

JAPAN'S LOST DECADE: ON THE DEVELOPMENT OF THE JAPANESE ECONOMY IN THE 1990S¹

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ABSTRAKT

Cílem článku je popsat a analyzovat hospodářský vývoj, shrnout a vysvětlit nejvýznamnější faktory, které pravděpodobně vedly k celkovému oslabení a dlouhodobé nestabilitě japonské ekonomiky v 90. letech 20. století (tzv. ztracená dekáda). Zásadní vliv na další vývoj měl rozpad bubliny na trzích aktiv na počátku 90. let 20. století. Rozpad této bubliny vyvolal nebo posílil další negativní a velmi komplikované procesy v japonské ekonomice, zejména počínající deflaci a nedostatečnou domácí poptávku. Rozpad bubliny také negativně ovlivnil japonský finanční sektor, výrobu a investiční aktivitu japonských společností atd. Existují však i faktory strukturálního a institucionálního charakteru, které limitují efektivitu proticyklických opatření hospodářské politiky a rozvoj nabídkové strany japonské ekonomiky.

Klíčová slova: Japonsko, recese, bublina na trzích aktiv, deflace, krize finančního sektoru

ABSTRACT

The objective of this article is to describe and analyse the economic development and to summarize and explain the most important factors that have caused the long-term stagnation and instability of the Japanese economy in the 1990s (so called „lost decade“). The asset price bubble collapse at the beginning of the 1990s has probably activated and amplified impacts of other complicated processes in the economy, especially of the protracted deflation and insufficient final domestic consumption. The burst of the bubble has negatively affected both Japanese financial sector, production and investment activity of Japanese companies etc. It is also possible to identify some important structural deficiencies and rigidities that limit both the effectiveness of government anti-stagnation measures and development of the supply side of the Japanese economy.

Key words: Japan, recession, asset price bubble, deflation, financial system crisis

JEL: E31, E32, N15, O11

INTRODUCTION

At the beginning of the 1990s Japan was hit by one of the biggest bubbles in the asset market. Its disruption started a protracted stagnation (so-called lost decade), led to the collapse of Japanese financial sector, deepening of instability of public finances and to a number of other problems. As Japan belongs to major world economies, there were many arguments and explanations in world literature why the economy was hit by such serious problems in the 1990s. However, there has never been an agreement on their causes and consequences. Factors of long-term slowdown and repeating recessions in the 1990s can be found on the aggregate supply side and demand side as well as in specific fields of the Japanese social and economic system.

¹ The article was written within the solution of the Research Plan of the Faculty of International Relations, the University of Economics in Prague Nr. MSM6138439909 „Governance in the Context of a Globalized Economy“.

The aim of the article is to describe and analyse economic development, sum up, list and explain main factors that might have led to the general slowdown and instability of the Japanese economy in the 1990s. The author tries to explain basic economic relations in the Japanese economy and describe its development in the so-called lost decade on the background of hasty development in the current world economy.

Factors of the slowdown in the 1990s and problems of the Japanese economy are discussed by a number of renowned authors. The topic was examined in a more complex way by e.g. Drysdale and Gower (*The Japanese Economy*, 1998), West or Posen. Posen with Kuttner in their study “The Great Recession: The Lessons for Macroeconomic Policy from Japan (2001) used the term “Great recession” for the development in Japan in the 1990s to stress the specifics of this period in comparison with the development in previous decades and development in other countries or regions. Less known is Edward L. Lincoln, whose book *Arthritic Japan: The Slow Pace of Economic Reform* (2001) thoroughly analyses individual phases of an economic cycle and approaches of government authorities to solving major economic issues. Best known Japanese authors of a number of books and papers on the Japanese economy known even in American National Bureau for Economic Research or as members of research teams of Japanese government and Central Bank of Japan (BOJ) are Takatoshi Ito (e.g. *The Japanese Economy*, 1992) and Hiroshi Yoshikawa (e.g. *Japan’s Lost Decade*, 2002).

Selected issues of the Japanese economy (e.g. the bubble in asset markets, liquidity trap, deflation, credit crunch, factors of limited efficiency of fiscal expansion in Japan in the 1990s or causes and impacts of financial sector crisis) were studied also by other authors. Factors of slowdown and specifics of economic cycles were discussed by a Nobel prize winner in the field of economics for 2004 E. C. Prescott a F. Hayashi (study *The 1990s in Japan: a Lost Decade*, 2002). Causes and impacts of a liquidity trap and deflation were investigated by P. Krugman (e.g. article *It’s Baaack! Japan’s Slump and the Return of the Liquidity Trap of 1998* and following articles). Numerous Japanese authors, e.g. K. Okina, S. Shiratsuka or BOJ governor M. Shirakawa analysed causes and impacts of a so-called bubble in the asset markets in the early 1990s.

OECD and IMF publications must also be mentioned, mainly empirical studies of economic cycles in developed countries published in different issues of OECD Economic Surveys or IMF World Economic Outlook. Very good theoretical studies and information on the condition and issues of the Japanese economy can be found e.g. in IMF Selected Issues.

The text of this study is divided into three parts, which chronologically map the development in the 1990s. The first part is devoted to a bubble boom and recession after the disruption of the bubble in asset markets. The second part reminds the development in 1994-1996, when the Japanese economy was stable for a certain time; nevertheless serious macroeconomic and structural problems which influenced the development in the successive period (particularly deflation, liquidity trap, imbalance of public finances and problems of the financial system) emerged and deepened simultaneously. The last part describes the end of the decade with the emphasis on the analysis of efficiency of economic policy measures in this period and settling of financial system crisis. Attention is paid to impacts of the crisis in East-South Asia and Japanese links to these regions.

1 Bubble boom and recession in the beginning of the 1990s

Strong growth in the Japanese economy at the end of the 1980s was paradoxically encouraged by a strong appreciation of Japanese currency (yen, JPY).² This rise is, however,

² Yen appreciated after a coordinated foreign exchange intervention of G5 countries against USD strengthening of 1985, a so-called Plaza Accord. The impulse for JPY appreciation and

often called a “bubble boom” or a “bubble” for which three features are typical: significant growth in money and loan supply, rapid growth in asset prices and overall overheating of economy. The disruption of the bubble was reflected not only in the recession in 1991-1993. According to most authors bubble disruption was the most important event of the 1990s for the Japanese economy, its consequences were long-term and could be seen in many sectors.

1.1 Bubble in asset markets in 1986-1991

From 1986 on the Central Bank of Japan (BOJ) responded to the JPY appreciation by decreasing the discount rate to protect Japanese exports and support domestic demand. Even despite the effort for fiscal consolidation, the government approved extensive incentives to support domestic demand. The main aim was to avoid so-called slump from strong yen (endaka recession) in 1985-1986, which was achieved very soon. Already at the end of 1986 Japan witnessed transition to the phase of conjunction and speeding GDP dynamics.³ 1987 is considered the beginning of the bubble as the economy reached the expansion phase, at the same time money supply started to grow fast and so did also the number of new loans and prices of assets.⁴ The number of new loans which were cheaper and cheaper and more affordable thanks to falling interest rates grew very fast, e.g. in 1989 the number grew by 23.2%. The growth in money supply reached almost 11% every year before 1990 – see table 1.

Table 1: Japan – Main Economic Indicators, 1986-1993

<i>Item</i>	<i>1986</i>	<i>1987</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>
GDP in current prices (trill. JPY)	336,3	350,0	376,5	405,6	437,0	464,9	477,1	480,8
Nominal growth rates (%)	4,7	4,1	7,6	7,7	7,7	6,4	2,6	0,8
Real growth rates (%)	3,0	3,8	6,8	5,3	5,2	3,4	1,0	0,2
- Private final consumption (%)	3,3	4,1	4,9	4,8	4,6	2,9	2,6	1,4
- Residential investment (%)	7,3	19,9	12,8	-1,4	4,9	-5,4	-5,9	1,1
- Private capital investment (%)	6,2	3,9	17,1	15,7	10,1	4,3	-7,1	-10,3
Unemployment rate (%)	2,8	2,8	2,5	2,3	2,1	2,1	2,2	2,5
Consumer price index (CPI, %)	0,6	0,1	0,7	2,3	3,1	3,3	1,6	1,3
Trade balance (trillion JPY)	15,1	13,2	11,8	11,0	10,0	12,9	15,8	15,5
Yen exchange rate against U.S. Dollar	185,0	151,0	127,0	130,0	150,0	135,0	130,0	118,0
Monetary base growth (% M2+CD) ¹	8,7	10,4	11,2	9,9	11,7	3,6	0,6	1,1
Discount rate (end of year, %)	3,0	2,5	2,5	4,25	6,0	4,5	3,25	1,75

Note: Shaded areas indicate periods of economic recession. ¹ The monetary base is defined as the total of cash in circulation (including cash held by financial institutions) and current deposits of financial institutions at the central bank.

