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Finding Conviction When Others Panic — Steven Romick

Mr. Romick, CFA, who joined FPA in 1996, is the Portfolio Manager of the FPA Crescent Fund. Mr. Romick was previously Chairman of Crescent Management and consulting security analyst for Kaplan, Nathan & Co. He earned a B.S. in Education from Northwestern University.

G&D: You started the Crescent fund in 1993, but let's go back earlier than that — you had an interesting opportunity coming out of Northwestern University to

enter the investment management industry. Can you talk about that and what your experience with investing was up to that point?

Steven Romick (SR): I had no experience investing up to that point. I was on my way to law school at USC to get my JD/MBA because I happened to have done reasonably well in school and I didn't really know what I wanted to do. I figured I could push off the real world for a couple more years. But, I got a job offer from a friend of my father, who said that he was



Steven Romick, Portfolio Manager, FPA Crescent Fund

tired of unlearning MBA's - he wanted to teach someone from the ground up.

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Low Decile, High Return — Donald G. Smith

Donald G. Smith is the CIO of Donald Smith & Co. He began his career as an analyst with Capital Research Company and subsequently worked at Capital Guardian Trust Co. In 1980, Donald became the CIO of Home Insurance Company, and President of Home Portfolio Advisors, Inc., which he bought in 1983 and changed the name to Donald Smith & Co., Inc.

Mr. Smith was awarded a B.S. in Finance and Accounting by the Univer-

sity of Illinois, an MBA by Harvard University and a J.D. from UCLA Law School and was admitted to the Bar Association of California.

G&D: Briefly describe the history of your firm and how you got started?

DS: Donald Smith & Co. was founded in 1980 and now has \$3.6 billion under management. Over 30 years since inception our compounded annualized return is 15.3%. Over the last 10 years our annualized return



Donald G. Smith, Donald Smith & Co.

is 12.1% versus -0.4% for the S&P 500. We have

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Welcome to *Graham & Doddsville*



Pictured: Bruce Greenwald and Marty Whitman at the Columbia Investment Management Conference in February.

We are pleased to present you with Issue X of *Graham & Doddsville*, Columbia Business School's student-led investment newsletter co-sponsored by the Heilbrunn Center for Graham & Dodd Investing and the Columbia Investment Management Association.

This issue features an interview with Steven Romick, portfolio manager of FPA Crescent Fund. Mr. Romick outlines his free-range capital allocation approach and walks through his preference for large-cap, internationally exposed companies

with pricing power. He also discusses the fund's recent investment in distressed mortgages.

The issue also features an interview with Donald G. Smith, who volunteered for Ben Graham at UCLA. His fund concentrates on the bottom decile of price to tangible book stocks and has compounded 15% over 30 years.

We also talk with Danilo Santiago, CBS '01 and Claudio Skilnik, CBS '02, who operate a long-short fund with a unique strategy of

focusing on a stable set of 85 companies.

We also aim to offer specific investment ideas that are relevant today. The current issue includes two student investment ideas, including U.S. Physical Therapy (USPH), presented by Ryan Coyle '11 and CoreLogic, Inc. (CLGX) by Alex Latushkin '11.

Please feel free to contact us if you have comments or ideas about the newsletter as we continue to refine this publication for future editions. Enjoy!

The Value of Process — Rational Asset Management

Danilo Santiago, CBS '01 and Claudio Skilnik, CBS '02 are both engineers who graduated from the University of Sao Paulo and co-founded Rational Asset Management Co. ("Rational"). Rational is the Investment Manager for the Rational Value Fund ("RVF"), which is a long-short equity hedge fund with a well defined investable base of 85 companies that closely represent the U.S. economy. Since its inception in April 2008, RVF has attained an unlevered net adjusted alpha in excess of 20% when compared to the S&P 500 performance.



Danilo Santiago, CBS '01 — Rational Asset Management



Claudio Skilnik, CBS '02 — Rational Asset Management

G&D: Why don't you introduce yourselves and explain how you got to know each other and got started with Rational Asset Management?

Danilo Santiago (DS): We met at Columbia Business

School, but we both graduated from the University of Sao Paulo with engineering degrees. This is important, because we have a common analytical background and a common investment methodology background. We

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Steven Romick

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G&D: That was your experience at Kaplan, Nathan, & Co.?

SR: It was James Nathan, who graduated from Columbia Business School with Mario Gabelli and Leon Cooperman sometime in the '60s. I worked with him for 11 years, and he helped me start my business during that time.

G&D: So you started your own money management firm in 1990, but the Crescent Fund didn't begin until 1993. Can you talk about those first three years?

SR: I managed separate accounts. Honestly, people shouldn't have given me money then. With what I know now, and what I thought I knew then, it's such a vast difference. People took a chance on me, and I learned as I went. I'm better now than I was then. I think that in the money management business, knowledge is cumulative, or rather should be cumulative rather than repetitive, and one should improve the longer one is in the business. I'm much more comfortable wearing the skin of an investor than I was back then. I guess I was too ignorant to realize that when I was younger.

G&D: So what advice would you give to young men and women looking to start their own fund, given what you know now?

SR: I don't think it is a mistake for all young men and women, but for me it was what I didn't know that I taught myself over time. I

“Honestly, people shouldn't have given me money then. With what I know now, and what I thought I knew then, it's such a vast difference. People took a chance on me, and I learned as I went. I'm better now than I was then.”

put myself in front of a lot of people and tried to have them teach me. I was fortunate, because within the first couple of months of working for Mr. Nathan I ended up having lunch at a

hotel down in Laguna Beach with a guy wearing pajama bottoms. I'd never seen anyone wear silk paisley pajamas in the middle of the day before, but it was John Templeton. I got to have dinner with Leon Cooperman, I think when he was running GSAM at the time. I got to sit down with these people and just listen, like a fly on a wall. In Mr. Nathan's office I had a desk pushed up to his and every time he spoke with a company I listened in on the extension.

G&D: Then in 1993, you started the Crescent Fund. How did you position the fund?

SR: I felt that most mutual funds were style box constrained, and didn't take advantage of a deep toolbox. I spent a lot of time looking at high-yield bonds and some distressed debt in the late 80's, and I got a flavor for it. I didn't think there were a lot of public funds out there that invested in such diverse asset classes, but felt that such a vehicle made sense for people. For years, I had to fight the idea that I was a style box manager.

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G&D: After three years you joined FPA. How did that transpire?

SR: I realized that you can't wear all the hats well, and I was wearing too many hats. I wanted to just focus on investing. I wanted someone to insulate me from the marketing and back office. It just took too much time away from the portfolio. I wanted to partner with people of like-minded nature, who were value investors and had great integrity. They may execute differently, but thought similarly. I had been friends with Bob Rodriguez for seven years at that time, and used to have regular lunches with him to talk ideas. At one lunch, I asked him if there was a place for me at FPA, and he said we should talk about it.

G&D: You have a unique strategy for a mutual fund, in that you can go short as well. However, your short exposure has never been very elevated. How do you think about building your portfolio?

SR: We think about discrete investments, from the bottoms up, which we believe have attractive upside-downside parameters. But, we also spend a lot of time thinking about the top

down, considering what might happen in the world and how we might protect against certain types of risk. You can protect against certain types of risk, not just by hedging your portfolio, but by choosing to buy certain types of companies versus others. That might

“We spend a lot of time thinking about what can happen. At the end of the day, we're worry warts. As a byproduct of our strategy, we end up with cash and we end up lagging in up markets, but outperforming in down markets.”

mean not owning certain industry groups or asset classes. For years, we didn't own financials because we had a lot of concern about what was happening with easy money, poor underwriting standards, excessive leverage, and a bubbling housing market. So we

stayed away from financials as P/Es on banks expanded to levels that weren't justifiable. I believe that P/Es on any levered business, all things equal, should be less. What's more leveraged than a bank? You might have an 8% capital ratio, so you've got 12-1 leverage, not including any off balance sheet leverage that might exist. You might have a large derivatives book, which is a black box. We felt the excessive prices being paid weren't taking the risk into account.

By the way, when I first started out with Mr. Nathan, I did most of my work on banks and thrifts. I was effectively a banking and thrift analyst back in the mid-'80's, so I was predisposed to analyze and enjoyed owning banks. I didn't feel it was justified owning those companies as a result of our top-down view in the early part of the last decade. We wrote about credit default swaps back in 2002. We spend a lot of time thinking about what can happen. At the end of the day, we're worry warts. As a byproduct of our strategy, we end up with cash and we end up lagging in up markets, but outperforming in down markets. It's not that we're targeting such performance

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characteristics, but that our general sense of unease leads that to be the case.

G&D: Do you have financials in your portfolio today?

SR: Now we do. 2008 rolls around, and we were net short financials, not in a big way, but short companies like Lehman Brothers and certain Spanish banks. Most of our financial exposure is on the debt side. We were able to buy loans with very strong collateral, which we thought we understood reasonably well, and we stress tested the portfolios to determine what our asset coverage would be in a worst case scenario. We ended up buying things like Ford Credit of Europe, CIT, American General Finance, and International Lease Finance. We discounted the underlying assets tremendously, and in every case we didn't think we could lose money so we just kept buying. So our portfolio is not long financials on the equity side to any great degree, but on the debt side. A lot of that has been culled back. The yield on our debt book was 23% last year and now it's less than 8%.

G&D: In your first letter in 1993, you wrote that you often found niche compa-

nies with excellent track records that Wall Street has yet to discover. Is it worth your time looking for these opportunities now that you have \$4 billion under management?

SR: I think that I was naïve. What is really undiscovered? I think it's morphed from undiscovered to unloved or misunderstood.

“Being a really good investment manager is equal parts being a financial analyst, business analyst, and psychologist with conviction to act when others are panicking.”

There aren't that many undiscovered names out there.

G&D: How do you go about looking for ideas where there is a gap between perception and reality?

SR: Fortunately, people are emotional and they make visceral decisions. Such deci-

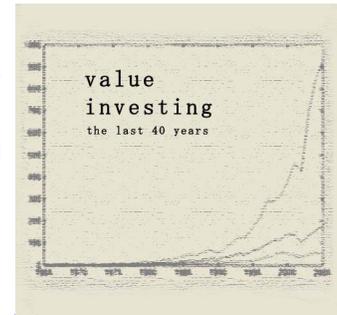
sions end up manifesting themselves in volatility, where things are oversold and overbought. Being a really good investment manager is equal parts being a financial analyst, business analyst, and psychologist with conviction to act when others are panicking.

When we screen, we're looking for companies with strong cash flow characteristics and returns on capital, but most of companies don't come from screens. What's more prominent in our process are monitor lists. There are other areas, like spin-offs, that we monitor because we think there are more natural sellers than natural buyers. We don't think spin-offs are terribly inefficient anymore, but there are other things like that that we follow.

G&D: How do you think about your goal as a portfolio manager?

SR: Beating the market is not our goal. Our goal is to provide, over the long term, equity-like returns with less risk than the stock market. We have beaten the market, but that's incidental. We don't have this monkey on our back to outperform every month, quarter, and year. If we think the market

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Columbia Business School is a leading resource for investment management professionals and the only Ivy League business school in New York City. The School, where value investing originated, is consistently ranked among the top programs for finance in the world.

