
Security Analysis

Overview of Financial Market Environment and Conditions



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

The Role of Financial Markets and Institutions

- A financial markets
 - Market with assets (securities, financial instruments)
 - Sell and buy ...
 - Transfer of funds...
 - Deficit subjects
 - Surplus subjects
 - Financial Market: a market in which financial assets (securities) such as stocks and bonds can be purchased or sold
 - Financial intermediation – financial savings to investments
 - Payment system
 - Means of manage risk
-

Role of Financial Markets

- Transfer funds from those who have excess funds to those who need funds.
 - Students – student loan
 - Families – mortgages
 - Business – finance they growth
 - Government – finance their expenditures
 - One side supply funds the other side demand funds
 - Earn return but only if fund is available in financial market
-

Role of Financial Markets

- Surplus units – lenders, investors
 - Receive more money than they spend
 - Deficit units – borrowers
 - Spend more money than they receive
 - This relation is formally organized by securities
 - Agreement between lender and borrower
 - Claim on the issuer
-

Role of Financial Markets

■ Debt securities

- Represent debt incurred by issuer – credit, borrowed funds
- Deficit units issue the securities to surplus units and...
- ...pay interest to surplus unit on a periodic basis (such as every six months)
- Characteristics:
 - Maturity date
 - Face value
 - Fixed or variable interest rate

■ Equity securities

- Represent equity or ownership in the issuer – stocks
 - Deficit units issue the stocks to surplus money...
...spend more money than they receive from normal operations
-

5¼% REPAYABLE 15TH NOVEMBER, 1987

COMMONWEALTH OF AUSTRALIA
Treasury Bond

TRANSFERABLE BY
DELIVERY

ISSUED UNDER THE COMMONWEALTH
INSCRIBED STOCK ACT 1911-1963.

\$20

5¼% DEF 001067 \$20

This Bond entitles the Bearer to the payment, at the Reserve Bank of Australia at Canberra, Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, or Launceston of
— **TWENTY DOLLARS** — *together with interest thereon at the rate of*
FIVE AND ONE QUARTER *per centum per annum in accordance with attached coupons,*
and such sums are secured on the Consolidated Revenue of the Commonwealth of Australia.
Principal is repayable on the FIFTEENTH DAY OF NOVEMBER, ONE THOUSAND NINE HUNDRED AND EIGHTY SEVEN.

Dated this 14th day of February, 1966.

Roland Wilson
SECRETARY TO THE TREASURY.

1987

PRINTED BY THE AUTHORITY OF THE GOVERNMENT OF THE COMMONWEALTH OF AUSTRALIA

COMMONWEALTH OF AUSTRALIA TREASURY BOND
INTEREST COUPON

5¼% DEF 001067 41

INTEREST FOR SIX MONTHS 15TH MAY, 1986
ON \$20
REPAYABLE 1987 \$0.52

COMMONWEALTH OF AUSTRALIA TREASURY BOND
INTEREST COUPON

5¼% DEF 001067 42

INTEREST FOR SIX MONTHS 15TH NOV., 1986
ON \$20
REPAYABLE 1987 \$0.53

COMMONWEALTH OF AUSTRALIA TREASURY BOND
INTEREST COUPON

5¼% DEF 001067 43

INTEREST FOR SIX MONTHS 15TH MAY, 1987
ON \$20
REPAYABLE 1987 \$0.52

COMMONWEALTH OF AUSTRALIA TREASURY BOND
INTEREST COUPON

5¼% DEF 001067 44

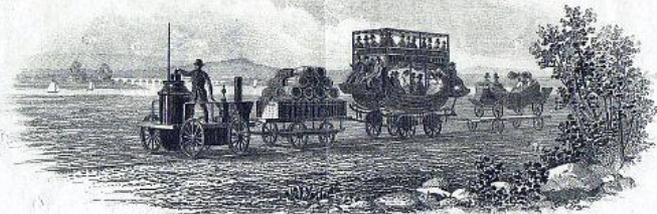
INTEREST FOR SIX MONTHS 15TH NOV., 1987
ON \$20
REPAYABLE 1987 \$0.53

DEC 30 1903

COMMON STOCK

NUMBER
D34422

SHARES
10



The Baltimore and Ohio Railroad Company

Incorporated by the State of Maryland, February 28, 1827.

This Certifies that *Goldsmith, Wolf & Co.*

the owner of **TEN** shares of the par value of One Hundred Dollars each, full paid and non-assessable, of the Common Capital Stock of The Baltimore and Ohio Railroad Company, transferable only on the books of the Company at its transfer office by the holder hereof in person or by duly authorized attorney upon the surrender of this certificate. The holders of Preferred Capital Stock to the amount of Sixty Million Dollars (\$60,000,000) now issued and such additional amounts as may be lawfully issued from time to time by the President and Directors of the Company pursuant to the resolutions of the stockholders duly adopted (April 11, 1899) are entitled to receive in each year out of the surplus net profits of the Company for the current year such yearly dividend (non-cumulative) as the Board of Directors of said Railroad Company may declare up to but not exceeding four per centum before any dividends shall be set apart or paid upon the Common Stock. In Witness Whereof, the said Company has caused this Certificate to be signed by its duly authorized officers this

OCT 29 1903

E. Devereux
TRANSFER AGENT

J. Lee
W. Black
VICE PRESIDENT
ASST. SECRETARY

SHARES \$100 EACH

FEB 5 1904
M. T. CO.

REGISTERED
JULY 20 1903
THE MERCANTILE TRUST COMPANY

REGISTERED
AND APPROVED

Trust and Loan
Bank Note Co. New York

Role of Financial Markets

- Debt instruments
 - Bonds, mortgages, mortgage-backed securities
 - Contractual agreement by the borrowers to pay the holder of the instrument fixed amounts at regular intervals until a specific date (maturity day), when a final payment is made.
 - The maturity of a debt instrument is the number of years until that instrument's expiration date.
 - Debt instrument is
 - Short – terms or
 - Long - term
-

Role of Financial Markets

■ Equities

□ Common stocks

- Which are claims to share in the net income (income after expenses and taxes) and the assets of a business.
- If you own one share of common stock in a company that has issued one million shares, you are entitled to 1 one-millionth of the firm's net income and 1 one-millionth of the firm's assets.

□ Equities often make periodic payments to their holders

- Dividends

□ They are considered long-term securities because they have no maturity day.

□ Owning stocks means that you own a portion of the firm and thus have the right to vote on issues important to the firm and elect its directors.

Role of Financial Markets

- Advantages and disadvantages
 - Debt vs. equities
 - Disadvantages of equities
 - Equity holder is **residual claimant**
 - Advantages of equities
 - Holders benefit **directly** from any increases in the corporation's profitability or asset value
-

Type of Financial Markets

■ Money versus Capital Markets

- Short-Term, < 1 Year
 - High Quality Issuers
 - Debt Only
 - Primary Market Focus
 - Liquidity Market--Low Returns
 - Long-Term, >1Yr
 - Range of Issuer Quality
 - Debt and Equity
 - Secondary Market Focus
 - Financing Investment--Higher Returns
-

Type of Financial Markets

■ Primary versus Secondary Markets

- New Issue of Securities
 - Exchange of Funds for Financial Claim
 - Funds for Borrower; an IOU (I owe you) for Lender
 - Trading Previously Issued Securities
 - No New Funds for Issuer
 - Provides Liquidity for Seller
-

Type of Financial Markets

- Securities brokers and dealers are crucial to a well-functioning secondary market
 - Brokers
 - Dealers



Type of Financial Markets

- ❑ **Stock Exchange**
 - ❑ Visible Marketplace
 - ❑ Members Trade
 - ❑ Securities Listed
 - ❑ New York Stock Exchange
 - ❑ NASDAQ (2006)
 - ❑ **OTC**
 - ❑ Wired Network of Dealers
 - ❑ No Central, Physical Location
 - ❑ All Securities Traded off the Exchanges
 - ❑ Forex
 - ❑ Because over-the-counter dealers are in computer contact and know the prices set by one another, the OTC market is very competitive and not very different from a market with an organized exchange.
-

<HELP> for explanation.

<Menu> to Return

Quick Search <Exchange Name> 1) Advanced Search 2) News Time Display Exchange Profile

Global > Americas > United States

New York Stock Exchange

- 57) International Se
- 58) Kansas City Boar
- 59) Miami Internatio
- 60) Minneapolis Grai
- 61) NASDAQ Capital
- 62) NASDAQ Global
- 63) NASDAQ Global S
- 64) NASDAQ InterMar
- 65) NASDAQ OMX BX
- 66) NASDAQ OMX Fut
- 67) NASDAQ OMX PH
- 68) NASDAQ OMX PS
- 69) NASDAQ Options
- 70) NASDAQ OTC
- 71) National Stock E
- 72) New York Merca
- 73) New York Stock
- 74) NYSE Arca
- 75) NYSE Liffe US
- 76) NYSE MKT
- 77) One Chicago
- 78) OTC Bulletin Boa
- 79) OTC Markets
- 80) SharesPost Mark

5) General 6) Trading 7) Market Data 8) Condition Codes 9) Events

11 Wall Street, New York, NY 10005 Phone
212-656-3000

General Information Equity Asset Details

Country	United States	Composite Code	US
Region	North America	13)Exchange Code	UN
10)Website	www.nyse.com	Trading Currency	US Dollar
Acronym	NYSE	Open Time*	15:30
11)Parent Exchange	NYSE-Arca-Amex	Close Time*	22:00
12)CDR Code	NY	Settlement Cycle	T+3
MIC Code	XNYS	14)Entitlement ID	14003
ISO Code	US	Round Lot	100
Trading Days	Mo/Tu/We/Th/Fr	Closing Price	Official Closing Price
Time Zone	EST	Sample Security	C UN Equity
Data Delivery Type	Real-time	15)Turnover	NYSEVALU Index
Alt. Trading System	ECN	16)Trading Volume	VOLU Index
Trading Venue	Standard Exchange		
Inception Date	1792		
TRADEBOOK	Yes		
SSEOMS (Equity)	Yes		
TOMS (Fixed Inc)	Yes		
B-PIPE	Yes		
Exchange Ticker	ICE US Equity		

*Time display: current TZDF

<HELP> for explanation.

