

Notes from the book, *A Brave New World*;

A Brave New World is excellent. It gives a clear concise picture of why the economy has acted the way it has, in the 2000s. Their conclusions make so much sense. If you'd like to understand where we've been and how things operate in the new economy, read my notes on the book.

There's one item I don't agree with the writers about. That's what the crash will look like, when it comes. Their conclusion is that we'll experience a deflationary boom. However, I think it will be a deflationary bust.

Regardless, it's a great book.

The book can be found at: www.gavekal.com

[Note: Page reference numbers listed at end of paragraph(s)]

Chapter 1

Typical company does the following

- Design product
- Manufacture product
- Sell product

This is the blueprint for a vertical company like, Ford or GM etc

If vertical company goes international, it would build manufacturing plant in country it wanted to sell in.

The New Company

- Produces no where and sells everywhere
- This is a blue print for a *Platform Company* (PC)

Platform Company knows

- Where the clients are
- What their clients want
- Where the producers (manufacturers) are

Platform Company organizes by

- The ordering of clients
- The delivery of the producers

In-house, a Platform Company does

- R&D
- Treasury
- Marketing

Platform Companies outsource

- Everything not listed immediately above

- Example companies
 - Dell, IKEA, Wal-Mart

This means that the difference between a vertical and platform company is the manufacturing (producing) stage of a business model.

Manufacturing eats and ties up capital. It's labor intensive. It forces companies to keep expensive inventories. Asset values of manufacturing companies are lower than those that do not manufacture products because of the low return on investment capital (ROIC).

Finally, the manufacturing industry is extremely volatile. This volatile aspect is the key to the why the economy has behaved the way it has, in the early 2000s. Basically, we are exporting our volatility to third-world countries. (p6)

Think about how many hotel companies are shedding the hotels and going into the management business. They don't want to be in the real estate business due to the expense of costs to maintain the buildings. These new types of hotel companies are simply shedding poor capital producing assets. Then, they can have a light balance sheet and react quickly when they need to shift due to the business climate. (p7)

A platform company has four important pillars that its' model rests on

1. free trade
2. technological progress
3. recurrent overcapacity
4. ability to move goods, without significant difficulty (p9)

Explanation of items above

1. free trade
 - a. If goods are being produced cheaply in China, then, we must have free trade with China so we can get to those goods.
2. technological progress
 - a. Especially true in communications (where technology allows platform companies to manage a creative process where design, production and sales are no longer centralized.)
3. recurrent overcapacity
 - a. allows platform companies to have a huge amount of goods to choose from
4. ability to move good around without significant difficulty
 - a. roads, ships, trucks, etc (p9)

Two types of growth

1. Schumpeter
 - a. Invention growth that is called "Creative Destruction"
 - i. example
 - email killed TELEX, almost killed faxes, etc

2. Ricardian

a. rational organization of talent

i. example

- If a doctor can get paid more by typing reports, he'll fire his secretary. This is unlikely to happen. The meaning: it's best for a doctor to stay a doctor and not be a secretary.
- Said differently, it doesn't pay to have PhDs as doormen when they should be in their own field, doing what they do best.

To have Ricardian growth you must have

- low trade barriers

To have Schumpeter

- low taxes and easy access to capital
- and, the ability for a company to fail (go bankrupt, not save it because it's "too big to fail") **(p10)**

Interesting comment on page 11 regarding inventions: *Kill the exchange of ideas, you kill inventions*

The industrial revolution multiplied man's physical strength while the Internet revolution multiplied man's intellectual strength **(p13)**.

China's products are much better quality than they used to be. China will work through the recent years of excess capacity by exporting. To do that, they will undercut others. **(p15)**

Note: terrorists want to destroy our transportation grids, or power grids etc, rather than assassinate political leaders. **(p16)** [Note from Jim: I'm an avid JFK assassination reader. Throughout many of these books, about the assassination, the writers talk about the new era of political assassination. However, most of the books were commenting from a 1963 perspective. Lastly, many of us grew up with political assassination as the norm. It doesn't hold true in America anymore. Now it's about infrastructure, hence, the economy.]

