

Some Remarks on Japanese Finance, Growth and International Integration

By Mechthild Schrooten*

Yet among the main features of institutional change are its complexity and the unforeseeable nature of its consequences, setting us off on random walks to goodness knows what destination. Institutional experiment by a single firm is fine, because it does not matter much for the economy as a whole if it does not work. Institutional experimentation at the level of the whole economy gives one more pause. Reflection along these lines can easily lead to timid conservatism.

R. C. O. Matthews, 1986

Summary

Despite the fact that the last century was characterized by an impressive increase of cross-border capital flows, Japan remained a relatively closed economy up to the late 90s. Only when the “bubble” burst was the impetus given for more rapid opening up of the economy and the closely related liberalization of the financial sector. In general economic theory sees international financial market integration as an important instrument for increasing economic productivity. Japan, however, remains mired in an ongoing deep financial crisis even following the implementation of this measure. To understand this phenomenon better, this paper connects ideas from endogenous growth theory with the introduction of new rules of the economic game on the financial market. It can be demonstrated empirically that in Japan, the “old” internal institutions on the financial market have continued to exist even after the change in external institutions. Against the backdrop of these tensions, it is unlikely that the formally liberalized financial sector will have any significant positive impacts on Japan’s economic development in the near future.

1. Motivation

Japan was a relatively closed economy up to the 90s (Kleinert, 2001). Both the liberalization of the domestic financial system and the integration into international financial markets had developed very rudimentarily. Only with the deep financial crisis of 1989 did it become clear that far-reaching reforms were unavoidable. Especially the efficiency of state interventions into the domestic financial market was called into question. However, for a long time the financial sector in Japan was closely linked not only to the government but also to the enterprise sector: “Keiretsu” is the Japanese word for conglomerates, which are usually formed as loose-knit enterprise groups with a bank at their core. Within such a group, it was the usual practice that banks accepted major invest-

ment projects planned by firms belonging to the “Keiretsu” and that they provided preferential loans when thought necessary. The emergence of far-reaching moral-hazard problems concerning crediting the enterprise sector was a consequence of these specific rules of the economic game (Flath, 1993). Therefore after the bubble burst, financial liberalization and international integration were considered as crucial for the future growth perspectives of the country.

Indeed, in the Japanese situation, the argument of financial liberalization gains power from economic theory. Both neoclassical and modern (endogenous) growth the-

* Correspondence to: Mechthild Schrooten, DIW Berlin, Königin-Luise-Str. 5, 14195 Berlin, Germany. E-mail: mschrooten@diw.de.

Table 1

Steps towards international (financial) integration

July 1990	Regulation of deposits in overseas financial institutions is relaxed. Individuals as well as companies can deposit up to 30 million yen without regulation, compared with a former ceiling of yen 5 million.
June 1991	A subcommittee of the Financial System Research Council to the Finance Minister releases its final report on deregulating and globalizing Japan's financial system, which includes the recommendation to permit banks and securities houses to enter into one another's businesses through subsidiaries.
November 1991	The government decides on measures to stimulate the government procurement of foreign products, effective April 1992.
1992	Computer Agreement is reached between the United States and Japan, its aim being to expand government purchases of foreign computer products and services.
December 1993	The Advisory Group for Economic Structural Reform submits a final report (Hiraiwa report) to the Prime Minister proposing the principle that economic regulations should be eliminated in principle, with only certain areas subject to regulation.
March 1994	The government announces the Outline of External Economic Reform Measures. The outline consists of measures to increase market competition and to improve access to the Japanese market and voluntary measures in priority areas of Japan-US framework talks.
October 1994	Insurance Agreement between the United States and Japan, which ensures more transparency and easier access to the market.
1995	U.S.-Japan Automotive Agreement to eliminate market access barriers and significantly expand sales opportunities in this sector.
Since 1995	Implementation of the Uruguay round tariffication and bound rate cuts concerning the import of agricultural products and leather.
February 1995	Agreement between the United States and Japan to deregulate the financial markets, especially in the key areas of asset management, corporate securities, and cross-border financial transactions.
July 1995	Arrangement between the United States and Japan called "Policies and Measures Regarding Inward Direct Investment and Buyer-Supplier Relationships" is reached, designed to promote foreign direct investment.
February 1996	A set of deregulatory measures concerning cross-border financial flows are introduced, covering yen interest rate swaps, foreign currency overseas deposits, abolition of notification requirements on certain yen loans to non-residents.
March 1996	The extent to which securities companies can undertake foreign exchange transactions is increased.
December 1996	Supplementary measures to the 1994 Insurance Agreement are introduced, defining the scope and timing of primary sector deregulation and defining the scope of business activities of Japanese insurance subsidiaries in the third sector.
1997	Information Technology Agreement among 43 countries reached, eliminating tariffs by the year 2000 on the overwhelming majority of products covered. Elimination of tariffs on white distilled spirits as a result of the December 1997 settlement of a WTO dispute.
May 1997	Adoption of changes in the Foreign Exchange Law, which fully liberalize foreign exchange transactions from April 1998.
November 1997	Signing of the APEC-program "Early Voluntary Sectoral Liberalization" concerning accelerated trade liberalization measures in nine sectors: environmental goods and services, fish and fish products, toys, forest products, gems and jewelry, medical equipment and instruments, chemicals, and a telecommunications mutual recognition agreement.
April 1998	New Bank of Japan Law and new Foreign Exchange Law take effect. It entails that the divisions separating investment banking, commercial banking and foreign exchange dealings disappear, and that Japanese banks and finance houses are able to operate across all sectors. Every bank in the country is entitled to offer foreign currency accounts and transactions to customers, so that they can carry out business in any currency they choose. The field is opened up to foreign banks.
December 1998	The Ministry of Finance announces measures to promote the yen's internationalization, including sale of Finance Bills in the market.
1999	Introduction of tax exemptions to non-residents and foreign corporate holders of Japanese government bonds within the Bank of Japan book-entry trading system. Moreover some deregulation to stimulate foreign investment.
March 1999	Inception of the WTO Financial Services Agreement, signed in December 1997.
April 1999	The Council on Foreign Exchange and Other Transactions submits its report to the Finance Minister, recommending further measures to enhance the yen's international standing.
March 2000	New Land and Housing Lease Law takes effect. It follows a deregulation submission of the United States and enables Japan to develop a quality housing rental market for the first time, improving housing options for Japanese families and creating enormous opportunities for domestic and foreign builders and suppliers.
March 2000	Implementation of partial liberalization of the electricity sector.
Source: OECD Economic Surveys 1989–2000; http://www.mac.doc.gov/tcc/data/commerce_html/countries/countries2/japan/national-trade/2000/countryreport.html (cited 16 August 2001).	

