# **Financial Education in Japan**

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Tokyo, 22-23 January, 2015

# **Characteristics of Asia**

- 1, Bank dominated asset allocation
- 2, Financial Education to prepare for Age
- 3, Financial Education in Schools in Japan

#### **Survey to 4462 teachers**

**Promotion of Financial Education, Council** 

- 4, Loan Sharks (Money Lenders)
- 5, SME (Small enterprises) education in finance

6, New Channels to provide fund to SMEs and Startup businesses (Risks and Returns)

### Financial Education in Schools (Japan)

- 1, Secondary School (7<sup>th</sup>-9) and High School (10-12<sup>th</sup>) taught in the courses of "Civics, Home-economics" Many teachers are not well trained in the subject.
- 2, Financial education in Japan's primary school is taught at "Home making courses".
- 3, Very few hours are allocated to financial education
- 4, It is regarded as a shame to make money by financial investments.
- 5, Retiree from financial institutions could teach financial economics to students. Video lectures

### Survey on Financial Education in Schools (Japan)

Study Group on the Promotion of Financial and Economic Education (Chairman: Professor Yoshino)

(Secretariat : Japan Securities Dealers Association)

**[Target]** Total distributed questionnaires: **32,220** 

Teachers at almost all junior high schools (JHS) and high schools (HS) in Japan, who teach finance-related subjects, such as Social Studies(JHS), Technology and Home Economics (JHS), Civics(HS), Home Economics(HS), Commerce (HS).

[Response] 4,462 questionnaires (13.8% response rate)[Survey Period] From December 2013 to January 2014.[Report in English]

Available at

http://www.jsda.or.jp/en/newsroom/researches-studies/files/20140827edu.pdf

### Teachers' majors in college

(0/)

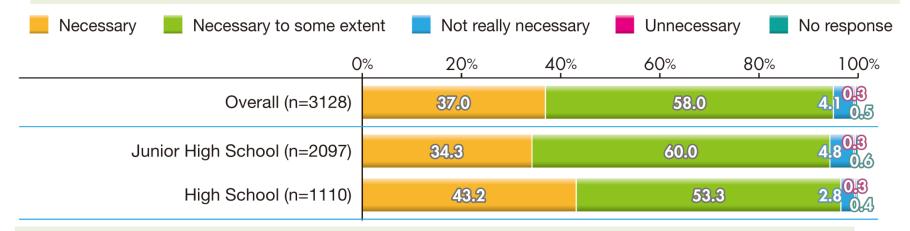
							(%)
	Economics,	Literature	Law	Social	Education	Home	Science and
	business	and foreign		sciences		economics	engineering,
	management,	languages				and	others
	and					human life	
	commerce					sciences	
Junior high school	17.2	23.8	13.5	8.8	32.7	0.3	1.1
social studies							
Junior high school		2.0			24.2	<b>FR C</b>	
technology and	0.3	2.8	0.1	0.3	31.2	57.6	5.4
home economics							
High school civics	25.7	24.3	19.8	10.0	15.7	0.2	1.6
High school	0.4	1.4	0.3	0.1	21.5	73.6	0.9
home economics	0.4	1.4	0.5		21.3	73.0	0.9
High school	95.7	2.1	0.7	0.7	_	0.7	
commerce	55.7	2.1	0.7	0.7	_	0.7	_

Only 20 % of junior-high-school teachers in charge of financial education graduated from Department of Economics, Business, or Commerce. Even regarding high-school-civic teachers, only 25% of them graduated from School of Economics, Business, or Commerce.

Because of teaching license system, many people not majoring in economics in college are expected to teach finance in school. <sup>5</sup>

#### Teachers Agree on Necessity of Financial and Economic Education

What do you think about financial and economic education being taught in schools?



