3 The two "lost decades" and macroeconomics

Changing economic policies

Kobayashi Keiichiro

Introduction

The expression "lost decades" is nowadays used to refer to the economic and market decline and broad political and social conditions in Japan in the last decade of the twentieth and the first decade of the twenty-first century. As Andrew Gordon points out in Chapter 5, the term gained currency in the media, first foreign, then Japanese, in the second half of the 1990s. At the time, the phrase was used to refer to the long-term decline in Japan's growth rate that had started at the beginning of the 1990s, in contrast to the remarkable economic growth shown in the decades after World War II, especially from the 1960s onwards.

Japan's growth rate plummeted in the 1990s, and it remained low in the early years of the twenty-first century. In terms of GDP growth, it is indeed appropriate to say that these two decades were lost. However, the demographic shifts that Seike Atsushi discusses in Chapter 1, including the population decline and changes in the working-age population since 1995, give rise to a slightly different picture. As Figure 3.1 shows, during the 2000s the working-age population's per capita GDP growth rate in Japan actually outshone that of the United States. It may not be so simple therefore to describe the past twenty years as completely "lost." The evidence suggests that the situation is slightly more nuanced, and varying opinions among economists demonstrate something far from a consensus.

This chapter adds an additional perspective to the study of the lost decades. It does so in two ways: first by investigating the macroeconomic policies that were taken at the time and second by elucidating the opportunities that were gained and lost during the two lost decades. In this way, lessons can be learned for present-day Japan and advanced Western countries.

The origins of nonperforming loans (NPLs) in the 1980s

The nature of the Japanese economy changed considerably between the 1970s and the 1980s, and in fact the origins of Japan's two lost decades can be traced back to this era.

On the domestic level, high economic growth, averaging 10 percent annual GDP, came to an end in the 1970s due to a demographic labor shift from the agricultural to the industrial sector. Japan completed its "catch-up" with other

Real GDP growth (2000 USD held constant)	Mid Growth Period 1980-1990	Two "lost decades" - first ten years 1990-2000	Two "lost decades" - latter ten years 2000-2010
Japan	4.6%	1.1%	0.3%
United States	3.2%	3.4%	1.4%
Germany	2.3%	1.9%	0.6%

Real per capita GDP growth (2000 USD held constant)	Mid Growth Period 1980-1990	Two "lost decades" - first ten years 1990-2000	Two "lost decades" - latter ten years 2000-2010
Japan	4.0%	0.9%	0.3%
United States	2.3%	2.2%	0.5%
Germany	2.2%	1.6%	0.7%

Real GDP per workforce (age 15-64) growth (2000 USD held constant)	Mid Growth Period 1980-1990	Two "lost decades" - first ten years 1990-2000	Two "lost decades" - latter ten years 2000-2010
Japan	3.7%	1.1%	0.9%
United States	2.3%	2.1%	0.3%
Germany	1.7%	1.8%	1.0%

Figure 3.1 GDP growth (Japan, Germany, and the United States)

Source: The World Bank Group. "Data | The World Bank." http://data.worldbank.org/.

as collateral. Because the Ministry of Finance (MoF) regulated bank management, the major financial institutions did not fear bankruptcy. These factors lay behind another, secondary myth that the banks were indestructible – that major banks could never go bankrupt. Such features lessened the vigilance over economic fundamentals, with the twin myths of ever-increasing land prices and indestructible banks causing a rapid increase of land-related financing through banks. These were the factors that lay behind the formation of the economic bubble.

Why was it that the financial authorities and business circles in the 1980s were not more wary of a bubble forming? A look at financial crises around the world shows us that banking crises were not unknown in economically advanced countries in the interwar years – the Great Depression of the 1930s is a notable example. However, the Bretton Woods system that had been inaugurated in the wake of World War II led many people to believe that financial crises in advanced countries were almost impossible. With the collapse of this system in the 1970s, banking crises started to occur again with alarming frequency, both in Europe (for example, Spain) and in Latin American countries. But in Japan it was thought that such crises could never happen, due to differences in Japan's economic structure. At the end of the 1980s, when the U.S. savings and loan crisis occurred and there was a marked accumulated debt problem in Latin America, no sense of crisis whatsoever was felt in Japan.

In a 2009 interview, Nakai Sei, deputy director general of the MoF's Banking Bureau (BB) from 1995 to 1998, summarized the rationale behind Japan's monetary policy at the time in this way:

> The Savings and Loans crisis [in the 1980s and 1990s in the United States] was a terrible thing – it was as if people had been defrauded of their money. We never imagined that something similar might take place in Japan. At the time [Japan's] international balance of payment imbalances, starting with the Japan-U.S. trade surplus, was the major problem. We considered that the appropriate way to deal with this for a creditor country such as Japan was simply to have a very low interest rate policy.[1]

As is evident from Nakai's statement, policymakers at this time were less concerned with preparing for or managing a possible financial crisis induced by a bubble economy than with maintaining an expansionary monetary policy to alleviate the noxious effects of yen appreciation on exports.

