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SOME LESSONS FROM THE JAPANESE BUBBLE

by
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Abstract

In the second part of the 80s, Japan was under political pressure to expand aggregate demand. It followed suit in increasing its money supply. This caused severe inflation and the financial bubble which collapsed in 1990 resulting in capital losses and in a sizable loss of GDP. This paper draws some lessons from the Japanese experience. The bottom line is that Japan became the victim of a misleading concept of global demand management.

J.E.L.-Classification: E 50

In three major continental countries of Europe, in France, Germany and Italy, the economic policy debate has seen a new focus which emphasizes the demand side approach. Keynesian ideas of stimulating aggregate demand by using monetary expansion generously, by relying on government spending, and even by raising wages, come to the foreground in the public discussion. In the same tradition, arrangements for international macroeconomic coordination are favored. Although history never repeats itself and a correction of the demand side approach may already be under way in Germany, it is worthwhile to look at the Japanese experience of the second part of the eighties when similar ideas prevailed.

How the bubble developed

In 1985, the economic policy situation in the world economy was characterized by a large US current account deficit of 3 percent of GDP. The US dollar had appreciated strongly in the first part of the eighties. The immediate policy concern was to reduce the US current account deficit, and one of the instruments to be used was to devalue the US dollar. In addition, Americans put pressure on Japan and Germany to expand domestic demand in order to help reduce the current account deficit of the US. This political request for Japan and Germany to play the locomotive for the world economy was echoed by academics. For instance, Bergsten wrote:

> "Japan and Germany (and possibly the United Kingdom) need to adopt new expansionary measures on the order of 2–3 percent of their GNPs" (1986, p. 40)

> "[Japan and Germany] must keep their domestic demand growing rapidly for some time. They must cooperate to achieve and then maintain a set of equilibrium exchange rates preferably through the adoption of target zones" (1988, p. 191).

I appreciate critical comments from Holger Bahr and Klaus-Jürgen Gern.
Krugman (1989) plays a similar tune with respect to Germany:

> "A ... problem is posed by the unwillingness of Germany to expand domestic demand" (p. 104)

and

> "... Germany needs to reduce its penchant for self-punishing (and neighbor-punishing) monetary policy" (p. 105).

Hale (1986) takes the view that[1]

> "[f]urther declines in U.S. interest rates ... reinforce Treasury Secretary Baker's policy of using dollar devaluation to force competitive monetary convergence and lower interest rates upon West Germany and Japan".

A similar theme of using the devaluation of the US dollar as a means to get Japan and Germany to expand domestic demand is addressed by Dornbusch (1987)

> "A falling dollar would do much good abroad. It would force on America's reluctant trading partners the recognition that they must become the locomotives for the world Economy or face deep recession themselves".

The press was full of recommendations to stimulate aggregate demand in Europe and in Japan (International Herald Tribune 1986; US News & World Report 1986). The argument was used that the US had played the demand locomotive for the world economy in the early eighties and that in order to allow the US to amend the negative impact of this policy (in terms of a high current account deficit) it was now the responsibility of Japan and Europe to expand demand.

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1 Hale pointed out, however, that "monetary stimulus, alone, would simply produce a 1920s-type stock market boom without materially improving real growth". Ibid.

> "It is time for America's stronger allies to take on the role of Keynesian 'locomotive' as the United States gives it up" (Dunn 1986).

Feldstein (1987) took quite a different position from Bergsten. He suggested that

> "we should recognize explicitly that Japan and Germany have the right to pursue the monetary and fiscal policies that they believe are in their best interests".

He pleaded to end the international coordination of economic policy.

> "... it would be wrong for Japan to adopt such new ... spending policies that Japan judges to be inappropriate merely to satisfy the demand of foreign trading partners ..." (Feldstein 1996).

In the Plaza Agreement of September 1985, when the US dollar had already started to decline since March, the G-5 finance ministers and central bank governors agreed to bring down the value of the US dollar by interventing in the foreign exchange market. The Japanese yen appreciated by 50 percent from 1985 to 1987. Giving in to the political pressures to expand domestic demand, Japan's monetary policy switched to an expansionary strategy since 1985 with a rate of increase of the money supply of more than 8 percent per year (Table 1). However, in spite of the strong appreciation of the yen, Japan's current account surplus was not markedly reduced. The appreciation of the yen meant a dampening of economic activity and a much lower growth rate in Japan, for instance 2.9 in 1986 which was unusually low in the context of the Japanese experience.