Deflationary shocks are in the cards for the US. There are 2 types of deflationary bubbles:

1. bubbles on non-productive assets (NPA)
 - a. real-estate
 - b. land
 - c. gold
 - d. 'tulips'
 - e. etc
2. bubbles on productive assets (PA)
 - a. canals
 - b. railroads

- c. telecom lines
- d. etc

In the first type of bubble (NPA) prices are bid higher due to the rarity of the asset.

For the second type of bubble (PA) prices are bid higher because people mis-judge the future return on the asset.

When the bubble bursts for:

1. NPA
 - a. we are left with no more land, gold, tulips, oil, than what we started with
2. PA
 - a. productive capital has been put in place and can now be exploited by the current or new owners
3. examples
 - a. NPA
 - i. When the tulip market crashed (1637) people were left with an asset with little or no value; tulips.
 - ii. When the stock market crashes, people are left with an asset with little or no value; stock ownership in a company is worth far less than purchased.
 - b. PA
 - i. Railroads. When that railroad market crashed, in 1871, they still had an infrastructure in place. The new owners acquired the railroad for much less than was put into it. People actually end up benefiting by lower costs passed off by the new owners.
 - ii. Telecom. When that market crashed in 2001, we were left with a huge infrastructure that was acquired for cents on the dollar. Those savings were passed off to the consumer.
 1. Example: consumers were able to place phone calls for much cheaper. Data was transferred over the Internet for cheaper rates.
 2. *This is precisely why we've seen so many call-centers move off-shore. It's really cheap to push the data around the existing infrastructure cheaply.*
4. Another difference between the two bubbles is how the original assets are financed
 - a. If the asset was financed by banks, the banks capital disappears & the velocity of money collapses (more on velocity later).
 - b. If the bubble was financed by the capital markets (corp bonds, junk bonds, equities etc) only those owning the assets take a bath. If the assets are leveraged, then, the assets get transferred to new owners.
5. worst type of bubble
 - a. NPA financed by banks
6. best type of bubble
 - a. PA financed by capital markets

7. examples
 - a. Japan, 1980s
 - i. it was the worst type of asset bubble
 1. real estate financed by banks
 - b. US bubble of 2001
 - i. best
 1. telecom, computers, Internet financed by capital markets
(p18)

How the Bubble Bursts

1. Everything is fine as long as ROI (Return on Investment) is perceived to be higher than financing the investment.
2. If return on investment falls below the cost of financing, then, the bubble begins to burst. **(p19)**
3. Chronology
 - a. sales begin to fall in that sector, then,
 - b. overcapacity
 - c. if sales don't pick up
 - i. creditors call in loans, then, money supply shrinks
 - d. banks go under
 - e. prices go down further
4. In this scenario any debt (held by the person who owns the asset at the time of the bubble bursting) skyrockets in the terms of ROI.
 - a. debt becomes extremely expensive to own
 - b. *the price of the asset is falling while the cost of the debt remains the same.*
 - c. repaying the debt becomes impossible
 - d. bankruptcies begin
 - e. cash is king
5. in a supply-side cycle, the economy moves in 3-phases
 - a. asset/debt inflation
 - i. two components stick out
 1. belief in the new paradigm
 2. the use of financial leverage (which leads to over capacity)
 - b. the crisis
 - i. participants realize the cost of \$s are more than the ROI
 - c. debt deflation
 - i. cost of \$s move even further above cost of ROI.
 - ii. prices put on collateral for loans collapse
 - iii. bank failures & bankruptcies multiply
 - iv. *price fall, interest rates rise.* (p19)
 - d. Cycle ends when the productive assets move from financially weak to the financially strong. This must happen for the deflation to end. (p20)