1990s policy responses

The early 1990s saw the collapse of Japan's asset bubble. The rapid slowdown of the economy notwithstanding, accounts were still in the black and the yen's value remained high – until the late 1990s. The reasons behind a persistently high yen remain a mystery. But the fact that Japan was an international creditor state that kept producing chronic current account surpluses meant that it was insufficiently responsive to foreign investors' pressure to force its banks to properly dispose of their nonperforming loans (NPLs) in the 1990s. As noted by Peter Drysdale and Shiro Armstrong in Chapter 10, after the collapse of multilateral trade negotiations to open its domestic market, in the early 2000s Japan finally signed free trade agreements (FTAs) and economic partnership agreements (EPAs), which opened up opportunities for such foreign investor pressure. The delay in disposing appropriately of NPLs meant that there was limited pressure from foreign direct investment (FDI) during the 1990s. Ironically, if Japan had been a debtor nation plagued by account deficits, foreign investors would have made stern demands for an overhaul of banking, and the implementation of drastic and swift reforms would have been unavoidable. It is possible that the subsequent banking crises and simultaneous yen depreciation would have been offset by exports, which might have led to a speedy economic recovery.

In actuality, since little effect could be exerted by foreign pressure, reforms were slow to arrive and NPLs proliferated. As land and stock prices dropped, the harmful effects on banks' balance sheets increased. Yet, in the first half of the 1990s, due to strong expectations of resurging land and stock prices, the MoF's Banking Bureau and financial institutions continued to postpone drastic measures for NPL disposal.

There were two reasons behind this postponement. First, the dominant understanding in Japan in the early 1990s was that the collapse of the real estate bubble had created these NPLs and that they would not really have any damaging effect on the economy. There was a widely held belief that the disposal of NPLs was not a public policy issue but rather a private matter between banks and their debtors, which led to a delay in NPL disposal measures. Second, dealing with NPLs was predicated on either the collapse of banks or capital injections into banks through public funds. The former would have assigned the loss to depositors, while the latter would have met with strong political opposition by taxpayers. The political cost of either of these two options was far too high to contemplate at this time; the only other option was the postponement of NPL disposal.

As the authorities decided to postpone resolution of the problem, land values continued to decrease, exposing the emptiness of the myth of increasing land prices that had propped up the system for so long. As shown in Figure 3.2, land prices in the commercial districts of Japan's six major cities reached a peak in 1990 and bottomed out in 2004, falling to the same level of land prices in 1975.

In 2010, Teramura Nobuyuki, former general director of the MoF's Banking Bureau between 1992 and 1994, gave an indication of the main factor behind the persistent decline in land prices:

> As various postwar regulations that curbed housing land were progressively relaxed, market mechanisms began to come into play and prices have eventually converged on the calculated returns to investment.[2]

However, the lag in disposing of NPLs continued to plague the Japanese economy, a fact that financial authorities and economic scholars failed to notice.

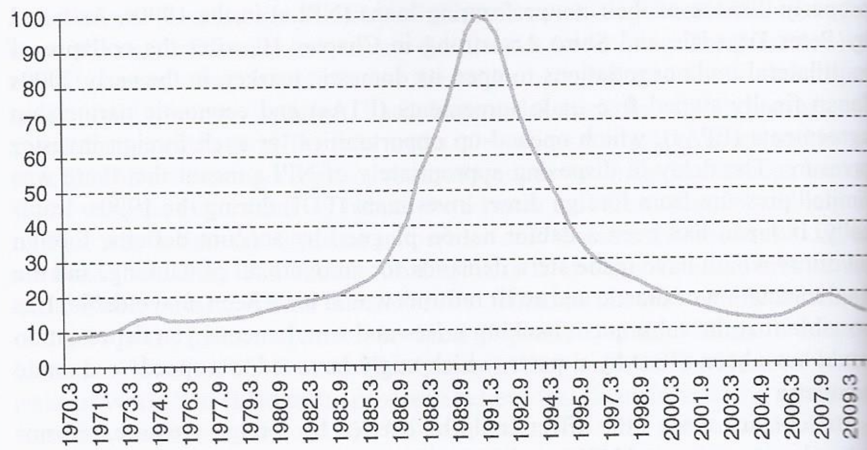

Figure 3.2 Indicator for land prices in the commercial districts of six cities

Note: Figures for September 1990 indexed as 100.

Source: Adapted from Matsushima and Takenaka, 2011.[3]

Postponement of dealing with NPLs

The view on NPLs significantly changed over the decades. Until the early 1990s, the standard view among economists was that flow variables (such as GDP growth, Indices of Industrial Production, and the unemployment rate) alone would indicate fluctuations in the economic climate.[4] Stock variables, such as the price of assets and the quantity of NPLs, were merely a *result* of economic fluctuations, not a *cause*. This was the representative line of thinking on the economy. Yet, along with economic stagnation in Japan during the 1990s, economic paradigms also changed. Recent economic theory developed in the late 1990s holds that stock variables, such as balance sheet variables, can also be a cause: they can be responsible for worsening the economy.[5] On this basis, we can say that the postponement of dealing with the NPLs (the stock variable) caused the significant increase of NPLs on the bank balance sheets, further exacerbating the economic downturn and making the pain last even longer.

