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COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

What Lessons Do the Lost Two Decades of the Japanese Economy Give for the Other Economies?[1]

Shinichi Ichimura (Professor emeritus, Kyoto University)

Abstract

During the recent three decades, 1980~2010, the Japanese economy has experienced a period of rapid growth followed by two stagnant decades with serious financial distress and continuous deflation. In this process, Japan established a strong base for manufacturing industries in the world but could not handle the external shocks—the Plaza Accord, the rise of China, the Asian financial Crisis and the 2008 Financial Crisis—and adjust its economy to the dramatic changes in the energy/resources and financial markets. This paper sums up the representative views of Japanese economists on these problems and then presents the author's own opinions. A sharp and continuous decline of economic growth was caused not only by external events but also aggravated by the mismanagement of private and public agencies, particularly in the financial sector. The author relies on a number of outstanding works by Japanese and foreign economies like Mitsuo Saito (1927-2010), *The Japanese Economy*, WSPC, 2000.; 3 volumes edited by Fumio Hayashi, *Positive Analysis and Design of Economic Institutions* (J). Keiso Shobo, 2007, besides his own studies: *Political Economy of Japanese and Asian Development*, Springer-Verlag and Sobun-sha, 2003 and other essays. One important work is Tadao Kagono, *The Spirit of Management* (J), Japan Productivity Center Pub. Co., 2010 which pointed out that the Japanese government made a mistake in reforming the Corporation law, at the suggestion of the US government, to change the behavior patterns of Japanese entrepreneurs toward less risk-taking when more outward-looking behaviors are required in this uncertain world nowadays, and lost the precious traditional spirit of Japanese-style management. All other important references are given at the end of the paper with a statistical appendix.

Key Words: External shocks to the Japanese economy, Plaza Accord, Asian financial crisis, Bankruptcy of Lehman Brothers, Inefficiency of banks and financial sector, Declining rate of capital formation, Declining technological innovations, Declining fertility rate, Insufficient supply of loanable funds to small and medium-sized enterprises.

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1 This paper was originally presented at the 38th International Conference of the Korean Academy of Sciences in Seoul on October 21, 2011.

I. A Steady Decline of Japanese Economic Growth: 1970 - 2010

Table 1 summarizes the performance of Japanese economy from 1945 to the present. After the post-WWⅡrecovery, rapid growth continued up to 1972. Then the oil shocks and Nixon shocks (revaluation of Yen and rapprochement with China)

Table 1: Per iodization of Postwar Japanese Political Economy and the Growth Rates

	Sub-periods of postwar years	GDP/pop	¥/$ rate	growth rate
1	1945~52: the Occupation Period	$ 380	¥ 360	5.0 %
2	1952~60: the Reconstruction Period	$ 760	¥360	9.2 %
3	1960~70: the Rapid Growth Period	$ 966	¥360	10.4 %
4	1970~80: the Shock Period	$ 4789	¥217	5.2 %
5	1980~90: the Internationalization Period	$ 14,387	¥ 141	3.8 %
6	1990~2000: the Reform Period	$ 32,496	¥ 110	1.1 %
7	2000~10: the Globalization Period	$ 53,581	¥ 85	0.65 %

notes: 1. GDP per capita in $ is calculated by deflating the nominal Japanese GDP in terms of current exchange rates given in IMF *International Financial Statistics* as the mean over a decade, except for $380 is for 1948 and $ 760 is for 1956. Hence, they reflect the revaluation of ¥/$ rates, 2. The growth rates of real GDP are calculated as an annual average in each period from real GDP's in Japanese Yen. Data Sources: S. Ichimura [3] and Appendix to this paper.

hit Japan in the 70s. Its growth rate suddenly dropped to half: 5.2 % and continued down, down to as low as 1 % now. In the 80s, however, she still kept a satisfactory rate of growth as a developed economy around $ 15,000- per capita GDP. Then came the *Plaza Accord* in September 1985 which forced Japan to revalue the yen and ignited the so-called *bubble economy* bursting in 1991 through 92. Another challenge in the 80a was the success of Den Xiao Ping's *Open and Reform* in China. In 1997 occurred Asian Financial Crisis in Thailand and later spread to other countries. Then came the Lehman Brothers crisis in 2008, which soon spread all over as the World Financial Crisis until now. Thus the steady decline of Japanese growth in the past seems to be at least partly caused by a series of external shocks and the economic crises originating abroad. One could ask if the Japanese government policies would have been appropriate to maintain the growth rate better. One should notice that there were three unique characteristics associated with the Japanese economic decline of growth.

(1) Rapid revaluation of Japanese Yen *vis-a-vis* US$ (¥360 to ¥77 now over 40 years) or European currencies nearly five times or more. No other hard currency experienced such a high revaluation.

(2) Deflation accompanied the slow growth after the *burst of bubble* in the mid-90s for almost 20

years.

(3) The *fertility rate* has declined rapidly and *life expectancy* became the longest in the world, making the ratio of active labor force to population became the lowest in the world. Recently the total population began to fall.

II. Changes in Growth Factors for the Lost Two Decades

For the rapidly growing period: 1945-1972, my paper: "The Challenge of the Rising Sun," in *Quadrant*, an Australian journal in 1970[2] identified ten factors for growth that are shown in Table 2.

Table 2: Changes in Growth Factors in pre- and post-Bubble Periods

	Favorable Factors for Rapid Growth	Changes after 1990
1	High Rate of Capital Accumulation,	↘
2	High Propensity to Save	→
3	Industrious, Well-educated Labor	↘
4	Rapid Increase in Agricultural Productivity,	↘
5	Borrowed and Improved Technology	↘
6	Appropriate Choice of Industrial Composition	→
7	Capable Bureaucrats and Cooperation with Private Enterprises	→
8	Group Loyalty of Japanese Employees	↘
9	Positive Roles of Banks and Close Relations with Private Enterprises	↘
10	Political Stability	↘

Notes: 1) ↘ implies that the factor declined, and → implies that the factor remained unchanged. 2) Some new factors emerged as important to determine the growth path in the lost two decades. They are discussed in Section III.

