ESSENTIALS
of Investments
BODIE | KANE | MARCUS

SEVENTH EDITION

CHAPTER 2

Asset Classes and Financial Instruments

2.1 THỊ TRƯỜNG TIỀN TỆ

Các nhóm tài sản tài chính chủ yếu

- Thị trường tiền tệ
- Thị trường trái phiếu
- Thị trường cổ phiếu
- Các chỉ số
- Thị trường các công cụ phái sinh

Các công cụ thị trường tiền tệ

- Tín phiếu kho bạc
- Chứng chỉ tiền gửi (Certificates of deposits)
- Thương phiếu (Commercial Paper)
- Hối phiếu (Bankers Acceptances)

Các công cụ thị trường tiền tệ

- Eurodollars
- Repurchase Agreements (RPs) and Reverse RPs
- Brokers' Calls
- Federal Funds
- LIBOR Market

Figure 2.1 Money Rates

FIGURE 2.1

Rates on money market securities

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Money Rates

January 4, 2007

International rates

	Latest	Week ago	52-WEEK High	52-WEEK Low
Prime rates				
U.S.	**8.25**	8.25	8.25	7.25
Canada	**6.00**	6.00	6.00	5.00
Euro zone	**3.50**	3.50	3.50	2.25
Japan	**1.625**	1.625	1.625	1.375
Britain	**5.00**	5.00	5.00	4.50
Overnight repurchase				
U.S.	**5.22**	5.19	5.28	4.13
U.K. (BBA)	**5.080**	5.047	5.150	4.100
Euro zone	**3.60**	3.77	3.77	2.26

U.S. government rates

	Latest	Week ago	52-WEEK High	52-WEEK Low
Federal funds				
Effective rate	**5.24**	5.25	5.37	4.21
Treasury bill auction				
4 weeks	**4.760**	4.660	5.170	3.950
13 weeks	**4.930**	4.875	4.990	4.070
26 weeks	**4.900**	4.900	5.110	4.250

Secondary market

	Latest	Week ago	52-WEEK High	52-WEEK Low
Freddie Mac				
30-year mortgage yields				
30 days	**5.92**	6.06	6.71	5.81
60 days	**5.93**	6.07	6.75	5.82
One-year ARM	**3.375**	3.375	3.375	3.375
Fannie Mae				
30-year mortgage yields				
30 days	**6.066**	6.107	6.792	5.913
60 days	**6.089**	6.125	6.821	5.924
Bankers acceptances				
30 days	**5.29**	5.31	5.38	4.35
60 days	**5.30**	5.31	5.43	4.44
90 days	**5.31**	5.31	5.49	4.49

Other short-term rates

	Latest	Week ago	52-WEEK High	52-WEEK Low
Commercial paper				
30 to 60 days	**5.23**	...	...	...
61 to 90 days	**5.22**	...	...	...
91 to 120 days	**5.20**	...	...	...
Dealer commercial paper				
30 days	**5.26**	5.27	5.36	4.32
60 days	**5.26**	5.28	5.41	4.42
90 days	**5.25**	5.30	5.46	4.46
Euro commercial paper				
30 day	**3.58**	3.58	3.62	2.00
Two month	**3.62**	3.62	3.63	2.39
Three month	**3.69**	3.68	3.69	2.45
London interbank offered rate, or Libor				
One month	**5.32000**	5.3256	5.4200	4.4188
Three month	**5.36000**	5.3600	5.5200	4.5500
Euro Libor				
One month	**3.628**	3.634	3.713	2.386
Three month	**3.733**	3.724	3.733	2.488
Euro interbank offered rate (Euribor)				
One month	**3.625**	3.634	3.672	2.384
Three month	**3.734**	3.723	3.734	2.490
Asian dollars				
One month	**5.335**	5.337	5.425	4.418
Three month	**5.363**	5.370	5.525	3.570

	LATEST Offer	LATEST Bid	Week ago	52-WEEK High	52-WEEK Low
Eurodollars (mid rates)					
One month	**5.28**	5.30	5.32	5.39	4.36
Two month	**5.29**	5.31	5.32	5.44	4.45
Three month	**5.30**	5.32	5.34	5.51	4.51

Table 2.2 Components of the Money Market

TABLE 2.2

Major components of the money market

	$ Billion
Repurchase agreements	$ 563.0
Small-denomination time deposits*	973.7
Large-denomination time deposits	1,359.4
Eurodollars	430.2
Treasury bills	963.9
Commercial paper	1,829.8
Savings deposits	3,620.5
Money market mutual funds	1,853.6

*Small denominations are less than $100,000

Source: *Economic Report of the President*, U.S. Government Printing Office, 2006; *Flow of Funds Accounts of the United States*, Board of Governors of the Federal Reserve System, September 2006.

