Date: Saturday, November 10, 2012

Analyst Name: Fausto Guillén Aguilar Jr.

CIF Stock Recommendation Report (Fall 2012)

Company Name and Ticker: International Business Machines Corp IBM Section (A) Summary

Recommendation Bu	ıy: Yes	Target Price: \$216	Stop-Loss Price: \$170	
Sector: Technology	Industry: Computer Systems	Market Cap (in Billions): \$214.28	# of Shrs. O/S (in Millions): 1,129.93	
Current Price: \$189.64	52 WK Hi: \$211.79	52 WK Low: \$177.06	EBO Valuation:	
Morningstar (MS) Fair Value Est.: \$193	MS FV Uncertainty: Average	MS Consider Buying: \$135.10	MS Consider Selling: \$260.55	
EPS (TTM): 13.91	EPS (FY1): 15.13	EPS (FY2): 16.64	MS Star Rating: ***	
Next Fiscal Yr. End "Year": 2012 "Month": December	Last Fiscal Qtr. End: September 2012	If Less Than 8 WK, next Earnings Ann. Date: 22 Jan 2013	Analyst Consensus Recommendation: Outperform	
Forward P/E:	Mean LT Growth: 9.92	PEG:	Beta: 0.67	
% Inst. Ownership: 60.32%	Inst. Ownership- Net Buy: N	Short Interest Ratio: 3.40	Short as % of Float: 1.30%	
Ratio Analysis	Company	Industry	Sector	
P/E (TTM)	13.65	18.67	21.66	
P/S (TTM)	2.05	5.46	10.66	
P/B (MRQ)	9.95	4.42	3.61	
P/CF (TTM)	10.22	15.18	13.27	
Dividend Yield	1.79	1.51	1.93	
Total Debt/Equity (MRQ)	156.29	12.02	18.22	
Net Profit Margin (TTM)	15.53	16.52	13.50	
ROA (TTM)	14.39	19.50	15.58	
ROE (TTM)	74.18	26.97	22.19	

Investment Thesis

I recommend buying the stock because IBM is a trusted information technology brand with a strong product portfolio that will fit great with our CIF portfolio. The stock has been steadily growing over the past five years and has not had a significant drop in price.

IBM also has good management and incentives that reduce agency problems. This will ensure that the stock price has a good chance of increasing.

For being a cyclical stock, IBM has a low beta of 0.67 and a higher than industry dividend yield of 1.79.

Summary

Provide brief summary of your analysis in each section that follows

<u>Company Profile:</u> IBM is one of the largest IT companies with an array of offerings, including system hardware, infrastructure software, outsourcing, and systems integration services. The firm has operations in more than 170 countries and generates about 65% of revenue from abroad (Morningstar).

<u>Fundamental Valuation:</u> The fundamental valuation was not very accurate with the discount rate being at 7.14%, however if I changed the discount rate to 10% the implied price seemed to be more accurate.

Relative Valuation: Compared to its competitors, IBM has the highest mean for FY2 at 16.64, and also highest price to book and return on equity. All other ratios are close.

<u>Revenue and Earnings Estimates:</u> Third quarter revenue and earnings came in a little below expectations, however the firms overall financial performance was good.

<u>Analyst Recommendations:</u> Analysts recommend to buy or hold the stock but not to sell. Some analysts also believe the stock will outperform.

<u>Institutional Ownership:</u> There are two companies that own more than 5% of the company.

Short Interest: For the past year, short interest has slightly increased.

Stock Price Chart: For the past five years the stock has increased steadily and at times underperformed with the S&P 500 and its competitors.

Section (B) Company Profile (two pages maximum)

Company Summary

IBM, acronym for International Business Machines, is a multinational computer technology and consulting corporation. The company is one of the few information technology companies with a continuous history dating back to the 19th century. IBM manufactures and sells computer hardware and software, and offers infrastructure services, hosting services, and consulting services in areas ranging from mainframe computers to nanotechnology (CrunchBase). IBM was founded in 1910 and is headquartered in Armonk, New York. IBM operates in 170 countries and has over 433,362 employees (IBM.com).