- e. For assets to move from weak to strong, several things must take place
 - i. willingness for policy makers to allow companies to go bankrupt
 - ii. bankruptcy laws that permit creditors to gain control of the under performing assets
 - iii. efficient markets which permit the transfers of under performing assets from weak to strong
- f. If the three items mentioned above are *not* allowed to happen, the lousy performing companies stay open. They waste capital, drag down ROI for competitors, maintain excess capacity, and keep prices artificially low (think Japan, in the 1990s).
- g. This problem didn't just happen in Japan. Think about the "to big to fail" syndrome in the US, Italy and the UK in the 1990s. The US is still operating from this belief...or...at least that's what the street thinks. **(end page 20)**

China

Except for Shanghai, the bubble in China has NOT been in real-estate/land. It's been in infrastructure. Like, fast trains, airports, factories. Example: China has over 300 car manufacturers and 3000 ball-bearing companies.

China's capital spending has been financed in one of three ways

1. Retained earnings
2. Foreign direct investment
3. Direct bank lending – which is an extension of the government, since they own the banks.

China is NOT allowing underperforming companies to fail. The gov is carrying bad debts/loans on these companies equivalent to 40% of GDP.

The sharp increase in capital spending, recently [2005], has been financed by the gov. Hence, a big part of China's growth is occurring on the gov balance sheets directly. Example: Spending by local authorities, towns. Or, the growth is showing up indirectly, meaning commercial banks. **(End pg 21)**

Conclusion:

When return on capital [what I've been referring to as ROI], in China, falls below cost of capital, we won't see a fire sale on leveraged assets that is typical of a supply side economy deflationary bust because many of those assets are on the gov's books. **(p22)**

Chapter 4

Discontinuous CPI

Fisher's equation is: $MV = PQ$

(This equation launched econometrics).

Where: M = Money Supply

V = Velocity

P = Price

Q = Activity

Velocity can be thought of as the velocity of money (dollars). Most economists today assume that increases/decreases in M would impact Q first & foremost. This is particularly true because in every economic cycle 1946-1990 that's exactly what happened. But, today that doesn't hold true. That's because P is taking some of the adjustment. **(pg 23)**

Example: Since 1990, each *deceleration* in liquidity and economic growth, inflation made lower-lows. With each *acceleration*, higher highs.

The old model ($MV = PQ$) was this:

1. when average costs went up so did average prices.
2. This is not the case in the 2000s, as the recent spike in oil and metals show [2005].

Who would have thought the USD could fall 35%, oil triples, copper triples, shipping rates triple, and *CPI remains the same (under 3%)*? That's because things *are* different this time.

The difference is:

1. **Prices are at the margin not the average.**
 - a. [Note from Jim: This is a *key concept* throughout the book. I think it's very important to grasp if you'd like to understand how the new economy works. Read on.]
2. examples
 - a. commodity markets
 - i. They aren't stable but they are allowed to move freely on the information the market has. **(pg 24)**
 - ii. With the combination of globalization and technology, platform companies, like Wal-Mart, makes-a-market for any goods, products, or services, etc. These types of companies know very quickly if there's excess capacity *out-there*. And what price that capacity can be rented at.
 - iii. Said differently, platform companies engender an optimization at the lowest possible price of the global capacity of production.
 - iv. So, price will stay low if there's excess capacity and the infrastructure is in place to move those goods.

v. **Add this up and you get dis-inflation.**

Side note from pg 25

As long as saving rates remain high across Asia, the cost of capital will be low. With the cost of capital low, companies will continue to be too-big-to-fail. **(pg 25)**

In the past, price increases meant a fall in consumer spending (disposable income). Today, price increases lead to a fall in corporate profits for the companies that can't increase productivity fast enough & who have no pricing power because of the Internet and globalization.

This explains why the rise in commodity prices, witnessed in recent years, has neither hurt the western consumer or western companies [2005]. Instead, the rise in commodity prices has killed Chinese companies.

