



MOTIF: Intro & Macro

The successful macro investor must be some magical mixture of an acute analyst, an investment scholar, a listener, a historian, a river boat gambler, and be a voracious reader. Reading is crucial. ~ Barton Biggs

Scholar, historian, river boat gambler, skilled pit fighter and voracious lover of fine women... All common traits of the profiteering global macro trader.

These talents are the building blocks of what is ultimately an order executioner. When you break trading down to its basics, it's simply entries and exits.

The success or failure of any trader lies with how he makes these entry and exit decisions. And by far the more important of the two are the exits.

But since entries come first, and a number of you have asked for more color on how we select trades, I figured it's time we lay out the nuts and bolts of our trade identification process for the Strategic Portfolio. We've given a broad overview of our philosophy in the handbook, but in this series we'll go deeper into how we scour the world, filter signal from noise, identify asymmetry and then choose a vehicle to put our capital to work.

As macro players who trade any liquid asset (equities, bonds, futures, currencies) around the world; the number of asymmetric opportunities are only limited by our ability (time, energy, and tools) to sift through the chaff and find them. There're many great trading opportunities available to us at any given time which is why we don't marry ourselves to a theme, stock, or bias — we simply cut losses and move on to the next looker.

With that said, the world is plenty noisy and confusing and a trader without a well thought out and defined process of analysis is doomed to flail around shooting blindly at anything that moves.

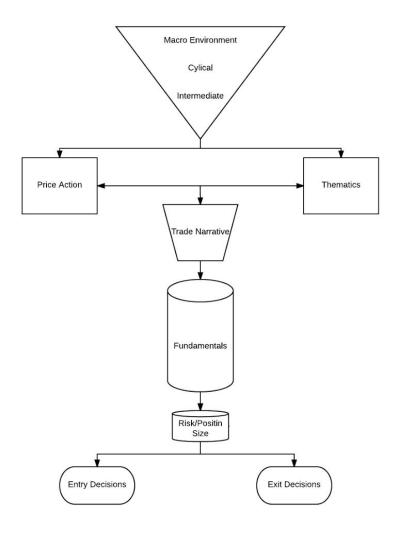
Take the template I'm about to show you, use it, add to it, discard pieces you don't like and make it your own.

Our analysis funnel is intended to provide you with trading opportunities that are convex and possess multi-variable tailwinds — the idea is to take trades that have as many factors in their favor. You'll see that it's an evolved and more detailed iteration of Michael Marcus' trifecta of technicals, fundamentals and sentiment.





Here's a breathtakingly beautiful burning-man-looking diagram that depicts our entire top-down analysis funnel.



We start by identifying the macro environment and trend direction for both cyclical and intermediate timeframes. For time intervals we use the standard intervals from Robert Rhea's book *The Dow Theory:*

There are three trends in the stock averages and in any market: the short-term trend lasting from days to weeks; the intermediate-term trend, lasting from weeks to months; and the long-term [cyclical] trend, last from months to years. All three trends are active all the time and may be moving in opposing directions.

Once the macro trend is established we use price action and/or thematics to select a country/sector/asset class we want to zero in on. Both price action (which establishes the





short-term trend) and thematics need to confirm one another to form a potential trade narrative. From there we put on our surgical masks and go Dexter on the space, digging through the fundamentals until we identify the best vehicle to express the trade. Our confidence levels across all of the above steps combine to determine our risk and position sizing. Then it's just entry and exit...

Simple, simple, simple... Each part of this series will cover a different section of the funnel. Let's begin at the beginning — Macro.

Macro: The Starting Point

The original "Boy Plunger", Jesse Livermore always said the most valuable lesson he learned on his way to becoming one of the greats was his understanding of "general conditions", aka. Macro.

Here's Livermore on Macro from Reminiscences...:

But I can tell you after the market began to go my way I felt for the first time in my life that I had allies — the strongest and truest in the world: underlying conditions. They were helping me with all their might. Perhaps they were a trifle slow at times in bringing up the reserves, but they were dependable, provided I did not get too impatient.

And

I still had much to learn but I knew what to do. No more floundering, no more half-right methods. Tape reading was an important part of the game; so was beginning at the right time; so was sticking to your position. But my greatest discovery was that a man must study general conditions, to size them so as to be able to anticipate probabilities.



Understand macro and how to identify changes in general conditions and you've learned 70% of the game — it's that important.

We are fundamental adherents to K.I.S.S, which stands for "keep it simple stupid"; a popular Marine adage and something important to keep top of mind when developing your market approach. Like Einstein said "everything should be made as simple as possible, but not simpler."