<Menu> to Return

Quick Search <Exchange Name> 1) Advanced Search 2) News Time Display Exchange Profile

Global > Americas > United States

NASDAQ Capital Market

- 5) International Se
- 58) Kansas City Boar
- 59) Miami Internatio
- 60) Minneapolis Grai
- 61) NASDAQ Capital
- 62) NASDAQ Global
- 63) NASDAQ Global S
- 64) NASDAQ InterMar
- 65) NASDAQ OMX BX
- 66) NASDAQ OMX Fut
- 67) NASDAQ OMX PH
- 68) NASDAQ OMX PS
- 69) NASDAQ Options
- 70) NASDAQ OTC
- 71) National Stock E
- 72) New York Merca
- 73) New York Stock
- 74) NYSE Arca
- 75) NYSE Liffe US
- 76) NYSE MKT
- 77) One Chicago
- 78) OTC Bulletin Boa
- 79) OTC Markets
- 80) SharesPost Mark

5) General 6) Trading 7) Market Data 8) Condition Codes 9) Events

One Liberty Plaza, 165 Broadway
New York, NY 10006
Phone
1-212-401-8700

General Information

Equity

Asset Details

Country	United States	Composite Code	US
Region	North America	14)Exchange Code	UR
10)Website	www.nasdaq.com	Trading Currency	US Dollar
11)Parent Exchange	NASDAQ OMX	Open Time*	15:30
12)CDR Code	N7	Close Time*	22:00
MIC Code	XNCM	15)Entitlement ID	14005
ISO Code	US	Round Lot	100
Trading Days	Mo/Tu/We/Th/Fr	Closing Price	Official Closing Price
Time Zone	EST	Sample Security	OXGN UR Equity
Data Delivery Type	Real-time		
Trading Venue	Standard Exchange		
TRADEBOOK	No		
SSEOMS (Equity)	Yes		
B-PIPE	Yes		
Exchange Ticker	NDAQ US Equity		
13)Exchange Rulebook	nasdaq.cchwallstreet.c		

*Time display: current TZDF

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
 SN 831461 CET GMT+1:00 H178-3612-0 25-Feb-2014 09:35:17

<HELP> for explanation.

<Menu> to Return

Quick Search <Exchange Name> 1) Advanced Search 2) News Time Display Exchange Profile

Global > Americas > United States

NASDAQ Capital Market

- 57) International Se
- 58) Kansas City Boar
- 59) Miami Internatio
- 60) Minneapolis Grai
- 61) NASDAQ Capital
- 62) NASDAQ Global
- 63) NASDAQ Global S
- 64) NASDAQ InterMar
- 65) NASDAQ OMX BX
- 66) NASDAQ OMX Fut
- 67) NASDAQ OMX PH
- 68) NASDAQ OMX PS
- 69) NASDAQ Options
- 70) NASDAQ OTC
- 71) National Stock E
- 72) New York Merca
- 73) New York Stock
- 74) NYSE Arca
- 75) NYSE Liffe US
- 76) NYSE MKT
- 77) One Chicago
- 78) OTC Bulletin Boa
- 79) OTC Markets
- 80) SharesPost Mark

5) General 6) Trading 7) Market Data 8) Condition Codes 9) Events

Equity	Session Name	Start+	End+	Notes
	Preopening	10:00	15:30	
	Continuous Trading Period	15:30	22:00	
	After Hours	22:00	02:00	

*Time display: current TZDF

Notes

Section Search

N/A

(P): Parent Exchange

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
SN 831461 CET GMT+1:00 H178-3612-0 25-Feb-2014 09:37:57

<HELP> for explanation.

<Menu> to Return

Quick Search <Exchange Name> 1) Advanced Search 2) News Time Display Exchange Profile

Global > Americas > United States

NASDAQ OTC

- 57) International Se
- 58) Kansas City Boar
- 59) Miami Internatio
- 60) Minneapolis Grai
- 61) NASDAQ Capital
- 62) NASDAQ Global
- 63) NASDAQ Global S
- 64) NASDAQ InterMar
- 65) NASDAQ OMX BX
- 66) NASDAQ OMX Fut
- 67) NASDAQ OMX PH
- 68) NASDAQ OMX PS
- 69) NASDAQ Options
- 70) NASDAQ OTC
- 71) National Stock E
- 72) New York Merca
- 73) New York Stock
- 74) NYSE Arca
- 75) NYSE Liffe US
- 76) NYSE MKT
- 77) One Chicago
- 78) OTC Bulletin Boa
- 79) OTC Markets
- 80) SharesPost Mark

5) General 6) Trading 7) Market Data 8) Condition Codes 9) Events

One Liberty Plaza, 165 Broadway
New York, NY 10006
Phone
1-212-401-8700

General Information		Equity	Asset Details
Country	United States	Composite Code	US
Region	North America	12)Exchange Code	UV
10)Parent Exchange	NASDAQ OMX	Trading Currency	US Dollar
11)CDR Code	EX	Open Time*	12:00
MIC Code	OTTC	Close Time*	23:00
ISO Code	US	13)Entitlement ID	14005
Trading Days	Mo/Tu/We/Th/Fr	Closing Price	Official Closing Price
Time Zone	EST	Sample Security	RUBNF UV Equity
Data Delivery Type	Real-time		
Trading Venue	OTC-Over the Counter		
TRADEBOOK	No		
SSEOMS (Equity)	Yes		
B-PIPE	Yes		

(P): Parent Exchange

*Time display: current TZDF

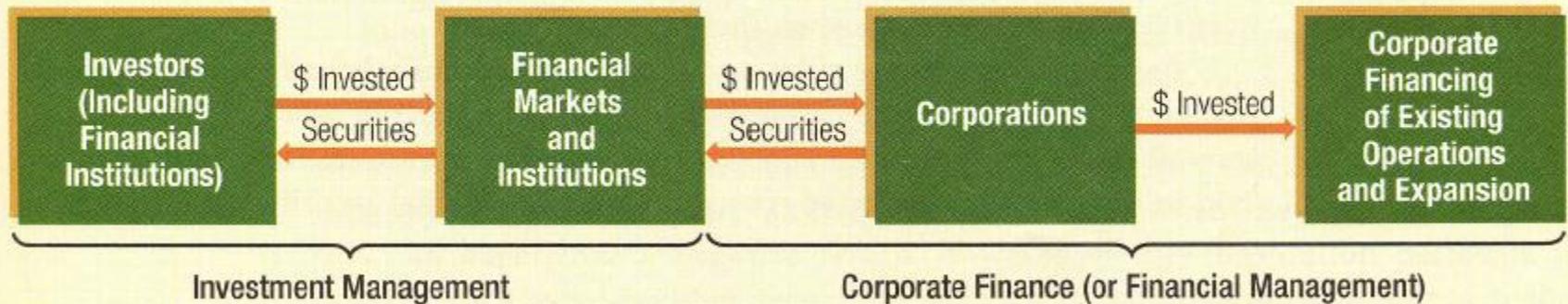
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2014 Bloomberg Finance L.P.
 SN 831461 CET GMT+1:00 H178-3612-0 25-Feb-2014 09:35:35

How Financial Markets Facilitate Corporate Finance

- Three segments of finance
 - Corporate finance
 - How much funding to obtain and how to invest a proceeds to expand their operation
 - Investment management
 - Make a decision about form of financing and investing
 - Debt vs. Equity financing or investing
 - Financial markets and institutions
 - Attract fund from investors and channel the funds to corporation
 - Money market – borrow on short term basis
 - Support existing operations
 - Capital market – obtain long term funds
 - Support corporate expansion
-

How Financial Markets Facilitate Corporate Finance

Exhibit 1.1 How Financial Markets Facilitate Corporate Finance and Investment Management

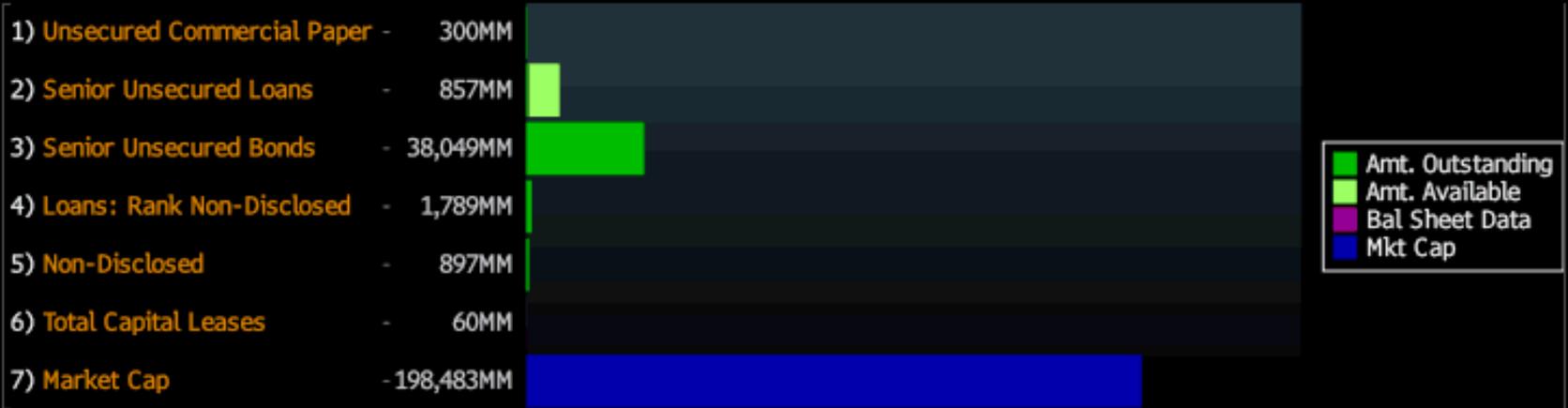


Source: Madura, J.: Financial Markets and Institutions, 9th Edition

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

96) Historical View 97) Security List by Rank Capital Structure

International Business Machines Corp Percentage Curr USD View Linear Scale



Show Integrated/Branch Offices

Corporate Structure	Debt Ticker	Eqty Ticker	CDS Ticker	Debt(MM)
International Business Machines Corp	IBM	IBM US	IBM CDS <COR	38,913
Softlayer Technologies Inc	SOFTEC	3736459Z U		250
IBM International Group Capital LLC	IBM	3687901Z U		17
IBM Nederland BV		0944567D		
IBM International Finance NV	IBM	4400Z US		
DemandTec Inc	IBM	DMAN US		
Kenexa Corp		KNXA US		
Kenexa Compensation Inc	IBM	SLRY US		
IBM Argentina SA	IBM	6647964Z A		
IBM World Trade Corp	IBM	0750353D		
IBM Canada Ltd	IBM	0133569D C		

<HELP> for explanation.

