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# DESIGNING A FOREX TRADING & EQUITY INVESTMENT STRATEGY FOR THE NEW-STATE CAPITAL HEDGE FUND

# RIZVAN MALIK

2008

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# TABLE OF CONTENTS

OBJECTIVE	
BACKGROUND TO NEW STATE CAPITAL	
STRUCTURE	5
INTRODUCTION	6
The train of thought behind setting up a hedge fund	7
CURRENCY & THE FOREX MARKETS	9
Currency codes & definitions	
How to read quotes	13
Bid & Ask Prices	13
Stop & Limit orders	14
TRADING FOREX	15
FUNDAMENTAL ANALYSIS 'Vs' TECHNICAL ANALYSIS	16
Introduction to Fundamental Analysis	16
Economic Indicators	
Major Indicators	20
New-State Capital - utilising Fundamental Analysis	22
Introduction to Technical Analysis	23
New-State Capital - utilising Technical Analysis	
Trade Set-up	
ADDITIONAL TRADING STRATEGIES	29
Arbitrage	29
Hedging Strategy	
Long Term – Currency investing	31
Correlation Strategy	31
New-State Capital - utilising correlation strategy	32
New-State Capital – Articulating Forex trading strategy	34
New-State Capital – Lessons learned from Forex trading strategy	34
Personal Note – Conclusion	35
BACKGROUND TO EQUITY INVESTING	
Graham's investment principle	
INVESTMENT OR SPECULATION	42
TIME VALUE OF MONEY	44

NEW-STATE CAPITAL – EQUITY INVESTMENT STRATEGY46
New-State Capital – Equity Investment Criteria47
Create Investment Principles48
Analyse the business – Evaluation questions49
Risk & Reward Criteria
Reinvest Dividends
Financial Analysis + Equity Search Results52
BRINGING PART 1 & 2 TOGETHER54
CONCLUSION &THE FUTURE
APPENDIX
BIBLIOGRAPHY60

# OBJECTIVE

- Construct the investment strategy for The New-State Capital Hedge Fund
- Identify profit making opportunities in Foreign Exchange (Forex) & Equities using both conventional and non-conventional indicators
- The author is to articulate and document his current knowledge in the chosen area in order to stimulate ideas in creating potential investment strategies
- Justify knowledge with actual results a genuine live investment.
- Critique & evaluate the effectiveness of the proposed investment strategy
- Conclude with lessons learned and future research

# BACKGROUND TO NEW STATE CAPITAL

New State Capital is a privately owned Hedge Fund in its inception phase and exits as an offshore legal entity with a cash balance of (approx) \$6,000 leveraged to \$2,400,000. It has two investing partners; one of whom is the author, each owning 50% of the equity. The objective of the dissertation is to assist New-State Capital in creating a profitable strategy orientated around the exploration and validation of both conventional and non-conventional indicators used by other Hedge Fund managers. The author and his investment partner have full authority on using this cash as they deem fit. New-State Capital, like any Hedge Fund, has an objective to maximise gains. Generally, Hedge Funds can do this in any way they deem fit and trading antiques, paintings,

musical instruments in a fund consisting of Bonds, Derivatives, Equities and Currency may not necessarily be an uncommon strategy. However, New-State Capital have a simple trading strategy which is to leverage its principal to maximise gains trading foreign exchange and use the profits to reinvest in value equity through the stock markets. Therefore, the \$6,000 will be used as a genuine live example and once a potential strategy is in place, short term testing will be conducted and all positions will be recorded in the course of this research. The capital is therefore acting as margin on the leveraged trade. It is important to note here that we are not professional fund managers and we are therefore testing our egos in documenting losses. However, we are confident that this will be a profitable venture and will attract further investment after a proposal for regulation.

# STRUCTURE

This dissertation is more about testing my own understanding. I have read numerous books and practiced many trading strategies over the last 10 years and therefore using this dissertation as a way of articulating my knowledge in the hope of opening doors to new areas of exploration. Charts and tables have been kept to a minimum because of the fact that in order to prove any strategy it must be applied to a length of time which is outside the scope of this paper. Such a structure creates a pragmatic approach to the paper. Part 1 describes how we understand Forex and how we see can use it to our benefit. The main focus point will be to identify our train of thought in establishing a currency trading portfolio explaining both the fundamentalist and technical school of thought. Part 2 focuses more on how the greatest investors have successfully grown their portfolios weighted towards equities. As a matter of principle, my personal opinion is that in order to be the best at something one has to study and work with the best. In other words you capture the attributes of those individuals you admire the most. I am therefore using this report as an excuse to study the greatest equity investors, both Benjamin Graham & his student Warren Buffet.

The purpose of this report is to act as a research document to assist the investors in New-State Capital in discovering the most profitable trading strategies and investment techniques. It is prepared on the basis that the reader is intelligent yet uninformed. The reader is assumed to understand the concept of foreign exchange although the "Forex product" itself will be discussed. The reader is also expected to understand the basics of accounting principles such as balance sheets, income statements & other basic financials. This report will be written from both the personal perspective of the author (My, me or I) as well as a group perspective (We, our & us.) Also note that currency notations may be inconsistent and in certain examples I may be using \$'s

whereby in other examples I will be using £'s. This should not cause any confusion and the simple reason why this cannot be avoided is due to the deposit & withdrawals currencies and different currency accounts. However, apart from when I am exploring the strategies of Graham & Buffet where their names will be used vigorously, this report is mostly a product of my mind from years of study.....call it a de-cluttering opportunity with the intention of building a multi-billion pound Hedge Fund. Only a few books have been used and they will all be cited. The websites used for live data sourcing are personal to our corporation and cannot be cited for confidentiality purposes. Corporate brokers, Bankers, Solicitors & Accountant details have also been kept anonymous.

It is also important to note that a strategy cannot be proven during the course of a short term research report. So, as much as I will endeavour to prove the strategies can work (through live trading examples) the reader will have to be pragmatic and understand that this is report will be focused on "discussion" aspect of potential strategies; and if the market timing permits, then hopefully there will be a chance to execute live trades. However, what with the sub-prime credit crisis wave coming from the USA; proving a workable strategy within this volatility may be an impossible feat. Having said that; I'm sure we'll find a short period of comfortable volatility where I can execute a series of trades closely matching our developed strategies.

Neither myself, nor the partners currently know what the strategy is likely to be. It may even take years to develop. Therefore, although it'll be unlikely during the course of this dissertation, but hopefully in the course of the next few years; this write up will become the vehicle to illustrate the mistakes and profit strategies that will form the spine to further research, which is likely to be inevitable.

# PART 1 - FOREIGN EXCHANGE

# INTRODUCTION

It can be argued at this point that \$6000 hardly constitutes a Hedge Fund which typically operate in the \$Millions/Billions. However, firstly we have to take in to consideration the opportunity for leverage. Leverage means that our brokers will offer us a credit line as long as we cover the short fall should the position go against our portfolio. Secondly we have to consider how far an

investment of liquidity (cash) can take you. This point requires further elucidation and will also give you an insight into why New-State Capital is trading both Forex & Equity.

Let me use an example of a friend of mine who sells fruit in a market every Saturday and Sunday. Every weekend he'd walk away with around 200% profit! (Without getting into the semantics of gross/net etc) On the face of it this is a healthy return. But, unfortunately, the principle of compounding returns can only go so far, until eventually; his profits are calculated as simple returns. By this I mean that on, for example a £300 principal investment he may see an extra £600 in his pocket after trade (i.e. 200%) If he re-invests this, £900, on the same model his returns will be compounded to £2,700 (including principal.) In other words, 200% the second time round is more in monetary terms compared to the first trade. However, as you've probably guessed; at some point he'll have to pocket (or find another place to put his cash...) the profits because business assets (fruit) have soaked up maximum liquidity and any further injections will result in wasted stock, unless of course demand becomes infinitely increasing, which will never happen. My friend will only ever be able to make a 200% profit on an investment which will result in minimum wastage of stock. He can always buy another market stall to soak up some of his profits, but even this will have its limits dependent on various factors, which is not important for now. On a bigger scale, there'll always be a maximum amount of fruit Tesco can sell. There can always be potential idol stock (perishable or not) which means that maximum profit has been reached.

The reason why New-State Capital has decided to trade predominantly in the currency markets (invest proceeds into equities) instead of selling fruit is due to the requirement to make that "liquidity sponge" ever bigger. The train of thought may sound slightly repetitive in terms of emphasising the hunt for a venture which will soak maximum liquidity, but given the importance of this mind-set iterations as such are important.

## THE TRAIN OF THOUGHT BEHIND SETTING UP A HEDGE FUND

If a fruit stall will only soak up £x liquidity before complex strategies need to be in place for the fruit stall to start soaking up more liquidity; then returns will be limited to the next expansion strategy to sell more fruit to soak up yet more liquidity. The route problem we have is that demand for fruit is marginal as it's consumed. Fruit would never be a viable venture for two business partners who do not see themselves as having the patience to set up complex logistical operations having reinvested the profits made. So, how about we use the \$6,000 to buy some property? Well the problem we have here is that we can only ever leverage this up to say \$90,000 and the

earnings/capital gains will not service a monthly cycle debt, and capital gains will take around 5 years to realise. The challenge here is not "Demand Vs Liquidity Utilisation" as in the fruit example where complex strategic models and costing will have to evolve in order to compound returns. The challenge in a property business would be "Returns Vs Time" where debt servicing becomes a commitment regardless of economic cycle and returns can only be realised after a long period. Although the property market can absorb liquidity the viability and sustenance of such a business requires huge amounts of liquidity to service a debt and to pool-invest whilst the equity value of your first property increases. What business do we decide upon? Our train of thought requires yet more elucidation. We are looking to invest our capital in a venture which maximises returns, the liquidity soaks up demand, returns gains to the investor within a shortest possible period of time and doesn't require the need to service a debt. I guess this is where the entrepreneurial trait has to kick in. Entrepreneurship is about filling the demand gap in the market supply of a particular good/service. However, every good or service requires liquidity which, as we know, may be soaked up within reason and only those who create the greatest economies of scale will survive to expand and compound. Therefore, whilst the entrepreneurs are supplying business/homes with required goods and services in which the rate of injecting liquidity is at the mercy of demand levels. The higher the demand, the more necessary it becomes to achieve economies of scale in order to expand. In such an instance, management will have to juggle the weight of choices in order to determine which decisions will lead to winning a larger share of the market demand, and as if by magic you can become another Tesco – albeit 90 years later. Therefore, to soak liquidity you require demand and to increase demand you need market share, and to increase market share you need exceptionally complex strategic models not to mention the cost of resource. That state of entrepreneurship is not conducive with our train of thought as it still boils down to the necessity to implement models to soak up liquidity. Given the fact that these businesses as big as Tesco's face the same challenges as a market stall; then the management at New-State Capital has no desire to join that dance. Therefore, the strategy needed to get to the core of liquidity itself.

New-State Capital has decided to create initial profits through trading the value of that very liquidity which those entrepreneurs inject into their businesses, that is; currency. Fair enough, the value of that liquidity is determined by how much it is in demand, but in this instance, we will not be at the mercy of demand levels because we will trade the value relative to its era. So this could mean making profits when the GBP buys you 2.05 USDs (i.e. George Bush era) or when the GBP buys you 1.45 USDs, (Bill Clinton era). Within the era, there are monthly, weekly, daily, hourly,

minutely, secondly & fractional-secondly fluctuations of volatility at the mercy of economic & technical indicators which is what New-State Capital wishes to benefit from.

Liquidity is the tool which creates the freedom to choose which material desires one will wish to manifest into his life. Liquidity is therefore still a commodity, the value of which is determined by the goods/services which it can buy; which are in turn determined by how much they are desired. Nevertheless, because human desires are never ending and money is the (almost universally) accepted means to achieve those (material) desires; the demand or the retention for money will only ever increase. After all, who is not going to demand more or retain more money? However, if the supply of money was to always meet its demand, then needless to say infinite money will have to be supplied. This, with all the technology in the world is actually possible to do – i.e. put the printing machine in "24 hour mode." Alas, if money became infinite then its value would be worthless because "I'll not exchange fruit for cash which is infinite in supply because everyone can get it. Therefore, give me something I can't get but do need and then I'll exchange it for these apples in a quantity that we mutually agree. That's the mode of exchange – i.e. Currency.

# **CURRENCY & THE FOREX MARKETS**

New State Capital has weighted its strategy towards the foreign exchange market. This is because it is the most liquid market and thus its volatility allows for returns to be realised quicker than in the other components. The profits obtained from trading currency will subsequently be injected into equities.

Mayer Amschel Rothschild is quoted to have said, "Let me control the issuance of a nation's money and I care not who writes the laws."