Business Model, Competition, Environment and Strategy

IBM operates in five different segments: Global Technology Services, Global Business Services, Software, Systems and Technology, and Global Financing (yahoofinance.com). Some of IBM's competition is Hewlett-Packard Company, Computer Sciences Corporation, Microsoft Corporation, Oracle Corporation, and Dell Inc (reuters.com). IBM is cyclical and it has a competitive advantage in system management, due to its ownership of the mainframe and its high-end proprietary services (Morningstar). Overall, IBM has a trusted brand and strong product portfolio that gives it an edge when getting new business.

Revenue and Earnings History

	# of Estimates	Mean	High	Low	1 Year Ago
SALES (in millions)					
Quarter Ending Dec-12	22	29,187.10	29,925.00	28,407.00	31,062.70
Quarter Ending Mar-13	18	24,785.90	25,390.90	24,150.90	26,321.50
Year Ending Dec-12	25	104,446.00	105,128.00	103,612.00	110,405.00
Year Ending Dec-13	25	106,724.00	108,894.00	103,665.00	114,720.00
EARNINGS (per share)					
Quarter Ending Dec-12	23	5.25	5.32	5.19	5.11

Quarter Ending Mar-13	20	3.05	3.20	2.89	2.99
Year Ending Dec-12	26	15.13	15.20	15.07	14.84
Year Ending Dec-13	26	16.64	17.09	15.88	16.38
LT Growth Rate (%)	10	9.92	15.00	5.00	10.79

Discuss any pattern in revenue and earnings (e.g., increasing year over year; seasonal; etc.)

Sales declined from 110,405 to 10,446, and earnings per share increased from 14.84 to 15.13.

Section (C) Fundamental Valuation (EBO)

IBM	PARAMETERS	FY1	FY2	Ltg									
	EPS Fore casts	15.13	16.64	9.92%		Model 1: 1	2-year for	e casting h	orizon (T	=12).			
	Book value/share (last fye)	17.31					and a 7-y	ear growt	h period.				
	Discount Rate	7.14%											
	Dividend Payout Ratio (POR	23.00%			Please dov	vnload and	save this	template t	o your ow	n storage d	evice		
	Next Fsc Year end	2012			You only	need to in	put values	to cells hi	ghlighted i	in "yellow"			
	Current Fsc Mth (1 to 12)	11			The rest o	f the spre	adsheet is	calculate d	auto matic	ally			
	Target ROE (industry avg.)	26.99%			Please rea	d "Guidel	ines_for_F	undame nt	alValuatio	n_ProfLee	_Spre adsh	eet" file c	are fully
	Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Long-term EPS Growth Rate (Ltg)			0.0992	0.0992	0.0992	0.0992	0.0992					
	Forecasted EPS	15.13	16.64	18.29	20.11	22.10	24.29	26.70					
	Beg. of year BV/Shr	17.310	28.960	41.773	55.857	71.338	88.354	107.059					
	Implied ROE		0.575	0.438	0.360	0.310	0.275	0.249					
ROE	(Beg. ROE, from EPS forecasts)	0.874	0.575	0.438	0.360	0.310	0.275	0.249	0.254	0.258	0.262	0.266	0.270
Abnormal ROE	(ROE-k)	0.803	0.503	0.366	0.289	0.238	0.204	0.178	0.182	0.186	0.190	0.194	0.199
growth rate for B	(1-POR)*(ROEt-1)	0.000	0.673	0.442	0.337	0.277	0.239	0.212	0.192	0.195	0.198	0.202	0.205
Compounded growth		1.000	1.673	2.413	3.227	4.121	5.104	6.185	7.373	8.812	10.560	12.687	15.28
growth*AROE		0.803	0.842	0.884	0.931	0.982	1.039	1.101	1.343	1.641	2.010	2.466	3.034
required rate (k)	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.07
Compound discount rate		1.071	1.148	1.230	1.318	1.412	1.513	1.621	1.736	1.860	1.993	2.135	2.28
div. payout rate (k)	0.230												
Add to P/B	PV(growth*AROE)	0.75	0.73	0.72	0.71	0.70	0.69	0.68	0.77	0.88	1.01	1.16	1.33
CumP/B		1.75	2.48	3.20	3.91	4.60	5.29	5.97	6.74	7.63	8.63	9.79	11.12
Add: Perpetuity													
beyond current yr	(Assume this yr's AROE forever)	10.49	10.27	10.07	9.90	9.75	9.62	9.52	10.83	12.35	14.12	16.18	18.5
Total P/B	(P/B if we stop est. this period)	12.24	12.75	13.27	13.80	14.35	14.91	15.49	17.57	19.98	22.76	25.97	29.69
Implied price		225.77	235.22	244.79	254.60	264.67	275.00	285.60	324.11	368.47	419.68	478.90	547.54
Check:													
Beg. BV/Shr		17.31	28.96	41.77	55.86	71.34	88.35	107.06	127.62	152.53	182.79	219.62	264.5
Implied EPS		15.13	16.64	18.29	20.11	22.10	24.29	26.70	32.35	39.29	47.84	58.38	71.4
Implied EPS growth			0.100	0.099	0.099	0.099	0.099	0.099	0.212	0.215	0.217	0.220	0.223

