

Ed Chancellor on the capital cycle...

From his introduction to *Capital Returns: Investing Through the Capital Cycle: A Money Manager's Reports 2002-15*, which was released in hardcover today (Dec. 2015):

Typically, capital is attracted into high-return businesses and leaves when returns fall below the cost of capital. This process is not static, but cyclical – there is constant flux. The inflow of capital leads to new investment, which over time increases capacity in the sector and eventually pushes down returns. Conversely, when returns are low, capital exits and capacity is reduced; **over time, then, profitability recovers**. From the perspective of the wider economy, this cycle resembles Schumpeter's process of "creative destruction" – as the function of the bust, which follows the boom, is to clear away the misallocation of capital that has occurred during the upswing.

The key to the "capital cycle" approach – the term Marathon uses to describe its investment analysis – is to understand **how changes in the amount of capital employed within an industry are likely to impact upon future returns. Or put another way, capital cycle analysis looks at how the competitive position of a company is affected by changes in the industry's supply side**. In his book, *Competitive Advantage*, Professor Michael Porter of the Harvard Business School writes that the "essence of formulating competitive strategy is relating a company to its environment." Porter famously described the "five forces" which impact on a firm's competitive advantage: the bargaining power of suppliers and of buyers, the threat of substitution, the degree of rivalry among existing firms and the threat of new entrants. Capital cycle analysis is really about how competitive advantage changes over time, viewed from an investor's perspective.

Part 1:

Merryn: Hi. I'm Merryn Somerset Webb, editor-in-chief of Money Week. Welcome to another one of our video interviews. With me today is Edward Chancellor, who is a very experience and well-known financial strategist and investment expert. Also, the author or this week's cover story, or last week's cover story, by the time you see this, which is very interesting, about gold miners.

And the editor of this most recent book, *Capital Returns*. It's a series of essays written by very successful money managers at Marathon, and Edward has introduced them beautifully, and then edited them into a great collection. Well worth reading, and it will be on our Christmas book list, when we get to that.

Now, let's talk briefly about the premise of the book, or the way Marathon invests, should I say? They invest on a capital cycle basis.

Ed: Yes. So the capital cycle, what Marathon Asset Management's called the capital cycle, is really to look at companies not from the perspective of their valuation, whether

they're cheap or expensive on a PE (price/earnings) basis, or a price to book basis. But really, **to look at where the capital is entering into or exiting an industry.**

And if you look at things that way, sometimes, you find businesses that look expensive, but are actually quite cheap, because they can sustain returns for a long time. But more to the point, **investors often fail to pay attention to the amount of capital that is being spent in an industry.**

Now, take, for instance, the global mining industry or the energy oil stocks recently, over the last ten years, there have been enormous surges in capital spending in both those sectors. And that surge in capital spending prefigured both the collapse in prices, in commodity prices, but also the collapse in stock.

So if you look at things from a capital cycle perspective, in other words, capital flowing in to or out of an industry, you're likely to be a better investor.

Merryn: So the basic idea is that as capital flows into an industry, supply of whatever that industry produces is going to up very fast. Then the price of that thing is going to fall, and you want to be in when supply is low, and out when supply is high.

Ed: Yes. The principle is very simple, as you expressed it. In fact, so simple, one shouldn't really need to write a book on the subject.

Merryn: I've definitely made it sound too simple, in that case.

Ed: No, I don't think so. Look, let's discuss a few of these instances over the last 20 years that your readers, viewers, might remember. Go back to the dotcom bubble in the 1990s. There was a surge of spending in technology, in particular, laying out fibre optic cables, both in Europe and in the States, and actually crossing continents too.

In the UK, there were a number of so called alternative carriers, or "altnets" listed, and these are businesses with huge capital funding needs. Now, at the same time, we had the telecoms companies, spending vast amounts of money on 3G mobile networks and so forth. Now, that surge in spending anticipated the collapse, the dotcom collapse.

In fact, it determined the dotcom collapse in 2002. So you got to a situation that, of all the fibre optic cable that had been laid, something like 95% of it was excess capacity. Now, move into the next decade, and you saw a housing boom, and saw a surge of spending on construction, spending on residential real estate.

Not so much in the UK, but certainly in Spain and Ireland and in the US. And what's quite interesting about the US example is that some very well-known investors, in 2005, 2006, started saying "hey, US housing stocks are cheap. They're trading roughly at book value".

This is the lowest range at which they've ever traded, and, you want to hold your nose, and there may be problems in the housing market, but you want to buy those stocks. Now, those stocks, on average, fell roughly 75% from that point to the trough, say four, five years later.

You could have bought the stock of a perfectly respectable company that survived the real estate bust, at a very cheap value, and still lost 75% of your money

So you could have bought a housing stock of a perfectly respectable company that survived the real estate bust, you could have bought it at a very cheap value, and still lost 75% of your money. **And the capital cycle argument is that what you should have been looking for is not the valuation per se, but how much money had been sucked into these businesses in the run-up.**

And the truth is that those businesses had been expanding their capital base by about 25% per year for the previous five years, so they were riding for a fall. And we see this time and time again, the markets encourage and fund capital spending, investors cheer it on, then things start turning, turning down a bit. And the value investors come in and say; these stocks are cheap. **And then the value investors get completely wiped out.**

So if you understand the capital cycle, you stand back from the madness of the crowds, as things are being bid up, but you also avoid the great value traps, which are constantly hitting so-called contrary and old value investors.

Merryn: And you also stand back from the demand story on the way up. Because this is the way that these events are sold to investors, that the supply side is rarely mentioned. What is mentioned is the ongoing demand.

Ed: Yes. You're quite right.

People love to project demand into the future, because demand is unknowable. And because it's unknowable, you can have any fantasy you want about it at all

Merryn: ... we extrapolate, and extrapolate, and extrapolate the demand, and never add up how much supply is coming on at the same time.

Ed: And this interesting point is that people, I don't quite know why, but they love to think about and project demand into the future. They love it, I suppose, because... well, they like projecting demand because demand is unknowable. And because it's unknowable, then you can have any fantasy you want about it at all, optimistic or pessimistic.

But given the nature of mankind, those would tend to be optimistic. So a huge amount of work goes into forecasting demand. As our mutual friend Russell Napier says, analysts spend 90% of their time thinking about and forecasting demand, and 10% of their time thinking about supply.

Now, the interesting thing about supply is that supply actually can be forecasted because in most industries, it takes quite a while for the supply to come on stream. You can see how much assets have grown inside an industry, or inside any particular business. You can see it through any number of measures.

Through IPO issues, through secondary share issues, through companies taking on more debt, through companies going through a boom, such as the mining companies or the US homebuilders, who have had a surge in profitability, and have reinvested those profits.

You can measure it technically through looking at things, like current capital spending to depreciation ratios. Or you can look at it, for instance, the rate of reported profitability of a company to its cash flow, the so called cash conversion rate. And if a

company is generating large profits, but not generating any cash flow, it's probably in a negative phase of the capital cycle.

So the point, to go back to what you were saying, is that investors, **if they knew the right way to approach, would be thinking 90% about supply, and then fantasizing 10% about the completely, or not quite completely, but more or less completely unknowable demand side.**

Merryn: So they'd focus, for once, on something they can actually measure.

Ed: That would make life boring and simple.

Merryn: It would also put an awful lot of analysts out of work, particularly this time of year.