The above statement has not been quoted for its admiration. The very fact that the statement has manifested itself into reality throughout the last 250 years is now the underlying cause of poverty, war and covert wealth. When a single institution has the power to define what is and isn't acceptable as monetary value on the land; the political economy is inherently flawed. That debate is a research report within itself. However, the intention of this brief synopsis is to illustrate the colossal underlying power of currency especially when its issuance results in the central institution having society at its mercy. A currency is the unit of exchange which facilitates the transfer of goods and services. It's deemed a standard of value and defines itself as a form of money which is indeed deemed as the medium of exchange. In order to facilitate trade between currency zones, there are

exchange rates. This is the cost at which one currency can be exchanged for another. This can be a complex and confusing topic and readers may better understand how exchange rates work when they need to go on holiday. Given the laws of demand & supply (which even though it forms the basis of global political economic thinking & policy formulation; the author still finds such laws debateable, but for the purposes of this dissertation we'll postulate the laws of demand & supply are correct) currencies fluctuate according to how much they are in demand. This can be tested using the holiday example. The first thought here will be to look up countries which rely on tourism as its income. Almost intuitively we can think Maldives, Mauritius and the Caribbean to name a few. As a very brief informal hypothesis we'll conclude the legitimacy of the quick web search suggesting that "the busiest period in the Maldives is between December & April where hotels are fully booked and prices go up etc..." Now, looking at the 2 year chart below, it can be seen that relative to the British Pound, the Madives Rufiyan (MR) has grown weaker. The underlying trend is that slowly, more MR's can be bought with £1. Without digressing too much, the underlying weakness in the MR is in reference to its accumulating debt so its weakness is likely to continue as long as there's a threat of negative growth. However, notice how holiday season brings strength (albeit marginal) or a period of "relative strength" (i.e. Relative to its yearly escalating weakness.) The reason behind this is that demand for the MR escalates to pay for these domestic services. Subsequently, while holiday season gets relatively weaker, the currency continues its fundamental route to weakness due to "more worrying" reasons.



#### FIGURE 1

The above description is just an improvisation (more thinking out loud) example of how a currency can get stronger or weaker. Another illustration (applying the same simplicity) could be business transactions. As I type, £1 buys me \$1.9528. A random web search reveals that an i-pod in the UK costs £100 but in the USA it costs \$150. This doesn't quite sound right does it? Naturally an i-pod in the USA should cost \$195.28 because of the exchange rate. This allows for a profit making opportunity. Ignoring transaction and logistical costs, I can buy 10 i-pods from the USA at \$1500 and sell them here for £1000. But it would have only cost me £768.12 to buy £1000 worth of stock due to the exchange rate. Now imagine the dollar rate fell to  $\pounds 1 = \$2.0832$ . This will mean that the 10 i-pods which I can sell for £1000 would have cost me £720.05. Therefore the importers profit margins increase by around £48 per 10 i-pods. For the record, such exchange rate volatility is evident to exist in very short spaces of time such as 2-3 months. This means that the UK importer is hoping that the dollar falls in relation to the pound so that their unit cost goes down and gross margins increase. Conversely, the USA may start to buy less UK goods & services as it becomes expensive for them. When trans-national conglomerates are conducting transactions in the \$100s of millions, there is clear evidence why a currency pairs' fluctuation of 1/10000th makes a huge difference to the economy. This exchange is known as the foreign exchange (Forex) market. Forex is an interbank market that was created in 1971 when international trade transitioned from fixed to floating exchange rates. Since then the rates of currencies relative to each other are determined by the most obvious means which is the exchange at a mutually agreed rate.

This market surpasses the others in its volume. For example, the daily turnover of world securities market is estimated at \$300 billion, while Forex approaches \$2 Trillion the same amount of time. However, Forex is not a market in a traditional sense. It doesn't have a fixed location of the trading floor as, for example, futures market does. The trading is done over the telephone and at the computer terminals in hundreds of banks around the world simultaneously. Unlike the Futures & Securities market; Forex is open 24 hours a day and the currency exchange operations are maintained through working days of the week. Almost every time zone (London, New York, Tokyo, Hong Kong, Sydney) has dealers willing to quote currencies.

# CURRENCY CODES & DEFINITIONS

It's now important to narrow down the above introduction and start to get a bit more specific in how New-State Capital will be viewing and trading the currencies. In order to understand the context of Forex and understand the common annotations; here follows an example of the product itself; its label, name etc. Each currency is assigned a three-letter code as follows:

Zone	Currency Code	Currency
USA	USD	Dollar
Great Britain	GBP	Sterling
Japan	JPY	Yen
Switzerland	CHF	Swiss Franc
Euro-Zone	EUR	Euro
Australia	AUR	Australian Dollar
New Zealand	NZD	New Zealand Dollar
Canada	CAD	Canadian Dollar

FIGURE 2: - THE ABOVE CURRENCIES ARE BETTER KNOWN AS "THE MAJORS."

# HOW TO READ QUOTES

The rates are usually expressed as five-digit numbers. For example, USD/JPY = 102.13 means that 1 US dollar is valued at 102.13 Japanese Yen (i.e. they are willing to pay you that many yens for one US dollar while you are buying or selling). At the same time, GBP/USD = 1.9528 means that 1 British pound is valued at 1.9528 US dollars. In other words, if the rate XXX/YYY = Z, it means that one unit of XXX is worth Z units of YYY. If for example the USD/JPY rate changes from 102.13 to USD/JPY = 102.50 this means that the rate has moved 37 points. The Yen in this example has depreciated by 37 points, and the Dollar has appreciated by 37 points. The most recent credit crunch has led to exceptional weakness in the USD/JPY which has recently touched 99.10 Yen to one Dollar. This has led to profit warnings by Japanese companies such as Toyota who fear that their car sales in the USA will decrease (because it's become more expensive for the USA public to buy a Japanese car with Dollars) Notice that the Yen is decimalised at two points (i.e. XXX.00) whereas all other majors, such as USD/GBP are decimalised to four points (i.e. XXX.0000)

## **BID & ASK PRICES**

Quotes are given as a pair, for example 102.13/18 is a BID/ASK price for the USD/JPY. The first number is bid which is the price the investor sells the currency at, then the two last figures is the ask price which is the price the investor has to pay to buy the currency at. Here follows an example of how this works in practice:

## NEW-STATE CAPITAL – EXECUTING A TRADE

- The trader believes that the pound will get stronger against the dollar
- The trader knows that this strength is only in relation to the US market, and realises that it may not necessarily be getting stronger against other currencies.
- The trader wants to benefit from this belief
- The trader decides to contact his broker and get a quote for GBP/USD
- The broker quotes 1.9528/31
- The trader wants to sell dollars and buy pounds in other words, he wants to go long on the GBP/USD

• The trader instructs the broker to sell \$1,000,000 and buy approximately £512,000

Using the above example a trade has been conducted. The trader now holds £512,000 worth of sterling. If the trader wants to instantly sell his position, then he can only sell at the given "Bid" price which is 1.9528, which is -0.0003 from what he paid for it. [ $(\pounds 512,000 / 10000) * (3)$ ] This evidences that in any trade, the broker's commissions are paid first and the trader is in an instant loss of around £153.60. The tighter the spread, the lower the commissions paid to the broker. It turns out, that the pound starts to gain phenomenal strength. Three days later, the GBP/USD quote is 2.0132/35. The trader decides to close out his position by selling the sterling holding. The profit will be [(2.0132-1.9531)\*(10000)] \* [(512,000/10000)] = £30,771 profit. This is the profit that the trader could have made after 3 days or so. Although New State Capital has more than doubled this buying power, our strategy is to only risk approximately 5% of our total leverage at any one point. So, for this reason; the £30,771 type of profits will not be seen for a long while yet. The above calculations also assume that the currency went up (i.e. Dollar weakened) in a straight line. This is never the case. What if the Dollar strengthened to 1.9450 before it went to the 2.0132 mark? That means that sufficient margin would have to be in the account in order for there to be a significant cushion for such eventualities. Statistically, 95% of traders are wiped out of their margin due to such volatility.

#### STOP & LIMIT ORDERS

The trader can use such basic strategies as useful trading tools allowing him to protect the portfolio from unforeseen losses to certain degree and take the expected profits. For a previously opened position an instruction may be entered at any moment (during the working days) to close it, if the rate reaches a preset level. Using the above example, even though the trader expects the exchange rate to move up; there still has to some protection if the rate moves against us. In order to protect the portfolio from significant losses if the rate moves down it'd be a wise strategy for the trader to enter a "Stop Loss". This is where the trader sets a price below its current value at which point the position will be automatically closed with no further instructions. The other strategy is that of entering a "Limit Value." This is used if the trader believes that currency pairs will start rise but he requires confirmation of an uptrend. So for example, if the current GBPUSD rate is 1.9528/31 and the trader believes that the rate will go up (i.e. pound will strengthen or dollar will weaken...) then he may want to see a rise first before actually opening up a position. In such an event, the trader will use a Limit Value order. In this instance the trader will set the Limit order at, say, 1.9613 and if

the currency pair hits that value then the order will be automatically executed. The same strategies for both Stop Loss & Limit Orders can be used

# TRADING FOREX

Given that currencies fluctuations are decimalised to 1000<sup>th</sup> (100<sup>th</sup> for Japanese Yen) it's not a lie to say that you have to be exceptionally rich to make a worthwhile return on the foreign exchange markets, or; like New-State Capital of course, have a huge leverage arrangement. This point begs two questions. Firstly, how can an individual (or institution) make a profit from the exchange rate fluctuation? And secondly, how can exchange rate fluctuations help an individual (or institution) make a profit? These two questions sound exactly the same, but they're not. The first question has been answered in our i-pod example where a conglomerate could increase their profit margins due to the weakness in the exporters' economy. Without exaggeration, this could mean that a company anticipating reporting a loss, may end up reporting a profit due to the exchange rate fluctuations; even though their product may still be a weak seller in their market segment. The second question is where an individual (or institution) speculates over economic imbalances in order to make a profit on the exchange rate volatility. This should help distinguish New-State Capital's ambitions. We do not aim to make money through (un)favourable exchange rates unlike Tesco's may when they buy oranges from Spain hoping for stronger pound.

New-State Capital is watching for minutely/hourly/daily/weekly/monthly movements in the currency rate in order to make a profit. The reason behind the volatility will be explained later as will the infrastructure of executing the trade. The purpose of trading on any market is to buy low and sell high, unless of course there is a shorting strategy involved. In the foreign currency market Forex is no exception. The goods traded on this market are rates of currencies of different countries. As with any other commodity, the currencies have their prices. To settle transactions between businesses located in different countries, governments, speculative transactions such as New-State Capital and banks around the world will execute currency trades on Forex market. Depending on various factors such as international trade, interest rates and government policy to name a few; currency prices stay in motion.

New-State Capital's task as a Hedge Fund is to determine the trend of the rate and buy an appreciating currency or sell a depreciating one, and then take profits through execution of a reverse transaction. Our brokers allow us to obtain real time currency quotations from different

banks and largest world exchanges participating in Forex market. At the same time, the rate charts for every currency are displayed for us, and latest economical news that may affect currency rates now or in the future directly or indirectly are fed to our trading systems. It is important to note that New-State Capital holds a typical sterling bank account and credits its brokers account with dollars and despite having US Dollars in the brokers account, can sell Euros or Japanese Yen not concerning itself with not having bought them in advance. That's the broker's role with the inter-banks.

# FUNDAMENTAL ANALYSIS 'VS' TECHNICAL ANALYSIS

## INTRODUCTION TO FUNDAMENTAL ANALYSIS

Fundamental analysis refers to the study of the core underlying elements that influence the economy of a particular underlying security, be it a currency holding, derivative or stock. It is a method of study which attempts to forecast price behaviour and market trends by analyzing economic indicators, such as interest rates, consumer spending, consumer confidence, transaction costs, inflation, demand of domestic & foreign goods, GDP, Money Supply to name a few. A good analogy for understanding how fundamentals work is to think of the mechanics behind a clock. Anyone can tell the time, but only a few people will understand how all the gears/cogs work behind the clock face. You can't be a watch maker if you don't understand the fundamentals, and likewise you're unlikely to (intentionally) succeed in financial gain without understanding the gears/cogs of the underlying security. Although we have found that there is a tendency to classify trading strategies into two distinct schools of analysis - fundamental and technical; the reality is that it has become increasingly difficult to fully adhere to either school. Fundamentalists need to keep an eye on the various signals derived from the price action on charts, while few technical strategists can afford to completely ignore impending economic data, critical political and issues that influence prices. One of the big challenges that New-State Capital faces is the financial underpinnings of any country takes into account many factors, including social, political and economic influences and staying on top of an extremely volatile and sometimes random fundamental picture can be challenging.

Fundamental analysis is a very effective way to forecast economic conditions, but not necessarily exact market prices. For example, when analyzing economists forecast of the upcoming GDP or employment report, we will begin to get a fairly clear picture of the general health of the economy and the forces at work behind it. However, the challenge for New-State Capital here is that we'll

need to come up with a precise method as to how best to translate this information into entry and exit points for a particular trading strategy.