Source: CAO (2006): Annual Report on The Japanese Economy and Public Finance (GDP growth rates, inflation, monetary base); Statistics Bureau (2008): Historical Statistics of Japan (unemployment rate, trade balance, exchange rate); Statistics Bureau (1998): Japan Statistical Yearbook 1998, p. 451 (discount rate); own calculations.

German Mark appreciation was the pressure of the USA. This way the USA wanted to reduce the current account deficit of the balance of payment. In 1987 the agreement of G5 countries was modified by the Louvre Accord, where Japan signed up to maintain a stable exchange rate JPY/USD and implement monetary and fiscal expansion to increase aggregate demand. For the agreements and more detail see G8 Information Centre: www.g8.utoronto.ca/.

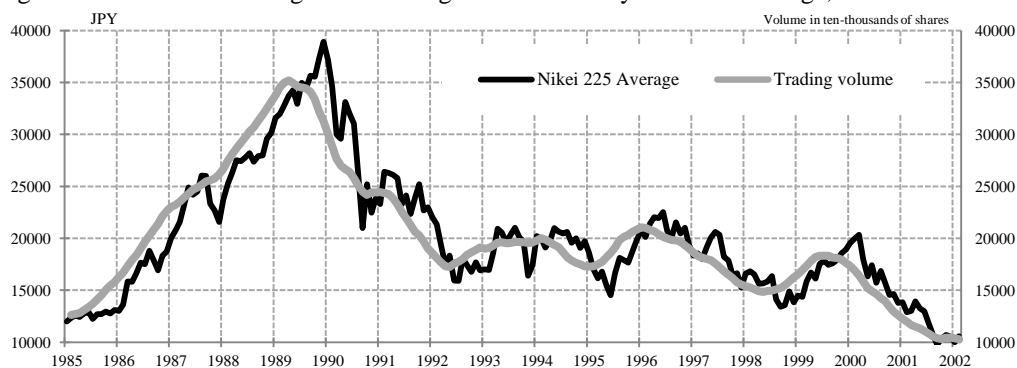
³ ESRI (2011): Guide for Using Diffusion Indexes and Composite Indexes. Course and features of Japanese economic cycles in more details Stuchlířková, Z. (2011a): Specifika hospodářských cyklů Japonska, p. 279–295.

⁴ Okina, K. – Shirakawa, M. – Shiratsuka, S. (2001): The Asset Price Bubble and Monetary Policy: Japan’s Experience in the Late 1980’s and the Lessons, p. 397.

The consequence was a strong growth in consumers' spending of households and investments into properties and securities leading to rapid growth in their prices (so-called asset inflation) – see figure 1. The overall price level (measured by CPI index) remained stable, mainly thanks to decreasing prices of imports (together with strengthening JPY exchange rate).⁵

The main stock exchange index Nikkei 225 Average reached the top with JPY 38.916 at the end of 1989, i.e. it increased by almost three times compared to its level in 1985. Besides the growing value of securities, the trading volume at Tokyo and other Japanese stock exchanges was also growing. In the same period the land price index grew almost four times. Land prices (especially in biggest cities) had grown relatively fast even already before 1986, when the BOJ reduced the interest rates. Asset prices started to accelerate already around 1982.⁶

Figure 1: Nikkei 225 Average and Trading Volume at Tokyo Stock Exchange, 1985-2002



Note: The Nikkei 225 Average is comprised of the 225 highly liquid stocks of the Tokyo Stock Exchange 1st Section at the end of month (left scale). Trading volume at the Tokyo Stock Exchange 1st Section, monthly average amount of traded stocks in one day (right scale).

Source: Statistics Bureau (2008): Historical Statistics of Japan; BOJ (2002): Stock Market Statistics; own construction.

Approximately in the same period there were bubbles also in other developed OECD countries, e.g. Great Britain, Finland and Sweden. Even though a comparison is difficult, the level of asset price fluctuations in Japan was the biggest, as well as the level of bad assets held by financial institutions after the bubble disruption and value of public means invested into settling of bad loans. According to the OECD this has been the biggest bubble in OECD countries after World War II (before asset price bubbles in 2008-2009).⁷

From the Japanese view it was the biggest and longest bubble after the war. During this bubble the economy grew at a similar pace as in the period of fast growth in the 1960s. However, the second longest expansion was followed by the second longest recession after the bubble disruption. Average pace of the real GDP growth in 1986-1991 was 4.4%, the average in developed countries reached 3.3% according to the UNCTAD (in the USA only 2.9%).⁸ The growth was driven by private capital investments and private consumption and mainly by

⁵ Factors of bubble rise of a bubble in the asset market, see Stuchlíková, Z. (2011b): Japonská bublina na trzích aktiv a důsledky jejího prasknutí počátkem 90. let 20. století, p. 91–107. Development of the Japanese economy until the rise of the bubble, compare Stuchlíková, Z. (2011c): Japonský hospodářský zázrak. To the development of the Japanese economy from the end of the 1970s to the end of 1980s see p. 43–69.

⁶ Statistics Bureau (2008): Historical Statistics of Japan.

⁷ OECD (1998): Economic Survey – Japan, 1998, p. 45.

⁸ UNCTAD (1997): Handbook of International Trade and Development 1996/97, p. 324, 325.

investments into properties – see table 1. JPY appreciation could be seen in a significant, but only temporary decrease in surplus of the trade balance. Unemployment also developed favourably, inflation slightly grew.

1.2 Bubble disruption and transition of the economy into recession

In 1989 the BOJ increased the discount rate from 2.5% to 4.25% and in 1990 even to 6%. The central bank took this step from fear of potential inflationary pressures caused by increased money supply and because of continuous yen devaluation. While in 1988 prices of consumer goods grew by 0.7%, in 1989 it was already by 2.3% and in 1990 by 3.1% – see table 1. Monetary control was tightened and the amount of money which banks were allowed to borrow against mortgages in the form of property was limited.

Tightening of monetary policy led to a dramatic decrease in asset prices. The stock exchange index Nikkei 225 Average slumped by 44% by 1992 compared to 1989 and land price indexes experienced a similar slump, even though with a certain delay. Immediate impact of the decrease in asset prices were substantial capital losses – in cumulative expression according to the OECD in 1990-1996 they reached approximately JPY 967 trillion, i.e. twice the one-year Japanese GDP. Households carried more than 44% of overall capital losses, non-financial institutions 34%.⁹

The bubble disrupted and the economy slumped into recession during which, however, absolute decrease in current or real GDP was not experienced. In 1990 the growth in real GDP was still recorded at 5.2%, but already in 1991 the pace started to slow down – see table 1. According to an official statement of the EPA/ESRI the recession started in March 1991 and lasted till October 1993. It was the second longest recession after the recession in 1980-1983.¹⁰ Also other developed countries experienced a slowdown in the growth at the beginning of the 1990s, many of them also passed through recession, however, from different reasons. For example the pace of GDP growth in Germany fell by 1.1% in 1993 and by 0.5% in the USA in 1991.¹¹

In 1991 the BOJ started to cut the discount rate (from 6% down to 1.75% in 1993) to encourage the “strangled” economy. However, the BOJ did not manage to stop the decrease in private consumption and gross fixed investments. Japanese government also focused on the support of weakened domestic demand. In 1991 the government approved a new 5-year plan for 1992-1996. In compliance with the strategy from the 1980s the plan was aimed at improving the living standard of Japanese citizens and development of domestic economy and in same time at a more obliging attitude of Japan to global community. The success, however, was not big. In the same time three incentive “packages” amounting to JPY 29.9 trillion, i.e. 2-3% of GDP were adopted in 1992-1993.¹² These fiscal measures should have supported mainly public investments and housing construction and included also reduction in taxes.

Thanks to monetary and fiscal measures private investments into properties started to grow slightly, nevertheless private capital investments continued to decline. Only SMEs responded to the decrease in interest rates, as they are more sensitive to their changes than big businesses. And it is the decrease in fixed investments that is to be blamed for a significant decrease in the pace of GDP growth. The growth in private consumption also slowed down in the period in question.¹³

Although economic dynamics slowed down during the recession, it did not cause any more substantial problems with unemployment or inflation. Till 1993 the inflation increased

⁹ OECD (1998): OECD Economic Survey – Japan 1997-1998, p. 46.

¹⁰ ESRI (2011): Guide for Using Diffusion Indexes and Composite Indexes.

¹¹ OECD (2001): OECD Economic Outlook No. 7, 2001, p. 205.

¹² OECD (2000): OECD Economic Survey – Japan 1999-2000, p. 53.