What should have been done, then, in the first half of the 1990s? First, policymakers should have resolved the NPL issue to sanitize banks' balance sheets. Second, they should have contained the financial shocks by injecting public funds into banks at an earlier stage. Third, debt restructuring of NPLs should also have been considered at an earlier stage to revitalize indebted companies. Few if any such measures were enforced throughout the 1990s, however, with nothing happening but the passing of time. Following great political turmoil in 1995, 680 billion yen worth of taxes was injected into house loan corporations (*jusen*, the Japanese equivalent of American savings and loan associations) for their liquidation. This money amounted to 10 percent of the public funds eventually needed for capital injections into banks.

These capital injections gained momentum only in 1998 when several major banks went bankrupt. Between 1991 and 1997, Japanese policymakers continued to postpone the restructuring of NPLs. Individual banks kept tackling the problem on their own initiative, but the speed and scale of their efforts was suboptimal from the vantage point of society as a whole.

The peculiarities of 1990s economic policies – the taboo of NPLs

Most of the Japanese establishment assumed that NPLs evolved as a result, not as a cause, of the recession and that they were a private issue among banks and their debtors rather than a public policy affair. Moreover, banking prudential policies were consistently micro oriented, rather than macro oriented. As evident in the words of MoF Banking Bureau General Director Nishimura Yoshimasa:

> [the Banking Bureau] aimed to avoid the instability of the overall system by maintaining the solidity of individual financial institutions," and "there was no notion of handling the NPL issue through a macro approach.[6]

At the same time, there were several incidents relating to NPLs in the early 1990s pointing to murky relationships between banks and gangster organizations: these included the 1994 execution-style killing of the manager of Sumitomo Bank's Nagoya branch and the 1993 killing of the vice-president of the small Hanwa Bank Ltd. Such incidents were one reason why bank managers and economic policymakers tended to view the NPL problem as a taboo. The peculiar structure of banking regulation and supervision centered on a closed financial community that included MoF's Banking Bureau and large private banks. The coziness of the relations in this community reinforced the thinking behind the now-famous "convoy" system of Japan's banking, in which all the main banks were helped by the government to move forward together, none were allowed to lag behind (or go bankrupt), and external actors had hardly any say. The system helped prevent the tardiness of dealing with NPLs from exposure to outside criticism, a situation that persisted due to an unspoken set of agreements between MoF's Banking Bureau and the financial world.

Parallel with the postponement of the NPL disposal, policymakers undertook annual measures to boost the economy, especially fiscal stimulus packages. Throughout the 1990s, the multiplier effect – a proportional factor that measures how much an output variable (e.g., GDP) changes in response to a change in input variables (e.g., government spending) – of expansionary fiscal policies gradually decreased. Since fiscal stimulus was better than nothing, however, the government repeatedly kept at it. The Japanese government also continued to issue orders for public works projects in an effort to help the construction industry, which was already groaning under excessive debt.

The Japanese financial system faced systemic risks due the collapse of the economic bubble. Nonetheless, the Bank of Japan's response was sluggish, monetary policy had little effect in terms of the scale of interest rate cuts, and its efforts were too late. Kuttner, Iwaisako, and Posen investigate Japan's monetary policy in detail in Chapter 2.

My own question is: Why were monetary and fiscal policy used in such small doses to alleviate the worsening situation? The answer may be twofold. First, in the 1990s both economists and government officials developed a peculiar fixation with flow variables (e.g., unemployment), which informed their economic policy decisions. Many policymakers did not take into appropriate consideration the influence of balance sheet variables, such as the fall of asset prices and the NPL issue. Since the change in flow variables was in the end not significant, many officials ended up underestimating the depth of the recession.

Second, there was a general understanding that land prices would eventually stop falling. Comments by Teramura Nobuyuki in 2010 are indicative of this perception:

> It would have been possible to adequately confront the subsequent problems if land prices had stopped at the level prior to the burst of the bubble . . . if we had told people in 1994 that prices would fall by 80 percent, they simply would have not believed us.[7]

In fact, far from simply falling to pre-bubble levels, land prices continued to fall, right down to the level of the 1970s. A drop of asset prices of this magnitude was beyond anyone's expectations, and the failure to grasp just how large and long-standing the drop would be led to an extreme tardiness in policy countermeasures.

Structural reforms

Since Keynesian policies were not effective in reviving the economy, supply-side structural issues came under great scrutiny among the economists and policymakers as the prime cause of Japan's economic stagnation. To break away from recession, the momentum did finally grow to solve, once and for all, the long-standing structural problems. However, arguments in favor of structural reforms also became a further excuse for Japanese leaders to continue to avoid dealing with NPLs. The ineffectiveness of Keynesian countermeasures led many people to believe that a fall in the demand side was not the only cause behind economic stagnation, and supply-side structural reforms also became the target of policy debates within the Japanese establishment. In effect the NPL problem, the principal cause of Japan's economic problems, was once again ignored.