Enter values and hit <Go>, <Menu> to Return

Capital Structure: Senior Unsecured Loans

Issue --/--/-- - --/--/-- Mty --/--/-- - --/--/-- Curr (M) Min Amt (M)

1) CAST View 2) Covenants & Pricing

International Business Machines Corp 3 Results

Company Name	Ticker	Tranche	Maturity	Curr	Loan Type	Status	Trnch Sz(M)	Amt Out(M)	S&P	Moody's
3) International Business M	IBM		06/30/17	JPY	TERM	SIGNED	45,400,000	45,400,000		
4) International Business M	IBM		12/05/17	JPY	TERM	SIGNED	42,450,000	42,450,000		
5) International Business M	IBM		11/08/18	USD	REVOLVER	SIGNED	10,000,000	0		

IBM US \$ Market

P180.53 / 185.44P

2x4

Prev 182.79

Vol 5,699,331

IBM US Equity

1) Create Report

2) Output to Excel

Weighted Average Cost of Capital

International Business Machines Corp

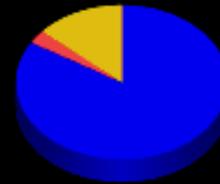
Period MR 2013 Q4

Filing MR

Cost of Capital - Current Market Value

Capital Structure (Millions of USD)

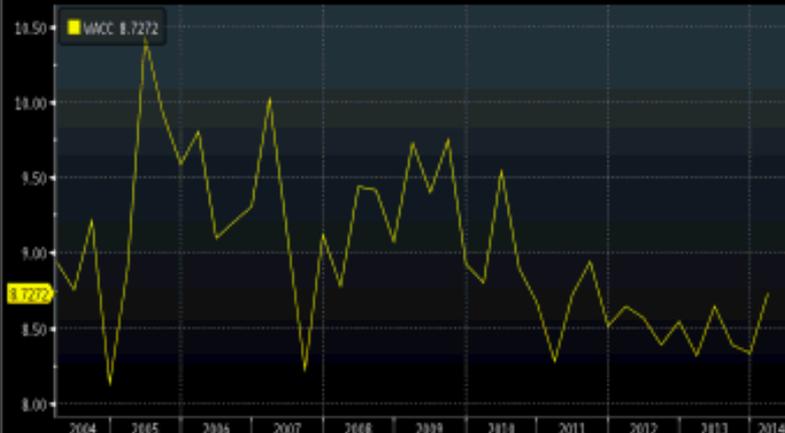
	Weight	Cost	W x C
3) Equity	83.7%	9.9%	8.3%
4) Debt Cost (A-T)	16.3%	2.3%	0.4%
5) Preferred Equity	0.0%	0.0%	0.0%
WACC			8.7%



Market Cap	203,673.6	83.7%
ST Debt	6,862.0	2.8%
LT Debt	32,856.0	13.5%
Pref. Eqty	0.0	0.0%
Total	243,391.6	100.0%

6) History

WACC EVA ROIC EVA Spread



Economic Value Added (Millions of USD)

7) Net Operating Profit	19,262.00
8) Cash Operating Taxes	1,054.41
NOPAT	18,207.59
9) Total Investment Capital	81,159.00
Capital Charge	7,046.38
Economic Value Added	11,161.21
ROIC	22.43%
EVA Spread	13.75%

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.

SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 11:57:04

IBM US \$ Market

P180.53 / 185.44P

2x4

Prev 182.79

Vol 5,699,331

IBM US Equity 90 Settings 97 Actions 98 Output 99 Feedback Relative Valuation

Comp Source Bloomberg % Rev. by Industry - FY2013 Region Global Currency USD



Metric	IBM	Low	Comp Range	High
Est P/E Current Ye	10.22	8.05	8.05 - 51.25	51.25
EV/Est EBITDA Cur	8.23	2.62	2.62 - 13.18	13.18
Revenue per Empl	240.66k	46.88k	46.88k - 2.13M	2.13M
Sales Growth Yoy	-4.55	-6.74	-6.74 - 111.31	111.31
Gross Margin (%)	48.63	12.21	12.21 - 86.26	86.26

IBM US Median

6 News 7 Research 8 Bloomberg Industries

20 Overview 22 Comp Sheets 23 Markets 24 EPS Preview 25 Ownership 26 Credit 27 Custom

Name	Mkt Cap (USD)	Last Px (USD)	Chg Pct 1D	Px Chg Pct:M-1	Rev - 1 Yr Gr:Y	EPS - 1 Yr Gr:Y	P/E	ROE	Dvd Yld
Average	87.59B	81.81	-0.18%	-0.87	8.92%	20.45%	15.74	26.42%	1.91%
100) INTL BUSINESS MACHINE	198.48B	182.79	-0.80%	-2.99	-4.55%	3.65%	11.17	79.15%	2.02%
101) HEWLETT-PACKARD CO	56.67B	29.79	-1.32%	-0.37	-6.70%	N.A.	9.65	20.95%	2.38%
102) ORACLE CORP	171.35B	38.10	-0.44%	-0.03	0.16%	15.08%	16.22	25.55%	1.10%
103) MICROSOFT CORP	315.26B	37.98	0.61%	5.00	5.60%	29.21%	13.36	28.95%	2.69%
104) UNISYS CORP	1.46B	33.34	0.69%	1.65	-6.74%	-28.81%	14.82	N.A.	0.00%
105) SYMANTEC CORP	14.20B	20.53	0.10%	-11.89	2.62%	-31.01%	14.03	15.92%	2.19%
106) CA INC	14.52B	32.42	-0.77%	-5.37	-3.55%	8.38%	12.66	18.90%	3.08%
107) ACCENTURE PLC-CL A	56.82B	83.80	0.50%	-1.33	2.07%	27.96%	18.43	70.70%	2.08%
108) COMPUWARE CORP	2.31B	10.59	0.38%	0.00	-6.46%	N.A.	31.57	-1.16%	3.54%
109) COMPUTER SCIENCES CO	9.06B	62.20	-0.24%	11.97	-2.41%	N.A.	13.70	22.33%	1.29%
110) COGNIZANT TECH SOLUTI	31.22B	102.73	2.06%	3.85	20.37%	16.62%	25.11	22.36%	0.00%
111) CGI GROUP INC - CLASS	10.17B	32.82	-1.96%	3.89	111.31%	196.00%	15.60	15.99%	0.00%
112) LEIDOS HOLDINGS INC	3.90B	45.51	-0.48%	-1.88	6.44%	N.A.	10.17	13.74%	3.87%

11) Edit Comparables 16) Select Stats 17) Group by Zoom 100%

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P. SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 11:55:38

Securities Traded in Financial Markets

- Return
 - Expected return from investment
 - Ex post
 - Ex ante
 - Mean of return
- Risk
 - Uncertainty surrounding the expected return
 - More uncertainty surrounding the expected return more risk
 - Standard deviation or variance
 - Coefficient of variation = $\frac{\text{expected risk (standard deviation)}}{\text{expected return (mean)}}$
- Amount of liquidity
- Tax status
- Normally
 - High return with particular preference of low risk and adequate amount of liquidity

TRA

Please enter valid date(s).

IBM US Equity Settings Actions Total Return Analysis

Buy Date 01/01/2010 Sell Date 28/1 /2014 Period Daily
 Buy Price 200.98 Sell Price 183.69 Shares 1000 Currency USD

Total Dividends 3800.00 Gross Net 5) Commission Cost N.A.

Holding Strategy	Total Return	Annual Eq	Gain/Loss
Price Change	-8.6028%	-8.6254%	-17290.00
Divs Reinvested in Security	Shares Purchased 20.57	-6.7225%	-13510.85
Dividends Reinvested at 0.0231%	Reinvested Income .35	-6.7297%	-13489.65



Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
 SN 541209 CET GMT+1:00 6384-760-0 17-Feb-2014 09:56:03

TRA

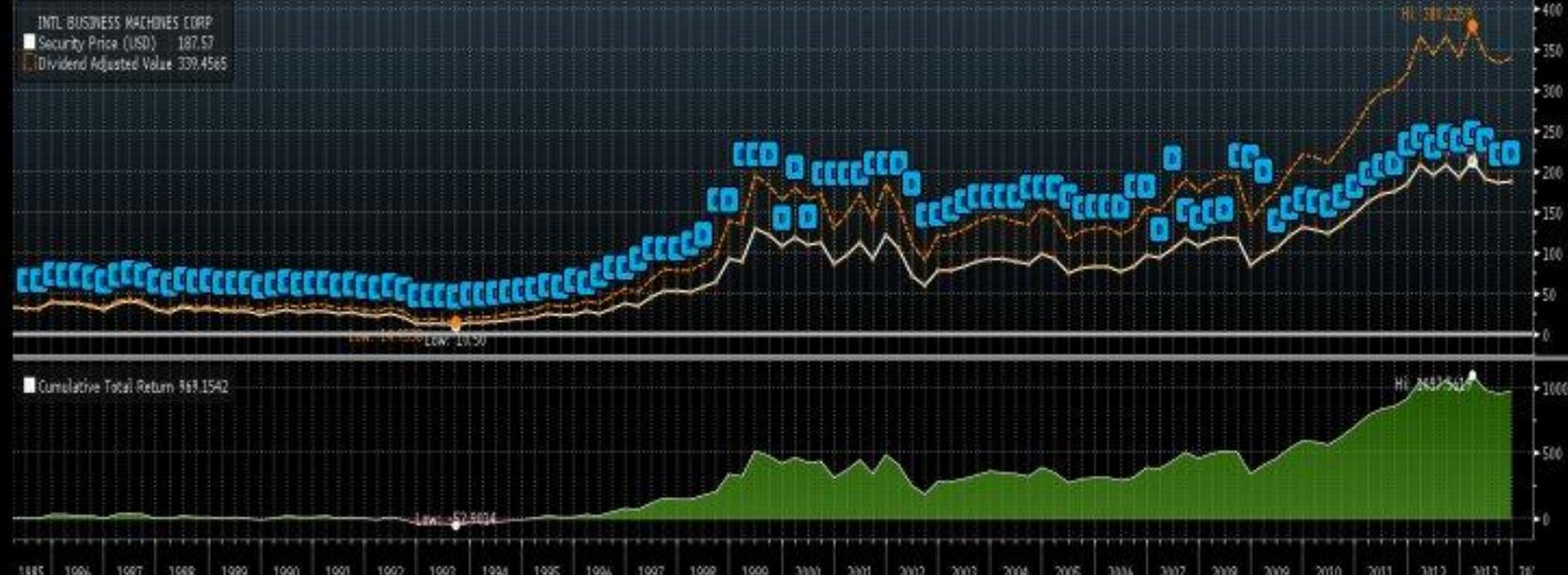
Enter all values and hit <Go>

IBM US Equity Settings Actions Total Return Analysis

Buy Date 03/29/1985 Sell Date 12/31/2013 Period Quarterly
 Buy Price 127.00 Sell Price 187.57 Shares 1000 Currency USD
 Adj. Shares 4000.0 Adj. Price 31.750000
 Total Dividends 137.02k Gross Net 5) Commission Cost N.A.