Ed: But actually, it's not the question just of analysts, it's the investment bankers. As ever, the investment bankers are up to mischief. I'm sure your readers, viewers, know that their worst enemy is the investment banker. Not because of the investment banker...

Merryn: I think they do.

What the investment banker really wants to do is to generate fees by raising capital

Ed: ... is a greedy bastard, because we know he's a greedy bastard. But what he really wants to do is to generate fees by raising capital. And if you raise capital, and you throw it at any industry, the returns wouldn't decline. So the investment banker, and with the broker incorporated into the investment banking operations, will serve as cheerleaders, always, into the capital raising process, and will tend to be blind until after the fact, that too much capital has been misallocated.

Merryn: So what does this mean for the value investor? **The ordinary value investor is usually wrong because they picked the wrong point in the cycle to invest.**

Ed: Yes. And I think this is where the value investor has to show a tiny bit more intelligence than a pure contrarian instinct. Now, the contrarian instinct, as is...

Merryn: We all have that.

Ed: No. You and I have it, but the point is, it's a perfectly fine and admirable trait, and we admire it completely.

*The contrarian instinct is a perfectly fine and admirable trait, but you have to be an intelligent contrarian, **and look to see how long the capital cycle takes to play out***

Merryn: We admire it.

Ed: And we don't like people who run with that. But that alone is not enough to deliver, to protect your money. **What you have to do is be an intelligent contrarian, and the intelligent contrarian, among other things, will be looking to see how long the capital cycle takes to play out.**

Go back to what we were talking about, the US homebuilders. Now, the US homebuilding cycle ran for about five years on the upside. I mentioned to you that the **stocks were putatively cheap in 2005, when they were trading at book. And then the book disappeared in a great big hole.**

Now, so it was obviously a bad time to buy stocks in US homebuilders, 2005.

Merryn: How did you know it was a bad time then? You can see the cheap price, but you're an intelligent contrarian. What else says to you; I know how cheap that is, but I'm not buying it now.

Ed: I'll tell you. So, look, this is another area where, if you remember, the value investors got it wrong around the time of the global financial crisis. The typical value investor says – he is full of false modesty – he says “I don't know nothing about macroeconomics; it doesn't interest me. I just know about stocks, and so on. I just know about companies, and blah, blah, blah. I just analyze profit and loss accounts, and balance sheets”, and so on.

Well, actually, around the time of the financial crisis, in case you hadn't noticed, there was a great housing bubble. Now, everyone knew there was a housing bubble.

I remember one of the analysts at the time, or providers of information, used to just provide a chart of the number of mentions of housing. The housing bubble was the best known fact in the world, really.

Merryn: It was everywhere.

Ed: Apart from Ben Bernanke, who didn't seem to know about it, but it was a very well-known fact. Now, that housing bubble had led to what I call a fundamental bubble in the balance sheets of the homebuilders. **So, yes, they reported huge amounts of profitability, but they were illusory profits.**

But you didn't even really need to know that. the nice thing about the capital cycle approach is just to say, OK, you can be as dumb as a value investor, or as blinkered, if you will, but just say: **I'm going to look at companies and see how much they've been expanding their assets. And I'm going to look at them not just on an individual basis, but I'm also going to look at their competitors too.**

And if there has been massive expansion of assets – never mind how good the story is, China, or running out of oil, or energy supercycle, or the dotcom future. It doesn't matter how good the story. It doesn't even matter whether the story pans out exactly as predicted, as was the case with the dotcom stuff.

And not with, let's say, the commodity or energy at the peak oil thesis. So try not to pay attention to that, just look only at the expansion of assets. Now, I'll tell you, and this is not just my argument, I edited another book on the capital cycle for the same people, Marathon, about ten, 11 years ago.

And at the time, when I was writing the introduction to that book, I looked around to see **if there was any academic research on this subject of the relationship between investment and returns.** And the truth was, there was hardly anything out there at the time. But when I came to edit the new book, and write a new introduction, I actually found quite a lot of new research from finance academics in the States.

And the gist of those findings is that **there is an inverse relationship between investment or asset growth and future returns.** So we all know, or at least we should all know, that everything else being equal, growth stocks, companies that sell on

high price/earnings ratios, and companies that sell high price to book, deliver returns below the market average.

And the converse is that so called value stocks, cheap stocks, are delivered at above average returns. Now, you have to qualify that finding in the light of the new research, which I touch upon in this book, which is to say how much investment has been going on. Because what we now find is that most of the value growth effect belongs to **differentials in investment.**

So it's not really to do with cheapness, investors' expectations of growth and investors' pessimism. If you will, the historic explanation of value growth anomaly, as they call it, is just, don't investors get carried away? Yes, they do get carried away, but like most findings of behavioural finance, this is a rather facile observation, and you need to go a tiny bit deeper. And, I think, if you go deeper, you start thinking about differentials in capital spending.

Merryn: It's the same thing, isn't it? That investors get carried away at times, when they've heard the story about demand, and when they're hearing the story about the demand, that's when the assets are growing, and when the capital spending is happening. It's facile, but it's not that facile. It is really what's happening.

Ed: You can put it like that, if you want.

Merryn: Thank you.

I don't like to miss an opportunity to knock behavioural finance people, partly because to my mind, they're telling Just So stories. It's investment for dummies

Ed: I don't like to miss an opportunity to knock behavioural finance people, partly because they just... to my mind, they're telling Just So stories. It's investment for dummies, so to speak. And it's amusing.

You can give an amusing talk about investors' expectations, and delve into psychological frailties, and so on. But actually, it's not really to do with the business of investment. The business of investment, yes, it's obviously driven by human beings and human beings are frail and full of folly. We all know that. As I wrote a book, *The History of Financial Speculation*, which, was very much on that theme.

But the more I think about it, the more I think what's important is not investors' expectations. Yes, they are there, but they're really the epi-phenomena. It's icing on the cake. What you really need to do is to break through that icing, go back to what I was saying, **look in the instance of the capital cycle, and look at the investment cycles.**

Because investors may have very high expectations. They may be very ebullient, very bullish, about a particular sector. But if that sector has not attracted a huge amount of capital investing, the chances are that those expectations, those ebullient expectations, will be met.

Now, go back, for instance, to the... well, I can give you any number of examples, but I'll go back to the homebuilding example. In the States, in Ireland, in Spain, there was, obviously, a lot of excited expectation about house prices and inflated house prices. You could describe that, in your way, as an investor rationality. But there was a huge investment response.

Now, when we looked at Ireland and Spain, we found that, I think, Irish and Spanish excess homebuilding was roughly 15 times annual demand. So you can see the huge glut of over supply that had built up. Now, American over-building had been roughly five years, we calculated. it's just rule of thumb. And it took roughly five years to burn off. OK, that's fair.

Now, look at the UK, and Australia, for that matter. They both had very similar bubbles, in terms of house prices. So both British house prices and Australian house prices, they followed... well, as far as I remember, they went up higher than US national prices. But in neither country was there a demand, was there a supply and response.

So take, for instance, the... and I know, this is a field, when I first got into this, into the **investment analyst business**, I was working for an investment bank in the city in the early 1990s, where, and this was in the aftermath of the great, of a very serious housing bust in the early 1990s.