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is going to return 9% and we can buy a high-yield bond that's yielding 11.5% and we're confident that the principal will be repaid in the next three years, we'll take that. If the market rips and goes up 30%, we don't worry about it. We don't feel the onus to be buying juice all the time, because that can sometimes turn into disaster. We are absolute value investors. We take our role as guardians of our clients' capital quite seriously. If we felt the need to be fully invested at all times, then we would have to accept more risk than I think we need to. I don't think our approach is for everybody, but it works for us. I'd like FPA to be known as respected value investors. I'm very careful in stating 'value investors' and not 'value investment firm' because our money is invested alongside our clients.

G&D: Despite constructing your portfolio from the bottom-up, your macro view does play a role in your analysis. Do you want to give us an overview of what you are seeing right now?

SR: We think it is very important to have a macro backdrop and not be in-

vested in certain areas of the market. We don't have a crystal ball and don't believe that we understand the economic picture better than everyone else. At certain points though, we feel that there is enough uncer-

“We are in one of those periods right now where we think the economic outlook is pretty opaque. The U.S. economy is currently so jacked up on steroids that you can't really understand the data until the meds wear off.”

tainty that could lead to either some pretty ugly outcomes or even wonderful outcomes. We are in one of those periods right now where we think the economic outlook is pretty opaque. The U.S. economy is currently so jacked up on steroids that you can't really understand the data until

the meds wear off. Half of the people in this country are receiving subsidies of some sort. What does that mean for GDP? Our economy is not growing that fast as it is.

This is the second deepest downturn of the last 100 years and the rebound coming out of that contraction has been rather muted. There has been some bump – it has been positive – but if one used the alphabet soup of recovery, it is not a “V”. It kind of looks like a square root, where it comes up like a “V”, but then tails off and does not do much after that. The government is doing its best to keep things moving with the latest hope pinned on QE2.

G&D: What do you think the impact of that potentially substantive liquidity response might be on the US dollar?

SR: The government is doing its best to destroy the value of the US dollar. We have made efforts to de-dollarize our portfolio, taking advantage of other parts of the world that have better growth opportunities than the US with more exposure to currencies other than our own. We are seeking those companies

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that are more protected should inflation be more than expected in the future. Now, we are not calling for hyperinflation, but we will not tell you that it cannot come – that is something we view as a real possibility. We are looking for companies where we feel the pricing power would offset the potential rise in input costs. That leads us to a whole universe of companies, while keeping us away from others.

G&D: That seems consistent with characteristics of the larger-cap group of stocks you discussed earlier.

SR: Yes, they have better pricing power, have more international exposure, and also tend to be less efficient. You can improve efficiencies and take costs out – which should lead to better earnings. In fact, the large-cap stock earnings growth has been stronger than small-cap stock earnings growth for some time now, which a lot of people find surprising. Russell has data showing that 5-year trailing earnings growth for the Russell 1000 companies (large-caps) has been greater than earnings growth for the Russell 2000 companies (small-caps) all the way back to 1995. Large-cap companies have

had better earnings for some time and most people do not realize it. Admittedly, there are some flaws with looking at reported earnings, given write-offs and other noise, and the indices are market-weighted; but I still find it a

“We are looking for companies where we feel the pricing power would offset the potential rise in input costs. That leads us to a whole universe of companies, while keeping us away from others.”

reasonable proxy.

G&D: Can you give us an example of a large-cap stock with pricing power and international exposure that you are looking into?

SR: One name we own is Aon Corp. (AON; \$39.46). They are an insurance brokerage firm that does consulting as well. Aon is a business that derives about

65% of its revenue from outside the US. That will drop though because there is a deal closing to buy Hewitt, a consulting firm. Given our knowledge, we actually would have preferred that Aon not buy Hewitt. But, the gentleman who runs Aon has a proven track record and we believe that he will be successful with the Hewitt transaction. It just would not have been our first choice.

In regards to inflation – where are you guys calling from?

G&D: The Columbia Business School library.

SR: The replacement cost of the building you are in will cost more in an inflationary environment. Aon, which incurs no underwriting risk, will be a beneficiary of increased premiums – which will rise because of replacement valuations. But, for Aon to perform well, we do not even need an inflationary environment. If we just get pricing to stabilize, the stock should be a winner. This is a necessary business, it is almost impossible to disintermediate, it will improve if the economy improves, it will improve if inflation comes, and mean-



Pictured: Glenn Greenberg at the Security Analysis 75th Anniversary Symposium (Fall 2009), with Bruce Berkowitz (left) and Tom Russo (right).

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while it is generating huge amount of free cash flow.

G&D: Would potential inflation also benefit their float?

SR: Yes, but their float is unlike that of a traditional insurance company. With a broker, the money comes in from the client and before it is paid to the insurance company it sits on their books and vice versa when an insurance company has to pay a benefit. Unfortunately, that cash sits on their books earning practically nothing today. Thus, they will be a beneficiary of higher short-term interest rates, inflation, a hard market in pricing, and their continued internal restructuring. We also believe they will benefit from the Hewitt transaction – we have greater belief in it as a financial transaction than as a strategic transaction; although, they believe in both. Plus, Aon has a great balance sheet. We look at this and say it fits those parameters of being protected in an inflationary environment with a lot of optionality attached.

G&D: How good of a business is it other than having those characteristics?

SR: Their returns on capital are huge. The company was built by Pat Ryan, who made many successful acquisitions over a long period of time. I would argue it was never operated as well as it has been since Greg Case came in. It was a loose collection of businesses that were quasi-integrated. We love

“If you take out the intangibles, there actually is negative equity – there is no capital for this business.

The company is comprised of people, either brokers or consultants and they throw off \$1 billion of operating income annually.”

those types of investments where a business was growing through acquisitions for a number of years, and then they are finally integrated. Another example is Michaels Stores, which we owned for years. It grew through acquisition and then

a new CEO, Michael Rouleau, came in and really drove the business forward as he brought in systems, took out costs, and at the same time was able to drive sales and take advantage of buying power. So, with Aon, Greg has found many opportunities to improve efficiencies. Return on capital is massive on a tangible book basis. Returns are fantastic for a company that we think is relatively under-leveraged, or at least not at an optimized balance sheet. If you take out the intangibles, there actually is negative equity – there is no capital for this business. The company is comprised of people, either brokers or consultants and they throw off \$1 billion of operating income annually.

G&D: Many investors shy away from companies that were built through acquisitions, but this is a slightly different view.

SR: We shy away from companies that are serial acquirers until the deals are largely behind them and a strong operating executive comes to help the company realize its potential. Another example of that is AGCO, which we have owned for some time. AGCO is a farm equipment

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company, which had gone on a binge of acquisitions. After a new management team came in, they stopped acquiring. We do not mind a company making acquisitions periodically, we just do not want them to have an addiction.

G&D: How do you think about valuation for Aon?

SR: We think sustainable normalized FCF is the relevant indicator of value at businesses like AON. So, we focus on the normalized level of FCF and are interested in buying at a reasonable multiple of normalized FCF. On that basis, AON is trading at 10-11x.

G&D: Your fund has made some distressed mortgage investments over the past 12 months – how did you come across this opportunity?

SR: A third-party servicing firm that purchased a defunct sub-prime servicing platform came in and pitched our fixed income team on an opportunity to buy distressed whole loans. So, our investment is not in distressed mortgage securities. This is a little bit out of form for what our fixed income team had done his-

torically and a little bit more up our alley. We started to work through the idea, and the margin of safety was similar to the assets we were buying in 2008/2009, albeit an admittedly lower

“We are going to different banks that were originators of sub-prime and Alt-A loans back in 2005-2007 and buying these loans at roughly forty-three cents on the dollar, of the unpaid principal balance...”

return. For example, if home prices dropped 10% we were still going to make money. We think that is a better risk-reward than the stock market. We are going to different banks that were originators of sub-prime and Alt-A loans back in 2005-2007 and buying these loans at roughly forty-three cents

on the dollar, of the unpaid principal balance, or roughly a 65% or so discount to the original estimate of appraised value when the loan was underwritten.

As an example, let's say we are able to buy a \$100,000 mortgage at \$43,000 and originally that home was valued at \$125,000. We believe we can achieve an appropriate return. If we knock the appraisal values that we are getting today down by about 10%, then we figure that we will still make an annual return of 10%-12%. That also assumes 80% foreclosures, which is not occurring either.

G&D: What happens if you can work out a modification on the loan?

SR: Even better - we get to say to the borrower (who has a \$100,000 mortgage) if you can qualify for a modification at \$65,000, then that would be beneficial for both of us. We will make 50% and you will have a lower monthly payment and you will get to live in your home. That has been our strategy. We would like to pick up a lot more of these opportunities and we have bid on other pools of mort-

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Professor Bruce Greenwald at the 2009 G&D Breakfast

Bruce C. N. Greenwald holds the Robert Heilbrunn Professorship of Finance and Asset Management at Columbia Business School and is the academic Director of the Heilbrunn Center for Graham & Dodd Investing. Described by the New York Times as “a guru to Wall Street’s gurus,” Greenwald is an authority on value investing with additional expertise in productivity and the economics of information.

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gages; but, we have lost more than we have won. With the first pool we purchased, we had about 31% of principal paid to us over the initial 10 months and we made about 24% in that period. We do not think that will be indicative of the rest of that pool or the other pools, but it is still an indicator that we are on the right track. We have this one mortgage in Detroit, which is not in a great area. Our cost of this mortgage is \$1,800 and in the last 10 months, we have received \$2,500 in payments and still own the mortgage.

G&D: Why do you think such attractive pricing for these loans exists – is it similar to a spin-off, where you have a pressured seller?

SR: Sure, banks have added to their reserves and they are taking losses slowly over time. But, there are not a lot of natural buyers for these assets, so you have a little bit of a mismatch – more capital for sale than there is seeking purchase. If the housing market goes up from here, our returns are going to be terrific. We set it up so that we can make a 10% rate of return, even if housing prices decline a bit.

G&D: You have worked with Bob Rodriguez for many years – what are some of the main lessons that you learned from him?

SR: The biggest lesson I ever learned from Bob is to prepare for the worst and hope for the best.

G&D: We also noticed that you recently hired Elizabeth Douglass, a former business journalist with the LA

“As someone interested in an investing career, I think you have to patiently wait for the opportunity. Also, do enough work so that you can take advantage of that opportunity when you see it...”

Times, which we found interesting – can you talk about that decision?

SR: We are trying to do due diligence in a deeper way and get information that may not be easily accessible. For example, with Aon, Elizabeth will help us track

down people who used to work for Aon and get their phone numbers. We will then have conversations. Or, in certain cases, she will have the conversations for us. Other times, she will act as a data gatherer; for instance, insurance market pricing data in a hard-market versus a soft-market. So, she is an investigative journalist for us, a data synthesizer, research librarian and just a great resource to have.

G&D: As MBA students, how do you think we should make the most of our time and squeeze the most out of this program?

SR: I appreciate your school’s program – it is back to basics. As someone interested in an investing career, I think you have to patiently wait for the opportunity. Also, do enough work so that you can take advantage of that opportunity when you see it, either in terms of job prospects or an investment proposition.