Holding Strategy	Total Return	Annual Eq	Gain/Loss
Price Change	490.7717%	6.3667%	623280.00
Divs Reinvested in Security	Shares Purchased 3.24k	969.1542%	8.5820%
Dividends Reinvested at 0.0231%	Reinvested Income 339.18	598.9285%	6.9899%
			760639.18

1M 3M 6M YTD Show Dividend Events



1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
 SN 541209 CET GMT+1:00 6384-760-0 17-Feb-2014 09:57:54

RBI AV € ↓ 27.025 - .10 V27.005 / 27.04V 318 x 161
 At 9:39 d Vol 79,546 0 27.00V H 27.235V L 26.97V Val 2.154M

1) Settings 2) Actions Page 1/9 Comparative Return

Range 02/27/2004 - 01/31/2014 Period Monthly No. of Period 119 Month(s)

Security	Currency	Price Change	Total Return	Difference	Annual Eq
1. IBM US Equity	USD	83.09%	113.20%	22.25%	7.92%
2. SPX Index	USD	55.69%	90.95%		6.73%
3. CCMP Index	USD	102.18%	126.01%	35.06%	8.55%

1M 3M 6M YTD 1Y 2Y 3Y 5Y 10Y



Australia 61 2 9777 8600 Brazil 5511 3048 4500 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
 SN 831461 CET GMT+1:00 HI83-3223-3 24-Feb-2014 09:56:44

1) Settings

2) Actions

Page 1/9 Comparative Return

Range 02/27/2004 - 01/31/2014 Period Monthly No. of Period 119 Month(s)

Security	Currency	Price Change	Total Return	Difference	Annual Eq
1. IBM US Equity	USD	83.09%	113.20%	22.25%	7.92%
2. SPX Index	USD	55.69%	90.95%		6.73%
3. MXEF Index	USD	96.04%	157.93%	66.98%	10.01%

1M 3M 6M YTD 1Y 2Y 3Y 5Y 10Y



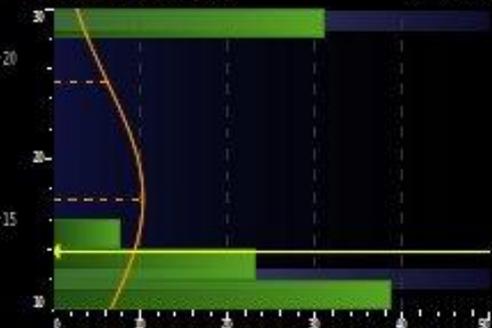
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 Total Return
 Copyright 2014 Bloomberg Finance L.P.
 SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 09:58:37

<HELP> for explanation.
 Enter all values and hit <Go>

95) Actions ▾ 96) Templates ▾ 97) Hide 98) Table Volatility Comparison
 Period Quarterly ▾ Range 01-Jan-2010 - 28-Jan-2013 Ann. Factor 4 CUR LCL Statistics
 Security IBM US Equity Hist Vol 10 30 50 100 T ▾ Model CLV Price Implied Vol



Statistics	
IBM - Hist Vol (10Q)	
Last	13.915
Mean	17.291
Off Avg	-3.376
Median	13.915
StDev	7.752
Off Avg StDev	-.436
Percentile	56.322
High (12/31/2010)	29.275
Low (12/30/2011)	10.234

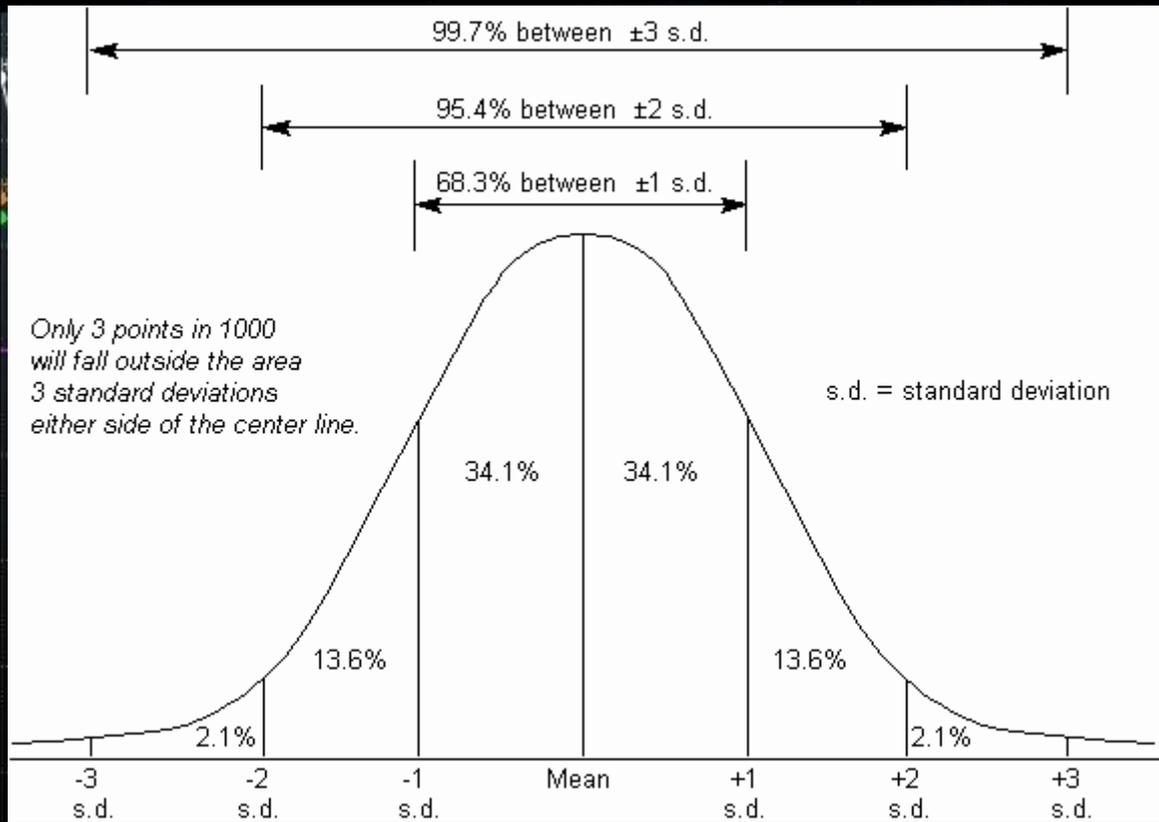


Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 Copyright 2014 Bloomberg Finance L.P.
 SN 541209 CET GMT+1:00 6384-760-0 17-Feb-2014 10:36:46

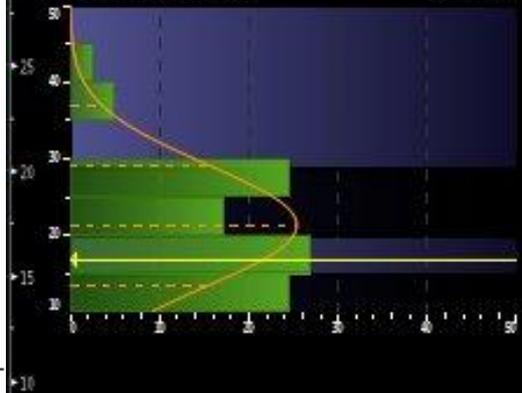
<HELP> for explanation.

Maximum 10 years data. Date range has been reset to 10 years.

95) Actions ▾ 96) Templates ▾ 97) Hide 98) Table Volatility Comparison
 Period Quarterly Range 31-Dec-2003 - 31-Dec-2013 Ann. Factor 4 CUR LCL Statistics
 Security IBM US Equity Hist Vol 10 30 50 100 T Model CLV Price Implied Vol



Statistics	
IBM - Hist Vol (10Q)	
Last	16.845
Mean	21.256
Off Avg	-4.411
Median	20.04
StDev	7.882
Off Avg StDev	-.56
Percentile	32.059
High (12/31/2003)	42.994
Low (12/30/2011)	10.234



Mar 31 2004 Dec 31 2005 Jun 30 2006 Dec 29 2007 Dec 31 2008 Dec 31 2009 Jan 18 2010 Dec 31 2011 Jun 30 2012 Dec 31 2013
 Australia 61 2 9777 8600 Brazil 5511 3048 4500 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
 SN 541209 CET GMT+1:00 G384-760-0 17-Feb-2014 10:37:39
 Copyright 2014 Bloomberg Finance L.P.

Securities Traded in Financial Markets

- Money market securities
 - Only debt securities
 - Capital market securities
 - Bonds
 - Mortgages and Mortgage-Backed securities
 - Stocks
 - Derivative securities
 - Speculation
 - Speculation on movement in value of underlying assets without having to purchase those assets
 - Leverage effect
 - Hedging
 - Commodities
 - Foreign currencies
-

Money market

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

97) Change Country		98) Feedback		10:03:48		Treasury & Money Markets: United States							
1) FED Funds(FOMC)		02/21		US T-Bill		EURO\$DEP		Reverse (Bid)		Repo (Ask)			
BID/ASK	0.0600 0.0900	4w 0.02 +0.00 0.03 0.02		3M 0.03 -0.01 0.04 0.03		3M 0.1600 0.2600		O/N 0.05 0.02		1w 0.07 0.04			
LST/OPEN	0.0700 0.0700	6M 0.07 -0.01 0.08 0.07		1Y 0.10 +0.00 0.11 0.10		6M 0.2100 0.4100		2w 0.07 0.04		1M 0.09 0.06			
HIGH/LOW	0.2500 0.0200	Dow Jones		S&P 500 Future		NASDAQ Composite Index		CRB Commodity Index					
		DJIA 16103.30 -29.93		SPX Future 1836.50 +2.20		CCMP 4263.41 -4.13		CRB 301.58 +0.33					
2) US Bonds (BBT)				Comm Paper		90D EUR\$ FUT		Funds Future		3) LIBOR Fix			
T 0 ³ / ₈	01/31/16	0.318	100-03 ¹ / ₄	100-03+	- 00 ¹ / ₄	15D	0.160	MAR	99.7625	FEB	99.932	1w	0.11725
T 0 ⁵ / ₈	02/15/17	0.702	99-24+	99-24 ³ / ₄	+ 00	30D	0.170	JUN	99.7550	MAR	99.925	1M	0.15550
T 1 ¹ / ₂	01/31/19	1.530	99-27 ¹ / ₄	99-27+	+ 00+	60D	0.190	SEP	99.7300	APR	99.925	2M	0.19595
T 2 ¹ / ₈	01/31/21	2.169	99-22+	99-23	+ 00+	90D	0.210	DEC	99.6750	MAY	99.920	3M	0.23485
T 2 ³ / ₄	02/15/24	2.730	100-05	100-05+	+ 00	120D	0.230	MAR	99.5800	JUN	99.920	6M	0.33050
T 3 ⁵ / ₈	02/15/44	3.693	98-23+	98-24+	+ 00	180D	0.300	JUN	99.4350	JUL	99.920	1Y	0.55530
4) Spot FOREX (FXC)		Key Rates		Swaps		10Y Note Future		Commodities		5) 30Y MBS (BBTM)			
JPY	102.390	Prime	3.25	3Y	0.8220	CBT 125-21+ + 02		NYM WTI 102.43 +0.23		GNMA 3. 102-07 102-08 + 00			
EUR	1.3765	BLR	2.00	5Y	1.6385	GOLD 1330.50 +6.22		GOLD 3.5 100-13 100-14 + 00		FNMA 3.5 100-23 100-24 + 00			
GBP	1.6657	FDTR	0.25	10Y	2.8310								
CHF	0.8861	Discount	0.75	30Y	3.6650								
CAD	1.1125												
30) Economic Releases (ECO)													
Date	Time	C	A	M	Event	Period	Survey	Actual	Prior	Revised			
31) 02/24	14:30	US	🔊	📧	Chicago Fed Nat Activity Index	Jan	-0.20	--	0.16	--			
32) 02/24	16:30	US	🔊	📧	Dallas Fed Manf. Activity	Feb	3.0	--	3.8	--			
33) 02/25	15:00	US	🔊	📧	House Price Index MoM	Dec	0.3%	--	0.1%	--			
34) 02/25	15:00	US	📧	📧	House Price Purchase Index QoQ	4Q	1.00%	--	1.96%	--			
Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.													
SN 831461 CET GMT+1:00 HI83-3223-3 24-Feb-2014 10:03:48													