And one of our clients, Tarmac, had lost a great deal of money; we were raising money for Tarmac. Now, I studied the UK housing market at the time, and what you could see

was a huge supply response in the 1990s to the rising house prices, and then the subsequent bust.

Now, fast forward 15 years, what happened? The UK home construction business, or the homebuilders, were immensely consolidated, if you will. Just a handful of companies where there had been, I don't know, let's say 15 or 20 builders, large builders, but probably only about four or five of note, for any number of reasons, it was very difficult to build new houses in the country.

Now, and this points to an interesting opportunity that was created. I can identify it in retrospect. It's better than not at all. **Whereas the US homebuilders were value traps, even in 2008, going into the crisis, and in 2009, the UK homebuilders, which had also collapsed in price... take Persimmon.** I remember looking at its stock, and its stock, I think, perhaps you know better than I, I think it went from about £15 to £3, or something like that.

Merryn: These were phenomenal collapses in these stocks.

Gold mining stocks were always described as an option on the gold price: if you want gold and you want a supercharged investment in gold, buy gold stocks. That is just a guaranteed way of losing money.

Ed: Yes, I know, and it collapsed. But actually, if you looked at Persimmon and the UK homebuilding industry, you see that there actually hadn't been any overdone capital cycle. **So these stocks recovered much better.** So if you knew nothing about either the particularities of the US homebuilders, or the UK homebuilders, but if you just looked at their asset growth, you would have said, from a capital cycle perspective, that the UK homebuilders were outstandingly attractive.

Merryn: And, of course, that turned out to be the case, they were, in nominal terms.

Ed: I'm giving some hindsight wisdom.

Merryn: Very good of you, thank you.

• **If you missed any of Merryn's past interviews, you can see them all here.**

Merryn: What industries, and obviously, I'm thinking about the gold miners we wrote about here, and obviously, I'm thinking about commodities. These industries are at a point in the capital cycle where you think they are worth buying.

Ed: Right. So now that would put me on the spot rather more, wouldn't it, than giving you tips as to which stocks...

Merryn: What to do ten years ago. Put you on the spot a lot more. But you've written it down in real words, so you can say it on video.

Ed: I have written, for you, a piece that is **bullish on gold miners**. And the argument there is this. Namely, the gold price, if you remember, went up from around what did we say? \$252?

Merryn: Around where we first suggested in MoneyWeek, we just buy.

Ed: And hit a peak of what?

Merryn: \$1,923 and something. I can't remember.

Ed: So it had gone up tremendously since 99. The gold mining stocks went on a decent... The gold mining stocks were always described, and they still are described, quite wrongly, as an option on the gold price thing. If you want gold and you want a supercharged investment in gold, then you want to buy gold stocks.

And that is just a guaranteed way of losing money. You know that, yes. And any of you who own gold stocks...

Merryn: Know that now.

Ed: ... will know that too. So the question is; why did the gold... The gold price is still up, was it roughly three to four times, let's say, from its trough. the trough was really around \$300 that it was trading, and it's now, what? \$1,050, or thereabouts. So, still, it's up around three times from the trough.

But the gold miners have gone nowhere. And recently, they've lost a great deal of money, and they've under-performed the S&P 500 over the last five years, even though the gold price has still more than doubled. So the question is; why did this happen? And the answer is quite straightforward, is that the gold miners, the guys running the companies, blew the money.

And what they did is they, as the gold price went up, they invested more, and more, and more. And they embarked on some phenomenally bad loss making capital expenditures, of which, Barrick Gold, the world's largest miner, blew, I would say, around \$5bn on some South American mining venture up in the Andes, on the Argentine Chilean border.

They blew \$5bn without extracting, as far as I know, a single ounce of gold. And they have now closed down the operation and written it off.

Merryn: On the basis that the cost of production would be too high at the current gold price, or at any gold price.

Ed: Well, they were just, they were running into any number of different, operational problems. But the point of this is that, and it's not so dissimilar from the housing, or dotcom, or whatever, you have either, **a rising price of something you sell, or even a future demand, drives the capital investment.**

And capital investment tends to be overdone, and is, as we know, cash flow negative. It costs money, in plain and simple terms. And then if it's done with too ebullient spirits, it leads to a **misallocation capital.** And the gold miners have done that in spades. They really are the worst capital allocators out there.

Merryn: I thought you said they weren't uniquely awful.

Ed: They're not, well, I was understating.

Merryn: OK, but uniquely awful.

Ed: They are uniquely awful. I'll tell you why, and you know this as well as I do. If you look at the long-term historic return of miners, of gold miners, relative to the rest of the market, **they're around two percentage points annually worse than the rest of the market. Now, that has to be telling you something.**

Merryn: Uniquely awful.

Ed: They are uniquely awful, because they've got, as we were saying earlier, too many spivs and crooks running them. But this is not a problem of spivs and crooks. This is a problem of incompetence. Of stupid incompetent people, who get sucked up in the gold mining, gold bull market, and throw a lot of money away.

The best thing that ever happened to an investor in gold mining stocks has been the collapse of the gold bubble from \$1,800 by 40% or so

So my argument is this. That the best thing that ever happened to an investor in gold mining stocks has been the collapse of the gold bubble from \$1,800 by 40% or so. And the reason for this very simple intuition is that if the miners could not make money when the gold price was going up, well, they bloody well ought to be able to make money when the gold price is going down.

And the reason they'll make money when the gold price is going down is because they **will put a cap on their future expenditure.**

Merryn: And they would shut down unprofitable mines.

Ed: They will shut down unprofitable mines. Actually, I'll tell you. So one of the companies I cited in my piece is a company called Newcrest, which is an Australian miner with operations in Indonesia. But what's interesting about this company is it's now being run from someone brought in to run it, who's outside of the gold industry.

He doesn't really care about how many ounces of gold they extract. And he's setting... the new metrics that have been set are cash flow generations, return on invested capital, and so on.

Merryn: This is new.

Ed: This is new. These are businesses being run like businesses, rather than being run to pull, some yellow stuff out of the ground for its own purpose. And I think that that... and I'll tell you, this is another interesting thing about gold. Although one can say that the amount of gold, and you know this, the amount of gold mined doesn't really make

any difference, because it's 2%, the amount mined in any year, it's 2% of the above ground stock.

Having said that, there will be no new gold supply on the market over the next five to ten years. It's pretty clear. I told you, we talked about it earlier, we don't know what the demand for gold will be. It might be high or low, but we do know there will be no supply. You could argue that the supply doesn't really make that much difference.

But in the long-run, it probably does make some difference, and there's going to be no new supply. Now, I think this is where gold differs from, well, in particular, basic materials, mining, such as iron ore mining. Because in that instance, there has been a huge surge of investment, **and that investment will carry on coming forward.**

And it so happens that the new iron ore mines have a cheaper cost of extraction than the old ones, so there's no incentive...

Merryn: To shut those down.

Ed: ... to shut those down. So we have a combination of new capacity coming on stream, and that being low cost. So that will be there and we don't know, whether demand is going to be high or low, as a China bear, the so called Panda, you know that we're called Pandas now.

Merryn: I didn't know. China's bears are Pandas.

Ed: The Pandas, like you and I, will actually think demand will be fairly weak. But if we put the capital cycle hat on, we'll just say that there has been a lot of massive new supply, and that supply will continue for a while to come.

