To begin, Mr. Rickards took note that this was the 69th anniversary of the attack on Pearl Harbor. One of his purposes in studying the topic of economics and national security was to help ensure that no future financial Pearl Harbor happens. He also noted that there was a good deal of science behind his analyses; however, we would not have enough time to explore that at this seminar.

In his analysis Mr. Rickards starts from a dynamic systems analyst point of view using

- A good deal of behavioral dynamics
- Complex systems analysis
- A different outlook than most PhD financial analysts
- Physics and economics together for analysis
  - When talking at places such as APL, listeners are very interested in the combination
  - When talking to economists, they are not interested in any such combinations of disciplines for analysis

Mr. Rickards stated that he does not predict the future but he does warn about issues that seem inevitable

- Example: losing control of a car on an icy road – you know it will end badly
  - Nothing wrong with the car at a given second in time if used freeze frame
  - Bernanke is using a freeze frame view of the economy – no scratches – yet
  - Rickards studies the ice on the road and the dynamics of the event and sees that things will end badly
- Another example: dropping a pen above a table
  - You know it will hit the table
  - Not really a prediction – just physics
- A Nobel Laureate in Economics once said that the economic system is so complex that no one can really model it nor understand it completely
Most people in the audience do not get to watch CNBC all day as Rickards does
  • However, CNBC is watching what people in national security are doing
  • CNBC took note of the economics-related war games planned by the Pentagon
    o See video clip for 1 minute 50 seconds (after ad) at http://www.cnbc.com/id/15840232/?video=1653093678&play=1
    o Such games take into consideration many of the topics covered by CNBC such as problems with sovereign wealth funds, budgets and deficits
    o Army’s Annual Title 10 war game Unified Quest 2011 will actually be looking at what happens when the systems breakdown and how to handle the subsequent civil unrest
  • Other examples:
    o The Marine Corps War College went to New York to study the stock market
    o There are new worries about threats to stock markets
  • Three years ago such worries were considered esoteric – now mainstream
    o Several senior national security figures have told Congress that the biggest threats are now coming from economic problems or worries

Biggest economic problem in the world today is the sovereign debt crisis
  • Impossible to repay the debts countries have run up
  • Runaway deficit spending has been creating and adding to the problem for decades
  • We are in a depression not a recession
    o Will run from 2007 to 2012 or 2013 depending on policies
    o During the Great Depression, the stock market had its best year ever in 1934
      ▪ Similar to the upswing we are seeing now
      ▪ At the same time unemployment was very high

The recent “Stimulus” was just more spending adding to the deficit
  • The Keynesian Multiplier of tax and spend which many believe adds wealth is largely discredited
  • Such action actually destroys wealth
  • Takes money from private hands (taxpayers) and gives to government
  • Money is actually then lost due to inefficiencies in government
  • Substitutes public debt for private debt
  • Example: the recent crisis in Ireland
    o Irish banks which made mistakes were bailed out by the government
    o Then the government goes broke because of the bail-out
    o Then the IMF comes in to help (IMF funding mostly from the US)
    o Bailing out the private debt did not solve the problems
      ▪ Just moved money from one bucket (private) to another (public)
  • Only way to get out of the current crisis is by growing the economy
    o But we may be in too deep already
    o No level of growth could be high enough to pull us out of debt even if taxes are raised
    o This goes beyond politics – now a matter of physics
One accounting says there is $42 trillion in world debt – public, private, business

- Must look at other kinds of debt, too
  - What you are paying back on one kind of debt (taxes) is then not available to handle other kinds of debt or investment
- Without increased consumption, cannot have economic growth
- Usual debt level numbers don’t take into account debt such as Freddie Mac, student loans, etc.
- Real world debt level may be more like $100 trillion

**Sovereign Debt Crisis**: Enormous debt that has been accumulated has made the recent financial crisis worse

![Sovereign Debt Levels](image)

In Europe there has been confusion between connecting debt problems and the health of the Euro

- In the US if businesses go bad, it does not reflect badly on status of the dollar
- In Europe both in policy-making and markets, the health of business and the Euro are largely seen as one and the same
- Europe’s problem is a core-periphery problem – rather like how empires collapse when they expand too much beyond what they can control
Hard to say how it will play out
• Germany could rescue all of the others but it would want something back
  ▪ Germany definitely wants the Euro to remain viable and devalued since it helps them maintain their market share by reducing their export costs
  ▪ But, a reduced euro is the consequence of badly performing economies and large debt in portions of Europe which then requires a German bailout
  ▪ There is some question about the level of tolerance for financial pain that the German people have
  ▪ Could be the Fourth Financial Reich