Figure 2.2 Treasury Bills

Treasury Bills

MATURITY	DAYS TO MAT	BID	ASKED	CHG	ASK YLD
Jan 11 07	6	4.50	4.49	–0.11	4.56
Jan 18 07	13	4.57	4.56	–0.09	4.63
Jan 25 07	20	4.61	4.60	–0.01	4.68
Feb 01 07	27	4.70	4.69	–0.06	4.77
Feb 08 07	34	4.70	4.69	+0.01	4.78
Feb 15 07	41	4.73	4.72	–0.08	4.81
Feb 22 07	48	4.79	4.78	–0.04	4.88
Mar 01 07	55	4.83	4.82	–0.02	4.92
Mar 08 07	62	4.86	4.85	+0.01	4.96
Mar 15 07	69	4.85	4.84	–0.01	4.95
Mar 22 07	76	4.88	4.87	–0.02	4.99
Mar 29 07	83	4.88	4.87	–0.02	4.99
Apr 05 07	90	4.91	4.90	–0.01	5.03
Apr 12 07	97	4.90	4.89	–0.01	5.02
Apr 19 07	104	4.90	4.89	–0.01	5.03
Apr 26 07	111	4.90	4.89	–0.01	5.03

FIGURE 2.2

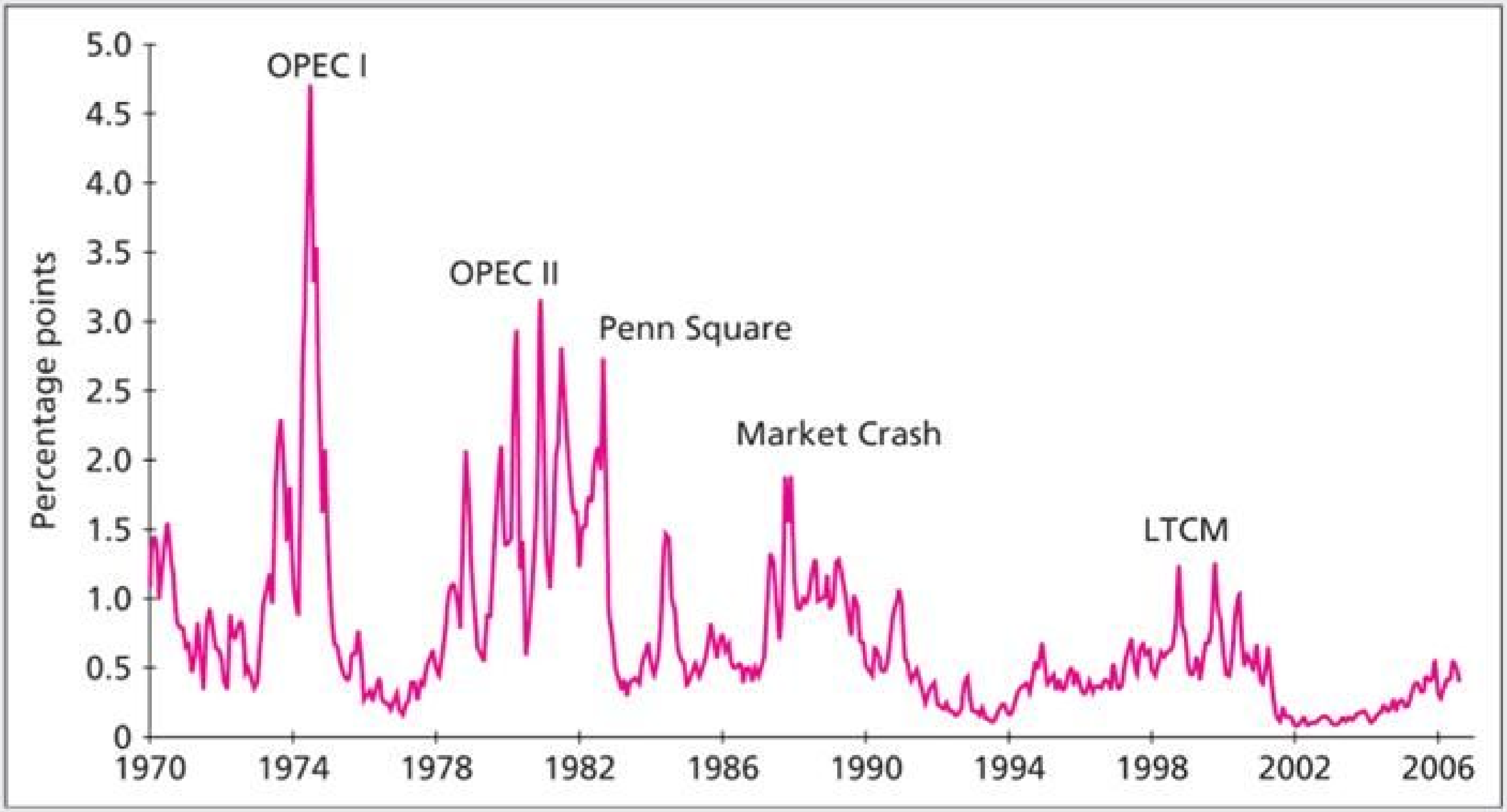
Treasury bill listings

Source: *The Wall Street Journal Online*, January 4, 2007.

Figure 2.3 Spreads on CDs and Treasury Bills

FIGURE 2.3

Spread between three-month CD and T-bill rates



2.2 THỊ TRƯỜNG TRÁI PHIẾU

Bond Market

- Treasury Notes and Bonds
- Federal Agency Debt
- International Bonds
- Inflation-Protected Bonds
- Municipal Bonds
- Corporate Bonds
- Mortgages and Mortgage-Backed Securities

Treasury Notes and Bonds

- Maturities
  - Notes – maturities up to 10 years
  - Bonds – maturities in excess of 10 years
- Par Value - $1,000
- Quotes – percentage of par

Figure 2.4 Treasury Notes and Bonds

U.S. Government Bonds and Notes

Representative Over-the-Counter quotation based on transactions of $1 million or more.