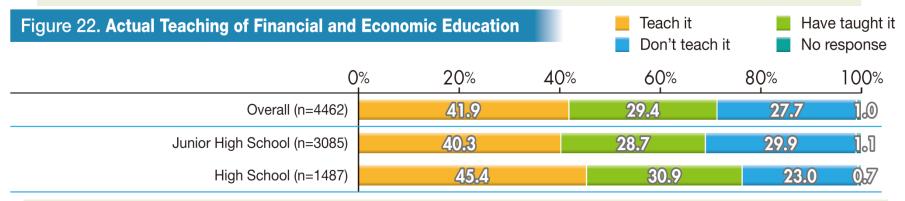
#### Reasons Why Financial and Economic Education Is Necessary

(%)

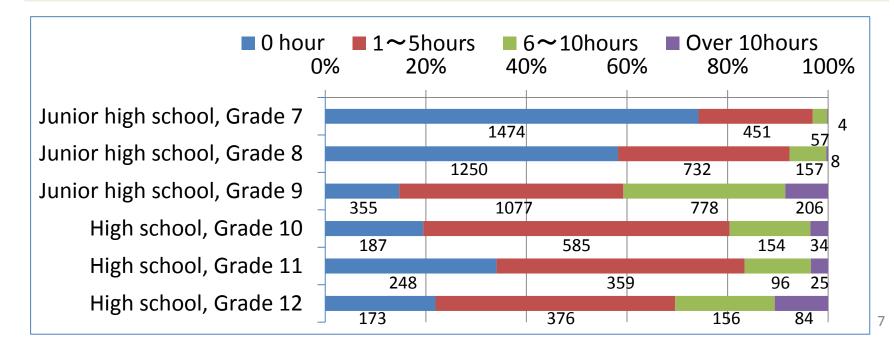
	Number of	Gain the	Gain an	Become	Gain a
	questionnaires		understanding		correct
		required to	of the workings		sense of
		be a smart	of society	individual in	
		consumer		future	of money
Overall	4241	73.5	44.8	38.9	24.6
Junior high school	2909	77.2	43.7	36.2	24.6
High school	1436	65.7	47.8	44.6	23.7

#### Finance is Taught, but for Few Hours.

#### Do you actually teach financial and economic education?



#### Actual Time Spent Teaching Financial and Economic Education



#### Teachers Agree More Time Needed.

# Do you think that sufficient time is allowed for teaching financial and economic education?

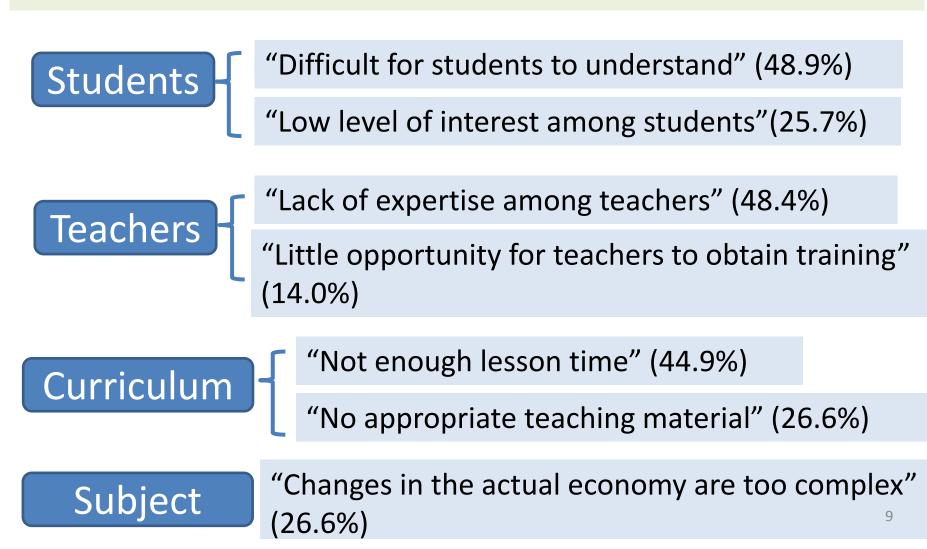
Sufficient	Somewhat sufficient		Somewhat ins	ufficient	Insufficient		No response
	0	%	20%	40%	60%	80%	100%
	Overall (n=3128)	<b>7.2</b>	32.3		46.9		<mark>12.1</mark> 1ຜິ
J	unior High School (n=2097)	8.1	36.2		45.1		9.1 1.5
	High School (n=1110)	<mark>5.3</mark>	24.6		50.8		<mark>17.7</mark> 1ຜິ