1. Fact: The Chinese equity market stinks!
2. It's been going down since July of 2001 and made 5 yr lows in 2005.
3. That's because we (the USA) are exporting our volatile manufacturing sector to China.
4. all their input costs have risen & they have excess capacity
5. The end result: *Shrinking Margins & Falling Stock Prices.* **(pg 26)**

The platform company business model has opened the way to a world in which inflation is dis-continuous. Inflation wipes out the margin of the company, instead of killing the consumer. Those companies are usually in ASIA. MEXICO, etc.

Chapter 5

Getting/Being Rich is Getting Expensive

Conspiracy theorists say that inflation data is being manipulated by the Central Banks. What's the truth? (p29)

In some categories inflation has really taken-off. In others, it's fallen. Balance them out and inflation is *not* being manipulated by the Central Banks. What one must look at is exactly what costs are skyrocketing.

1. Hair care
2. Holidays
3. Restaurants
4. Healthcare
5. Gasoline
6. Oil
7. and some others.

However, the following items have plummeted in price

1. Clothing
2. Shoes
3. Consumer electronics
4. and others

[Let's see how this works]

1. China
 - a. enters into global economy & we also have the emergence of the platform company.
 - b. China has pushed down prices of all mass-produced goods. They have a virtual limitless supply of mass-produced products and cheap labor. They also mis-allocate capital all the time. This ensures cheap products.
 - c. The downward pressure on manufactured products from China has caused other products to rise in price. This is because China can't produce certain items like
 - i. oil
 - ii. legal infrastructure (financial services) or
 - iii. things that can't be traded like housing, & education (p30)
2. *If manufacturing prices are falling 3-4% a year, then, there must be some other items that are rising fast enough to maintain inflation levels of the 3-4% rise we are experiencing.*
3. In a sense, the ever cheaper consumer-goods have allowed other things in the economy to rise. Things that Asia can't produce like financial services, oil, housing etc. This can be seen partially in the things China isn't producing like those mentioned above and you can include luxury properties around the

world to that list.

4. This brings us to the most surprising part of the inflation story. As the prices of financial services and luxury properties [for example] are driven higher, service producing countries like Britain, Hong Kong, and the USA get richer relative to other countries which specialize in manufacturing. Within these service countries the rich will get richer because they are providing these high-end services which are unaffected by competitors. However, the problem with this is that the rich people are all chasing the same items, **(p31)**
 - a. housing
 - b. education
 - c. financial services, etc **(p32)**

[Note from Jim: This is a *key concept* concerning inflation. They're stating that inflation only lies in certain sectors. And, the sectors that everyone *needs*, like housing, education, and healthcare are all being chased by the masses in the US. That's causing inflation in our country, but only in those areas. Meanwhile, we're paying extremely small amounts for consumer electronics, clothing etc.; all those items that *can* be outsourced to other countries. As where *housing, education, healthcare, etc., can't be outsourced.*]

Chapter 6

Platform Companies & The Fall of Volatility

1. western companies are becoming non-industrialized
2. industry has moved to China, Poland, Korea, Mexico etc
3. the US, UK, & Netherlands are becoming post-industrialized nations
4. add this up and you have
 - a. The exportation of manufacturing jobs which has killed volatility in the US (and other post-industrialized nations) economy. **(p33)**

The industrial part of production is the most cyclical part of the 3-part business cycle

1. design
2. produce (manufacturing)
3. sell **(p34)**

When the economy weakens more than was forecast western companies are not left holding the excess inventories, excess labor, etc. It's the producers [manufactures/suppliers] from the new manufacturing countries who are left holding the volatile manufacturing sector.

A western platform company simply orders less from the manufacturer. This leaves the manufacturers holding that volatile sector; hence, they are left with the problem of laying-off workers and selling their excess inventory for cheaper. *This is the excess capacity part of the platform company equation.*

Selling their excess inventory at a cheaper price is to the benefit of the platform companies.