Table 3: Ten Growth Factors during the Lost Two Decades

No.	Factors	Studies Based
1	The low rate of capital accumulation	Horioka[2];OECD data
2	The propensity to save did not change very much.	Horioka [2]
3	Low fertility, aging population, and shorter working hours	Saito [13],
4	Weakening of primary industries	
5	technological innovations slow down	[2] and [11]
6	Insufficient adjustment of Industrial composition to meet Chinese and Korean challenge	[2] and [3]
7	Insufficient reform of bureaucratic system and deregulation	

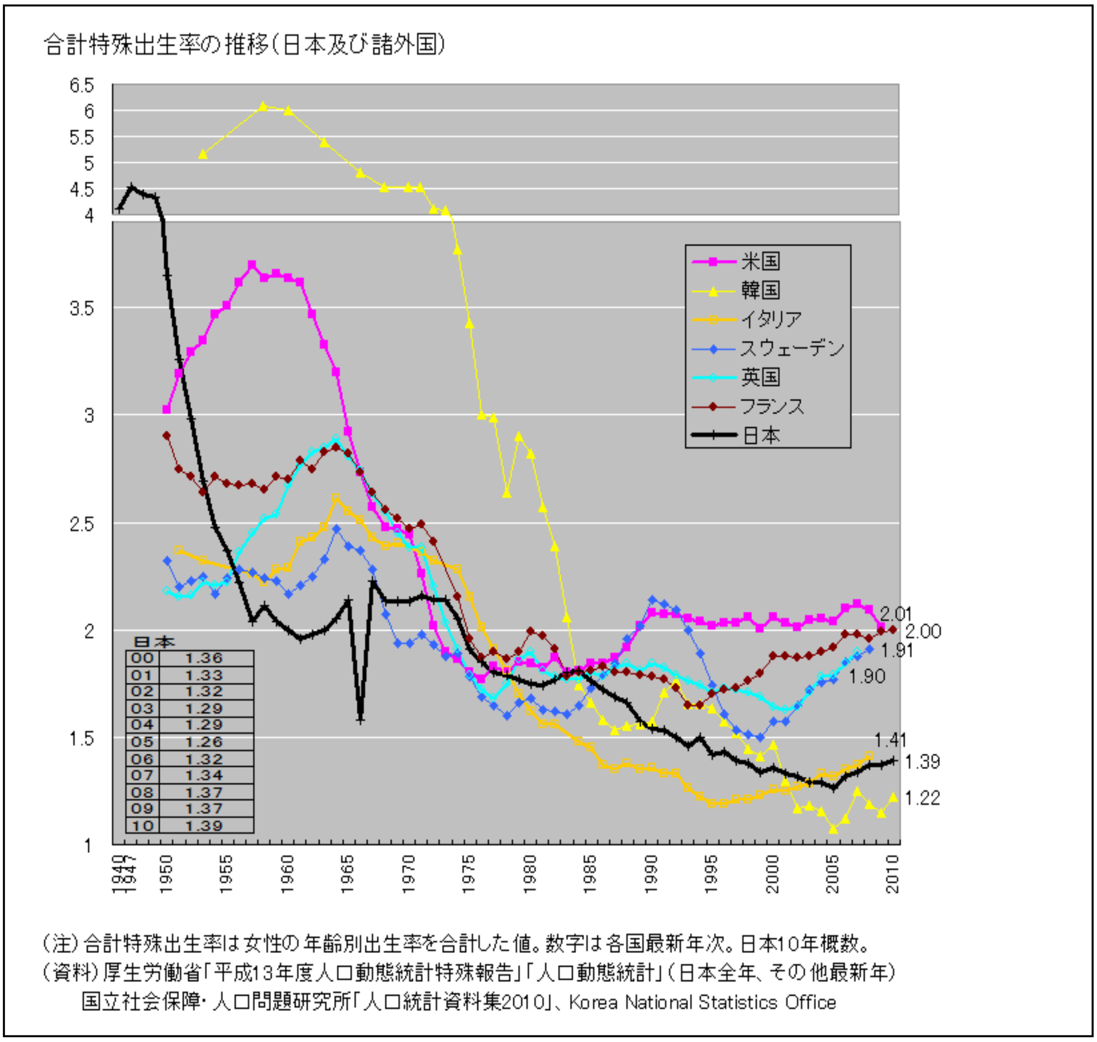
2 It is reproduced as Chap. 2 in Ichimura [4].

8	Failure in reforming private enterprises d	Kagono [7]
9	Poor working of financial and fiscal administration	[1], [10]~ [15]
10	Political instability	[1] vol. III, [4]

They worked in a virtuous circle then but gradually disappeared in the 70s and later and . During the lost two decades, the same factors could no longer work as well as before. The political economy of the domestic conditions and the international circumstances greatly changed and caused a sharp and steady decline of Japanese growth rates. The arrows in the last column of Table 2 show their direction of changes. How the roles of these factors have changed after 1990 has been studied by many academic and government economists in Japan and abroad[3].

[3] Hayashi [1] gives references to many articles by Japanese and foreign economists .

Figure 1: The Fertility Rates of Japan and Other Countries



Sources: Ministry of Welfare and Labor, *Special Report on Statistics of Population Dynamics*, 2001; *Statistics of Population Dynamics*, all years; Institute of Population Problems, *Sources of Population Statistics*, 2010; Korea National Statistics Office.
Note: Line colors: Purple—USA; light yellow—Korea; dark yellow—Italy; blue—Sweden; light blue—UK; black—France (2.00 in 2010); Bold black—Japan.

Some emphasized the shortage of Effective Demand (Demand-siders), whereas others pointed out the changes in the supply side of the Japanese economy (Supply-siders). We will briefly sketch the main arguments in the order of Table 2, while adding some new growth-deterrent factors that characterize the period of lost two decades and offer our tentative conclusions at the end. Table 3 sum up the changes in the conditions of growth factors and refers to various studies I have based my conclusions. More specific discussions on the Asian Financial Crisis in 1997-98 and on the recent World Financial Crisis after 2008 will be given in Sections V and VI.

(1) (*Low Rate of Investment*) From 1960 to 90, the share of total capital formation in GDP was around 30 %. During the lost two decades, it dropped to slightly above 20%. Sometimes the investment growth rate became *negative*. This is a cause and an effect of long recessions during the lost two decades and most conspicuous of all the factors characterizing this period. There are many reasons why this occurred. Some of the external events have been mentioned. Certainly the increasing uncertainty in the world political economy like the fall of Berlin Wall in September 1989 is important, but an important fact is that Japan seems to have suffered more seriously than other major countries. In the following explanation, we will try to give some reasons.