# What do you think are the reasons for not enough time being allowed for teaching this subject?

		Number of questionn aires	No room in the current education plan	Teachers lack expertise in the subject	There are other more important subjects	Little coverage in textbook	School unused to teaching the subject
Overall		1845	84.7	32.5	25.3	24.3	5.9
	Junior high school	1136	84.2	34.2	23.2	27.6	6.0
	High school	760	85.3	29.1	28.6	18.7	6.1

### Various Issues to Teach Finance in School

Do you encounter any difficulties when teaching financial and economic education in your lessons?



# Do you encounter any difficulties when teaching financial and economic education in your lessons?

		By scho	ol type
	Overall	Junior high	High school
Number of questionnaires	4462	school 3085	1487
Difficult for students to understand	48.9		
Lack of expertise among teachers	48.4		
Not enough lesson time	44.9	44.4	46.2
Changes in the actual economy are too complex	37.8	38.9	35.0
No appropriate teaching material	26.6	28.3	23.2
Low level of interest among students	25.7	22.4	33.0
Little opportunity for teachers to obtain training	14.0	13.6	14.9
School unused to teaching the subject	5.2	5.4	4.5
Difficult to obtain understanding of parents or guardians	0.2	0.3	0.1
Others	1.0	0.9	1.1
No response	1.6	1.6	1.8

# Empirical Investigation on factors affecting teachers' ability and involvement about financial education

# Who actually teach finance in schools?

Dependent variable: Dummy variable, which is unit if he/she chooses "teach it" or "have taught", and zero if not.
Independent variables: Gender, Age,

Living prefecture, Teaching subject, and Major in university.



#### Logistic regression estimated

	coefficient	standard error	p-value
Male	-0.323	0.118	0.006
Age20	-0.505	0.285	0.077
Age30	-0.105	0.279	0.707
Age40	-0.014	0.276	0.961
Age50	0.078	0.276	0.778
F5_1	-0.012	0.171	0.945
F5_2	-0.72	0.183	0.000
F5_3	-0.204	0.182	0.262
F5_4	0.124	0.192	0.517
MAJ2	0.214	0.305	0.484
MAJ3	-0.086	0.174	0.622
MAJ4	-0.417	0.149	0.005
MAJ5	-0.198	0.142	0.165
MAJ6	-0.307	0.197	0.120
MAJ7	-0.904	0.537	0.092
MAJ8	-0.268	0.172	0.120
MAJ9	-1.41	0.458	0.002
MAJ10	-0.899	0.265	0.001
constant	2.234	0.373	0.006

Coefficients for 46 prefecture dummies are not reported due to space limitation.

#### By Logistic regression model, we find that,

- ✓ <u>Male Dummy</u> (1 % sig. ): **Male** teachers tend not to teach finance.
- ✓ <u>Age Dummies (all, insig.)</u>: Age seems not to affect probability.
- ✓ <u>Prefecture Dummies</u> (10 of 46, sig. at 1%): There are some differences among prefectures. Teachers in **Tokyo** are more likely to teach finance than these 10 prefectures.
- ✓ <u>Subject Dummies</u>: (F5\_2, sig.) Those teaching technology and home economics in junior high school tend not to teach finance.
- Major Dummies: (MAJ4, sig.) Teachers majoring particularly in Literature and foreign languages tend not to teach finance, compared with teachers majoring in Economics.

MAJ1 Economics and business management	MAJ6 Social sciences	
MAJ2 Commerce	MAJ7 Foreign languages	
MAJ3 Law	MAJ8 Home economics and human life	
MAJ4 Literature	sciences	
MAJ5 Education	MAJ9 Science and engineering	
	MAJ10 Others	-

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# Who regard that the lack of expertise among teachers is one of difficulties for teaching finance in schools?

**Dependent variable**: Dummy variable, which is unit if he chooses "the lack of expertise among teachers" as one of difficulties, and zero otherwise.

Independent variables: Same as before.