Gold miners, even run by blithering idiots, have at this moment a better prospect than the conventional miners. Which, by and large, are run by much more professional people

So everything else being equal, and you can come back and we'll see, in few years' time whether this is right or wrong, I'm going to say that the gold miners, even run by

blithering idiots, have, at this moment, a better prospect than the conventional miners. Which, by and large, are run by much more professional people.

Merryn: All right. So we're going to buy gold miners. We're not quite going to buy the other miners yet, other big miners. We're probably not going to buy oil yet. Oh, look, a downfall.

Ed: oil is... to tell you the truth, I haven't quite done enough work on oil.

Merryn: Take a guess.

Ed: No. So the bull, you like a bull story?

Merryn: Yes.

Ed: So the bull story is this, and it's a capital cycle story. There has been a surge of investment in energy. We all know that. A lot of it didn't come to anything. Like, the big oil majors spent a lot of time drilling holes in deep water in the Arctic, and they hardly managed to, despite all this expenditure, hardly managed to replenish their reserves, let alone build up any new reserves.

However, in the States, where money was dirt cheap, and someone had discovered fracking, of getting oil through the fracking process. **There was a huge investment in fracking in, if you will wildcat rigs across the States. And that has expanded supply, as far as I understand, by I don't know, two or three million barrels of oil a day.**

Now, again, from the capital cycle perspective, those frackers are toast. And they are going out of business now.

Merryn: Are they? Even though their cost of production is getting lower and lower?

Ed: Well, you have to get Jim Chanos in. He was presenting on this subject the other day at the presentation I went to, and the argument there is that a lot of this new supply in the States is only profitable at \$60 to \$70 a barrel. And the analysts have \$80 in their models, so they're pricing it off at a much higher oil price.

So let's assume that in the first instance, the price of oil stays about roughly where it is. And these wildcat frackers, who've increased supply, disappear over the next two or three years. And let's also assume, this is not quite certain, that those oil wells that they've uncovered was just a short increase, a temporary increase in supply.

some people compare... I know nothing about the oil industry, but I like the idea that you compare an oil well to a can of Coke that's been shaken up, and you open the lid and it gushes out. Now, what I understand is that the frackers, it gushes out much faster than a conventional well. And it could be, and no one's 100% certain about this, so they could have much shorter lives.

Merryn: I understood that there were these vast fields that, would last for many, many, many, many years. And also, more importantly, that they could be turned on and off really quickly. So they're swing producers, that will hold the price of oil at \$50, \$60, indefinitely. I guess that's the bear case.

Ed: but Merryn, that may be the bear case, but you have to bear in mind that that's the sort of bear case that's put out after the oil price has already fallen 50%. When it was up, Goldmans, for instance, now, is saying the oil price at \$50...

Merryn: And we all remember their \$150 call, don't we?

Ed: It was \$300.

Merryn: Was it \$300?

Ed: You have to go back to, I think, 2008, they were calling \$300. Now, the point of this, as is that market, as Jim Grant says, markets make opinions, not the other way around. **So a low oil price will engender thoughts that there will be a huge amount of supply at the margin.**

Some intelligent people think – believe – that that may not be the case. In which case, if you take out the frackers, you could take out a couple of million barrels of supply, and you might find that the supply conditions for the oil industry, forget about demand, could rectify much more quickly than, say, for iron ore and conventional mining. So if we're going to put a category, do you want a category?

Merryn: Yes, I do.

Ed: We're going to start from a capital cycle perspective and say; the gold miners look ripe about now, regardless of what happens to the oil price. But as I say, the lower the better, because it gets rid of the marginal producers. The energy guys are worth keeping an eye on. Do you want... someone gave me quite a nice idea, if you want an idea.

Merryn: Absolutely. We always want ideas, particularly when they're second hand.

Ed: [Laughs] where does one get an idea from, if it's not second hand? So one of my former colleagues, I was talking to him about this subject. And it's his thesis that, that the fracking supply could come off fairly rapidly. And I asked him and said what was he interested in?

He's not interested in the big energy, the big oil. Because, well, they've had a pretty wretched time of it recently, and they're having trouble just, as I say, replenishing their reserves. However, if you want to be politically incorrect...

If you wanted to leverage play on a long supply of oil coming out for the next 30 years or so, that you should look towards the Canadian tar sands business

Merryn: Always.

Ed: ... Canadian tar sands businesses have, apparently, and you can check up on this, they've, apparently, they have invested a lot in their start-up investment, but their marginal cost of production is lower than the frackers. So it's conceivable that if you wanted to leverage play on a long supply of oil, in other words, a stream of oil coming out for the next 30 years or so, that you should look towards the tar sands business.

Now, the environmentalists will not be pleased if you buy your stocks. However, I'm told, so, for instance, there's one called Canadian Natural Resources, apparently good stock, a good company run by reasonably sensible people.

Merryn: Wouldn't this also, maybe, then be a wonderful time to buy Russian oil companies? They're double cheap. Is that too much for you? That's just too much.

If you own something in Russia, and it halves in price, it is technically cheaper. But then you realise that it's country run by a very unpleasant man, who has absolutely no concern whatsoever for the interests of domestic, let alone foreign, investors

Ed: [Laughs] I own, sort of... Look, the test, another test of whether you've made a good investment, is you buy an investment and see it halve in price, and do you want to own more or do you have second thoughts? The point is, if you own something in Russia, and it halves in price, it is technically cheaper.

But then you realise that it's country run by, a very unpleasant man, who not only, is prepared to invade his neighbours, but has absolutely no concern whatsoever for the interests of domestic, let alone foreign investors. Foreign investors on Putin's list of priorities is extremely low.

And if you, if you don't know that, you can read that rather good book by Bill Browder, I think it's called **Red Alert** that came out earlier this year, explaining what happens if you invest in Russia. So the trouble with Russia is that yes, stuff is cheap, and particularly, the Gazproms of this world. But their cash flows are diverted by Putin to his cronies, and perform national service. it may be that they're so cheap, you can't...

Merryn: That doesn't matter.

Ed: No. look, this year, the Russian stock market is one of the best performers.

Merryn: Exactly. This is my point. It depends how much you care about this stuff, if we're being politically incorrect.

Ed: Well, I don't know. My own preference is to separate one's social concerns from one's investments. Because, if it's legal, I think you should, in the investment world, do it, really, so to speak. And if it shouldn't be legal, I think that someone should frame a law against it. I think that was quite right.

Now, with Russia, I suppose my feeling about this is not just with Russia, but really, with a lot of the emerging markets. Because there is no, if you want to call it, corporate governance, and because the state, there's no rule of law, what is your claim on property?

So you can get, I think, Russia is really a binary proposition, you know. You're either going to make money...

Merryn: Or you're not going to have any left at all.

Ed: So my own view is just, not... and I did it myself, but I didn't double down, is have some small exposure, because it's very cheap, but don't, but be prepared to lose it all.

Merryn: Yes. We have that as well, some small exposure to Russia. Anyway, I think we better leave it there, so thank you very much. So now we know buy gold, buy politically correct oil, don't...

Ed: Incorrect oil.

Merryn: Well, it's both. It's politically correct because it's in Canada, and politically incorrect because it's tar sands, right?

Ed: Yes.

Merryn: It's both. Maybe that evens out. So buy neutrally correct oil, neutrally politically correct oil. Either way. Gold miners...

Ed: And buy *Capital Returns*.