Some countries could go it alone, i.e., leave the Euro Zone, but many could not

Basically, all this debt will not be repaid really – so possible outcomes could be:
• Defaulting outright – just not pay any of their debts
  ▪ World War I reparations could never be paid
  ▪ Resulted in one of the reasons leading to WWII
  ▪ France and the Britain owed enormous amounts to the US
  ▪ Called for German reparations which they could not pay
  ▪ Hoover’s moratorium on war debts called for a moratorium on reparations, but France and Britain did not let Germany off the hook
• Employing confiscatory taxation, which amounts to a fiscal default
• Going into hyperinflation – here’s your money back – but it’s not worth very much

Recent problems with Ireland, Greece, Portugal are really all part of the same crisis

What matters is what happens while we wait for the crisis to come to a head
• When economies are expanding, no one worries about currency markets
• When economies are declining, you get currency wars

Currency Evaluations
Looking at basic formula for determining Gross Domestic Product (GDP)
• GDP = C + I + G + (X – M) which means GDP = 
  ▪ private Consumption + gross Investment + Government spending + (eXports − iMports)
• Brings up the question will companies invest for the future if they envision that no one will be buying?
• US is now on its 4th Stimulus plan – i.e., extending the Bush tax cuts for all but no spending cuts
• Really need net exports to increase
  ▪ Could be done by cutting the value of the $
  ▪ Impossible for all countries to devalue their currencies at the same time when all want to do so for the same reason
  ▪ We always say that we don’t want to repeat the problems of the 1930s but it looks like that is exactly what is happening; that is, we are getting into currency wars

All currency rate advantages are temporary
• Escalation is inevitable
• One theory is if you can’t solve a problem, enlarge it
Which means look at the bigger picture and try to solve that problem first

However, the situation is more negative now than in the past

• Historically, currency wars have led to trade wars which led to shooting wars
  • Occupation by the French of Germany’s Ruhr Valley grew out of currency wars
    and as a reprisal after Germany failed to fulfill reparation payments demanded by
    the Versailles Treaty

• Political backlash is now growing against the bailouts
  • Compare Iceland and Ireland
    • Iceland’s economy was allowed to collapse completely
      ▪ Then growth occurred at a high rate
      ▪ Because started at such a low level
    • Ireland, on the other hand, has been getting bailed out; and was not allowed to hit
      bottom

See the chaos being created in Europe in this video clip of a European Parliament speech
http://www.youtube.com/watch?v=Fyq7WRr_GPq&feature=player_embedded

Following is from the video:

• Many in Europe are desperate to preserve the dream of the Euro and European union
  • So desperate that they are ignoring democracy in the process
  • Bunker mentality may be taking over

• There is talk of no European nation states surviving in the 21st Century
  • Belgium could not talk about the political pressures put on it by the EU because it
    hasn’t had a government in 6 months

• Ireland’s problems were largely caused by the greed of a small number of people, but the
  populace is now being told that they have to pay for those mistakes

• There has been an obsession to create the Euro-state
  • Apparently millions must suffer to make this happen
  • Next will likely be Portugal and Spain (with a bailout that will need to be 7 times
    that of Ireland’s)
  • If we continue to rob people of their identity, we will only have a nationalism left

Basic question: Why are the Irish people being made to suffer to pay off the mistakes of others?

• Those who caused the problem should be made to pay for it
• Too much favoritism went on in Ireland

In the US, are we in for a period of inflation or deflation?

• If we knew which one, we could plan our investment portfolios accordingly
• But no way to know which way the situation will move
• The Federal Reserve (Fed) is currently in the process of “quantitative easing” and adding
  to its balance sheet by buying Corporate Bonds and US Treasuries, which is inflationary.
• But the overall economy is suffering from deflation
• Will the Fed’s actions fail with deflation taking over; or will the situation become
  unstable, and we will quickly move into hyperinflation?
• History suggests the latter
Quantum of Pain

- Problems happen when it is too easy to borrow
  - Capital gets misused and is not properly invested
  - One way to handle the problem is to either blow-up houses that are a drag on the market or the financial equivalent – just allow bad businesses to fail
- The Federal Reserve wants to fix the problem by having some inflation but not too much
  - Problem: inflation/deflation solutions are like trying to catch anvils in mid-air
  - You catch one – and then what’s your next move?
- It is possible to switch the problem out to the longer term
  - Periods of high unemployment are followed by periods of great growth
    - But we may need to wait 10 to 20 years this time
- It is possible to shift losses to different losers
  - In the current crisis banks and financial organizations should be the losers
  - More likely, the public will be the losers
- The US has a relatively high tolerance for such pain but a low tolerance for stagnation and unfairness