¹³ CAO (2006): Annual Report on the Japanese Economy and Public Finance 2006.

only to 2.5%, i.e. by 0.4 percentage points compared with 1990. As the BOJ intended with its strict anti-inflationary packages, the inflation slowed down to 1.2% in 1993 – see table 1. However, the price for this success proved to be too high compared with recession and further decrease in prices. The yen started to appreciate hand in hand with growing real interest rates – this contributed to strengthening deflationary pressures, which caused serious problems to the economy in the ensuing period.

Due to deepening problems and unclear future of the economy there were significant changes also on the domestic political scene. In 1993 for the first time since the World War II the position of one party, Liberal Democratic Party (LDP) was suppressed. In January 1993 Prime Minister Miyazawa was forced to resign due to several corruption scandals and increasing disagreement among individual fractions in the LDP. Japan New Party won the majority in elections in July 1993. Coalition governments (after 1994 again with the LDP) were nevertheless very fragile and changed very often. There were eight different Prime Ministers in Japan from 1990 to 2000. Domestic political instability and insufficient consensus among leading parties over the solution to main issues influenced negatively forming of the economic policy.

2 Recovery of the economy in 1994-1996

The recovery phase lasted from November 1993 to May 1997, i.e. 43 months. As this was the third longest after-war expansion,¹⁴ the government held the impacts of the preceding serious recession for solved and the phase of stock adjustment for finished. Nevertheless, private investments and consumption were rather instable in this period (particularly investments into real estates) and grew slowly, prices of real estates also continued to decline. Positive development was attributed mainly to ongoing monetary and fiscal incentive measures. However, already in June 1997 the economy fell into another serious recession, which found expression even in the decline in the real GDP of 1.8% in 1998 and 0.2% in 1999 – see table 2.

Table 2: Japan – Main Economic Indicators, 1994-2000

Item	1994	1995	1996	1997	1998	1999	2000
GDP in current prices (SNA93)	486,5	493,3	502,6	512,2	503,0	495,2	501,1
Nominal growth rates (%)	1,2	1,4	1,9	1,9	-1,8	-1,5	1,2
Real growth rates (%)	1,1	1,9	2,6	1,4	-1,8	-0,2	2,9
- Private final consumption (%)	2,7	1,8	2,3	0,8	-0,8	1,1	1,1
- Residential investment (%)	7,2	-4,8	11,8	-12,0	-14,2	0,1	0,9
- Private capital investment (%)	-5,7	3,1	1,8	6,6	-5,2	-4,3	7,9
Unemployment rate (%)	2,9	3,2	3,4	3,4	4,1	4,7	4,7
Consumer price index (CPI, %)	0,7	-0,1	0,1	1,8	0,6	-0,3	-0,7
Trade balance (trillion JPY)	14,7	12,3	9,1	12,3	16,0	14,0	12,6
Yen exchange rate against U.S.Dollar	107,0	93,0	106,0	120,0	130,0	118,0	106,0
Monetary base growth (% M2+CD) ¹	2,1	3,0	3,3	3,1	4,0	3,6	2,1
Discount rate (end of year, %)	1,75	0,5	0,5	0,5	0,5	0,5	0,5

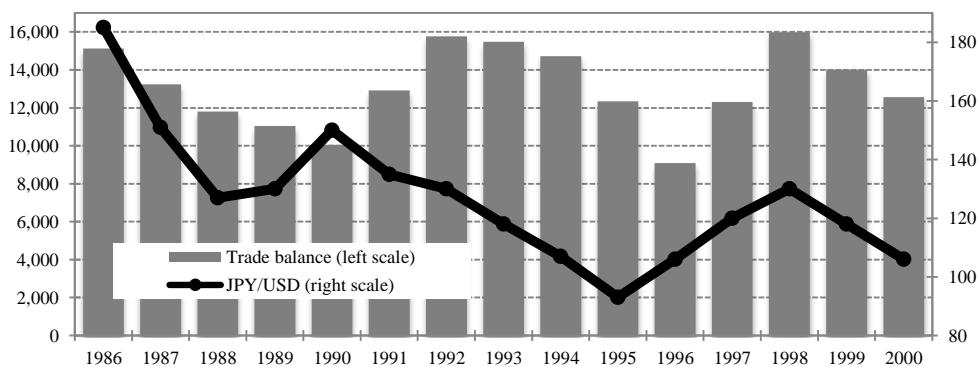
Note: Shaded areas indicate periods of economic recession. ¹ The monetary base is defined as the total of cash in circulation (including cash held by financial institutions) and current deposits of financial institutions at the central bank.

Source: CAO (2006): Annual Report on The Japanese Economy and Public Finance 2006, (GDP growth rates, inflation, monetary base); Statistics Bureau (2008): Historical Statistics of Japan (unemployment rate, trade balance, exchange rate); Statistics Bureau (1998): Japan Statistical Yearbook 1998, p. 451 (discount rate); own calculations.

¹⁴ ESRI (2011): Guide for Using Diffusion Indexes and Composite Indexes.

Ongoing appreciation of the currency to the value of about 90-100 JPY/USD, culminating in 1995 represented another restriction for the economy – see figure 2. The main factor of yen appreciation was the pressure on devaluation of USD on the background of culminating financial crisis in Mexico and deepening US trade deficits. Compared to the USA, Japan also offered relatively high real interest rates to investors (even despite low nominal rates). Japanese businesses also played an important role as they repatriated dollars because of the worsening situation in the domestic financial sector.¹⁵ Appreciation did not lead to the expected significant decline in imports. Nevertheless, it was reflected in the fast growth in cheaper and cheaper imports and thus also in the decline in the trade balance surplus. In consequence of yen appreciation manufacturing businesses started to move their operations from Japan to countries in South East Asia from the beginning of the 1990s on. Thus the growing total imports contained also growing imports from these countries (so-called return imports).¹⁶ Appreciation was also negatively reflected in the decline in securities markets and mainly in further decline in the domestic price level.

Figure 2: Yen Exchange Rate against U.S. Dollar and Trade Balance of Japan (trillion JPY), 1986-2000



Source: Statistics Bureau (2008): Historical Statistics of Japan; own construction.

A vast earthquake in Kobe region (Great Hashin-Awaji Earthquake) on 17 January 1995 also had impact on the economy. It accounted for more than 5 thousand victims and damages to properties in the amount of 2% of GDP. Indirectly one could experience it in growing pessimism in economy.¹⁷

The central bank responded to yen appreciation and other shocks in the economy by further liberalization of its monetary policy. In summer 1995 the BOJ pushed the discount rate down to 0.5% and kept it on this level till 2001, when it was decreased further. The main aim of the BOJ was to encourage domestic investments, increase the money supply in the economy and thus to avoid deflationary pressures and continuing yen appreciation. Two governmental fiscal packages from 1995 were targeted against the appreciation as well. These were supposed

¹⁵ Grimes, W. W. (2001): *Unmaking the Japanese Miracle*, p. 182.

¹⁶ Yoshikawa, H. (2002): *Japan's Lost Decade*, p. 30-31.

¹⁷ In the same year the attack organized by Óm Šinrikjó with nerve gas in the Tokyo underground deepened the scepticism about a further development and resulted in the decline in credit of public institutions, since they did not pay enough attention to it straight from the beginning. Data taken from EPA (1995): *Economic Survey 1994-95: Toward the Revival of Dynamic Economy in Japan*, p. 4-5.

to underpin deregulation of the economy and encourage public investments. Besides the 1994 package in the total amount of JPY 15.3 trillion, the government poured another JPY 17.4 trillion into the economy in 1995. The packages reached more than 3% of the GDP, the biggest part of them went on investments into social infrastructure and price decrease (JPY 5.9 trill.).¹⁸

Besides incentive packages the government tried to encourage domestic demand also within general economic programmes, e.g. a new economic plan of 1995 for the period 1996-2000. In this plan structural reforms, deregulation of the economy, generation of new jobs, stabilization of the financial system and social field (improvements in housing, solution to problems caused by aging of population, etc) were stressed.¹⁹ The new 5-year plan was followed by a programme of a structural reforms of 1996. Major principles of this programme were e.g. support of the competition and newly also support of prospective businesses with instable financial situation. Priority fields of structural reforms were financial sector, telecommunications, distribution systems, land treatment and housing, labour market and healthcare.

These measures led to the growth in private capital investments, whose pace recovered from red numbers. Thanks to ongoing deregulation, electronic and telecommunications industries accounted for the biggest growth in investments. Thanks to measures taken by the BOJ, government and G7 countries²⁰, the yen started to devaluate gradually, which could be seen also in slowing down the import dynamics and increasing surplus of the trade balance. Despite the recovery, however, unemployment continued to grow (to 3.4% in 1996) and the growth in consumer prices oscillated around the zero border – see table 2.