After the Louvre Accord of February 1987 and in response to lower growth, Japan's expansion of the money supply was stepped up in 1987 to 10 percent and more. The objective of the Louvre Accord was to fix the exchange rate of the yen to the US dollar. This implied that Japan's monetary policy switched

from stabilizing nominal expenditure and money expansion to stabilizing the exchange rate (Hetzel 1998). In this approach, it was attempted to prevent a rising current account surplus and a further appreciation of the yen by lowering the interest rate. With the US current account deficit continuing, this implied that the Bank of Japan had to sell yen and to increase the money supply (Meltzer 1995, p. 61). The short- term and the long-term interest rates came down considerably, the discount rate being reduced from 5 percent (January 1986) to 2.5 percent (February 1987). With the appreciation of the yen, the increase in the money supply did not translate into a marked rise in the price level of consumer goods. But the increase in liquidity did not remain without effect. The monetary overhang fueled an increase in house, land and asset prices and started a financial bubble (Figure 2). The rise in asset prices and low capital costs led to an investment boom especially in the real estate sector (Meltzer 1995, p. 61).

In contrast to monetary expansion, Japan's fiscal policy was not expansionary. The general government budget had a surplus in the second part of the eighties and the debt-to-GDP ratio declined from 1987 on.

In the late eighties, asset price inflation became a concern because a major negative impact on the real sphere of the economy was feared once the bubble would burst. Starting in May 1989, the Bank of Japan[2] raised the discount rate up to 6 percent in August 1990. The Nikkei index fell, and real GDP growth declined with GDP stagnating in the nineties.

Note that Germany, also pressured to expand aggregate demand, followed a different path in its monetary policy. The money supply (M3) increased with a rate of 6.5 percent in 1985–1989, the price level rose with less than 1 percent