G&D: Thank you very much Mr. Romick – we truly appreciate you sharing your thoughts with our readers.

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Donald Smith

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seven investment professionals and three of those went through the Value Investing program at Columbia. The program has been a wonderful hunting ground for us to find analysts who understand the value approach.

Our investment philosophy goes back to when I was going to UCLA Law School and Benjamin Graham was teaching in the UCLA Business School. In one of his lectures he discussed a Drexel Firestone study which analyzed the performance of a portfolio of the lowest P/E third of the Dow Jones (which was the beginning of “Dogs of the Dow 30”). Graham wanted to update that study but he didn’t have access to a database in those days, so he asked for volunteers to manually calculate the data. I was curious about this whole approach so I decided to volunteer. There was no question that this approach beat the market. However, doing the analysis, especially by hand, you could see some of the flaws in the P/E based approach. Based on the system you would buy Chrysler every time the earnings boomed and it was selling at only a 5x P/E, but the next year or two they would go into a down cycle, the P/E would expand and you were forced to sell it. So in effect, you were often buying high and selling low. So it dawned on me that P/E and

earnings were too volatile to base an investment philosophy on. That’s why I started playing with book value to develop a better investment approach based on a more stable metric.

“I still kept coming back to price to book. Most of the backtests we did showed that price to book would come out the best or close to the best. I liked the simplicity of it. It made common sense to me that stocks should sell in some relationship to their underlying book value.”

I then went to Harvard Business School and spent a lot of my time analyzing

stocks. Upon graduation I went to work as a securities analyst at Capital Research in Los Angeles. They had just bought an IBM mainframe and had a lot of excess computing capacity. They had a bright programmer and I asked him to set up different screens. So we backtested many value strategies based on price to book, price to earnings, price to sales, price to dividends, growth rates, return on equity, etc. We found that a lot of the value approaches worked. I guess the moral of the story is that there is more than one way to skin a cat. But I still kept coming back to price to book. Most of the backtests we did showed that price to book would come out the best or close to the best. I liked the simplicity of it. It made common sense to me that stocks should sell in some relationship to their underlying book value. At the time analysts used price to book for utilities, banks and insurance companies, but it wasn’t emphasized outside of these industries as much as I thought it should be. When I joined Capital I started applying price to book more broadly and I soon became known as the deep value portfolio manager.

G&D: Today it’s a lot easier to screen than it probably was when you started out. Has that made the strategy more competitive?

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DS: Screening for tangible book value has certainly gotten easier. However, we make a lot of adjustments that don't show up in the databases. For example, we adjust book value for dilution from options and convertible debt. We add back deferred tax asset valuation allowances if there is a likelihood that they will be used to offset taxes in the future. We also adjust for "phantom goodwill" which can occur when a company does acquisitions and writes up the assets in the process so that the purchase premium does not show up in goodwill. That is something that most investors don't do.

G&D: The contrast to that might be when tangible book value understates the asset value. Do you tend to miss out on companies with hidden asset values?

DS: That can happen, but I think it happened more often years ago. Companies, in the quest for earnings, have sold many highly valued assets when they had the opportunity. In our fundamental research we dig intensively into the liquidation value of companies to find instances where that value is significantly higher than tangible book value. In that case it's just frosting on the cake. However, we still like to focus on basic tangible book value because of the margin of safety it of-

fers. If we know the tangible book value is \$10, the liquidation value is \$20, and we can buy the stock for \$7, that's ideal.

G&D: There aren't many investors that maintain such a strict focus on tangible book value, with many seeking out franchise businesses.

"Often when we're buying stocks below book, there is some franchise value there that isn't on the books: customer relationships, intellectual property, etc. We'll take it as a freebie, but to pay for it, that's something else."

the great franchises of all time was supposed to be the distribution system and trademark of General Motors. No one could ever penetrate Chevrolet distribution. People paid a lot of money for that "franchise" and then it disappeared. Eastman Kodak was one of the greatest trademarks in the whole world, and then the value of that trademark disappeared. There are some exceptions - Coca Cola has managed to keep its franchise intact. In general though, franchise value can disappear on you very easily and that's how you get hurt. Often when we're buying stocks below book, there is some franchise value there that isn't on the books: customer relationships, intellectual property, etc. We'll take it as a freebie, but to pay for it, that's something else.

G&D: There are plenty of studies suggesting that the lowest price to book stocks outperform. However, only 1/10 of 1% of all money managers focus on the lowest decile of price to book stocks. Why do you think that's so, and how do people ignore all of this evidence?

DS: They haven't totally ignored it. There are periods of time when quant funds, in particular, use this strategy. However a lot of the purely quant funds buying low price to book stocks have blown up, as was the

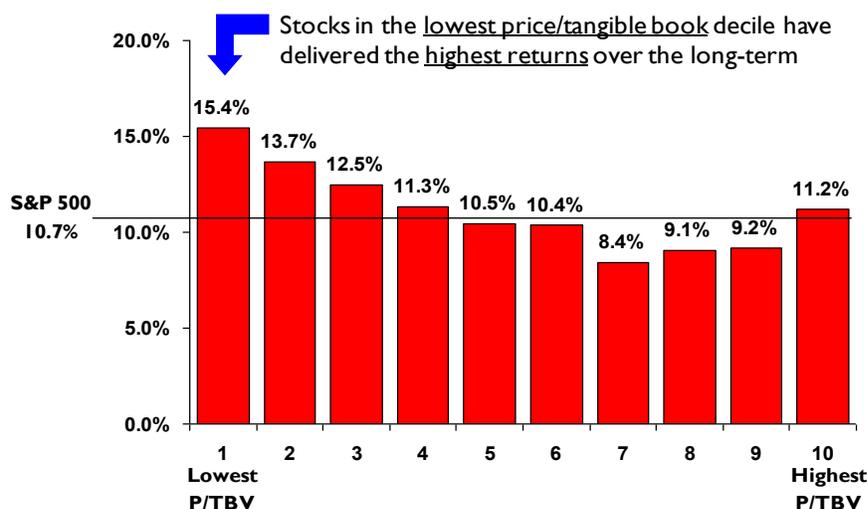
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Returns by Price/Tangible Book Value Decile (1951-2009)



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case in the summer of 2007. Now not as many funds are using the approach. Low price to book stocks tend to be out-of-favor companies. Often their earnings are really depressed, and when earnings are going down and stock prices are going down, it's a tough sell. Analysts don't like to cover them and they don't have an easy time pitching them to portfolio managers. The companies are often difficult to understand and have many moving parts. Institutional investors don't want to have to explain to clients that their stocks have gone down 50%, that same store sales are negative, that market share is decreasing. In general people like glamour, growth, clean and simple stories. It's also tough to ride out our strategy during hard times. Every ten years

or so the low price to book strategy has a down period. From a psychological standpoint, it can be a difficult approach to stick with.

G&D: How is your investment team structured?

DS: We all have a sector focus. When a new stock hits the watch-list and looks interesting, the first work is done by the industry analyst. If he thinks it's worth pursuing, then it goes to Rich Greenberg (our Director of Research). If Rich thinks it's worth pursuing, he comes to me with it, and if it looks interesting to me, we set up a meeting with management. This really differentiates us from the quant shops. We strongly believe in fundamental research. We like the fact that a stock is being looked at by three people - an analyst who knows the indus-

try, Rich who knows many industries, and me. I have followed many industries over the years and bring a macro perspective.

G&D: What are some of your key questions for management?

DS: The first thing we talk about is the balance sheet. We want to make sure that tangible book value is accurately stated, all the assets are fairly valued and all the liabilities are stated. We focus a lot on whether or not the book value is real. What's the replacement cost? Is the balance sheet sufficient to withstand a recession for a year or two? We stress test it. That is the first of the value traps - buying something that ends up going bankrupt on you. The second value trap is buying a cheap asset that

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“In general people like glamour, growth, clean and simple stories. It’s also tough to ride out our strategy during hard times. Every ten years or so the low price to book strategy has a down period. From a psychological standpoint, it can be a difficult approach to stick with.”

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 stays cheap forever. That is why the second part of our meetings with management is always focused on the earnings power of the company. We spend time on where the company is today and why it is under-earning. Is it an industry problem? A management problem? Is underperformance isolated to one struggling division? Then we come up with an estimate of what we think normalized earnings will be. This earnings power is what gives us near-term upside, instead of just buying cheap assets and hoping that someone comes in and buys them someday. We really look for stocks where earnings can turn around. That's what gives you the doubles, triples, quadruples. We put that all together and come up with 20 to 30 best ideas.

G&D: How much importance do you put on a company's management team?

DS: Quite a bit, in the sense that we want a management team that will do no harm. We don't expect a stock selling at 70% of book to have Einstein running it. We spend a lot of time questioning the management. Do you plan to do acquisitions (we're generally anti acquisition)? Do you like your own business? If the stock is selling at 70% of book, why aren't you buying it back? Ben Graham said that the opinion people have of management is correlated with the stock price.

I have seen dumb managers whose stocks are selling at \$10, suddenly become geniuses when their stock goes to \$40. One of the attractive things about owning a stock with a low price to book ratio is that it often attracts good management. A good manager at GE for example would rather become the CEO of a company with a stock that's at 80% of book than one in the

“We really look for stocks where earnings can turn around. That's what gives you the doubles, triples, quadruples. We put that all together and come up with 20 to 30 best ideas.”

same industry selling at 1.8x book. We've had companies with average management teams that end up with terrific management, and those companies have become some of our biggest winners.

G&D: Have you ever taken an active approach with managers, for example, writing letters or campaigning for some sort of shakeup of the board?

DS: We try to make sure that when we buy something it's so undervalued that natural market forces will cause the stock to go up. We try not to spend a lot of time on anything that is considered “active”. We might, for example, press management very hard to buy back their own stock instead of doing an acquisition that is dilutive to book value, but mostly we keep a low profile. Generally managements tend to just listen to you politely and then do what they want to do anyway, unless you have a very large position.

G&D: Would you mind talking about how the composition of that bottom decile has changed over time? Is it typically composed of firms in particular out of favor industries or companies dealing with specific issues unique to them?

DS: The bulk is companies with specific issues unique to them, but often there is a sector theme. Back in the early 1980's small stocks were all the rage and big slow-growing companies were very depressed. At that time we loaded up on a lot of these large companies. Then the KKR's of the world started buying them because of their stable cash flow and the stocks went up. About six years ago, a lot of the energy-related stocks were very cheap. We owned oil shipping, oil services and coal companies

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trading below book and liquidation value. When oil went up they became the darlings of Wall Street. Over the years we have consistently owned electric utilities because there always seem to be stocks that are temporarily depressed because of a bad rate decision by the public service commission. Also, cyclicals have been a staple for us over the years because, by definition, they go up and down a lot which gives us buying opportunities. We've been in and out of the hotel group, homebuilders, airlines, and tech stocks.

G&D: Speaking of cyclicals, you mentioned your understanding of the macro picture. How do you overlay your macro views on top of your bottom-up perspective?