Macro, especially, can quickly devolve into an avalanche of data, spurious relationships and a web of complexity. This is not only headache inducing, but it's also paralyzing to the trader... so we need to steer clear of that.

The study of macro can be broken down into two approaches; fundamental and technical. The aim of both is to identify the direction and longevity of the cyclical and intermediate trend, as well as potential systemic risks and shocks that could change that trend.

In this series we'll cover the basic foundations of each approach. We'll dive deeper into each in future pieces.

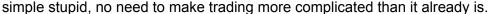
And with that, let's first dive into macro technicals.

The Technicals of Macro

When it comes to trading macro, you cannot rely solely on fundamentals; you have to be a tape reader, which is something of a lost art form. ~ Paul Tudor Jones (PTJ)

Looking at macro from a technical standpoint is simply looking at price and determining which direction the cyclical and intermediate trend is headed.

Besides spending time developing your tape reading (charting) skills; the simplest way to determine these two things is to use moving averages. Again, keep it



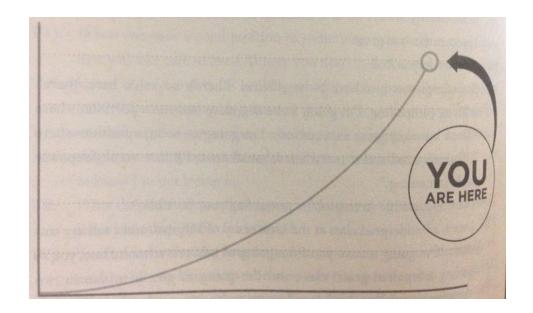
For that, let's turn it back over to PTJ:

My metric for everything I look at is the 200-day moving average of closing prices. I've seen too many things go to zero, stocks and commodities. The whole trick in investing is: "How do I keep from losing everything?" If you use the 200-day moving average rule, then you get out. You play defense, and you get out. I go through this exercise when I'm teaching a class on technical analysis. I'll draw a hypothetical chart like the one below-- it will go all the way to the top on a clean sheet of paper on a white board.









And then I ask, "Okay, all you know is what you see right here. How many people want to be long and stay long on this chart?" And about 60% will raise their hands, yes. And how many want to get off this investment and sell it? Then 40% or so will say get out. And I say, "You 40% should never ever invest your own money in you entire life! Because you've got this contrarian bug, and it's the greatest way to ruin that there possibly is. It means you're going to buy every brand -- you're going to buy things that go to zero and sell things that go to infinity, and one day, you're going to die.

The direction in which the 200-day moving average is pointed is the direction of the cyclical trend... pretty advanced stuff I know, but it works which is why PTJ uses it.

As a simple example, take a look at the 200-day moving average (blue line) in the S&P 500 from 2012 to 2015. It was sloped straight up which meant a bullish cycle. That was a great time to have a long bias in the equity markets.







We use moving averages the same way to determine the intermediate trend. But instead of the 200-day, we use the 50-day moving average.

Continuing with the S&P example, check out the 50-day moving average (pink line) during the last few months of 2012. It's sloped downwards, meaning the intermediate trend was down.



As you can see, there will be times where individual timeframes don't match up. In this case the cyclical trend is up, while the intermediate trend is down.

The idea is to take trades where all three time frames line up; where the cyclical, intermediate, and short-term are all headed in the same direction. It's about getting your zen on and going with the flow... the trend is your friend except at the end where it bends... not sure who said that, Schwager or Seykota?.

Occasionally we'll take mean-reversion trades that are well over bought/sold from their 200-day MA. But even these are typically trend reversals where we believe the 200-day is about to change direction.

Depending on what you're looking at, it's always good to determine the cyclical and intermediate trend directions for not just the broader market, but for the sector and stock itself.

Steve Cohen said in his *Market Wizards* interview that 40% of a stock's movement is due to the market, 30% to the sector, and only 30% to the stock itself. Identifying profitable opportunities is about finding something with a clear runway and as many tailwinds as possible. Using the double moving average approach for the market, sector, and stock is a good easy way to do this.

Now onto the fundamentals of macro that drive the direction of these trends.





The Fundamentals of Macro

The most important fundamental...

The dictionary defines the word fundamental as, "a central or primary rule or principle on which something is based."

If there's one primary rule which drives all fundamentals, it's liquidity. Liquidity is the Mac-Daddy of all fundamental inputs. And not surprisingly, it's the least followed and understood.