By Logistic regression model, we find <u>that MAJ4, MAJ5, MAJ6, MAJ8, MAJ9,</u> <u>MAJ10 are significant.</u>



Teachers' majors in college significantly affect the recognition of the lack of expertise.

	coefficie	standard	p-
	nt	error	value
Male 💦	-0.33	0.103	0.001
Age20	0.509	0.258	0.048
Age30	0.35	0.25	0.162
Age40	0.372	0.246	0.131
Age50	0.379	0.246	0.124
F5_1	-0.424	0.154	0.006
F5_2	-0.112	0.165	0.499
F5_3	-0.562	0.166	0.001
F5_4	-0.245	0.172	0.155
MAJ2	0.156	0.249	0.530
MAJ3	0.216	0.158	0.173
MAJ4	0.779	0.137	0.000
MAJ5	0.641	0.129	0.000
MAJ6	0.597	0.179	0.001
MAJ7	1.124	0.567	0.048
MAJ8	0.54	0.157	0.001
MAJ9	1.202	0.469	0.010
MAJ10	0.922	0.268	0.001
Cons.	-0.632	0.321	0.049

Coefficients for 46 prefecture dummies are not reported due to space limitation. 13

#### Who actually teach "Role of stock market" in schools?

- **Dependent variable**: Dummy variable, which is unit if he chooses "I teach 'role of stock market'", and zero if not.
- Independent variables: Same as before.
- By Logistic regression model, we find significantly negative coefficients for the dummy variables regarding majors in "Education" and "Home economics and human life sciences." In sum, these graduates tend not to teach finance, after controlling gender, age, prefectures, and subjects.



Many teachers in charge of finance education did not major in economics in college. It is very important to support teachers who are not familiar with finance and feel difficulties in teaching finance.

### **Summary of Our Survey**

- Most teachers at junior high and high school agree on the necessity of financial and economic education.
- However, very few hours (i.e., less than 5 hours annually) are normally allocated to financial education.
- About 60% of respondents think that sufficient time is not allocated for financial education, particularly because of the current educational plan.
- > Lack of expertise among teachers are also addressed.

- Need to change the official education guidance to increase teaching hours for financial education.
- ✓ Need to support teachers (e.g., by providing appropriate teaching materials and training opportunity).

#### (References: Further interesting results from the Survey)

What knowledge, abilities, and attitudes do you think should be taught to students through financial and economic education?

		By scho	ol type
	Overall	Junior high school	High school
Number of questionnaires	4462	3085	1487
Importance of money and planning methods	43.8	47.3	35.6
Life planning and household budget management	36.6	33.3	43.8
Working and money	35.9	35.9	36.0
Consumer rights and responsibilities	46.0	51.5	34.2
Consumer issues and consumer protection	47.2	49.8	41.7
Civil awareness of consumption	17.9	19.3	14.8
Credit, loans, and securities, etc.	36.4	31.9	46.1
Risk management (risks that need to be covered by insurance)	5.9	4.4	9.5
Pension systems	13.1	9.7	20.6
Others	0.3	0.1	0.7
Nothing in particular	0.2	0.2	0.3
No response	0.5	0.6	0.5

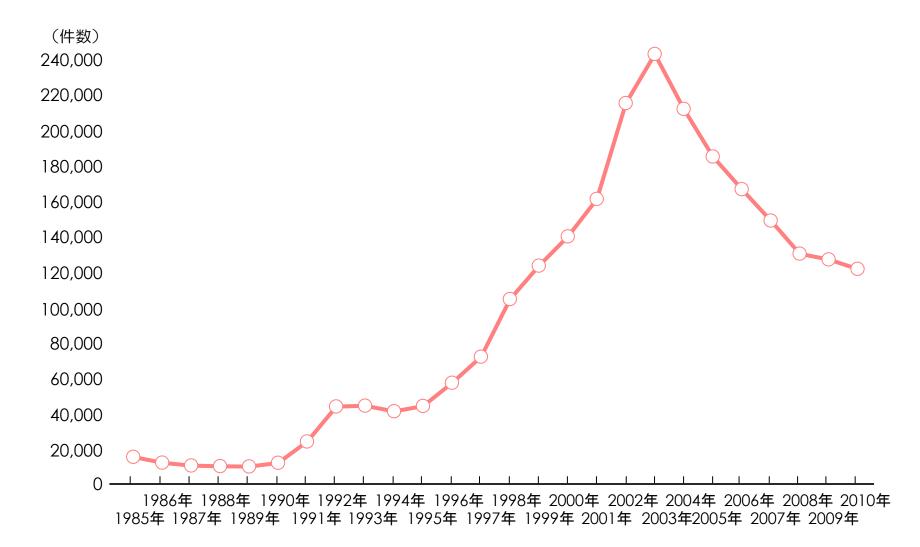
# What type of content have you taught in the lessons you have given on financial and economic education?