DS: A lot of times our macro view is generated by our bottom-up process. For example, we have followed homebuilders, banks and the mortgage GSEs for years. When we did a bottom-up review four years ago, we saw that these companies were extremely overleveraged and that housing prices were unsustainable relative to income levels. At the same time, down-payments were going from 20% to 10% to 5% and then 0%. We sent a client letter out in 2007 saying that housing prices should go down 40% just to get

back to normal valuations. That was very valuable, and primarily precipitated by bottom-up analysis. It helped us to avoid some huge value traps. Sometimes it's not what you own but what you don't own

“We sent a client letter out in 2007 saying that housing prices should go down 40% just to get back to normal valuations. That was very valuable, and primarily precipitated by bottom-up analysis.”

that makes you successful.

G&D: Would you mind giving us a few examples of your process in action?

DS: One industry that we like is the airlines. During 2008/2009, capacity was cut back severely, and while some is being added now, it's very small compared to other recoveries in the past.

You now have very strong growth in operating rates while fares have also gone up, so it's not uncommon to see companies with revenue growth of 13-15%. We think the whole industry is changing as a result of the big guys merging. They are going to have more pricing power. One company we like is Republic Airlines (RJET; \$8.70). It's a low-cost operator with a very good CEO. They recently bought Frontier and Midwest out of bankruptcy at good prices. At \$8.70 the company is trading at 86% of tangible book value and we estimate it has approximately \$1.60 of earnings power, so we're paying 5.4x potential earnings. This conservatively assumes EBT margins of 1.5% for the Frontier segment and 7.0% for the regional jet segment. The company will not pay taxes for several years due to tax loss carryforwards. Republic will benefit tremendously from consolidation in the industry. Southwest is buying Airtran and both of them are big competitors of Republic. Fewer competitors is usually a good thing in this industry.

G&D: It's interesting, you've heard very few people saying positive things about the airline industry. Warren Buffett says that each time he thinks about this space, he has a 1-800 number he calls to prevent him from making an investment in the industry. What is it that

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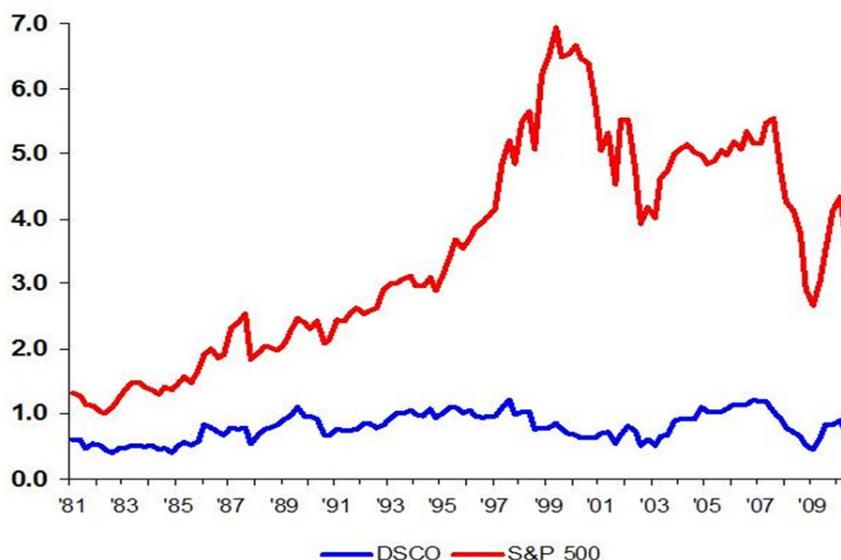
“The moral of the story is that no matter how bad the industry is, at the right price and especially when the fundamentals are turning, you can make a lot of money.”

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you guys see differently; is it more a matter of understanding the cycles that the industry goes through?

DS: People are overly negative on the industry because they have been burned in the past and because “conventional wisdom” now states that you should never buy an airline stock. Yet, we think there are a lot of new things going on. Consolidation has reduced competition and not as many airplanes are being ordered. Companies are being run by CFOs that became CEOs so they are more focused on the bottom line rather than empire building. Historically overcapacity was due in part

Price / Tangible Book Value of Donald Smith & Co., Inc. Portfolios



*All long-only portfolios managed by Donald Smith & Co., Inc. as of 9/30/10.

to easy access to off balance sheet lease financing. It would be a real positive if airlines had to put all their leases on balance sheet, of which there's some talk. The moral of the story is that no matter how bad the industry is, at the right price and especially when the fundamentals are turning, you can make a lot of money. The steel industry was terrible for years, but when the fundamentals finally turned, we made a lot of money on AK Steel and US Steel.

G&D: Republic Airways is selling at about 86% of tangible book right now. At what point do you think about selling?

DS: Generally, if anything gets to 2x tangible book it's automatically a sell. The advantage of this approach is that if you catch a company in a real turnaround, their book can grow at 20% a year, and if they have tax loss carryforwards, even faster than that. In these cases the stock price often follows the book value growth but the multiple doesn't initially expand so we stay in the stock. Then after five years of this, the growth guys come in and say, this must be a changed industry, and then bid the stock up to 2x book. Then we're on our way out. This happened with the homebuilders, when in the early 2000's, they were selling at

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less than 50% of book, and their earnings grew like crazy. By the time we finally ended up selling at over 2x book, our worst performer, Standard Pacific, had gone up 7x. Our biggest gainer, Hovnanian, had gone up 14x.

G&D: Do you want to shift to another name?

DS: Another name that we own is Dillard's Department Stores (DDS; \$26.46). This is a tough one to get your hands around. Management generally doesn't have conference calls. The Dillard family controls the company via a dual class share structure so there are concerns about management accountability. The real story here is tremendous hidden real estate value. Dillard's owns 46 million square feet of real estate. The stated book value is \$32, but if you assume retail real estate value recovers, their real estate could be worth \$100 a square foot and that would add about \$20 for an adjusted book value of \$52 (and that's after adjusting for taxes on selling the real estate). So you have a stock around \$27, with a breakup value of about \$52. One of the problems with the company has been their lack of sales growth, and that's turning around. You have a fundamental turnaround story here, supported by tremendous asset value. If you think inflation is a problem down the road, owning

this real estate at \$100 a square foot is probably a good deal.

“Some academic studies suggest that long holding periods for low price to book stocks are better than short holding periods. Often our holding period gets sped up because we have a lot of takeovers.”

G&D: This is probably a good segue to talk about timing and your average holding period, which is under one year for most funds. But for a lot of these theses to play out, obviously you'll be waiting much longer than that. What is your typical holding period?

DS: We usually hold stocks for three-to-four years and when we do our earnings

estimates, it's based on normalized earnings looking out two-to-four years. We find that it generally takes that long for a business to fundamentally turn around, and that even after it turns around, it takes a while for the Street to pick up on it, and even longer to attract the momentum investors. Some academic studies suggest that long holding periods for low price to book stocks are better than short holding periods. Often our holding period gets cut short because we have a lot of takeovers. This year we have had 8 takeovers out of about 60 stocks, and the premiums have been very attractive.

G&D: One of your top holdings is Yamana Gold – can we discuss that investment?

DS: We were attracted to Yamana Gold (AUY; \$11.63) because it was selling at a huge discount to tangible book. We started buying it at the end of 2008 when it was being dumped during the financial crisis. Currently the stock is trading at a 25% premium to book but we think it is still attractive here. At current gold prices Yamana has about \$1.00 of earnings power. However, the company has significant organic growth potential through the development of existing mines and reserves. Importantly, Yamana has a very strong balance sheet, with only 7%

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debt to capital, so it can fund expansion through internally generated cash flows. Also, in our analysis the company can make money all the way down to \$600 gold, so you are getting production growth and upside leverage to the price of gold with limited downside. We think gold stocks are a lot more attractive than the metal itself.

G&D: You have a few tech stocks in the portfolio, which we were surprised to find.

DS: Many small and medium-size tech companies have been in a bear market since the 2000 tech bubble, so over the last couple of years we have purchased a lot of tech stocks at well below book value. We think all the new gadgets, like smart phones and iPads, and the corporate replacement cycle for technology provides good growth prospects for this industry over the next couple of years. The stocks have sold off recently because of the fear of a double-dip recession. There may be a slowdown in consumer spending, but the typical smart phone uses 7x the semiconductor content of a traditional cell phone. Thus, we think revenue growth is going to be strong for the enablers of these trends. We think there will be a lot of takeovers in this space. Many tech companies have a lot of cash, and have stocks trading at big multiples of

book value, so it makes all the sense in the world for them to buy our tech stocks at book value for cash or stock, even paying a premium. Some of these companies also have valuable intellectual property that we are getting for free.

“...they should buy Graham and Dodd stocks in their own portfolios and see how it works. Hopefully they’ll make so much money that they can start their own firms.”

G&D: How do you get comfortable with the assets of technology companies, with the fear of obsolescence?

DS: We have an analyst whose job it is to figure out which products are going to become obsolete, and which aren’t. But most of our companies are large and diversified, like Micron Technology (MU; \$7.60),

which has a big market share in mature product categories like DRAM and NOR flash, and rapidly growing categories such as NAND flash and solid state drives. It’s unlikely that the company as a whole will become obsolete. For that reason we generally stay away from single focus tech companies. Micron has a strong balance sheet and trades at 87% of its \$8.70 tangible book value. It also trades at 6.9x our estimated normalized earnings power of \$1.10, which assumes net income margins of about 11%.

G&D: A lot of our readers are MBA students, or recent grads, committed to a value investing approach based on what they learned from Ben Graham and Security Analysis. But as we’ve discussed here, there are not a lot of disciplined value investing firms. What advice do you have for someone who can’t find the ideal organization for their first job?

DS: There are very few true Graham and Dodd style deep value firms, so they can send their resumes to us, but other than that it’s tough. While they’re seeking out as many deep value investment firms as possible they should buy Graham and Dodd stocks in their own portfolios and see how it works. Hopefully they’ll make so much money

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that they can start their own firms.

G&D: You've been in this industry for over 30 years, which is much longer than many people last. Over 30 years of investing, what is the most difficult part about a deep value strategy to stay disciplined about?

DS: About every 10 years this strategy has a bad period, but those clients that stick with us are usually highly rewarded. After these tough periods, our stocks have massively outperformed the S&P. Older clients that have experienced these rebounds are very loyal to us. But with newer clients, it can be a tough sell. The 2008 down period lasted about 18 months, which is good. If it lasts more than two years, patience wears out. Our worst stretch was 1998 and 1999. During times of underperformance there's a lot of pressure to change your stripes, and that's what happens at many value firms. I'm convinced that one of the main reasons for our superior results is that we take a long-term focus and are willing to tough it out during rough periods.

G&D: What was the most instructive mistake you made in the past?

DS: We have gotten into trouble in situations where the free market isn't allowed to work. For in-

stance, companies with tough union problems can be a challenge. Another thing we have learned to avoid is companies in secular decline. We always ask ourselves, does this company or industry have a cyclical or secular problem? Finally, we have learned to always stress-test our projections. For example, what happens if oil goes to \$150, how about \$30? With our airlines, it would not be pleasant if oil went to \$150. Yet, they weathered the last oil spike which gives us some comfort. If oil goes to \$30, margins could explode.

G&D: There's an active debate. A lot of people who have thought of themselves as bottoms-up, are thinking, now in light of the past couple of years, we need to pay more attention to macro. Have your views on that shifted over time?