Here's one of the greatest of all time, Stanley Druckenmiller, on the importance of liquidity (emphasis is mine):

Earnings don't move the overall market; it's the Federal Reserve Board... focus on the central banks and focus on the movement of liquidity... most people in the market are looking for earnings and conventional measures. It's liquidity that moves markets.



So what is liquidity exactly?

In simple terms, **liquidity is demand**. It's the willingness to exchange safe assets (money) for riskier ones (ie, stocks and bonds) and convert savings into consumption. And this <u>demand is</u> driven by the tightening and easing of credit.

Now what we usually think of as money (the stuff we use to buy things) is comprised of both hard cash + credit. The amount of physical cash in the system is relatively stable and small (approx. \$3T cash to \$60T credit in US). But credit is extremely elastic because it can be created by <u>any</u> two willing parties. And it's this flexibility that makes it the main factor in driving liquidity/demand.

The majority of credit, and therefore money, is created outside the traditional banking sector and government. Most is created between businesses and customers. When businesses purchase wholesale supplies on credit; money is created. When you open a Best Buy credit card to purchase that new flat screen TV; money is created. And when you purchase stocks on margin from your broker; money is created.

The logic is simple. The more liquidity in the system, the more potential demand. Credit liquidity is the largest driver of the business cycle and bull/bear markets.





This is how the business cycle works in a credit based economy.

"It's the Fed stupid..."

Everything starts with the central banks because they set the cost of money (interest rates) which are then transmitted throughout the system; expanding and contracting liquidity at their whim.

The Fed has three primary policy tools to do this:

- 1. Discount Rate
- 2. Reserve Requirements
- 3. Open Market Operations

I can write a small book on the inner-workings of the Fed and the many other tools they use to drive liquidity, but for the purposes of this piece we'll just refer to all the Fed's tools as the Fed Funds Rate. (We'll break down the Fed in detail in a later piece.)

The Fed has three mandated objectives [1] maximum employment [2] stable prices and [3] moderate long-term interest rates.

Inflation and unemployment are the primary drivers of Fed policy.

The business cycle starts, and a bull market begins, after the Fed has lowered the funds rate by a significant <u>relative</u> amount.

This is an important bit to remember. It's not the <u>absolute</u> rate of interest but <u>relative</u> changes in the interest rate over a period of time that are important. A minimum of +/- 3% on the Fed's Fund Rate seems to be the general amount that causes cycles to turn. (This tends to change under significant inflationary regimes where a higher relative change in rate is needed.)

There is a typical lag of 6-18 months between changes in rates and their reflection in the economy and markets. This is why you see many quant studies mistakenly claim no connection between interest rates and stocks. They're only looking for immediate direct causal links.

But this is not how markets work. Markets are nonlinear dynamic systems which is why logic often trumps quant studies when trying to understand them.

Lowering the Fed Funds Rate causes a domino liquidity effect that transmits throughout the whole economy:

The lower rate transfers to private rates set by banks, lenders and businesses.





- As a result, borrowing is cheaper and more attractive which causes consumers and businesses to borrow and spend more.
- Existing debt becomes cheaper to service leaving consumers and businesses with more money to spend.
- The discount rate at which businesses and financial assets are valued is lowered, which
 increases the present value of assets, creating a wealth effect, which again increases
 spending.

It becomes a cycle. Cheaper credit increases borrowing and boosts demand. Consumers and businesses borrow and spend more. And since one person's spending is another's income, personal incomes and corporate earnings rise, further driving demand.

This new demand inflates asset prices (ie, homes, businesses, stocks etc.). Rising asset prices raises people's net worth which strengthens their credit profile allowing them to borrow even more.

A reflexive positive feedback loop is created in liquidity which goes on until the cost of money finally rises by a significant enough relative amount.

Typically this occurs when the Fed becomes concerned about rising inflation (one of its three mandates).

There's different types of inflation but the most typical kind seen near the end of a business cycle is a mix of demand-pull and cost-push inflation.

Demand-pull inflation occurs when the credit driven demand of an economy bumps up against productive capacity. This happens because credit demand can be created much faster than what an economy can productively support. This leads to too much money chasing after too few goods, resulting in higher prices.

The cost-push inflation that occurs towards the end of a normal business cycle is primarily caused by a tightening labor market.

The new wave of liquidity demand pushes companies to hire more workers to meet the influx. Eventually this demand for labor drives down unemployment to its natural rate, which is a combination of structural and frictional employment that exists in an expanding economy.

Past this natural point, the continued increase in demand for more workers starts driving up the cost of labor and we see wage pressures. Labor is by far the largest cost for businesses and this cost is passed on to the consumer in the form of higher prices.