Our intention over the longer term is to therefore study the markets using fundamental analysis and build a portfolio of models to formulate a trading strategy. These models will typically utilize a vast array of empirical data and attempt to forecast market behaviour and estimate future values or prices by using past values of core economic indicators. This information will then be used to derive specific trades that best exploit this information.

The sticky point within an organisation such as New-State Capital is the number of people interpreting the data. Two people can look at the exact same data and come up with two completely different conclusions about how the market will be influenced by it. Therefore is it important that before casting into a particular model regarding any aspect of market analysis the fundamentals meet the trading style and the partners can unite expectations.

The partners of New-State Capital often talk about getting caught into becoming too entwined in the analysis and never making a trade. This is one of the reasons why many traders turn to technical analysis. To some, technical analysis is seen as a way to transform all of the fundamental factors that influence the markets into one simple tool, prices. However, trading a particular market without knowing a great deal about the exact nature of its underlying elements is like fishing without bait. We might get lucky on a few occasions but it's not the best approach over the long haul. For Forex traders, the fundamentals are everything that makes a country tick. From interest rates and central bank policy to natural disasters, the fundamentals are a dynamic mix of distinct plans, erratic behaviours and unforeseen events. Therefore, it is best to get an understanding on the most influential contributors to this diverse mix as opposed to formulate a comprehensive list of all "The Fundamentals."

## ECONOMIC INDICATORS

Given that the fundamentals of the Forex market are captured in the economic data, we'll now endeavour to understand more about what these economic indicators are. Obviously this will be limited to the major indicators and then we'll conclude with understanding what economic indicators tend to be the major Forex drivers. Gaining an understanding in this area is paramount to the future success of trading in this hedge fund. Economic indicators are snippets of financial and economic data published by various agencies of the government or private sector. These statistics, which are made public on a regularly scheduled basis, help market observers monitor the pulse of the economy. They are religiously followed by almost every bank and hedge fund in the financial markets. With so many people poised to react to the same information, economic indicators in general have tremendous potential to generate volume and to move prices in the markets. A few simple guidelines can be put into place to track, organize and make trading decisions based on the data. So, it is therefore important for New-State Capital to understand the meaning behind the economic data and its affect on the underlying currencies. First and foremost, we must know exactly when each economic indicator is due to be released. There are various economic calendars on the internet and we prefer to use streaming economic data as even a 3 second delay could be costly. Here's a genuine example of how New-State Capital is using the economic calendar. It's Monday morning and the USD has been in falling chaos for the last two-three weeks. As such, it's safe for us to assume that many traders are holding large short USD positions. However, on this coming Friday the employment data for the U.S. is due to be released. It is very likely that with this key piece of economic information soon to be made public, the USD could experience a short-term rally leading up to the data on Friday. The point here is that economic indicators can affect prices directly (following their release to the public) or indirectly (as hedge funds and traders massage their positions in anticipation of the data.) Not only will the likes of New-State Capital be exploiting this data, business transactions may be postponed in order to capitalise on pending data.

From the above frame of thought, it is important to analyse what particular aspect of the economy is being revealed in the data. For example, we must work to gain an understanding the applied functions of which indicators measure the growth of the economy (GDP) or those that measure inflation (PPI, CPI) or employment (non-farm payrolls). The intention is to therefore follow the data for a short period and become very familiar with the different shades of each economic indicator and what part of the economy they are measuring. Not all economic indicators are created equal. Well, they might've been created with equal importance but along the way, some have acquired much greater potential to move the markets than others. Market participants will place higher regard on one statistic versus another depending on the state of the economy. It is therefore important to know which indicators the markets are waiting on. For example, if prices (inflation) are not a crucial issue for a particular country, inflation data will probably not be as keenly anticipated or reacted to by the markets. However, in the current economic slowdown era, inflationary pressures mixed with requirement to reduce interest rates are very harmful for the

well-being of an economy. On the other hand, if economic growth is a growing problem, changes in employment data or GDP will be eagerly anticipated and could precipitate tremendous volatility following their release. Trading this volatility may prove to be very lucrative.

If the data is released and conducive with market expectations, then it may lack importance as the current Forex rate will have already priced this in. Besides knowing when all the data will hit the news-wires, it is vitally important that we are aware of what economists are forecasting for each indicator. For example, knowing the economic consequences of an unexpected monthly rise of 0.3% in the producer price index (PPI) is not nearly as vital to our short-term trading decisions as it is to know that this month the market was looking for PPI to fall by 0.1%. We must therefore be aware that PPI measures prices and that an unexpected rise could be a sign of inflation. Analyzing the longer-term ramifications of an unexpected monthly rise in prices can wait until after we've taken advantage of the instant trading opportunities presented by the data. Once again, market expectations for all economic releases are published on various sources on the web and we have started to post these expectations on our calendar along with the release date of the indicator.

However, through trading, we have also experienced not to get caught up in the all the headline news such as unemployment. As important as it may be it is manipulative through government initiatives and therefore New-State Capital have learned that in the payroll data; non-farm payrolls is probably a more important figure. Other economic indicators are similar in that the headline news figure is not nearly as closely watched as the finer points of the data. PPI for example, measures changes in producer prices. However, the statistic most closely watched by the markets is PPI, ex-food and energy. Having spoken to some city traders, they tell us that the food and energy component of the data is much too volatile and subject to revisions on a month-to-month basis to provide an accurate reading on the changes in producer prices. Volatility as such leads to potential revisions, hence it's important for us not to be too quick in making the trade should a particular economic indicator fall outside of market expectations. Contained in each new economic indicator released to the public are revisions to previously released data. For example, if durable goods should rise by 0.5% in the current month, while the market is anticipating them to fall, the unexpected rise could be the result of a downward revision to the prior month. We should be in the habit of looking at revisions to older data because in this case, the previous month's durable goods figure might've been originally reported as a rise of 0.5% but now, along with the new figures, is being revised lower to say a rise of only 0.1% Therefore, it is possible that the unexpected rise in the current month is likely the result of a downward revision to the previous month's data. On this note, we can't forget that there are two sides to a trade in the foreign exchange market. So, while we may have a great handle on the complete package of economic indicators published in the United States or Europe, most other countries also publish similar economic data. The important thing to remember here is that not all countries are as efficient or stringently regulated as the G7 in releasing this information. So, the important lesson here is that not all of these indicators carry the same weight in the markets and not all of them are as accurate as others.

When focusing exclusively on the impact that economic indicators have on price action in a particular market, the foreign exchange markets are clearly the most challenging, and therefore, have greatest potential for profits of any market, which is why New-State Capital are exploiting potential trades as I type. Obviously, factors other than economic indicators move prices and as such make other markets more or less potentially profitable. But since a currency is a proxy for the country it represents, the economic health of that country is priced into the currency. Economic indicators provide an excellent tool to monitor the heath of a country's economy. The challenge for New-State Capital comes in diligently keeping track of the nuts and bolts of each country's particular economic information package. As mentioned, not all of the economic indicators can be illustrated in great detail, so the author has decided which indicators are most applicable in their frame of trading.

Most economic indicators can be divided into leading and lagging indicators. Leading indicators are economic factors that change before the economy starts to follow a particular pattern or trend. Leading indicators are used to predict changes in the economy. Lagging Indicators are economic factors that change after the economy has already begun to follow a particular pattern or trend.

# MAJOR INDICATORS

THE GROSS DOMESTIC PRODUCT (GDP) - The sum of all goods and services produced either by domestic or foreign companies. GDP indicates the pace at which a country's economy is growing (or shrinking) and is considered the broadest indicator of economic output and growth.

INDUSTRIAL PRODUCTION - It is a chain-weighted measure of the change in the production of the nation's factories, mines and utilities as well as a measure of their industrial capacity and of how many available resources among factories, utilities and mines are being used (commonly known as capacity utilization). The manufacturing sector accounts for one-quarter of the economy. The capacity utilization rate provides an estimate of how much factory capacity is in use.

PURCHASING MANAGERS INDEX (PMI) - The National Association of Purchasing Managers (NAPM), now called the Institute for Supply Management, releases a monthly composite index of national manufacturing conditions, constructed from data on new orders, production, supplier delivery times, backlogs, inventories, prices, employment, export orders, and import orders. It is divided into manufacturing and non-manufacturing sub-indices.

PRODUCER PRICE INDEX (PPI) - The Producer Price Index (PPI) is a measure of price changes in the manufacturing sector. It measures average changes in selling prices received by domestic producers in the manufacturing, mining, agriculture, and electric utility industries for their output. The PPIs most often used for economic analysis are those for finished goods, intermediate goods, and crude goods.

CONSUMER PRICE INDEX (CPI) - The Consumer Price Index (CPI) is a measure of the average price level paid by urban consumers (80% of population) for a fixed basket of goods and services. It reports price changes in over 200 categories. The CPI also includes various user fees and taxes directly associated with the prices of specific goods and services.

DURABLE GOODS - Durable Goods Orders measures new orders placed with domestic manufacturers for immediate and future delivery of factory hard goods. A durable good is defined as a good that lasts an extended period of time (over three years) during which its services are extended.

EMPLOYMENT COST INDEX (ECI) - Payroll employment is a measure of the number of jobs in more than 500 industries in all states and 255 metropolitan areas. The employment estimates are based on a survey of larger businesses and counts the number of paid employees working part-time or full-time in the nation's business and government establishments.

RETAIL SALES - The retail sales report is a measure of the total receipts of retail stores from samples representing all sizes and kinds of business in retail trade throughout the nation. It is the timeliest indicator of broad consumer spending patterns and is adjusted for normal seasonal variation, holidays, and trading-day differences. Retail sales include durable and nondurable merchandise sold, and services and excise taxes incidental to the sale of merchandise. Excluded are sales taxes collected directly from the customer.

HOUSING STARTS - The Housing Starts report measures the number of residential units on which construction is begun each month. A start in construction is defined as the beginning of excavation

of the foundation for the building and is comprised primarily of residential housing. Housing is very interest rate sensitive and is one of the first sectors to react to changes in interest rates. Significant reaction of start/permits to changing interest rates signals interest rates are nearing trough or peak. To analyze, focus on the percentage change in levels from the previous month. Report is released around the middle of the following month.

#### NEW-STATE CAPITAL - UTILISING FUNDAMENTAL ANALYSIS

Although all of the above indicators provide scope for trading we have chosen to show the affects of interest rates, gold & oil separately. This is because interest rates are used to control consumer / commercial spending behaviour whereas gold/oil is almost an alternative to money due to the scarcity of such a commodity – their prices are fundamental in the currency market.

A common way to think about interest rates is how much it's going to cost to borrow money, whether for our mortgages or how much we'll earn on our bond and money market investments. Currency traders obviously think outside this box. Interest rate policy is actually a key driver of currency prices and typically forms part of the basic strategy for smaller traders entering the markets. Fundamentally, if a country raises its interest rates, the currency of that country will strengthen because the higher interest rates attract more foreign investors. When foreign investors invest in (for example) U.S. treasuries, they must sell their own currency and buy U.S. Dollars in order to purchase the bonds. Therefore given the current climate in the U.S, the Fed have continued to reduce interest rates over the last year or so and this has led to a less attractive dollar hence the new record highs in other save haven commodities such as oil and gold. It's not hard to understand why there has been a run-up in gold prices lately. In the U.S. there is a great threat of inflation and political tension around their intentions in Iraq. Historically, gold is a country-neutral alternative to the U.S. dollar. So given the inverse relationship between gold and the U.S. Dollar, New-State Capital can take advantage of volatility in gold prices in innovative ways. For example, if gold breaks an important price level, one would expect gold to move higher in coming periods. With this in mind, we would look to sell dollars and buy Euros, for example, as a proxy for higher gold prices. Moreover, higher gold prices frequently have a positive impact on the currencies of major gold producers. For example, Australia is the world's third largest exporter of gold, and Canada is the world's third largest producer of gold. Therefore, given today's economic climate, traders have lost a lot of confidence in the dollar and it is therefore likely that the demand for gold will increase and therefore there will be an increase in the price of gold. This would justify New-State Capital to establish long positions in Australian Dollar or the Canadian Dollar - or even position to be long those currencies against other major countries like the UK or Japan. Higher oil prices negatively impact the stock prices of companies that are highly dependent on oil such as airlines, since more expensive oil means higher expenses and lower profits for those companies. In much the same way, a country's dependency on oil determines how its currency will be impacted by a change in oil prices. The US's massive foreign dependence on oil makes the US dollar more sensitive to oil prices than other countries. Therefore, any sharp increase in oil prices typically leads to a fall in the value of currencies like the US dollar. So, like mentioned earlier, a fall in the value of the US dollar may lead the price of currencies like the Australia and Canadian dollar to increase.

# INTRODUCTION TO TECHNICAL ANALYSIS

Technical analysis attempts to forecast future price movements by examining past market data. Although New-State Capital will profess to be hands on fundamental traders, it must be understood that both fundamental and technical analysis goes hand in hand. The interesting thing is that traders and investors from a fundamental school of thought tend to get agitated by technical analysts labelling them as the astrologers of the financial markets.