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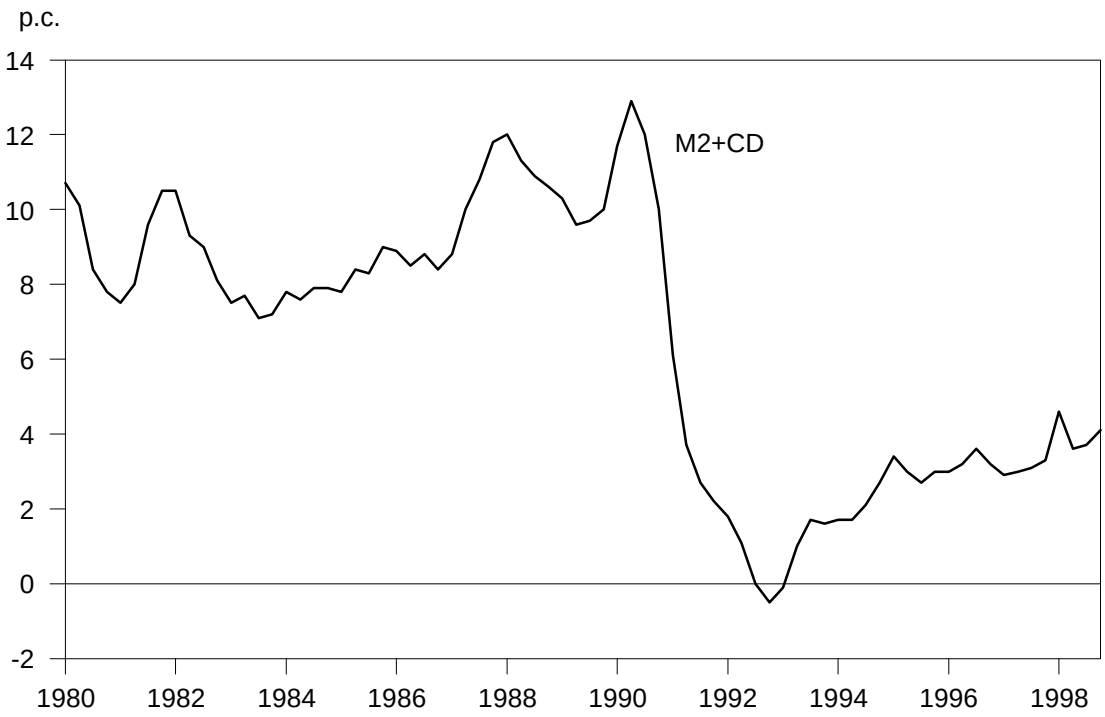
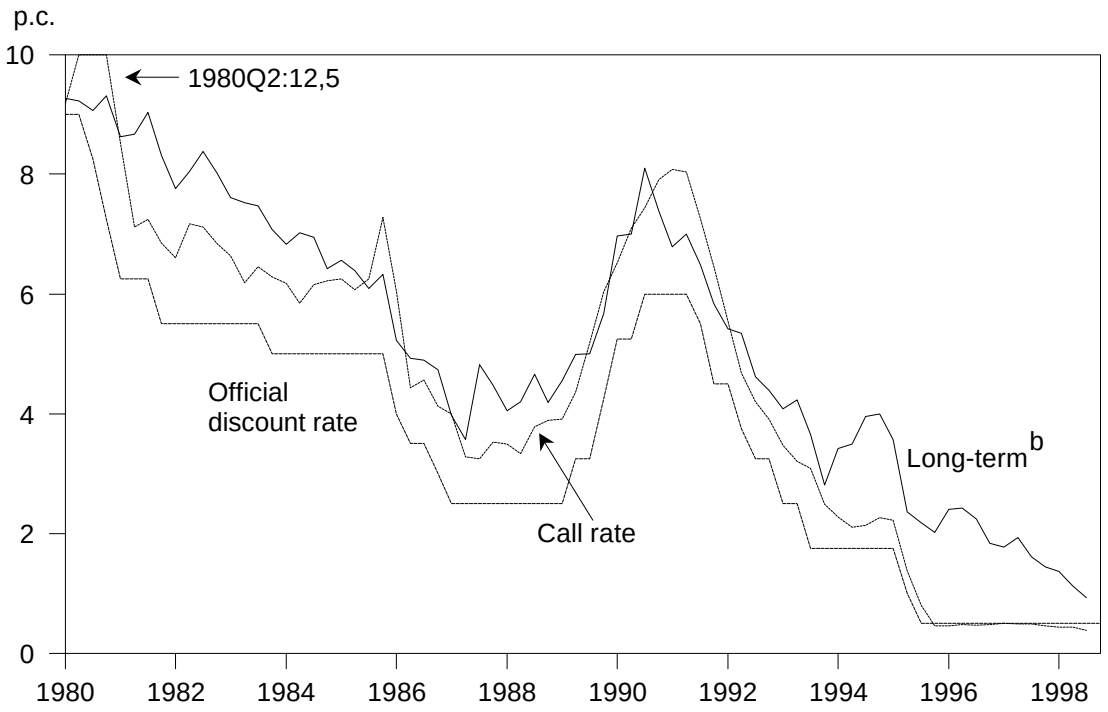
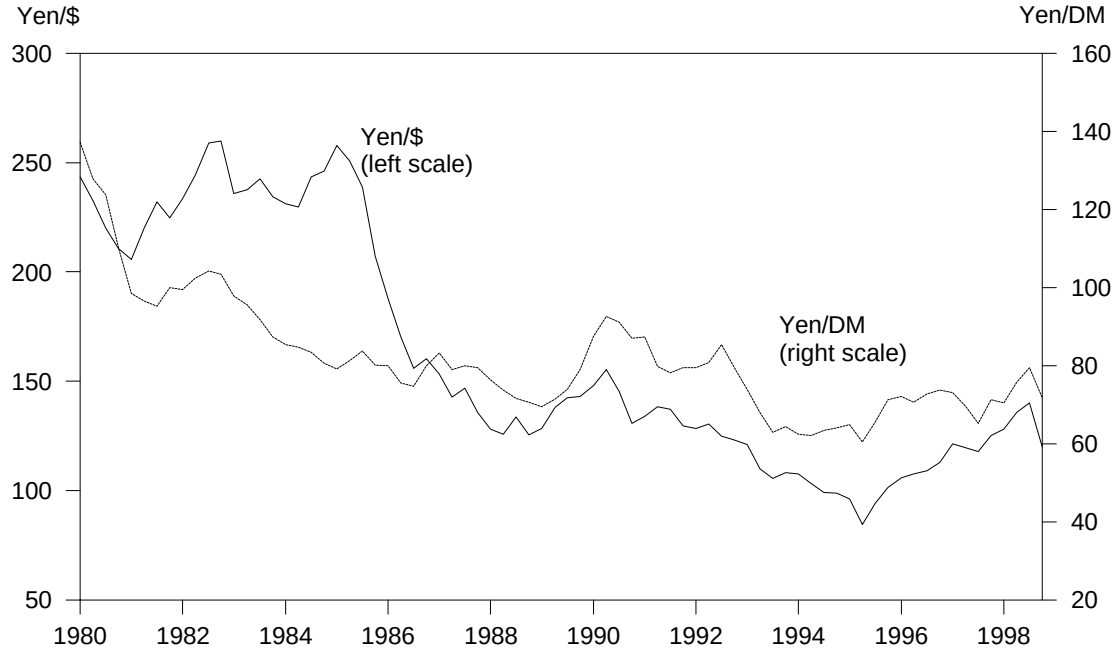
[2] Hetzel (1998) compares Japan's monetary policy problem of controlling asset price inflation by reducing the price level to that of the Bank of England in returning to the gold standard in 1926 at the pre-War parity for sterling. Then, it was necessary to reduce the price level to engineer a lower price of gold.