Although it seemed that the economy was recovering, negative factors appeared in this phase as well. Besides JPY appreciation, continuing decrease in asset prices and earthquake in Kobe region, there was a further decrease in the price level, public finances worsened, the amount of non-performing loans and assets grew and commencement of a financial crisis.

2.1 Transition into deflation and liquidity trap

Already from the 1980s on Japan showed the lowest average rates of price level growth in the OECD. The rate of inflation was gradually falling in all developed countries, in Japan the fastest. While the average annual rate of inflation was 2% in 1990-1994, it fell to 0.49% in 1995.²¹ In 1994 the rate of inflation (measured CPI) reached only 0.7% and in the ensuing year -0.1%. Producers' prices decreased in the long term from the mid-1980s. In the 1990s the pace of their decrease was faster than the decrease in consumers' prices and it was the same with GDP deflator – see figure 3. Worries about negative effects of the deflation started to appear in Japan in this period.²²

The long-term decline in prices was not expected in Japan by either official or private stakeholders. Deflation is likely to be initiated by more factors on the side of growing aggregate supply (growth in productivity and decrease in costs as a result of technological progress and structural changes, later decrease in prices caused by restructuring of non-competitive

¹⁸ OECD (2002): OECD Economic Survey – Japan 2001-2002, p. 53.

¹⁹ Hsu, R. C. (1994): The MIT Encyclopedia of the Japanese Economy.

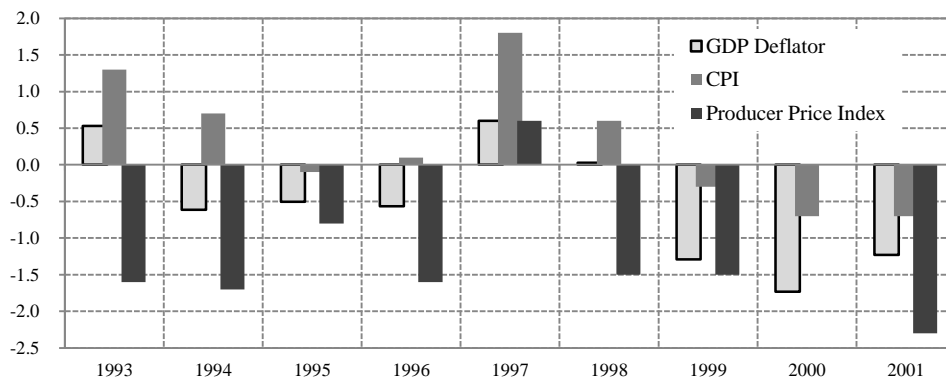
²⁰ Several coordinated interventions (following the G7 agreement) to strengthen USD and weaken JPY were undertaken in 1995. In contrast to the Plaza or Louvre Accords from the 1980, president Clinton's administration of this period strove for maintaining a strong USD. A strong USD should have reflected a strong economy, therefore the USA were interested in a so-called strong-dollar policy.

²¹ Cargill, T. F. (2001): Monetary Policy, Deflation and Economic History, p. 119.

²² Deflation can be defined as “decreasing of a price level or increasing of purchasing power of a money unit”. According to Hindls, R. – Holman, R. – Hronová, S. a kol. (2003): Ekonomický slovník, p. 71.

businesses etc.) as well as by long-term stagnating aggregate demand (caused by aging of population and psychological aspects after the slump in asset prices), including the crisis in the banking system, insufficiently expansive monetary policy (in the long-term oriented at maintenance of low inflation).²³ The deflation was also strengthened by JPY appreciation, which reduced prices of imported goods. The continuing decline in prices could also be seen in strong deflationary expectations in the 1990s, which the BOJ was not able to reverse.

Figure 3: Price Development in Japan, 1993-2005, average annual changes (%)



Source: CAO (2006): Annual Report on The Japanese Economy and Public Finance 2006, (CPI, Produce Price Index). OECD Economic Outlook, No. 81, 2007 (GDP deflator); own construction.

Impacts of deflation on the economy generally depend on its resources, extend and length.²⁴ In Japan the causes of deflation were complicated; decrease in prices was long-term and relatively big. Due to worries about uncertain future, Japanese families started to economize on their consumption even more and preferred possession of money in cash. Low consumption made the businesses decrease production prices further and limit investments, which worsened their financial situation and ultimately led to the growth in bad debts in balances of commercial banks because of the growth of bankruptcies in the economy.²⁵ Difficulties of the business sector could be seen in the growth in unemployment and in stagnation of nominal wages or even in their decrease. Even other fields experienced the decline

²³ Baig, T. (2003): Japan's Experience with Deflation and Associated Costs, p. 42.

²⁴ As Baig claims, in case of temporary price declines resulting from the growth in aggregate supply or productivity, the impacts on the economy needn't be serious. Deflation as well, if it is caused by positive external shocks (e.g. decrease in import prices thanks to substantial trade liberalization) may only represent adjustment and transmission of the economy to a new equilibrium. Negative effects are connected mainly with deflation pulled by aggregate demand. See Baig, T. (2003): Understanding the Costs of Deflation in the Japanese Context, p. 5.

²⁵ Unexpected decrease in prices among other consequences worsens the position of debtors; the wealth is redistributed from a debtor to a creditor. The value of liabilities in real expression grows (nominal value remains unchanged), which may cause problems with their settlement. However, in the same time the value of mortgages in the hold of creditors decreases. This decrease may significantly be strengthened by the decrease in the asset price caused by dissolution of bubbles in asset markets. This was the case of Japan in the early 1990s. As a consequence of a credit crunch, this may appear in such situation, expenditures on consumption and investments fall and thus also the aggregate demand – see further.

in economic activity, e.g. in the decrease in state revenues from taxes and increase in expenditures in the social sphere.

Although the BOJ responded to declining prices from the mid 1990s in a standard way, i.e. by monetary expansion and reduced the discount rate to the minimum, it did not lead to the expected increase in credit dynamics and money supply in circulation. As far as the reasons for the inefficiency are concerned, e.g. Horská states that “the causes and methods of Japanese deflation cure should be searched both on the aggregate supply side and aggregate demand side. Therefore the measures of fiscal and monetary policy oriented only at the recovery of domestic demand have so far been ineffective”²⁶ Most authors agree that the best way how to “cure” deflation is its prevention.²⁷ In case that deflation breaks out, it is necessary to offer the economy enough liquidity and ensure stability of the financial system.

In Japan, however, monetary policy had a number of restrictions. According to P. Krugman and other authors²⁸ a problem connected with deflation, a so-called liquidity trap appeared here (as a result of insufficient demand) in the 2nd half of the 1990s. Nominal interest rates are then on a very low, almost zero level (they cannot fall lower), hence participants in financial markets generally expect their future increase. They prefer possession of liquid cash as they expect the price of other assets to fall hand in hand with the growth in the interest rate. Prices decrease – hence real interest rates are too high, they do not stimulate domestic consumption, which makes recovery of the economy impossible. Increase in employment and production (in the state of surplus capacity in traditional industries and slow development of new ones) requires a significant reduction in real interest rates (even to the minus level). However, the monetary policy is not efficient, since any growth in the money supply remains in a liquid form or in voluntary bank reserves.²⁹ The monetary base increases, but the central bank cannot control the growth in the money aggregate.

In Japan it was probably the above-mentioned insecurity about the future development of the economy that played a role in the decline in the dynamics of domestic demand after 1997 and preference of liquidity possession. A strong aversion towards risk is typical for the Japanese, whom consider all activities from a relatively long-term view. This insecurity probably grew even stronger in the mid-90s when the instability of the financial sector deepened and criticism of vast governmental fiscal packages grew. In this point of view the development in Japan is very specific.

Krugman blames internal factors, particularly a weak level of innovations in technology and aging of population for the liquidity trap. In contrast to the traditional concept of a liquidity trap³⁰ he doesn't advocate the fiscal policy to solve the situation (but he doesn't

²⁶ General factors of deflation are excessive production capacities, liquidity trap, and excess of savings supply over the demand for investments. Price slump in the real estates market is given as the most important factor for deflation in Japan. For more detail see Horská, H. (2004): *Deflace v Japonsku*, p. 152.

²⁷ Prevention can be implemented so, that when benchmarking the inflation, the central bank sets a bottom limit, under which inflation should never fall. It is important to maintain stability of the financial system in order reduce a risk of a bubble in asset markets. If prices start falling, the central bank should aggressively respond by interest rates and add liquidity into the economy as soon as possible. Frait, J. (2003): *Měnová politika v období velmi nízké inflace*, p. 3.

²⁸ See e.g. Krugman, P. (1998): *Its Back: Japan's Slump and the Return of the Liquidity Trap* or Frait, J. – Melecký, M. – Horská, H. (2002): *Recese, deflace, bankovní krize a past likvidity v Japonsku*.