(2) (*Personal Savings*) The propensity to save has remained almost unchanged before and after 1990 so that Private Consumption did not work to press sown the growth of GDP. Its growth rate was slightly higher than GDP's.

(3) (*Declining Population and Labor Supply*) The most dramatic change in recent Japan took place in the conditions of labor supply. Fundamentally, as Figure 1 shows, the fertility rate has kept dropping after 1970, and now it is 1.34 (slightly up from the bottom). Saito [16] calculated by simulating his macroeconometric model to attribute the growth rate of GDP in 1960-73 (9.46%) to the growth rate of population (3.76%) and the growth rate of technical progress (5.56). A decline of population and technical progress naturally explains the radical drop in GDP growth rate—an important proposition of supply-siders[4]. .

(4) (*Low Productivity of Primary Industries*) Agriculture, Fishery and Forestry suffered from the shortage of young workers. In recent years one can see that the precious cultivable land all over the country remains uncultivated simply because of the shortage of farmers. Sons and daughters of farmers have gone to the urban factories and do not come back. This is not only due to the income differentials between secondary-tertiary industries and the primary industry but also the too restrictive and out-of-date regulations on the use and sale of farming land and forest and protection of fishing rights.

(5) (*Insufficient Technological Innovations*) No doubt, the speed of Japanese technological

[4] As for the supply side, the quality of labor is important. The nominal level of education in school years or college admission did not change much, but its quality seems to have deteriorated. About twenty years ago, Ministry of Education lowered the standard of text books for mathematics, natural sciences and other subjects at the primary school level. Although this was corrected some years ago after severe criticisms from university educators and professionals, it is afraid that the effects remain for many years to come. *Training on the job* has deteriorated against good tradition of the Japanese enterprises. Moreover, in 1988 the Labor Standards Act was revised to shorten the standard labor hours per week, which reduced the performed labor hours nation-wide (from 44 to 40 hours in 88 to 93). All these elements worked in effect to reduce the Total Factor Productivity.

progress has slowed down, broadly speaking, as her technology catches up with the Western technology. Various studies of TFP (total factor productivity) in Japan show that during the recent two decades its growth rate has declined but not as much as the first research of Hayashi-Prescott suspected. According to METI report [12], the statistical data of Science and Technological Patents applied and obtained by Japanese experts in the US and Europe does not seem to show any significant decline, though the data in METI report are not up to date. Since the recent rate of capital accumulation is less than before, and the R & D expenditure is not increasing as much as in the earlier years, it may be natural that technical progress slows down.

In addition, the 1988 revision of Labor Standards Act mentioned in no. 3 above and no significant deregulation of employment—at the time of Koizumi Cabinet some deregulation was done -- at private enterprises have caused the slower pace of TFP increase. Yet the slower growth of Effective Demand could not absorb the supply of Aggregate Output, causing deflation throughout the lost two decades[5].

(6) (*Adjustment of Industrial Composition*) As the Japanese economy grew up, readjustment of the composition of manufacturing industries became increasingly difficult. Big ships cannot change the direction quickly. Japanese style management based on lifetime employment made it difficult to readjust the composition of employees. A study of Ken *et al* [10] showed that difficulty in labor mobility among corporations in different industries was the hardest factor preventing the exit and entry of new firms from suiting the changing demands. Another factor was a misuse of subsidies that allowed inefficient enterprises survive. Some old enterprises losing the international comparative advantage did not dare to undertake new ventures in other industries or go abroad.

(7) (*Insufficient Bureaucracy reforms and privatization*) "Reforming the bureaucratic system" was a popular slogan in Japanese politics particularly after the *burst of bubble,* contrasting the appraisal of the cooperation between bureaucrats and businesses in the 60s and the 70s. The primary reason was the publicized failure of the powerful ministries like Ministry of Finance in managing influential government banks like Long-Term Credit Bank *etc.* Deregulation of the MOF control of the banks and other financial institutions was belatedly undertaken but did not improve the efficiency of the private banks and other financial institutions overnight. The only successful example of privatizing public enterprises was the National Railroad Company divided into 6 JR (Japan Railway) regional companies. The reform of Postal Public Enterprise was undertaken by the

[5] Several chapters in Vol. I of [1] dealt with this issue and the resultant change of Industrial composition by means of Dynamic Models and Structural SVAR Models. Vol. II of [1] dealt similarly with the financial sector.

Koizumi Cabinet, but it remains to be seen whether it can follow the JR success or not. The core resistance comes from labor unions in bureaucracy and sectionalism among the ministries.

(8) (*Wrong reforms of Japanese Style Management*) Inefficient aspects of Japanese style management have been depicted and often argued as something to improve in the globalizing world economy, as Japanese enterprises must go abroad too. T. Kagono [9] argues, however, that the reforms having adopted the American standards straight-forwardly to the Japanese corporations killed the strength of Japanese style management and made the Japanese top managers more hesitant to undertake the risky investment. This is one of the reasons for having discouraged Japanese investment during the lost 90s and later. In particular,

1) share-holders' lawsuit made easy;
2) bad timing to introduce quarterly settlement of accounts;
3) too detailed specification of corporate governance in the corporation law;
4) too early introduction of current price evaluation of Assets and Liabilities;
5) hasty introduction of American style internal control system into the Japanese corporations law, where they are managed with basically internal promotion and spot decisions.

These bad reforms made Japanese managers much more averse to risk-taking than before.

(*Inappropriate functioning of banks and other financial companies*) The Japanese banking system was efficient in the early postwar period up to the time of Plaza Accord in 1985, which agreed among G5 governments to rescue the twin imbalance of the US economy by increasing money supply and devaluating other major currencies against dollars. This ignited the *bubble economy* promoted by speculation in real-estate finance in many countries, particularly Japan. Unti*l then, the Ja*panese banks simply responded to the ever-increasing demand for loanable funds with deliberately lowered rate of interest. The banks were content by taking land as certain mortgage or curatorial whose prices ever kept rising. But after the burst of bubble economy, everything changed. Banks and other financial institutions were suddenly thrown into the uncertain and risky markets in the early 90s with little knowledge nor experiences of deflation. This made them very "defensive" or hesitant to do anything bold. *Credit crunch* or just buying the Japanese government bonds became customary in financial investment.

