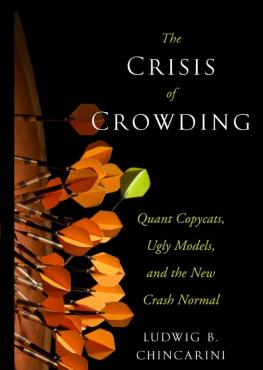


CHINCARINI

Managing One Million Dollars January 16, 2015



Ludwig B. Chincarini, Ph.D., CFA University of San Francisco Index IQ

LUNCH WITH LUDWIG SERIES

- Thank you for coming. Thanks to Dori, Michelle, Susan and everyone else who helped organize this lunch.
- Please ask questions if something is unclear and/or at the end of the presentation.

I. Introduction

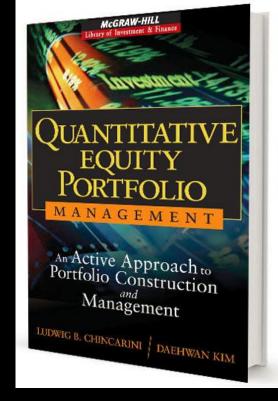
- Student Managed Fund started this year with \$1M from USF.
- Students works as a real fund shop to manage the money.
- Hope to have alumni donate to the fund and fund proceeds will be used for scholarships, supplement professor research, and for purchasing data and other things to make the business school better.

II. Structure

- Chief Investment Officer
- Performance Analyst
- Editor of Newsletter
- Editor of Website
- Chief Operating Officer
- Economists
- Quant Data Analysts

- Quantitative focus combined with individual fundamental analysis
- Fund primarily US equities
- Some tactical bets (e.g. oil)
- 75% equities, 25% cash
- The Future: Other countries

• Quantitative Models:



- Based on backtesting, theory and academic research, models build on factors that make for good stocks.
- A variety of factors, but a good quality value tilt.
- A great introduction to this sort of stuff:
 Quantitative Equity Portfolio Management by Chincarini and Kim.

An Example

- Enterprise Value = stock market equity + debt of company cash
- What does this measure? How much you would have to pay to buy a company outright.
- EBITDA = earnings before interest, taxes, and depreciation (an estimate of cash flow)
- Look at companies EV / EBITDA. Companies with low values might be "cheap".

- An Second Example
- P/B the price of a company divided by its book value.
- A way to find "value"
- Sort companies by high and low P/B. Does it predict anything?

An Second Example

		Value Portfolios						
		P1	P2	P3	P3–P1	Factor		
U.S. stocks 01/1972 to 07/2011	$\begin{array}{c} \text{Mean} \\ (t\text{-stat}) \\ \text{Stdev} \\ \text{Sharpe} \\ \text{Alpha} \\ (t\text{-stat}) \end{array}$	9.5% (3.31) $17.9%$ 0.53 $-1.7%$ (-1.59)	10.6% (4.33) $15.4%$ 0.69 $0.8%$ (1.02)	13.2% (5.19) $15.9%$ 0.83 $3.6%$ (3.17)	3.7% (1.83) $12.8%$ 0.29 $5.3%$ (2.66)	3.9% (1.66) $14.8%$ 0.26 $5.8%$ (2.49)		

AMBA – a Bay Area Company we didn't know about

Ambarella, Inc. develops semiconductor processing solutions for video that enable high-definition (HD) video capture, sharing, and display worldwide. The company's system-on-a-chip designs integrated HD video processing, image processing, audio processing, and system functions onto a single chip for delivering video and image quality, differentiated functionality, and low power consumption. Its solutions enable the creation of video content for wearable sports cameras, automotive aftermarket cameras, Internet Protocol (IP) security cameras, and camcorders in the camera market; and manage IP video traffic, broadcast encoding, transcoding, and IP video delivery applications in the infrastructure market. The company sells its solutions to original design manufacturers and original equipment manufacturers through its direct sales force and logistics providers. Ambarella, Inc. was founded in 2004 and is headquartered in Santa Clara, California.