When the Fed sees inflation ticking past its preferred 2% level, it starts its hiking cycle. The raising of rates starts slowly pulling credit (demand) back out of the economy and market. The liquidity feedback loop that drove the business cycle begins to shift into reverse — remember there's typically a 6-18 month lag between cause and effect.

- The higher Fed rate transfers to higher rates in the private sector.
- Credit becomes more expensive so consumers and business borrow less and demand falls.
- The cost of servicing all this new debt goes up and consumers and businesses have less income to spend.
- The discount rate at which businesses and financial assets are valued goes up, lowering the present value of assets, sending the wealth effect into reverse.

Spending begins to fall and since one person's spending is another's income; incomes are reduced. Businesses and investments that once made sense when the discount rate was low and demand high begin to get repriced. Companies go bankrupt. Workers get cut and credit spreads widen as business and consumer loans are defaulted on as payments are missed.

This further tightens liquidity, making debt more expensive to service and new credit less desirable, thus pulling demand even lower. This is the deflationary turning point of the business (credit) cycle.

This process plays out until the Fed cuts rates by a significant enough relative amount. This causes the process to start all over again.

That is the macro of the business cycle. All macro consists of is looking around the world and gauging liquidity in different regions of the globe and then learning to understand the interactions between these various liquidity regimes.

And remember, the most significant lever on global liquidity regimes is the US Fed. The dollar is the world's reserve currency; meaning most global trade and financing is done in greenbacks. So when the Fed tightens liquidity, it doesn't just tighten in the US, but it tightens credit conditions all around the world; especially in emerging markets that are dependent on dollar financing.

When a company or country borrows in dollars they're essentially taking a short position against USD. And when the Fed raises rates, the cost of that debt goes up and global liquidity (demand) contracts.

The old market adage "don't fight the Fed" exists for good reason — heed it.

Gauging Liquidity





Now that you know how the business cycle <u>really</u> works and also how to use moving averages to identify current cyclic and intermediate trends, I'll show you the most important gauges of liquidity. These will tell you everything you need to know about the longevity of the current trend. And the longevity is the likely duration of the current trend which is determined by understanding the underlying drivers and potential risks to the broader movement.

These gauges can be broken down into three groups:

- 1. Central Bank
- 2. Private Market
- 3. Inflationary

The **Central Bank** gauges are simple. We want to pay attention to the direction and amount of change in the policy rate.

For the US you can find that information here:

- ➤ Fed Discount Rate
- ➤ <u>Effective Fed Funds Rate</u> (this is the interbank rate for the Fed funds market)

And when the effective rate is below zero, like when the US was doing QE, you'd have to look at the Shadow Fund Rate which can be found here (we'll be going back down below zero in the next cycle):

➤ Shadow Fund Rate

If you're looking at Europe you can find their policy rates here:

- ➤ Euro Area Discount Rate
- > ECB Shadow Rate
- ➤ <u>United Kingdom Shadow Rate</u>

These rates then filter into **Private Market** rates. While central bank rates don't change much, market rates do. They provide a better gauge of short-term liquidity than CB policy rates. Here's the important market rates you need to monitor:

- ➤ Bank Prime Loan Rate
- > 3 Month Libor Rate
- > Ted Spread
- ➤ BofA Merrill Lynch US High Yield CCC or Below Option-Adjusted Spread
- ➤ BofA Merrill Lynch Euro High Yield CCC or Below Option-Adjusted Spread





- ➤ BofA Merrill Lynch Emerging Market High Yield CCC or Below Option-Adjusted Spread
- ➤ BofA Merrill Asia High Yield CCC or Below Option-Adjusted Spread

Higher-yield debt, which is lower quality (higher risk) credit, is more sensitive to perceived risks. Watching the BofA CCC option adjusted series can help you gauge risk sentiment and intermediate liquidity.

The high-yield bond ETFs are also great for this:

- ➤ Junk Bond ETF (JNK)
- ➤ High Yield Corporate Bond ETF (HYG)

You also want to watch delinquency rates because these are a driver of private rates and tell a lot about where we are in the credit cycle.

- ➤ Delinquency Rate on Commercial and Industrial Loans
- Delinquency Rate on Credit Card Loans
- ➤ Delinquency Rate on Consumer Loans

You want to look at both the cyclical, intermediate and short term trend on these liquidity gauges. This will give you a reading on market sentiment and investor's assessment of risk for the different timeframes. A significant change in sentiment will always show up first in credit and that shift will generally be preceded by deteriorating or improving credit fundamentals.

