WHAT THEY DON'T TEACH YOU IN COLLEGE

MY STORY

Some background about me so you know who it is you're being forced to listen to for the next three hours, and so that you can put my comments in context.

- Used to be professor here at the business school at the Univ of AZ. As soon as I got tenure at
 Arizona, I took a brief break at a finance company in San Francisco that's now called BlackRock.
 I guess I'm a "recovering academic," because I'm still at BLK.
- Why left academia: After a few years, I was finding my own research boring. And I'll never forget the time one of my graduate students was standing in my office doorway asking about some aspect of his dissertation, and all I heard was blah, blah, blah. I wasn't interested...why didn't I lock my door? That's when I realized I needed to take a break...spend a year outside of academia applying what I'd learned. So I went to BLK for sabbatical. After about six months at BLK, and one of our models called for an \$8bb sale of stocks. This would have been the biggest trade in stock market history by a long shot, and would have pushed the stock market off a cliff, making the crash of 1987 look like a blip on people's computer screens. A week of frantic work and late meetings ensued. It was during that week that I realized that my career options boiled down to staying at BlackRock where I'd impact millions of people's retirement portfolios, or going back to academia where I'd continue to prove a particular matrix is positive semi-definite. When evaluated along that dimension, the decision was easy.
 Story of managing my dad's retirement funds without knowing it...
- And that's what I do...I'm now overhead (no longer make investment decisions), but the teams I'm responsible for manage several hundred billion dollars for investors around the world.
- · Married, three kids. Give some color.

With that intro, here are things I learned from 20 years in the business; things they won't teach in college.

- Lots of things are more important to career success, but I chose these because they're the things I didn't know when I graduated.
- I've also noticed that rookies at BLK tend to undervalue these, so I assume that most of you would also undervalue them. You might find them especially useful.

SUMMARY OF THE LESSONS

- 1. Leave the investing to the pros
- 2. Importance of risk management
- 3. Importance of hair color;
 - Corollary: Pick the professor not the class
- 4. No such thing as a disposable relationship
- 5. Go all in; the dangers of diversification
- 6. Use an alarm
- 7. A career happens over a lifetime not overnight.
- 8. Could add: EQ and IQ Fellow prof had low EQ. Made grad students grade exams on Christmas Day. Now they're peers, but the students haven't forgotten.
- Could add: If all your colleagues are idiots, then look in the mirror...you're the common factor. Story of another colleague.

THE LESSONS

LESSON 1: LEAVE THE INVESTING TO THE PROS

First lesson is about conducting your own market research: Don't do it. Talk about

- SAE's internet search activity
- million broker reports we process annually.
- · tens of thousands of earnings call we attend
- BLK's \$100m annual data budget
- Twitter and Alibaba access
- using satellite images to monitor activities in shipping yards/harbors, parking lots, oil storage tanks

In contrast, you notice the line at Apple is unusually long so you buy Apple...even though it's doubled in price over the last year. Can any of you really compete against us? Instead, three steps to personal investing:

- get your asset allocation right...only 3 bets: stocks versus bonds, three regions, EM vs. DM.
- implement that as efficiently as possible...ETFs and index funds
- reserve the active bets for the LongHorizon views, where you're not competing against trillions of
 dollars of expertise and not reflected in current prices. This is the one place where you have an
 edge over me, because your horizon is 40 years and mine is 3 years (underperform for 3 years
 and get fired).

LESSON 2: IMPORTANCE OF RISK MANAGEMENT

I've witnessed a number of disruptions during my career, from the Asian financial crisis, to the dot-com bubble, to the GFC, and now the ongoing issues in Europe. The most important investment lesson I learned during those periods is the importance of risk management. Risk management is about avoiding the downside. The important lesson is that it's more important to avoid the downside than it is to capture the upside.

- Story: We survived the quant crisis because we focused on avoiding the downside. Give story of the carry trade, trading \$35b to get out of way. Easy to trade because there was a buyer on the other side who was doubling down...doubling his risk level.
- How do you do it? Two keys.
 - Diversify: Give example of Global Ascent during GFC. Diversified in commodities, rates, equities. Equities plummeted 40% but government bonds increased 20%. Commodities were unaffected by the GFC. Diversify across the nvestment horizon.
 - Stop losses. Research shows we hold onto our losers too long...stop losses protect us from this behavioral bias. Example of Freddie Mac, Global Ascent.

LESSON 3: IMPORTANCE OF HAIR COLOR

I had to go into the emergency room in Hawaii recently after a surfing accident while I was being chased by sharks. (At least, that's the story I'm using because the truth isn't nearly as interesting.) The

attending physician was this young kid who looked like a teenager...which means he was probably about your age, because most of you look like teenagers to me. He had all kinds of fancy degrees on his wall, but I'd have gladly traded in all those degrees for a few grey hairs.

Why? Because the best education in the world – even one that comes from Univ of AZ – won't teach you as much as old-fashioned experience. I remember when I first learned this. I had just arrived at BLK, a hotshot Engle/Granger-trained econometrician, and was working on a project to forecast Germany's longrun stock market return. I was stuck, so I went to my boss, Richard Grinold, to seek advice. Just so you know, Richard is a guru in the financial community – arguably the most highly respected person in the field of quantitative finance. He told me that 30% of Germany's annual stock market volatility would probably be a good starting point for the forecast. I couldn't believe how naïve his advice was...this guy was supposed to be smart! I was expecting a fancy economic or econometric model, and he gives me 30% of volatility#\$#??? So I blew him off, went back to my desk and threw all my years of Nobel-prize-level high-powered econometric training at the problem...and came out with – you guessed it – 29% of volatility. [I went back to him to ask how he knew...] His grey hair – his experience – was much more valuable than any degree that he or I received, and I'm very lucky to have been mentored by him for the first 15 years of my career.