Merryn: Oh, and buy *Capital Returns*, the book, because that's going to be a fabulous investment. It should be in everybody's Christmas stocking, right?

Ed: I wouldn't put it in a Christmas stocking, personally, but you could buy it for reading in the New Year.

Merryn: Perfect. Thank you.

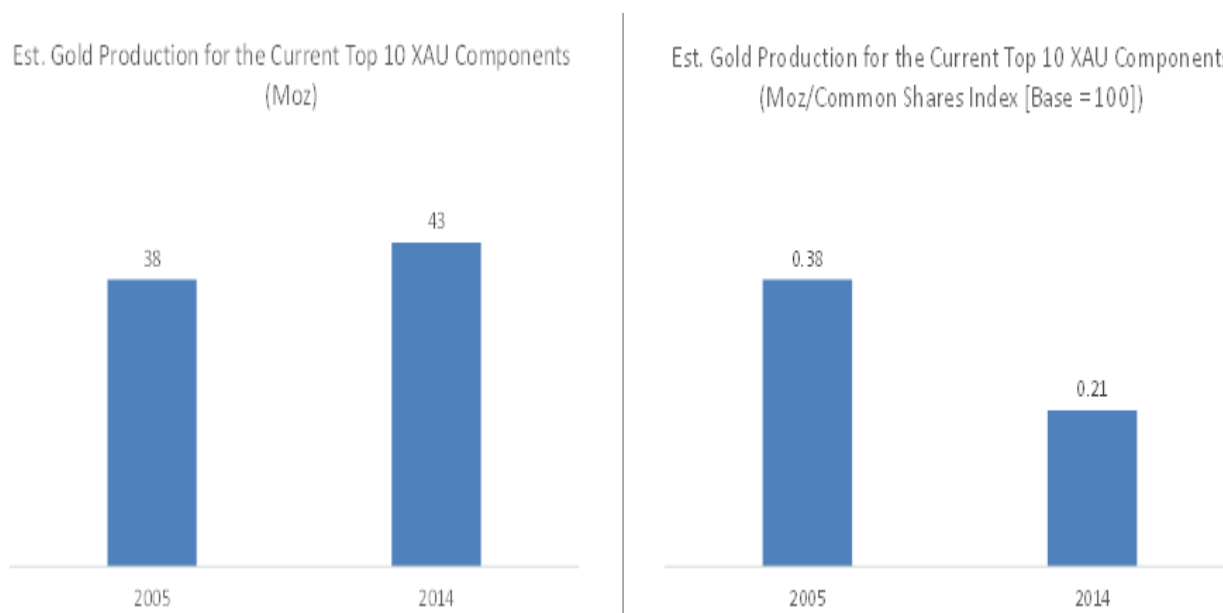
Ed: Thanks, Merryn.

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The Gold Mining Industry Is Severely Incapacitated

Over the past 10 years, aggregate debt of the gold-mining industry increased from \$1 billion to \$41 billion. (For purposes of this discussion, all figures refer to the ten largest companies included in the XAU index as a proxy for the industry.) The increase in debt was to fund capital expenditures for mine expansion in the expectation of sustained high gold prices. From 2005 to 2011, the gold price per ounce rose from \$429.55 to \$1420.78; it averaged \$803.60 over that six-year period (numbers from Bloomberg). Managements, investors, and lenders were uniformly bullish as the gold price reached \$1900.23 in 2011 amid predictions of a government shutdown in August of that year. Following the 2011 peak, the dollar gold price fell steadily to sub-\$1100 levels, a decline of more than 40 percent. The decline has severely undermined industry profitability, added further strain to balance sheets, and raised doubts as to future returns on capital committed to new mining projects.

Equity investor enthusiasm enabled the industry to double share issuance over that 10-year period to fund mine expansion and corporate acquisitions. The incremental return on investment from equity and debt issuance has been highly disappointing. Significant increases in capital have spurred little production growth, and share issuance has severely diluted equity investors. Aggregate profits have fallen from a peak of \$14 billion in 2011 to negative \$5 billion in 2014. Gold production over that same period rose an estimated 13 percent, from 38 million oz. to 43 million oz., while per-share production declined from .38 oz. to .21 oz., or 45 percent.



Note: Estimated gold production = revenue divided by average gold price
Source: Bloomberg, FactSet

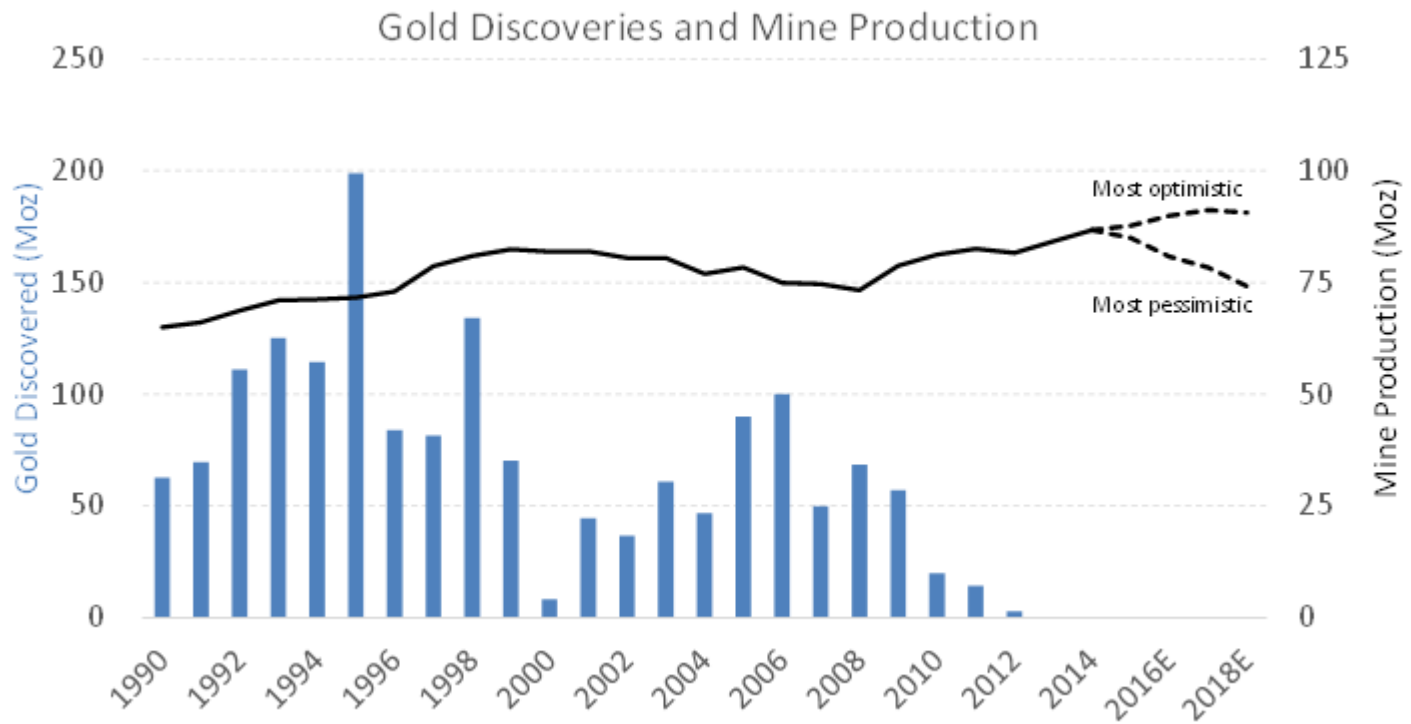
To us, this cumulative and collective misfortune has translated into a loss of credibility and perhaps an inability to raise significant incremental capital for several years to come. In our opinion, it will require a sustained rise of several years in the gold price to attract capital for new mining projects, assuming that such projects even exist in light of the severe reduction in industry exploration expenditures and discovery rates. In the absence of a sustained rise in the gold price, the most likely outlook over the next two to three years in our opinion is for the industry to continue in a survival mode of balance-sheet repair and running in place to remain positioned for a

future rise in the gold price.