At *the same time*, hasty liberalization of capital markets, especially the short-term capital market in some developing counties like Thailand or Korea created the greedy financial speculation in some Asian countries which led to Asian financial crisis in 1997-98 and affected also the Japanese financial sector. Symbolic was the bankruptcy of Yamaichi Securities Co., one of the

Major four security companies in Japan in November, 1997. Data show a dramatic shrinkage of Japanese bank loans. This must have caused the radical decrease in private investment mentioned as No. 1 factor for the lost two decades.

Furthermore, the sub-prime loans problem occurred, and the Lehman Brothers holdings with more than 500 billion dollars assets filed bankruptcy in September, 2008--the world-wide financial crisis. This shattered the Japanese financial system and made them extremely hesitant in supporting the Japanese domestic and overseas investment. Some studies in Hayashi [1] showed that the credit cruch was particularly serious to the small and medium size enterprises, much more important in the Japan than abroad. We take this up in Section V.

Table 4: Japanese Governments and Main Events in the World

Year/	Japan cabinet	Monetary Policies	Fiscal Policies	Political Events
1990	/2 Kaifu	/3 off.d.r. raized /8 off.d.r. raized	/4 budget not dep.on gov. bonds /6 pub. Invest. Plan	
1991	/11Miyazawa	/7 off.d.r. lowered /11 off.d.r. lowered /12 off.d.r. lowered	/9 emergency econ.policy	/1 Gulf War
1992		/4 off.d.r. lowered /7 off.d.r. lowered	/2 comprehensive economic policy	
1993	/8 Hosokawa	/9 off.d.r. lowered	/9 emergent pol.for ¥ revalued	/11 Maasricht Treaty for EU effected
1994	/4 Hata /7 Murayama			/3 (New Election Law) /12 (Shinshin P. born)
1995		/4 off.d.r. lowered /9 off.d.r. lowered	/5 budget for dissik, bad hous, loan	/2 (Hanshin Earthq.)
1996	/1 Hasimoto		/4 cons. Tax rauzed	/9(Democratic P. born)
1997		/11 big bank crisis	/5budgetreform law /12 ibid suspended	/7 Asian Finan. Crisis /12 (Shinshin P dissol.)
1998	/7 Obuchi			
1999		/2 zero inter. Policy		/1 Euro born
2000	/4 Mori	/8 zero I, pol. Stop	/4 nursing system	
2001	/4 Koizumi	/3 quant.easing pol.	/1 centr.min,reform	
2002			/12 priv, of four highway ent, /4 Tax reduction; 3/4 Postal PE starts	
2003				/4 (Liberal P joins Dem)
2004				
2005/				
2006	/6 Abe			
2007	/8 Fukuda			
2008	/9 Aso	quant.easing pol		US Financial Crisis
2009	/9 Hatoyama	quant.easing pol		
2010	/6 Kan	quant.easing pol		
2011	/8 ?	quant.easing pol		/3 (Tohoku Earth q.)

(10) (*Mismanagement of Fiscal Expenditure and Taxation*) High-ranking officials of the Ministry of Finance used to take pride in maintaining the sound fiscal policy stance and were very cautious to issue the government bonds throughout postwar years. Their mismanagement of some large government banks in the bubble years, however, made them lose their authority to resist the political pressure and resulted in giving the bureau of banking which controls the banking sector to the Prime Minister's Office. And even changing the name of the historic Okura-sho (Ministry of Public Finance or Exchequer) to American Zaimu-sho (Ministry of Fiscal Administration). The Ministry of Finance in charge of fiscal spending and taxation simply followed the political pressure of populist government parties, one after another, as Table 4 shows, to spend as much as the parties requested with little consideration of fiscal efficiency. Political instability in the lost two decades may be contrasted against political stability in the immediately postwar Japan. Due to the failure in managing the public finance during the bubble years, the LDP (Liberal Democratic Party) lost the support of the general public, which made Japanese politics very unstable. This created uncertainty in the perspectives of entrepreneurs and made them hesitant to undertake any bold investment.

The lost 90s began simultaneously with two dramatic events in the world: the fall of the Soviet Union, and the *burst of bubble.* The latter is connected with the Plaza Accord in September, 1985. Then came Asian Financial Crisis in 1997, and more recently the Lehman Brothers Financial Crisis in 2008-09. If the Japanese government had not been suffering from the heavy fiscal debt, it would have been easy to overcome the recessions with deflation by the standard Keynesian policy with sufficient care for efficiency of fiscal policy. But the weak cabinets one after another, except for Koizumi Cabinet, could not reduce the fiscal deficit. Political instability and weak government was really behind the ineffective economic policies. Table .4 gives a brief picture of political instability in Japan in the 1990s and 2000 to 2010.

Even under these unfortunate experiences there are different opinions by some great economists who maintain the more positive Keynesian type of Demand-sider policies would have rescued the Japanese economy from plunging into the two decades of recessions and deflation and fiscal deficit all together. That is Klein-Adams-Kumasaka [12] and S. Shishido *et al* [18]. Their diagnoses are based on their respective macroeconometric models. Their works are awaiting the close examination of experts. A crucial point of implementation is that such policies must be maintained by the strongly supported governments. Otherwise, the so-called "stop and go" policies can never bear fruits even if the policies are theoretically correct. It is true that the Japanese fiscal debt in terms of total government debt to nominal GDP ratio is the highest in the world, but its annual debt burden is not as high as in the US and much lower than the UK. Thus this kind of policy can still be experimented under the strongly supported government.

IV. A Postmortem Diagnosis of Asian Financial Crisis[6]

The financial crisis in East Asian economies occurred in Thailand in July 1997 and quickly spread to other countries. There were preceding other serious economic phenomena, for instance, the burst of the bubble economy in Japan in the late 80's. Besides, it is not an isolated crisis. There are many preceding and subsequent crises in the world. I would offer some notes to think about the financial crises in the late 90's and to avoid the future similar crises in the early 21st Century. I maintain that for that purpose the reform of international financial institutions like IMF is highly desirable.

