# Lecture 3: Introduction to portfolio management and institutional investors

In the next few lectures, the main focus is on the activities of institutional investors – pension funds, mutual funds and life insurance companies - that are the main players in securities investment in most countries. In this lecture we will focus on institutional investors as financial institutions and the reasons for their growth and development.

Definition: "specialised financial intermediaries managing saving collectively on behalf of small investors towards specific objectives in terms of risk, return and maturity of claims"

## Introduction - why focus on institutional investors?

- institutions' growing dominance of the financial system and markets
- main players in securities investment
- illustrate all principles necessary for understanding securities investment

#### **Features of institutional investors**

Risk pooling/diversification
Long term liabilities and scope for matching
Size
Countervailing power
Liquidity preference
Information

## The nature of institutional portfolio management

Asset management versus institutional investment
Fiduciary role
Principal agent problems
Herding?
Front and back office functions

- Front office:
  - Marketing
  - Fund management
- Back office:
  - Transactions processing and settlement
  - Systems support
  - Accounting and administration
  - General administration

Elements may or may not be "bundled"

#### The size of institutional sectors

Size and growing importance justifies our focus on institutions

Ratios to GDP and the size of the financial sector Estimates of the value of institutional

investment

Importance to personal sector assets, corporate liabilities and government debt holding

Comparing institutions' portfolios with those of households

Key cross-country contrasts and financial structure – overall trends are common across countries but stylised differences remain

# SIZE INDICATOR OF FINANCIAL STRUCTURE (TOTAL FINANCIAL CLAIMS AS A PROPORTION OF GDP)

	1970	1980	1990	2000	Change
					1970–
					2000
UK	4.7	4.9	8.9	11.0	6.2
UK excluding	4.7	4.2	7.9	9.7	5.0
Euromarkets					
US	4.1	4.1	5.9	8.4	4.4
Germany	2.9	3.6	4.7	7.9	5.0
Japan	3.8	5.1	8.5	11.9	8.1
Canada	4.7	5.1	5.8	6.6	2.0
France	4.4	4.8	6.9	11.4	7.0
Italy	3.4	3.9	4.3	7.1	3.7
<b>G7</b>	4.0	4.4	6.3	9.0	5.0

# FINANCIAL INTERMEDIATION RATIOS (INTERMEDIATED CLAIMS AS A PROPORTION OF THE TOTAL)

	1970	1980	1990	2000	Change
					1970–
					2000
UK	0.32	0.42	0.47	0.58	0.26
UK excluding	0.32	0.34	0.40	0.52	0.20
Euromarkets					
US	0.33	0.37	0.34	0.44	0.11
Germany	0.44	0.45	0.43	0.45	0.01
Japan	0.39	0.42	0.42	0.52	0.14
Canada	0.29	0.34	0.37	0.47	0.18
France	0.34	0.62	0.41	0.39	0.05
Italy	0.36	0.32	0.31	0.35	-0.01
G-7	0.35	0.41	0.38	0.45	0.10

# BANK AND INSTITUTIONAL INTERMEDIATION RATIOS (PROPORTION OF INTERMEDIATED CLAIMS HELD BY BANKS AND INSTITUTIONAL INVESTORS)

		1970	1980	1990	2000	Change
						1970–
						2000
UK	Bank	0.58	0.64	0.55	0.44	-0.13
	Institutional	0.28	0.26	0.32	0.38	0.10
United	Bank	0.58	0.58	0.42	0.21	-0.37
States						
	Institutional	0.31	0.31	0.40	0.44	0.13
Germany	Bank	0.84	0.86	0.83	0.73	-0.12
	Institutional	0.10	0.12	0.17	0.23	0.14
Japan	Bank	0.45	0.36	0.38	0.24	-0.21
	Institutional	0.10	0.10	0.16	0.17	0.06
Canada	Bank	0.45	0.55	0.44	0.38	-0.07
	Institutional	0.23	0.19	0.25	0.35	0.12
France	Bank	0.94	0.68	0.82	0.65	-0.29
	Institutional	0.05	0.04	0.19	0.46	0.41
Italy	Bank	0.98	0.98	0.95	0.64	-0.34
	Institutional	0.06	0.05	0.11	0.31	0.25
<b>G7</b>	Bank	0.69	0.66	0.63	0.47	-0.22
	Institutional	0.16	0.15	0.23	0.33	0.17
Anglo-	Bank	0.53	0.59	0.47	0.34	-0.19
Saxon	Institutional	0.28	0.25	0.32	0.39	0.12
Europe	Bank	0.80	0.72	0.74	0.56	-0.24
and	Institutional	0.08	0.08	0.16	0.29	0.21
Japan						