and even remained constant in the period 1985–1987. Fiscal policy reduced the budget deficit of the early eighties in a steady approach so that the budget was

Figure 1 — Money expansion[a], interest rates[b] and exchange rate







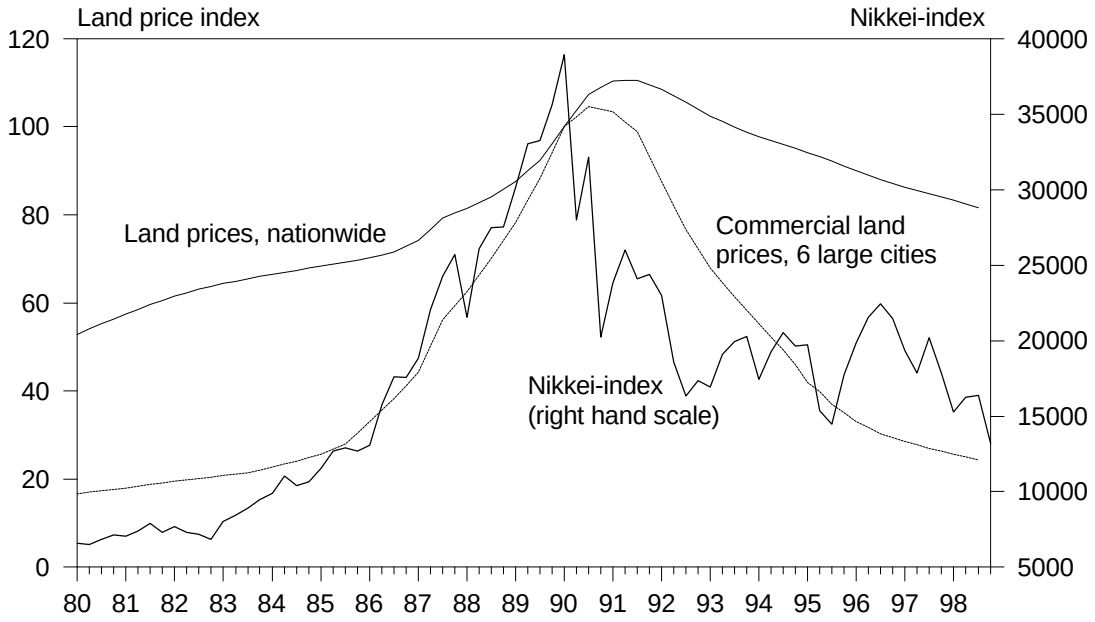
[a]M2+CD: Quarterly data, seasonally adjusted; change over previous year. — [b]Weighted average of government bond yields.

Source: Datastream, OECD.

balanced in 1989 and Germany was in the fortunate position to have budgetary manouvring space when the opportunity of unification opened up. Had Germany followed the American advice to play the locomotive for the world economy it might have been in a bubble like Japan at this critical moment of its history.

In Japan, the bubble showed up in the increase of stock prices and of the land price index. The Nikkei-Index rose from 10,000 in 1984 to 38,916 on December 29, 1989. Then it fell sharply to a low of 20,221 within the year 1990, and it went further down thereafter (Figure 2). The price-earning ratio reached a level of 60 or 70 at the end of the eighties; the inverse of the price-earning ratio indicated a rather low rate of return of 1.5 relative to other assets (Sachverständigenrat 1998, p. 26). Commercial land prices in 6 large cities increased by a factor of four from 1984 to 1991 and then dropped sharply (by a factor of four until 1998).