DS: It's probably true that macro is more important today because the financial system is much more leveraged, and world wide government intervention is having a huge impact on interest rates, currencies, commodities, etc. Capital flows much more freely than it did 20 years ago which can make all asset classes very volatile. I think that macro has always been important, but more so now because the whole system is so leveraged and volatile that accidents can and will happen.

G&D: Any parting words of wisdom?

DS: The universe of investment opportunities is very large and there is a lot of analytical noise in the system. When I started at Capital I realized there were a lot of smart people out there working 12 hours a day analyzing every opportunity – how could I possibly beat them? So I said, let's just eliminate 90% of the universe and focus on the lowest price to book decile. To begin with this is a much better pond to fish in. It also gives me a 10 to 1 focus advantage over the competition. We learn much more about these companies than they can learn about the whole universe. Most importantly, when push comes to shove and stock prices are falling, we have an anchor of solid tangible value supporting our stocks, so we can confidently buy at the lows. So I would just say that you need to have a differentiated investment philosophy. After transaction costs, it is a negative-sum game, so not too many people can substantially beat the market over time. You need to have an approach that is unique.

G&D: Donald, thank you so much. We truly appreciate it.

“When I started at Capital I realized there were a lot of smart people out there working 12 hours a day analyzing every opportunity – how could I possibly beat them? So I said, let's just eliminate 90% of the universe and focus on the lowest price to book decile.”

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Ryan is a second year MBA student concentrating in Finance & Economics. He spent the summer interning with a value-focused small-cap fund in New York. Prior to enrolling at Columbia Business School, he spent four years covering the consumer sector at a long-short hedge fund in New York.

U.S. Physical Therapy (USPH)

Ryan Coyle
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U.S. Physical Therapy	USPH	Long, Price Target of \$24.00 (15.0x 2012E Adj. FCF)					
Capitalization		Multiples			Returns		
Price Per Share (10/15/2010)	\$18.04		LTM	LTM Adj.		LTM	3-year avg.
Diluted Shares	11.6	TEV/Sales	1.0x	--	ROA	15.6%	14.8%
Market Capitalization	\$209.8	TEV/EBITDA	5.9x	7.7x	ROIC	18.0%	17.3%
Plus Debt	4.3	TEV/FCF	8.4x	12.6x	ROE	14.6%	13.7%
Plus Non-Controlling Interest (NCI)	8.3	P/B (6/30/2010)	2.2x	--	Growth		
Less Cash	7.2		EPS	P/E		LTM	3-year CAGR
Enterprise Value (TEV)	\$215.3	LTM 6/30/2010	\$1.10	16.4x	Revenue	5.6%	14.5%
Operating Statistics	LTM	2010E	\$1.22	14.8x	EBITDA	9.0%	16.0%
Revenue	\$206.0	2011E	\$1.33	13.6x	Net Income	16.8%	24.2%
EBITDA	36.3	2012E	\$1.45	12.4x	EPS	18.3%	16.0%
Adjusted EBITDA (ex-NCI)	27.8	Other			Corporate Location: Houston, Texas		
Net Income	13.0	Short Interest		3.4%	Clinics: 471, in 41 states		
FCF (OCF - CapEx)	25.6	Insiders Own		5.9%	States with Most Clinics: Tennessee (56),		
Adjusted FCF (OCF - CapEx - NCI)	17.1	Dividend Yield		NA	Texas (50), Michigan (41), Wisconsin (17)		

Investment Thesis:

I recommend purchasing shares of U.S. Physical Therapy ("the Company" or "USPH"). USPH is poised to benefit from secular demand growth for physical therapy services. Additionally, the physical therapy business model offers attractive unit economics and solid cash flow, and USPH has a golden opportunity to gain market share via targeted in-market advertising, selective new partnerships, and tuck-in acquisitions (taking advantage of an extremely fragmented marketplace). At 12.6x LTM adjusted free cash flow to common equity (after cash payments to non-controlling interests, aka clinic partners), the company is attractively valued in light of the business fundamentals. I believe a combination of market share growth, demand growth, and operating leverage will enable USPH to grow FCF at a high single digit rate over the medium term, yielding a value estimate of \$24.00 per share, up 33%.

High Demand, Low Supply: The US Bureau of Labor Statistics predicts that the demand for physical therapy will grow 28% by 2016, or ~4% per annum. A large driver of the demand growth is the retirement of baby boomers who are pursuing active lifestyles later in life. Further, a recent Business Week survey indicates that there is an estimated 15% shortage in the supply of physical therapists in the marketplace. Any individual therapist must complete a three-year graduate degree program, undergo training, and then meet state licensing requirements prior to beginning work in the marketplace. The market demand for physical therapy is brisk, and the industry is healthy.

Selling Therapists Have Limited Options: There are over 16,000 therapy clinics in the USA, and many of those clinics are locally-owned businesses. In the current competitive landscape, no outpatient physical therapy company has a national market share greater than 6.0%. Indeed, USPH has only a 2.9% market share. USPH maintains a \$50M revolving credit facility and can act quickly and decisively when an opportunity presents itself. Historically, USPH has made acquisitions ranging in size from one clinic to a regional network of 50 clinics. USPH is in good position to acquire partnerships as existing therapists/owners seek a partial (or full) liquidity event for their existing enterprise while still maintaining a minority equity interest in the business. In the wake of the financial crisis, some clinic owners and therapists are increasingly eager to diversify their personal financial risk away from their place of business.

Disciplined Buyer: USPH does not undertake an acquisition unless it is immediately accretive to earnings, and unless the management team is willing to stay on to run the business after the transaction closes. USPH typically extracts immediate synergies as the acquired operations streamline into the USPH systems. As previously indicated, there are over 13,000 clinics in the universe of potential domestic acquisitions for USPH, many of which are small operators, and thus it seems reasonable to assume that USPH can tuck-in or otherwise capture share from these clinics and improve the operational efficiencies, driving further operating leverage for the company over the medium term.

Management: The USPH management team has industry experience and a record of delivering shareholder value. The CEO, Chris Reading, is a licensed physical therapist. Prior to joining USPH in 2003, he managed 200 clinics within the HealthSouth outpatient therapy system. Management must continue to manage the business prudently. To date, they have a good track record of doing so.

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U.S. Physical Therapy (Continued from previous page)

Cash Flow: On an enterprise basis, USPH generates substantial free cash flow to equity and is in a net cash position. Even with substantial non-controlling cash interest expense, the combination of a larger clinic footprint, operational efficiencies, and an inelastic demand environment for physical therapy services will enable the company to grow operating earnings and free cash flow at a high single digit growth rate over the next 3 years. USPH can redeploy this cash flow into new clinic openings, accretive acquisitions, and/or share repurchases. The company has an existing share repurchase authorization for approximately 5.9% of the shares outstanding.

Business Description:

USPH is the third-largest provider of outpatient physical and occupational therapy clinics in the United States and the largest pure-play operator. USPH owns and/or operates 371 clinics in 42 states. A physical therapy clinic provides rehabilitative exercise services for a variety of physical ailments, including orthopedic-related disorders, sports-related injuries, neurological-related disorders, rehabilitation, and preventative care. Clinics obtain new patients via physician referrals. Services take place on an outpatient basis under the supervision of licensed physical therapists. USPH has historically grown its store base in the following ways: (1) by partnering with established therapists in select markets to open new centers; (2) by acquiring ownership interests in existing clinics; and (3) by opening same-market “satellite” locations. Approximately 80% of the current USPH store base was developed organically, with the remainder coming via acquisition. 80% of revenue comes via non-government sources (Private Insurance and Managed Care 57%, Worker’s Comp 16%, and Other 7%), with the remaining 20% from Medicare and Medicaid. USPH seeks to reduce its exposure to government-funded programs over time because this line of reimbursement has recently experienced pricing pressure.

Valuation

USPH is on track to drive operating leverage in its core business, and it has a golden opportunity to scale the business further. At current valuation, you are buying a well-managed business trading at an adjusted FCF yield of 8% with secular demand tailwinds and minimal risk of a serious

Valuation Range

	Low	Mid	High
TEV (2012E @ 15.0x Adjusted FCF)	255.0	346.7	403.7
Equity Value (2012E)	249.6	339.2	395.2
Current Value (discounted 2 years @ 10%)	\$206.2	\$280.4	\$326.6
Shares Outstanding	11.63	11.63	11.63
Per Share	\$17.73	\$24.10	\$28.08
Upside from Current	(1.7%)	33.6%	55.7%

negative change to the underlying business. My midrange valuation assumes USPH adjusted FCF expands from a normalized base level at a 7.5% CAGR over the next two years, and assumes modest multiple expansion as the growth trajectory ramps up for this company. This expansion in adjusted FCF comes alongside growth in the store base and modest operating efficiencies, yielding a midrange value estimate of around \$24.00 per share. Although the current valuation ascribes no potential “strategic value” to this asset, one could potentially view USPH in this light as large healthcare institutions attempt to diversify their revenue streams and invest more heavily in preventative and rehabilitative outpatient care. USPH currently trades at a 65% discount to transaction comps in the space.

Investment Risks/Considerations

Reimbursement Reduction: Many are concerned by the potential for future reductions in government reimbursement rates, and they fear that any government reduction will trigger a cascade of reductions from all other parties. However, I would argue that this risk is less prevalent for USPH because the company’s mix of government-paid patients is relatively small (as of 2Q10, 20% of USPH patients are Medicare/Medicaid). My research indicates that contract negotiations with other payors are more enlightened as many within the payor community are beginning to embrace the relative cost efficiency and measurable outcomes of physical therapy (as compared to alternative treatments).

No Moat: Detractors claim that USPH has no “moat” in its business model. This is a fair criticism. However, I would argue that USPH’s current scale, the credibility of its management team, and its status as a pure-play public company with capital markets access give USPH an advantage in executing transactions quickly. Further, I would argue that the current fragmentation in the market makes it more of a “land grab” to gain further scale, and that USPH can succeed simply by hitting relatively simple milestones in its current growth trajectory.

Integration Risk: There is always operational risk to consider. Some are skeptical of this company because it is a “roll-up” model across disparate geographies, but I would argue that the retained equity interest in the clinics by the therapist partners keeps the incentives for USPH and its clinicians aligned and that scale benefits are actually more tangible than detractors believe.

“USPH has a golden opportunity to gain market share via targeted in-market advertising, selective new partnerships, and tuck-in acquisitions (taking advantage of an extremely fragmented marketplace).”

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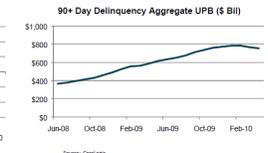
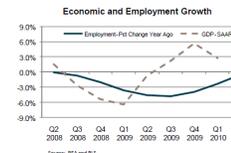
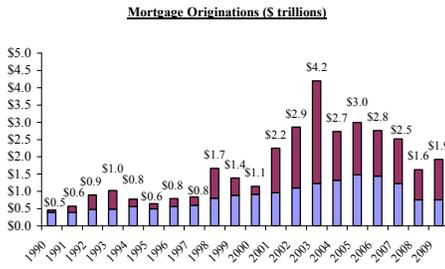
Alex is a second year MBA student and participant in Columbia's Applied Value Investing Program. Prior to school, Alex Latushkin worked in private equity. Post MBA, Alex would like to work at a research-oriented public equities investment firm.