The platform company can then invest their time & capital into marketing and designing products.

In the old economy [industrialized] companies ran in 2-modes when there were economic problems. The variable of adjustments for the economic cycle were either

1. employment
2. profits

If labor was tight companies retained workers and took the adjustment to the bottom line.

If labor was loose, they fired workers and boosted profits.

But in today's economy, with services becoming a bigger part of the workforce, the variable for adjustment is no longer employment or profits. **IT'S IMPORTS.** [my emphasis] **(p34/35)**

Industrial production volatility has taken a dive as we've outsourced the manufacturing to other countries. Volatility of employment has also taken a dive because we aren't seeing the mass hiring and firing of manufacturing jobs in the US anymore. **(p36)** Corporate profits have increased relative to the GDP because of this also.

Volatility of imports has risen. **(p37)**

The exportation of the volatile manufacturing process allow for:

1. the US Government to plan for consistent tax receipts
2. Consumers to experience less volatile employment market, therefore, spend with greater confidence.
3. companies to plan for future earnings more accurately **(p38)**

Chapter 7

When economic cycles are less volatile, companies can borrow more capital. (See Modigliani's work. 1985 Nobel winner.)

Companies can leverage with confidence. The ability to service debt is easier, less uncertain.

The same factor holds true for the consumer. They feel more confident, spend more, and borrow more.

The historic problem with leverage has been:

1. rising interest rates on variable loans
2. ability to repay debt after job loss

The ability to service debt is less of an issue with the emergence of the platform company. (p39)

Example:

1. 2000-01 tech bust
 - a. delinquency rates went up minimally
 - b. in-fact they stayed close to record lows (p40)

Low volatility = more debt [Note from Jim: Huge concept in the book. Think about it.]

UK, Australia, Sweden are all moving through the same debt cycle as the US was/is. (p41)

Catastrophic wars & natural disaster can kill the huge pool of liquidity we've been drawing off of since WWII.

We're the first generations in American history that can draw from our parents & grandparents savings. (p42)

Chapter 8

Real Estate

More often than not a highly leveraged country sinks money into real estate.

1. Economic transformation = rise in consumer disposable income due directly to the globalization process.
2. Prices decline in many areas so consumers tend to put money into homes. [Because of the deflationary affect from the cost of goods which are plummeting.]
3. As goods become cheaper houses become more expensive. **(p45)**
4. US worker is far less likely to get fired in an economic downturn today compared to a generation ago. Therefore, he has stronger visibility to his future earnings.
5. The structure of the workforce has changed. There are more households with 2 incomes. If a person gets laid off, there's most likely a second income within that household. Therefore, they can still service their debt obligation.
6. Main driver in real estate prices has been the collapse in long-term interest rates. **(p46)**

[Note from Jim: two interesting items below]

1. When banks begin to foreclose the banks will become desperate sellers. So watch delinquency rates vs. historical levels. That'll be a good indicator for timing a housing bubble burst.
2. UK and Australia real estate markets are more sensitive to central bank rate hikes because there are more variable rates in those countries compared to the US. **(p47)**

Summary of reasons for the housing price rise:

1. rise in disposable income
2. fall in interest rates
3. new methods of financing
4. dual income households **(p48)**

Housing prices have adjusted dollar for dollar with the decline in long-term interest rates over the last 10-years. [1995-2005. See charts on pps 48-49]

Chapter 9

Trade Balance

Will a large US trade deficit lead to the collapse of the USD? (Meaning, foreign countries won't buy our USDs.) The book states the answer is no. See pg 51.

Economists shouldn't measure global trade-flows in terms of sales- without looking at profits which is what trade numbers do- and deriving investment implications from these measures. (p52)

If our (the US) companies profit margins are 20% and manufacturing companies, in other countries, are 1% which do you want to own?