Almost every trader uses technical analysis to get a "big picture" on an investment's price history. Even fundamental traders will glance at a chart to see if they're buying at a fair price, selling at a cyclical top or entering a choppy, sideways market. Technical analysts make a few key assumptions as follows:

- All market fundamentals are reflected in price data. Moods, differing opinions, and other market fundamentals need not be studied
- History repeats itself in regular, fairly predictable patterns. These patterns, generated by price movements, are called signals.
- A technical analyst's goal is to uncover a current market's signals by examining past market signals

- Prices move in trends. Technical analysts believe price fluctuations are not random and unpredictable. Once an up, down or sideways trend has been established, it usually will continue for a period
- Get in and get out at the right time

In the instance of Forex, New-State Capital will rely on price charts, volume charts and other mathematical representations of market data (called studies or oscillators) to find the ideal entry and exit points for a trade. Some studies help identify a trend, while others help determine the strength and sustainability of that trend over time. Technical analysis can add discipline and minimize emotion in our trading plan. It can be hard to screen out fundamental impressions and stick with entry and exit points as planned. While no system is perfect, technical analysis helps us see our trading plan objectively.

PRICE CHART TYPES – It is important not to get too carried away in terms of the technical indicators. The reason behind this is that it technical analysis is only an aid to our strategy. Yes, we keep several charts open all day long but this is to illustrate a graphical representation of the market. For this reason, only basic descriptions have been given of the types of charts and indicators have been grouped to keep things simple.

BAR CHARTS - The most common type of chart showing price action. Each bar represents a period of time - a "period" as short as 1 minute or as long as several years. Over time, bar charts show distinct price patterns.

![](_page_24_Figure_5.jpeg)

#### FIGURE 3

24 | Page

CANDLESTICK CHARTS - Instead of a simple bar, each candlestick shows the high, low, opening and closing price for that period of time it represents. Candlestick patterns provide greater visual detail as they develop.

![](_page_25_Figure_1.jpeg)

FIGURE 4

LINE CHARTS – This is where a simple unbroken line represents the price of the currency/security against time. It's a simple method of gaining a general idea of the price performance over a selected period

![](_page_26_Figure_0.jpeg)

#### FIGURE 5

TREND - Trend indicators smooth price data out, so that a persistent up, down or sideways trend can be easily seen. A common strategy that traders use is to implement a moving average; which ultimately illustrates the average of a selected number of day's price movement. One of the most widely used indicators, moving averages help traders verify existing trends, identify emerging trends, and view overextended trends about to reverse. As the name suggests, these are lines overlaid on a chart that "average out" short-term price fluctuations, so you can see the long-term price trend. A simple moving average weighs each price point over the specified period equally. The trader defines whether the high, low, or close is used, and these price points are added together and averaged, forming a line. A weighted moving average gives more emphasis to the latest data. It will smooth out a price curve, while making the average more responsive to recent price changes. An exponential moving average weighs more recent price data in a different way. An exponential moving average multiplies a percentage of the most recent price by the previous period's average price.

It has taken New-State Capital a while to find the best combination of moving average and period length for your currency pair. The right combo will makes the trend we're looking for clearly visible, as it develops. Finding that optimal fit is called curve fitting. Usually traders start by comparing a few timeframes for their moving averages over a historical chart. Then we can compare how well and how early each timeframe signalled changes in the price data as they developed, then adjust accordingly. When the moving average has been found to work well for our particular currency pair, we'll consider this as a line of support for long positions or resistance for short positions. If prices cross this line, that often signals a currency is reversing course. For example, longer-term moving averages define a trend, but shorter-term MAs can signal its shift faster. That's why many traders watch moving averages with different timeframes at once. If a short-term MA crosses your longer-term MA, it can signal your trend is ending - and time to pare back your position.

STRENGTH - Strength indicators describe the intensity of market opinion on a certain price by examining the market positions taken by various market participants. Volume is a basic ingredient of strength indicators.

VOLATILITY - "Volatility" refers to the magnitude of day-to-day price fluctuations, whatever their directional trend. Changes in volatility tend to anticipate changes in prices. A common example here would be the use of Bollinger Bands. These bands identify the deviation of the currency / security price. Bollinger Bands are volatility curves used to identify extreme highs or lows in price. Bollinger Bands establish "bands" around a currency's moving average, using a set number of standard deviations around the moving average. Creator Jon Bollinger says that touching a high or low band doesn't necessarily mean an immediate trend reversal. Bollinger Bands adjust dynamically as volatility changes, so touching the band just means prices are extremely volatile. For this reason, Bollinger Bands must be used with other indicators to determine the trend's strength.

CYCLE - Cycle indicators indicate repeating market patterns from recurrent events such as seasons or elections. Cycle indicators determine the timing of a particular market pattern. A common example here would be the Elliott Wave. This is something that we tend not to use in our current strategy.

SUPPORT/RESISTANCE - Support and resistance describes the price levels where markets repeatedly rise or fall and then reverse. This phenomenon is attributed to basic supply and demand. The typical trend lines mentioned above are suitable to use to identify support and resistance. Fibonacci Retracements are levels are a sequence of numbers discovered by the noted mathematician Leonardo da Pisa in the 12th century. These numbers describe cycles found throughout nature; we may use them to find pullbacks in the currency market. After a significant price move, up or down, prices often "retrace" most or the entire original move. As prices retrace, support and resistance levels often occur at or near the Fibonacci Retracement levels. For currencies, that means retracements usually happen at 23.6%, 38.2%, 50% or 61.8% of the previous move.

MOMENTUM - Momentum indicators determine the strength or weakness of a trend as it progresses over time. Momentum is highest when a trend starts and lowest when the trend changes. When price and momentum diverge, it suggests weakness. If price extremes occur with weak momentum, it signals an end of movement in that direction. If momentum is trending strongly and prices are flat, it signals a potential change in price direction. The most common examples here are the Stochastic, MACD and RSI oscillators. Stochastic oscillators, help monitor a trend's sustainability and signal reversals in prices. The stochastic come in two types, %K and %D, measured on a scale from 0 to 100. %K is the "fast", more sensitive indicator, while %D is "slow" and takes more time to turn. Stochastic studies aren't useful in markets which are predominantly in a state of "sideway" movement. In these conditions %K and %D lines might cross too frequently to signal anything. Relative Strength Index (RSI) measures momentum of price movements on a scale of 0 to 100 like Stochastic. If the is below the 30 levels for a long time, without prices reversing course it could mean that a market is quite strong or weak - and likely to stay so for a while. It is therefore important that we adjust the RSI to the right timeframe which suits our trading strategy. At this point in time, we are not too sure what that time frame is but are currently working to a 10 day period to represent 2 weeks of trading. A short-term RSI will be very sensitive and give out many signals, not all of them sustainable; a longer-term RSI will be less volatile. Divergences between prices and RSI may suggest a trend reversal. MACD - (Moving Average Convergence Divergence) plots the difference between 26-day and 12-day exponential MAs. A 9-day MA serves as a trigger line: when MACD crosses below the trigger, it's a bearish signal; when MACD crosses above the trigger, it's a bullish signal. If MACD turns positive and makes higher lows while prices are still tanking, this could be a strong buy signal. Conversely, if MACD makes lower highs while prices are making new highs, this could be a strong bearish divergence and a sell signal.

## NEW-STATE CAPITAL - UTILISING TECHNICAL ANALYSIS

We've found that most of the time the currency markets don't show a clear trend - they bounce back and forth between support and resistance levels. This sideways movement is called a trading range. We've discovered a strategy to help identify entry points on short-term trends, while protecting our profits with trailing stops losses.

#### TRADE SET-UP

This strategy uses two charts with different time periods (10-minute and hourly), along with two technical indicators: a 200-bar moving average and a 14-bar slow stochastic study.

IDENTIFY A TREND - We compare the moving averages on both charts. A trend may be developing when price is consistently above or below the moving averages on both charts.

PINPOINT-ENTRY - Once a trend has been identified, we will look for the following two conditions at the same time on the 10-minute chart: Firstly that the price is no more than 20 points (i.e. 0.0020) above or below the MA. The "fast" stochastic (%K) crosses above the "slow" stochastic (%D) below 20 (to buy), or crosses below the "slow" stochastic above 80 (to sell).

RIDE THE TREND - We will then set a trailing stop loss after the trade entry. On a long position, we will place a stop order approximately 10 points below the 200-period MA on the 10-minute chart and then raise the stop as the trade goes in our favour. On a short position, place the stop 10 points above the MA. We then go on to lower the stop as the trade goes in your favour. This can be further explained in our hedging strategy below.

# ADDITIONAL TRADING STRATEGIES

## ARBITRAGE

Arbitrage is an interesting strategy which requires trading systems far more advanced that what New-Sate Capital can currently invest in. Through experience only, we have managed to discover the theme of arbitrage but unfortunately, we cannot (as yet) afford to execute the trades due to the commission spread. If we had the Reuters trading platform, there may be arbitrage opportunities to exploit. We noticed that there are many triangular arbitrage opportunities in currency trading. When we do get the Reuters platform here is basic method of how we will execute a profitable arbitrage opportunity

Currency	Direct Live Quote	Indirect Manual Quote
EUR/USD	1.4976	-
USD/CHF	1.0623	
EUR/CHF	1.5914	1.5909
FIGURE 6		

New-State Capital will import the direct streaming quotes into excel. From these quotes we will calculate a manual cross over indirect rate to see what the rate should be trading at based on other pairs. As you can see from above, the market rate for the EUR/CHF pair is at 1.5914, but when we manually (by manually we mean set up an automated formula in excel) calculate the rate based on the EUR/USD and USD/CHF pairs, it actually works out to be 0.0005 less than the quoted rate. In this very instance we'd open up a short position on the EUR/CHF anticipating a correction where the market rate adjusts to around 1.5909. This will yield an almost instant risk-less profit of "5 pips." – However, this example has been intentionally exaggerated to show the ability to make a risk-less profit. Unfortunately, these opportunities rarely exist, are too small hence require tighter spreads and to get these tighter spreads we need to deposit money directly with the institution.

#### HEDGING STRATEGY

The hedging strategy works by smoothing out the negative affect opening an opposite side position and banking small profits banking small profits. So for example, if the trader was to open a Long position on the EUR/USD and the EUR gains strength, the trade can exit and bank instant profits. However, if the position started moving against him, then the trader covers the losses by opening up a short position and thus making a profit on the reversal. The only problem now is that the positions are level and the net loss will be the commission spread on two trades which means that if a \$100,000 position has been opened; for every 1/10000th move in the currency; the investor makes \$10. Given the bid/offer spread of 3/10000th (broker commission) this'll mean that the investor is already down -\$60 (-\$30\*2) on opening a reverse trade. And given that the investor may not have realised the position was moving against him till say after 5/10000th the investor will be down \$-110 and this loss will be locked it while both positions form a direction. At one point, it is likely that the EUR/USD would have moved over 100/10000ths therefore one position will be up \$945 (-\$110/2) and the other position will be down \$945. At this stage; there are two options. Firstly, the investor could bank the profit of \$945, letting the loss of \$945 running. The investor will therefore be sure to implement this strategy at a point where he feels that a reversal is about to take place. In other words, bank the \$945 profit on the short position and hope that the EUR starts

to move back up again and thus start making cutting the losses on the long position. It is unlikely that the price will move straight back up to the original. However, it could move back up from a - \$945 position to a \$-445 position. Therefore the trader nets \$945 profit – (-\$945-445) \$500 and thus makes a profit of \$445. If this is done on a \$1,000,000 position then this'll mean making \$4450. This way you get two chances at a 50/50 game. However, let's presume that the banking was done too early, and the position works against the investors again. This'll mean opening another opposite position and watch this make money; bank and then carry on doing this until; the trader calls the reversal correctly.

#### LONG TERM – CURRENCY INVESTING

Countries like Iraq and Zimbabwe to name a few are countries with economic instability but resource. Pakistan and India are also good examples. The Pakistani rupee for example is currently  $\pounds$ 1-RP124. This is in despite of the fact that in 06/07 the received a record level of foreign investment. The weakening currency is more than likely to do with the economic instability. Zimbabwe is another "hunch" of an example. As a testament to history, tyrant rule fades into the sunset and economic stability rises. Sooner or later, President Mugambe will fade into the sunset too and economic stability will once again rise. If  $\pounds$ 1 buys me ZD 65,000 a simple  $\pounds$ 100,000 investment now; for the next 20 years may see a future conversion of  $\pounds$ 1=ZD6,500 and a profit of  $\pounds$ 900,000 just through the exchange rate fluctuation. The Iraqi dinar and Pakistani rupee would be my favourite long term currency investments due to the fact that (in my opinion) economic stability will flourish in the long term. The Indian rupee is also an excellent short term currency buy due to the fact that the country has enough basic resources to help the economy prosper and thus attract further investment.