CoreLogic, Inc. (NYSE: CLGX)

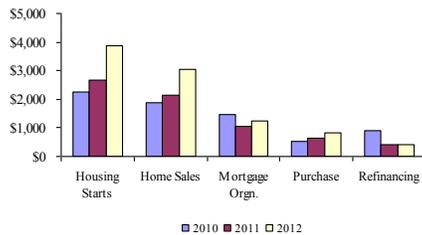
Alex Latushkin—alatushkin11@gsb.columbia.edu

Recommendation: Buy common stock of CoreLogic, Inc. ("CLGX"), which trades at \$18/share and has an intrinsic value of \$27/share or ~50% upside.

- CLGX was spun-off from First American (FAF), a title and specialty insurance company on 6-1-10. Since then, the market has given us the opportunity to invest in a high ROIC business services/data analytics company with leading niche market share that should benefit from long-term secular trends of providing useful tools and applications to the mortgage and financial industry amidst more regulatory oversight and increasing transparency. The stock trades at an attractive 10% free cash flow yield (possibly off cyclical trough FCF) and is naturally hedged via its default and origination businesses.
- Due to lack of substantial analyst coverage and confusing public financials (Capital IQ and other financial databases present incorrect pre spin-off financials), CLGX is a below-the-radar \$2.2 billion market cap company.
- While many of its outsourcing services are demanded irrespective of housing conditions, the company's operations are nonetheless tied to housing and credit and therefore tainted by these currently weak end-markets.
- Management (having operated together for over 15 years) has been able to grow margins and withstand weak macro conditions despite volumes and sales being tied to mortgage originations by adding new revenue streams through higher margin product launches, via incremental market share penetration and by rigorously controlling costs.
- With 5 patents, CLGX's solutions are used by all top 100 mortgage lenders/originators, over 500,000 realtors, many hedge funds, broker-dealers, as well as millions of individual users and government bodies.
- Benefiting from scale, CLGX is the lowest cost provider in the industry, has 50% of its workforce abroad, carries little debt, and hedges its operations by providing default services; management is able to sustain a competitive edge in various housing markets.
- Management continues to penetrate growth opportunities by creating new applications for customers and by entering tangential sectors like telecom, energy and public utilities industries (all need detailed property data and analysis) and international markets.
- In light of the company's leading market share (operating in a sector with few major players), attractive barriers to entry from its heavily invested data analytics and sticky customer base, the market should value CLGX on a more appropriate mid-cycle FCF valuation. Applying 13x free cash flow to a normalized levered FCF of ~\$250MM, I arrive at a target price of \$27/share.



MBA Projections (as of 9-10)



Data Description	# of U.S. Counties Covered		
	CoreLogic	MDA	LPS
Property Ownership	3,093	909	1,077
Sales Transactions	2,555	659	847
Mortgages	1,427	659	677
Adjustable Rate Riders	1,309	0	0
Foreclosure	1,322	659	847
Pre-Foreclosure	1,485	154	151
Assignments	1,384	478	0
Release of Mortgage	1,383	0	0
Bankruptcies	3,144	0	0

Data Description	# of U.S. Counties Covered		
	CoreLogic	MDA	LPS
Federal Tax Liens	1,076	0	0
State Tax Liens	985	0	0
Mechanic Liens	1,101	0	0
Homeowner's Assoc. Liens	867	0	0
Judgments	1,131	0	0
Support Judgments	689	0	0
Local /City/ County Liens	888	0	0
Divorces	823	0	0

LPS – Lender Processing Services; MDA – MacDonald Dettwiler Corporation
Competitive information as of February 2010 - gathered using best available public information sources

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CoreLogic, Inc. (Continued from previous page)

Business Description

- **Business and Information Services segment (50% of '09 sales; 53% of '09 EBITDA)** - Mortgage Origination segment provides outsourcing services to mortgage originators, servicers and default asset managers via tax information from 22k taxing authorities to protect lenders from delinquencies (#1 position/42% share) and via federally mandated flood zone and geospatial data services to mortgage lenders/insurance companies (#1 position/40% share). Default Services & Technology provides for loss mitigation services, property valuation, default technology, claims management and broker price options (29% market share). Customers include IMM+ end-users in insurance, real estate, finance, consumer-direct, and gov't sectors. CLGX has grown market share in this segment.
- **Data & Analytics segment (35% of 2009 sales; 43% of 2009 EBITDA)** - Provides high quality data/analytical tools to assist customers in risk management, fraud detection, property evaluation and consumer credit functions. Specialty Finance provides credit reports, realtor solutions and compliance services (50% market share); Risk/Fraud provides risk management (database covers 95% of US properties/135MM non-prime records) to analyze mortgage securities/loans. Data & Analytics segment profitability has remained resilient throughout the recession by introducing higher margin new applications, and via market share gains. CLGX has grown market share in this segment.
- I value CLGX on mid-cycle EBITDA/FCF given the cyclical end-markets; 7.5x EBITDA or 13x FCF given where comps trade, and in light of CLGX's leading market share, strong barriers to entry, high ROIC and secular tailwinds. In a downside case, CLGX is worth \$14/share (22% downside) under Bear Case '10 EBITDA of \$375MM (10% below guidance) and at 5x EBITDA. In an upside case of mid-cycle EBITDA of \$500MM and 9x EBITDA multiple, CLGX is worth \$37 (105% upside).
- Risks include a prolonged housing crisis, pressures from bank consolidation, and misuse of capital.

“The market has given us the opportunity to invest in a high ROIC business services/ data analytics company with leading niche market share that should benefit from long-term secular trends of providing useful tools and applications to the mortgage and financial industry amidst more regulatory oversight and increasing transparency.”

	x 2010									
	EBITDA	Lev FCF								
Current Capital Structure					Quick Discounted Cash Flow					
Price Per Share (10-15-10)	\$18.09				WACC		10%			
Shares Outstanding	117				Terminal EBITDA Multiple		7.5x			
Market Cap	\$2,117	10.1x			PV of Yr 1-5 Unlev FCF's		\$944			
Net Debt	\$222				2014 EBITDA		\$506			
Enterprise Value	\$2,339	5.8x			PV of Terminal Value		\$2,357			
Intrinsic Value					Implied Enterprise Value		\$3,301			
Normalized EBITDA & FCF	\$458	\$249			Implied Price/Share		\$26.32			
EBITDA & FCF Multiples	7.5x	13.0x			% upside		45%			
Implied Price Per Share	\$27.47	\$27.62								
(\$ in millions)										
			LTM		Projections (2012 = Normalized)					
	2007	2008	2009	6-10	2010	2011	2012	2013	2014	
Sales										
Risk & Fraud Solutions	\$429	\$412	\$388	\$387	\$408	\$424	\$458	\$481	\$505	
Specialty Finance Solutions	\$355	\$320	\$301	\$294	\$263	\$273	\$295	\$313	\$328	
Data & Analytics	\$784	\$732	\$689	\$681	\$671	\$697	\$753	\$794	\$833	
Mortgage Origination Svcs	\$562	\$430	\$565	\$528	\$510	\$530	\$573	\$601	\$632	
Default & Tech Services	\$281	\$368	\$417	\$426	\$450	\$428	\$406	\$386	\$367	
Business & Info Services	\$843	\$798	\$982	\$955	\$960	\$958	\$979	\$987	\$998	
Employer, Legal & Marketing	\$380	\$373	\$306	\$262	\$285	\$294	\$305	\$314	\$321	
Corporate	\$31	\$9	\$14	\$6	\$0	\$0	\$0	\$0	\$0	
Total Sales	\$2,038	\$1,912	\$1,991	\$1,903	\$1,916	\$1,949	\$2,037	\$2,095	\$2,152	
% Growth		-6%	4%		-4%	2%	5%	3%	3%	
EBITDA										
Risk & Fraud Solutions	\$133	\$142	\$130	\$121	\$126	\$136	\$147	\$159	\$167	
Specialty Finance Solutions	\$62	\$61	\$71	\$65	\$58	\$63	\$70	\$78	\$82	
Data & Analytics	\$195	\$202	\$201	\$185	\$184	\$199	\$217	\$237	\$249	
Mortgage Origination Svcs	\$153	\$130	\$169	\$128	\$122	\$138	\$155	\$168	\$183	
Default & Tech Services	\$42	\$53	\$76	\$84	\$95	\$90	\$81	\$77	\$70	
Business & Info Services	\$194	\$183	\$245	\$212	\$217	\$228	\$236	\$246	\$253	
Employer, Legal & Marketing	\$77	\$56	\$18	\$18	\$20	\$24	\$27	\$28	\$29	
Corporate	\$16	\$8	(\$1)	(\$15)	(\$20)	(\$21)	(\$22)	(\$23)	(\$24)	
Total EBITDA	\$482	\$450	\$463	\$401	\$401	\$429	\$458	\$488	\$506	
% Margin	23.7%	23.5%	23.3%	21.0%	20.9%	22.0%	22.5%	23.3%	23.5%	
Capital Expenditures	(\$83)	(\$79)	(\$81)	(\$67)	(\$70)	(\$75)	(\$77)	(\$78)	(\$80)	
Interest Expense	(\$18)	(\$18)	(\$18)	(\$18)	(\$15)	(\$8)	(\$3)	\$0	\$0	
Taxes	(\$139)	(\$124)	(\$130)	(\$105)	(\$106)	(\$119)	(\$130)	(\$141)	(\$148)	
Levered FCF	\$242	\$229	\$235	\$211	\$210	\$228	\$249	\$269	\$278	
Unlevered FCF	\$260	\$247	\$253	\$229	\$225	\$236	\$252	\$269	\$278	

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“...we remember that Greenwald frequently mentioned the concept of ‘circle of competence.’ This is how we designed the fund, in the sense that we are truly capable of understanding the industries in which we invest and we are able to understand how those industries evolve.”

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both had classes with Professor Bruce Greenwald, which was our real introduction to Value Investing in a more practical way and it's fantastic, because it's a common ground. This consistency is very important for partners. One of the major risks when you're starting a fund is to have disagreements on your approach. We stayed in touch after Columbia as Claudio went back to work at ABN AMRO Capital and I went back to McKinsey. Over time we discussed starting a fund together, but if not for Columbia, we would not be partners.

G&D: Was starting the fund your first direct investment experience?

DS: No, I was at a \$2 billion hedge fund for almost three years and Claudio was working with private equity after business school. Claudio also managed investments for family and friends before we founded Rational together. Given our industry experience, we also knew how to run a company. That is very important, because you might be an excellent investor, but not necessarily a good businessman.

G&D: You have an interesting and unique investment strategy. Can you give us an overview of that?

DS: The core of Rational, which is very different from

what most people do, is that we have a circular process. Most funds start with the entire universe, screen the companies, and then commence a deep-dive analysis. We realized, though, that this screening process can consume a huge amount of time and create false leads. So what we decided to do was establish our knowledge base, which is a group of about 85 solid companies that we don't change. With that knowledge base, we apply the same template and same process for analyzing each company. The details of the template are highly customized, but we use the same template to give us the consistency. The objective is to know each company we cover better than the average investor, given the amount of time we spend performing each valuation.