ory consider financial liberalization a means of improving resource allocation. According to standard models, an integrated global economy can better exploit economics of scale and promote growth. At the same time opening up an economy leads to the implementation of new “rules of the game”. The “New Institutional Economics” (NIE) approach regards the legal framework as a set of “external” institutions. These rules can work effectively only if an appropriate sanctioning mechanism is implemented. The new internationally harmonized arrangements may improve the efficiency and lower the transaction costs of cross-border and domestic transactions. However, international standards are often in conflict with domestic “rules of the game” (Engerer and Schrooten, 2001).

Here we try to understand the functioning of the Japanese financial sector by linking ideas from endogenous growth theory to basic assumptions of NIE. The paper starts with a presentation of some stylized facts about the ongoing deregulation process in Japan and its influence on Japan’s integration into international financial markets. Japan is an example of very gradual financial sector reforms. It took nearly ten years to implement the so-called “Big Bang” in the financial sector. Although the primary focus of these reforms lies in the Japanese banking sector, their implementation affects the laws and rules of the whole system significantly. In chapter three we analyze the linkages between financial markets, growth and institutional arrangements from a theoretical point of view. We pose the question of whether the idea of financial development holds in the case of Japan. In chapter four we confront the theoretical findings with some empirical results before closing with a look at some prospects for the future.

2. Stylized Facts — Financial Intermediation in Japan

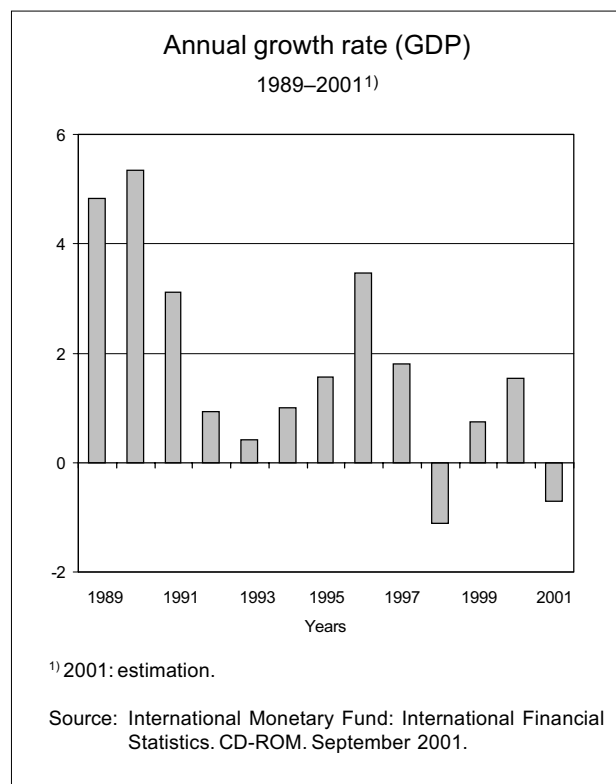
In Japan after the bubble burst, economic growth had slowed significantly (Figure 1). In view of decreasing growth rates, financial sector reforms and the internationalization of the economy were seen as the important factors that could lead to revitalizing the spirit of the Japanese miracle which had brought tremendous wealth to the island after World War II. For many years, the main task of the financial sector was seen as channeling household savings to the industrial sector in order to secure a successful catch-up process. Up to the time when the bubble burst, not only were banks heavily regulated by the Ministry of Finance (MoF); but also different forms of financial repression, that is, all forms of governmental interventions in the financial market, were being carried out in the Japanese financial sphere. One important issue was the regulation of interest rates. In addition, preferential as well as directed credits were granted to certain sectors. Preferential as well as direct credits and interest rate regulation