#### CORRELATION STRATEGY

To be an effective hedge fund, understanding our overall portfolio's sensitivity to market volatility is important. But this is particularly so when trading Forex. Because currencies are priced in pairs, no single pair trades completely independently of the others. Again, we are quite behind on understanding the correlations but and how they change, but it is our ambition to take advantage of them to control over our portfolio's exposure. The reason for the interdependence of currency pairs is easy to see: if we are trading the British pound against the Japanese yen (GBP/JPY pair), for example, we are actually trading a kind of derivative of the GBP/USD and USD/JPY pairs; therefore, GBP/JPY must be somewhat correlated to one if not both of these other currency pairs. However, the interdependence among currencies stems from more than the simple fact that they are in pairs. While some currency pairs will move in tandem, other currency pairs may move in opposite directions, which is in essence the result of more complex forces.

Correlation, in the financial world, is the statistical measure of the relationship between two securities. The correlation coefficient ranges between -1 and +1. A correlation of +1 implies that the two currency pairs will move in the same direction 100% of the time. A correlation of -1 implies the two currency pairs will move in the opposite direction 100% of the time. A correlation of zero implies that the relationship between the currency pairs is completely random.

With this knowledge of correlations in mind, let's look at the following tables, each showing correlations between the major currency pairs for the month of March 2008 (taken with the courtesy of www.fxcm.com)

EUR/USD	AUD/USD	USD/JPY	GBP/USD	NZD/USD	USD/CHF	USD/CAD
1 Month	0.94	-0.92	0.92	0.94	-0.99	-0.32
3 Month	0.47	-0.37	0.83	0.57	-0.98	-0.61
6 Month	0.74	-0.83	0.94	0.78	-0.96	-0.57
1 Year	0.85	-0.86	0.91	0.93	-0.98	-0.89

#### FIGURE 7

The upper table above shows that over the month of March (1 Month) EUR/USD and AUD/USD had very strong positive correlation of 0.94. This implies that when the EUR/USD rallies, the AUD/USD will also rally 94% of the time. Over the longer term (three months), though, the correlation is slightly weaker (0.47). In contrast, the EUR/USD and USD/CHF had a near-perfect negative correlation of -0.99. This implies that 99% of the time, when the EUR/USD rallies, USD/CHF will undergo a selloff. This relationship even holds true over longer periods as the correlation figures remain relatively stable.

#### NEW-STATE CAPITAL - UTILISING CORRELATION STRATEGY

Calculating the above correlations can be done by importing all the relevant currencies and using a "CORREL" function in Microsoft excel to calculate it. We have managed to find a website <u>www.advfn.com</u> which will import direct streaming prices into our excel file and therefore correlations can be calculated on a streaming bases. With correlation knowledge it helps New-State Capital in avoiding entering two positions that cancel each other out. For instance, by knowing that EUR/USD and USD/CHF move in opposite directions nearly 100% of time, we would see that having a portfolio of long EUR/USD and long USD/CHF is the same as having virtually no position - this is true because, as the correlation indicates, when the EUR/USD rallies, USD/CHF will undergo a selloff. On the other hand, holding long EUR/USD and long AUD/USD is similar to doubling up on the same position since the correlation is so strong.

Diversification is another factor to consider. Since the EUR/USD and AUD/USD correlation is traditionally not 100% positive, we can use these two pairs to diversify their risk somewhat while still maintaining a core directional view. For example, to express a bearish outlook on the USD, instead of buying two lots of the EUR/USD, we may buy one lot of the EUR/USD and one lot of the AUD/USD. The imperfect correlation between the two different currency pairs allows for more diversification and marginally lower risk. Furthermore, the central banks of Australia and Europe have different monetary policy biases, so in the event of a dollar rally, the Australian dollar may be less affected than the Euro, or vice versa. We can also use different pips or point values for our advantage. Let's consider the EUR/USD and USD/CHF once again. They have a near-perfect negative correlation, but the value of a pip move in the EURUSD is \$10 for a lot of 100,000 units while the value of a pip move in USD/CHF is \$8.34 for the same number of units. This implies traders can use USD/CHF to hedge EUR/USD exposure. So, to expand, let's say that New-State Capital had a portfolio of one short EUR/USD lot of 100,000 units and one short USD/CHF lot of 100,000 units. When the EUR/USD increases by ten pips or points, the trader would be down \$100 on the position. However, since USD/CHF moves opposite to the EUR/USD, the short USD/CHF position would be profitable, likely moving close to ten pips higher, up \$83.40. This would turn the net loss of the portfolio into minus \$16.60 instead of minus \$100. Of course, this hedge also means smaller profits in the event of a strong EUR/USD sell-off, but in the worst-case scenario, losses become relatively lower. In all honesty, our correlation strategy is in its infancy. Even if we were looking to diversify our positions or find alternate pairs to leverage our view, it is very important to be aware of the correlation between various currency pairs and their shifting trends. Such knowledge helps traders, diversify, hedge or double up on profits.

#### NEW-STATE CAPITAL – ARTICULATING FOREX TRADING STRATEGY

To be an effective trader, it is important to understand how different currency pairs move in relation to each other so traders can better understand their exposure. Some currency pairs move in tandem with each other, while others may be polar opposites. Learning about currency correlation helps traders manage their portfolios more appropriately. Regardless of your trading strategy and whether you are looking to diversify your positions or find alternate pairs to leverage your view, it is very important to keep in mind the correlation between various currency pairs and their shifting trends.

As mentioned earlier, Investing in foreign exchange markets has traditionally been the domain of large institutions and corporations to reduce currency risk. However, the Forex markets have evolved significantly and increasingly are being seen as a source of returns for investors. Institutional investors such as hedge funds (the bigger ones!) have played an important role in this development but as with most markets, retail investors are catching up and looking at Forex as an interesting asset class with strong diversification and return-generating opportunities.

## NEW-STATE CAPITAL – LESSONS LEARNED FROM FOREX TRADING STRATEGY

KNOW WHAT MOVES CURRENCY MARKETS - Like any asset class, there are a number of factors that drive currency performance. A country's macroeconomic situation can have a major influence – economic data releases, policy decisions and political events can change an economist's outlook on the country, and therefore the currency. There are also technical factors such as interest rates, equity markets and international trade which may have an impact. Spend time getting to know these.

MANAGE RISK - Like with any investment decision, we need to decide what risk we are willing to accept. In other words we need to ask "how much are we willing to lose on a position?" If we didn't have a convincing or comfortable answer then we need to rethink the trade. We need to implement methods on how you can mitigate your downside risk; make use of trading strategies such as stop losses or limit orders.

STICK TO A FEW - There are literally hundreds of currency pairs that can be traded in the currency markets, each of which have their own characteristics and considerations to understand and analyse. Because we're participating in the market on a non professional basis (i.e. we're not

classified as a regulated financial institution) it is probably better to concentrate on just a few pairs and commit to thorough and robust research on those, rather than superficial research on the many. Some key things to consider when analysing a currency pair are its liquidity, transaction costs (the spread) and its volatility. We've adopted a general rule that major currencies usually have better liquidity, tighter spreads and lower volatility, versus emerging market currencies which have poor liquidity, wide spreads and volatile movements.

CONTROL EMOTIONS - The markets are fast moving and in the short term can be unpredictable. Rather than trying to make a quick profit, it's important to still to a longer plan based on your research making smaller profits over a longer period. Even the most successful of traders don't win on every trade. What they do have is a robust plan and long-term strategy which carefully considers the risks. So, we cannot necessarily be disheartened if a trade doesn't go our way. We need to review why it went wrong and see if there is anything to learn from the experience. Currency trading is not a quick buck game as we've come to realise. Like any investment, it only should be played by those with a long-term end-game in mind.

**RESEARCH** - It's important to stay up to date. All currencies move quickly and checking the price once a week is not going to help us make strong long term returns.

## PERSONAL NOTE – CONCLUSION

It'd be an impossible feat to develop a definitive trading strategy in the scope of this research paper. It almost feels frustrating that I cannot type out the final strategy. However, in order to prove that the above strategy works I have put together a table of how it worked over an eight day period. This can be viewed in the following table.

26/02/08 10:22	DEBIT	CREDIT	6,177.35
26/02/08 10:22		357.07	6,534.42
26/02/08 10:22	436		6,098.42
26/02/08 12:33		40	6,138.42
26/02/08 15:20		120	6,258.42
26/02/08 15:20	100		6,158.42
26/02/08 18:50		4.92	6,163.34
26/02/08 18:55		290	6,453.34

26/02/08 19:28		19.75	6,473.09
26/02/08 19:32		315.9	6,788.99
26/02/08 19:45		102.4	6,891.39
26/02/08 19:53		18.62	6,910.01
26/02/08 19:55		19.76	6,929.77
26/02/08 20:15		18.39	6,948.16
26/02/08 20:24		19.8	6,967.96
26/02/08 20:29		368.94	7,336.90
26/02/08 21:21		19.79	7,356.69
26/02/08 21:28		13.85	7,370.54
26/02/08 21:28		36.92	7,407.46
26/02/08 23:34		18.65	7,426.11
26/02/08 23:48		178.34	7,604.45
26/02/08 23:49		115.7	7,720.15
26/02/08 23:49		370.23	8,090.38
27/02/08 00:17	1,562.25		6,528.13
27/02/08 00:17		1,662.04	8,190.17
27/02/08 00:23		15	8,205.17
27/02/08 00:29	37.45		8,167.72
27/02/08 00:29	475		7,692.72
27/02/08 00:31		37.07	7,729.79
27/02/08 00:50		92.65	7,822.44
27/02/08 09:59	414.75		7,407.69
27/02/08 09:59		696.18	8,103.87
27/02/08 09:59	84.07		8,019.80
27/02/08 10:58		427.5	8,447.30
27/02/08 10:58		275	8,722.30
27/02/08 10:58		930.84	9,653.14
27/02/08 11:03		6.58	9,659.72
27/02/08 14:13	19.9		9,639.82
27/02/08 18:09	568.72		9,071.10
28/02/08 22:03	3,705.00		5,366.10

28/02/08 22:03	3,105.00		2,261.10
28/02/08 22:03		2,922.00	5,183.10
28/02/08 22:03		3,652.50	8,835.60
04/03/08 17:16		145.82	8,981.42
06/03/08 15:08		1,958.00	10,939.42
Holding Period	8 Days		
Total Profit	4,762.07		

FIGURE 8

Judging by the above results, we seem to have found an effective strategy with nearly \$5000 (\$4,762.07) profit in less than eight days. Given the fact that returns can be compounded it's quite clear that such a return in eight days can result in returns of \$100m + in the years to come. However, notice the times. This strategy basically requires sitting by a PC, with several charts and screens about 18 hours a day. This was not what we had planned, and certainly not worth the blood and sweat. It transpires that although the root of creating wealth lies within currency fluctuations we would need the Reuters system which cost anything between £14,000 and £50,000 + depending on licences etc. It is simply too much effort for a small fund like New-State Capital. Now here's a bald statement – If we invested \$60,000 we would have made nearly \$50,000 in days based on the same risk factors. Pretty neat? Most definitely not! And the main reason why is because it'd have been just as easy to lose all \$60,000. The point which can be proven is that building a fund worth \$100 million + in a few years is absolutely possible. The above tests and the strategy development can prove this. However, for New-State Capital the strategy will now take a new root and that will be to mitigate the probability of loss. This can be gained from further investigation into correlation trading and hedging.

The fund started to fall to the \$8,000 levels at which point we cashed in to revise the strategy. Our next ambition will be to spend the coming years exploring what we think is a sure profitable strategy and that is; correlation trading using hedging tools such as options to help protect the portfolio. The objective for this part of the dissertation was to devise a trading strategy to help grow the New-State Capital Hedge Fund. Although a strategy has been designed; unfortunately it forms only 1% of the required ingredients to formulating a strategy where we can mitigate the chances of loss. The Forex section of this write up has just opened the doors to what New-State Capital will become and that itself can be deemed as success. Part two of this dissertation will

explore how we can utilise equities to create a successful portfolio. Taking a lesson from our Forex strategy write up, I'd take this opportunity to study the best equity investors' strategy in order to simply open the doors to the path New-State Capital should be taking. We will therefore study the greatest pioneers in equity investing; understand their principles; apply it to past experience and hopefully devise a trading plan.

# PART 2 - EQUITY INVESTING

# BACKGROUND TO EQUITY INVESTING

The author is the lead trader at New-State Capital and has around 10 years experience monitoring the equities markets. However, in order to open the doors to devising a strategy, it is important to study the greatest equity investors. From documenting and understanding their performance and investment styles we will conclude with our own proposed investment style. Although the equity investment strategy involves buying equities "to keep," we must remember that New-State Capital may consider leveraging its trading power, unlike these great investors. So, yes; there may be instances where we trade equities, but for the purposes of devising a strategy we are only looking to invest in companies with rock solid balance sheets.