Inputs (provide below input values used in your analysis)

EPS forecasts (FY1 & FY2):15.13 & 16.64

Long-term growth rate: 9.92%

Book value /share (along with book value and number of shares outstanding):

Book value: 17.31

of shares outstanding: 1,163.18

Book value / share: 1.48

Dividend payout ratio: 23.00%

Next fiscal year end: 2012

Current fiscal month: 11

Target ROE: 26.99%

Output

Above normal growth period chosen: 2012

EBO valuation (Implied price from the spreadsheet): \$225.77

Sensitivity Analysis

EBO valuation would be (you can include more than one scenario in each of the following):

\$547.54 if changing above normal growth period to 2023

\$225.77 if changing growth rate from mean (consensus) to the highest estimate 15%

\$225.77 if changing growth rate from mean (consensus) to the lowest estimate 5%

\$181.98 if changing discount rate to 9%

\$225.77 if changing target ROE to 35%

Section (D) Relative Valuation

	IBM														
							Mean FY2								
						E	arnings Estimate	Forward	Mean LT	PEG	P/B	ROE	Value	P/S	P/CF
	Ticker	Name	Mkt Cap	Cı	urrent Price	(next fiscal year)	P/E	Growth Rate		(MRQ)	5 yr ave	Ratio	TTM	TTM
1	ORCL	Oracle Corp	\$ 146,258.30	\$	30.35	\$	2.65	11.45	11.92%	0.96	3.39	24.01%	0.14	3.97	11.14
2	MSFT	Microsoft Corp	\$ 242,646.59	\$	28.83	\$	2.89	9.98	9.63%	1.04	3.53	40.00%	0.09	3.35	13.01
3	HPQ	Hewlett Packard Co	\$ 26,759.46	\$	13.61	\$	3.50	3.89	3.60%	1.08	0.86	25.95%	0.03	0.22	
4	DELL	Dell Inc	\$ 16,322.62	\$	9.41	\$	1.74	5.41	3.28%	1.65	1.68	46.07%	0.04	0.27	4.04
Г	IBM	International Business	\$ 214,280.41	\$	189.64	\$	16.64	11.40	9.92%	1.15	9.95	59.73%	0.17	2.05	10.22
		Implied Price based on						P/E		PEG	P/B		Value	P/S	P/CF
1	ORCL	Oracle Corp						\$190.58		\$158.60	\$64.61		\$160.73	\$367.25	\$206.71
2	MSFT	Microsoft Corp						\$166.00		\$171.00	\$67.28		\$100.46	\$309.90	\$241.41
3	HPQ	Hewlett Packard Co						\$64.71		\$178.30	\$16.39		\$37.73	\$20.35	\$0.00
4	DELL	Dell Inc						\$89.99		\$272.16	\$32.02		\$41.51	\$24.98	\$74.97
		High						\$190.58		\$272.16	\$67.28		\$160.73	\$367.25	\$241.41
		Low						\$64.71		\$158.60	\$16.39		\$37.73	\$20.35	\$0.00
		Median						\$127.99		\$174.65	\$48.32		\$70.99	\$167.44	\$140.84