Economists assume that imports & exports must balance, otherwise we'll move into debt, then, one day we'll have to *pay the piper*. This is true only if margins on imports & exports are the same. (p52)

In Anglo-Saxon countries:

- Margins are high, low sales, low volatility of industrial production and employment.
- Domestic workers have stable income on which they can place a fair amount into debt.
- The urge to save, therefore, is non-existent.
- Domestic companies have positive cash flows and very high return on investment capital (ROIC).

In emerging markets:

- Low margins, high sales, high volatility of industrial production and employment.
- Unstable incomes on which they invest very little into debt.
- Domestic companies, in emerging markets, have low ROIC, negative cash flows, accumulate huge amounts of precautionary savings (large shareholder equity) should a liquidity crisis hit.
- Domestic savings rates (in emerging markets) are high. (p53)

Trade balances are computed on sales. Implicit in this computation are two hypotheses:

1. margins on imports & exports are the same
2. sales must balance each other over the long term

Both hypotheses are wrong. Instead of sales balance, goods can be exchanged for assets. This doesn't mean the USA will get poorer either. (p53) Read on.

If three US companies make a net profit of \$245 from the sale of a computer (MS, Dell, Intel), and that \$245 is put to work in the companies stock, and these stocks are trading 20-times earnings this means the market cap for the sale of the computer is $\$245 * 20 = \$4,900$.

The computer was built abroad at lower margins. The workers, in the country that built it, save money. (Remember the bullet point above under “In emerging markets”). Those savers are going to want to invest their money in America, where returns are safer and higher, and where there’s less volatility in the economy.

If demand for, say, platform companies products, like Dell computers, goes up, so will the trade deficit. Say their sales go up 10%. The deficit will grow bigger. But, the Chinese worker can only buy 2.2% of American assets because the price of US assets (Dell stock) will rise by 10%. (See second paragraph on pg 54 for further explanation). The worker is chasing a moving target. **(p54)**

A trade deficit is buffeted by a rise in corporate earnings.

A trade deficit is viable as long as corporate profit’s rise more than the current account deficit deteriorates and as long as asset prices acknowledge this income (stocks go up).

In the past 5 years, US profits (cash-flow) increased by \$500 billion dollars and the trade deficit increased by \$250 billion dollars. If the assets generating these profits are selling @ 20-times earnings, this leads to an increase in US assets of \$10 trillion compared to deterioration in external debt of less than \$1.2 trillion. Where is the unsustainability? **(p55)**

Bears question how long we can maintain an account deficit of 700 billion or 5.7% of the GDP. [The book states that we can sustain it. Also, they contend that measuring the current account deficit vs. the GDP is wrong. That’s because the current account is the counter part of a capital inflow, sustainability depends not on how much the US economy’s annual output but on how much foreigners are willing/able to acquire US assets.]

US current account is set by the amount of assets Americans are willing to sell. Therefore, the current account should be compared to the value of US assets, not the GDP.

The latest value of US private net assets is 49 trillion. Annual capital inflow required to finance the 700 billion trade deficit represents 1.4% of that 49 trillion. Net assets have been growing 6% annually since the start of the 2000s. The trade deficit pre-empts less than ¼ of this increase in wealth. If American wealth keeps growing as fast as it has the current account is sustainable @ 250 billion or 750 billion or a trillion because it doesn’t matter. **(p56)**

Facts:

US consumer buys Chinese goods for very little money. The Chinese make very little margin.

The Chinese take their saved USDs and buy US assets @ inflated prices. Whether those assets are PCs, USDs, or T-Bills (etc).