function in the same way as grants or subsidies to a set of given enterprises. On the one hand, as forms of financial repression, they can be considered to substitute for direct fiscal interventions. On the other hand, as forms of quasi-fiscal policy, they lead to indirect taxation of certain transactions. For a long time, the financial sector in Japan has more or less provided public financial services (Fukada and Hiroda, 1996). During the pre-crisis period, competition within the financial sector was hampered not only by interest rate regulation, but also by the institutional framework. One example are the difficulties in the market introduction of financial innovations: The MoF, as the supervisor of the monetary system, had to authorize new financial products and this was typically done for all commercial banks at the same time. As a consequence, there was no advantage to be gained by a single bank in developing a new product and no incentive for competition. In this way the development of the financial sector itself was inhibited.

The close relationship between the financial sector and the MoF was underpinned by personnel links: banks were forced to employ retired high-level members of the MoF. In Japanese, this time-honored practice is called “*amaku-dari*” which means “descent from heaven”. These personnel links form the basis for close face-to-face government-business relations — in the entire enterprise sector. As this concerns the banking sector, a special form of governmental supervision was implemented and indirectly, commercial banks were insured against failure. Face-to-face relations are not only crucial for the linkages between the government and the banking sector, but also for the relationship between enterprises and banks and within the enterprises themselves. Most companies had one main bank and the concrete modalities for financial intermediation were not transparent (Aoki et al., 1994). For many years, the Japanese enterprise sector has relied on the so-called stakeholder system (Schulz, 2001). The core of this system is the management of and balance of the different interests of stakeholders, who from their own point of view make personal contributions to, and reap a personal benefit from, the value-adding process of a firm. Stakeholders are at the same time partners and competitors (Ballon and Honda, 2000). Within such a system, the entrepreneur is forced to coordinate and resolve the numerous conflicts of interests between the different groups working in the enterprise. Consequently, such a system leads to a relative unimportance of shareholder rights. Typically shares of a firm are held reciprocally by other corporations, so that commercial relations are often underpinned by cross-ownership structures.

For a long time, the Japanese concept of stakeholder capitalism was very successful. However, the burst of the bubble sounded the death-knell for a system which, from then on, was seen as an obsolete leftover of the catching-up process, which had already come to an end. To overcome the economic crisis and to get back on the track of

Figure 1



sustained growth, Japan announced an ambitious plan to deregulate and reform six major areas of the economy in late 1996. The deregulation of the financial system and international financial integration were considered as crucial for the future development of the country. However, opening up the domestic market for foreigners also became more necessary not only to import “competition” but also was forced by the international community itself. The improvement of international financial integration was embedded into an overall opening up process, which focused on international trade agreements and liberalization as well as on the elimination of market access barriers concerning the Japanese economy.

Concerning financial liberalization the so-called “Big Bang” initiative has resulted in numerous reform proposals developed by the Financial Supervisory Agency’s (FSA) predecessor, the Ministry of Finance. A major goal of the reform was to make Japan’s financial system “free, fair and global” (Nabor, 2001). Thus the problems of the Japanese financial system were identified as resulting mainly from its protection against competitors, its practice of state intervention, that is, lending which is often government-influenced and preferential towards certain sectors, and the Japanese system’s overall domestic orientation. Remedies to overcome the financial crisis were seen in liberalization and opening up the economy. Thus it

became clear that in the future, the shareholder-value concept would gain importance even in Japan (Allan and Gale, 2000).

3. Some Theoretical Considerations

Japan’s “Big Bang” was intended to deregulate the financial system in many ways and open up the financial market for foreign investors significantly. However, despite its name, the Japanese financial reform cannot be considered to have been a form of shock therapy. Furthermore, up to the 21st century, it has still not come to an end. In 2001 new plans to restructure the bad-loans burden in the financial sector were announced. Financial market reforms as implemented in Japan can be considered as a change in the rules of the game in the financial sphere. It is obvious that within the very specific Japanese “triangle” — enterprises, banks and government — specific rules, or as New Institutional Economics (NIE) argues, specific institutions emerged (North, 1992). The function of institutions is to reduce uncertainty, to prolong time horizons, to induce a deeper division of labor, etc. According to the argumentation of NIE, the state is an organization which implements and enforces institutions mainly to prevent market failures and therefore to achieve a more efficient resource allocation. A major assumption of NIE is that resource allocation is connected with transaction costs. Transaction costs are costs which result mainly from the fact that perfect information does not exist. With the emergence of institutions the information problem decreases and transaction costs slow down.

However, NIE argues that different sets of institutions lead to differences in the “transaction costs”. Basically, it is important to distinguish between rules implemented and sanctioned by the “society” (internal institutions) or the “state”, as well as by “international organizations” (external institutions) (Table 2). NIE assumes that the “state” is a neutral player without any self-interest. Therefore NIE often neglects the possibility that the state uses the installed institutional framework or regulation as an instrument for economic policy or a substitution of tax and subsidy policy.