Treasury bond, note and bill quotes are from midafternoon. Colons in bond and note bid-and-asked quotes represent 32nds; 101:01 means 101 1/32. Net change in 32nds. n-Treasury Note. i-inflation-indexed issue. Treasury bill quotes in hundredths, quoted in terms of a rate of discount. Days to maturity calculated from settlement date. All yields are to maturity and based on the asked quote. For bonds callable prior to maturity, yields are computed to the earliest call date for issues quoted above par and to the maturity date for issues quoted below par.
*-When issued. Daily change expressed in basis points.

RATE	MATURITY MO/YR	BID	ASKED	CHG	ASK YLD
3.375	Jan 07i	99:28	99:29	----	6.72
3.125	Jan 07n	99:27	99:28	----	4.62
2.250	Feb 07n	99:21	99:22	----	4.89
6.250	Feb 07n	100:04	100:05	----	4.73
3.375	Feb 07n	99:23	99:24	----	4.90
3.750	Mar 07n	99:21	99:22	----	4.99
3.875	Feb 13n	96:06	96:07	+8	4.59
3.625	May 13n	94:23	94:24	+8	4.58
1.875	Jul 13i	97:00	97:01	+1	2.37
4.250	Aug 13n	98:00	98:01	+9	4.60
12.000	Aug 13	111:04	111:05	+2	4.71

RATE	MATURITY MO/YR	BID	ASKED	CHG	ASK YLD
4.250	Nov 13n	97:29	97:30	+10	4.60
2.000	Jan 14i	97:16	97:17	+1	2.38
4.000	Feb 14n	96:09	96:10	+10	4.61
4.750	May 14n	100:26	100:27	+9	4.61
13.250	May 14	119:02	119:03	+4	4.61
2.000	Jul 14i	97:14	97:15	----	2.37
4.250	Aug 14n	97:21	97:22	+10	4.61
12.500	Aug 14	119:04	119:05	+4	4.62
11.750	Nov 14	118:30	118:31	+6	4.59
4.250	Nov 14n	97:19	97:20	+9	4.61
1.625	Jan 15i	94:18	94:19	+1	2.37

FIGURE 2.4

Listing of Treasury issues

Source: From *The Wall Street Journal*, January 5, 2007. Reprinted by permission of Dow Jones & Company, Inc. via Copyright Clearance Center, Inc.