Arguments in favor of structural reforms followed the several paths. In 1993, an economic reform study group (ERSG) was established as a private advisory board to Prime Minister Hosokawa Morihiro. It was chaired by the head of the Japan Federation of Economic Organizations (the current Japan Business Federation) Hiraiwa Gaishi. The ERSG submitted a mid-term report in November 1993 entitled *On Deregulation*, also known as the Hiraiwa Report, as well as a final report in December 1993 entitled *On Economic Reforms*. The report cited "five main economic reforms," of which deregulation was one.[8]

Following this report, in 1995 the Cabinet Office approved a three-year "Plan for Promoting Deregulation." In 1998 a new "Three Year Plan for Promoting Deregulation" was compiled, and a Deregulation Committee was established within the Cabinet Office's Administrative Reforms Promotion Headquarters. This committee would later be renamed the Regulatory Reform Committee.

Around this time, economists centered on Mizuno Kazuo and others pointed to the low profitability of companies as the reason behind sluggish growth. The 1999 *White Paper on the Economy* also mentioned the structural problem constituted by the "three excesses": excessive debt, excessive equipment, and excessive employment. "The recent economic downturn has not simply originated from poor demand," the *White Paper* stated, "The larger cause stems from traditional company management practices that have prized market share expansion over operational efficiency, from the high-growth era up to the bubble period."[9] The three excesses, cited as the principal cause behind worsening profitability, became the target of structural reforms.

Until 1998, Japanese companies refrained from drastically reorganizing their business practices: they did not trim their staff and continued to pay back debts by taking advantage of profits from assets, that is to say their stocks and land. Following the Asian financial crisis in 1998, drastic cuts started to take place in employment – the hiring of nonregular employees increased and companies adopted a merit-based pay system. As a consequence, traditional Japanese-style employment practices were shaken. Andrew Gordon explores the specifics of the major transformations of Japanese-style employment in Chapter 5, and Toyama Kazuhiko provides more detail in Chapter 4.

Piecemeal responses to the 1997–99 financial crisis

The default of Sanyo Securities in November 1997 initiated a chain reaction in the interbank market that then triggered the wave of bankruptcies in the Japanese financial industry: the voluntary closure of Yamaichi Securities (YS) and the bankruptcies of Hokkaido Takushoku Bank (HTB), Nippon Credit Bank (NCB) and the Long-Term Credit Bank of Japan (LTCB). The government continued to make huge capital injections and subsidies of public funds, totaling approximately 38 trillion yen. The capital injection peaked in 2000, as the government set up a framework of public funding worth 70 trillion yen to save financial institutions. Such public money included:

- Money grants to collapsed financial institutions totaling 18.6 trillion yen: some of these were grants worth 3.2 trillion yen to LTCB, 3.1 trillion to NCB, 1.7 trillion to HTB, etc. Asset purchase of the same financial institutions totaled 6.3 trillion yen: 1.6 trillion yen went to HTB, 0.79 trillion to LTCB, and 0.38 trillion yen to NCB.
- Capital injections totaling 1.8 trillion yen went to 21 big banks in March 1998, under the provisions of the old Economic Stabilization Law.
- Capital injections totaling 8.6 trillion yen sent to 32 big banks between March 1999 and March 2002, under provisions of the Early Strengthening of Financial Functions Law.

- Capital injection of 1.9 trillion yen given to Resona Bank, one of the large banks in Japan, in May 2003, under the provisions of the Deposit Insurance Law.

In the early 2000s, the banking sector gradually accelerated the write-offs of their NPLs, and in 2002 the Koizumi government took a number of measures to further hasten this process. Market sentiments improved markedly after the rescue of Resona Bank thanks to capital injection of public funds in May 2003. At the same time, the yen started depreciating, thus leading to an appreciation of stock prices and economic growth. Macroeconomic data shows that the recovery phase of the business cycle began in February 2002, and in April 2005 the full implementation of measures to deal with the NPLs was officially announced.

Incomplete economic policies at the height of the NPL problem

The main agents behind counter-cyclical economic policies were the Ministry of Finance, the Ministry of International Trade and Industry (MITI; later renamed the Ministry of Economy, Trade and Industry, METI); and the Economic Planning Agency (EPA). Financial regulation and supervision was under the MoF's secrecy umbrella and is firmly hidden from the open debates on broader economic policies among MoF, MITI, and EPA. Consequently, banking regulation and supervision were excluded from the scope of policies directed toward economic recovery. The NPL problem is illustrative of this. Throughout the 1990s, the need to deal with the NPL problem was not considered a national problem from any general economic perspective – it was instead treated as a matter between banks and debtors, at most as a problem of the banking community. Thus it was that micro- and macroeconomic policies kept sidelining the most important factor behind Japan's economic downturn.