From the top panel

IBM has a higher current price, FY2 Mean, P/B, and ROE than its competitors' do. This can be a bullish sign. However, for P/S and P/CF IBM's ratios are similar to its competitors.

From the bottom panel

Oracle has the highest Value, P/E, and P/S and Hewlett Packard has some of the lowest ratios.

Section (E) Revenue and Earnings Estimates

HISTORICAL SURPRISES

Sales and Profit Figures in US Dollar (USD) Earnings and Dividend Figures in US Dollar (USD)

Estimate	Actual	Difference	Surprise %
25,362.20	24,747.00	615.19	2.43
26,275.00	25,783.00	491.97	1.87
24,777.90	24,673.00	104.87	0.42
29,708.80	29,486.00	222.83	0.75
26,256.30	26,157.00	99.25	0.38
3.61	3.62	0.01	0.19
3.42	3.51	0.09	2.54
2.65	2.78	0.13	4.75
4.62	4.71	0.09	1.91
3.22	3.28	0.06	1.84
	25,362.20 26,275.00 24,777.90 29,708.80 26,256.30 3.61 3.42 2.65 4.62	25,362.20 24,747.00 26,275.00 25,783.00 24,777.90 24,673.00 29,708.80 29,486.00 26,256.30 26,157.00 3.61 3.62 3.42 3.51 2.65 2.78 4.62 4.71	25,362.20 24,747.00 615.19 26,275.00 25,783.00 491.97 24,777.90 24,673.00 104.87 29,708.80 29,486.00 222.83 26,256.30 26,157.00 99.25 3.61 3.62 0.01 3.42 3.51 0.09 2.65 2.78 0.13 4.62 4.71 0.09

All actual sales have been slightly less than estimated, with the biggest surprise being in the quarter ending Sep-12 at 2.43%. On the other hand, all earnings per share were higher than estimated, with the biggest surprise in the ending quarter of Mar-12 at 4.75%. Surprises were definitely more notable for earnings. After looking at the stock chart, each time there was a significant surprise the stock price rose or declined simultaneously.

CONSENSUS ESTIMATES ANALYSIS

Sales and Profit Figures in US Dollar (USD) Earnings and Dividend Figures in US Dollar (USD)

	# of Estimates	Mean	High	Low	1 Year Ago
SALES (in millions)					
Quarter Ending Dec-12	22	29,187.10	29,925.00	28,407.00	31,062.70
Quarter Ending Mar-13	18	24,785.90	25,390.90	24,150.90	26,321.50
Year Ending Dec-12	25	104,446.00	105,128.00	103,612.00	110,405.00
Year Ending Dec-13	25	106,724.00	108,894.00	103,665.00	114,720.00
Earnings (per share)					
Quarter Ending Dec-12	23	5.25	5.32	5.19	5.11
Quarter Ending Mar-13	20	3.05	3.20	2.89	2.99
Year Ending Dec-12	26	15.13	15.20	15.07	14.84
Year Ending Dec-13	26	16.64	17.09	15.88	16.38
LT Growth Rate (%)	10	9.92	15.00	5.00	10.79

Review the range and the consensus of analysts' estimates. (1) Calculate the % difference of the "high" estimate from the consensus (mean); (2) Calculate the % (negative) difference of the "low" estimate from the consensus; (3) Are the divergent more not

able for the current or out- quarter, FY1 or FY2, revenue or earnings? (4) Note the number of analysts providing LT growth rate estimate. It that roughly the same as the number of analysts providing revenue and earnings estimates?