Federal Agency Debt

- Major issuers
  - Federal Home Loan Bank
  - Federal National Mortgage Association
  - Government National Mortgage Association
  - Federal Home Loan Mortgage Corporation

Municipal Bonds

- Issued by state and local governments
- Types
  - General obligation bonds (secured by a state or local government's pledge to use legally available resources, including tax revenues, to repay bond holders)
  - Revenue bonds (of repayment solely from revenues generated by a specified revenue-generating entity associated with the purpose of the bonds, rather than from a tax)
    - Industrial revenue bonds
- Maturities – range up to 30 years

Municipal Bond Yields

- Interest income on municipal bonds is not subject to federal and sometimes state and local tax
- To compare yields on taxable securities a Taxable Equivalent Yield is constructed

Trái phiếu doanh nghiệp

- Do công ty phát hành
- Thanh toán lãi nửa năm một
- Chịu rủi ro thanh toán lớn hơn chứng khoán chính phủ
- Các quyền chọn đi kèm trái phiếu doanh nghiệp
  – Có thể mua lại Callable
  – Có thể chuyển đổi Convertible

Figure 2.7 Investment Grade Bond Listings

ISSUER NAME	SYMBOL	COUPON	MATURITY	RATING MOODY'S/S&P/ FITCH	HIGH	LOW	LAST	CHANGE	YIELD %
Alltel	AT.GO	7.875%	Jul 2032	A2/A–/A	109.079	100.744	103.523	–5.617	7.561
Home Depot	HD.GH	5.400%	Mar 2016	Aa3/A+/A+	100.188	97.375	97.598	–0.232	5.740
Home Depot	HD.GK	5.875%	Dec 2036	Aa3/A+/A+	99.522	98.720	99.355	0.387	5.921
Goldman Sachs GP	GS.WB	5.750%	Oct 2016	Aa3/AA–/AA–	103.184	101.671	101.989	0.166	5.482
Walt Disney	DIS.HX	5.700%	Jul 2011	A3/A–/BBB+	102.131	101.865	102.058	0.158	5.183
R.R.Donnelley & Sons	DNY.GU	4.950%	Apr 2014	Baa2/BBB+/—	92.916	92.196	92.235	–1.115	6.302

FIGURE 2.7

Investment Grade Bond Listings

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Nợ thế chấp và chứng khoán đảm bảo bằng thế chấp
Mortgages and Mortgage-backed Securities

- Ra đời vào 1970s nhằm cải thiện tính thanh khoản cho các thể chế tài chính
- Sở hữu từng phần trong nhóm tài sản thế chấp (pool) hoặc một chứng khoán nợ cụ thể nào đó do nhóm đó đảm bảo
- Thị trường loại tài sản này đã từng có những khi tăng trưởng rất nhanh