DFD **0.0700** -- 0.0600 / 0.0900

At 2/21 Op 0.0700 Hi 0.2500 Lo 0.0200 Prev 0.0700

97) Change Country ▾ 98) Feedback 10:05:16 Treasury & Money Markets: Germany

1) Money Rates		Interbank		EURIBOR Fix		EUR LIBOR Fix		Euro Swaps		OBL/BUNDS	
0/N DEPO	0.000	0/N	0.16500	1M	0.2220	1M	0.19714	1Y	0.3790 0.3840	1Y	0.11 -0.01
0/N LEND	0.750	T/N	0.13000	2M	0.2510	2M	0.22786	2Y	0.4510 0.4510	2Y	0.13 +0.01
1 Week	0.250	1M	0.25000	3M	0.2870	3M	0.26071	3Y	0.5990 0.6030	3Y	0.23 +0.02
3M Repo	0.250	3M	0.23000	6M	0.3840	6M	0.34143	4Y	0.8105 0.8110	4Y	0.43 +0.02
2) Govt Bonds		6M	0.31000	9M	0.4640	1Y	0.50886	5Y	1.0290 1.0320	5Y	0.69 +0.02
2Y	0.129	9M	0.42000	1Y	0.5470			6Y	1.2380 1.2405	6Y	0.81 +0.02
5Y	0.686	1Y	0.47500					7Y	1.4340 1.4365	7Y	1.04 +0.02
10Y	1.679	Euro FRAs						8Y	1.6120 1.6140	8Y	1.26 +0.02
30Y	2.563	1x4	0.2520					9Y	1.7710 1.7720	9Y	1.51 +0.02
Spot FOREX		3x6	0.2470	Futures				10Y	1.9100 1.9119	10Y	1.68 +0.02
€/GBP	0.8263	6x9	0.2470	BUND EUX	143.82	-0.05		20Y	2.5256 2.5300	20Y	2.46 +0.02
€/USD	1.3768	9x12	0.2665	BUXL EUX	127.02	-0.18		30Y	2.5830 2.5860	30Y	2.56 +0.01
€/JPY	140.9430	1x7	0.3610	BOBL EUX	126.70	-0.05		EONIA		0.1710	+0.0020
BuBills		3x9	0.3585	SCHATZ EUX	110.57	-0.01		Stock Indices			
1st	0.055 +0.001	6x12	0.3700	EURIBOR	99.74	+0.00		DAX	9645.00	-11.95	
2nd	0.081 +0.007	12x18	0.4440	3M EUX	99.74	+0.00		HDAX	5023.46	-3.20	
		18x24	0.5730					DAX FUT	9645.50	-19.00	

30 Economic Releases (ECO)

	Date	Time	C	A	M	Event	Period	Survey	Actual	Prior	Revised
31)	02/24	10:00	GE	IF	IF	IFO Business Climate	Feb	110.5	111.3	110.6	--
32)	02/24	10:00	GE	IF	IF	IFO Current Assessment	Feb	112.8	114.4	112.4	--
33)	02/24	10:00	GE	IF	IF	IFO Expectations	Feb	108.1	108.3	108.9	--
34)	02/25	08:00	GE	IF	IF	GDP SA QoQ	4Q F	0.4%	--	0.4%	--

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
 SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 10:05:17

Stocks

IBM US \$ Market

P180.02 / 185.58P

3x4

Prev 182.79

Vol 5,699,331

IBM US Equity

98 Report

99 Feedback

Page 1/4 Description

1) Profile

2) Issue Info

3) Ratios

4) Revenue & EPS

6) IT Services (CCB)

INTL BUSINESS MACHINES CORP

International Business Machines Corporation (IBM) provides computer solutions through the use of advanced information technology. The Company's solutions include technologies, systems, products, services, software, and financing. IBM offers its products through its global sales and distribution organization, as well as through a variety of third party distributors and resellers.

[BBGID BGG00BLNNH6]

7) Price Chart (GP)



Px/Chg 1D (USD)	182.79/-0.8%
52 Wk H (03/15/13)	215.90
52 Wk L (02/05/14)	172.19
YTD Change/%	-4.78/-2.55%
Mkt Cap (USD)	198,483.3M
Shrs Out/Float	1,085.9M/1,084.3M
SI/% of Float	26.6M/2.46%
Days to Cover	3.8

8) Earn (ERN)

9) Est (EE)

Date	22:30	(C)	04/16/14
P/E			11.17
Est P/E	12/14		10.22
T12M EPS (USD)			16.36
Est EPS			17.89
Est PEG			1.17

11) Dividend (DVD)

Ind Gross Yield	2.08%
5Y Net Growth	13.7%
Cash 02/06/14	0.95

12) Corporate Info

13) www.ibm.com
Armonk, NY, United States
Empls 430,000 (09/30/13)
14) Management (MGMT)
15) Virginia M Rometty "Ginni" Chairman/President/CEO
16) Jeanette Horan Chief Information Officer
17) Mark N Wegman Chief Scientist:Software Tech
18) 12M Total Ret (TRA) -7.23%
Beta vs SPX 0.97
20) Depository Receipts
Active Receipts 6

IBM US \$ Market

P180.02 / 185.58P

3x4

Prev 182.79

Vol 5,699,331

IBM US Equity

98 Report

99 Feedback

Page 2/4 Description

1) Profile

2) Issue Info

3) Ratios

4) Revenue & EPS

6) Public Offerings (CACs)

Follow-on Offering	12/01/68, Common Stock	IPO 11/11/15
Shares Off/Split Adj	50.00k/800.00k	
Share Price/Split Adj	\$ 328.50/20.53	
Lead Manager	Merrill Lynch & Co	

8) Institutional Holdings (OWN)

# of Inst. Owners	2,645
Shares Owned	710.82M
Shares Out/Float	65.5%/65.6%
# of Buyers/Sellers	812/1.143k
Shares Sold	16.58M

9) Issue Information (RELS)

Sec Type	Common Stock			
Pri Exch	New York	PAR	USD	0.2
Pri MIC	XNYS			
Incorp	UNITED STATES (NY)			
SIC Code	7389 (BUSINESS SVC)			
BBGID	BBG000BLNNH6			
ISIN	US4592001014			
CUSIP	459200101			
SEDOL1	2005973 US	NAICS	541512	
Common	009703799	WPK #	851399	
		Sicovam	012964	

10) Eqty Weights(WGT)

SPX	N.A.
INDU	7.290%
RIY	N.A.
RAY	N.A.
S5INFT	N.A.
OEX	N.A.
RLG	N.A.
SPR	N.A.
BWORLD	0.398%
SVX	N.A.

11) Insider Holdings (OWN)

% Held by Insiders	0.14%
Net change last 6M	-32.83%

12) Top Holders (HDS)

as of 2/23/2014	
BERKSHIRE HATHAWAY I	6.27%
STATE STREET CORP	5.46%
VANGUARD GROUP INC	5.11%
BLACKROCK	4.97%
STATE FARM MUTUAL AU	1.53%
NORTHERN TRUST CORPO	1.40%
BANK OF NEW YORK MEL	1.29%

13) OMON

Opt/LEAPs/Marginable

IBM US \$ Market

P180.02 / 185.58P

3x4

Prev 182.79

Vol 5,699,331

IBM US Equity 98 Report 99 Feedback Page 3/4 Description

1) Profile

2) Issue Info

3) Ratios

4) Revenue & EPS

Fiscal Year End 12/2013

* Last Quarter End 12/13 Q4

~ Current/T12M (USD)

7) Income Statements (FA IS)

8) Balance Sheet (FA BS)

9) Cash Flow (FA CF)

Issue Data		Per Share Data		Cash Flow Analysis	
~ Last Px	USD/182.79			P/CF	11.4
~ P/E	11.2	~ EPS T12M	16.36	Curr P/FCF	14.4
~ Dvd Ind Yld	2.1%	~ DPS	3.70	CF/NI	1.1
* P/B	8.71	* Bk Val Per Sh	20.99	Dvd P/O	24.6%
~ P/S	2.0	Rev/Bas Sh	91.14	Cash Gen/Cash Reqd	2.2
~ Curr EV/T12M EBITD	9.0	CPS	15.98	Csh Dvd Cov	4.1
~ Mkt Cap	198,483.3M	* Curr Shares Out	1.1B	CF0/Sales	17.5%
~ Curr EV	227,272.3M	FCF/Basic Sh	12.53	Eff IR	1.1%
Growth Potential		Profitability		Structure	
Dil EPS Frm Cont Op 1	6.8%	EBITDA	25.1B	Curr Ratio	1.3
Capital - 1 Year Grow	19.9%	EBIT	18.8B	Quick Ratio	1.0
BVS - 1 Yr Growth	24.4%	OPM	18.8%	Debt/Assets	31.5%
R & D to Sales	6.2%	Pretax Mrgn	19.6%	Debt/Com Eq	174.3%
Retention Ratio	75.4%	ROA	13.4%	A/R Trnovr	3.4
Rev - 1 Yr Gr	-4.6%	ROE	79.2%	Inv Turnover	22.3
Empl 1Y Gr	N.A.	ROC	29.3%	GM	48.6%
Assets - 1 Year Growt	5.9%	Asset Turnover	0.8	EBIT/Tot Int Exp	46.7

Bond

I

IBM 7 1/8 12/01/96 Corp

Page 1/11

Description: Bond

94 Notes

95 Buy

96 Sell

97 Settings

21) Bond Description

22) Issuer Description

Pages

- 1) Bond Info
- 2) Addtl Info
- 3) Covenants
- 4) Guarantors
- 5) Bond Ratings
- 6) Identifiers
- 7) Exchanges
- 8) Inv Parties
- 9) Fees, Restrict
- 10) Schedules
- 11) Coupons

Quick Links

- 32) ALLQ Pricing
- 33) QRD Quote Reqa
- 34) TDH Trade Hist
- 35) CAC Corp Action
- 36) CF Prospectus
- 37) CN Sec News
- 38) HDS Holders
- 39) VPR Underly Inf

66) Send Bond

Issuer Information

Name IBM CORP
Industry Software & Services

Security Information

Mkt of Issue US Domestic
Country US **Currency** USD
Rank Sr Unsecured **Series**
Coupon 7.125 **Type** Fixed
Cpn Freq S/A
Day Cnt 30/360 **Iss Price** 98.68700
Maturity 12/01/2096

MAKE WHOLE @15 until 12/01/96/BULLET
Issue Spread 80.00bp vs T 6 3/4 08/15/26

Calc Type (1)STREET CONVENTION

Announcement Date 12/03/1996
1st Coupon Date 06/01/1997
Exchange Notice Date 05/21/2012
Exchange Expiration Date 06/18/2012

FINAL MTY: 12/1/2096. CALL @ >PAR OR MAKE WHOLE +15BP. SHORT 1ST CPN.