Future Mine Production Will Begin to Slump

The nuclear winter of the gold-mining industry will have inescapable intermediate to longer-term effects on future mine supply. Financial constraints, investor bearishness, and the ever-lengthening time cycle to build new mines will in our opinion lead to a moderate to severe decline in global gold-mining output before the end of the decade. Discovery of new ore bodies has declined significantly since 2006 (chart below). Without discovery, there can be no new mines. Exploration spending, down about 60 percent from the peak, has been among the prominent casualties of the industry's hard times.

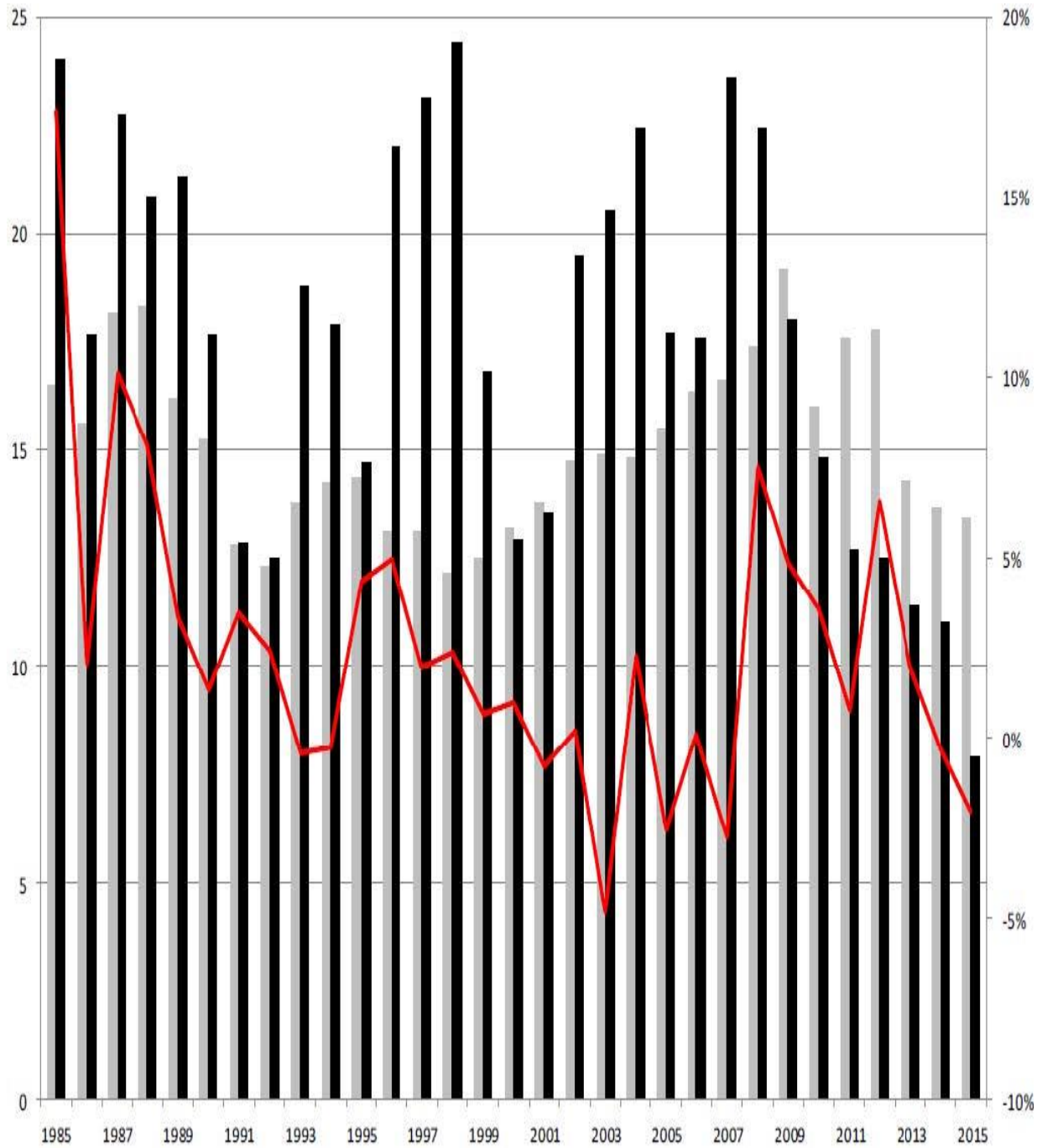
The requirements for building a new mine go well beyond exploration success, however. The hurdles for permits, social licenses, host-government approvals, engineering and construction, and most importantly, financing, are high and going higher. We believe that the time from discovery to production for all significant new projects is five years, optimistically, and more realistically ten or more years. An added headwind is the seemingly steady trend towards more onerous conditions set by host countries for extractive industries in general, and the seemingly steady erosion of the rule of law in locales once thought to be safe for new investment. At the very least, these trends argue in favor of higher hurdles for new investment.

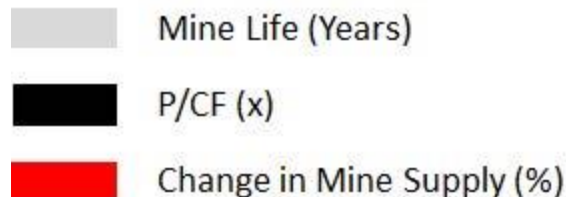


Note: Gold discovered is based on deposits containing >2 Moz
 Source: BMO Capital Markets, Credit Suisse, SNL Financial

Reserve life has fallen to precarious levels, in our view; the lowest in 30 years (chart below). The current estimated mine life of 13 years is calculated on the assumption of a gold price of approximately \$1,200/oz. That assumption will most certainly be revised, as required by the SEC, to a lower number following 2015 year-end assessments. Not evident in such calculations is the extent to which the practice of high grading (mining of the

highest-grade ore) has further gutted the sustainability of industry production at current levels. We estimate that the industry reserve life would be shortened by one to two years based on an assumption of a \$1000 gold price.





Source: Scotiabank

Global mine production for 2015 is expected to reach approximately 3200 t, a very slight increase over 2014. For 2016, we project production to be essentially flat. We believe that the winding down of industry production will be gradual initially, and much more rapid by 2018, reaching a decline of perhaps 25 percent by 2020. A revival of the 10-year complex and arduous process to expand industry production will not occur, our opinion, merely because of a spike in the gold price of 30 to 50 percent from current levels. Many might regard such a spike as a bear market rally to be followed by even lower prices than current lows, based on deeply ingrained bear-market psychology.