1. A Series of Financial Crises

There have been a number of financial crises in the world ever since the post-World War II reconstruction was over in the 70's. The main ones may be enumerated as follows:

1) The two oil crises in the 70's and the subsequent financial crises mainly in Latin American countries.
2) 1979 debt crisis in Poland
3) The mid-80's Crises for Savings and Loans Associations in the US
4) 1994 Mexican financial crisis
5) The early 1990s burst of the bubble economy in Japan
6) 1997 financial crisis in East Asian countries
7) 1998 financial crisis in Russia
8) 1998 financial crisis in Brazil
9) 1998 bankruptcy of LTCM (Long Term Credit Management) in the US

A reexamination of the financial crises must be made not only in light of observations in East Asia, but also the experiences of countries all over the world.

2. Diagnosis Tableau of East Asian Financial Crises

In order to carefully observe and to comparatively examine the various experiences of fi-

[6] This secion is a modified version of Chapter 16 in Ichimura (2003) whichi is not in English version Ichimura (1998).

nancial crises in different countries, the following tableau may be useful.

Table 5. Diagnosis Tableau of Financial Crises

Symptoms to observe	J	K	T	Ph	Hk	Th	M	S	In	C	US
1 Real estate price inflation	X	X	△	X	X	X	△	△	△	△	△
2 Stock prices inflation	X	X	△	X	X	X	△	△	△	△	△
3 Flexible exchange rate	○	△	△	△	X	X	△	△	△	X	○
4 Appropriate exchange rate	○	○	△	△	X	X	△	△	△	X	○
5 Foreign debt	○	X	○	△	○	X	X	△	X	△	X
6 Short-term debt	○	X	○	△	○	X	△	○	X	○	△
7 Monitoring foreign debt	○	X	○	△	X	X	△	○	X	△	△
8 Capital transaction control	X	X	○	△	X	X	△	○	X	○	X
9 Government excessive guarantee	○	X	○	○	○	X	△	○	X	○	○
10 Ample foreign exchange reserve	○	X	○	△	○	X	△	○	X	○	○
11 Conservative Bank management	X	X	△	△	○	X	△	○	X	△	△
12 Good corporate governance	△	X	△	△	X	X	△	○	X	△	△
13 Corrupted politicians, bureaucrats & businessmen	△	X	△	X	X	X	△	○	X	△	△
14 Sound fiscal management	X	△	△	△	X	○	△	○	△	△	○
15 Sound monetary policy	△	△	○	△	○	X	△	△	△	△	○
16 Overall evaluation	-2	10	-7	2	3	13	1	-9	9	-2	-4

Overall evaluation is mechanically made by giving -1 to ○, +1 to X, and 0 to . △.The scores given in this table are provided by the author's judgment around the time of crises in each country, mostly in the late 90's. The higher the score is, the more likely the financial crisis is likely to occur in the country. Interpretation of this Table 1 requires some explanation. Most symptoms on the list would be understandable, but some items like capital transaction control may not be straightforward in its implication for financial crisis. In advanced economies like Japan and the US there is no control of capital transaction. In Taiwan, Singapore, or China, however, control of capital transaction is strictly imposed. This has contributed to avoid the financial crisis, so that the way of giving scores must be more carefully made. But overall the scores given on the basis of these symptoms seem to demonstrate which countries were more likely to encounter the financial crises.

Clearly Thailand is most exposed to the danger of financial crisis, and then follows Korea and Indonesia. In fact, financial crises did not occur to all the countries or areas in East Asia in the late 90's. There are significant differences in the degree of exposition to financial crisis among the East Asian countries and areas. Thailand, Korea and Indonesia encountered the most serious crises for the good reasons.

The external debt situations, important in this table, of the critical three countries in East Asia are shown below. This is the reliable up-to-date information available to outsiders then.

Table 6a: External Debt of Korea, Indonesia and Thailand

Units	Korea			Indonesia			Thailand		
Billion $, %	1997	1998	1999	1997	1998	1999	1997	1998	1999
External Debt (total)	159.2	148.7	136.4*	136.2	150.9	-	93.7	86.2	75.6
—long-term	95.7	118.0	98.3*	100.3	121.7	-	56.5	59.4	61.9
—public	-	-	-	55.9	66.9	-	22.3	28.1	23.6
—private	-	-	-	44.5	54.7	-	34.1	31.3	25.5
—short-term	63.6	30.7	38.1*	32.9	20.1	-	34.8	23.5	13.7
(GDP)	476.5	320.7	414.5	215.7	94.2	141.7	150.6	112.2	126.3
External Debt vs GDP	33.41	46.36	32.91	63.12	160.24	-	62.23	76.77	59.83
—long-term-	20.08	36.79	23.72	46.51	129.22	-	37.49	52.93	49.01
—public	-	-	-	25.90	71.10	-	14.82	25.05	18.67
—private	-	-	-	20.61	58.12	-	22.67	27.88	20.19
—short-term	13.35	9.57	9.19	15.23	21.36	-	23.13	20.96	10.83

Sources: Korea (MOFE、http//epic.kdi.re.kr), Indonesia (ADB、WB), Thailand (ADB, http//www.bot. r.th); ADB: The Asian Development Bank, Key Indicators; GDP: ICSEAD(2000); WB:, Global Development Finance

Notes: 1. GDP in 1999 is calculated by assuming our projected growth rates: Korea (8.5%), Indonesia (0.0%), Thailand (4.0%) for their own real income in terms of its own currency unit. 2. * means preliminary. 3. The External Debt of Korea on the basis of WB (ADB) may be extrapo-

Table 6-b

Units	WB base			MOFE base		
Bilion $, %	1997	1998	1999	1997	1998	1999
External	137.0	139.1	127.6	159.2	148.7	136.4
—	72.1	94.1	-	95.7	118.0	98.3
—public	33.9	58.0	-	-	-	-
—	38.3	36.1	-	-	-	-
—	53.8	28.1	34.9	63.6	30.7	38.1
(GDP)	476.5	320.7	414.5	476.5	320.7	414.5
Ext.Debt/GD	28.75	43.37	30.8	73.79	46.36	32.91
— long	15.14	29.33	-	44.36	36.79	23.72
—	7.10	18.07	-	-	-	-
—	8.03	11.26	-	-	-	-
—	11.29	8.770	8.43	13.35	9.57	9.19

3. Lessons from the Financial Crises

Thus, we are able to draw some lessons from the financial crises in East Asia and other countries. Main lessons are summarized as follows:

1) Pay attention to the competition and complementarity between China and other East Asian economies.