## INSTITUTIONAL INVESTOR CLAIMS AS A PROPORTION OF GDP

	1970	1980	1990	2000	Change
					1970–
					2000
United	0.42	0.37	1.02	1.93	1.51
Kingdom					
United	0.41	0.47	0.79	1.62	1.21
States					
Germany	0.12	0.20	0.33	0.84	0.71
Japan	0.15	0.21	0.58	1.03	0.88
Canada	0.32	0.32	0.52	1.10	0.79
France	0.07	0.12	0.52	2.04	1.96
Italy	0.07	0.06	0.15	0.76	0.69
<b>G7</b>	0.23	0.25	0.56	1.33	1.11
Anglo-	0.39	0.39	0.78	1.55	1.17
Saxon					
Europe	0.11	0.15	0.40	1.17	1.06
and Japan					

# The main types of institutional investor

Institutions are not homogeneous – differ in terms of the contractual relations of investors to managers in terms of distribution of return and risk, and definition of liabilities
Relative growth of institutional sectors

- Pension funds
- Insurance companies life and nonlife
- Mutual funds hedge funds
   Portfolios of the differing institutional sectors

The locus of risk bearing and nature of regulation – guarantees in defined benefit pensions and life insurance, absent in defined contribution pensions and mutual funds

### GROWTH OF U.S. INSTITUTIONAL ASSETS UNDER MANAGEMENT

	1990 (\$	1998 (\$	<b>Compound Annual</b>
	billion)	billion)	<b>Growth Rate (%)</b>
Pension funds	3124	7409	11.4
of which			
Private	1668	4060	11.8
Insured	636	1005	5.9
State and	820	2344	14.0
local			
Mutual fund	967	3396	17.0
Insurance	1328	2537	8.4
companies			
All	6322	15432	11.8
institutions			

### Institutional Investment, 1998

	Life In	surance	Pension	n Funds	Mutual	Funds	Total	
	(\$bn)	% of	(\$bn)	% of	(\$bn)	% of	(\$bn)	% of
		GDP		GDP		GDP		GDP
UK	1294	93	1163	83	284	20	2742	197
US	2770	33	7110	84	5087	60	14,967	176
Ger-	531	24	72	3	195	9	798	35
many								
Japan	1666	39	688	16	372	9	2727	63
Canada	141	24	277	47	197	34	615	105
France	658	43	91	6	624	41	1373	90
Italy	151	12	77	6	436	35	664	54
G-7	7212		9479		7195		23,886	

## INSTITUTIONAL INVESTORS, 1998 (PERCENT OF GLOBAL TOTAL)

	Life	Mutual	Pension	Total Iden-
	Insurers	Funds	Funds	tified
United States	17.9	12.3	3.9	11.5
Japan	38.4	75.0	70.7	62.7
Germany	7.4	0.8	2.7	3.3
France	23.1	7.3	5.2	11.4
Italy	2.0	2.9	2.7	2.6
United Kingdom	9.1	1.0	8.7	5.7
Canada	2.1	0.8	6.1	2.8
Total of above	100.0	100.0	100.0	100.0

### (PERCENT OF NATIONAL TOTAL)

	Life	Mutual	Pension	Total Iden-
	Insurers	Funds	Funds	tified
United States	47.2	42.4	10.4	100.0
Japan	18.5	47.5	34.0	100.0
Germany	66.5	9.0	24.4	100.0
France	61.1	25.2	13.6	100.0
Italy	22.9	45.0	32.0	100.0
United Kingdom	47.9	6.6	45.4	100.0
Canada	22.7	11.6	65.7	100.0
Total of above	30.2	39.7	30.1	100.0