The other component is our portfolio construction methodology. After you have spent literally hundreds of hours on each one of those companies, doing extremely detailed and complete quantitative and qualitative analysis, you don't want to second guess yourself on when to buy and when to sell, and what size each position should be. So Rational has another component which is that our portfolio construction is rules-based. We limit our exposure, both long and short – we want to limit each individual position size too. This is part of portfo-

lio risk control, which is very important. Sometimes value investors focus so much on the individual analysis that they miss that.

G&D: It must have taken quite some time to develop your knowledge base.

Claudio Skilnik (CS): While we were both attending the Seminar in Value Investing, we remember that Greenwald frequently mentioned the concept of “circle of competence.” This is how we designed the fund, in the sense that we are truly capable of understanding the industries in which we invest and we are able to understand how those industries evolve. Let's take the example of the natural gas industry in the United States. To truly understand it, one has to follow the industry for at least three to five years. You have to understand the importance of drilling in unconventional reserves (e.g. shales) as opposed to conventional drilling onshore and in offshore waters. You also must understand the difference in terms of economics associated with the different ways of exploring, and how the huge reserves of natural gas previously trapped in the major shales are now being made economically available. If it weren't for Danilo's experience in plenty of consumer related businesses at McKinsey, and for my experience with infrastructure,

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we don't think we would have the knowledge base in the detail that is necessary to build the huge checklist that is basically our modeling. In this sense, we can do good work - we are able to understand the industries and the businesses not only differently, but also better than most research analysts, and that gives us the necessary edge to outperform.

G&D: What is the first step in the process?

DS: Initially, it's a lot of industry analysis. You understand how the industry works, and then you jump into a company. You can't start with a company's 10K, because you won't know what the results tell you. You need to develop industry-wide information standards from comparing each company. How does the company drive its sales? Is it correlated with something in the industry, or does that company have its own particular niche market? So if you don't look into companies within the industry context, you are missing an important part of the process. We don't go as high as making macro economic forecasts, but on the industry level, you really need to be a specialist.

CS: We get lots of questions from potential clients asking us how we could truly understand these 85 companies in detail and follow them very closely with

only a four person team. It is because of the number of years we have spent studying these companies. These are not companies that we decided one or two years ago to analyze. These are companies that we have been following for five, six years, or even more than that. This is why we have

“You can't start with a company's 10K, because you won't know what the results tell you. You need to develop industry-wide information standards from comparing each company”

these 85 companies, but we would not feel comfortable coming back a year from now and telling you that we expanded our knowledge base to 150. We would not be able to follow such a large number of additional companies in a short period of time. Whenever we are following a company, we

have to make sure that the models are updated and we are on top of whatever is going on not only in the companies themselves, but also their industries.

G&D: Do you know any other fund managers that follow such a strategy?

DS: You know, it's funny, our impression is that there may only be one or two that are doing this. But it's a typical black swan situation - it doesn't matter how many white swans you look at, you don't know if there are any black swans out there, and how many of them. But we don't think it's a common way of running a portfolio. That may be because it's not appealing on a day to day basis - it is very systematic and boring for most people. But, we love it! It's about a process, so you either like to do processes, or you don't. My first job was as a methods and process engineer, so that may have something to do with this. In our opinion, of course, it looks very logical. It is one of the best ways, for sure not the only one, but a very responsible way of investing. It lowers your chances of being completely wrong in something because you have seen that company in different cycles and you know how it behaves. It's very hard when you look at a company for the first time to understand where the company is, until you have studied one cycle

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and lived through another one.

G&D: How do you think about forecasting?

DS: These cycles exist and it is important not to forecast against the extremes of a cycle. For instance, when the US was building 2.5 million houses per year, above the long-term average of 1.5 million houses per year, people were forecasting a soft landing in housing. The dominant rationale for housing was that it would never fall below 1.5 or 2 million houses per year. Now we are at 600 thousand and it's the opposite, we'll never build houses again. So that's one thing we try very consciously not to do, is forecasting extremes into the future. What helped us to do that well was looking at the same companies. Otherwise, you keep jumping from one industry to another, in different parts of the cycle, and how do you know where you are? You never know how long and how high the cycles will go, but you can clearly recognize when you are in extreme modes.

There are many people on both the buy-side and sell-side that do a lot of good analysis. But, we think the difference is the consistency of our methodology, which we think is unique. We would love to know exactly why people don't follow

that, because when we have conversations with potential investors, with other managers, they say, look, it makes a lot of sense to do it this way.

“What helped us to do that well was looking at the same companies. Otherwise, you keep jumping from one industry to another, in different parts of the cycle, and how do you know where you are?”

G&D: You have some personal experience with some of these companies, but other than that, how do you choose your companies and industries?

DS: There is one major driver of the knowledge base, which is it has to follow a broad index. We want to represent the US economy. We are a super-specialized fund. People ask us if we can do this in Brazil – we might be able to in five years, but not tomorrow,

because we need to build the knowledge base. Since that's not the plan, Rational is a one-trick pony. We focus on US equities. What defines us as investors is not that we are Brazilians, but that we are engineers who were exposed to the idea of value investing. In other words, we need data, we like data. We know how to run correlations, or whatever is necessary to help us understand how the flow of information from the industry trickles to the company. We also were both trained in corporate finance. You need both, the industry knowledge and the ability to translate that.

So which country has a lot of public information where we speak the language and which has a broad base of companies? Maybe Japan, but we don't speak Japanese. Maybe Europe, but then you probably have to speak Italian, French and German, so you can have the same depth of knowledge that you have here. So clearly the US was the first choice for us. So after we decided where we wanted to play, we had to decide how to choose the 85 companies. An important point is the performance of those 85 companies over time has had a very high correlation with S&P 500 or Russell 2000 – thus, there is not a bias in our knowledge base. We also avoid industries that we are not able to analyze. Our methodology,

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even in the US, does not apply to banks, biotechnology, or high-tech, because you do not really know where the industry will go.

G&D: What is the next step?

DS: Then you need to search. You exclude the companies where the industry is not highly quantifiable. We look at trucking companies, infrastructure, packaging, basic consumer companies like Coca-Cola, Pepsi, and Nestle. Take hard-line retailers like Home Depot and Lowes, Staples, OfficeMax, and OfficeDepot, for example. We can count how many square feet they have, we can adjust by the age of their stores - we can work with that data.

To summarize: choose the country, exclude the industries where the methodology does not apply, and make sure that the block of companies you focus on correlates with an index and has no bias - otherwise you become a sector fund. Then, make sure that every single one has a volumetric driver - miles driven for trucking companies, number of trucks produced by trucking manufacturing companies, square feet for the retailers. You need the physical drivers.

G&D: That sounds like an interesting contrast to many investors. You are not nec-

essarily looking for great businesses.

DS: One thing we find very interesting is that a lot of value investors say that they are looking for companies with huge moats. If there are huge moats though, then there's no earnings variation, and without earnings variation, there's no confusion. For example, people get highly confused when they see USG delivering \$6-\$7 per share in 2005 or 2006 and now they earn minus \$2. This confusion though, presents the opportunity to go short or go long at different times. We did just that. We shorted it, then bought it, then sold it and then bought it again. Another company we've done this with is Advance Auto Parts. It has a totally different cycle. They are the quintessential maintenance company. In this particular case, we bought AAP's shares when we started the fund and sold recently, with a good realized return.

CS: We are looking for businesses whose assets are important from a valuation perspective because the anchor for our valuation is long-term return over invested capital. Technology firms, for example, are usually light from an asset perspective. This makes it very hard to determine the long-run trajectory of the business - how will capital expenditures impact the business, whether competition

will occur or not, how probable it is that the barriers to entry or the economies of scale will be achieved? It's very important for us that the industry attract competition when return over invested capital gets high. In technology though, there isn't a number that can be reliable in the short, medium or even long run. We don't have history on those numbers and we don't know whether the competition will be coming or not.

One of the companies we considered putting into our knowledge base is Paychex. It's a very interesting business with very high barriers to entry, customer captivity and high return over invested capital; however, we wouldn't feel comfortable knowing when to short a business like that. We don't know what the limit is on the ROIC that this company can achieve. From the long perspective, we don't know that competition is not capable of entering and destroying their ROIC. Quantifiable information is very much related to ROIC as we understand it.

DS: The opposite of this is trucking. It's a highly competitive sector with earnings variation because of economic cycles. We know there will be reversions to the mean from both sides. Since the sector has very low barriers to entry, it's highly predictable. You know that when they are

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“One thing we find very interesting is that a lot of value investors say that they are looking for companies with huge moats. If there are huge moats though, then there's no earnings variation, and without earnings variation, there's no confusion.”

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making a lot of money they will ultimately buy a lot of trucks, and eventually either declining demand or excess supply will bring the economics back to 8, 9, 10% ROIC. There are other industries that are always in trouble, like the airline industry, so we don't touch them. In other words, there is a limit to how competitive you want your companies to be.

CS: By its nature, the airline industry is highly leveraged. So our bad case for an airline business is almost always zero for the equity. We have to make sure that we're comfortable buying a business below our bad case, and would feel comfortable shorting the company at a valuation above our great case.

DS: So it's a balance because we don't want a company with a super high barrier to entry because we don't know how much they can potentially earn and there will not be sufficient earnings variation. On the other side, we want to avoid companies that would bring permanent losses of capital by going bust during the bottom of a cycle.

G&D: You've mentioned using a low, great and base case valuation framework. Why use this approach?

DS: We try to simulate what we think are believable

scenarios. They are probably extreme for the industry, but they are believable. You can always model a company going bankrupt, but that's not a realistic worst case for most compa-

“We have to make sure that we’re comfortable buying a business below our bad case, and would feel comfortable shorting the company at a valuation above our great case.”

nies. Take the rail company CSX. A low case is sub-historical return over invested capital for the industry, in that case 6-7%. In that scenario, you are assuming low volume growth and lower returns than you have observed in the industry projected in perpetuity.

There was a recession in 2000, volume went down, their price went down, and their stock traded consistent with our low case.

The great case is a huge expansion of margins in the rail industry due to higher fuel expenses. Trucking companies need 3x more fuel per mile on average than a rail company. That means when fuel doubles, the delta moves from 3-1 to 6-2, a difference of 4 units rather than 2 units. The rail companies priced most of this delta and it explained most of the increase in margins. In May 2008, we were short CSX and at that moment the market was saying that the ROIC would be 15% in perpetuity. It implied that volumes would keep growing and gaining market share from trucking and/or that people would consume more heavy goods. So, that's a great case.

So our study of a company's historical returns helps us define what believable great and low returns on invested capital are. Next, we take into consideration changes in the industry. Even our low case for CSX is much higher than it would have been 15 years ago when oil was much cheaper. The excess supply from OPEC was consumed, and we don't see huge expansion of capacity coming online. So if oil stayed where it is, there is more room for margins even in the long

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term for rail companies. So we do incorporate that. If there are new facts, we incorporate them and don't blindly forecast off of historical information into perpetuity. If we think that the low case before was even worse than our case today, we're fine with that, because we don't know what is going to happen in fifty years, nor does the market. So everyone has a medium term bias, but what we try to avoid is what we call a mathematical impossibility.

G&D: Can you give us an example that illustrates a mathematical impossibility?