²⁹ See e.g. Hindls, R. – Holman, R. – Hronová, S. a kol. (2003): *Ekonomický slovník*, p. 291.

³⁰ J. Hicks (1937) worked up the topic of a liquidity trap from Keynes's speculative demand for money. He claimed that in case of too low interest rates, stakeholders anticipate their future growth, so they will hold money, not bonds. Monetary expansion doesn't lead to the increase in

reject it), but he favours the monetary policy. He states that in the long term the central bank should accept the credibility policy of a controlled inflation with the aim of increasing inflationary expectations to reach the decrease in real interest rates and the ensuing growth in investments. The BOJ should set a target level of inflation in a long term (approx. 4%) and do the utmost to achieve it, i.e. to run standard open market operations, non-standard operations with long-term bonds and unsterilized interventions.³¹ If the liquidity trap is seen as a problem of surplus of savings to demand for investments, monetary expansion should lead also to currency depreciation with positive impacts on net export. Nevertheless, Krugman also points out that the necessary export of capital is prevented by taking account of the fact that the exchange rate is expected to return to the “normal” level, i.e. future appreciation.³²

Krugman’s proposals were accepted by American and Japanese economists, the BOJ, however, rejected them at the beginning arguing that it was not easy to set a certain inflationary goal. The BOJ was also worried about a potential loss of control in case of inflation. Moreover, growth in nominal interest rates resulting from higher inflation (or inflationary expectations respectively) would eliminate the effects of decreased real rates. Furthermore, JPY was not desired regarding the relations with business partners.³³

In 1996-1998 prices started to grow slowly again and worries about a deflationary spiral decreased. But the decrease in prices continued after 1999. Thus deflation became an important factor for further development of the economy and according to some authors it was the cause of the ensuing crisis. One speaks about a so-called deflationary recession or a deflationary-recession spiral.

2.2 Deepening imbalance of public finances and starting crisis of financial system

Fiscal expansion of the 1st half of the 1990s led to a partial recovery of the economy, but also to a substantial worsening of the state of public finances. Public expenditures grew from 31.6% of the GDP in 1991 to 36.8% of the GDP in 1996. On the contrary, in the same period receipts to budgets fell from 33.3% to 31.7% of the GDP. In 1992 Japan still showed a surplus of public budgets. From 1993 on, however, Japan started to have deficit budgets, the deficit grew every year and in 1995 the deficit got above the 5% of nominal GDP and above the average of OECD countries. Gross public indebtedness grew to 95% of the GDP in 1996 – see table 3. A higher rate of indebtedness was recorded only in 3 OECD countries in that year (Canada 102%, Belgium 133% and Italy 128% of the GDP).

The indebtedness started to grow rapidly in the time, when the country was facing aging of its population and therefore decreasing tax revenues and growing expenditures into pensions and health care in the future. Nevertheless, at the beginning, the public debt was not

the money supply and aggregate demand. Only expansive fiscal policy can ensure the recovery of economy. For more details see e.g. Mach, M. (2002): *Makroekonomie II*, p. 75, 83-87.

³¹ Krugman, P. (1998): *It’s Back: Japan’s Slump and the Return of the Liquidity Trap*.

³² For more details of theory of exchange rates see e.g. Neumann, P., Žamborský, P., Jiráňková, M. (2010): *Mezinárodní ekonomie* or Taušer, J. (2007): *Tradiční teorie měnového kurzu v podmínkách ekonomické transformace*, in: *Ekonomický časopis*, 2007/9.

³³ There is a lot of criticism of a liquidity trap theory and Krugman’s concept. E.g. B. Powel (2002: *Explaining Japan’s Recession*, p. 40) states that his recommendations were inefficient. This could be seen during the recession in 1998, when the BOJ and MOF purchased private and government securities. They held up to 53% of all government bonds. Even though the amount of Money in the economy (Money base) increased and JPY depreciated, the economy stayed in recession. According to other representatives of a so-called Austrian school the whole anti-deflationary policy is unjustified and harmful as it leads to inadequate redistribution and boosting of recession. According to e.g. J. Šímy (2007: *Deflace – definiční znak zdravé ekonomiky*) deflation is a “defining sign of a healthy economy.”

seen as an important risk, since in net expression it reached only 29.3% of the GDP in 1996 (after deduction of state debts to other stakeholders). For example Italy faced a net debt of 104% of its GDP and Belgium even 115% of its GDP.³⁴ Japanese public debt is quoted in yens and in the mid-90s more than 90% of the debts were held by domestic stakeholders. Hence from the view of Japanese government the problem “was still at home”. Paradoxically, the state became not only a debtor, but also its own creditor, as public institutions held more than a half of state bonds in the long term, e.g. in 1996 it was 61%.³⁵ Nevertheless, budget deficits and fast growing indebtedness of Japan became subject to widespread criticism from renowned rating agencies and international institutions. It was partially their contribution that in 1997 the government approved strict, nevertheless too early measures for consolidation of public finances.

Table 3: Japanese Public Finances in 1990-2000, % of nominal GDP

<i>Item</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>
Public budgets balance	2,1	1,8	0,8	-2,4	-4,2	-5,1	-5,1	-4,0	-5,8	-7,4	-7,6
- OECD average	-2,9	-3,6	-4,5	-4,9	-4,2	-4,0	-3,1	-1,7	-1,3	-0,8	0,2
Gross public debt	68,6	64,8	68,6	74,7	80,2	87,6	95,0	101,6	114,3	128,3	136,7
- OECD average	54,2	55,9	59,3	63,7	65,2	70,1	72,2	72,5	73,0	72,4	69,6
Net public debt	26,1	13,3	13,3	18,1	20,8	25,0	29,3	34,8	46,2	53,8	60,4
- OECD average	33,9	33,7	33,7	40,3	41,7	42,6	44,5	44,3	44,2	41,6	38,6

Source: OECD (2007): OECD Economic Outlook, No. 81, p. 265, 270, 271.

Further threat was a problem of commercial banks and other financial institutions, lasting since the bubble dissolution in 1991. Due to economic stagnation many businesses were not able to pay high debts from the period of a bubble boom. Moreover, the value of mortgages, i.e. real estates was declining. Undercapitalized financial institutions recorded higher and higher losses and a growing volume of so-called non-performing loans (NPLs). Japanese central bank generally defines these loans as loans, where banks do not receive the planned instalments of the capital and interests and their economic value is declining under their accounting value. Thus there is a risk, that in future banks will not be able to reimburse the costs of the loan from their yields and will themselves be threatened by a lack of resources.

While in 1992 the total volume of NPLs stated by the BOJ was JPY 1.6 trillion, in 1994 it was JPY 5.2 trillion and in 1995, it was already JPY 13.4 trillion³⁶ In October 1994 for the first time governor Mieno publicly informed about the need to solve this issue, however, without any adequate response of the government.

In 1995 for the first time the Prime Minister Murayama’s government had to intervene publicly in favour of mortgage companies (jusen)³⁷ and credit co-operatives, which invested into real estates during the bubble and now were close to bankruptcy. Overall losses of these non-banking institutions reached JPY 6.4 trill. in 1995. As jusen were closely connected with other businesses (particularly in the country), it was also a political issue and so the government

³⁴ OECD (2007): OECD Economic Outlook, No. 81, p. 263, 264, 270, 271.

³⁵ Statistics Bureau (2008): Historical Statistics of Japan.

³⁶ BOJ (2002b): Japan’s Nonperforming Loan Problem.

³⁷ Jusen are non-banking companies founded by banks and other financial institutions in the 1970s to complete their offer of loans on housing for households. In the 1980s they started to lend high loans not only to households, but also to real estates companies. Their total losses from speculative trading were so high during the bubble, that their founder’s banks were not able to reimburse them. Their problems were described first in 1993. For more details see e.g. Nakaso, H. (2001): The financial crisis in Japan during the 1990s: how the Bank of Japan responded and the lessons learnt.

was bound to take steps. Many other regional banks and non-banking financial institutions went bankrupt or were forced to undergo restructuralization from the same reason.

Financial institutions were quickly losing credit among the public even due to large bank frauds which started to be uncovered in the mid 1990s. One of the major scandals was illegal trading of New York branch of one of the major Japanese banks – Daiwa Bank. In September 1995 this trading made the bank declare a USD 1.1 billion loss and later American authorities made the branch finish their activities in the USA.³⁸ Hence the bank problems started to appear even on the international level.