Figure 2.8 Mortgage-Backed Securities Outstanding

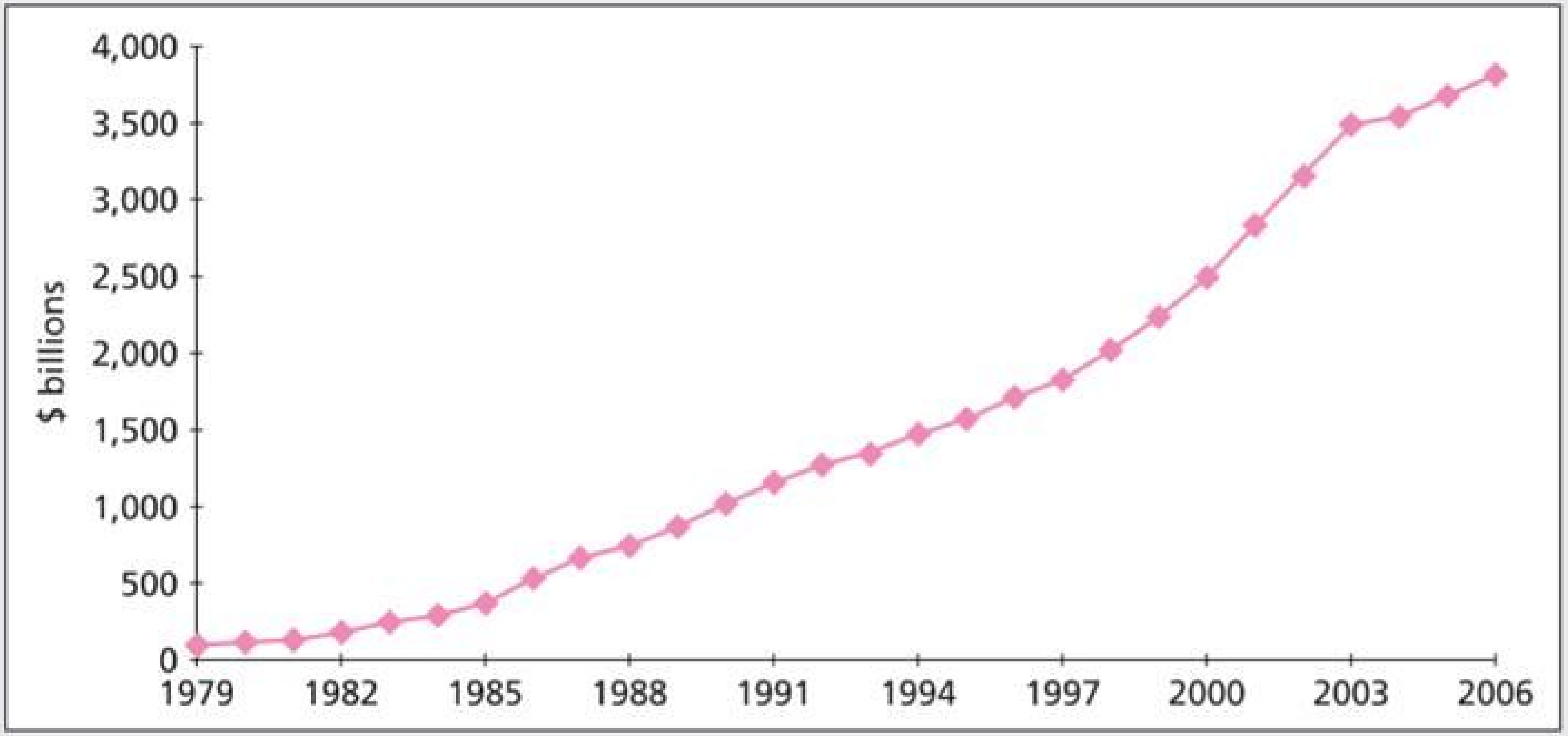

FIGURE 2.8

Mortgage-backed securities outstanding

Source: *Flow of Funds Accounts of the U.S.*, Board of Governors of the Federal Reserve System, September 2006.

2.3 CHỨNG KHOÁN VỐN – EQUITY SECURITIES

Thị trường cổ phiếu

- Common stock
  - Residual claim
  - Limited liability
- Preferred stock
  - Fixed dividends - limited
  - Priority over common
  - Tax treatment
- Depository receipts (phiếu gửi tiền): một **ngân hàng** Mỹ **thường phát hành** cho các **cư dân** Mỹ, **dựa vào việc cơ quan** NẮM GIỮ CÁC CỔ PHIẾU **thường** của một **công ty ngoại quốc**. **Người** giữ ADR **có quyền hưởng cổ tức của công** ty **ngoại quốc**

Figure 2.9 Stock Market Listings

FIGURE 2.9

Listing of stocks traded on the New York Stock Exchange

Source: From *The Wall Street Journal Online*, January 9, 2007. Reprinted by permission of Dow Jones & Company, Inc. via Copyright Clearance Center, Inc. © 2007 Dow Jones & Company, Inc. All Rights Reserved Worldwide.