Identifiers

ID Number DD1089174
CUSIP 459200AP6
ISIN US459200AP64

Bond Ratings

Moody's Aa3
S&P AA-
Fitch A+
Composite A+

Issuance & Trading

Amt Issued/Outstanding

USD 850,000.00 (M) /
USD 316,390.00 (M)

Min Piece/Increment

1,000.00 / 1,000.00
Par Amount 1,000.00
Book Runner SAL
Reporting TRACE

S

IBM 7 1/8 12/01/96 Corp

Page 3/11

Description: Bond

94 Notes

95 Buy

96 Sell

97 Settings

21) Bond Description

22) Issuer Description

Pages

- 1) Bond Info
- 2) Addtl Info
- 3) Covenants
- 4) Guarantors
- 5) Bond Ratings
- 6) Identifiers
- 7) Exchanges
- 8) Inv Parties
- 9) Fees, Restrict
- 10) Schedules
- 11) Coupons

Quick Links

- 32) ALLQ Pricing
- 33) QRD Quote Reca
- 34) TDH Trade Hist
- 35) CAC Corp Action
- 36) CF Prospectus
- 37) CN Sec News
- 38) HDS Holders
- 39) VPR Underly Inf

66) Send Bond

Covenants

51)	Negative Pledge	Yes
	Change of Control	No
	Fundamental Change	No
52)	Limit of Indebtedness	No
	Cross Default	No
	Negative Covenant	Yes
53)	Certain Sales of Assets	Yes
	Restriction on Activities	Yes
	Debt Service Coverage Ratio	No
	Free Cash Flow To Debt Service Ratio	No
	Restrictive Covenant	Yes
54)	Merger Restrictions	Yes
55)	Limitation on Sale-and-Leaseback	Yes
	Limitation on Subsidiary Debt	No
	Restricted Payments	No
	Ratings Trigger	No
	Collective Action Clause	No
	Material Adverse Change Clause	No
	Force Majeure	No

Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
 SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 10:11:22

I

IBM 7 1/8 12/01/96 Corp

Page 5/11

Description: Bond

94 Notes

95 Buy

96 Sell

97 Settings

21) Bond Description

22) Issuer Description

Pages

- 1) Bond Info
- 2) Addtl Info
- 3) Covenants
- 4) Guarantors
- 5) Bond Ratings
- 6) Identifiers
- 7) Exchanges
- 8) Inv Parties
- 9) Fees, Restrict
- 10) Schedules
- 11) Coupons

Quick Links

- 32) ALLQ Pricing
- 33) QRD Quote Reqa
- 34) TDH Trade Hist
- 35) CAC Corp Action
- 36) CF Prospectus
- 37) CN Sec News
- 38) HDS Holders
- 39) VPR Underly Inf

66) Send Bond

Bond Ratings

Agency/Type	Bond Ratings	Effective Date
MOODY'S		
▪ Bond Rating	Aa3	11/23/2010
STANDARD & POOR'S		
▪ Bond Rating	AA-	05/30/2012
FITCH		
▪ Bond Rating	A+	05/30/2007
Recovery Rating	NR	05/30/2007
BLOOMBERG COMPOSITE		
Bond Composite	A+	05/30/2012
Egan-Jones Ratings Company		
Bond Rating	AA+	10/17/2013
DUFF & PHELPS		
▪ Bond Rating	NR	06/01/2000

S

IBM 7 1/8 12/01/96 Corp

Page 7/11

Description: Bond

94) Notes

95) Buy

96) Sell

97) Settings

21) Bond Description

22) Issuer Description

Pages

- 1) Bond Info
- 2) Addtl Info
- 3) Covenants
- 4) Guarantors
- 5) Bond Ratings
- 6) Identifiers
- 7) Exchanges
- 8) Inv Parties
- 9) Fees, Restrict
- 10) Schedules
- 11) Coupons

Quick Links

- 32) ALLQ Pricing
- 33) QRD Quote Reca
- 34) TDH Trade Hist
- 35) CAC Corp Action
- 36) CF Prospectus
- 37) CN Sec News
- 38) HDS Holders
- 39) VPR Underly Inf

66) Send Bond

Exchanges, Issuance & Trading Information

Clearing House	Exchange	MIC Code	Mkt Segment
TRACE ELIGIBLE	FRANKFURT	XFRA	
	NEW YORK	XNYS	

Commodity - gold

XAU ↑ 1333.29 +9.04 BGN 1333.13 / 1333.45 BGN
 At 11:37 Op 1324.28 Hi 1334.65 Lo 1318.91 Close 1324.25 Value 02/26/14

XAU BGN Currency 95) Save As 96) Actions 97) Edit 98) Table Line Chart

02/25/2009 - 02/24/2014 Last Price BGN Line 11) Compare Mov. Avgs No Lower Chart USD

1D 3D 1M 6M YTD 1Y 5Y Max Daily Security/Study Event

Last Price 1333.29
 High on 09/05/11 1960.20
 Average 1381.62
 Low on 04/17/09 868.85



Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
 SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 11:37:27

XAU ↓ 1333.20 +8.95

BGN 1333.03 / 1333.36 BGN

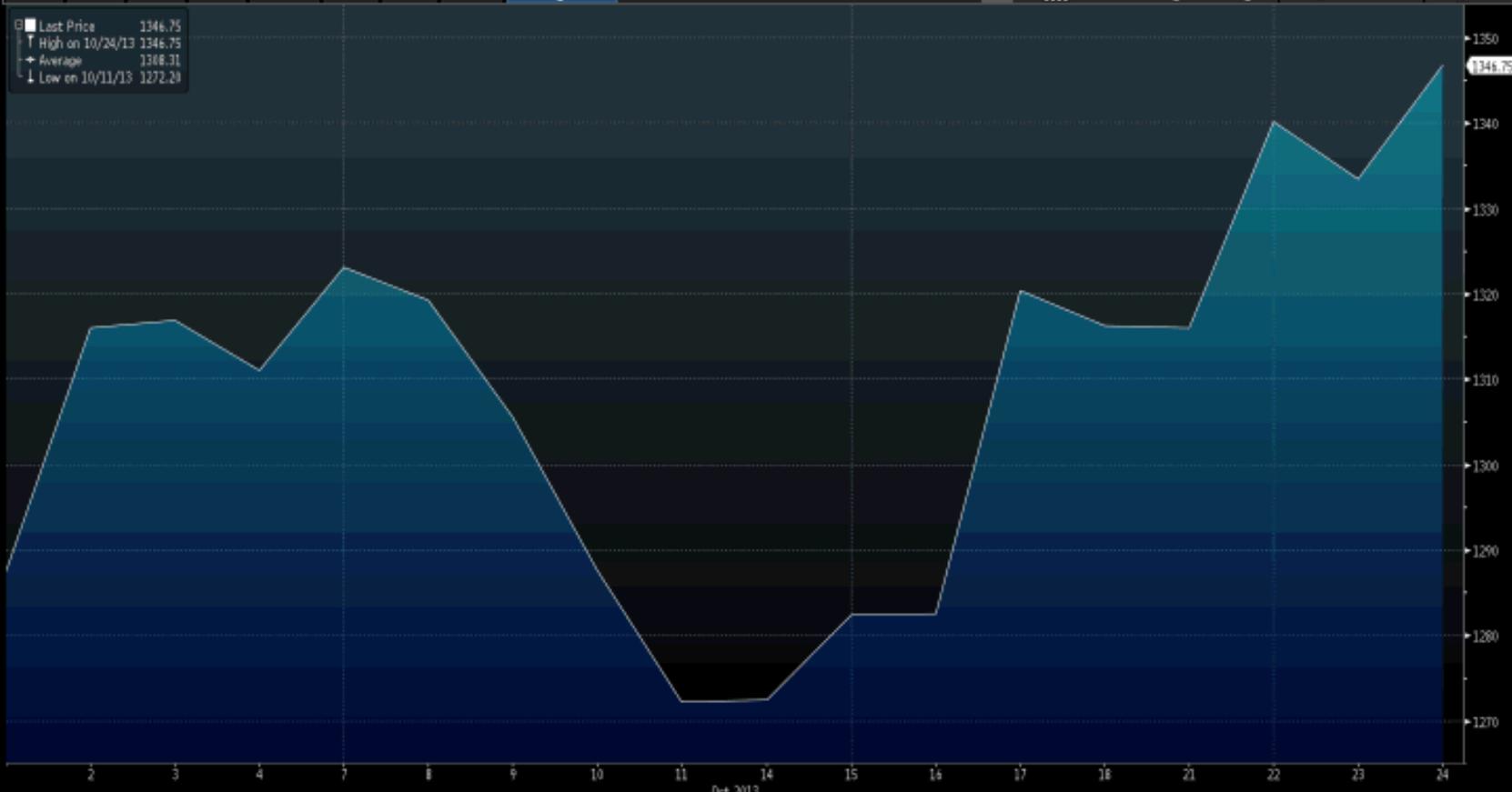
At 11:36 Op 1324.28 Hi 1334.65 Lo 1318.91 Close 1324.25 Value 02/26/14

XAU BGN Curncy 95 Save As 96 Actions 97 Edit 98 Table Line Chart

10/01/2013 - 10/24/2013 Last Price BGN Line 11 Compare Mov. Avgs No Lower Chart USD

1D 3D 1M 6M YTD 1Y 5Y Max Daily Security/Study Event

Last Price 1346.75
 High on 10/24/13 1346.75
 Average 1308.31
 Low on 10/11/13 1272.29



Australia 61 2 9777 8600 Brazil 5511 3048 4500 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
 SN 831461 CET GMT+1:00 H183-3223-3 24-Feb-2014 11:36:37

BOXPBE85 138.08 As Of 02/21/14 USD/cwt

USDA Boxed Pork Belly Cut 200 Lbs Spot Price

BOXPBE85 Index 1) News Index Description

USDA Boxed Pork Belly Cut 200 Lbs Spot Price

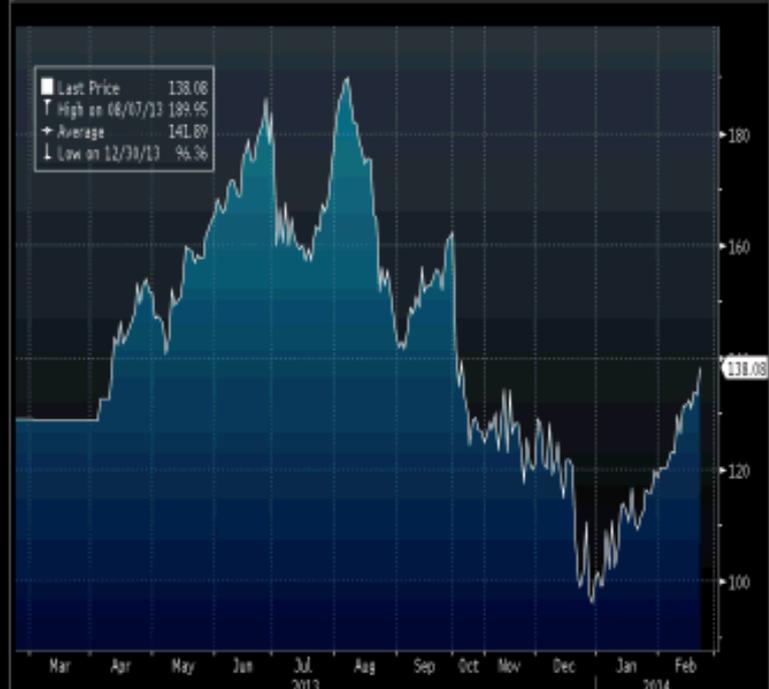
Notes

There has been a transition from voluntary reporting to mandatory. The numbers will reflect the new data as of April 11, 2013 {http://www.ams.usda.gov/mnreports/lm_pk602.txt} *As of Jan. 3, 2006, the yield calculations are based on a 200-lb carcass Commodity: Pork Cut, Belly ...