In order to renew the stability of the banking system, the parliament approved six new laws in 1996 making possible e.g. liquidation of most problematic juseus and other financial institutions and establishing specialized companies for administration of bad mortgages. Under the amendment to the act on deposit insurance the system of payment in case of bankruptcy of financial institutions was improved and a new fund was established, which allowed the Japanese company for deposit insurance a higher coverage of bank deposits. However, the financial system required deregulation and far reaching reforms, which were announced in November 1996 – see further.

3 Worsening situation and recession in 1997-1999

The economy experienced another shock, when the real GDP fell by 1.8% in 1998 and by 0.2% in 1999. The absolute fall in the GDP was recorded for the first time since oil shocks. According to the government the negative development started in June 1997 and lasted till January 1999. Particularly the slump in private capital investments, private consumption and public investments accounted for the fall in the GDP. Japanese exports went down as well, as they were negatively influenced mainly by the Asian financial crisis – see table 2. Main factors of the rise of this recession were: too early shift to restrictive fiscal policy, growing instability of the financial system, influence of the Asian crisis and deflationary pressures.

According to EPA the recession had also structural reasons, resulting from the characteristics of the economy. In the 90s the model of standardized mass production proved to be too rigid and out of date in comparison with new trends in globalized world economy. From the mid 90s on developed countries switched from mass production and large economic projects to the economy focused on diversity, high-technologies, services and information. Japan fell behind. Numerous studies started to point out system failures of a so-called Japanese model.³⁹

3.1 Controversial efficiency of fiscal expansion and open crisis of the financial system

The improvement of economic development in 1994-1996 was accounted mainly to fiscal expansion and growth in consumers' demand prior to the announced tax increase in 1997. Expansive policy, however, led to destabilization of public finances. The government of the Prime Minister Hashimoto tried to respond by stricter consolidation measures. In April 1997 the most important taxes were increased (particularly consumption tax – from 3% to 5%), tax relieves from former fiscal packages were abolished, a reform of health insurance increasing health and social premiums was carried out and public investments were decreased. The overall

³⁸ Mori, N. – Shiratsuka, S. – Taguchi, H. (2001): Policy Responses to the Post-Bubble Adjustments in Japan: A Tentative Review Monetary and Economic Studies, p. 65.

³⁹ CAO (2000): Economic Survey of Japan 1999-2000. For critiques of the Japanese model see e.g. Mulgan, A. G. (2000): Japan: A Setting Sun? or Schoppa, L. J. (2001): Japan, the Reluctant Reformer or Lincoln, E. (2001): Arthritic Japan: The Slow Pace of Economic Reform nebo Trevor, M. (2001): Japan: Restless Competitor.

effect of these measures was estimated to JPY 10.8 trillion, which is approximately 2% of the Japanese GDP.

Paradoxically the fiscal policy was tightened just in time, when the economy was getting into recession. Therefore the timing of the reforms was often criticized. The government ignored signals about a worsening economic situation, which they considered stable. If the given measures had been smaller or postponed, the recession might have been more moderate. According to the OECD the pace of growth in the GDP without recession would have been approximately by 2 percentage points higher in 1998 and 1999.⁴⁰

According to further criticism Japanese overall fiscal policy in the 1990s failed, expansion in form of stimulus packages didn't bring expected effects in form of increased domestic demand. However, in the situation of a liquidity trap fiscal expansion should be highly efficient as the increase in government expenditures through the sale of government bonds doesn't create pressure on the growth in interest rates. A potential ousting effect and negative impact on consumption and exports (with appreciating JPY because of growing interest rates) should therefore be minimal. Also the government debt from the time of relatively low interest rates shouldn't represent problems with repayment in the future. Nevertheless, even with high amounts of incentive packages, Japan failed to boost the economy, which is usually explained in different ways.

Majority of financial support from stimulus packages flew into non-productive construction projects, whose multiplication effect was limited. E.g. Kwan states, that the fiscal policy of the 1990s was not successful, because the value of the fiscal multiplier even fell due to changes in its components – due to the decline in marginal slope to investments and to consumption and increase in marginal slope to import.⁴¹ The marginal slope of firms to investments fell after dissolution of bubble economy due to surplus capacities and the need to pay high debts. The marginal slope of households to consumption fell due to growing worries about the growth in the unemployment and future increase in tax burdens caused by the need to solve fiscal imbalance. And as far as the growing marginal slope to import is concerned, this is given by growing competitiveness of goods from Asian countries.⁴²

So-called Ricard's equivalence (Ricard-Barro's theory) gives another explanation of the fiscal policy failure in Japan. According to this theory increase in government expenditures motivates people to lower consumption. Economic stakeholders behave rationally and expect the fiscal expansion to be replaced by restriction in the future (the value of growing public debt will have to be compensated by growing tax burdens). Since they want to retain (in harmony with the hypothesis of a consumption life cycle) a certain level of consumption even in future, they decrease their current consumption and use the savings for increasing future consumption. Prices will fall further and therefore expansion misses the target. According to some authors Japan was approaching the state of this equivalence in the 1990s.

According to the Austrian school, e.g. according to Powell, stimulus packages only postpone needed reforms, maintain the existing structure of production, which doesn't suit the needs of consumers and lead to bad investments (as a result of pressure on inflation renewal through "unnatural" development of interest rates). Hence according to this school the main problem of Keynes's approach to smothering recession is that it cannot find a really efficient solution and neglects a lasting discrepancy between production structure and consumers'

⁴⁰ OECD (1998): OECD Economic Survey – Japan 1997-1998, p. 36-38.

⁴¹ Fiscal policy multiplier (government expenditure multiplier) states by how much the level of equilibrium income grows as a result of the increase in government expenditures on goods and services or autonomous expenditures with constant offer of real money balance. In a liquidity trap the fiscal policy multiplier equals a simple expenditure multiplier, otherwise it is smaller.

⁴² Kwan, C. H. (2001): Revitalizing the Japanese economy, p. 58-59.

preferences. Massive fiscal incentives, stimulus packages and government interventions only worsen functioning of the market further.⁴³

On the contrary, Yoshikawa states that the fiscal policy in the 1990s promoted economic growth and successfully avoided even bigger slumps in the economy. In 1992-1994 the economy would have experienced a zero or negative growth if there hadn't been increased government expenditures.⁴⁴

The crisis of the financial system with its peak in 1997 played an important role in the unfavourable development of the economy. The volume of bad loans of all Japanese banks almost doubled compared with 1996, to JPY 13.3 trill. In 1998 bad loans represented 5.4% of all loans and this share was still growing (up to 8.0% in 2002). Credit banks and banks offering long-term loans had the biggest volume of NPLs, about 8-10% of all loans. In case of municipal and regional banks this share fluctuated around 4-6% before 2000.⁴⁵ Due to worsening economic results, banks started to go bankrupt in large numbers. After the collapse of mortgage companies and credit co-operatives in previous years, now it was the turn of big banks and other financial institutions. In the end of 1997 e.g. two big companies trading in securities, Sanyo Securities and Yamaichi Securities and Hokkaido Takushoku Bank (in 1996 the 10th biggest municipal bank in the country) went bankrupt.⁴⁶ Banking houses had to face a fast decline in the price of securities (index Nikkei 225 fell to the level lower than after bubble dissolution – see figure 1) and outflow of deposits and worries about an overall crisis of the financial system grew.

Consequences of problems in the financial sector were far reaching. According to the IMF: “a long-term stagnation of the economy weakened the financial sector and the crisis of the financial sector in the late 1990s retrospectively had a negative impact on the real economic activity and restricted the efficiency of economic policy.”⁴⁷ This worsened the mediating role of banks and led to the decrease in the efficiency of resource allocation in the economy. In 1997 Japan experienced a so-called credit crunch, i.e. the situation when undercapitalized banks are neither able nor willing to offer a sufficient amount of new loans to companies.⁴⁸ In the effort to maintain their capital-adequacy ratio⁴⁹ banks started to reduce the amount of newly offered loans. This was a big problem for the business sector, particularly SMEs which were dependent on these loans.

The central bank cannot solve a credit crunch by increasing the money supply, since this increase would lead only to the increase in bank reserves. Theoretically ideal, however, a financially and time very demanding solution, is revival of the financial sector. But both the BOJ and the government were reluctant about this for a long time. The fact that many businesses suffered from the decline in the value of their own assets and worsening of their own balance, which meant that they had to economize and accept restructuralization programmes,

⁴³ Powell, B. (2002): Explaining Japan's Recession, p. 41.

⁴⁴ Yoshikawa, H. (2002): Japan's Lost Decade, p. 17.

⁴⁵ IMF (2003) Japan: Financial System Stability Assessment, p. 10.

⁴⁶ Crisis in more details, see e.g. Nakaso, H. (2001): The financial crisis in Japan during the 1990s: how the Bank of Japan responded and the lessons learnt.

⁴⁷ IMF (2003): Japan: Financial System Stability Assessment, p. 12-13.