NAME	SYMBOL	CLOSE	NET CHG	VOLUME	52 WK HIGH	52 WK LOW	DIV	YIELD	P/E	YTD% CHG
Gencorp	GY	13.59	–0.29	491,300	20.75	12.02	----	----	dd	–3.1
Genentech	DNA	83.68	–0.35	3,986,300	94.46	75.58	----	----	49	3.1
General Cable	BGC	42.67	–1.11	679,700	45.41	20.3	----	----	23	–2.4
General Dynamics	GD	74.59	0.17	1,497,300	77.98	56.68	0.92	1.2	16	0.3
General Electric	GE	37.56	–0.19	26,907,700	38.49	32.06	1.12	3	23	0.9
General Gwth Prop	GGP	51.51	–0.8	1,308,200	56.14	41.92	1.8	3.5	215	–1.4
General Maritime	GMR	34.56	–0.83	597,400	40.64	30.34	4.8	13.9	5	–1.8
General Mills	GIS	56.97	–0.42	1,355,600	59.23	47.05	1.48	2.6	18	–1.1
General Motors	GM	30.24	0.6	10,477,600	36.56	19	1	3.3	dd	–1.6
Genesco Inc	GCO	36.75	–0.9	127,900	43.72	25.5	----	----	15	–1.5
Genesee & Wyoming	GWR	25.86	–0.5	364,500	36.75	21	----	----	9	–1.4
Genesis Lease	GLS	23.6	0.1	298,500	24.4	23	----	----	----	0.4
Genuine Parts co.	GPC	46.86	–0.51	384,400	48.34	40	1.35	2.9	17	–1.2
Genworth Financial	GNW	33.79	–0.32	1,414,900	36.47	31	0.36	1.1	13	–1.2
Geo Group Inc	GEO	37.57	–1.53	157,500	40.3	14.69	----	----	35	0.1
Georgia Gulf	GGC	18.69	–0.38	479,000	34.65	18.36	0.32	1.7	6	–3.2
Gerber Scientific	GRB	12.32	–0.07	243,200	16.8	9	----	----	27	–1.9
Gerdau Ameristeel	GNA	8.59	–0.04	446,200	11.02	5.85	0.08	0.9	7	–3.7
Gerdau S.A. Ads	GGB	15.57	–0.56	1,729,100	18.16	11.27	0.58	3.7	----	–2.7

2.4 STOCK AND BOND MARKET INDEXES

Stock Market Indexes

- There are several indexes worldwide such as:
  - Dow Jones Industrial Average (DJIA)
  - Nikkei Average
- Offer ways of comparing performance of managers
- Base of derivatives

Factors for Construction of Stock Indexes

- Representative?
- Broad or narrow?
- How is it weighted?
  - Price weighted (DJIA)
  - Market weighted (S&P 500, NASDAQ)
  - Equal (Value Line Index)

Table 2.4 Data to Construct Stock Price Indexes

TABLE 2.4

Data to construct stock price indexes

Stock	Initial Price	Final Price	Shares (millions)	Initial Value of Outstanding Stock ($ million)	Final Value of Outstanding Stock ($ million)
ABC	$ 25	$30	20	$500	$600
XYZ	100	90	1	100	90
Total				$600	$690

DJIA Price-Weighted Average

- Using data from Table 2.4; example 2.2
  Initial value = \$25 + \$100 = \$125
  Final value = \$30 + \$ 90 = \$120
  Percentage change in portfolio value =
  Initial index value = (25 + 100)/2 = 62.5
  Final index value = (30 + 90)/2 = 60

  Percentage change in index =
  -2.5/62.5 = -.04 = -4%

S&P's Composite 500 Market Value-Weighted Index

- Using data from Table 2.4:
  - ABC would have five times the weight given to XYZ

Value Line
Equally Weighted Index

- Places equal weight on each return
- Using data from Table 2.4

  Start with equal dollars in each investment

  ABC increases in value by 20%

  XYZ decreases by 10%

  Need to rebalance to keep equal weights

Examples of Other Indexes - Domestic

- Dow Jones Industrial Average (30 Stocks)
- Standard & Poor's 500 Composite
- NASDAQ Composite
- NYSE Composite
- Wilshire 5000