Figure 2 — The Japanese bubble



Source: Datastream.

The Impact of the bursting of the bubble

The immediate result of the bursted bubble was that financial capital was lost. Cumulative capital losses in the period 1990–1996 since the 1989–90 peak amounted to 967 trillion yen which corresponds to Japan's GDP of two years (OECD 1998; Table 2). Households took more than 40 percent of the total losses.

Table 2 — Capital Losses[a,b] in Japan, 1990–1996 in trillion yen

Non-financial corporation	–334.7
Financial institutions	–181.0
General government	–98.5
Households	–427.9
Total nation	–967.3

[a]Gross assets. — [b]Since the 1989–1990 peak.

Source: OECD (1998), Table 9.

The impact for the banking sector consists of a serious debt overhang. Non-performing loans are estimated to amount to 12.6 percent of total loans according to the new FSA (Financial Supervisory Agency) standards (Table 3). In the categories representing different credit risks (categories II-IV) outstanding loans amount to 49,5 trillion yen according to FSA-standards. Book reserves are too low; in category II they make up only 8 percent of the required reserves.

Other authors evaluate non-performing loans of the 19 major Japanese banks at 57,4 trillion yen with book reserves at 13,6 trillion yen (according to the evaluation of banks, Horiucki 1999).

Table 3 — Loan Portfolio Assessment of Top 19 Banks in Japan, March 31, 1998

	Outstanding Loans as of March 31,1998				Book reserves	
	Self-evaluation		FSA-standards		in Bill. Yen	
Loan Category	Bill. Yen	percent of total loans	Bill. Yen	percent of total loans	as of March 31, 1998[a]	as required[b]
I	350 115	88,8	344 709	87,4	–	–
II	40 197	10,2	43 781	11,1	639	8 318
III	3 772	1,0	5 343	1,4	1 965	3 740
IV	125	0,0	376	0,1	125	376
Total	394 208	100,0	394 208	100,0	2 729	12 434
memorandum item: Problem loans (category II-IV)	in p.c. of total loans	in p.c. of GDP	in pc. of total loans	in p.c. of GDP		
	11.2	8.9	12.6	10.0		

[a]Based on the top 17 banks (excluding nationalized Long Term Credit Bank and Nippon Credit Bank). — [b]According to guidelines of the Financial Supervisory Agency (FSA) for major banks applying for public funds.

Note 1: Category I: Loans with no or little risk of default. — Category II: Loans with some risk that require monitoring. — Category III: Loans that are unlikely to be repaid. — Category IV: Loans that are unrecoverable.

Note 2: An accounting of bank loans using a different classification system more in line with US standards reveals that nationwide 5.5 p.c. of total loans (corresponding to 6.1 p.c. of GDP) are actually non performing or restructured.

Source: Choy 1999; Nikkei Weekly 1999; own calculations.

The impact of the bursted bubble for the real sphere of the economy goes along several lines: The wealth effect for households reduces private consumption. Banks become more cautions in giving new credits; this leads to a credit crunch affecting the financing possibilities of firms. Firms are also implicated through the balance sheet mechanism, for instance in their capital endowment. Moreover, firms experience a lower aggregate demand. Cost cutting strategies of firms include the shedding of labor which increases the economic uncertainty for households and is an additional reason to be cautious with spending. Taken together, these effects imply a lower growth rate. Since 1992, the Japanese economy has been nearly stagnant (with the exception of 1996) and slid into a severe recession in 1998.

Besides the loss in GDP, Japan is faced with high costs that have to be incurred in order to move the economy out of the trap. Thus, funds allocated to the program for stabilization of the Japanese financial sector amount to a total of 60 trillion yen (5 trillion US-$ at 120 yen/Dollar) breaking down into three parts:[3]

— 17 trillion Yen financial assistance for the deposit insurance scheme
— 18 trillion Yen to deal with the liquidation of failed financial institutions (through nationalization or bridge bank scheme)
— 25 trillion Yen to recapitalize banks of which some 9 trillion have been applied for in a first round of capital injection.

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[3] There are other costs such as subsidized government credits to the firms and credit guaranties for the enterprise sector. Japanese banks had to pay a premium difference between the Tokyo rate and the London rate relative to other banks since 1995 amounting up to 0.7 percent temporarily for 3-months money; the premium is now near zero.