⁴⁸ In the situation of a credit crunch the interest doesn't clear the credit market, demand for loans exceeds their supply.

⁴⁹ BIS defines the capital-adequacy ratio as a ratio between the level of own capital and risk assets. Internationally active banks must maintain the indicator at a minimum level of 8% for operations in foreign markets and 4% for activities in the domestic market. If the indicator falls, banks must reduce the volume of their loans. For more details see the websites of the Basle Committee on Banking Supervision www.bis.org/bcbs/index.htm.

made the situation even worse. Therefore businesses themselves partially reduced the demand for loans.

Opinions of academicians on the existence, causes and impacts of the credit crunch differ considerably. According to Yoshikawa, a long unsolved increase in the volume of bad loans and with this connected credit crunch was the main factor, which indirectly caused a substantial decline in private fixed investments and the 2nd recession in the 1990s.⁵⁰ But e.g. Hayashi and Prescott claim, that a long-term stagnation cannot be explained by a credit crunch because of growing possibilities of internal and other than bank funding of Japanese firms.⁵¹

In 1998 the government decided to solve the situation by crisis measures and financial support of problematic banks. In 1998 JPY 60 trill., which is 12% of the GDP, were allocated for the support of banks.⁵² The central bank also tried to increase the liquidity in the financial sector by purchasing government bonds and securities from commercial banks. Under the act on emergency measures for financial stabilization, a reconstruction programme for banks was announced and was amended by a plan of deregulation and reforms of the whole financial system. This plan known as a Big Bang was announced already in the end of 1996; however, laws necessary for its implementation were approved only in June 1998. New deregulation measures should have: 1) eliminated the barriers against foreign financial institutions active in the Japanese market, 2) liberalized all foreign operations of financial and business stakeholders, 3) strengthened the supervision over financial institutions, 4) eliminated restrictions for creation of financial holdings prohibited after the World War II, 5) supported competitive environment in insurance, 6) reformed accounting systems in businesses, and 7) strengthened BOJ autonomy. The main aim of this ambitious plan was to create a competitive, market-oriented financial system and open it to foreign competition. The new financial system should have been “free, fair and global”.⁵³

In harmony with the intentions of the “Big Bang”, in June 1998 the government set up a Financial Supervisory Agency (FSA), whose main mission was supervision of money institutions and situation monitoring in the financial sector. Another new authority was the Financial Reconstruction Commission (FRC), whose task was to study FSA analyses and search for adequate solutions to problems of indebted financial institutions.

3.2 Impacts of the crisis in South-East Asia

Japanese economic crisis was also influenced by financial crisis in countries of South-East Asia (1997-1998), as there were tight trading and financial links with these countries from the past. From a territorial point of view South-East Asian share (including China) in Japanese export reached almost 40% in the 1990s, however, in 1998 it fell to 33.2% (share of import fell to 34.9%).⁵⁴ Effects of the crises could be seen only in the end of 1997 and in 1998, when the growth in export to hit countries slowed down. Asian countries were also an important partner in the field of capital. In 1997 Japanese direct foreign investments in Asia represented almost JPY 1.5 trill. (20% of total Japanese direct foreign investments). In 1998 they fell to JPY 0.84 trillion and in 1999 to less than JPY 0.8 trillion. While many foreign investors decided to finish their activity here due to worsening business conditions, many Japanese businesses decided to stay because of close links. According to the METI only 2% of Japanese investors left till the

⁵⁰ Yoshikawa, H. (2002): *Japan's Lost Decade*, p. 24-25, 49-82.

⁵¹ Hayashi, F. – Prescott, E. (2002): *The 1990s in Japan: a Lost Decade*.

⁵² IMF (1999): *Japan: Staff Country Report for the 1999 Article IV Consultation*, p. 18.

⁵³ For more details see e.g. official websites on reforms: Financial System Reform, available from http://www.fsa.go.jp/p_mof/english/big-bang/big-bang.htm.

⁵⁴ Callen, T. – McKibbin, W. J. (2001): *Policies and Prospects in Japan and The Implications for the Asia-Pacific Region*, p. 12, 13.

end of 1998.⁵⁵ The crisis also deepened difficulties of Japanese banks, even though only to a limited extent. Their loans in the region before the crisis amounted to about JPY 13 trillion, i.e. 2.6% of all loans. According to the OECD the Asian crisis thus meant a decline in the growth pace of the real GDP by up to 0.4-0.5% percentage points for Japan in 1997 and by 1.3% points in 1998; this decline was caused mainly by the decline in export to the region.⁵⁶

Recession in Japan took place almost in the same period as the financial crisis in South East Asia. Therefore there were worries that it would have impact on the economies hit by the crisis and would thus prolong their recovery. It is clear from the statistics, that Japanese recession led to the reduction in investment abroad and to the decline in demand for Asian goods. However, the dynamics of imports from South East Asia fell only in short term, it accelerated again from 1999 on and so it contributed to the revival in the region. In 1999 almost 30% of all imports from the region (i.e. JPY 4.4 trillion) represented so-called re-imports, coming from branches of Japanese businesses in these countries.⁵⁷ The growth in imports from Asia was thus beneficial for both parties. Also the fact that Japanese investors did not run away massively in the time of the crisis was essential for the region. Japanese direct foreign investments in some countries of South-East Asia amounted for almost 20% of all private foreign investments.⁵⁸

Regarding the growing interconnection of Asian economies, it is clear that shocks in the development of individual economies will influence to smaller or bigger extent also other countries. Assistance to countries hit by the crises thus became a part of Japanese governmental initiatives for “reducing risks in global economy”. Besides direct financial aid in the total amount of USD 44 bill., in 1998 Japan started to offer Asian countries assistance in the form of loan guarantees, which could be achieved through financial markets and from international institutions. Japanese governmental institutions also started to purchase government bonds of Asian countries and offer them favourable loans to implement structural reforms. Governmental measures were oriented also at support of branches of Japanese companies in Asia. That is why the assistance of Japan officially amounted to approximately USD 80 bill.⁵⁹ Originally, Japan also proposed to set up the Asian Monetary Fund (AMF) as a strong regional institution for stabilization of monetary and financial systems in Asian countries. The AMF should have been a parallel to the IMF. However, the USA and some European countries were against this proposal. Thus the countries only agreed on a so-called Mijazawa’s initiative and in 2000 on a convention among countries of the ASEAN+ 3 on mutual help in case of monetary crises in the form of loans from state foreign exchange reserves of participating countries.⁶⁰ In this period Japan also reconsidered its strategy of trade and economic liberalization and started to sign bilateral free trade agreements with neighbouring countries. In 1998 Japan started to negotiate with Republic of Korea and signed the first agreement with Singapore in 2002. Integration

⁵⁵ The crisis weakened the demand in the region and influenced also commodity prices. Thanks to their decrease real Exchange ratios improved, which had positive effects for Japan. Data taken from CAO (2000): Economic Survey of Japan 1999-2000, p. 80 and METI (2000): The Economic Foundations of Japanese Trade Policy-Promoting a Multi-Layered Trade Policy.

⁵⁶ OECD (1998): OECD Economic Survey of Japan 1998, p. 44 a 59.

⁵⁷ In 1990 re-imports from Asia accounted for only 9% of total imports from this region. METI (2000): White Paper on International Trade.

⁵⁸ Callen, T. – McKibbin, W. J. (2001): Policies and Prospects in Japan and The Implications for the Asia-Pacific Region, p. 8.

⁵⁹ See e.g. MOFA (2000): Asian Economic Crisis and Japan's Contribution.

⁶⁰ Fürst, R. (2000): Asijská krize tři roky poté, p. 9-10.

