” says Aw Choon Hui, our Deputy CEO. “The system would still have made us stay invested during those falls, and over the long term, we would have doubled our annualised return.”

The Risk Matrix produced equally exceptional results for a Regular Savings Plan, provided the investment had a time horizon of 10 years or more. Investing $100 a month from 1985 would have seen the portfolio starting to beat the MSCI World Index after 9 years, before eventually



© GYC Financial Advisory Pte Ltd - All rights reserved. Not to be distributed, reproduced or copied without permission.

rising to over $195k by the end of 30 years. That's $159k worth of additional returns – four and a half times the mere $35.5k of additional returns accrued without Risk Matrix intervention.

The Risk Matrix went live in early 2015.

"So far, there has been only one stretch of red signals," says Chay. "That was in August 2015, when the technical components triggered the system to red. The financial stress indicators did creep up, but were not elevated to worrying levels. It was still enough to tell us to move to cash."

Stress indicators eventually recovered after that, and the Risk Matrix continued to fluctuate between amber and green throughout early 2016. "Even during the big selloff in January and February this year, we were confident enough to tell people that things were actually not bad and there was an opportunity to buy into the market," he says. "The models were not warning of a crash like in 2008, and with the benefit of hindsight, they were right."

In the weeks leading up to the 23 June Brexit vote, warning signs – amber signals – cropped up again as early as 14 June. However, the financial stress readings of the market remained steady, and the Risk Matrix was once again green by 30 June.

"With little fundamental risk and an improvement in the technical models, our message to clients throughout the period was that there was really nothing to worry about, and the selloff in fact became an excellent opportunity to add to risky positions," says Chay.

The Risk Matrix functions as a protective overlay for all of GYC's investment portfolios, allowing our clients some peace of mind and buttressing our investment decisions with hard, objective data. It is not a magic bullet that guarantees investment success – that may forever be unattainable – but it does provide a system to significantly reduce the risk of your hard-earned investment monies being badly impaired by a market crash. In the long term, this leads to greater gains.

"The key is to miss the bad days in the market," says Chay. "We may miss some good days by not being fully invested following a bear market market trough, but that is fine as long as losses are capped on the downside. It all comes down to mathematics: if I don't have to suffer a large loss on my investments, my recovery (to break-even) is much faster.

"We are still proponents of buy and hold," he says. "But you have to do it in a smarter way."

www.gyc.com.sg enquiries@gyc.com.sg +65 6430 9595

GYC is a licensed Financial Adviser, Registered Fund Management Company (RFMC) and Exempt Insurance Broker.

GYC Financial Advisory Pte Ltd | Co Reg No: 199806191-K | 1 Raffles Place #15-01 One Raffles Place, Singapore 048616

IMPORTANT NOTES: This document may not be reproduced in any form without the express permission of GYC Financial Advisory Pte Ltd. The above information is strictly for information purposes and should not be construed as an offer or solicitation to deal in any product offered by GYC Financial Advisory. Any such investment products offered by GYC Financial Advisory are not obligations of, deposits in, or guaranteed by GYC Financial Advisory Pte Ltd. Any investment product, including investments in unit trusts, is subject to investment risks, including the possible loss of the principal amount invested. Investors may wish to seek advice from a financial adviser before making a commitment to invest in any investment product. In the event that an investor chooses not to seek advice from a financial adviser, the investor should consider whether the investment product is suitable for him or her.

© GYC Financial Advisory Pte Ltd - All rights reserved. Not to be distributed, reproduced or copied without permission.