As regards the financial sector, external rules known as “financial regulations” are highly relevant because the financial sector suffers from specific forms of market failures that arise mainly from the absence of perfect and zero-cost information for the agents. Furthermore the existence of the financial sector itself can be explained by the fact that perfect information is not available, that contracts are expensive and that future developments are uncertain. Consequently transaction costs are a major problem of financial markets (King and Levine, 1992, 1993a, 1993b). These costs are mainly due to the asymmetric information existing between the different actors on the

Table 2

Types of institutions

Kind of rule	Kind of enforcement	Type of institution
1. Convention	Self-enforcing	Type-1 internal
2. Ethical rule	Self-commitment of the actor	Type-2 internal
3. Customs	Via informal societal control	Type-3 internal
4. Private rule	Organized private enforcement	Type-4 internal
5. State law	Organized state enforcement	External
6. International law	Organized international enforcement	External
Sources: see Engerer and Schrooten (2001) and Schrooten (2002).		

financial market: Asymmetric information can be assumed not only to be a reason for governmental intervention into the financial sphere, but also to be a main cause for the existence of financial intermediaries, since they are able to improve resource allocation via risk sharing. An important role of financial intermediaries is to collect savings and to provide liquidity to individual investors (Diamond and Dybvig, 1983; Diamond, 1984).

Financial intermediaries can also reduce inefficiency by pooling savings and investing funds in bigger, more illiquid and more profitable projects. However, according to economic theory, financial intermediaries such as banks fulfill several more important functions. Greenwood and Jovanovic show that financial intermediaries can not only completely eliminate project-specific shocks by managing and diversifying their portfolios (Greenwood and Jovanovic, 1990; Greenwood and Smith, 1993), but also detect the early signals for an aggregate shock by noting simultaneous disturbances involving more than one project. Bencivenga and Smith argue that financial intermediaries, by allocating funds to more illiquid and productive assets and reducing the premature liquidation of profitable investments (Bencivenga and Smith, 1995), could enhance the productivity of capital, and thus the growth rate. However, in order to find the most profitable project, financial intermediaries have to evaluate, monitor and screen investment projects. In other words, the existence of financial intermediaries is an expression of the fact that in reality, important assumptions of the neoclassical theory have been violated.

Financial markets are often considered not only to be essential for the allocation of resources but also to be the core of the entire economic system (Laporta et al., 1997, 1998). Regulation is seen as an instrument to prevent

financial crises since it is assumed that high returns in the financial sector are often related to high risks. In cases of financial crisis, returns on assets become negative and financial contracts are connected to high transaction costs. Therefore, regulation itself is considered as a means of reducing transaction costs within the financial sector. However, it is necessary to mention that the government resolves market failures only imperfectly by regulation or intervention, since regulation at least also suffers from asymmetric information between the financial intermediary and the regulator.

Pagano illustrates the influence of the financial sector and its regulation on growth using the very simplest type of endogenous growth model, the AK model (Pagano, 1993).

Here output Y is a linear function of technology A and capital K

$$Y_t = A_t K_t \quad (1).$$

In the short term, A is constant. Gross investment is defined as $I_t = K_{t+1} - [(1 - \phi) K_t]$ whereby ϕ reflects the depreciation rate. Within this argumentation it is assumed that financial intermediation causes specific transaction costs (τ).

Savings are motivated according to the time-separable utility function of an immortal household

$$U = \int_0^{\infty} u(c_t) e^{-\rho t} dt$$

with the momentary utility function given by

$$u(c_t) = \frac{c_t^{1-\sigma} - 1}{1-\sigma}.$$

The household has to maximize its utility subject to the lifetime budget constraint (intertemporal Euler equation). In this specification there are two parameters describing intertemporal preferences: the intertemporal elasticity of substitution in consumption, $\frac{1}{\sigma}$, and the pure rate of time preference, ρ .

Due to imperfection on the financial market, only a certain portion of savings (S) can be used for investment:

$$I = (1 - \tau) * S \quad (2).$$

Consequently we get the steady-state growth rate

$$y_Y = A \frac{I}{Y} - \phi = A (1 - \tau) s - \phi \quad \text{with } s = S/Y \quad (3).$$

Within this argumentation the financial sector influences the economic growth rate via three channels:

- Firstly, by changing either the productivity of capital (A) through financial resource allocation. To improve financial resource allocation, financial intermediaries have to be free in the selection of investment projects. However, since the profit of an investment project is uncertain, financial intermediaries cannot simply maximise the contractual nominal interest rate, but also have to consider the failure risk of the given project. Therefore, the risk adjusted expected return of an investment project may be much lower than the interest rate agreed on in the loan contract. As mentioned above, the existence of asymmetric information leads to a specific risk for financial transactions. To limit this risk for a single financial intermediary, governmental regulation of financial transactions is a common remedy.
- Secondly, within this model the financial sector influences the saving rate (s) through the development of better and more attractive financial products. However, it is ambiguous what this relationship means: higher income might induce higher savings, but financial development might also reduce saving incentives out of the precautionary motive. This is because, with financial development, households gain better insurance against exogenous shocks and better risk diversification.
- The third possibility to affect the growth rate is given by transaction costs (ϕ). Since financial intermediaries absorb a fraction of resources ($1 - \phi$) by funnelling savings to investment, reduction of this cost leads to higher growth rates. The “visible” transaction costs include the spreads between deposit and lending rates, transaction fees (such as reserve requirements, etc.). Other “invisible” transaction costs may result from restrictive governmental regulations or changes in the regulation. This is true especially if changes happen only on the level of external institutions and the given internal institutional structure remains unchanged. Under such circumstances an increase in transaction costs may result because of the co-existence of two different “systems” in the society. Therefore it is not a trivial decision for economies to adopt international standards for the financial sector which might require the development of a different financial system altogether.

So far the simple AK model is only formulated for the case of a closed economy. Obstfeld and Rogoff (1996) use a stochastic AK-model to illustrate how international financial integration can raise steady-state growth. The intuition behind this concept is that international portfolio diversification might decrease the total risk of the portfolio and therefore lead to higher total yields. Individuals have the possibility to switch between risk-free and risky assets without any additional costs. The key implication of their model is that the expected growth rate is a decreasing function of the variance of the risky return. They assume that countries all over the world have the same preference

and technology. However, the returns on a risky project are imperfectly correlated internationally. In other words, since the world portfolio of risky capital is globally diversified, the variance of risky return in the case of a global portfolio is smaller than in the case of a national portfolio. It follows that growth in the case of capital market integration will be higher than under autarky.

In this setting, opening up the economy can be considered as a way to improve financial resource allocation on an international level. However, standard problems of financial transactions which are due to the fact of asymmetric information between the agents cannot be overcome simply by permitting cross-border capital flows. In fact, they could even worsen due to tension between the given country-specific structures and institutions of the international financial market. Due to this, at the very least, transaction costs might rise. In Japan however, opening up the economy was considered a remedy to force the very slowly progressing domestic reform process: institutional development in particular should be encouraged. Thus it was expected that the import of institutions, new arrangements and rules of the games on the domestic level would increase efficiency within the sector. But what happened to the Japanese financial sector?

4. What Kind of Financial Development?

Opening up the economy is a standard approach to encourage the public as well as the private sector to adopt international standards and regulations. Consequently in Japan, opening up the financial market was announced at the very beginning of the reform process in the 90s. However, there does not exist a “single” international financial market which operates under specific, internationally accepted rules (Eichengreen, 1999). Furthermore, national financial systems and regulations differ widely — even or especially between high-income economies (Demirguc-Kunt and Levine, 1999; Demirguc-Kunt and Maksimovic, 1998).

In Japan, the bank-based financial system dominates not only the domestic financial sphere (Corbett and Jenkinson, 1996) but also leads to a specific outcome of corporate control structures. Typically, the bank is the center of a *keiretsu*, which consists of a number of companies. These companies are linked by stable cross-shareholdings. *Kereitsus* do not sell shares to outsiders (Hoshi, 1998). Within such a system, corporate control is exercised by the bank and by the group’s companies themselves — a non-transparent system of bank-led cross-corporate control emerged. Despite the fact that Japanese shareholders have far-reaching rights, it is as difficult for them as it is for the bank itself to actually exercise corporate control. First, this is because of the underlying stakeholder concept of the companies, which is based on

the harmonization of different types of interest within the firm. Secondly, the weak corporate control is due to difficult moral-hazard problems which emerge from the widespread cross-shareholding. Consequently, these conglomerates with banks at their cores were exposed to high risks concerning lending decisions.

Usually, regulation is seen as an instrument to prevent financial crises that result from risky lending practices. In cases of financial crisis, returns on assets become negative and financial contracts are connected to high transaction costs. Regulation itself is regarded as a means to reduce transaction costs within the financial sector. However, it is necessary to mention that the government resolves market failures only imperfectly by regulation or intervention, since regulation also suffers at least from asymmetric information between the financial intermediary and the regulator. Nevertheless, there are only a few basic rules for the financial sector, which are considered so relevant for its functioning that they are usually implemented in all industrialized economies, not only to protect the domestic market against failures, but also to avoid harsh tensions between the existing widely different financial systems. Among these more or less internationally accepted rules are the so-called Basle criteria or BIS standards for banks. These indicators, which were developed under the umbrella of the Bank for International Settlementment, focus on the balance sheet structure of commercial banks. However, Japan's first steps of liberalization and opening up of the economy did not involve the adoption of these international accounting standards or loan-risk classification according to the BIS standards. Furthermore, it became too clear that the idea of implementing those internationally accepted accounting standards would cause serious problems not only for the financial but also for the enterprise sector, since in the past, credit was often initiated by the "keiretsu", and thereby by the enterprise itself. Risk criteria were more or less neglected. This kind of disfunctioning of the financial sector was underpinned by different forms of governmental interventions on the financial market. In Japan the period of liberalization can be considered to be the transition from more or less direct governmental protection to regulation.