This sum amounting to 12 percent of GDP may serve as an illustration of the costs that Japan has to bear. It is even not certain whether this GDP loss will be sufficient to get Japan out of the vicious circle.

Some Lessons

The Japanese experience teaches some economic policy lessons that are worth to be remembered when policy recommendations are developed.

i) A demand side stimulus like the one that occured in the first part in the eighties in the US associated with currency appreciation may easily result in a current account deficit which eventually mandates correction. Reducing this imbalance in the current account of one country (while surpluses in other countries exist, i.e. in Japan and in Germany) by shifting demand to the surplus countries has led to a new severe disruption of the world economy in producing the Japanese bubble. Had Germany followed the American policy recommendation it would possibly have had a bubble as well. The first lesson of the Japanese bubble is: It is simply too naive to analyze the world economy primarily in terms of steering world aggregate demand and shifting it regionally. Such an explicit macroeconomic stabilization policy has not worked nationally; one cannot simply assume that politics can fine-tune global demand. The danger is that this simple macroeconomic approach will in its implementation add to the volatility of economic activity and will only reduce one problem by creating new and possibly more severe ones.

ii) It is misleading to look predominately at the interest rate when judging monetary policy as some politicians (for instance in Germany and elsewhere in Europe) now tend to do. The relevant question is to what extent the money supply should be increased in order to accommodate the expansion of the production potential under the restriction that the value of money remains stable, i.e. that the price level does not rise. It is not sufficient to take the actual low in-

flation rate as the yard stick. The relevant variable is the inflation rate that will result when the increase in the money supply has worked its way through the economic system. The time lag between the expansion in the money supply and the increase in the price level is different between countries; for Germany it is estimated to have been 2–2½ years in the past. Using such a time lag, the price level two years down the rod is the relevant measuring road to judge the monetary policy of today.

iii) The consumer price level two years down the road, however, is no longer the only relevant target variable for monetary policy as the Japanese bubble shows. The consumer price level may very well remain relatively stable, but the increase in liquidity may fuel a rise in asset prices. When asset prices eventually collapse, there can be a severe negative impact on the real sphere of the economy. The fall in asset prices reduces wealth of households implying a reduction in consumption demand. The balance sheet of banks is affected, and banks may be forced to restrain credits. A credit crunch has a negative impact on consumption and investment. It may take a loss of ten or twenty percent of GDP to bring the banking sector back into shape. There is a trade-off between short-run GDP stimulation by demand policy and a GDP loss in the long-run.[4]

iv) The consequence for the Euro area is that monetary easing will not solve Europe's dominating economic policy problems (Mayer 1999). These are a high unemployment rate and a poor investment performance in the nineties. The high unemployment rate is due to an overregulated and inflexible labor market and due to high labor costs caused by the social security systems. The reason for the poor investment performance are tax burdens, partly product market regulation and also the influence of labor costs. Monetary easing will not solve

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[4] It can be expected that the trade-off curve empirically varies between countries. It seems a promising research line to establish a curve between short-run GDP gains from financial bubbles and long-run GDP losses.

these structural problems. In that sense most of the continental European countries may be in a similar situation as Japan in the late eighties.

v) A major question is whether the characteristics of the business cycle had changed in Japan in the eighties. Traditionally, in the upswing an increase in demand leads to an increase in the inflation rate. This induces a tightening of monetary policy which then stops the upswing. It seems that the Japanese experience (and other Asian experience, Mayer 1999, Browne 1998) exhibits a different pattern of the cycle in which the real cost of capital declines leading to rising asset prices and to an investment boom. The higher capital stock allows more production, the rate of return on capital declines. As soon as the real cost of capital rises again, the capital stock becomes partly obsolete, and the capital loss implies a loss in GDP. If such a pattern of the business cycle is to be characteristic in the future, traditional Keynesian type demand smoothening over the cycle no longer are appropriate. The main message then is that monetary policy has to make sure that it does not generate artificially low levels of capital costs.

vi) Whereas in theoretical models, coordination of national economic policies can be shown to be welfare improving, coordination in practice meets severe obstacles. These result from the fact that countries are in different economic positions and have diverging interests, that different paradigms are used in their economic policies leading to diverging policy implications, and that political decision processes require a different amount of time so that once a national decision is reached the situation may already have changed.