2) Don’t forget the business cycles in the East Asian economies
3) Overvaluation of its currency *vis a vis* main trade partners’ currencies is dangerous
4) Watch the debt service ratio. If it does not go below 30% for many years, such growth rates are not sustainable.
5) Sudden surge in the inflow of short-term capital funds is a red signal.
6) The extraordinary increase of real estate values is a symptom of financial crisis.
7) The hyper-inflationary increase of stock prices due to speculation is a symptom of financial crisis. Similarly the steady decline of stock prices also a symptom of financial crisis.
8) Financial crisis will hit most seriously the greedy, mismanaged banks and enterprises with poor corporate governance, particularly in assets and liabilities management.
9) Financial crises are almost always related to the corruption connecting politicians, bureaucrats and businessmen. Conversely if corruption remains moderate, serious financial crises are unlikely to take place.
10) Excessive guarantees of the government and the central banks without adequate backup of foreign exchange reserve often aggravate the crises and create the country risks.
11) The so-called “Washington Consensus” was not necessarily the best diagnosis of the critical conditions in most East Asian economies. Their analytical capability and policy suggestions have limitations[7].
12) The objections of the US government and the international financial institutions to the increase of the capital funds have turned out to be inadequate. This requires the further consideration as follows.
13) What is most urgently needed and very important in all the countries is the reform of regulations and institutions to require the strict monitoring of all the important financial transactions of the banks and financial corporations.
14) Such re-regulations or de-regulations and reorganization of financial institutions and activities are needed not only domestically but internationally.

4. Reform of International Financial Organizations

Half a century has passed since the Bretton Woods system was established. As we discussed at the beginning, many financial crises have occurred in the world. Every time, the IMF and the World Bank moved to overcome those crises. Their policy prescriptions were based on the Wash-

[7] Criticisms on Washington Concensus was repeated later when Central European countries faced the financial crises for transition from Socialist to Market economies. See Ichimura *et al* (2009).

ington Consensus, which were not necessarily adequate in all the cases nor fairly implemented in all the cases. For instance,

1) The IMF offered almost the same diagnosis for the Mexican crises in 1994 and the East Asian crisis in 1997 despite the significant differences in fiscal and other conditions between Mexico and East Asian economies and implementation was much slower.
2) The IMF experts did not understand the underlying problems of East Asian economies. For instance, they were saying that Indonesia was an ideal borrower.
3) The policies implemented in Thailand and Korea were based on the Washington Consensus and could have been free from grievous faults, but those in Indonesia were quite inadequate in demanding the cut of subsidies to kerosene oil and food as well as stopping the loans to many small enterprises. Such policies forced the bankruptcy of many enterprises in the country where no bankruptcy law existed. After all, those policies had to be greatly remedied later.
4) On the other hand, Malaysia could overcome the crisis with neither any help nor advice from the IMF.
5) The rescue plan for Russia was determined with no regard to the Washington Consensus. It was simply a political decision. Who are responsible for such a decision may be questioned.
6) The US government was against the monitoring the international financial transactions by Hedge funds and other credit funds, but after the bankruptcy of LTCM[8] it seems to have changed its position.
7) It is clear that some kind of international regulations is needed, particularly from the viewpoint of small economies, to monitor and regulate the large amount of capital transaction into and out of the developing economies.

In other words, the monopolistic position of the World Bank and the IMF combined in dealing with the financial crises in any place of the world. As the World Bank is supplemented by the ADB and other regional development banks, so does the IMF need to be supplemented by the regional monetary funds. At the moment, there are specifically three problems in the present international financial institutions.

Both the World Bank and the IMF have only insufficient funds to cope with the serious financial crises in the contemporary world. This has been recognized by the authorities of the Bank and the Funds, but it was the US government and the Congress that have consistently against the increase of capital in both organizations.

[8] This important event is relatively unknown abroad due to the control of information maybe by NYFRB. But this is very closely related to the World Financial Crisis in 2008.

In handling the East Asian financial crises the amount of loans extended to the suffering countries from the IMF will not exceed one quarter of the total loans in almost all the countries. The main supplier of the loans was the Japanese Overseas Cooperation Bank. The US government pledged a certain amount but never implemented it, even a penny.

The officials of the Funds stay in the region at best only for a few years. It would be impossible for those coming from Washington D. C. to learn the social and economic conditions in so many developing countries in Asia.

8) Hence, the Funds must be supplemented by a regional monetary fund like ADB for WB.

9) The Japanese government proposed soon after the financial crisis in Thailand in 1997 to establish an Asian Monetary Funds, but it was the US government that flatly refused even to consider it. Later on, however, when a similar idea was proposed as an informal Miyazawa initiative, all the governments concerned including the US supported it. Again, later, the mutual agreement to accommodate the necessary funds at the time of crises among Asian economies was supported even by the US government as well as Chinese and other Asian countries.

What is needed now is the reform of the international financial institutions and to devise the adequate regulations and institutions to handle the globalized international economy. The establishment of EC and Euro has given an impact to reorganize the world economy. The world economy is moving toward the Tripartite world; namely, the American continent, the European hemisphere, and the Asian world. How to manage them is one of the great tasks of the world economy, but the modest first step will be to establish some regional financial organization that is capable of handling the kind of financial crises we have just had in the past decade.

V. Who are Responsible for the World Financial Crisis in 2008?

1. Wrong US Policies and Fraudulent Credit Rating Agencies[9]

Now (mid-2008) the world economy seems to be at the entrance to the Great Depression. If any serious mistakes are made in economic policies, the Great Depression like the one in the 30s may come again. Many excellent studies on the Great Depression are available to learn from. More recently the Japanese economy has just experienced the miserable recessions mainly due to the burst of the bubble economy in the early 90s. If, therefore, we have learnt the lessons from the experiences and adopt the appropriate policies, we should be able to overcome the recessions in a year and half to two years. Similarly with the US and Europe, many outstanding economists and

[9] This is a revised version of my essay in Japanese published in the *Yamaguchi Bank Monthly*, January 2009 but it was written in mid-2008 and privately circulated to bankers and politicies.

financial experts are there too. Yet they are repeating the same kinds of blunders over and over again. Why couldn't they anticipate the serious recessions before they aggravated this much and have taken appropriate policy measures? One could not be too optimistic about the future if we had to extrapolate this past stupid repetition of mistakes. One could ask; who are really responsible for this world financial crisis in 2008?