Therefore the Japanese "Big Bang" was intended to improve the financial system in many ways and to open it up to foreign investors. However, despite the fact that the financial sector is often considered the core of an economy, it is difficult to measure the performance of this sector. On the one hand this is due to the fact that financial intermediaries fulfill different functions. Thus a single indicator or even a set of indicators cannot reflect the overall performance of the sector. On the other hand, there seems to be a lack of sufficient information on financial transactions — a pitfall which was discussed in the aftermath of the Asian financial crisis. However, there exists a set of indicators to measure the performance of the financial sector

concerning the overall economic development (King and Levine, 1993; Schrooten, 2002). These indicators focus on the development in the banking sector and therefore of M0 and M2, as well as of the components of domestic credit. In their cross-country-study King and Levine came to the conclusion that the share of "credit to the private sector" is crucial for the economic development of a country: the higher the share of credits to the private sector, the higher the economic growth. The assumption underlying this indicator is that financial systems that allocate more credit to private firms are more engaged in exerting corporate control, providing risk management services and facilitating transactions (Levine, 1997). Despite the fact that a lot of work just has been done on financial development it is unclear, whether there exists a one way relationship between finance and growth. Up to now, there seems to be some empirical evidence for the assumption, that real growth follows financial development.

Nevertheless before analyzing several financial indicators, we have to take into account the specific situation in Japan: financial liberalization was not accompanied by inflation but rather by deflation — a phenomenon which up to now is very rare in industrialized countries (Figure 2). This presents a stark contrast to many other financial liberalization experiences, where usually high inflation rates occurred (Fry, 1995). In Japan not only asset but also consumer and wholesale prices went down. How does such a situation arise? According to the "Keynesian" theory, which tries to analyze the factors behind deflation, there exists a certain interest rate that individuals consider "normal" at each given point in time. However, in general it is assumed that the lower the actual interest rates, the larger the amount of money holding. Furthermore there seems to exist an interest rate which is low enough to make it rational to hold money and not to invest in bonds etc. for nearly all agents — a situation which is called a liquidity trap. Typically, private demand slows down in such a situation. The Keynesian answer to this complex setting is to carry out public spending programs to overcome the agony. Indeed fiscal programs were implemented to overcome deflation in Japan. However, due to the stop-and-go character of the fiscal policy, whereby expansionary impulses were counteracted by a sudden swing to budget consolidation, this strategy failed (DIW et al., various issues).

The Japanese deflation is often interpreted as a long-lasting consequence of the "bursting of the bubble" in 1989. However, it would be necessary to take into account that deflation did not occur immediately after this event. Furthermore, deflationary trends in CPI were only observed in the mid-90s — after a period of considerably high nominal interest rates and during a period of deregulation. Therefore Japanese deflation can be interpreted as a symptom of overcoming the former heavy protection of the domestic economy. The argument gains strength from

Figure 2

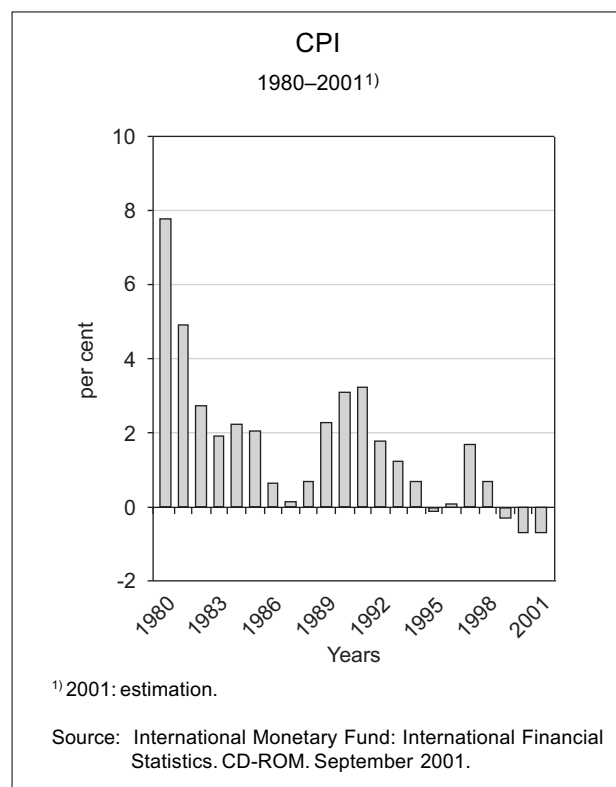
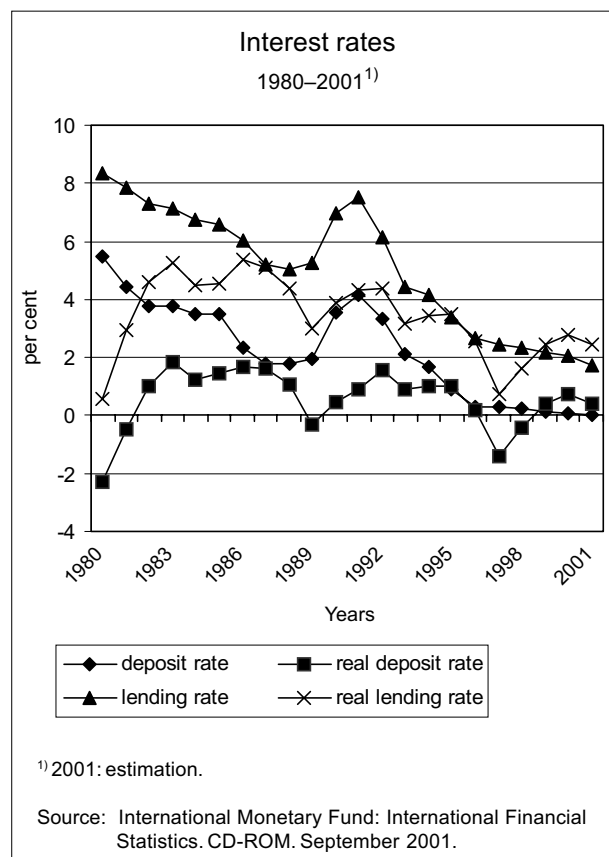