Against this backdrop, the economic policies that were put together and promoted by the MoF, MITI, and EPA were for the most part Keynesian expansionary policies, deregulatory policies, and institutional reforms, such as those pertaining to corporate legislation. Since Japan's essential economic problems were in the financial sector, a successful economic policy necessarily entailed tackling that sector. This was also true of government intervention in individual industries, since they all basically required getting rid of NPLs. Nevertheless, economic policies, in particular industrial policies, did not touch upon the NPL problem, and they all ended up being ineffective. In the 1990s, mainstream thinking at MITI also shifted toward economic neoliberalism, characterized by free trade, deregulation, and nonintervention, as the ministry experienced the obvious ineffectiveness of government intervention.

This was one of the main reasons behind the proliferation of voices, especially from MITI, calling for structural reforms and deregulation throughout the 1990s.

Corporate legislation reforms

From the second half of the 1990s to the 2000s, corporate legislation reforms progressed rapidly because low corporate profitability was understood as one of the main factors behind the economic slowdown. In particular, corporate governance qualified as a structural problem that needed to be improved through reform of underlying inefficient corporate legislation. From the standpoint of debtors, writing off NPLs meant the disposal of excessive debt. As a result, the lack of progress on the NPL issue was also understood as originating with inefficient corporate governance. In hindsight, reforms in both areas – writing off NPLs and adjusting corporate governance – were necessary in order to revitalize Japan's economy.

Return on equity (ROE) is one of the indicators that show Japanese companies' marginal productivity of capital (MPK). Up until the 1980s, the ROE of Japanese and American companies was roughly at the same level. Since the 1980s, however, Japanese companies' ROE has continued to fall. It is now between 6 and 7 percent, less than half the U.S. level. Figure 3.3 shows the ROE for both Japanese and American companies, according to statistics compiled by Japan's System of National Accounts.[10] These statistics show that the gap is even greater than the one derived from company-based data.

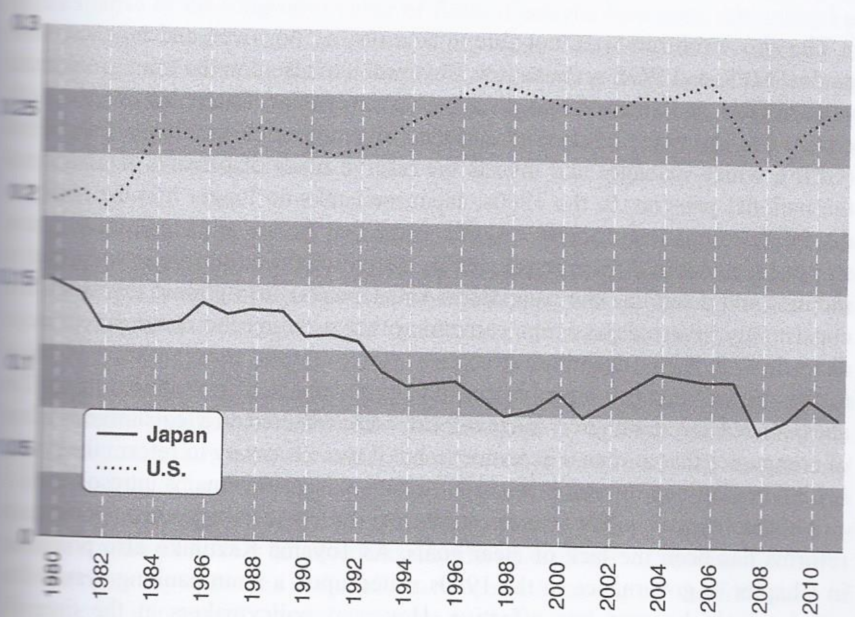

Figure 3.3 Japanese and American firms return on equity

Note: Return on Capital = Net Operating Surplus / Net Capital Stock

Source: Japan's Cabinet Office; U.S. Bureau of Economic Analysis[11]

This drop in ROE reveals that a major structural problem exists within Japanese corporate governance. It means that for twenty years since the 1990s, despite the reforms of corporate legislation that have been enacted to make Japanese corporate governance more efficient, little change resulted.

The main legislative reforms have been:

- The May 1997 introduction of stock option schemes through amendments to the Commercial Code.
- The December 1997 lift of the ban on pure holding companies through amendments to the Anti-Monopoly Law.
- The 2000 Civil Rehabilitation Law and the abolishment of the Composition Law.
- The 2002 Commercial Code amendment that allowed for share warrant and considerably relaxed limitations on class shares.
- The 2003 enactment of general revisions of the Corporate Reorganization Law.
- The 2003 introduction of companies with a committee government structure through the revision of the Commercial Code.
- The 2005 New Company Law that allowed flexibility to companies with a committee government structure and the ulterior expansion of class shares' liberty.