Copy/paste the "Consensus Estimates Trend" Table from *Reuters.com, "Analysts" tab* (include both revenue and earnings)

CONSENSUS ESTIMATES TREND

Sales and Profit Figures in US Dollar (USD) Earnings and Dividend Figures in US Dollar (USD)

	Current	1 Week Ago	1 Month Ago	2 Month Ago	1 Year Ago
SALES (in millions)				
Quarte r Ending Dec-12	29,187.10	29,187.10	29,379.40	29,379.80	31,062.70
Quarte r Ending Mar-13	24,785.90	24,785.90	25,027.50	25,012.10	26,321.50
Year Ending Dec-12	104,446.0 0	104,468.0 0	105,208.0 0	105,203.0 0	110,405.00
Year Ending Dec-13	106,724.0 0	106,788.0	108,029.0	108,020.0	114,720.00

Earnings (per share)

Quarte r Ending Dec-12	5.25	5.25	5.27	5.27	5.11
Quarte r Ending Mar-13	3.05	3.05	3.06	3.05	2.99
Quarte r Ending Dec-12	15.13	15.13	15.14	15.14	14.84
Quarte r Ending Dec-13	16.64	16.64	16.69	16.63	16.38

Review recent trend of analysts' consensus (mean) estimates on revenue and earnings. (1) Are the consensus estimates trending up, down, or stay the same? (2) Is the trend more notable for the near- or out- quarter, FY1 or FY2, revenue or earnings?

Copy/paste the "Estimates Revisions Summary" Table from *Reuters.com*, "Analysts" tab (include both revenue and earnings)

ESTIMATES REVISIONS SUMMARY									
	Last V	Veek	Last 4 Weeks						
Number Of Revisions:	Up	Down	Up	Down					

Revenue

Quarter Ending Dec-12	0	0	4	17
Quarter Ending Mar-13	0	0	2	14
Year Ending Dec-12	0	2	1	23
Year Ending Dec-13	0	2	2	21
Earnings				
Quarter Ending Dec-12	0	0	6	13
Quarter Ending Mar-13	0	1	7	8
Year Ending Dec-12	1	0	8	10
Year Ending Dec-13	0	2	5	13

There are more down revisions for both revenue and earnings. The revision do tend to be predominantly down. I did notice that the revisions for the last four weeks were a lot higher than the last.

You will need to incorporate what you see here with Morningstar's analyst research report (you can access *Morningstar Direct at the Financial Markets Lab*.) and other readings/analysis you found from various on-line financial sites. Discuss whether you think the company has a good chance of making or beating analyst consensus estimate, and why. Based on how the stock has been trading lately, do you think market has already anticipated strong or lackluster financial outlook from the company?

Section (F) Analysts' Recommendations

ANALYST RECOMMENDATIONS AND REVISIONS

1-5 Linear Scale	Current	1 Month Ago	2 Month Ago	3 Month Ago
(1) BUY	5	6	5	5
(2) OUTPERFORM	6	6	6	5
(3) HOLD	16	17	16	16
(4) UNDERPERFORM	1	0	0	0
(5) SELL	0	0	0	0
No Opinion	0	0	0	0

Mean Rating 2.46 2.38 2.41 2.42

For the last three months, analyst recommendations have remained about the same, just changing by one rating. This report is very similar to Morningstar's with most recommendations saying to hold and none saying to sell. Analysts also recommend to buy and that the stock will outperform.