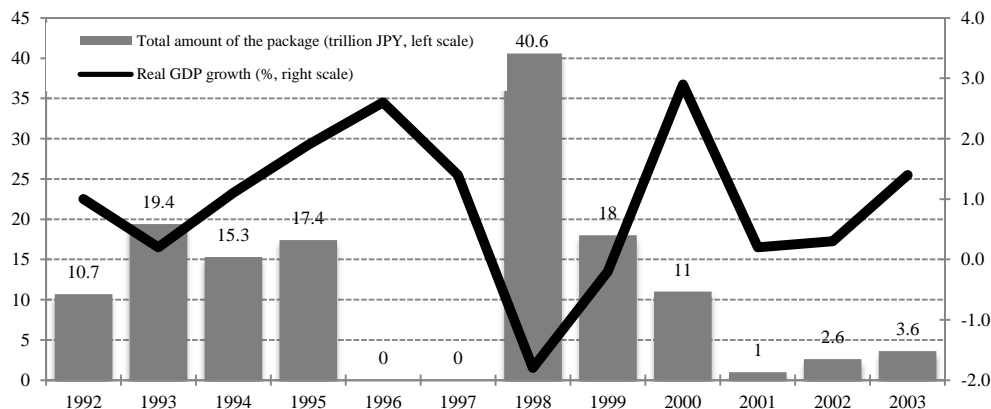
became another way how to strengthen mutual relations and support structural reforms in all participating countries.⁶¹

3.3 Crisis measures and stabilization of the economy at the end of the decade

Due to unfavourable development, in 1998 the government decided to take back the intention of fiscal consolidation. The aim to balance the state budget was postponed to 2005. The government started to approve expansive measures again: in April it was a stimulus package in the amount of JPY 16.7 trillion and in November in the amount of JPY 23.9 trillion for supportive public projects and tax relieves. In this way the government “pumped up” the economy with the aid amounting to 8.3% of the GDP in 1998, mostly in form of public investments and tax cuts. In 1999 the government released further JPY 18 trillion and even in the following years the government continued to stimulate the economy in form of budget expenditures and non-budgetary packages – see figure 4. The package of 1998 was far the biggest in the history of post-war Japan. Enormous increase in public expenditures was hence experienced also in doubling the net public indebtedness during five years – from JPY 29.3 trill. in 1996 to JPY 60.4 trill. in 2000 – see table 3.

Crisis measures of the packages were focused on stabilization of the financial system and improvement of the intermediary role of banks. Stabilization of the system should have helped to the revival of aggregate demand and whole economy. In this period the government started to build a so-called new society for the 21st century, which should have been advanced in information technology, equipped with high-techs and quality social infrastructure. The economy should have gradually shifted from the growth pulled by public demand to the growth supported by private sector.

Figure 4: Fiscal Packages and Real GDP Growth in Japan, 1992-2003, trillion JPY and %



Source: OECD (2004): OECD Economic Surveys: Japan 2003-2004, p. 87 (fiscal packages); CAO (2006): Annual Report on The Japanese Economy and Public Finance 2006, (GDP growth); own construction.

⁶¹ For more details on regional integration see e.g. Stuchlíková (2011d): Bilaterální a regionální obchodní dohody Japonska, in: Němečková, T. a kol.: Vzestup asijských zemí v mezinárodním obchodu; Neumann, P. (2007): Vybrané trendy nového regionalismu v přístupech USA a Japonska k regionalismu v Severní Americe a asijském Tichomoří, in: Čihelková, E. a kol. Nový regionalismus: teorie a případová studie (Evropská unie), p. 176-194; or Hnát, P. (2007): Bilaterální regionální integrace v Evropě a Asii: vliv na regionální a světový obchodní řád, in: Současná Evropa a Česká republika, 2007/1.

The central bank also responded to the recession and continued in decreasing interest rates. The main aim of the monetary policy was the fight with deflationary pressures (JPY appreciation and lowering labour costs) threatening the already weak economy. In April 1999 the BOJ announced that it would “flexibly ensure the inflow of financial means into the economy and maintain short-term interbank interest rates on the lowest level, until the threat of deflation was over”.⁶² Doing this the BOJ officially accepted the so-called zero interest rate policy. In March the short-term interest rate for inter-bank operations was damped down to 0.3%, official discount rate remained at 0.5%.⁶³

Closer to the end of 1998 the economy started to recover, the recession officially finished in January 1999. The economy experienced expansion till November 2000. Thanks to further financial injections for banks (JPY 7.5 trill. for 15 major banks in March 1999) and governmental reconstruction plan the financial system was partially stabilized. Special tax relieves for mortgage holders enabled a slight increase even in private investments into real estates. Nevertheless, profits of Japanese businesses were slumping further and so fix investments also fell again in 1999. It was mainly thanks to private consumption and governmental investments that the economy slightly recovered.⁶⁴

The public started to worry about the growing rate of unemployment. While during the recession in the early 1990s the unemployment rate did not increase substantially (in 1991-1993 it fluctuated between 2.1-2.5%), in 1998 it exceeded 4% and grew further to 4.7% in 1999. Despite generous governmental projects for the support of employment, conditions on the labour market were worse and worse. Another problem was a fast growing number of older people discouraged from searching for work⁶⁵ and a lack of suitable positions for those who completed school and their unwillingness to work. An unfavourable trend in the labour market of the late 1990s was also the decrease in the number of working hours and labour costs.

Despite the zero interest rate policy the BOJ didn't succeed in increasing inflationary expectations and thus inflation. Nevertheless, in 1999 money supply experienced a year-to-year increase of only 3.6% and loans in the inter-bank market remained on a low level. The pace of growth in consumer prices decreased below zero level again in 1999 (-0.3%) and this decline continued even in the following years. After a preceding decline caused by strong JPY appreciation, the surplus in the trade balance increased up to JPY 16 trill. in 1998. However, its growth was stopped by repeated yen strengthening.

A relatively short recovery in 1999-2000 was followed by another recession, already the 3rd one after the dissolution of “bubble economy” from December 2000 to January 2002. Japan remained very unstable. It was also criticized for insufficient progress in reforms, which were moved further only under the Prime Minister Koizumi, who led the government, untypically, full five years (2001-2006).⁶⁶

CONCLUSION

Causes of unfavourable development of the Japanese economy in the 1990s are so complex and interrelated, that it is not possible to choose the “most important one”. Different

⁶² Mori, N. – Shiratsuka, S. – Taguchi, H. (2001): Policy Responses to the Post-Bubble Adjustments in Japan: A Tentative Review, p. 71.

⁶³ Statistics Bureau (2007): Japan Monthly Statistics 2007.

⁶⁴ CAO (2006): Annual Report on the Japanese Economy and Public Finance 2006.

⁶⁵ The unemployed, who want to work but don't look for work since they think “they have no chance to find any”. The unemployment level adjusted for the number of discouraged persons was estimated at 10.7% in 1999. Fujiki, H. – Kuroda, S. – Tachibanaki, T. (2001): Issues in the Japanese Labor Market: An Era of Variety, Equity, and Efficiency or an Era of Bipolarization?

⁶⁶ See e.g. Stuchlíková (2013): Japonská ekonomika v letech 2000-2008. In: *Scientia et Societas*, 2/2013.

theoretical schools and approaches obviously favour various factors of the decline in the economy, but only some authors admit that there were probably more reasons. The demand shock after the dissolution of the bubble in the asset markets in the early 1990s, which was one of the biggest in the world, had major impacts on the development in the whole period. A long deflation, connected with a liquidity trap and credit crunch had negative impacts on long-term rather low consumption of households, production, and investment activity of businesses as well as on stability of the financial sector. Besides the shocks and weakness on the side of aggregate demand, different substantial failures started to appear on the side aggregate supply, particularly rigidity in the labour market, insufficient competitiveness in Japanese market with goods and services and in financial market. Although these rigidities were gradually removed and the economy was liberalized and deregulated, this process was too slow. This resulted in e.g. decline in the productivity in the economy and in slowing down the pace of growth in a potential product. Measures of the economic policy in different phases of economic cycles of the 1990s often proved to be inefficient and slow (particularly monetary measures to suppress deflation) or even contra-productive (e.g. too early increasing of taxes and cutting expenditures in the effort to consolidate public finances in mid 1990s). Vast fiscal expansion had limited effects, it lead rather to a record increase in public debt in a situation when the economy needed essential reforms of the pension scheme and labour market because of demographic changes and aging of population.

Literature mentions also other reasons for instability, particularly of system or institutional character.⁶⁷ Long stagnation is usually explained by specifics of a “traditional model” of the Japanese economy, i.e. the same specifics as those used to explain the “Japanese economic miracle” until the 1990s. While these specifics were positive in the past, in the 1990s they proved to be outdated and uncompetitive in more and more globalized world economy. Similar hypothesis can be confirmed only after a longer time. It is evident, that it is less and less clear what the traditional Japanese model is. According to many studies the Japanese economic system is gradually getting closer and closer to the systems in other developed countries (mainly western economies, i.e. European and American ones). Traditional features of the economy and society such as e.g. systems of life-long employment or orientation at a group (collectivism) are slowly disappearing. The role of the state in the economy is changing as well, interventions of the government into the market are limited, domestic and foreign competitiveness in the economy grows, etc. Some traditional features may cause problems and restrict efficiency of the whole system (e.g. relatively rigid business relations within keiretsu). A more detailed analysis of changing characteristics and relations in Japanese social and economic system from the institutional view goes behind the frame of this article, but it would be worth a deeper study.

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⁶⁷ Compare e.g. Witt, M. A. (2006): *Changing Japanese Capitalism: Societal Coordination and Institutional Adjustment*; Carpenter, S. (2008): *Why Japan Can’t Reform: Inside the System* nebo McKinsey & Company (2011): *Reimagining Japan: The Quest for a Future That Works*.

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