A Very Successful Catch



- We have winners, but we also have losers.
- We want to on average how more winners than losers.

- Individual Presentations
- Students research stocks in our preferred list or otherwise and make a presentation.
- If 2/3 vote for a buy or sell, we take the action.
- Still in development. It takes the most time and students are learning.

- Individual Presentations
- On November 12, 2014, two groups of students presented on GDOT. They made their case and students voted. One said to BUY, one said to HOLD.
- Class voted to NOT BUY. Since then has lost 15% (to 01/15/15) [Ref: S&P 500 -1.8%] Good Decision
- On same day, student wanted us to "keep" ANDE, but quant model wanted out. Students voted and SOLD. Since then, lost 15% (same period). Good Decision

- Individual Presentations (Tactical Bet)
- On 11/25/2014, one student recommended buying OIL.
- Class voted to do it, even though we had strong words from Saudi's to wait until after OPEC meeting and to NOT BUY due to Iranian nuclear issue.
- How do you buy OIL?
 - ETFs, Regression, Size
- Only smart thing we did was to buy ½ of a normal position. It is down 38% since we bought (USO). Bad Decision

- Individual Presentations (Tactical Bet)
- In case you wondered, OIL might be a good buy in the very near future. What might a Saudi say?
- Oil is going just as I told you last time. It's going to reach a bottom of \$40, maybe \$35 if overselling goes wild. Geopolitically, the lower oil prices are doing exactly as planned by Saudi Arabia and the US. From a market perspective, US oil companies are getting destroyed at these prices. I see May or June is when Oil begins its recovery to its norm. One of the big players in the Oil market will have to cut oil production.

IV. Challenges and the Future

- Margin account and clever trading.
- Semester course, rather than 1 year
- More resources to enable students to do more easier
- More time for students to learn and contribute (testing models, building models, studying companies, etc)
- Global markets (equities, macro, and tactical)

V. The World for 2015

- I would consider buying OIL soon, however, the wait for profits may be long.
- I might unwind the Euro-Dollar position (suggested on Jan 4, 2014)
- I would look for "cheap" companies in what could be overvalued environment...maybe long-short or hedged.

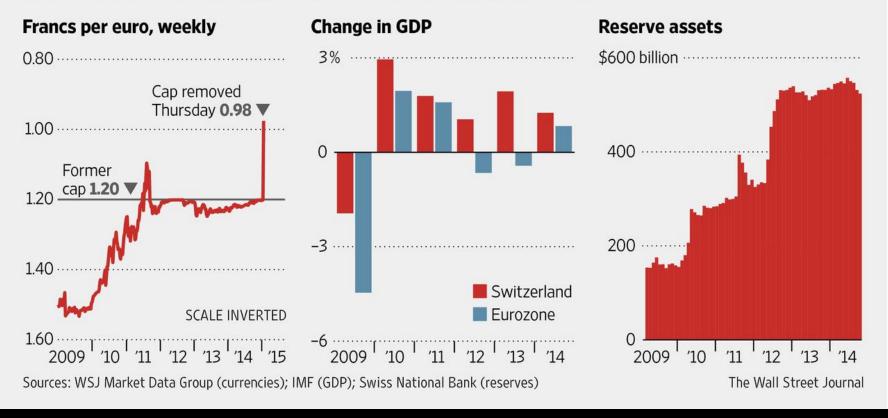
V. The World for 2015 (2014 Trade)



V. The World for 2015 (2014 Trade)

Scrapping the Cap

Capping the franc against the euro helped sustain Switzerland's export-driven economy, but it required foreign-exchange purchases that swelled the central bank's balance sheet.



V. The World for 2015

Dimmer View

The eurozone's financial troubles, Russia's recession and other emerging-market slowdowns are weighing on global growth, despite a stronger U.S. economy.