We will jointly explore the investment strategies first articulated by Benjamin Graham and made popular by his disciple, Warren Buffet. Benjamin Graham is often thought of as the father of value investing. Not only was he one of the world's greatest and most influential investor of all time; he was also one of the leading financial philosophers who have ever lived. It's amazing to think that before Graham, money managers used to adhere to investment rules based on superstition guess work and esoteric rituals. It was his book "Security Analysis" that brought modernity to the profession of finance. Graham soon became a master in researching stocks in microscopic detail where in 1925 he learned that Northern Pipe Line Co. held at least \$80 per share in high-quality bonds yet were trading at \$65 per share. After convincing the management to increase the dividend, he sold the shares at \$110 per share 3 years later. The Graham-Newman Corporation gained at 14.7% annually compared to the average 12.2% return for the stock market as a whole from 1936 to his retirement in 1956. This is by far one of the best long term records on Wall Street history.

The gift which Graham gave to today's financial community is a set of investment principles. He advocates that investments into stocks are actually an investment into a slice of income. This is a function of the manager's capability to utilise the company assets in a way to generate escalating income. Today the market is plagued with millions of individuals who like to call themselves investors who are nothing short of gamblers where the self fulfilling prophecy of the crowd forces a price in the desired direction – i.e. if enough people believe it's going to go up because they've painted their office walls yellow; then the equity value is likely to go up. True value is visible in their books, and it is this which we wish to explore.

#### GRAHAM'S INVESTMENT PRINCIPLE

THE MARKET IS LIKE A PENDULUM - A bull is known to strike its horns upwards and a bear strike its paws downwards – accordingly, a market where stocks are on the rise is known as a bull market and vice versa, that is, a market where stocks are on the decline is known as a bear market. Graham claimed that every bull market is followed by a bear; thus the dot com boom and crash of 1999/2000 would not have surprised Graham as he earned 250% one day in 1919 during the automotive industry boom. This pendulum swings between unsustainable optimism where stocks are overpriced; and unjustified pessimism where stocks are under priced and thus cheap. It is therefore important to recognise and distinguish the bull and bear market.

A COMPANY IS NOT JUST AN ELECTRONIC BLIP - which flashes across the computer screen. Owning a company share is the same as owning an interest in the business. The underlying value of the business does not depend on the share price.

THE FUTURE VALUE OF EVERY INVESTMENT IS A FUNCTION OF ITS PRESENT PRICE - For example, if you pay a high price for a stock, this market optimism will be unsustainable which subsequently produces a lower return for the investor. Warren Buffet (Today's most successful investor, student/friend of Graham) said that risk is only prevalent when you do not know what you are doing. It is the risk element that New-State Capital wishes to mitigate. The root of this comment comes from Graham's comment that no matter how much risk one manages to mitigate there is always the risk that the investor may be wrong. So in order to minimise the odds of error an investor should never over pay. This is known as the investor's margin of safety.

DISCIPLE, COURAGE, CONFIDENCE, CRITICAL THINKING AND PATIENCE - are a few of the personal attributes which an investor needs to possess in order to guide their financial destiny and

ultimately take on the worst of bear markets. The behaviour of the market is irrelevant compared to the behaviour of the investor.

The objective of this paper is to therefore sample some of today's stocks on the Alternative Investment Market (although searches will be done across all markets just in case a security has fallen unjustifiably) and apply Graham's principles in order to prove their current day validity.

Our investment principles are therefore starting to take shape in a way contrary to earlier discussions insofar as going against the attitudes of day traders who in essence buy a stock simply because it has gone up, or sell simply because it is going down. In other words short term trading may work on currencies with colossal liquidity, but risky on equities. Graham advocates that his principles do not apply to those who believe that profiting from a day-trade was down to business acumen as opposed to gambling. In 50 years, Graham had never seen anyone who had sustained money by "following the market." Unfortunately, the popularity of individuals "following the market" has fuelled a pump and dumps culture at the lower end of the markets where traders create a "lemming's ethos" - that is, where an individual will slowly buy an equity and create lemmings to follow your recent buying habit. This is not where New-State Capital desire to be. Due to the lack of supply in issued shares the price of the equity starts to advance. At this point, the initial investor sells up; the price falls back down leaving the lemmings in possession of a stock that they did not research and holds very little value. A perfect example of this is a company called Pacific Media Plc (PCM). Historically, as soon as the big buys start coming in, PCM would rise during the course of the day. The lemmings would follow, and as time progresses with initial investors sold out, the price would fall back down and the lemmings find themselves in possession of a company which has around £18m of negative equity financing the asset side of the balance sheet.

Psychology plays a big part in applying the principles of investing correctly. We could potentially be our own worst enemy, so it is important to highlight the problems which face many investors. Buying stock for less than they're worth sounds great in theory, and even though business may be the science; the process by which we select undervalued stocks is more of an art. During the dot com boom of 1999-2000, many investors had lost over 95% of their investment in internet & telecom stocks. An increase of 1900% would have been required for them to recoup their investment. To put this in perspective, we have never seen a stock go from £3 to £60, but we have seen plenty lose that kind of value.

In the last 10 years alone we have seen the greatest crash since the Great Depression where within two years during the tech boom, the US markets had over \$7.4 trillion (or over 50.2%) wiped of the market. This was the period where most internet stocks were destroyed and the giants of the markets such as AOL and Cisco suffered huge losses. We have also seen the increase in corporate corruption in the bankruptcies of companies like WorldCom and Enron. The collapse of such giants was a result of evidence that accounting firms cooked the books to mislead the investing public. All of these factors are crucial events and learning points for the evolution of New-State Capital. It teaches us that if we can forecast the thinking of the crowds then we'll be able to forecast the movement in such equities. This is an era where top directors are now accused of siphoning millions for personal gain and investors are mislead which has resulted in very stringent regulations. Shockingly, even after such crashes; book-market values are still far apart which means that stocks would still have further to fall. New-State Capital are in an era returning to relatively low interest rates in first world counties where stocks are more attractive than bonds/deposits. So, it is evident that there have been significant global changes over the last decade or so. The question is as to whether or not such changes, in addition to terrorist threats, allow for the same investment techniques to be applied. Having said this, it is evident that the disciples of Benjamin Graham survived the tech crash with little effect to their own portfolio. This can be evidenced (in the following table) by Warren Buffets portfolio during 1999-2001

ANNUAL PERCENTAGE CHANGE					
Year	Buffet	S&P 500 plus div	Value Added		
1998	48.3	28.6	19.7		
1999	0.5	21.0	(20.5)		
2000	6.5	(9.1)	15.6		
2001	(6.2)	(11.9)	5.7		
2002	10.0	(22.1)	32.1		
TOTAL AVERAGE GA	AIN				
1965-2002	22.2	10.0	12.2		

# **41 |** P a g e

#### Figure 9

These figures speak for themselves. The tech boom started in 1999, where Buffet contentedly increased his portfolio by 0.5% and the index increased by 21.0%. The value lost in this year was not a physical loss to his portfolio. It was in fact just the potential he lost. This is an important point here; would he have really wanted to increase his portfolio wealth with stock which is in fact over hyped thus over valued? Nevertheless, he went on to recover this "loss" by outperforming the S&P in its worst ever years since 1960. His diminutive gain in 1999 compared to the technology driven gain in the S&P led critics to speak negatively about Warren Buffet; claiming that he is "old school..." and has "had his day..." – How wrong they were. Warren Buffets success over the world's most renowned crash is evidence that his teachers' (Benjamin Graham) investment principles will always stand the test of time?

I'd now take this opportunity to explain in detail the valuation techniques explained by Benjamin Graham. There are areas which are fundamental to the argument of value investing. These will be continuously debated with application to AIM stock. This will start with the debate between investing and gambling (or speculation)

## INVESTMENT OR SPECULATION

An investment opportunity is one which, upon thorough analysis, will promise safety of the principle amount and a return to the investor. Anything outside this definition will be called speculation. It's amazing to think that after the great market crash in 1929, most equities on the USA markets were considered to be speculative and bonds were commonly regarded as the only possible "investment" of its time. It may even be true to think that with the recent credit crisis we are slowly returning to this global economic disaster. I guess only time will tell, and we'll see whether or not the big debt financers survive the crisis. (NB. This point was written before the Merrill Lynch, Citi & Bear Sterns announcement of write downs...)

It is very important to highlighted and defend the definition of an investor as it has unfortunately become the definition of everyone who put's money into the markets. In June 1962 an article was published in the Financial Journal titled "SMALL INVESTORS BEARISH, THEY ARE SELLING ODD-LOTS SHORT" - This is a perfect example of the confusion between investors and speculators. Half the time, these speculators have no idea as to what they are actually buying or selling. This is the reason why we chose to mostly invest in equity as opposed to speculate. As much as we are against

speculation in equity, we are not ruling it out and on the same note; we are not specifically putting it into our strategy. Speculators go with the hype of the market; and buy because a stock is going up and sell because a stock is going down. Such members of the public base their buying on emotional conviction. During the tech-boom I spoke to many investors who bought shares simply because it was called "e-vestment plc, e-prime financial plc, and Fundamental e-Investments plc." Are these individuals really investors? It is clear that they are simply speculating that the acronym "e" will be the fuel to rocket the price into an orbit of unsustainable optimism. In the following article http://english.vietnamnet.vn/biz/2005/10/504740/ titled "Investors Sell Short" it is evident that even the authors of such editorials show their lack of understanding. "Selling short" is a term used for those individuals who sell stock they do not own. For example, assume you have a company car and the company has offered to sell it to you in October for £10,000. You can technically sell this car (which you do not own) to a friend on September the 30th for £12,000 and promise delivery in a few days time. You then buy this car at the agreed price for £10,000 on October 1st, and make an instant £2,000 profit. Selling short is therefore selling stock you do not own and making a profit when you "close the position." What individuals on the market can do is ask their broker to sell stock (say 1000 shares 200p) they do not own as they believe the share is about to decline. The market has now been diluted with stock and the market maker is happy to have a temporary imbalance on his books. Assume now the price declines a few days later to 150p. The individual will buy back those 1000 shares at 150p (thus cancelling his position and restoring equilibrium in the market makers books) and makes an instant 50p per share profit. It is therefore very obvious why Graham was adamant to defend the definition of an "investor" as someone who looks for a slice of the income which their share of a company's assets is producing. In selling something you do not own, how on earth can we call ourselves investors? However, we are a hedge fund. Our job is to therefore "Hedge." So, as sad as it may be to type this; I have to face reality in that we are looking to make income through micro/macro economic imbalances and re-invest the profits to ultimately "Go long" on an equity with a strong balance sheet. We are investors when we go long (to hold and keep) and speculators when we go short (to hedge.) Therefore, the article titled "investors sell short" makes very little sense. There is increasing concern for the current lack of distinction between the definitions. Graham argues that one day, the stock exchanges may be blamed for heavy speculative losses, due to the lack of effort in reinstating the definitive distinction between the terms "investment" and "speculation." - Today his argument has manifested into reality. Needless to say that the investor should be aware that there will be a risk attached to their investment which is inseparable from the profit which they may earn, thus both risk and the potential profit need to be

incorporated in the investor's calculations. In extending this comment we can say that speculation is somewhat inherent in any investment, but it is the duty of the investor to keep this truth to an absolute minimum in order to prepare for the upswings/downturns both financially and most importantly; psychologically. An investor sleeps at night knowing where their money is kept and very much aware of the fact that it is in good hands, i.e. the management. A speculator on the other hand tends not to sleep very well unless they are almost perfectly hedged – which is of course what New-State Capital seek to achieve.

As a heavy ex-speculator, I found myself more concerned with breaking even as opposed to actually making a profit. One likes to presume that they have investment knowledge, but outright speculation (i.e. following the crowd/charts) probably offers more chance of making money than statistically gambling on a horse race where your odds are defined.

Speculation may however be necessary in certain investments. For example, when a company decides to go for an Initial Public Offering (IPO) it will be quite an investment with an element of speculation involved. The investor will therefore minimise his risk by getting to know the managers and studying the market for the product or service. The more the investor understands the share of the product/service they owe; then the investment is less speculative. This would be considered as wise speculation. Such speculation can indeed be fun and also rewarding. BUT, it is important to never lose sight of the fact that you are ultimately taking a very high risk and can be wiped out of your cash. In this instance, a separate "speculation pot of funds" needs to be kept.

# TIME VALUE OF MONEY

As mentioned in Part 1, inflation is a term used to describe the increase in the price of products and services. There are many economic models to describe the reasons behind such activity but the common agreement is that inflation is caused when the supply of money is in excess or the demand for money reduces. So someone with a fixed (in terms of currency) income would obviously lose value of money over time. For this reason we will argue the proposal that stocks offer a capital gain and dividend income which is far more attractive than bonds which offer a coupon rate and a pull to redemption (par value) Graham therefore advocates that it is important to look at the mindset of an investor in how a rise in the price of stock would affect their investment decisions.