We construe the incapacity of the gold-mining industry to be extremely bullish for future gold prices. Notwithstanding the value destruction that has resulted from the carpet-bombing of investors by equity issuance to finance ill-conceived capital programs, we find many reasons to consider investing selectively in gold-mining equities. There are important exceptions to the sins and shortcomings of the industry at large. Value creation, even if currently unrecognized by the market, is in our view taking place in the form of accretive acquisitions by companies with access to capital and good balance sheets from those forced to sell quality assets to address excessive balance-sheet leverage. In addition, there are new mines that have been under construction for several years that should begin to produce gold, profitable even at current prices, at a time when industry production is shrinking. We believe that they will be sought-after acquisition targets as other producers deplete reserves. Other notable exceptions include companies that are still in good financial condition with attractive assets and positive cash generation. Their equities offer dynamic exposure to the repricing of gold that we regard as inevitable.

China, The End Of History And The Last Great Commodities Boom

Jan. 10, 2016 9:46 AM ET

Includes: [ANRZQ](#), [BBL](#), [BHP](#), [BTU](#), [CLF](#), [CPER](#), [FCX](#), [FOVLF](#), [FSUMF](#), [HBM](#), [NINI](#), [RIO](#), [SCCO](#), [TCK](#), [USO](#)

Disclosure: I am/we are long BHP, RIO. **(More...)**

Summary

China's economic deceleration is occurring because it has reached a particular point of development where the easy economic gains have been made.

Significantly lower economic growth in China is now the way of the future.

The greatest commodities boom ever known has come to an end, with sharply weaker commodity prices now the new normal.

The drivers of global economic growth have changed with the end of emerging markets as the key engine of economic growth.

It was only just over two decades ago that philosopher Francis Fukuyama released his controversial book, *The End of History and the Last Man*. In it, he expounded his theory that the collapse of communism and adoption of liberal democracy in Eastern Europe, through a series of velvet revolutions, broke the traditional paradigm through which mankind viewed history. These revolutions, he argued, symbolized the end of mankind's ideological evolution and the adoption of the final form of government.

Now we are witnessing events of equal magnitude, with the last major socialist stalwart China emerging from the economic darkness and embracing the central tenets of capitalism and the free market system to become a global economic super power.

The completion of this transition, I believe, signifies the end of one global developmental epoch and the emergence of a new global economic system which needs to be viewed through a different conceptual paradigm. This paradigm shift brings with it considerable changes for the global economic system and financial markets with it signifying the end of the last great commodities boom witnessed in modern times.

The creation of the greatest commodities boom ever

After the end of the civil war and the accession to power of the communists under Mao, China's economy stagnated. Then from the 1970s, China initiated a series of policies aimed at modernizing the nation. It was these that led to China's eventual rapid economic and social transition, triggering the greatest commodities boom ever witnessed in modern times.

As China modernized, and the required infrastructure was developed and put in place to support its economic transition, its consumption of iron ore, coking and thermal coal, base metals and other raw materials skyrocketed.

It pays to be a 'catch-up economy'

The boom really heated up in the early 2000s as Beijing's economic reforms started to gain traction and the experiment with the free market began in earnest. It is easy to see why China's rate of modernization and economic growth was so rapid and fueled what is probably the greatest commodity boom of all time.

Most importantly, at the start of the development cycle it pays to be a 'catch-up economy'.

You see, provided that other factors are equal, poorer less developed economies grow far more rapidly than partially developed or developed countries. This is because they are coming from a lower economic and developmental baseline.

They also have the advantage of being able to rapidly close the development gap by following the lead of developed nations through technology transfers and capital injections to achieve 'catch-up growth'.

Another key factor in China's rapid development was the immense physical capital that it was able to access and mobilize resources in order to develop new productive assets and infrastructure.

This is because both the size and accessibility of a country's physical capital significantly influences the pace of growth. In the case of China, these are

tremendous and can never be replicated by another nation with them being specific to China.

Foremost among them is China's copious population which is the largest of any country, thus endowing it with tremendous human capital. This human capital for a variety of socio-economic and cultural reasons was ready to be mobilized with a range of catalysts putting in motion the greatest wave of rural-to-urban migration the world has ever seen.

In fact, this rate of migration was unprecedented, causing the population of the majority of China's major cities to double or even more between 1990 and 2000. The scale of this migration continued to grow throughout the 21st century, with an incredible 145 million migrants in 2009 alone.

Urbanization is an important driver of economic growth, and for it to be occurring on such an unprecedented scale is one of the decisive reasons for China's rapid economic transition.

As a population migrates from country to city seeking better lives and higher incomes, consumption patterns change. This is because a higher income per person results in a marked increase in demand for consumer goods, food, services, and accordingly, the raw materials required to produce them. Once incomes start to rise they create a growing middle-class that causes demand to surge.

China's massive wave of urban migration created unprecedented demand for the resources to build cities as well as the transport, technology, energy and logistics to support them.

It fueled an unparalleled construction boom that was responsible for China's construction industry becoming the single most important consumer globally of a range of commodities, including steel, copper, zinc and nickel.

Such a massive population shift only added additional momentum to China's rapid pace of economic development with it providing a readily available and super-exploitable workforce to support the process of industrialization.

Between 2001 and 2011, China's industrial output more than doubled and this rapid growth further stimulated the already swift rate of rural-to-urban migration.

Rapacious commodities demand triggers once in a lifetime bull market

As China industrialized and wages as well as the standard of living improved, there was even greater consumption and demand for resources. By 2011, China had become the world's single largest energy consumer and the second largest consumer of crude after the U.S. This ardent appetite for energy caused China's consumption of thermal coal and oil (NYSEARCA:USO) to double between 2001 and 2011.

Furthermore, the surge in demand for basic materials is particularly evident when looking at China's consumption of iron ore and other metals.

China was responsible for 53% of the world's iron ore consumption in 2011, or more than four times the amount of iron ore it had consumed a decade earlier. For the same year, iron ore imports amounted to 61% of the global total or almost eight times more than China's iron ore imports in 2001.

The consumption of copper (NYSEARCA:CPER) grew more than fourfold for the decade from 2001 to 2011 when China became the largest single global consumer of copper.

This swelling demand for raw materials caused the prices of commodities such as iron ore, coal and copper to soar to stratospheric heights, triggering an investment frenzy among miners as they sought to cash on the 'boom that would never end'.

The price of iron ore peaked in 2011 at \$187 per tonne or more than 14 times higher than it was a decade earlier. Coking coal, another key ingredient in steel manufacturing, peaked at \$147 per tonne at the end of 2008 or almost four times its value in 2001.

Other metals also grew exponentially in value, copper more than doubled in value between 2001 and 2011, while zinc's price by 2008 had quadrupled in comparison to 2001. Nickel (NYSEARCA:[NINI](#)) also wasn't left behind, with its price peaking in 2007 at eight times higher than it was in 2001.

Meanwhile, China's insatiable thirst for energy saw thermal coal, its primary energy source, peak at \$192 per ton in 2007 or six times its value in 2001.

This rapacious demand for commodities triggered a soaring commodities bull market that many industry insiders claimed would never end.

The end of the greatest commodities boom ever

Nonetheless, like all economic bubbles, it eventually did end for one key reason, China's economy came off the boil and its economic growth began to slow markedly. By the third quarter 2015, China's GDP growth had slumped to 6.9% or 50 basis points lower than a year before and its lowest level since the global financial crisis.