Dynamics of Bubbles

- In a collapse a market (such as the housing market) goes down to below where it started
- The New Homebuyer Tax Credit helped the situation while it was going on, but did not have a lasting effect once it ended
- Housing market was never allowed to get to the bottom of the curve, so could not come back up the way it should have
- Yes, we need some inflation, however, we won’t get a nice 2-4% – more like the 12% we had in the late 1970s
- No way to fine tune inflation/deflation movements

Currency is really a contract

- If one reads the top of a dollar bill it says “Federal Reserve Note”
- Notes are really a liability on the balance sheet of the Federal Reserve
- We should consider notes (currency) as debts
- So when the Fed is printing money – it is really printing debt

We do not now have inflation because of China’s activity in our currency market, i.e. buying our debt

- China has pegged its money, the Yuan, to the dollar
- Suppliers are paid in dollars
- China needs to flood its markets with its own currency, otherwise we have no need for inflation
- This is a high stakes game of chicken about who devalues their currency first
  - When China gets a lid on its inflation, then the US will have inflation
- China depends on the dollar because 25million people needed jobs, otherwise they would have created social and political instability
- China will try to use price controls to handle the situation but they rarely work
  - China can coerce its society so they have a better chance
- The longer the battle goes on, the more instability is building up
Another formula, really a tautology, to consider: \( MV = PY \) explains the problem with QE (Quantitative Easing) or QE2 or QE\( n \)

- \( M \) is the quantity of money, \( P \) is the price level, and \( Y \) is aggregate output (and aggregate income)
- \( V \) is velocity, which links money and output and is the number of times a dollar is used to purchased goods and services
  - Example: You earn a dollar
  - Give a cab driver a dollar and he will spend it on coffee
  - The guy at the coffee shop will spend that dollar on a gift
  - So the velocity is 3
- If velocity declines, then Government needs to print more money to maintain economic output
  - Milton Friedman thought that velocity was constant
  - It was when he studied it – 1950s to 1980s
  - Over the longer term however, it has been more volatile
- If velocity is constant, then to improve GDP all you need to do is dial up velocity
- But Velocity is not constant
  - Bernanke is swimming against a strong current, and
  - China is throwing rocks at him
- Velocity is going down so the money supply has to go up, i.e. Fed easing
  - But the Federal Reserve is already broke
  - The Fed has not been buying good assets
    - They use to buy 30 year treasury notes which were the best
    - Now buying junk and having a big problem with 7-year bonds
    - Could lead to instability

Instability is reached when we reach a specific threshold of concern

- A dynamic model of a collapsing system is shown by the rise in the number of people rejecting the dollar as a safe currency
- As numbers rise, what you need to trip the threshold changes dramatically until you reach instability
- Example:
  - If you see 3 people suddenly run out of a theater, you may wonder why but not do anything about it
  - If you see 10 or 25 run out, you may be more inclined to run yourself even though you do not know why
  - Then you become one of numbers that sets off someone else
  - Becomes a chain reaction much like in nuclear explosion
Another problem relates to the maturity structure of national debts

- Think of this as the number of seconds you have after you pull the pin on a grenade before it blows up
- How long do we have after we pull the pin on the economy?
  - Shorter maturities pay less
- US has a short fuse – US rolls over debt in about 4 years already

Bottomline: sovereign debt cannot be repaid

- Inflation is an answer to the problem
- But inflation is unstable which will lead to a significantly devalued currency which hurts the populace