vii) One therefore has to search for a rule by which disruptions through national policies are prevented. The major regions of the world economy must aim for a policy oriented at stability at home. This approach has three components. First, in each region of the world, the expansion of the money supply has to be oriented at the growth of the production potential. Second, structural reforms have to ensure that production capacity of the economies is sufficiently elastic and that the growth potential is stimulated. If these conditions are fulfilled, rela-

tively stable exchange rates are likely to be obtained more or less automatically. Third, care should be taken to prevent unsteadiness and swings in aggregate absorption of countries. This means that there is not only an implication for monetary but also for fiscal policy which, however, was not the cause of the Japanese bubble. Fiscal policy has to aim for a balanced budget. While allowing a budget deficit in recessions, binding rules must be established that ensure that the budget deficit is more or less automatically reduced with an improvement of the economic situation. In booms, governmental budgets should have a surplus so that over time, the budget is balanced. In a realistic appraisal, such a fiscal policy may not be feasible because the binding institutional rules are lacking and because the political process is incapable of refraining from spending when tax revenues are ample. Insofar as a balanced budget over the business cycle is not politically feasible, Keynesian-type fiscal policy should not be pursued at all (or governments should at least be cautious and reluctant in pursuing it).

viii) Economists should be more humble in their policy recommendations. When making a proposal they should think through the implications instead of hoping for a shocking headline in tomorrow’s paper. Remember Keynes (1931): “If economists could manage to get themselves thought of as humble, competent people, on a level with dentists, that would be splendid”.

Appendix

Table A1 — Data on Japan, 1984–1998

	M–2 + CD	M–1	Inflation Rate[a]	Short-term interest rate[b]	Long-term interest rate[c]	Exchange Rate Yen/$[d]	Yen/DM[d]	Growth Rate	Budget Deficit in percent of GDP[e]	Gross Debt in percent of GDP[f]
1984	7.8	2.8	2.3	6.5	7.3	237.6	83.5	3.9	2.1	64.5
1985	8.4	5.1	2.0	6.6	6.5	238.6	81.1	4.4	0.8	65.3
1986	8.7	6.9	0.6	5.1	5.1	168.5	77.4	2.9	0.9	66.7
1987	10.4	10.5	0.1	4.2	5.0	144.6	80.4	4.2	–0.5	68.9
1988	11.2	8.4	0.7	4.5	4.8	128.1	73.0	6.2	–1.5	65.5
1989	9.9	4.1	2.3	5.4	5.2	138.0	73.2	4.8	–2,5	62.6
1990	11.7	2.5	3.1	7.7	7.0	144.8	89.4	5.1	–2.9	61.4
1991	3.6	5.2	3.3	7.2	6.4	134.5	81.0	3.8	–2.9	58.2
1992	0.6	4.5	1.7	4.3	5.3	126.7	81.2	1.0	–1.5	59.8
1993	1.1	3.0	1.2	2.9	4.3	111.2	67.4	0.3	1.6	63.0
1994	2.1	5.4	0.7	2.2	4.4	102.2	63.0	0.6	2.3	69.4
1995	3.2	8.2	–0.1	1.2	3.4	94.1	65.7	1.5	3.6	76.0
1996	3.3	13.7	0.1	0.6	3.1	108.8	72.3	5.0	4.3	81.0
1997	3.1	8.8	1.7	0.6	2.4	121.0	69.8	1.4	3.3	87.4
1998	4.0	8.4	0.6	0.7	1.5	130.9	74.5	–2.8	6.1	99.9
1985–1990	10.0	6.2	1.5	5.6	5.6	160.4	79.1	4.6	–1.0	65.1
1986–1990	10.4	5.4	1.8	5.4	5.4	144.8	78.7	4.6	–1.3	65.0

[a]Consumer price index. — [b]Three-month money market rate. — [c]Government Bond yields. — [d]Average of daily rates. — [e]General government. Negative figures represent surpluses. — [f]National accounts basis.

Source: OECD, Economic Outlook No. 64, December 1998, Paris; Datastream.

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Zusammenfassung

In der zweiten Hälfte der achtziger Jahre wurde auf Japan starker politischer Druck ausgeübt, die gesamtwirtschaftliche Nachfrage zu erhöhen. Japan folgte diesem Druck und vergrößerte übermäßig seine Geldmenge. Dies führte zur einer Inflation der Vermögenswerte und zu einer finanzwirtschaftlichen Blase, die 199o zusammenbrach und Kapitalverluste sowie einen beachtlichen Einbruch im BIP mit sich brachte. Dieser Beitrag erarbeitet einige Lehren aus der japanischen Erfahrung.