Topics in Einspeial and Economic		By school type		
Topics in Financial and Economic Areas	Overall	Junior high school	High school	
Number of questionnaires	4054	2781	1372	
Basic economic mechanisms	55.6	51.0	65.4	
Role of companies and corporate social responsibility	28.2	26.1	32.7	
Flow of capital (money)	26.8	24.2	32.2	
Public finance	34.8	36.9	30.0	
Role of the stock market	25.6	27.7	20.8	
Banking business	29.2	32.4	22.2	
Function of insurance	8.8	4.0	19.3	
Others	0.3	0.2	0.4	
Nothing in particular	14.0	17.1	7.7	
No response	7.4	8.7	4.8	

# What kind of problems do you see with the study content of current financial and economic education lessons?

		By scho	ol type
	Overall	Junior high school	High school
Number of questionnaires	3128	2097	1110
Focus on understanding terminology or systems makes it difficult for students to relate lessons to their actual lives	55.0	55.6	53.7
Students learn the information, but find it difficult to pick up abilities or attitudes	40.9	42.1	37.4
Financial and economic education is relegated to specific grades and timeframes, making it impossible to have ongoing studies in the subject	31.6	32.3	30.9
There is little practical knowledge, such as types of interest rates or financial products and the relationship between risk and return	28.3	24.7	35.0
Difficult for students to gain any basic skills needed to be independent, such as managing income and expenses and savings	22.2	20.7	24.8
Do not see any particular problems	5.5	6.0	4.1
Others	3.1	2.7	3.8
No response	2.3	2.3	2.3

# Number of Households' Default



# New Law – Microcredit Regulation hotline from Consumers (FSA)

- 1, Total Amount of Borrowing < 1/3 of Income
- 2, Ceiling Interest Rate = 20% more than 96%  $\rightarrow$  29%  $\rightarrow$  20%
- **3, Borrowers Information**

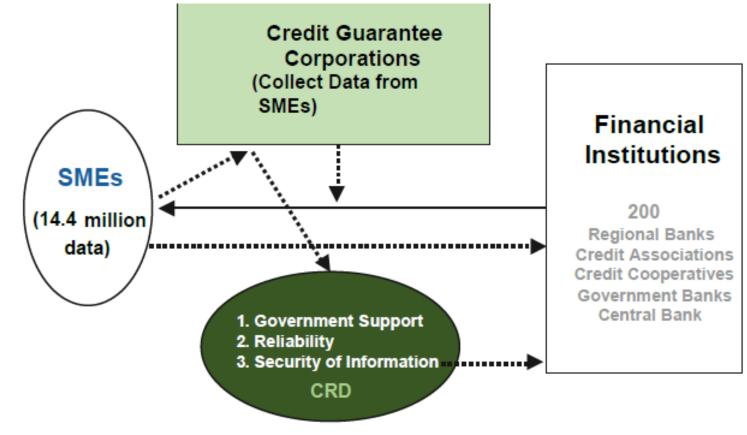
Aggregated total individual borrowings

- 4, Paper examination to be a money lender
- 5, Minimum capital requirement
- 6, Set up of Self regulatory organization