So what's the lesson here? If you want a successful career, look for grey hair. Find someone with lots of it, allow that person to mentor you, and you'll find your career's challenges easier to navigate.

LESSON 3 (COROLLARY): PICK THE PROFESSOR NOT THE CLASS

I picked Rob Engle, who went on to win the Nobel Prize. And I picked Richard Grinold, who went on to win the James Vertin award for lifetime contribution to finance.

Rookies often select a career/job based on the firm, or how much it pays, or where it's located, or how much fun it looks, or whether it seems to be a springboard to other things. In fact, many people will advise you that these are important criteria. But they're wrong. All of 'em.

Think about your classes. The professor, not the topic of the class, was the primary determinant of how much you learned. Same in the real world. If your goal is to build your human capital, then your first two or three jobs should be selected based on the professor, not the class. Ask:

- How much will you learn?
- Who's going to teach you?
- Is s/he respected by her/his peers?
- Is s/he accessible?

LESSON 4: THERE'S NO SUCH THING AS A DISPOSABLE RELATIONSHIP

The old adage used by Realtors as a guide to buying property is of course "location, location, location." One might easily adapt this and say that broader success in life requires three things...people, people and people. Relationships are important. I can think of no version of success that can be achieved in isolation. Even the monk seeking enlightenment requires community to be successful.

Here's something that some of you might have figured out already, and those who haven't will: Of all your relationships, the relationships at home are the most important. Home is where your closest relationships reside. It's where you run to when everything else is going badly. It's where you can be yourself. For me, the biggest things at work don't come close to the satisfaction/ fulfillment I get from the smallest things at home. No promotion or recognition can match

- 1. My teenage son telling a friend that he admires me
- 2. My 12-year-old running up and hugging me every day when I come home from work
- 3. My 10-year-old waiting for me to tuck her into bed every night.

But don't underestimate the importance of maintaining strong professional relationships as well. Three years ago, I fired a senior managing director in our London office. About six months later, in an effort to prevent our relationship from deteriorating further, I invited him out to lunch. It was an awkward and uncomfortable lunch for both of us. There were a lot of painful silent moments as we sat across the table from each other. But twelve months later, I was again sitting across a table from him. But this time it was a meeting in which he was evaluating one of my hedge funds on behalf of a client of his. Now let's be realistic...I'm not on his Christmas card list. But I believe that those efforts to maintain a strong relationship, even after having to let him go, contributed to the positive review we got from him.

You don't have to like your colleagues, but you do have to have productive relationships with them.

Bruce Goddard, "Only reason I'd quit is if I had to report to this guy in Australia." Six months later, he was my boss. It was tough. Our Thursday phone calls got canceled regularly because I arranged most of my business flights for Thursday afternoons, just to avoid interacting with him. This all changed when we were going through a losing battle in the markets, and I learned that he actually likes me and that he's actually not Satan incarnate. Foxholes make for strange bedfellows. Bruce made it clear to everyone that he wanted me to take over management of the hedge fund. That public vote of confidence changed our relationship, and we jointly grew that fund from \$500m to \$10b over the next five years. Had I blown off that relationship, we'd have never experienced our success.

Relationships are important. There's no such thing as a disposable relationship.

LESSON 5: GO ALL IN (THE DANGERS OF DIVERSIFICATION)

Diversification is important if we're talking about investments. It's a disaster if we're talking about careers.

Give story of Grinold telling me to get off the fence.

- I'd never be where I am if I didn't get that advice.
- Doesn't matter whether you like your job or not...still go all in.
- What does "going all in" look like?
 - Long enough hours to get the job done. That's probably not 9-5.
 - Learning about your firm and the industry you're in...on your own time
 - Making friends at the office
 - Taking that evening/weekend class
- Those who don't do this rarely have successful careers

LESSON 6: USE AN ALARM

Zurich hedge fund conference story

LESSON 7: CAREER IS A MARATHON NOT A SPRINT

Be patient...a career happens over a lifetime not overnight. It's a marathon not a sprint.

- Learn.
- Be curious.
- Gather information.
- Build your network.

The goal in the first decade of your career should be to build your human capital not your financial capital.

Even with all this, things won't always go your way. Be patient.

• Two tales of promotions not granted: WFNIA colleague and mine (Campagna)

State this again...goal of first decade is to build human capital. If a career was measured in years, then it's sensible to quit and find a place that values you more if you get underpaid, overlooked, lack of credit, etc. But if a career happens over decades, then it's just stupid to quit if you don't get promoted, don't get the raise, don't get the credit, etc.

And remember...how you build human capital takes us back to the third point: Color of hair; pick the professor not the class.

SUMMARY

So keep your priorities straight? What's important to you? Is it wealth, income or status? Those are hollow. I often think of the employee I had whose goal in life was to own a Ferrari by the time he was 30. He succeeded, buying a Ferrari at 29. But within five years, the Ferrari was long gone, as was his wife.