Figure 2-10 Comparative Performance of Several Stock Market Indexes

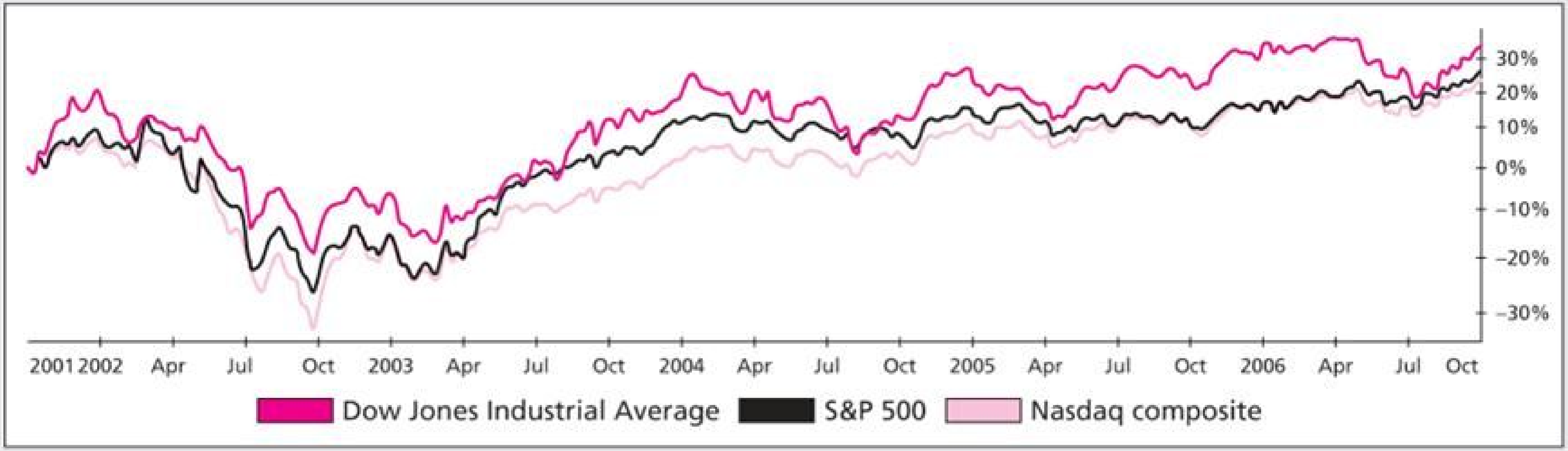

FIGURE 2.10

Comparative performance of several stock market indexes, 2001–2006

Examples of Indexes - International

- Nikkei 225 & Nikkei 300
- FTSE (Financial Times of London)
- Dax
- Region and Country Indexes
  - EAFE
  - Far East
  - United Kingdom

Table 2.6 Sample of MSCI Stock Indexes

TABLE 2.6

Sample of MSCI stock indexes

Regional Indexes		Countries	
Developed Markets	**Emerging Markets**	**Developed Markets**	**Emerging Markets**
EAFE (Europe, Australia, Far East)	Emerging Markets (EM)	Australia	Argentina
EASEA (EAFE excluding Japan)	EM Asia	Austria	Brazil
Europe	EM Far East	Belgium	Chile
EMU	EM Latin America	Canada	China
Far East	Emerging Markets Free (EMF)	Denmark	Colombia
Kokusai (World excluding Japan)	EMF Asia	Finland	Czech Republic
Nordic Countries	EMF Eastern Europe	France	Egypt
North America	EMF Europe	Germany	Hungary
Pacific	EMF Europe & Middle East	Greece	India
The World Index	EMF Far East	Hong Kong	Indonesia
G7 countries	EMF Latin America	Ireland	Israel
World excluding U.S.		Italy	Jordan
		Japan	Korea
		Netherlands	Malaysia
		New Zealand	Mexico
		Norway	Morocco
		Portugal	Pakistan
		Singapore	Peru
		Spain	Philippines
		Sweden	Poland
		Switzerland	Russia
		U.K.	South Africa
		U.S.	Sri Lanka
			Taiwan
			Thailand
			Turkey
			Venezuela

Source: MSCI, **www.mscibarra.com**. Reprinted by permission.

2.5 THỊ TRƯỜNG CÁC CÔNG CỤ PHÁI SINH

Derivative Securities

Options

- Basic Positions
  - Call (Buy)
  - Put (Sell)
- Terms
  - Exercise Price
  - Expiration Date
  - Assets

Futures

- Basic Positions
  - Long (Buy)
  - Short (Sell)
- Terms
  - Delivery Date
  - Assets