Details

Ticker	BOXPBE85 Index
Quote Type	Price
Unit	USD/cwt
Currency	US DOLLAR
Country	UNITED STATES
BBGID	BBG002SGLS04
Price Frequency	Daily
Last Update	02/21/14
Update Status	Latest data available from the source
Start Date	01/05/98
Current Source	3) United States Department of Ag
History	Close
End Of Week	Friday

Price Chart (GP)



Australia 61 2 9777 8600 Brazil 5511 3048 4500 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 2014 Bloomberg Finance L.P.
SN 831461 CET GMT+1:00 H178-3612-0 25-Feb-2014 10:18:55

BOXPBE85 138.08 As Of 02/21/14 USD/cwt

USDA Boxed Pork Belly Cut 200 Lbs Spot Price

BOXPBE85 Index 95 Save As 96 Actions 97 Edit 98 Table Line Chart

02/26/2009 - 02/21/2014 Mid Line 11) Compare Mov. Avgs No Lower Chart USD

1D 3D 1M 6M YTD 1Y 5Y Max Daily Security/Study Event

Mid Price 138.08
High on 08/07/13 189.95
Average 113.71
Low on 08/18/09 55.44



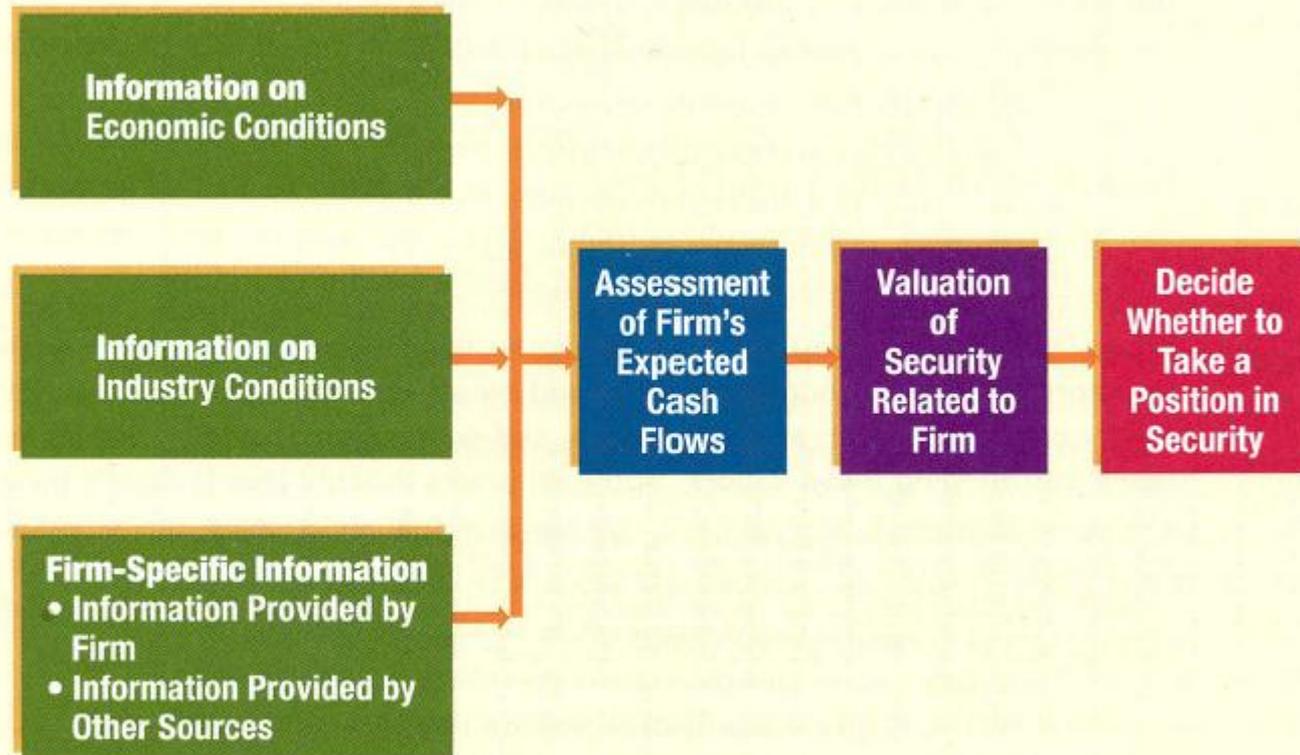
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
SN 831461 CET GMT+1:00 H178-3612-0 25-Feb-2014 10:22:58
Copyright 2014 Bloomberg Finance L.P.

Valuation of Securities in Financial Markets

- Each type of security generates a unique stream of expected cash flows to investors
 - Capital gain, income
 - Each security has a unique level of uncertainty surrounding the expected cash flows
 - Valuation of securities = present value (PV) of its expected cash flows
 - Discounted at a rate that reflects the uncertainty
-

Impact of Information on Valuations

Exhibit 1.2 Use of Information to Make Investment Decisions



Source: Madura, J.: *Financial Markets and Institutions*, 9th Edition

Financial Market Regulation

- Many regulations were enacted in response to fraudulent practices before the Great Depression
 - Asymmetric Information
 - Adverse Selection
 - Morale Hazard
 - In financial markets, one party often does not know enough about the other party to make **accurate decision**
 - Lack of information creates problems in the financial system on two fronts:
 - Before and after transaction
-

Financial Market Regulation

- Adverse selection
 - The problem created by asymmetric information **before** the transaction occurred.
 - This occurs when the potential borrowers who are the most likely to produce undesirable (adverse) outcome – the bad credit risk – are the ones who most actively seek out a loan and are thus more likely to be selected.
 - Because adverse selection makes it more likely that loans might be made to bad credit risks, lenders may decide not to make any loans even though there are good credit risks in the market place.
-

Financial Market Regulation

- Moral hazard
 - It is the problem created by asymmetric information after the transaction occurred.
 - Moral hazard in financial markets is the risk (hazard) that the borrower might engage in activities that are undesirable (immoral) from the lender's point of view, because they make it less likely that the loan will be paid back.
 - Because moral hazard lowers the probability that the loan will be repaid, lenders may decide that they would rather not make a loan.
 - Moral hazard leads to conflicts of interest
-

Financial Market Regulation

- Six types of regulations.
 - 1. Restriction on entry
 - 2. Disclosure
 - 3. Restriction on Assets and Activities
 - 4. Deposit insurance
 - 5. Limits on Competition
 - 6. Restriction on Interest Rate
 - Disclosure
 - Incorrect information - poor investment decision
 - Attempt to ensure that businesses disclosure accurate information
 - Disclosure information is available only a small set of investors that have major advantage
 - Goal to provide all investors with equal access to information
 - Regulatory Response to Financial Scandals
 - 2001 – 2002
 - Sarbanes-Oxley Act
 - The limited financial disclosure by firms is a major reason why there is much uncertainty surrounding their valuations
-

Global Financial Markets

- Improve of international transfer of funds between surplus and deficit units
 - Some countries have had financial market form a long time but there are also new market of transitive economies – emerging markets
 - Slow develop of financial markets in developing countries
 - Lack of information
 - Low confidence in markets
 - Rare of prosecution
 - Low efficiency of fund channeling
-

Perfect market E. Fama 1970's

- Characteristic of perfect markets
 - All information about any securities are available
 - You can buy any size of security
 - No existence of transactional costs
 - → financial intermediaries are not necessary
 - Markets are imperfect
 - Information are not perfectly and freely available
 - Surplus unit are not able to identify creditworthiness of borrowers
 - Individual contracts are expensive
-

Direct and Indirect Financing

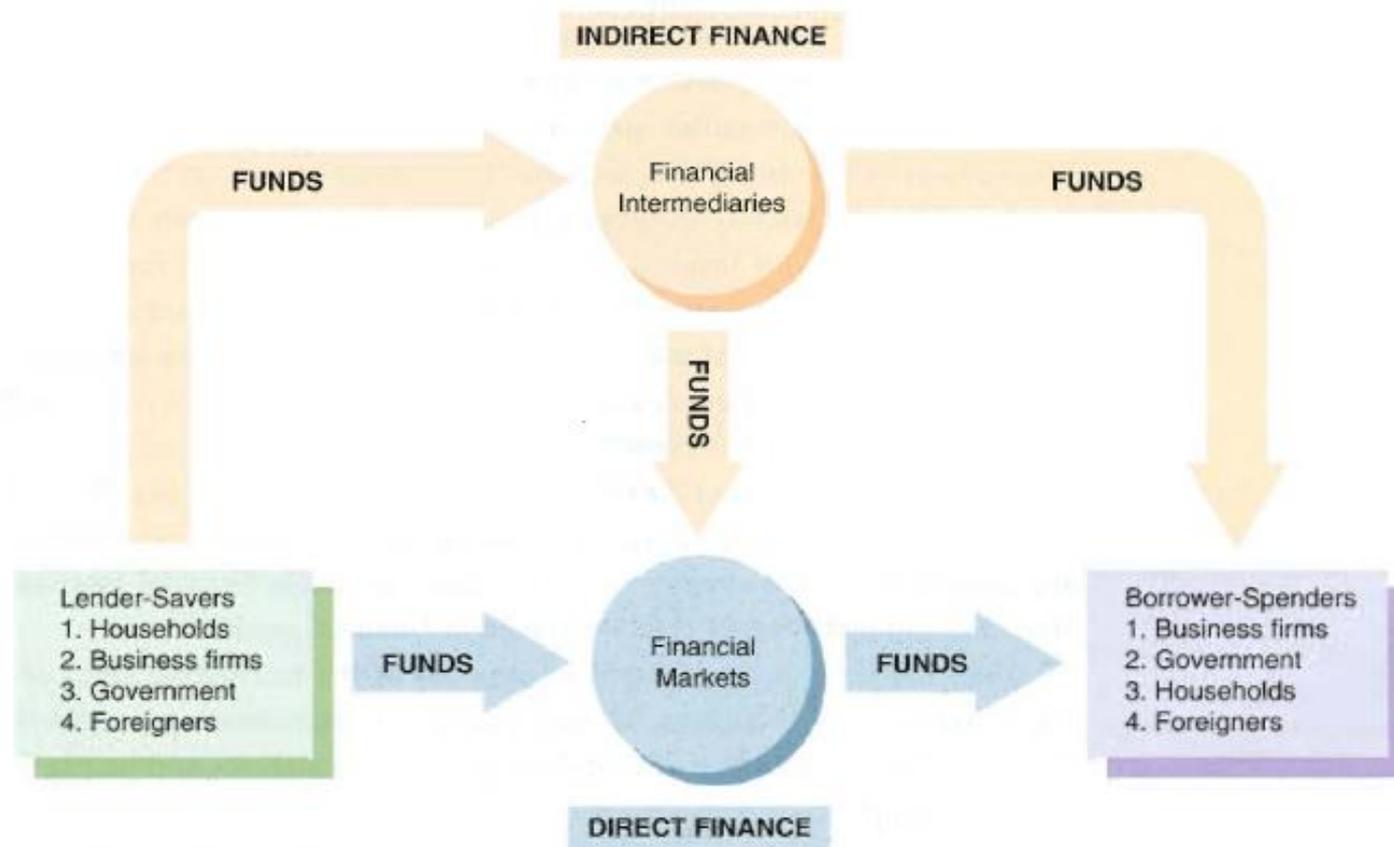


FIGURE 1 *Flows of Funds Through the Financial System*

Role of Financial Institutions

- Financial institutions
 - Depository Institutions
 - Non-depository Financial Institutions



Why are financial intermediaries and indirect finance so important?