World Bank economic forecasts for 2015 CHANGE 0.4 June '14 forecast 7.5% China pct. point 7.1% January '15 forecast 6.3 India 0.1 6.4 3.0 U.S. 0.2 3.2 World 0.4 3.0 3.0 South Africa 0.8 1.3 0.1 Japan 1.8 0.7 Eurozone 1.1 2.7 1.7 **Brazil** 1.0 0.5 3.4 Russia -2.9 Source: World Bank Group The Wall Street Journal

V. The World for 2015 (Equities)

<HELP> for explanation, <MENU> for similar functions.

94) News	95)	Settings					World Equi	y Indices
Standard 💌	Movers	Volatility	Ratios		AVAT		% Ytd	▼ USD ▼
1) Americas	2day	Value	Net Chg	% Chg	∆ AVAT	Time	% Ytd	% YtdCur
11) DOW JONES	Wagnes 🔑	17379.53	+58.82	+0.34%	+37.76%	11:45	-2.49%	-2.49%
12) S&P 500	Mayor V	2000.67 d	+8.00	+0.40%	+28.95%	11:30	-2.83%	-2.83%
13) NASDAQ	More *	4596.36	+25.53	+0.56%	+6.01%	11:45	-2.95%	-2.95%
14) TSX	May -	14184.70 d	+142.88	+1.02%	+32.51%	11:25	-3.06%	-5.97%
15) MEX IPC	<i>/</i> ////	41041.35 d	+42.58	+0.10%	-1.52%	11:25	-4.88%	-3.92%
16) IBOVESPA	man m	48950.69	+924.38	+1.92%	+18.32%	11:45	-2.11%	-1.24%
2) EMEA								
21) Euro Stoxx	War and	3206.45 d	+49.09	+1.55%	+8.67%	11:30	+1.91%	-3.02%
22) FTSE 100	Var and	6551.94 d	+53.16	+0.82%	+7.17%	11:29	-0.22%	-3.10%
23) CAC 40	V	4383.08 d	+59.88	+1.39%	+24.11%	11:30 c	+2.58%	-2.38%
24) DAX	War was	10197.03 d	+164.42	+1.64%	+27.14%	11:30 c	+3.99%	-1.04%
25) IBEX 35	V" WV"	10045.60 d	+63.10	+0.63%	-7.95%	11:30 c	-2.28%	-7.00%
26) FTSE MIB		19222.67 d	+378.15	+2.01%	+7.71%	11:24 c	+1.11%	-3.78%
27) AEX	man and	433.26 d	+7.94	+1.87%	+53.02%	11:30 c	+2.07%	-2.86%
28) OMX STKH30	Var	1468.90	+11.54	+0.79%	+25.76%	11:34 c	+0.30%	-3.89%
29) SWISS MKT	√	7899.47 d	-501.14	-5.97%	+143.13%	11:19 c	-12.07%	+2.26%
3) Asia/Pacific								
31) NIKKEI	Market Market	16864.16 d	-244.54	-1.43%	+24.37%	01:28 c	-3.36%	-1.58%
32) HANG SENG	بسهه ممسه	24103.52 d	-247.39	-1.02%	-12.42%	03:01 c	+2.11%	+2.13%
33) ASX 200	seen War	5299.24	-32.13	-0.60%	+17.72%	01/16 c		-1.74%
Australia 61 2 977 Japan 81 3 3201 89	77 8600 Braz 900 - Sin	ril 5511 2395 90 ogapore 65 6212	00 Europe 44 1000 - H	20 7330 750 S. 1 212 318	00 Germany 49 3 2000	69 9204 1210 Copuright 2015	Hong Kong 85	2 2977 6000

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V. The World for 2015 (US Bonds)

<HELP> for explanation.



Yields declining and 2-year negative yields?

V. The World for 2015 (World Bonds)

<HELP> for explanation.