The above reforms were not able to bear results, however, and Japanese companies' MPK and ROE remains low. This problem also derives from problematic asset holders and entrusted asset managing companies. Examples of asset holders are life insurance companies and the Government Pension Investment Fund (GPIF), which manages and invests the reserve funds of pension insurance and the national pension. In the 1980s, Japanese banks no longer had the ability to discipline companies properly, and this meant that the so-called main bank system stopped functioning. As a consequence, institutional investors were expected to monitor and discipline the companies. Yet, Japanese institutional investors have consistently invested passively, something that is thought to occur due to major distortions in their incentives structure – for example, compensation is linked to the size of managed assets rather than performance of investment made. The above-listed corporate governance reforms were centered on a legislative overhaul of companies that attracted investment, but it was necessary to reform the system behind institutional investors as well. To date, this issue remains unresolved.[12]

Another reason behind the unsatisfactory outcome of corporate governance reforms has been the lack of clear goals. As Toyama Kazuhiko also points out in Chapter 4, governance in the 1980s rested upon a main banking system that progressively became less effective. However, policymakers at the time did not clearly envision alternative institutions for monitoring and disciplining firms. Policymakers aimed at a major change from a bank-centered to a market incentive–centered monitoring system, but what constituted the "market?" Was it shareholders or creditors (that is to say bondholders) – or both? During the 1990s and the 2000s, there was in fact no consensus among Japanese policymakers concerning shareholder-led governance and its possible reinforcement.

For this reason, the understanding that governance of institutional investors needed to undergo reform was very slow in coming. Instead, the reform of investee companies was prioritized. As a result, institutional investors remained passive shareholders and said nothing to the managements of the investee firms. Again, this has possibly been one of the main reasons behind the failure of Japanese corporate governance reform in the past twenty years.

The emergence of "activist investors," such as the entrepreneur and founder of the Livedoor website portal Horie Takafumi and fund manager and founder of M&A Consulting Murakami Yoshiaki, who was also associated with Livedoor, created a short-lived momentum in the mid-2000s for shareholder-led corporate governance, but the rapid demise of their ventures meant that the momentum was quickly lost. These investors aggressively – too aggressively, in fact – pushed for an overhaul of business management, with the aim of short-term profits for short-term shareholders. Their investments were not oriented at increasing corporate value over the long run. In the end, their behavior simply helped the cause of traditional business managers, individuals who loathed change and opposed strengthening shareholder rights over corporate governance. The establishment in Japan, particularly in the business, governmental, and judiciary sectors, has always deeply opposed active investors. METI, too, was concerned about the possible collapse of the long-term value of firms if activist investors, who aimed at short-term profits, increased their controlling rights. METI did all that it could to sabotage the activities of activist investors, reinforcing antitakeover measures. METI's intentions were to some extent appropriate, since the aim was also to build rules of conduct for takeovers that were in line with other countries. As a former METI chief made clear:

> [METI aimed at creating] an extremely just mechanism that allowed shareholders to decide whether a company's management should be assigned to existing management or new management proposed by new investors who are interested in taking over the shares and control of the company.[13]

The adoption of such defensive anti-takeover measures would perhaps have been less problematic had shareholder-led discipline over firms functioned properly. In actuality, however, the main shareholders, that is to say the institutional investors, did not have any say over corporate discipline. The division between them reinforced companies' traditional management styles and inhibited the creation of a more positively balanced shareholder-management tension.

Were there any measures that could have been taken to avoid the formation of a managerial clique other than shareholder discipline? The practice of appointing external directors to the board was one possible option. Had it been implemented in the lost decades, however, all too often Japanese managers simply would have selected close acquaintances for such positions. The regular appointment by Japanese managers of "friendly faces" engendered tacit gentlemen's agreements, which only contributed to the code of silence about problems among firms. Appointing directors from the outside did not actually discipline companies and Japanese firms' low MPK did not change.

The global financial crisis and government intervention

Following the 2008 Lehman Shock, conditions surrounding Japanese firms of course changed. As Toyama Kazuhiko explains in Chapter 4, the financial situation of the electronic sector took a definite turn for the worse. It was unable to properly respond to the twin challenges of globalization and digitalization, and momentum rose in favor of taxpayer-funded bailouts. For this, policymakers envisioned a scheme that resembled the Troubled Asset Relief Program (TARP) in the United States, which bailed out, for instance, General Motors. To finance troubled firms, the government set up government-supported companies such as the Innovation Network Corporation of Japan (INCJ) and the Enterprise Turnaround Initiative Corporation of Japan (ETIC), the latter reorganized in March 2013 into the Regional Economy Vitalization Corporation of Japan (REVIC). The proliferation of such government-supported corporations raised concerns over Japanese private firms' dependency on such companies, as well as the fear that reliance on such measures would become the normal state of affairs.

The aim behind such attempts to restructure and revive firms through government-supported corporations is to tackle problems in the economy left in the aftermath of the NPL disposal. Taken together, these problems formed a vicious circle. The combination of an industrial structure that was unable to respond to the challenges posed by a declining, and ageing, population and public uncertainty regarding increased public debt and the fate of social security dampened the possibilities of economic growth. The rigidity of Japanese society as a whole was reflected by the excess risk aversion and indecisiveness of Japanese corporate managers. As a result, Japanese enterprises showed a lack of initiative in opening new business fields, which led to further sluggish growth. The torpid economy put pressure on government finances, increased future uncertainty, and made society ever more rigid.