DS: For example, when USG was trading at \$90 in 2006, it was implied that there would be a soft landing in the housing market and the return over invested capital for USG would remain in perpetuity around 30%. Our base case is 11%, not very far from the observed return during normal parts of the cycle. It's a very simple industry, very replicable. For instance, there was a price fly-up in the industry in 2005, the capacity was fully utilized and the pricing moves up the cost curve. But eventually capacity expands, and prices are already very close to where the cost curve tells you it should be. So what the market was forecasting back in 2006 is close to a "mathematical impossibility".

G&D: How far out do your base, low, and great cases forecast?

DS: Every single methodology, whether the person thinks of it as such or not, is

"It's impossible to know what USG's normalized earnings are when you have only two years' worth of projections. It is much easier to simulate the next cycle and bring this to an average ten years from now. Your mistake on that average is much smaller."

a perpetuity. When people tell you that they do a couple of years and use a multiple because they don't know what is going to happen in three, five or ten years, they're using a perpetuity. The multiple represents buying that cash flow in some form of perpetuity. So, we go over ten years, because we want to have

space to simulate cycles. For instance, we are now in a bottom of the housing cycle. It's impossible to know what USG's normalized earnings are when you have only two years' worth of projections. It is much easier to simulate the next cycle and bring this to an average ten years from now. Your mistake on that average is much smaller.

You can also see the impact of different scenarios over the coming years. For example, what happens with their debt? Will they blow up in some of the bear case scenarios? If you have a two year template, how do you know? The answer is you don't. We have all their debts modeled, tranche by tranche, because it matters how the company will be performing when they must renew their debt. If the company is luckier in that a bigger chunk is due at the next peak, they will refinance it at much lower rate, so we can't simply ignore that. It matters.

In practice, after the 10 year forecast period, it ends up being a perpetuity. The difference is that we do it explicitly. We converge to the long-term average return. The growth should be consistent with the population growth or whatever is the driver for that industry. It's very dangerous when you have a perpetuity where you can plug in 4% and say it's reasonable. But if infla-

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tion is 2%, and volume is 2%, that may imply huge market share gain over 30 years for a population that is growing at 0.5%-0.6%.

G&D: Can you talk about where USG is today relative to your base case?

DS: USG is very close to our low case scenario, which implies very low returns in perpetuity. The company was lucky that they had this huge peak in earnings, which allowed them to pay down a lot of debt. It is a leveraged company, so it is classified in our knowledge base as an “at risk” company. That’s a company that could be in trouble in the event of another bad recession. They were in trouble earlier when they were saved by Warren Buffett through the help of the convertible issue. Interestingly, three months ago, we left the position at our fair value, and then it dropped by 50%, and we bought it again. Same company, nothing changed, the market decides to take it from \$5 to \$25, more or less, and drops again to \$10-12.

G&D: It sounds like you’re building out a ten year forecast with different scenarios to capture different cycles. How do you think about those projections and the role they play in your process?

DS: A good example of that is housing with USG. To go out and project GDP, that’s too much macro forecasting. It’s always about a balance. However, going blindly into these industries without knowing what matters is also not a sound methodology. So we look

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at the sales of wallboard for the industry in the US, and see that the correlation with the new home starts is 90%. Although not all wallboard is used for new home construction, this one variable has a lot of information. When people are not building new homes, they are

also not thinking about doing expansions or renovations.

We develop our expectations on new home starts by looking at the number of homes per thousand inhabitants in the US and reversing this to the long-term trend that we see in the US. It has to fluctuate around a reasonable number of homes per thousand people. Our assessment of new home starts over the next 10 years is a major input into our valuation of USG.

G&D: So is that more of a return to long term trend or do you simulate variation around that trend line?

DS: For the next ten years, it’s the real simulation, with housing starts going from 600 thousand to 1.7 million and coming down to a million. In practice, companies will be impacted by it because of their debt cycle. USG has no normalized earnings. Their earnings are anything but normal in any given year. It’s always in transition between boom and bust. If you were the owner of this company, it would matter to you if the cash flow came now, five years from now, or ten years from now.

G&D: Are you more concerned with having a catalyst in your short positions, do you rely on the same longer-term valuation reversion?

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DS: We short the same companies that we will potentially go long. We present our companies not to have extreme scenarios in either direction, either going bankrupt or having the company become ten times bigger in real value than what we had forecasted. When companies are selling at our great case valuation and we are shorting them, chances are that they are very close to their peak earnings. It's just a matter of patience that the valuations will correct. We find that the correlation between next 12 months' earnings and price per share is extremely high. It doesn't make sense, but that's how the market works. We are creating alpha based on that, in the sense that price will follow earnings, and if there is high probability that the earnings are above trendline, they will reverse.

CS: We also need to make sure that the portfolio risk controls are all set and working. For example, even if the stock price of one of our short positions tripled against the price at which we shorted it, we could potentially make money once the stock finally goes to our fair value estimate (base case). To make sure that is the case we need to trim down our position to our maximum exposure per position on the stock price upward movement and we will be adding back to our

position on the stock price downward movement.

G&D: How do you think about margin of safety, do you require a certain spread between the great and low cases?

DS: This is why we develop the three scenarios we do, so that the margin of safety is there. If we make a mistake, we took a position in a company at the fair value.

CS: If you focus on always starting a position at a valuation such that you avoid permanent loss of capital, then you will understand the methodology. You are buying at a price where even if lots of bad things happen to the company, you are still going to avoid permanent loss of capital. And the same is true of shorts; you are shorting at a price where everything that can go in favor of the business is already priced into the stock. So the idea here is to open positions making sure that we may lose money in the short or medium term, but we are not going to lose from the permanent perspective.

G&D: Could you talk about a mistake that you made, that you have corrected the methodology to account for?

DS: I think the biggest mistake we will commit from time to time, which is inevitable, is underestimating how severe a macro-event

will be. For example, you think you are at the end of a recession, and then a second leg, much bigger than the first, is coming, as it did in 2008-2009. We design risk controls, to guarantee that there's no permanent loss of capital, so we come back after the recession. If our resources are preserved, we can keep moving as investors. But this is an inevitable mistake that will happen from time to time.

The only way to avoid it is to have a crystal ball. If we had one, we would have started our fund net short in April 2008, rather than net long because we were at the end of one recession. You can see this in trucking: the first normal housing recession was over already, that was from 2006 to 2008. Then the panic recession, with all the banks saying they were bankrupt, led to a huge decline in real activity in companies. In the case of USG, they had to go after an expensive, dilutive instrument. This shaves almost 30% of their value that was not in our forecast. And so this is unpredictable because it is an event that happens every 70 years. But you have to have a methodology that even with your mistakes, you don't blow up. We haven't changed anything from the beginning of the fund in April 2008 until now.

The other kind of mistake that we might commit, and

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“I think the biggest mistake we will commit from time to time, which is inevitable, is underestimating how severe a macro-event will be. For example, you think you are at the end of a recession, and then a second leg, much bigger than the first, is coming, as it did in 2008-2009.”

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this is more on an individual basis, is with wrong analysis. For instance, if you look at our implied return over invested capital, including capitalized leases, for Home Depot and Lowe's, it is higher than the average for other retailers we follow. Those two companies have behaved very well for a long time, including in this massive crisis. There was no price war. What should be the base case for this duopoly? There are limits to what they can earn, but if they continue to behave as they have, it implies a higher valuation than in a fully competitive industry. How could I make a mistake here? What if they started a long price war? The fair value will then be revised down. We thought we were buying at the low case valuation, but it turned out to be the real case. It is not a permanent loss of capital because of the margin of safety, but it would have been a mistake nevertheless. If you do a lot of this, your returns are going to be mediocre. But again, with companies that you know, that you have been following for many years, some of those mistakes will happen less frequently than compared to the average investor. Therefore you can create alpha by stock-picking.

G&D: How do you limit the impact of such mistakes?

CS: This is very important, and it goes very much

against a lot of things we hear from other value investors. If we think that the fair value of a business is

“There were some value investors that came out after the recession and said that they were very concentrated and they were chasing something down to the bottom. That’s the danger, because you expose your fund doing this. Although it is beautiful when it works, the risks associated with it are gigantic.”

\$16, and now the low case valuation for that same business is \$10, and we buy that company once it goes below \$10, our methodology does not include buying more at \$9, buying more at \$6, and even buying more at \$3. We recognize that we might be wrong on the subsequent

investment, and we need to make sure that we limit our losses. It is very important to recognize that we are doing the same kind of analysis for eighty five businesses, and we are not going to double or triple down on any one of them. The explanation that if you like something with an x market of safety, you should like it more with 2x and you should die for it at 3x - this is not within our methodology. Unfortunately, we will commit mistakes and we should make sure that our methodology will limit the losses associated with such mistakes. We intend to remunerate our investors for the bulk of our analysis and not necessarily for extreme returns achieved from one or two home-runs.

DS: There were some value investors that came out after the recession and said that they were very concentrated and they were chasing something down to the bottom. That’s the danger, because you expose your fund doing this. Although it is beautiful when it works, the risks associated with it are gigantic. Our portfolio management was designed before the 2008-2009 crisis and in such a way that it could withstand a very bad shock, which did happen. There was a drawdown, but we came back, without emergency tweaks in the methodology.

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G&D: Is there anything that you wish someone from the industry told you when you were at Columbia Business School?

DS: There are many different ways to invest: choose yours. Try to find it. I wish someone had told me that it is possible to invest being very methodical. The feeling that I had when I started to invest, after speaking with a lot of people and reading a lot of books, is really the same feeling when I started in engineering. I remember when I was an engineer, reading a book by Lee Iacocca talking about Chrysler. It was a must-read book for people who were thinking about being CEOs of companies. I remember feeling almost despaired when I read Lee Iacocca saying that he knew that the Mustang was the best name for that car and that it was the key to its success. I asked myself, how does he know that? How does he have that kind of foresight? And it was a terrifying feeling to think that I didn't have that type of intuition.

When I went to investing, it was something similar to this. How does this investor do it? Sometimes you see people presenting their methodology in very generic terms, as if all they did was a back of the envelope calculation. How am I supposed to do a back of the envelope calculation and be con-

fident that I was making a good and responsible investment?

“You research, you know your companies, you know the industry, and you know what you are doing under the best known circumstances. Mistakes will still happen, but there is a methodology - it’s not about having a dream one day and becoming a great investor.”

So I wish someone had told me that there's another way. You research, you know your companies, you know the industry, and you know what you are doing under the best known circumstances. Mistakes will still happen, but there is a

methodology - it's not about having a dream one day and becoming a great investor.

CS: I think that before getting into this industry I would have liked to have dealt more with the importance of portfolio allocation and risk control, in addition to studying single businesses and investment ideas. I think people focus a lot, and they should, in trying to understand a business and the industry. But a lot of importance needs to be placed on building a portfolio from these ideas that will maximize your gains and make sure that your losses are such that you can live with.

DS: For students at Columbia, the focus is more on specific company analysis. This makes sense, because one's initial job after Columbia is as an analyst. When you make the jump to running your own fund, you eventually have to learn the portfolio management part. You are going to need to have a methodology. So it's also an important part of the job.

G&D: Thank you very much Danilo and Claudio – that was very insightful.

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