Regional	_	97) Sett	ing:	S .	World Bond Markets					
91) Bonds 92) Spr		93) Curves	_	- "			_			
Maturity 10 Year	×		_	Trading Mode				ata Range		1onths
Country	CMI	Security		Bid Ask	Yield	Yld Chg Yield	Low	Range	High	3M Chg
1) Americas								Avg Now		
10) United States		T 2 ¼ 11/24		104-031/4 / 104-033/4	1.791	+7.6 mark	1.715	•	2,386	-36.5
11) Canada		CAN2 🛂 06/24	٠	108.645 / 108.684	1.502	+4.3^^	1,458		2,080	-42.1
12) Brazil (USD)		BRAZIL4 ¼ 25	•	100.675 / 101.145	4.109	+1.3	3,929		4.755	+14.5
13) Colombia (USD)		COLOM 4 02/24	•	101.170 / 101.585	3.787	+1.5	3,476	\rightarrow	4.092	+27.9
14) Mexico (USD)		MEX4 10/02/23	٠	104.200 / 104.700	3,371	+3.2	3,160		3,776	+17.8
2) EMEA										
20) United Kingdom	=	UKT2 ¾ 09/24	٠	110.820 / 110.840	1.535	+2.7	1.508	•	2,272	-55.8
21) France	=	FRTR 1 3/4 24	٠	110.610 / 110.630	0.633	-3.7	.633	•—•	1,309	-62.7
22) Germany		DBRO 🏃 02/25	•	100.435 / 100.455	0.454	-1.8 July	.422		.900	-36.4
2) Italy		BTPS 2 ½ 24	•	107.755 / 107.810	1.645	-8.6	1.645		2,592	-93.1
24) Spain		SPGB 2 ¾ 24	٠	111.290 / 111.370	1.491	-8.6	1.484	•—	2,255	-71.7
25) Portugal		PGB5.65 02/24	٠	125.065 / 125.285	2,500	-10.0	2,389		3,444	-94.5
26) Sweden		SGB2 🛂 05/25	٠	117.224 / 117.365	0.744	-2.8 mm	.744	•——	1,266	-41.8
2) Netherlands		NETHER2 07/24	٠	114.225 / 114.255	0.460	-2.7 www	.460	•——•	1.060	-52.8
28) Switzerland		SWISS 1 ½ 25	•	116.150 / 117.030	-0.110	-15.3	110		.466	-50.9
29) Greece		GGB2 02/24/24	•	64.500 / 65.880	9.027	+15.6	7.001		10.291	+38.6
3) Asia/Pacific										
30) Japan		JGB 0.3 12/24	0	100.551 / 100.668 c	0.231	-1.1	.231		.523	-24.6
31) Australia		ACGB 3 ¼ 25	•	106.145 / 106.234 c	2,554	-11.5	2.554		3,349	-63.2
2) New Zealand		NZGB 5 ½ 23	•	115.047 / 115.346 c	3,350	-9.2	3,350		4.079	-57.1
33) South Korea		NDFB 3 09/24	٥	106.458 / 106.716 c	2.344	-8.7	2,315	•—•	2.815	-39.3
				9000 Europe 44 20 73						

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 — Singapore 65 6212 1000 — U.S. 1 212 318 2000 — Copyright 2015 Bloomberg Finance L.P. SN 114576 EST GMT-5:00 H454-3965-0 16-Jan-2015 11:46:45

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V. The World for 2015 (Commodities)

<HELP> for explanation, <MENU> for similar functions.