It is expected that this decline will continue and I certainly don't expect to see any return to the double-digit figures recorded during the heady days of its economic boom between 2004 and 2010.

There are a number of reasons for this rapid economic growth and then decline.

Key being that once a particular point of development is reached economic growth slows as the advantages of being a 'catch-up' economy decline.

China has now reached that point on its developmental journey where rapid industrialization, urbanization and expansion of the economy has peaked and is now falling into decline. This means that future economic growth will never again reach the heady double-digit figures of the past decade, which triggered a massive demand for basic materials but will instead continue at a more sedate rate.

The latest data out of China confirms this. China's third-quarter GDP growth rate dipped to 6.9%, its lowest rate of growth since the global financial crisis. Analysts and economists expect China's growth to slow even further, with full-year 2015 GDP estimated to be 6.5%, which will decline to 6.2% annually by 2017.

With China being a leading buyer of commodities, it certainly doesn't bode well for their outlook and explains why commodities prices have plunged.

In fact, I believe that what we are now seeing is a paradigm shift among commodities and the move to a 'new normal' with indicators highlighting that double-digit growth is a thing of the past for China.

Two economic sectors that are among the largest consumers of raw materials in China are caught in intractable slumps.

The all-important construction sector is in terminal decline as is real estate development. By November of this year, investment in real estate development was less than a tenth of what it was at the start of the year and there are signs this downward trend will continue. Substantial inventories of vacant housing, coupled with slowing rural to urban migration, means that it will be some time before there is any uptick in demand for housing.

This reduces the pressures on infrastructure which means the demand for new and/or additional infrastructure is declining, further placing pressure on the demand for commodities.

I expect the rate of rural to urban migration to slow even further. This is because declining rates of industrialization, reduced labor intensity in manufacturing because of technological advancements, and falling industrial output are reducing the demand for labor and keeping a cap on wages, thereby removing probably the most important incentive.

The decline in industrial activity is already apparent. For December 2015, China's industrial activity contracted for the fifth successive month. Then

there is the decline in industrial growth, with output for 2015 having halved in comparison to 2011. Not only is this impacting the rate of rural to urban migration, but it is also having a sharply negative effect on the demand for commodities, particularly steel, base metals as well as energy such as oil and coal.

There won't be any uptick in industrial activity for the foreseeable future because of softer global demand for China's manufactured products coupled with the considerable excess productive capacity that arose during the boom years.

Significantly lower economic growth is the way of the future

There are a range of indicators that highlight that economic growth in China will remain sharply lower for the foreseeable future and that the days of heady double-digit growth are well and truly over.

Key among these is that China's rapid modernization and expansion has come to an end.

Once a certain point of economic development has been reached, the benefits of being a 'catch-up economy' decline. This is because the easy gains have been made, while the higher standards of living attained increase the costs associated with industrial activity, making these economies' exports less competitive and investment more expensive.

As a result, economic stagnation can ensue. Industrial growth starts to languish because of declining returns and a lack of investment, while higher incomes and standards of living lead to a lack of innovation and declining productivity.

It is clear that this is occurring in China. Industrial profits continue to decline, falling for the tenth consecutive month in November, while manufacturing investment in 2015 is down by 80% from where it was in 2011.

Then there is the risk of China falling into the 'middle income trap'. This would see it caught in a permanent state of economic stagnation interlarded by extreme boom and bust cycles, much as Brazil has experienced in recent years. The middle income trap is where a developing economy's growth slows sharply and per capita income levels stagnate, thereby trapping the economy in the middle income category. There are many causes for this, but key among them is an over-reliance on driving economic growth through the extraction and export of minerals as well as the manufacture and export of low tech goods.

With signs of this occurring, Beijing has moved quickly to adjust its policies in an attempt to prevent China from being permanently caught in this rut and make the transition to a developed economy. This has meant creating an environment conducive to the development of wealth and emergence of a broad-based middle class.

To achieve this, Beijing needs to rebalance China's economy from one focused on investment in infrastructure and industry to consumption-driven growth, requiring it to reverse many of the policies that were responsible for its rapid economic development.

As a result, Beijing has instituted a range of policies aimed at fostering growth in the country's weak services sector, reining in the excessive growth of the past and promoting consumption. This means that economic growth can only slow further and that the demand for commodities will continue to decline.

Can other developing nations pick up the slack?

Some analysts and industry insiders are touting the emergence of a range of other developing economies as being capable of picking up the massive excess capacity that now exists globally and fueling a new commodity boom.

Among those countries are Indonesia, Vietnam, India, Pakistan and Nigeria. But this appears highly unlikely with each of them lacking the unique

characteristics that fueled China's massive and rapid economic growth, triggering the greatest commodities boom of modern time. This is because each lacks the dynamics of China as well as the massive population base, access to vital resources, broad skill and educational base and geographic size of China.

These factors along with each of them being substantially further along the developmental curve than China when it first started to modernize, means that the rate of industrial growth, infrastructure development and urbanization will be slower and not last as long.

What does this mean for investors?

Despite the claims of some analysts that commodities are long overdue to rebound, what we are witnessing is a fundamental paradigm shift in how to view the global economy and commodities. The shift to weaker commodities prices is reverberating across global markets.

Not only has it triggered the end of rapid growth among some of the world's fastest growing emerging markets such as Brazil, but it has endangered the sustainability of the global financial system. This is because many miners and emerging economies have gorged themselves on cheap debt in order to live above their means along with the forlorn hope that an imminent recovery in commodities will fund repayments.

Clearly, there is no recovery on the way and this has left a number of commodities miners in precarious financial positions.

Mining heavy weights BHP Billiton (NYSE:[BHP](#))(NYSE:[BBL](#)) and Rio Tinto (NYSE:[RIO](#)) REMAIN determined to grow production while cutting costs through economies of scale to drive higher cost producers out of the market

Among the hardest hit are coal miners, with Alpha Natural Resources (OTCPK:[ANRZQ](#)) seeking bankruptcy protection and Peabody Energy (NYSE:[BTU](#)) among others that could potentially be on the way.

This is also applying considerable pressure to smaller iron ore miners such as Cliffs Natural Resources (NYSE:[CLF](#)) and Fortescue Metals (OTCQX:[FSUMF](#)). It also makes beleaguered coking coal and base metals miner Teck Resources (NYSE:[TCK](#)) an unappealing investment, particularly when its exposure to the increasingly uneconomic Fort Hills oil sands project is considered. Other copper miners such as Hudbay Minerals (NYSE:[HBM](#)), Freeport-McMoRan (NYSE:[FCX](#)), First Quantum Minerals (OTCPK:[FQVLF](#)) and Southern Copper (NYSE:[SCCO](#)) offer little upside because of this macroeconomic backdrop.

Bottom line

China's emergence as a global economic super power and the abrupt end to its catch-up growth phase has created a paradigm shift for the global economy and financial markets. It signifies the end of the greatest commodity boom of modern times and a fundamental shift in the growth drivers of the global economy, with the emerging markets growth model that had dominated global growth now seemingly broken. This means that investors need to become accustomed to significantly lower commodity prices that, with the exception of crude, now appear to be the new normal.

Editor's Note: This article covers one or more stocks trading at less than \$1 per share and/or with less than a \$100 million market cap. Please be aware of the risks associated with these stocks.