It seems to me that the solution to these problems entails a two-step approach. First, policymakers need to take measures to increase the nation's fertility rate, in order to revive the demographic balance in society. Second, in recognition of the demographic changes that have taken place, leaders need to implement reforms necessary for the sustainability of Japan's public finances and social security. This entails structural reforms accompanied by significant tax increases and cuts in social security spending. In short, if some sort of revival or restitution can be brought to public finances, social security sustainability, and the demographic makeup of society, Japan's future, at present so uncertain, may get brighter. If these things can be brought about, they will encourage companies to take the risk of active business ventures.

Nevertheless, such policies require an extremely long time to produce results. At present, Japan continues to flounder, with little visible progress. In the mid-2000s, policymakers at METI and similar bodies considered that the removal of the heavy NPL burden would stimulate lively economic activity based on free competition. Unfortunately, such hopes notwithstanding, the rigidity, or lack of decisive dynamics, shown by Japanese companies in their business activities only worsened, and few attempts were taken to open up new industrial fields. This is because, even after the disposal of NPLs due to Japan's demographic shifts and the accelerated accumulation of government debt, uncertainty significantly increased and thus depressed economic activities.

In order to properly understand the aim of the government-supported corporations such as INCJ and REVIC, it is necessary to understand how METI grasped the inner workings of the Japanese economic system. Their view differs considerably from the standard market-centered view of economics. According to orthodox economic thinking, the remedy for a rigid economy requires the establishment of a highly competitive market environment through deregulatory policies. Because of the uncertainty in the Japanese corporate world regarding demographic, fiscal, and social security issues, however, Japanese companies became averse to risk-taking activities. Deregulation alone was not enough to produce the will for competition and the resulting reallocation of resources. In actuality, interfirm business and trust networks play a major role in the real economy, even though they are usually discounted as a factor by orthodox economic theory. The characteristics of these "complex networks" are gradually elucidated by the theory of complex networks based on network science, which has made remarkable progress in the last decade. In an interview with a senior METI official who was also very close to INCJ, I was told the following:

> Interfirm networks create a distinctive "small worldness," where a limited amount of players function like hubs and have a major impact over the industry as a whole. Therefore, the revitalization and reorganization of firms that were key hubs through public institutional investors would propagate policy-led growth incentives through interfirm networks. And this would lead to the eventual revitalization of competition within the sector as a whole.[14]

This peculiar type of state capitalism is based on the assumption of market intervention by government-engineered institutional investors. The aim, however, was not to eradicate economic competition in the manner, say, of socialist intervention. Rather, the aim was to revitalize economic competition, as pointed out in the above comment by a senior METI official, who continued:

> As society grows immobile, if stimuli from the public sector is absent, firms also remain rigid, visionary businessmen are kept down, and the economy flounders. The INCJ's role is to provide such unorthodox yet visionary businessmen with resources and positions of management, in order to facilitate their corporate activities at the hubs of the market networks. In other words, the INCJ is responsible for regularizing newcomers' challenges to the traditional economy.[15]

Japan's demographic, fiscal, and social security problems, especially prominent in the later 2000s, prove that market competition does not always work along standard economic assumptions. These problems were also hard to get rid of, so policymakers made even more frequent use of public investment-led stimuli, intervention, to galvanize market competition.

The structure of the two lost decades

It is possible to argue that the fundamental problem in Japan over the past two decades has been a pervasive rigidity in public and private organizations, where decisions to revive economic activity came too late, and when the actions came they were insufficient. Organizational problems inhibiting flexibility common to many administrative organizations, banks, and private firms also played a part. This problem can be described as negative externalities (i.e., damage/costs caused by an organization for which it does not have to pay) stemming from "insider decision making." This section will explain the structure of negative externality by insiders.

Japanese organizations are peculiar for being relatively insulated from external discipline; and with the passing of time in the two lost decades, outside actors have become even less capable of exerting pressure. Discretion pursued by insiders is often neither interrupted by outsiders nor institutionally prevented. In the case of Japanese firms and banks, for example, the institutional environment of capital market actually constitutes the problem; in the case of administrative organizations, the institutional settings of government employees, which give them perverse motivations in relations with politics and the private sector alike, are the core of the problem.

Due to a growing insularity from discipline imposed by external actors, Japanese banks, private corporations, and public organizations developed into a sort of closed community. Insiders avoided situations that might damage their community, and they do not take into sufficient account the costs actually inflicted on outsiders. For example, Olympus, an optics and medical device company, developed a huge financial scandal on the loss-hiding of its mistaken investments made in the asset bubble era. The loss-hiding scheme was discovered by a newly appointed CEO, Michael C. Woodford, whereas other Japanese directors kept silent or did not have the capability to look into the situation.[16] As a consequence, insider decisions were made that were perfectly appropriate for their own interests but were apparently illegal and caused major deficiencies – or negative externalities – on outsiders (i.e., shareholders).