# **Financial Education for SMEs**

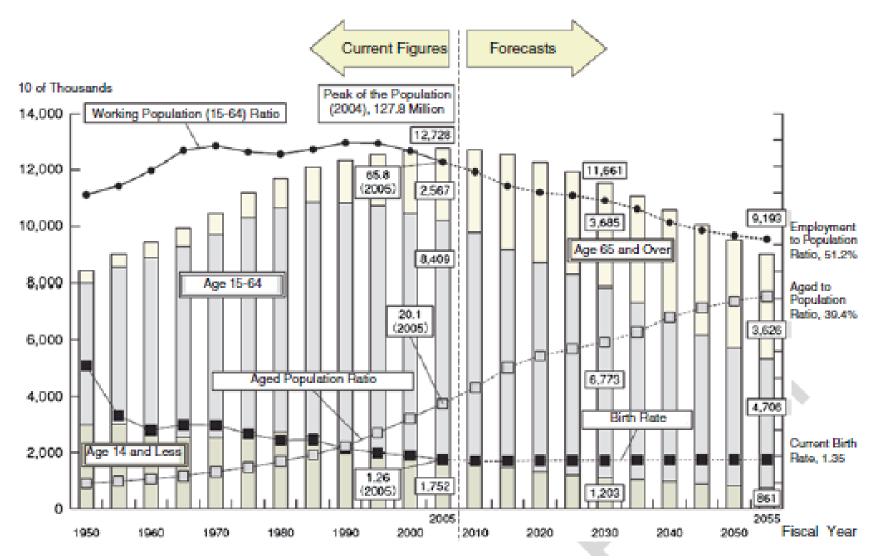
- 1, Book Keeping
- 2, Daily revenue and expenses
- **3, Long term thinking**
- **4, Accurate reporting of their business**
- 5, Reduce default loan losses
- 6, Reduce information asymmetry

#### **Credit Risk Database of SMEs** *Financial Education for SMEs*



Source: Yoshino (2012).

## Population Ageing of Japan

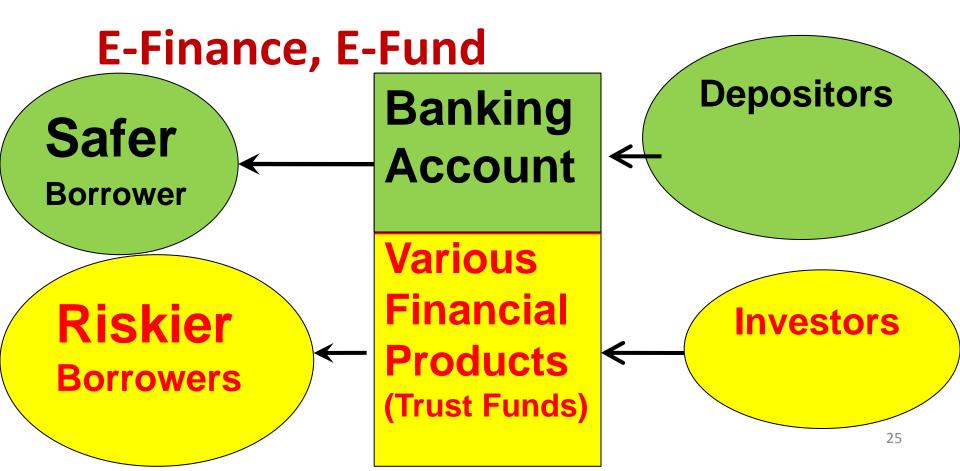


# Financial Education to prepare for old age

- 1, Government Support --- Pension System Need to develop 401K (Self protection for asset allocation)
- 2, Life Insurance --- long term savings by individuals to prepared for their retirement
- 3, long term institutional investors infrastructure investment (long-term funding)
- 4, Various financial products will be sold in Asia
- 5, Risks and Returns, individual financial education

Start up businesses and SME financing by Hometown Investment Trust Funds

- 1, Bank Loans --- relatively safer borrowers
- 2, Hometown Investment Trust Funds -- SME



# Risks and Returns Financial Education

- Hometown Investment Trust Funds
   Supply of risk capital in rural region
   Basel Capital Requirements -- safer borrowers
- 2, Agricultural farmers
- 3, Small business, Start-up companies
- 4, Individual Investors in the region Mutual assistance, Creation of jobs