Postponing the detailed discussions, I state my frank conclusions first. Exposition follows later. The heaviest responsibility lies on the three bodies:

(1) The US government's "super-optimism" on the US economy,

(2) Credit Rating Agencies' fraudulent rating of various securities and derivatives;

(3) Investment banks excessive speculative investment with extreme *leverage ratios*.

2. Why wasn't the World Financial Crisis anticipated?

Was it so difficult to anticipate the 2008 WFC? Of course not. Inflation of real estate prices has been continuing since a few years before. The same was true in Europe. Particularly in big cities like London, Paris etc. it was very conspicuous. Many economists as well as journalists had already observed the burst of bubble in Japan in the early 90s and Asian financial crisis in Thailand in 1997 so many of them warned against the burst of bubble economy. But no government in any country did not take stern action against it. Why? The circumstances are just the same as the one in Japan in the late 80s. Everyone knows that it cannot go on, but while one believes nothing will happen a few more months, suddenly the end comes.

Moreover, inflation in real estate price stimulates the demand for and investment in housing and thereby prolongs prosperity. The US government at war needed a continuation of booms so that it stimulated housing investment by tax reduction for housing loans. These tax exemption policies stimulated housing investment and maintained prosperity longer and kept the US growth rate higher than usual for the time being.

3. Tricks of Sub-prime Loans

The financial crisis this time was ignited by the sub-prime loans. It looks like a kind of low interest-rate loan for housing. Actually the low interest charge is only for the beginning few years. After the initial period, the interest rate becomes normal and repayment of principal begins. If inflation of real estate goes on, one could get the house only with the low payment at the beginning and sell the house before the higher payment starts. But if inflation stops and house prices come down, then many buyers cannot continue to repay the higher monthly payments and the loans become unpaid. Many banks faced an enormous amount of unpaid loans with low value mortgages and bankrupted. Mr. Greenspan, an outstanding former chairman of the FRB, admitted at the Congress hearing on this issue that the practice of this kind of loans extended widely without any prudent examination or checking was a serious mistake and failure of the FRB. This really resembles with the cases of Japanese commercial banks at the time of bubble years.

4. Credit Rating Agencies' Fraudulent Rating of Securities and Derivatives

The world financial crisis this time is much more serious than the burst of the bubble economy in Japan in the early 90s. If the US government had not give the government loans to private banks, insurance companies, security companies at all, then almost all the famous financial companies in the US—as some say, except for Wells Fargo Bank—would have bankrupted. In the case of Japan, many banks and security companies would have bankrupted too, but the main ones like Mitsubishi, Sumitomo, Nomura would have survived. European banks would have faced the situations closer to the US. Perhaps, however, the situations might have been more serious than in the US.

There are some significant differences between Japanese financial institutions and US-European institutions. The first difference is that almost no "derivatives" are dealt with in Japan. The second is that the banks' "leverage ratio" is far lower in Japan than in the US or Europe.

The most problematic is "*derivatives.*" A few decades ago dealing with the real estate by securitization began. Then the object of investment was clear. One of initiators was Edwin Mills now at Northwestern U. Then began dealing with a combination of some such securities was devised as a new security and put on the market. Then again a combination of such combined securities was marketed as "derivatives." By combining some securities, it was argued, one could reduce the risks involved. It was believed that risks would be further reduced by combining the combined securities so that they carried even higher rating than the original components, according to the rating given by credit-rating agencies. But nobody knows what they have bought or sold. Even professionals were actually cheated by the dealings of derivatives. Then appeared the so-called Credit-Rating agencies like Moody, Standard and Poor's, and they gave their ranks to each kind of security like AAA or AA etc. Customers trusted the ranking and bought them. But during the crisis, almost all securities including AAA dropped the values. Responsibility of grading companies are extremely important, but they take no responsibility. In other words, their rating has turned out to be utterly unreliable. They never specifically announced or publicized the reasons for their ranking. The most fundamental reason of the crisis this time lies in this point.

To perceive this danger would not have even too difficult, because we have already known the case of LTCM taking place earlier for almost the same reason. In Japan a famous mathematician and essayist Masashi Fujiwara pointed out the Genius' erroneous calculation in his famous book: *Nobility of Nations* earlier.

5. Why did the Financial Crisis spread to Europe?

Further discussions on some other reasons for financial crisis in the US will be omitted here. But another important aspect is that it spread quickly to Europe and caused more serious crises in some countries like Iceland. The reason is that even major banks in UK, France, Germany and Switzerland relied heavily on the borrowing for their loans. This is the same as the case of Lehman Brothers. This is demonstrated by their leverage ratio (total loans to own capital ratio). The ratios of European banks were almost twice as high as American banks, as the follow table from *Fortune* magazine shows.

Table 7 Leverage Ratios: Each Bank's Loans / Capital Ratio

Barcleys Bank	61.1	B of America	11.1
DeutschEe Bank	53.1	Goldman Sacks	26.1
ING group	49.1	Lehman Brothers	31.1
UBS	47.1		

European banks relied on the borrowed funds about half for loans, whereas American banks did the same about 30% or less. Hence, the damage from the fall of derivatives values was much more serious to European banks than American banks. The reasons why European banks invested so much in the derivatives in the US was their high rates of return that was made possible by the continued prosperity of the US economy. It was mainly due to the short-term success of the US government's stimulating cyclic policies. Given the triple dilemma of the low rate of saving, fiscal deficit, and trade imbalance, however, it is inconceivable for the US economy to maintain the 4 % growth rate any longer.