■ Transaction Costs

- Transaction costs, the time and money spent in carrying out financial transactions, are a major problem for people who have excess funds to **lend**.
 - Financial intermediaries can substantially reduce transaction costs because they have developed expertise in lowering them, and because their large size allow them to take advantage of economies of scale.
 - For example
 - A bank knows how to find a good lawyer to produce loan contract, and this contract can be used over and over again in this loan transactions, thus lowering the legal cost per transaction.
-

Why are financial intermediaries and indirect finance so important?

■ Risk Sharing

- Another benefit made possible by the low transaction costs of financial institutions is that they can help reduce the exposure of investors risk.
 - Financial intermediaries do this through the process known as risk sharing.
 - They create and sell assets with risk characteristics that people are comfortable with. The intermediaries then use the funds they acquire by selling these assets to purchase other assets that may have far **more risk**.
 - Asset transformation
-

Depository Institutions

- Accept deposit → provide credit → purchase securities
 - Offer deposit account
 - Repackage funds to provide loans
 - Accept risk
 - Expertise available
 - Diversification
-

Types of Depository Financial Institutions

Commercial
Banks
\$5 Trillion
Total Assets

Savings
Institutions
\$1.3 Trillion
Total Assets

Credit Unions
\$.5 Trillion
Total Assets

Types of Nondepository Financial Institutions

Financial
Companies

Mutual
Funds

Securities
Firms

Insurance
Companies

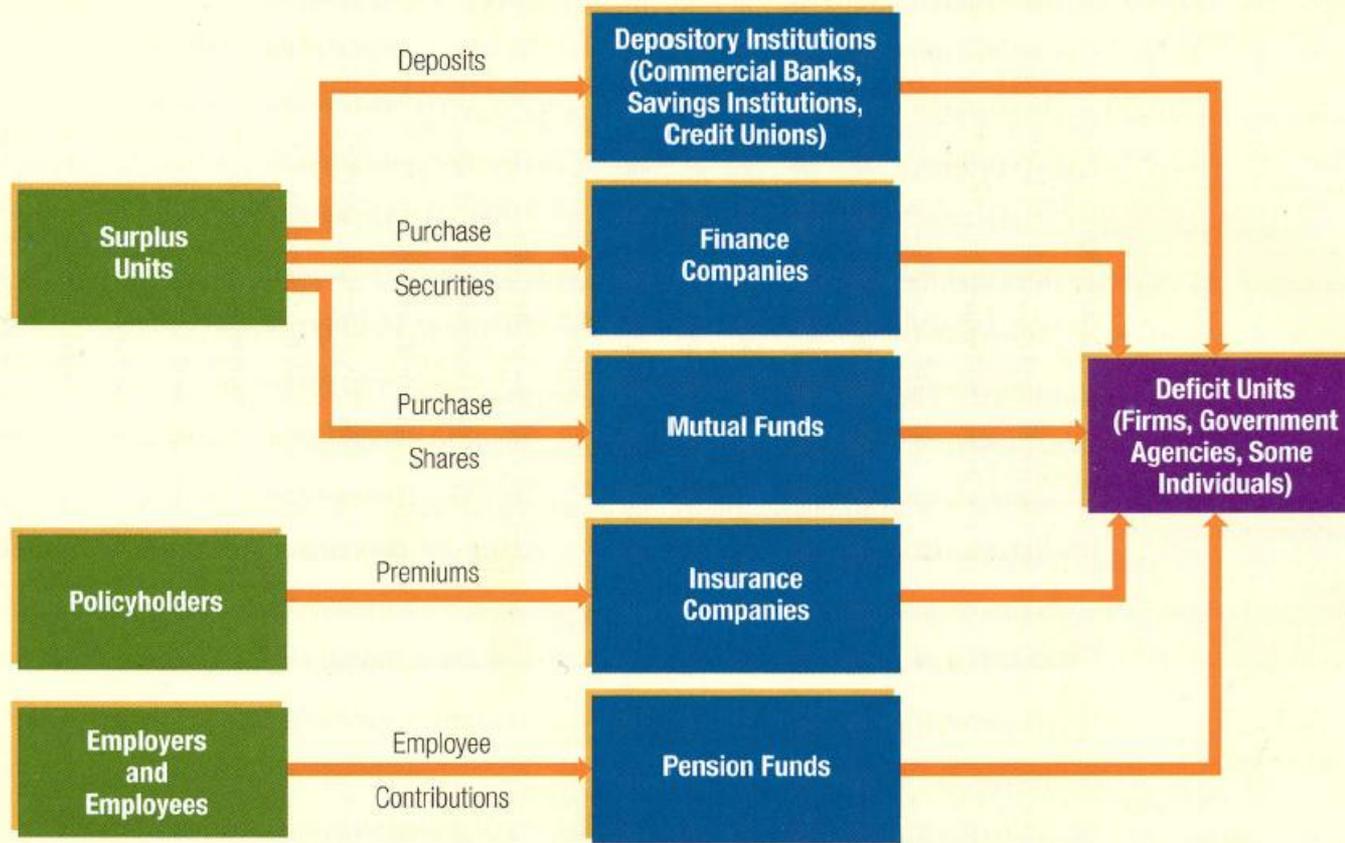
Pension
Funds

Nondepository Financial Institutions

- Focused on capital market
 - Longer-term, higher risk intermediation
 - Less focus on liquidity
 - Less regulation
 - Greater focus on equity investments
-

Comparison of Role among Financial Institutions

Exhibit 1.3 Comparison of Roles among Financial Institutions



—Source: Madura, J.: *Financial Markets and Institutions*, 9th Edition

Summary of Institutional Sources and Uses of Funds

Exhibit 1.5 Summary of Institutional Sources and Uses of Funds

FINANCIAL INSTITUTIONS	MAIN SOURCES OF FUNDS	MAIN USES OF FUNDS
Commercial banks	Deposits from households, businesses, and government agencies	Purchases of government and corporate securities; loans to businesses and households
Savings institutions	Deposits from households, businesses, and government agencies	Purchases of government and corporate securities; mortgages and other loans to households; some loans to businesses
Credit unions	Deposits from credit union members	Loans to credit union members
Finance companies	Securities sold to households and businesses	Loans to households and businesses
Mutual funds	Shares sold to households, businesses, and government agencies	Purchases of long-term government and corporate securities
Money market funds	Shares sold to households, businesses, and government agencies	Purchases of short-term government and corporate securities
Insurance companies	Insurance premiums and earnings from investments	Purchases of long-term government and corporate securities
Pension funds	Employer/employee contributions	Purchases of long-term government and corporate securities

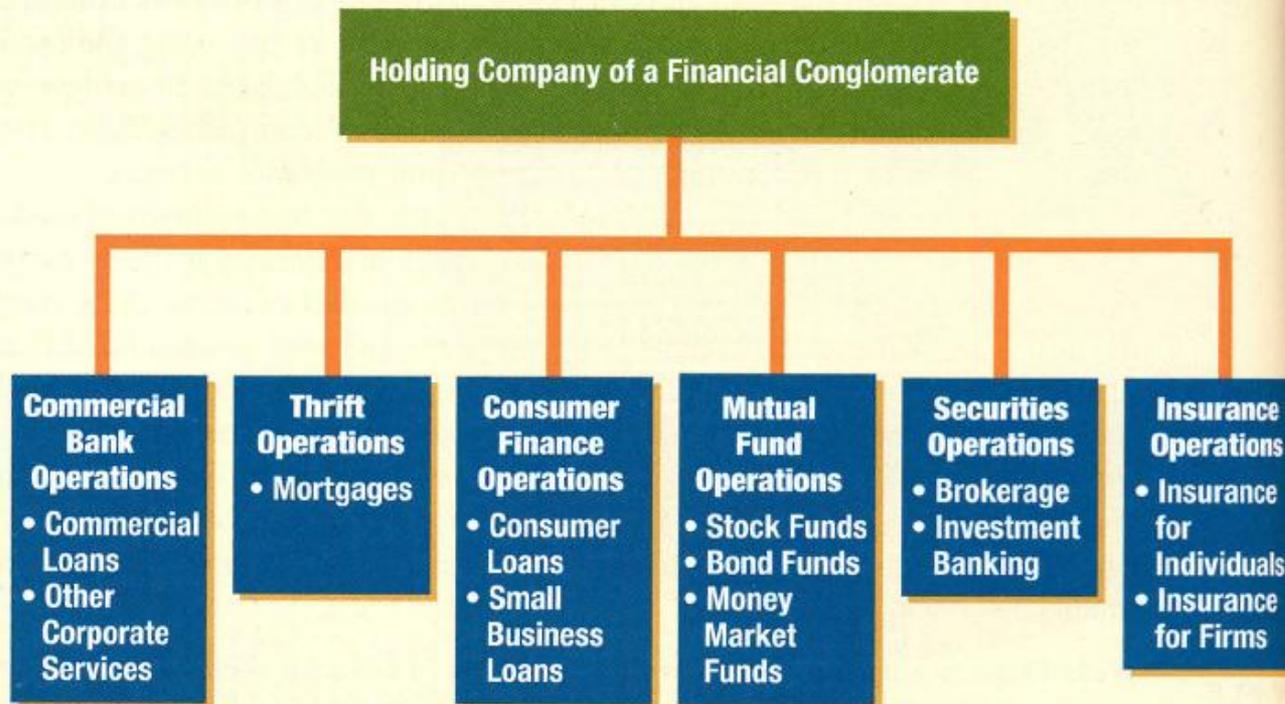
- *Source: Madura, J.: Financial Markets and Institutions, 9th Edition*

Consolidation of Financial Institutions

- Rapid growth of mutual funds and pension funds
 - Increased consolidation of financial institutions via mergers
 - Increased competition between financial Institutions
 - Growth of financial conglomerates
-

Typical Structure of a Financial Conglomerate

Exhibit 1.6 Organizational Structure of a Financial Conglomerate



Source: Madura, J.: *Financial Markets and Institutions, 9th Edition*