### PENSION FUNDS' PORTFOLIO COMPOSITION, 1998

percent	Liquidity	Loans	Domestic	Domestic	Property	Foreign
			Bonds	Equities		Assets
UK	4	0	14	52	3	18
US	4	1	21	53E	0	11E
Germany	0	33	43	10	7	7
Japan	5	14	34	23	0	18
Canada	5	3	38	27	3	15
France	0	18	65	10	2	5
Italy	0	1	35	16	48	0

### LIFE INSURERS' PORTFOLIO COMPOSITION, 1998

Percent	Liquidity	Loans	Domestic Bonds	Domestic Equities	Property	Foreign Assets
UK	5	1	25	48	6	13
US	6	8	52	26	0	1
Germany	1	57	14	17	4	0
Japan	5	30	36	10	0	9
Canada	7	28	55	26	7	3
France	1	2	74	15	7	0
Italy	0	1	75	12	1	0

### OPEN-END MUTUAL FUNDS' PORTFOLIO COMPOSITION, 1998

Percent	Liquidity	Loans	Domestic Bonds	Domestic Equities	Property	Foreign Assets
UK	4	0	8	56	2	33
US	17	0	30	51	0	N.A.
Germany	10	0	22	18	0	29
Japan	23	18	27	9	0	22
Canada	20	3	18	31	0	23
France	29	0	37	20	0	14
Italy	19	0	54	22	0	0

# Institutions, financial development and the functions of the financial system

Financial system has a set of functions regardless of institutional form.

Evolution is adaptation and improvement in provision under pressure from competition

Functions of the financial system and the role of institutional investors

- Clearing and settling payments
- Pooling of funds
- Transfer of resources geographically and over time
- Manage uncertainty and control risk
- Price information
- Incentive problems

Can institutions undertake these functions more efficiently than banks?

# Institutions and financial development – corporate finance and the role of banks

How does the financial system evolve? Illustrate by corporate finance developments – sources for entrepreneur change as economy moves to modern financial system

- family
- bank debt
- equity
- bonds

The role of institutional investors

- comparative advantage over banks in equity and bond finance due inter alia to pooling, price sensitivity, corporate governance leverage (Lecture 7)

### Three stages of financial development

In all phases banks provide liquidity and payments services but locus of savings shifts

- bank oriented phase no institutional investors, household assets in bank deposits, corporate finance via loans, banks using private information
- market oriented phase institutions develop with bond and equity markets. Institutions using public information share monitoring of firms with banks
- securitised phase institutions dominant. Market provides bulk of finance to non financial sectors via bonds and commercial paper, mortgages and consumer credit securitised. Monitoring is by rating agencies, investment banks, analysts. Extensive risk management via derivatives.

# Supply and demand factors underlying growth of institutional investors

Link to the functions of the financial sector

How were assets held before the advent of institutions? – wealthy held diversified securities portfolio at high cost, uneconomic for those at lower wealth who held deposits Development of household sector portfolios