**Rise of State Capitalism**

- First the world was run on Mercantilism in 17th and 18th centuries
  - Wealth was in tangible things – property, gold, goods
  - Wealth was also built by “stealing” it from others
    - By pirates from individuals
    - By countries from other countries in wars, etc.
  - On the policy side of things there were export subsidies, trading blocks
  - Worked mostly as a zero sum game
  - Trade was really a continuation of war by other means
- Then moved to the Washington Consensus in the 20th century
  - Wealth may include intangible and intellectual property but may have some mercantilist elements
  - For simplification look at a 2-person economy that only involves playing football and mowing lawns
    - Tom Brady would do both better than the speaker would
    - In a mercantilism economy both would do both tasks
    - In a more modern system, Brady would pay Rickards to mow so he could spend more time/effort on football which he would do significantly better
  - Both would be better off
  - The main elements of this type of economic system include:
    - Free trade with no tariffs
    - Free flow of capital
    - Nobility of labor
    - Protection of intellectual property
    - Became the engine of globalization in the 1980s
- Now moving toward the Beijing Consensus
  - Nationalism over economics
  - Some say we should give China a break since it is coming out of decades of revolution and bad government even before that
But China and Russia not really following this form either
- China and Russia may be moving into Neo-mercantilism
  - Involving tightly controlling markets such as rare earth metals or energy
    - Captive mining industries
    - Large and growing roles of the state sector such as Gazprom, Sinopec
  - Making lots of special connections with suppliers and markets around the world
- US is trying to play a positive sum game but there are problems
  - Made worse because of the financial crisis happening in a new world
  - Victory in negative sum games is still victory: I lose, you lose more, therefore I win

The US as a Gold Superpower

The good news is that the US has a secret weapon – vast stocks of gold
- US is reluctant to acknowledge or use this
- US position with respect to gold is it looks like Saudi Arabia’s situation with respect to oil
  - Gold is real money and it has been for 7,000 years

Currency gets destroyed during existential crises
- In the Revolutionary War, paper money was soon useless
  - “Not worth a Continental”
  - Hamilton then backed the currency with a gold and silver standard
- The Civil War also destroyed the value of paper money
- Grant put the country back on the gold standard and deflated the currency
  - That led to a period of enormous growth (1876-1914)
  - This was “good deflation”
  - Growth came from inventions and advances in productivity
- 1922 -1926 was the rise and fall of the Gold Exchange Standard
  - This was considered a failure and part of the causes for the Great Depression
  - Problems were caused because the wrong value was chosen
  - Churchill in particular was tied to the traditional value of gold
    - Needed to be more realistic about the value of gold
- 1944 - 1971 back on the gold standard (after Bretton Woods agreement) became another era of great prosperity
- Nixon then took the US off the gold standard
  - How high gold goes in value is more related to how low the dollar goes
- Must determine how much backing of the currency is needed
  - Do not need 100% backing
  - Need enough to appear stable – enough people must believe that they can get the gold that they deserve
  - Maybe about 40%
• Today the price of gold should be about $3,000-$7,000 an ounce to avoid the problems of the 1930s

The Good News – the US has by far the largest holdings of gold

- Germany, France and Italy have the next most
- IMF holds gold reserves in that same ballpark but most of that gold came from the US
- China is a pygmy in gold reserves – holds lots of reserves in US currency, not gold
- US may control up to two-thirds of all the world’s gold
- US has not sold an ounce since 1980
- Bottomline: US should consider returning to the Gold Standard
- All together only Europe has more gold than the US
- A country’s reserves can be in currency or gold
  - The US holds 70% of its reserves in gold
- The US sent 11,000 tons of gold to Europe after WWII
  - Trade surpluses were paid off in gold
- Today’s trade surpluses with China are paid off in currency, not gold

US is not at the top of the list if compare gold reserves versus GDP

- Germany and France head the list with the US 3rd
- China is in a very weak position
The Gold Standard is associated with two periods of great economic improvement
- Would be a problem if everyone wanted to devalue their currencies against the dollar
- The only way the US would be able to export more is if the dollar was weak
- In 1937 Roosevelt confiscated all private holdings of gold
  - Ft. Knox was built to hold it all
  - Gold was taken in at $20/oz and then re-priced at $35/oz
  - Nixon basically did the same thing in 1971
    - Everyone else wanted to devalue their currency against that of the US
    - Gold went from $35/oz to $800/oz

Conclusion
Bernanke realizes that there is too much debt in the US system
- Trying desperately to get some inflation but it is not working
- We may eventually go back to the Gold Standard at around $5,000/oz
  - That would make the dollar much cheaper
  - Could easily pay back China
  - This sort of thing happened twice in the 20th century

Expect to see more disorder around the world
- US has had a high debt to GDP ratio sometimes in the past, too
  - Last time was just after the US had won WWII – and the US got something out of the expense – world leadership
  - This time we cannot print the $3trillion we would need now to get out of the situation
US is in extremis again so may need to take drastic action – the President has the executive power to “seize, freeze, and don’t say please”
  o Could send federal troops to confiscate all the foreign gold in New York banks
  o Would then send another 14,000 tons of gold to West Point, the other gold depository
  o Then would re-price gold to start the system all over again
This at least gives us a Plan B
  o China and Russia have no Plan B
  o Exercise Unified Quest is designed to look at military issues that might come up if civil disorder broke out after a collapse of the economic system