Figure 3



the fact that deflation occurred with the increase of international competition on the domestic market.

Deflation itself is a symptom of the high uncertainty about the future economic development. In Japan, this uncertainty resulted not only from the stop-and-go strategy in the field of monetary and fiscal policy¹, but also from the difficulties in implementing a proper set of institutions with regard to accounting and financial transaction and from the instability of the financial sector itself. In addition, deflation impedes the success of financial sector reforms. One important factor here is that the real costs of credits are rising. In times of deflation, even nominal zero interest rates, as were introduced by the Bank of Japan (Weinert, 2001) to refinance banking activities, can lead to increasing real interest rates.

In fact, in Japan during the nineties, real interest rates decreased systematically. Real deposit rates even turned negative — and lending rates went down dramatically. However, despite this fact, more and more enterprises could not realize even this lower real return on their investment projects (Weinert, 2001). Misallocation of credits in the past and the currently insufficient accounting standards became a dangerous mixture for the entire banking sector. The stock of non-performing loans can be regarded as a reduction of the bank's equity base. However, not only is the Japanese banking sector confronted with a stock problem of bad loans, but also more and more

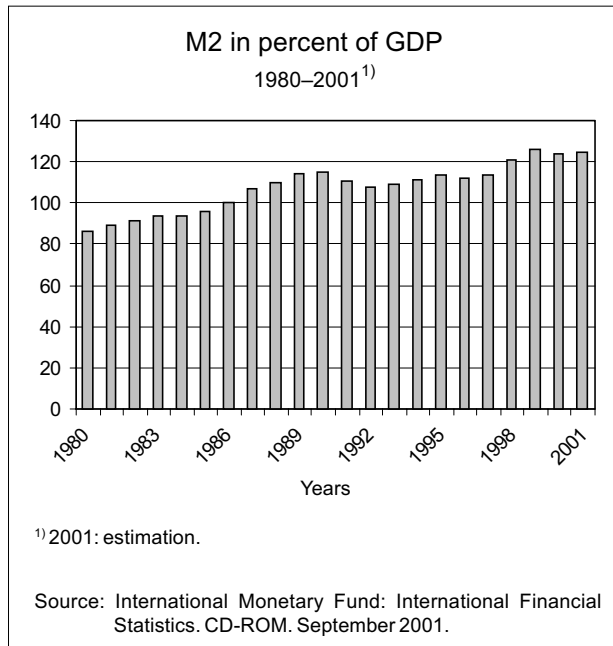
“fresh” loans have turned out to be non-performing. Undercapitalization might be the consequence. To maintain the optimal structure of the bank's passiva and to fulfill the minimum standards for banking transactions according to the BIS, the individual bank is forced to restrict its lending. Thus financial intermediation itself is hampered. The transmission mechanism for impulses given by the monetary policy is distorted. Disintermediation, or a decline of the money multiplier is a logical consequence.

In Japan the difficult situation in the financial sector was reflected in a stagnation of financial development over a long period. The ratio of M2 to GDP, which is considered an indicator for “financial depth”, remained on the same level for nearly ten years — nothing really happened on the way towards more active financial intermediation (Figure 4).

In 1998, with the sharp decline of GDP, the ratio even increased. However, this effect cannot be interpreted as a turning point towards more and better intermediation. Furthermore, more recently a clear trend of decline was observable — disintermediation occurred. What were structural factors behind this development? In Japan during the

¹ <http://web.mit.edu/krugman/www/japtrap.html>

Figure 4



years of deflation, domestic lending in nominal terms started to decrease. However, in terms of its share of GDP, it stagnated or even increased slightly (Figure 5). This can be interpreted at least in part as the result of banks trying to roll over non-performing loans. The logic behind rolling over loans is that in the short run, the man-