#### HOUSEHOLD SECTOR BALANCE SHEETS (% FIN ASSETS)

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		1970	1980	1990	2000	1970-2000
UK	Deposits	34	43	31	22	-12
	Bonds	07	07	01	01	-06
	Equities	24	12	12	17	-07
	Institutions	23	30	48	56	33
United States	Deposits	28	33	23	12	-16
	Bonds	13	10	11	07	-06
	Equities	36	21	14	25	-11
	Institutions	22	28	39	49	28
Germany	Deposits	59	59	48	34	-25
	Bonds	08	12	16	10	03
	Equities	10	04	07	16	06
	Institutions	15	17	21	34	19
Japan	Deposits	55	69	60	54	-01
•	Bonds	06	09	09	08	02
	Equities	12	07	09	03	-09
	Institutions	14	13	21	31	17
Canada	Deposits	31	38	36	25	-06
	Bonds	14	08	05	05	-09
	Equities	27	24	21	27	00
	Institutions	22	21	28	41	19
France	Deposits	49	59	38	25	-23
	Bonds	06	09	04	02	-04
	Equities	26	12	26	37	12
	Institutions	06	09	26	23	18
Italy	Deposits	45	58	35	25	-21
	Bonds	19	08	19	19	-01
	Equities	11	10	21	26	14
	Institutions	08	06	08	30	22
<b>G7</b>	Deposits	43	52	39	28	-15
	Bonds	10	09	09	07	-03
	<b>Equities</b>	21	13	16	22	01
	Institutions	16	18	27	38	22
Anglo-Saxon	Deposits	31	38	30	20	-11
	Bonds	11	08	06	04	-07
	<b>Equities</b>	29	19	16	23	-06
	Institutions	22	26	38	49	27
Europe	Deposits	52	62	45	35	-18
and Japan	Bonds	09	10	12	10	00
_	<b>Equities</b>	15	08	15	20	06
	Institutions	11	11	19	29	19

### Structural supply-side aspects

"Ways institutions fulfil functions more effectively"

#### economies of scale

- indivisibilities
- transactions and management costs
- countervailing power
- insurance
- diversification and risk pooling fiscal and regulatory aspects
   What are the costs of institutional investment? (marketing costs, principalagent problems)

### **Recent developments:**

Deregulation of markets and portfolios Technology new instruments alternative products unattractive bull market till 2000 and equity culture (now what?)

#### **Demand side factors:**

"Reasons households enhanced demand for functions institutions fulfil"

### Demographic aspects

- existing fall in birth rates and rise in life expectancy
- effects on the high-saving groups
- prospective population ageing

#### LIFE EXPECTANCY AT BIRTH

Years	1970–	1980–	1990–	2000
	1975	1985	1995	
United Kingdom	72	74	76	78
United States	73	75	77	77
Germany	71	73	76	77
Japan	74	77	79	81
Canada	73	76	78	79
France	72	75	78	79
Italy	72	75	78	79

#### **FERTILITY RATES**

Number of	1970–	1980–	1990–	2000
Children per	1975	1985	1995	
Female				
United Kingdom	1.8	1.8	1.8	1.7
United States	1.8	1.8	2.0	2.1
Germany	1.5	1.4	1.2	1.4
Japan	1.9	1.8	1.5	1.4
Canada	1.8	1.7	1.9	1.6
France	1.9	1.8	1.7	1.7
Italy	2.2	1.4	1.3	1.2

### PROJECTIONS OF ELDERLY DEPENDENCY RATIO TO 2050

### Population 65 and over as a Percentage of Population Aged 15–65

	1960	2000	2035	2050
United	17.9	26.6	44.6	45.3
Kingdom				
United	15.4	21.7	38.2	37.9
States				
Germany	16.0	26.6	54.1	53.2
Japan	9.5	27.7	53.9	64.6
Canada	13.0	20.4	42.2	45.9
France	18.8	27.2	47.5	50.8
Italy	13.3	28.8	56.8	66.8

### Pressures on pension systems

- rises in pension expenditures
- discounted social security liabilities Resultant savings projections – effects ambiguous

Non demographic aspects – wealth accumulation

### PROJECTIONS OF PENSION COSTS (OECD ESTIMATES)

Pension expenditure/ GDP	1995	2000	2010	2020	2030	2040
United Kingdom	4.3	4.3	4.1	3.9	4.3	4.1
United States	4.9	4.4	4.3	5.4	6.2	6.3
Germany	11.7	11.8	11.2	12.6	15.5	16.6
Japan	6.8	7.9	8.6	8.5	7.5	8.2
Canada	5.3	5.1	6.0	7.6	9.6	10.4
France	12.2	12.1	13.1	15.0	16.0	15.8
Italy	13.4	14.2	14.3	14.9	15.9	15.7

Source: Dang et al. (2001).