### Investors

**Community Type Infrastructure SME Hometown Trust Fund** Wind power Generator Funds **Japanese Wine Fund Local Airport Agricultural Sector** Large Projects and Professional Investors **Pension Funds (Financial Education) Insurance companies Mutual Funds** 27

## Macroeconomic effects of Financial Education

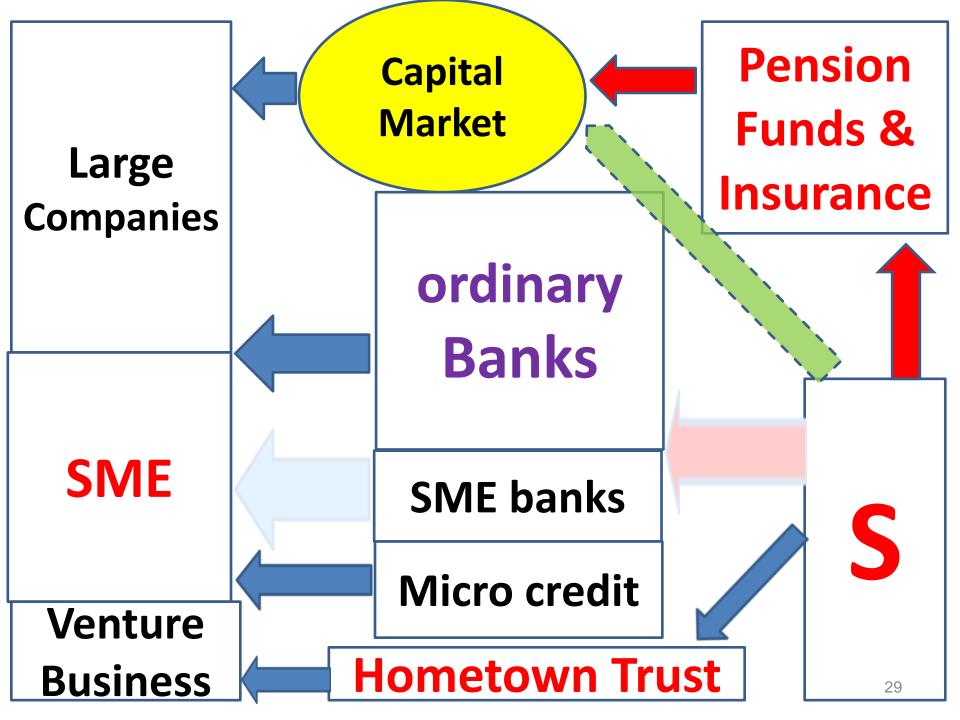
1, Households

Rate of return on Assets will rise

Long term perspectives

Borrowing behavior will be improved

- 2, SMEs financing behavior will be improved
- 3, Efficient allocation of financial assets
- 4, Expected future growth will rise
- 5, Risks and Returns



# **Transmission of Financial Education**

- S = D + B = (Deposits) + (Capital market)
- Y = A F (L, K) ..... Production Function
  - A = A(D,B)  $K = K_D + K_B = Loan + bond&stocks$
- Y = C (Yd) + I + G + EXP-IMP ..... Aggregate Demand
- $I = I_D + I_K$  Yd = Wage Income + Return from Savings
- $\rightarrow$  Wider asset allocation
- $\rightarrow$  Higher Aggregate supply and aggregate demand
- $\rightarrow$  risks will be transferred to individuals
- $\rightarrow$  Expected GDP will go up
- $\rightarrow$  Volatility of the Economy will also rise

**Financial Education Promotion Council** What kind of subjects and items should be taught at each level of school education ?

Chair Person, Naoyuki YOSHINO

**Central Bank of Japan** 

Financial Services Agency (FSA)

**Ministry of Education** 

**Consumer Protection Agency (Government of Japan)** 

**Bankers Association of Japan** 

**Securities Dealers Association** 

**Insurance Association** 

**Trust Bank Association** 

**Investment Trust Association** 

**Financial Planners Association** 

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