A scene from the 1980s movie *Rollover* appears to predict the current financial crisis

- See http://www.youtube.com/watch?v=m1aQ-XGWors&feature=related
  - In particular begin at 1:35 and run until 5:30
- Salient points from the video:
  - Things to consider:
    - What if the Arabs panic and move too much money too soon?
    - Could be the end of the market system if things go wrong
    - Happened because tried to stop some other trend from going too far
  - Money or capital can be a force nature, rather like gravity
    - Can be an unguided missile
  - The system can survive if no one panics
  - Must worry about a chain reaction of currency collapses
  - What happens when people watch all their savings become worthless?

**QUESTION & ANSWER SESSION**

**The QE2 Effort (Quantitative Easing)**
- A lot of the issue has to do with what you mean by money
  - M0 is the money supply available to a county’s central bank reserve
    - The Fed is increasing this, but
    - Banks are not turning this into loans they way that they are supposed to
    - The $3 trillion should be turned into $40 trillion in loans
  - M1 is all physical money such as coins and currency and checking accounts
  - M2 is M1 plus things like savings deposits and money-market funds
  - M3 is M2 plus larger liquid assets
- Money should be moving through this system
  - The Fed says that the transmission system is broken
- Need to define where the real money is
- There are limits: oil did not quadruple in price in the 1970s when the dollar collapsed

**Trust in the Federal Reserve**
- It has negative equity
- It is printing liabilities – not just printing more money
• This is more a behavioral / social science / political science issue

The 2008 Meltdown
• Need a central bank because no one bank could ever handle every depositor pulling out funds at the same time
• The job of a Central Bank in a crisis is to:
  o Lend freely
  o Accept only good collateral
  o Lend at punitive rates
• In the last crisis the Fed only did the first
  o Moral hazard insurance wasn’t an issue
  o Exactly what the collateral was is still a secret
  o If the Fed had charged a high interest rate, the profits would have gone to taxpayers
  o There should have been more failures
    ▪ CitiBank could have been nationalized and it still would have operated
  o Stockholders should have gotten zero
  o Bad collateral should have been pulled out and set aside
    ▪ Then you would have a clean bank
  o One problem was too much favoritism and cronyism
  o The system only looks better superficially now

Responsibility for the Financial Crisis
• A lot of people in the financial sector should be in jail now
• Problem: If you merely indict a financial firm, it fails immediately
  o But some are “too big to fail”
  o They wind up beyond the law
• How to create jobs
  o Companies like IBM or GE destroy jobs as they buy out smaller companies and achieve economies of scale by cutting some redundant jobs
  o New jobs come from small businesses so help them by
    ▪ Giving them money
    ▪ Keeping their taxes low
    ▪ Lessen the impact of regulations
    ▪ CEOs generally say that the US is hostile to such businesses

Money Market Fund Run-up of 2008
• Corporate balance sheets have more cash than at any time in the past
  o They are afraid to use cash in this economy
  o They fear the commercial paper market will fail
  o If it did, they would have to run on their own cash rather than their usual short-term loans
• So there should be some bail-outs but not for all
Predictions
Mr. Rickards noted that he avoids predictions since he did dynamic systems analysis
- There are some policy moves that could pivot the economy away from collapse but the chances aren’t very likely
China sees the same things
- It would need 3,000 tons of gold to reach for parity
- Think of the balancing much like we thought of strategic balances of warheads during the Cold War
- China secretly bought small amounts of gold up until 2009
  - Then it announced in one move it had another 500 tons
  - Stealth acquisition still going on
- China does mine a good deal of gold but
  - Take it directly to their own vaults
  - No open records
- China still not catching up to the US anytime soon
  - Would need another 7,000 tons in the next 10 years
  - It will probably run out of its own gold in about 4 years
  - Mining also complicated by their high use of cyanide – destructive to the environment

TARP
Banks were supposed to buy good assets with government money but never did
- Funds went to banks but they kept their bad assets, too
- There were some mark downs of the assets value from 100 to 90 cents on the dollar but many assets were really worth only about 50 cents on the dollar and have yet to be marked down appropriately
- The Fed balance sheet is cluttered with bad assets
  - Believe they can’t lend much
  - If they do lend, they move very slowly
- Things are beginning to break up in terms of banks lending, but very slowly

Policy
There should be a policy to put floors under the price of assets but that does not make growth possible