Singapore 65 6212 1000

Japan 81 3 3201 8900

95) Save Defaults	96) 1	News •				Glob	al Commod	ity Prices
Movers Units 🗷 AVAT	vs 100d	Chg NY	•	Cal Sprd	s 🌘 Avgs	Perf	%YTD 💌	USD
1) Energy	2Day	Price	Net Chg	%Chg	Δ AVAT	Time	%YTD	%YTDCur
10) NYMEX WTI Crude	ط ممرکر <u>س</u> م	47.47	+1.22	+2.64%	+25.97%	11:35	-10.89%	-10.89%
11) ICE Brent Crude	d ~~~ b	49.22	+0.95	+1.97%	+6.47%	11:35	-16.85%	-16.85%
12) NYMEX Gasoline	d My	132.73	+2.79	+2.15%	+52.35%	11:35	-7.52%	-7.52%
13) NYMEX Heat Oil	d wh	164.35	+2.02	+1.24%	-4.78%	11:35	-11.00%	-11.00%
14) ICE Gasoil	d ~~~	473.75	+0.75	+0.16%	+91.42%	11:35	-8.4 4 %	-8.4 4 %
15) NYMEX Nat Gas	d ~~~	3.161	+0.003	+0.09%	+59.30%	11:35	+9.42%	+9.42%
2) Metals								
20) Spot Gold		1278.09	+15.34	+1.22%		11:45	+7.91%	+7.91%
21) Spot Silver	~~~	17.71	+0.77	+4.53%		11:45	+12.75%	+12.75%
22) Spot Platinum		1268.75	+9.25	+0.73%		11:45	+5.03%	+5.03%
23) Spot Palladium	~~~	748.50	-18.28	-2.38%		11:45	-6.16%	-6.16%
24) LME 3mth Aluminium	d / ₩	1791.00y	+17.00	+0.96%		1/15	-3.32%	-3.32%
25) LME 3mth Copper	d M4	5630.00y	+82.00	+1.48%		1/15	-10.63%	-10.63%
3) Agriculture								
30) CBOT Corn	d My M	385.50	+5.50	+1.45%	-8.41%	11:35	-2.90%	-2.9 0 %
31) CBOT Wheat	d~~_~	536.25	+3.50	+0.66%	-9.79%	11:35	-9.07%	-9.07%
32) CBOT Soybeans	d \	990.50	-0.50	-0.05%	-6.63%	11:35	-2.62%	-2.62%
33) ICE Coffee	d -~~	170.95	-5.70	-3.23%	-8.89%	11:35	+2.61%	+2.61%
34) ICE Sugar	مسر d	15.44	+0.09	+0.59%	+23.90%	11:35	+6.34%	+6.34%
35) ICE Cotton	ر السر d	59.65	+0.16	+0.27%	-29.86%	11:35	-1.03%	-1.03%
Australia 61 2 9777 8600 Braz	il 5511 239			7500 Germ				

U.S. 1 212 318 2000

25

Rally of US housing...mortgage rates even lower

V. The World for 2015 (Housing)



- A couple of companies that we find attractive.
- AHC (publishing and websites in Texas/California)
- A value play, good ROA, ROE, recent sagging profit growth, but and no debt.
- Price: \$9.92
- Competitors:
- WINA (develops, franchises, and operates retail stores that buy, sell, trade, used and new merchandise – e.g. Once Upon a Child)
- Relative to growth a value play, otherwise a bit expensive, good ROA, ROE, and no debt.
- Price: \$79.78
- Competitors: Ross, Gap, L Brands

A couple of companies that we find attractive.



A couple of companies that we find attractive.

Backpage



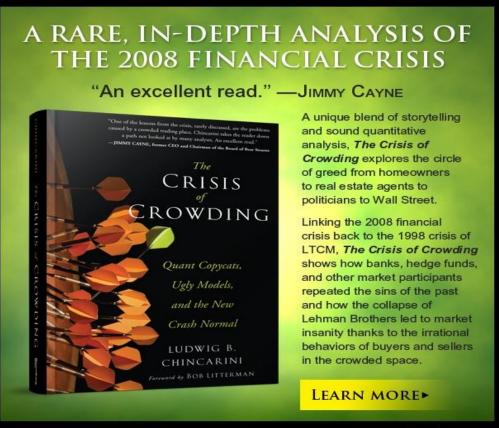
- An example company we DO NOT find attractive
- RDEN (Elizabeth Arden women's creams, cosmetics men/women)
- Value is ok, but not versus growth, recent poor performance, poor profits, higher debt.
- Price: \$17.77
- Competitors: Proctor Gamble, Unilever, L'Oreal

Thank you

- Dr. Ludwig Chincarini
- University of San Francisco
- IndexIQ

Please buy the book for yourself or as a gift.

www.ludwigbc.com
chincarinil@hotmail.com



Discussion / Questions

- Do you do any hedging of the market?
- Do you use option strategies?
- Do you do fixed income?
- Can alumni donate to the fund tax-free?
- Many other interesting comments and questions during the talk.