In the Boston Associates, Stocks, Bonds, Bills & Inflation 2003 Handbook it says that 78% of the time stocks outpaced inflation in the USA. The same appears to have occurred outside the USA

where in Germany, Belgium and Italy where stocks perform exceptionally well when inflation is mild. More often than not, stocks would decline an average of 10% when inflation starts to gather pace. So, 22% of the time, there is a positive correlation between declining stock performance and rising inflation.

As mentioned in Part 1, inflation is a term used to describe the increase in the price of products and services. Graham analyses inflation in greater detail obviously claiming that an advance would eat up in higher living costs. He explores whether investing in shares will help protect the individual against inflation. Historically, stocks have always done better than bonds. Graham studied the markets over a 55-year period and proves that stocks on the DJIA would give a compounded return (a mix of capital gains + dividends) of 8% per annum, which is indeed a much better return than an investor would receive on bonds over the same period. Given the current market climate; this raises an important point for New-State Capital as to whether or not such a return over 55 years is a good precedent for returning the same over the next 55 years. Graham advocates here that the past is no guide to the future based on returns. Although his argument here seems quite evasive, he justifies this point by splitting the investment period up between short term and long term, i.e. examining investment results over 5 years and over 25 years. He argues that over the shorter term, the psychology of the investor may change in addition to his, "hopes & apprehensions, his satisfaction or discontent with what he has done and his decisions on what to do next..." - Such changes in attitudes occur from year to year as opposed to every 25 years. A good example here would be to illustrate the economic situation of the USA nearly 40 years ago, where the cost of living increased some 22% between 1966-1970, both dividends and share prices declined. This is therefore an obvious contradiction to our earlier point that stocks will always outweigh the performance on bonds - which are indeed a fixed income product which loses value over time due to the effects of inflation.

We can now face the argument of link between inflation and corporate earnings. (without digressing too much - At this point I'd like to mention that I have recently been reading a lot on George Soros's theory of reflexivity which was born out of Karl Poppers research on "cause & effect." I wish I had discovered this concept at the start of this report. It's fascinating to see how the separation between thinking and reality can create corporate earnings to determine the stock price which in turn determines corporate earnings. This circular logic is very prevalent and requires further elucidation outside the scope of this report.) Naturally, even though corporate earnings will fluctuate with the economic cycle there has been no correlation between a rise in inflation and corporate earnings.

(Once again, without digressing too much, I have only recently come across many counter arguments to this by studying George Soros. Advocating these points will sadly take me out of scope.) Yet again, in this instance, Graham claims that there is no evidence that inflation has had a direct effect on corporate earnings. The growth in corporate earnings is a result of less stringent depreciation rates and reinvested profits on current capital. If inflation was to have any positive effect at all then it would increase the spending power of current invested capital. In theory, the rate of earnings on such capital will subsequently increase. Graham argued that the only way inflation would add to the value of a stock is by raising the rate on corporate earnings and over 20 years of Grahams study, there was no such evidence to suggest that inflation has added to stock values by "raising the value of current capital invested..." - In essence I guess what Graham is arguing here is that inflation leads to higher prices, which in the economic cycle increases corporate earnings. George Soros would further argue (and I really hope to adopt this philosophical mind-set) that the corporate earnings which have prevailed as a result of inflation will in turn raise stock prices which will receive further investment. As we learned from Part 1, in order to invest; you need to buy the domestic currency which raises makes the value of the currency higher (due to increased demand) and the costs of the very goods/services that those corporations sell become costly to the foreign buyer due to the new exchange rate difference. Demand for the product/service reduces, earnings reduce, stock prices fall and here we have the economic cycle. Expert Hedge Fund managers such as George Soros were able to ride the thinking of the crowd within these economic cycles. The New-State Capital Hedge Fund aims to get to this level. (Maybe this calls for a PHD on the flaws in political economy...) Although investor behaviour is compulsory study in a typical financial analyst course (such as the CFA); riding the market psychology is something which isn't taught and we can only benefit from studying the great philosophers who have deliberated for centuries insofar as separating thinking from reality. George Soros is a modern day campaigner & advocate of these wisdoms and his regimented attitude in continuously illustrating the flaw in global political economic theories require attention. We'll save that for another day...

# NEW-STATE CAPITAL – EQUITY INVESTMENT STRATEGY

Graham talks of the stock market as an institution, the pickings of which are reflected in an investor's portfolio. Naturally, anyone who invests would be aware of a small amount of stock market history, in addition to dividend performance and the volatility of the markets. Subject to the

investors knowledge on valuing they will be able to make a worthwhile judgement on whether or not to invest.

#### NEW-STATE CAPITAL – EQUITY INVESTMENT CRITERIA

Having now touched about the views of investors such as Graham, we feel that we can design the nucleus of our equity investment strategy. There is no doubt that our underlying investment philosophy comes from our experience in the stock markets but, as mentioned, this paper has been used as an excuse to study "what strategies are used by the greatest investors." For example, many people believe that market prices are somehow flawed and that opportunities are easy to find which we feel is incorrect. We are predominantly interested in genuine opportunities where there is logic in the company's growth and status. New-State Capital believe that the secret of successful investing lies in studying market behaviour which can point to key trends, indicators and investment opportunities. For example, we've found that markets are usually slow to react to major changes or "big ideas" as information spreads gradually and reaction is delayed by scepticism. However, when the buying starts, there is a lemming type reaction which quickly leads to overinflated prices. Analysing key information and market trends will therefore form the basis of all our investment strategies which will be captured later. Having looked into the strategies of Graham, New-State Capital believes that there is a greater chance of finding small companies having an unjustified price because of the fact that investors have not recognised the management skills and therefore not recognised the management's ability to create wealth from the corporate assets. Such factors may have been over looked and there is plenty of scope for finding these undervalued companies. The efficient market hypothesis proposes that all factors known to the market are priced into the value of equity. New-State Capital is attempting to establish a Graham school of thought suggesting that undervalued stocks exist through elements which require different valuation methods outside that of a typical fund manager. For example, whilst typical valuation methods look to value equity today at the present value of future earnings, many fund managers will fail to look at the future value of managerial skill or Intellectual Property. This is one of the many arguments, which form a research paper within itself; which discounts the efficient market hypothesis. This is the avenue which we wish to take New-State Capital. Towards the end of this section I'll run a filtered search to justify an undervalued stock. Maybe the reader can keep an eye over them over the coming years?

In order to grow, small companies have to raise money at a discount because they do not have access to normal capital markets. It would therefore make sense to put most of our research into smaller companies which have not been researched for the factors which we (as value investors) believe are being ignored. In other words, we are looking to exploit inefficiencies insofar as recognising value which the market has not recognised. For example, every fund manager and investor will recognise the effect a new drug release will have on the income for a pharmaceutical company; and the news of this release will show a gain in the share price resulting in investors benefiting only from income gains as opposed to intentionally making a capital gain. However, the same investors may not see the benefit in a media company owning the rights to script the biography of a relatively unknown individual like a young David Beckham. This may be an isolated example, but the principle is constant. New-State Capital seeks to identify common industries with 'not so common' I.P's or other assets. We will seek to identify underlying values, taking calculated risk.

Selecting the right management is probably one of the most important rules of our future equity investment criteria. From previous experience, it is possible to assess whether the management team is sharp or not, and whether they have the relevant experience or not. This is an evolving skill which has gained pace since losing out to a company with bad management back in 2001.

![](_page_48_Figure_2.jpeg)

We can therefore use the above analysis to create our own investment model

# FIGURE 10

- We aim to become investors in equity, and not speculators and thus aim to know what the true market price should be differentiating it from the asking price.
- Luckily we have access to a scanning tool (available to the general public at a small premium) where we can filter equities matching our criteria. This will allow us to rake the market for bargains at great ease. Having said this, New-State Capital regularly receives phone calls from stock brokers asking us to invest in "the next big bio-tech, pharmaceutical, technology company." These recommendations are nothing but ramped equity with no skeleton
- This has led us to another principle which is to treat corporate figures with suspicion given the potential of manipulation of accounting figure
- We should learn that there is never a missed opportunity. If we've done the maths and know the asking price, we will always have another opportunity should we miss one.
- It is important to diversify the portfolio of equities, holding a large number of companies from a range of sectors which are not all likely to react to the same market conditions
- Dividends will always serve as a clue to investing. We are investors and not speculators, so we have shareholder rights which we plan to use
- Have faith in the management once you trust their skill set
- Understand the potential of the products current or future market share
- Finally, we need to be patient. If we have met all the criteria, then the companies we invest in will see through turbulence and reward us with huge profits

# ANALYSE THE BUSINESS – EVALUATION QUESTIONS

Here follows some basic questions which we need to ask ourselves when weighing up a business. They are by no means conclusive, but still a vital point of stimulating thought on the company. This will form the basis of the establishing a **R**isk / **R**eward **C**riteria (RRC)

PROFITABILITY – Has the business been profitable, or can we use our skills on how WE interpret value to ascertain whether or not the companies are likely to be profitable on a consecutive basis?

STABILITY – Is the company likely to grow so quick during a recovery phase or a set up phase, that it is unlikely to sustain growth?

GROWTH IN EARNINGS – Has the company got at least three consecutive years of earnings growth?

FINANCIAL POSITION - Have they got a strong cash rich balance sheet?

MARKET SHARE – Have they got a significant proportion of the market share; or are they likely to gain a significant proportion through the uniqueness of their assets

DIVIDENDS & PRICE HISTORY – Can the company prove continuous dividend payout? And if not, is there scope for the company to pay a dividend matching the risk / reward criteria?

# RISK & REWARD CRITERIA

TOTAL DEBT LESS THAN BOOK VALUE – We will not invest in companies where the total debt is valued higher than the book value of the assets. For this reason, it may be common for us to discount almost fully, any intangible assets.

CURRENT RATIO GREATER THAN TWO – This helps us understand the companies short term debt obligations. A typical industry standard indication of financial strength will be around the 1.25 mark. However, due to New-State Capital's prudent outlook, we expect the current ratio to be 2, i.e. £2000 of current assets for every £1000 of current liabilities.

TOTAL DEBT LESS THAN TWO TIMES THE NET CURRENT ASSET – This rule has been directly taken from Grahams criteria. The net current assets will obviously stand at 50% of the total current assets as per current ratio strategy. However, we would adopt that if (as per above) the net current assets stood at £1000 then total debt cannot be more than £2000 (or £1999.99 to be precise)

STABILITY OF GROWTH OF EARNINGS – Our risk criteria here will be that there can be no more than two declines of 5% or more in year-end earnings in the prior 10 years. Otherwise, if this is a new venture; we'd have to assess management expectations and weigh up the sustainable growth rate

TWO SCHOOLS OF THOUGHT REGARDING P/E RATIOS - New-State Capital will adopt both schools. On one hand a high P/E ratio of around 10-20 suggests that the company is trading at a premium because investors believe that it will continuously deliver a 1-2% earnings per share. We do not argue against such P/E ratio levels. However, we are looking for stock which has not yet captured this premium; in other words, the company is earning good money and can apportion it to shareholders only that investors do not recognise this – yet. So, we are looking for companies with a lower P/E ratio. It wouldn't make sense to discuss what that P/E ratio will be because it will vary from industry to industry. On that note; we will say that in order to manage risk/reward; it has to

be less than 40% of the highest P/E ratio the stock had over the past five years. However, to reiterate an earlier promise; a filtered search will be run to find some gems out there on the market which come close to our criteria.

A DIVIDEND YIELD OF AT LEAST TWO-THIRDS THE AAA BOND YIELD – This is once again a principle probably personal to Graham. New-State Capital is unlikely to find this criteria being met in the smaller firms. So, no doubt we'll have to take this criterion with some flexibility due to the fact that although we may find a company who have a low P/E ratio, they are unlikely to be paying out such a huge apportionment in dividends. However, there is no harm in adding it to the search criteria, only that from experience I think it may make more sense to leave this rule out and use it as a sweetener in some cases.

STOCK PRICE BELOW TWO-THIRDS OF TANGIBLE BOOK VALUE PER SHARE – This is an enhancement on an earlier point in reference to discount all (or most) of the intangible book value. Once again, such a rule may be relatively stringent and rigid so we have to be flexible to our approach in applying this. Let us presume that the total assets (minus intangible assets) totalled  $\pounds 1$ 

STOCK PRICE BELOW TWO-THIRDS NET CURRENT ASSET VALUE – Once again, this is one of Graham's famous stringent criteria to investing in undervalued stock. Our opinion is that this is the only rule which is far too stringent to adopt. By all means it'll form part of our initial filtering, but we'll take it out of the filter criterion should we find that our search returns no results.