Section (G) Institutional Ownership

IBM				
Ownership Activity	# of Holders	% Beg. Holders	Shares	% Shares
Shares Outstanding			1,129,934,388	100.00%
# of Holders/Tot Shares Held	2,073	99.28%	681,576,423	60.32%
# New Positions	27	1.29%		
# Closed Positions	42	2.01%		
# Increased Positions	395	18.92%		
# Decreased Positions	569	27.25%		
Beg. Total Inst. Positions	2,088	100.00%	681,897,960	60.35%
# Net Buyers/3 Mo. Net Chg	-174	40.98%	-321,537	-0.03%
Ownership Information	% Outstanding			
Top 10 Institutions % Ownership	25.90%			
Mutual Fund % Ownership	0.62%			
Float %	99.38%			
> 5% Ownership				
Holder Name	% Outstanding	Report Date		
Berkshire Hathaway Inc State Street Global Advisors (US)	5.9 5.5			

Section (H) Short Interest (two pages)

Settlement Date	Short Interest	Avg Daily Share Volume	Days To Cover
10/15/2012	15,395,144	3,278,185	4.696240
9/28/2012	15,353,877	4,283,471	3.584448
9/14/2012	18,493,907	3,834,928	4.822491
8/31/2012	15,706,236	2,711,344	5.792786
8/15/2012	14,373,981	2,556,266	5.623038
7/31/2012	14,529,793	4,716,827	3.080417
7/13/2012	15,062,366	3,880,682	3.881371
6/29/2012	13,632,899	4,184,497	3.257954
6/15/2012	15,831,941	3,884,682	4.075479
5/31/2012	15,320,436	4,619,591	3.316405
5/15/2012	12,907,013	3,197,035	4.037182
4/30/2012	11,829,323	4,838,231	2.444969
4/13/2012	11,681,452	3,690,843	3.164982
3/30/2012	12,666,933	3,889,211	3.256942
3/15/2012	14,209,399	4,120,218	3.448701
2/29/2012	12,255,581	4,141,877	2.958944
2/15/2012	12,543,324	3,776,490	3.321424
1/31/2012	13,448,184	5,822,273	2.309782
1/13/2012	14,939,376	5,109,688	2.923735
12/30/2011	14,664,707	5,114,452	2.867308
12/15/2011	16,875,523	4,755,535	3.548607
11/30/2011	17,762,721	4,728,351	3.756642
11/15/2011	17,993,155	4,522,618	3.978482



From http://finance.yahoo.com/

Complete the following table with information from the "share statistics" table.

Avg Vol (3 month)	Avg Vol (10 day)	Shares Outstanding	Float
3,836,840	4,006,050	1.13B	1.13B
Shares Short (as of Oct. 31, 2012)	Short Ratio (as of Oct. 31, 2012)	Short % of Float (as of Oct. 31, 2012)	Shares Short (prior month)

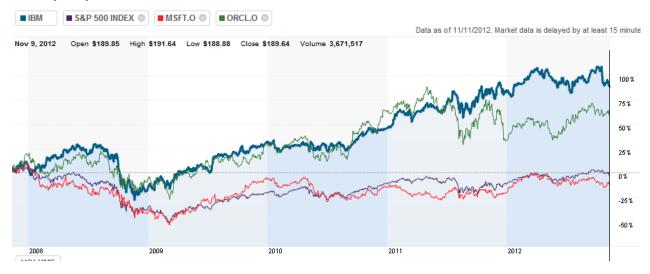
Section (I) Stock Charts A three months price chart



A one year price chart



A five year price chart



The five year chart shows how consistent and shareholder friendly IBM really is. IBM stayed on top of its competitors and the S&P 500. On the one-year chart, IBM stays consistent with the S&P 500 but Microsoft outperforms IBM. On the three-month chart, IBM underperforms during the first month, and then in the second month IBM outperforms its competitors and the S&P 500, but then in the last month it underperforms along with its competitors and S&P 500.