The New Economic Cycle

The old economic cycle:

- Industrial production (IP) slows, Fed eases, rates go lower, housing picks up along with consumption, unemployment begins to fall, economic activity accelerates, companies invest, trade deficit deteriorates, USD weakens, inflation bottoms-out, then, starts to rise, so...the Fed tightens liquidity shrinks, USD rises, IP slows...etc. (p57)

New economic cycle:

- Bust occurs (Asian currency crises, LTCM etc), prices fall in US (platform companies begin to import goods at lower prices because of excess capacity), Fed cuts rates, US consumers disposable income rises (because of lower prices and interest rates), consumption booms, trade deficit deteriorates, USD falls, BUT, inflation remains low as platform companies source their purchases to companies in countries that have not revalued their currency to the USD (like China). Fed maintains artificially low rates, housing booms, so does consumption. The bears yell to 'duck-n-cover'. USD falls further which leads to increased liquidity outside the US & Central Bank reserves go through the roof. Outside the US, housing and stock markets boom along with production. Wealth is created in huge amounts both inside and outside the US. Inflation remains low, USD falls more &...the bears yell to 'duck-n-cover'.

At some point, in the scenario immediately above, US assets become cheap and other countries begin to buy our assets. Therefore, they're not remitting their excess USDs to their country's Central Bank, but instead are putting USDs to work in the US which in turn bids-up US assets. The growth of foreign reserves (Central Banks) at our Federal Reserve deteriorates. The USD rises regardless of account deficits. Liquidity outside the US shrinks since the foreign private sector is recycling its earned USDs back into the US, instead of forcing their Central Banks to print money. This leads to a liquidity crunch and (p58) the margin players go bust. Platform companies tighten the screws on their suppliers. This is when the platform companies clean-up.

Instead of countries settling current account deficits with productive assets, like gold, they can do it with, say, real estate, farm land, bonds, shares, etc. The exchange standard was built around gold but this collapsed in 1972. The new standard is assets. There are no limits to the growth of assets, but, there is to gold. (p59)

Page 60-87 are missing in my notes. This is due to my non-interest in the topics covered.

Exporting US manufacturing jobs

The United States is exporting the volatile manufacturing industry and letting the emerging markets deal w/this aspect of the business. (p82)

Chapter 15

Because of the *new platform companies* we're moving from an inflationary environment to a deflationary environment.

Prices are no longer made on average cost but are now made on marginal demand.

Changes in the overall inflationary environment will/and are having deep impacts on the financial markets.

1. Earnings Discount model used to value equities stops working for companies that have debt on their balance sheets. This is because in a deflationary environment the cost of debt explodes.
2. Example
 - a. If prices of goods fall 10% per-annum and cost of repaying principal of debt is increasing by 10%, then, this should be subtracted from earnings. Otherwise, earnings are being overstated. **(p97)**
3. Because of deflation, debt compounds faster than anyone can repay it. This forces deterioration in earnings and forces deterioration in earnings and forces the sale of assets at reduced prices. But their debt is the same. **(p98)**
 - a. Example
 - i. If earnings up 20%, and prices down 5%, then, real cost of principal of debt rises 5%. **(p98/99)**

So what should we use to value companies in deflationary times? Look at the corporate bond market. When corporate spreads tighten (AAA corps vs. Gov Bonds), equity markets will rally (vice versa). **(p99)**

Pension Funds and Insurance Companies

Deflation wreaks havoc on Insurance Companies balance sheets. That's because they hold long-dated bonds & growth sensitive assets (e.g. equities, corp. bonds, real estate). When interest rates fall and assets don't rise, there are problems.

In deflationary times a fall in Gov Bond yields hurt's the stock market. Therefore, insurance companies & pension funds will have to sell assets.

Rising liabilities + falling asset prices = Disaster **(p100)**

Chapter 16

Velocity

Deflation also causes problems with liquidity based macro economic models and central bank procedures.

Examples: In inflationary times the value of cash is destroyed over time. So, keeping cash is bad. And, when the Fed adds money to the system, the private sector is forced to use, and multiply, this cash rapidly. Therefore, analysts believe the Fisher equation.

$$MV = PQ$$

(Where M = Money Supply, V=Velocity of money, P = Prices, Q = Economic Activity.)

Or, stated differently, an increase in M will lead to an increase in P or Q. This cycle held true 1945-1995. In 1995, this theory broke down and has continued to not work.