This problem has been key in policy domains affected by decision making in government departments. In fact, it explains why government deficits have been left unattended, leading to the rapid expansion of public debt. It was the same with the lack of willingness to take effective countermeasures to address the problem of an ageing society characterized by a low birth rate. What was happening was that do-nothing governments kept prioritizing minimizing the costs affecting their policy stakeholders over alleviating the burden on future generations. Such patterns of Japanese organizational avoidance during the two lost decades persist today.

Theoretical explanation and policy implications

Administrative organizations, banks, private firms, and the like developed into closed communities of this sort, composed of traditional managerial cadres, financial investors, and ministerial and agency heads, among others. This inward-looking environment allowed certain vested interests to impose substantial costs on outsiders, a negative situation that qualifies as a coordination failure within society as a whole. In this section, I will use game theory to analyze the nature of this coordination failure.

For simplicity's sake, I will take the government as a representative insider and citizens as their external counterpart, the outsider. Insider and outsider interact with one another through a particular strategic game. In this case, the government has the choice of two strategies: maximize the government's utility – that is to say, its own insider interests – to the people's detriment, or maximize citizens' utility through instituting stringent regulation. The downside of the former option, or the cost to society, is insufficient reallocation of resources and, in comparison with the latter, shrinking economic activity. On the opposite side, the citizens have a choice of opting for active political participation and stern monitoring of governmental activities, or an absence of political participation and no monitoring of government activities. The people's active political participation will incur costs for which citizens have to pay. The penalty for the government if it pursues policies to the people's detriment is the possibility of a regime change.

Of course, the desirable result is a "good equilibrium," meaning that the government maximizes citizen's utility and that citizens participate in and monitor the governmental activities. However, first of all, if the government's expectation of penalties that the citizens can impose on it are too small, and the costs for citizens' political participation are too high (too much time being spent, for example, due to insufficient reliable information), the government will be able to maximize its insider interests and thus impose costs on the nation as a whole. Furthermore, as far as the expected damage for a citizen due to her/his absent participation in politics is lower than the costs of her/his active participation, a rational citizen will keep not monitoring. Therefore, shrinking economic activity might not be prevented in such a "bad equilibrium." In short, in the case that the expected penalty for the government is too small (e.g., almost no chance of a regime change), or that the costs associated with citizens' active participation in politics are too high (e.g., insufficient disclosure of information about the government activities), the government tries to maximize its insider interests by imposing the costs on citizens. The coordination between the government and citizens is lost and the social welfare is significantly damaged.

Two reform options can solve this coordination failure: one is to increase the penalties that may be placed on the government through monitoring by citizens. The other is to decrease the costs on the people for their active political participation.

This structure and choice of reform options also applies to the interaction between the management in firms (insiders) and shareholders (outsiders), and bank managers (insiders) and depositors (outsiders). Arguably, empowering outsiders through easier monitoring mechanisms and enabling them to provide stronger penalties would be an important first step in increasing flexibility within Japanese society.

Conclusion

The two lost decades in Japan grew out of years of rigid decision-making processes and the avoidance of responsibility. To be sure, these problems originated from a sluggish economy; however, they also impeded economic growth on their own merits. Cause and effect work both ways, and Japan has been experiencing a bad equilibrium in which insiders (e.g., the government, corporate management, and bank management) maximize their own interests by deprioritizing interests of outsiders (e.g., citizens, shareholders, and deposit holders respectively) for quite a while.

Once the economy gets stuck in this bad equilibrium, it is insufficient to rely on market competition to bring about any reversal or comeback. Strong political initiatives or policy-driven big pushes are essential. A massive external shock, sufficient to smash the rigid social structures, is probably necessary to stop the inertia behind Japan's lost decades. A Japanese government bond (JGB) crash, for example, would be one such shock.

As of 2013, Japan's current account balance maintains a surplus. The trade balance has fallen into the red, however, so a sudden JGB crash would not seem out of the realm of possibility. The social costs of such an eventuality would of course be immeasurable, and every step must be taken to avoid it. It is imperative that the Japanese people push their government to carry out reforms, avoid economic turmoil induced by a crisis, and once and for all shed dependence on a system that has characterized the country's economy throughout the lost decades and continues to do so to this day.

Notes

1 Shigeru Matsushima and Harukata Takenaka, eds., *The Japanese Economy and Macroeconomic Policies from the Beginnings of the Bubble to the Overcoming of Deflation (History, Volume 3): Record of the Japanese Economy – An Oral History* (Tokyo: Saiki Insatsu, 2011), pp. 261, 302.
2 Ibid.
3 Ibid., p. 222.
4 Official statistics of industrial production, shipments, and inventory, monthly reported by the Ministry of Economy, Trade, and Industry.
5 A large body of research on balance-sheet variables were pioneered by Nobuhiro Kiyotaki and John Moore in "Credit Cycles," *Journal of Political Economy*, 105, no. 2 (1997), pp. 211–48; and Ben S. Bernanke, Mark Gertler, and Simon Gilchrist, "The Financial Accelerator in a Quantitative Business Cycle Framework," in John B. Taylor and Michael Woodford, eds., *Handbook of Macroeconomics* (New York: Elsevier, 1999), vol. 1C, chap. 21.