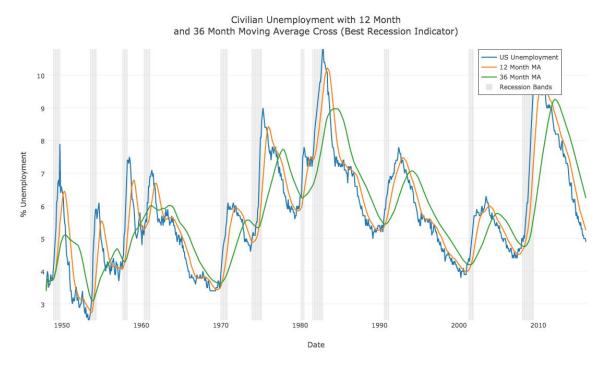
Inflationary gauges are important because inflation and market valuations are what drive the Fed to eventually tighten policy. The Fed's preferred measures of inflation are:

- > Core PCE
- ➤ Core CPI
- ➤ Core PPI

And finally since labor is the largest cost to production in the economy, the change in the civilian unemployment rate serves as the *best* leading indicator of recession. Take a look at the chart below.







This chart is from our site's dashboard that we're building. It shows civilian unemployment with both a 12 and 36 month moving average. Unemployment doesn't bottom until liquidity starts tightening. The further it falls, the more pressure on wages increase, driving inflation leading to a tightening of liquidity.

Tighter liquidity drives unemployment higher. And as you can see in the chart, unemployment crossing over its 12-month moving average has preceded <u>every</u> recession for as long as there's been data.

Combining the above signals allows us to paint a clear picture of liquidity in the system.

Right now (September 2016), the Fed gauges, using the Shadow Funds rate combined with market rates, show that we're in the middle to later stages of the credit cycle — a cycle that has been extended because of the Fed's move to back off rate hikes after the first one in December of last year. Seeing that inflation is still below the Fed's target and unemployment is still well below its moving averages and continues to fall, liquidity is likely to remain strong into the end of the year. Both the 200 and 50-day moving averages are pointed up on the major indexes which means the trend is up.

And that's it... that's the basics of how we view macro.

There's a number of other indicators like industrial production and ISM that you can look at to get a sense on the health of the economy. We'll discuss how we use these in our next piece on





macro. But remember, these all mostly tee off liquidity. Liquidity is causal, it's forward looking, and the other data points are just reflections of where we're at.

Macro Conclusion

A common mistake among many macro traders (even seasoned ones) is to play the 5-minute macro game and constantly change their cyclical market views after every new bit of conflicting data or market fluctuation. Don't do this.

Macro is a slow moving beast. It doesn't change day to day or even week to week. You only need to update your intermediate view once a month and your cyclical view every quarter. Even then, they should seldom change most of the time.

There will be long periods where the macro liquidity picture is unclear. These can last months. During these times it's wise to sit in cash or trade in other markets where the liquidity trend is more discernible.

The key to macro trading is having infinite patience and only striking when the environment is ripe.

There's also a common tendency for people to partake in macro mental masturbation. They'll study obscure macro data and come up with really complex theses about why such and such is going to happen. And then they lose their shirt because they bet against the 200-day moving average.

Traders do this because they want to feel smart. It's an exercise in ego that equates to a loss for the portfolio.

Remember: keep it simple stupid. To identify the macro environment all you need to do is:

- 1. Use the 200 and 50 day moving averages to determine trend direction
- 2. Use liquidity gauges to get a sense of the longevity and potential risks for the trend
- 3. Form your macro directional view (ie, bull or bear) on the two macro time frames
- 4. Cut out the noise, don't over evaluate, trade the trend until the trend & liquidity regime change

Simple, simple, simple.

Always keep these words from Druck top of mind:





I never use valuation to time the market. I use **liquidity** considerations and technical analysis for timing. **Valuation only tells me how far the market can go once a catalyst enters the picture to change the market direction.** The catalyst is **liquidity**, and hopefully, my technical analysis will pick it up.

We'll cover how we look at price action and thematics in our next piece on the Macro Ops Trade Identification Funnel (MOTIF).

Suggested Reading List for this section:

- Bridgewater's "How The Economic Machine Works"
- Solow's "Manias, Panics, and Crashes: A History of Financial Crises"
- Sperandeo's "<u>Trader Vic"</u>
- Reinhart's "This Time is Different"
- Pettis' "Volatility Machine"
- Drobny's "Inside the House of Money" and "Invisible Hands"
- Soros' "The Alchemy of Finance"
- Gonzalez's "How to Make Money with Global Macro"