The only answer, in describing why this theory broke down, is that we moved from an inflationary environment to a deflationary environment.

Therefore, central banks could add money to the system, then, the private sector could sit on the cash. In deflationary times, it pays to sit on cash. Hoarding cash makes sense.

(p103)

In inflationary times the velocity of dollars (money) has a floor because consumers and companies are forced to get rid of cash or watch it erode away through inflation.

In deflationary times, there is no floor to velocity because hoarding cash is rewarded by a rise in purchasing power. Therefore, if there is no floor on the velocity of money, then, there is no ceiling on the M, in the equation $MV=PQ$.

If the central bank tries to restrain the growth of M, when V is contracting, then, P or Q will implode. And, the central bank can print tons of dollars. In fact, they have to at the rate that is faster than the rate the velocity of dollars drops. **(p104)**

The Way Hedge Funds Invest

1. Return to the Mean (REM)
2. Momentum Based (MB)
3. Carry Trade (CT)

Volatility affects all three of these. We've had a big fall in vol over the last several years. One explanation may be as follows: We've exported our manufacturing job which is fundamentally volatile.

Low volatility hurts REM trading.

Carry Trades (CT) are also hurting from the low vol. If prices take the cyclical brunt of adjustments in the economy just as well as growth, yield curves should be slightly

positive in economic acceleration environments and inverted in deceleration environments. When the curve trades like this it kills the carry trade.

MB strategies also struggle in low vol environments. These strategies just get chopped up.

Chapter 21

The Four Types of Economies

1. Inflationary Bust
2. Inflationary Boom
3. Deflationary Bust
4. Deflationary Boom

Example of 1) Inflationary Bust

Stagflation = excessive government spending monetized by a carefree central bank.

Warning signs are increase in GDP & excessive growth in monetary aggregates.

Gold, up. Value of USD, down

Example of 2) Inflationary Boom

This environment has been the most prevalent since WWII. Most institutions base their investments based on this type of investment environment. This type of investment environment is changing, so the model will no longer work. The biggest beneficiaries in this type of environment are: Price sensitive producers. Today you can find these types of producers in the emerging markets, or commodities.

One reason we see inflationary booms? Central banks add too many dollars to the system. They realize this, then, begin to tighten. This has a huge impact on the government bond market. Bonds become very volatile, like they did in the 80s.

Example of 3) Deflationary Boom

Sales are the product of volumes sold against prices achieved. Saying that we are in a deflationary environment only addresses the price side of the equation. What about the 'volume' side? More importantly, what about total sales?

When prices fall we can face two situations:

1. Volumes rise faster than prices which = deflationary boom
2. Prices fall faster than volume, or both fall together = deflationary bust

Their years

1972 – 1982 = Inflationary bust

1983 – 2000 = Inflationary boom

[My years 2000 – 2010 = Deflationary boom]

Winners in deflationary boom = Currency, the local consumer, local financials (especially bonds), real estate (especially high-end), and anyone who produces goods with an elasticity to prices and an elasticity to revenue greater than 1 (see pps 127, 127).

The best companies to own are companies that have the ability to expand or contract their operations quickly. This means Platform companies which is the basis of this book.

Example of 4) Deflationary Bust

Worst type of investment environment. Think-the-1930s. Every single asset class goes down except for one, Government Bonds. To enter a deflationary bust, returns on invested capital fall below the cost of capital for a substantial period of time.

History shows a collapse occurs when governments do one or several of the following:

1. increase in taxation
2. increase in regulation
3. protectionism
4. war
5. continuing to tighten monetary policy

Any of the above can cause returns on invested capital to plummet and/or the cost of capital to rise inordinately. The answer is to load up on Gov Bonds IF the country has a healthy balance sheet & an undervalued currency.

Invest in the following 4 sectors:

1. Cash / Gold
2. Emerging Markets or commodities
3. Platform companies
4. Gov Bonds

Rebalance once a year.

End Book.