６、Failures in American economic policies and their future

Business cycles are unavoidable in the US economy, It was wrong on the part of the US government to have ignored such historic facts with unrealistic *super-optimism*. Some journalistic columnists blame the "market fundamentalism", but it is not right. There is no theory or fundamental preachings in economics to say that market solves the ups and downs of business cycles by market mechanism. What was wrong was the economic policies of the government and the FRB. More concretely the excessive stimulus given to housing investment and loans *plus* the lack of supervision of those policies on the part of the government authorities and the FRB. On this score, the responsible advisers in the Bush administration were too simplistic. In the middle part of September, 2008 there was a general meeting of the Mont Perlin Society in Tokyo, in which I had a chance to raise this question to Chairman of the Committee of economic Advisers, Dr. Edward P. Lazear. I asked him, "As I believe, there is excessive financing the speculative investment in housing loans in the US. Don't you think that some restrictive regulations are needed on such financing the speculative investment?" He flatly answered, "No, I don' agree with you." After the session, I had some further talks with him, but he had no recognition of the danger to show up in the US then. It is very clear, however, that he must have changed his opinions by now if he supports the later views of Secretary of Finance and the chairman of FRB. Changes in the American policies were at least too late by a year and half or two years. They changed the policies only after the bankruptcy of Lehman Brothers and the consequent fall of stock prices. But too late were the policy changes in Europe and Japan as well. In October 2008 the President of the US called for an international conference with 20 major nations' government representatives and put on the table 16 proposals and an action plan, including the reform of the IMF to increase its funds. Most of proposals are appropriate but belatedly proposed. How much of them and how soon they will be implemented is crucial. If not, implemented soon the world may face more serious recessions like the Great Depression in the 30s again. (2011.9. 04)

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Notes: 1. (J) means that the publication is in Japanese. 2. CARF is working paper series of univ. of Tokyo 3. METI is Ministry of Economy, Trade and Industry; former MITI.				

Appendix; Main Economic Indices of Japanese Economy: 1980—2010

	Real GDP (growth rate)	nominal GDP	Exports Total	Imports Total	Export Price I	Import Price I
			customs	customs	¥ base	¥ base
	Cabinet Off.	Cabinet	MOF	MOF	BOK	BOK
	Bill. ¥	Bill ¥	Mill. ¥	Mill. ¥	2005＝100	2005＝100
1980	(3.97) 287367	248376	30058827	31477107	164.7	171.9
1981	(3.15) 298687	264642	34361528	32244575	172.1	181
1982	(3.54) 308057	276163	34068189	31762189	173.4	190.9
1983	(4.77) 318922	288773	36128954	30601496	164.7	173.3
1984	(6.26) 334111	308238	41184358	32661254	168.2	172.2
1985	(1.92) 355096	330397	40731162	29079739	157.1	155.4
1986	(6.08) 361807	342266	34576395	20174729	136.3	97.4
1987	(6.41) 383873	362297	33067902	22466258	130.1	97
1988	(4.58) 408446	387686	34930866	24834121	129.8	93.5
1989	(6.20) 427115	415885	38882994	30404170	137.2	103.6
1990	(2.34) 453604	451683	41874991	34171137	135.3	108.9
1991	(0.71) 464210	473608	42696582	30970420	128.8	97.3
1992	(-0.49) 467519	483256	43052879	29225046	124	93.2
1993	(1.50) 465277	482608	39613246	26449918	114	81.6
1994	(2.29) 472249	489379	40750346	28988814	111	80.3
1995	(2.88) 483023	497740	42069433	32952957	111.4	80.4
1996	(-0.02) 496935	509096	46040586	39671660	115.5	90.2
1997	(-1.49) 496836	513613	51411190	39961469	117.2	92.4
1998	(0.74) 489460	503324	49449349	35393751	116.1	86.3
1999	(2.56) 493049	499544	48547649	36451616	105.3	82.2
2000	(-0.80) 505622	504119	52045240	42449369	102.5	85.6
2001	(1.20) 501618	493645	48592792	41509071	105.3	86.5
2002	(2.11) 507015	489875	52727106	43067102	102	85.7
2003	(1.80) 517713	493748	56060293	44855182	98.5	84.2
2004	(2.29) 527980	498491	61719417	50385782	98.5	90.3
2005	(2.30) 540025	503187	68290157	60511292	100.8	104.5
2006	(1.79) 552474	510938	77460587	68447345	104	115.7
2007	(-3.78) 562302	515644	85113382	74958075	103.8	124.9
2008	(-1.81) 541017	494183	71145592	71910444	96.1	125.4
2009	(1.37) 531204	476412	59012561	53780653	88.7	101.5
2010	538.500	475.800			88.8	

CPI	WPI	Mon. av. Interbank Ex. Rate	Tokyo Exch. Nikkei month. Av.	Tokyo Exch Index Sec. I	
M.T Aff	BOJ	BOJ	Nikkei	Tokyo EXch.	
2005＝100	2005＝100	¥／$	¥	1968.1/4＝100	
78.1	117.7	217.25	6999	485.61	1980
81.3	117.9	227.52	7599.1	564.22	1981
83.3	118.2	249.64	7531.1	556.98	1982
84.9	117.4	236.33	9323	694.64	1983
86.8	117.7	244.19	11061	858.99	1984
88.4	115.7	221.09	12935	1030	1985
88.4	109.6	159.83	18032	1488.8	1986
88.9	107.7	138.33	24195	2014.4	1987
89.5	107.1	128.27	28865	2248.8	1988
92.1	109.9	142.82	34968	2611.6	1989
95.0	111.3	141.29	26872	1989.6	1990
97.7	111.8	133.18	23350	1769.5	1991
99.2	110.6	124.8	17189	1302.4	1992
100.5	108.7	107.84	19641	1590.2	1993
100.9	107.2	99.39	19509	1555.3	1994
100.6	106.1	96.45	18029	1427	1995
101.0	104.5	112.65	20518	1553.7	1996
103.1	105.5	122.7	17923	1362.1	1997
103.3	103.3	128.02	14848	1148.5	1998
102.8	102.5	111.54	18041	1522.6	1999
102.1	101.9	110.52	15597	1442.5	2000
101.1	99.4	125.13	11439	1133.9	2001
100.5	97.7	121.9	9581.9	932.33	2002
100.3	97.2	113.03	9944.4	980.8	2003
100.3	98.8	107.49	11315	1139.5	2004
100.0	100.5	113.26	13565	1392.1	2005
100.2	102.5	116.94	16415	1644.4	2006
100.6	104.9	114.2	15968	1555.7	2007
101.7	108.2	100.46	10802	1057.4	2008
100.0	102.6	92.8	9974.3	904.27	2009