BALANCE SHEET				
Equity	2000	Fixed Tangible Assets	2000	
Debt	1000	Current Assets	2000	
		Current Liabilities	1000_	
		Net Current Assets	1000	
Total Liabilities	3000	Total Assets	3000	
Financials		Income Statement Extract		
Shares in Issue	20000	Profit	1000	
Book Value P/Share*	0.15	EPS	0.05	
Net Current Assets P/Share	0.05	P/E Ratio	2	
Market Price	0.10	Dividend Apportionment	5%	
Market Capitalisation	2000	Retention Apportionment	95%	
BOND RATES**		Dividend Per Share	0.0025	
AAA Bond Yield	5%	Dividend Yield	2.50%	

So, to summarise our investment criteria, we are looking for a company with a balance sheet that has a similar feel to the following simple improvisation:

FIGURE 11 - FICTICIOUS BALANCE SHEET & FINANCIALS TO GIVE US AN IDEA AS TO WHAT WE SHOULD BE LOOKING FOR IF WE ARE TO MEET GRAHAMS INVESTMENT CRITERIA \* Pence – In other words 0.15 = 15 Pence

\*\*<u>http://www.forecasts.org/interest-rate/moodys-corporate-bond-yield.htm</u>

This risk evaluation is basic yet solid. With this in place, we'd be able to almost mitigate a large amount of the risk behind the investment because the balance sheet has a debt financing structure which is manageable regardless of the global economic cycle.

#### **REINVEST DIVIDENDS**

As part of our strategy we have no intention of using paid dividends to form part of our pay-outs. Dividends received will be reinvested into the very same equity. The reason behind this is to simply add fuel to the compounding strategy.

#### FINANCIAL ANALYSIS + EQUITY SEARCH RESULTS

As we can see the above balance sheet is an almost identical match to our 8 point risk / reward criteria. It has been intentionally created to match the criteria, but even after such manipulation; it was impossible to intentionally manipulate it to match our RRC (Risk/Reward Criteria.) Here follows an application of the above balance sheet/financials/income state extract to our RRC.

Criterion No.	Risk Reward Criteria	Does the above Balance Sheet, Financials & Income Statement meet the criteria?
1	Total Debt less than book value	Yes
2	Current Ratio greater than 2	Yes
3	Total debt less than two times the net current asset	Yes
4	Stability of growth of earnings	Yes - (Assumed)
5	Low P/E ratios	Yes
6	Dividend yield of at least two-thirds the AAA bond yield	Nearly - We only have about 1/2 of AAA Bond Yield
7	Stock price below two-thirds of tangible book value p/share	Yes
8	Stock price below two-thirds net current asset value	No

FIGURE 12 – MATCHING OUR IMPROVISED FINANCIALS WITH BENJAMIN GRAHAM'S INVESTMENT PRINCIPLES

Analysis – From the above table (Fig. 12) we can calculate that approximately 80% of our risk/reward criteria have been met. In other words, I couldn't even make up a balance

sheet/financials/income statement to meet Grahams stringent criteria. If I couldn't even make it up with my intentional manipulation then what are the likely chances of finding it in a true live example? First I'll enter all the search criteria, and slowly eliminate the criteria one by one. I will now proceed to enter all 8 Risk/Reward Criterion. I will then take out criterion number 8 (i.e. stock price below two-thirds tangible book value per share) and then re-run the search. If no results then I will carry on until I find a company out there which matches 80% of Benjamin Graham's investment principles.

As you can see from the following picture (our searching system) we have attempted to find a balance sheet which has similar attributes to the one we could tailor to 80% of Graham's core principles.

TEST 1 - The result based on a simple search found me a company called Hotel Corporation. Now, this matches 80% of Graham's principles and has had a declining share price over the last 18 months or so. Maybe undervalued? This will involve further research outside the scope of this dissertation. Please see appendix "Figure 13 - Test 1 – Search Filter"

TEST 2 – I will now 10\* the figures in the search criteria. So, instead of looking for a company with  $\pounds$ 1m in liabilities and  $\pounds$ 3m in assets, I will replace it respectively with  $\pounds$ 10 and  $\pounds$ 30; subsequently amending the rest of the search. The results in this instance, obviously yielded me Hotel Corporation, but in addition we have a company call Absolute Capital Management Holdings Plc and a company called Mallet Plc. Please see appendix "Figure 14 - Test 2 – Search Filter

The 3 companies which we have discovered will require at least 2 years testing, so there is little point in deliberating over it here. However, I am amazed that I managed to find 3 companies that matched 80% of Graham's investment principles. Looking at the chart it seems as though bad news has hit them recently, but they are all trading at huge discounts to assets. This is where our business analysis skills need to enter. Remember that these searches have been done on the UK markets only. When we do get the Reuters systems, not only will the results be more accurate; they will be from across the globe.

TEST 3 - This is fun. I will increase the variables by another 50% to see the results. The results return back to Hotel Corporation. Please see appendix Figure 15 - Test 3 – Search Filter.

On that note we can conclude that there are 3 companies in the UK which meet 80% of Graham's principles. Although I haven't conducted further research into these companies, I'll be sure to add them to my watch list.

# BRINGING PART 1 & 2 TOGETHER

For New-State Capital, the elements of a successful trading and investment strategy are no secret and in order to get better at it, mistakes will be made. It is important to and select something from the market sentiment yet not get too entwined into the news; i.e. the madness of the crowds. It is important to understand charting tools in Forex, and the theories about what they can tell us for example, candlesticks. Although chart patterns may not simply tell us what is going to happen ahead of the current time, it is still also important to understand the reasons behind previous price fluctuations. if you do not know the price history of the item you are trading, you may as well mail your money to some useless cause. Learn about the fundamentals of the market and equity and most importantly the reason we are buying and selling. The further we are further we are from the company we invest in and their actual cash flow statements, the less useful fundamentals will be. Indeed, in large liquid markets, fundamentals are spun by so many people that what everyone in the world knows is a good fundamental, is actually bearish and vice versa. It is important to know what we are doing wrong and right and create and evolve our rules of investing.

# CONCLUSION & THE FUTURE

This write up has been exceptionally frustrating. Although I felt that I have met the objective of documenting a potential strategy, almost every paragraph led me down a path where new theories and approaches will start to emerge thus rendering many paragraphs up for review as they were being typed. An example here is where I started talking about George Soros in relation to corporate earnings. The reader may have noticed that it was slightly rushed, but unfortunately, even that point took me down another research avenue; believe it or not, of Quantum Physics. I guess it's important to draw a line when devising a strategy and this was difficult. However, the great benefit which this report has offered is that my ten year experience and understanding on the markets has been de-cluttered. As trivial as this may sound, it is indeed probably the biggest milestone that I feel

can be achieved in setting up the nucleus of an investment strategy; regardless of whether it will be used or not. Furthermore, given that each sporadic paragraph offered another avenue to explore, it suggests that there is not one correct way of investing and there will never be a definitive answer. As these new investment strategies have emerged we have (contrary to our initial train of thought...) decided that the Forex trading, as a primary income source, will probably be outside our risk criteria for the short term. Interestingly enough, through the various avenues of exploration, many new ideas have emerged which I feel are exceptionally powerful, new techniques. We are definitely looking to research these new strategies; namely statistical arbitrage (or correlation trading) as a minimum risk strategy. This is a very exciting time for the inception phase of New-State Capital. This report hasn't touched on the use of Options within our Hedge Fund, but we will certainly be adopting these as part of our strategy. Unfortunately, we couldn't document new discoveries as and when we came across them for the simple reason that we had to remain within some tidy scope. However, I would like to mention at this point that we will not be disregarding Forex trading. Forex trading offers potential of £ millions to be made in a very short time but we need some more time to research the complementing strategy which needs to be in place to put the probability of success in our favour. This of course will be captured within our new research. The statistical arbitrage system which we aim to develop over the next year, coupled with Option utilisation, seems to be the most exciting strategy of them all and we have already started to make good ground.

During the course of this dissertation we have managed to open up negotiations with investors and fund administrators, which will mean that New-State Capital is closer to achieving its goal as a start up Hedge Fund. The business plan which is now in place is hoping to attract a \$20,000,000 direct investment. Although we haven't really put much in the appendix, maybe I will use this opportunity to illustrate our New-Investment Portfolio breakdown. Please see appendix Fig 16. The New-State Capital formal entity is now logistically established. We have excellent brokers and administrators in place and our team has grown to eight members and we have every faith that exciting times lie ahead where New-State Capital will be a multi-billion pound Hedge Fund.

# APPENDIX

Activate rows	Include 💌	Total assets (m)	~	Greater than or equal to	-	3
	Include 💌	Total liabilities (m)	~	Less than or equal to	~	1
	Include 💌	Shares in issue	~	Less than or equal to	~	20000
	Include 💌	Market cap. (m)	~	Less than or equal to		2000
	Include 💌	Dividend yield	~	Greater than or equal to	~	3.32
	Include 💌	Market To Book Ratio	~	Greater than or equal to	•	0.033
<b></b>	Include 💌	Current ratio	~	Greater than or equal to	~	2
	Include 💌	PE ratio	~	Less than or equal to		2
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	-	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	<b>~</b>	Greater than		0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	•	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than		0.000
	Include 💉	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
		Reset	Search			
esults						
ompany (I	EPIC)	Fun	d. Quote (	Chart RNS	Compa	any (EPIC)

FIGURE 13 – TEST 1 - SEARCH FILTER

Activate rows	Include 💌	Total assets (m)	Total assets (m) Greater than or equal to		~	30
	Include 💌	Total liabilities (m)	~	Less than or equal to	~	10
	Include 💌	Shares in issue	~	Less than or equal to	~	200000
	Include 💌	Market cap. (m)	~	Less than or equal to	~	20000
	Include 💌	Dividend yield	~	Greater than or equal to	~	3.32
	Include 🖌	Market To Book Ratio	Market To Book Ratio		~	0.033
	Include 🖌	Current ratio	Greater than or equal to		~	2
	Include 💌	PE ratio	PE ratio		~	2
	Include 💌	Cash Flow	Cash Flow Greater than		~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	<b>~</b>	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow		Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
	Include 💌	Cash Flow	~	Greater than	~	0.000
		Reset	Search			
Results			111 111			
Company (I	EPIC)	Fun	d. Quote (	Chart RNS C	ompar	iy (EPIC)
Absolute Cap.Mt (ACMH)			Q (	E B	Hotel Corp (HCP)	
Mallett (MAE)		E	<u>Q</u> (	2 <u>R</u>		

FIGURE 14 – TEST 2 – SEARCH FILTER

Activate rows	Include M	Total assets (m)	Greater than or equal to		~	45
	Include 🖌	Total liabilities (m)		Less than or equal to	~	15
	Include 💌	Shares in issue	Y	Less than or equal to	~	300000
	Include 🔽	Market cap. (m)	~	Less than or equal to	~	30000
	Include 💌	Dividend yield Greater than or equal to		~	3.32	
	Include 💌	Market To Book Ratio	~	Greater than or equal to	~	0.033
	Include 💌	Current ratio	~	Greater than or equal to	~	2
	Include 🖌	PE ratio	~	Less than or equal to	~	2
	Include 💌	Cash Flow	<ul> <li>Image: A start of the start of</li></ul>	Greater than	~	0.000
	Include 💌	Cash Flow	<b>\</b>	Greater than	~	0.000
	Include 🖌	Cash Flow	~	Greater than	~	0.000
	Include 🔽	Cash Flow	~	Greater than	~	0.000
	Include 💙	Cash Flow	Cash Flow Greater than		~	0.000
	Include 💌	Cash Flow	Cash Flow Greater than		~	0.000
	Include 💌	Cash Flow	Cash Flow Greater than		~	0.000
	Include 💌	Cash Flow	ash Flow Greater than		~	0.000
	Include 💌	Cash Flow		Greater than	~	0.000
	Include 🖌	Cash Flow		Greater than	~	0.000
		Reset	Search			
Results			10 01			
Company (I	EPIC)	Fur	id. Quote (	Chart RNS	Compa	any (EPIC)
Hotel Corp (HC	P)	E	<u>Q</u> <u>Q</u>	<u>R</u>		

FIGURE 15 – TEST 3 – SEARCH FILTER

New-State Capital							
Capital Invested	\$20,000,000						
Fund Name	Growth	Income	Fund Approtionment	Apportionment Value	Strategy	% ROI PA	Projected Value 5- 10 yrs
Listed Equities	60%	40%	20%	\$4,000,000	Balance Sheet Analysis	10%	\$6,442,040
Equities Arbitrage	0%	100%	30%	\$6,000,000	Statistics & Correlation	100%	\$192,000,000
Unitised Property Portfolio	100%	0%	20%	\$4,000,000	Subcontinent + Africa + ME	20%	\$9,953,280
Private Equity	20%	80%	20%	\$4,000,000	MBO	5%	\$5,105,126
Options Hedging		100%	9%	\$1,800,000	Assist in Equities Arbitrage	10%	\$2,898,918
Forex Speculation		100%	1%	\$200,000	TA + Economic Indicators	30%	\$742,586
Totals			100%	\$20,000,000		175%	\$217,141,950
Total 5-10 yr profit	\$197,141,950						

FIGURE 16 – NEW PROPOSED PORTFOLIO DESIGN

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