Figure 6

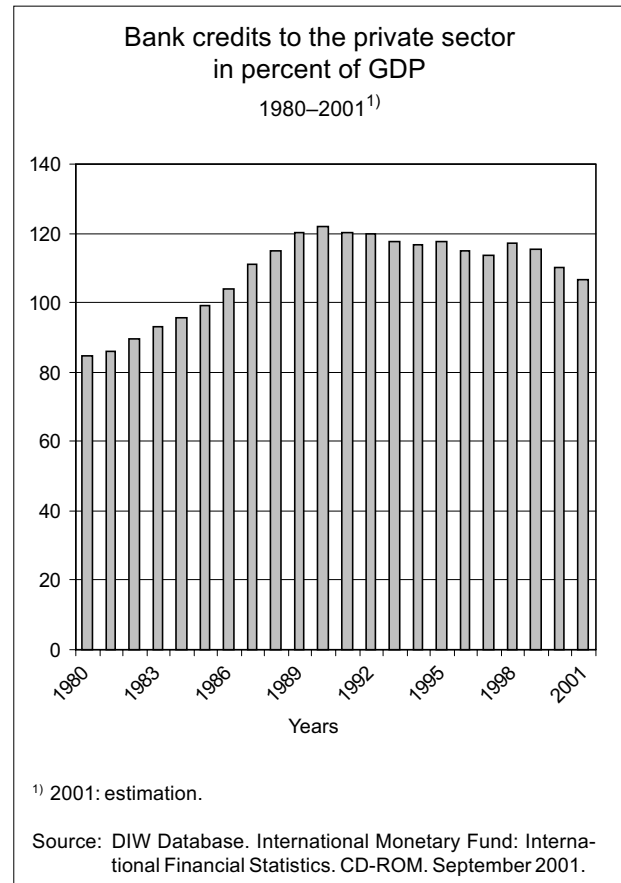
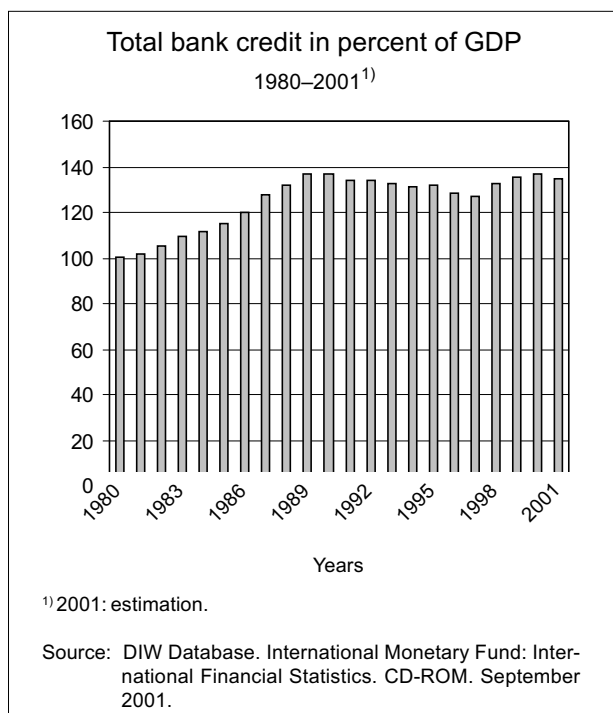


Figure 5

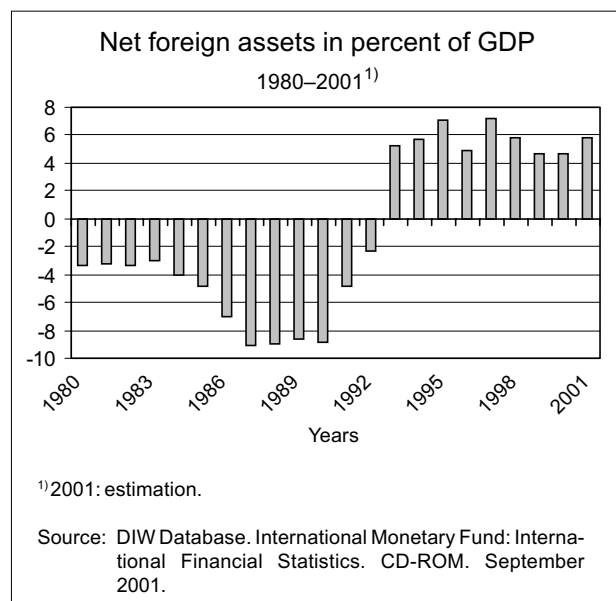


agement may hope to cover losses. Since accounting standards and banking supervision are implemented only rudimentarily, such behavior seems likely.

However, the structure of credits has changed remarkably during the past ten years: Credits to the private sector decreased remarkably (Figure 6), while governmental financing increased. However, it is unclear to which degree the decrease in private credit crunch is caused by a diminishing demand. From the supply side it might be interpreted as a change towards a specific “credit crunch” for the private sector. Then it would be also an indicator of the banks’ problems in evaluating private entrepreneurship and investment projects positively.

In fact there seems to be some evidence that banks developed two strategies to diminish the total risk of financial transactions: on the one hand, or in other words “domestically” they increased the lending to government. On the other, according to the liberalization of international engagement, they started to invest in the international capital market. With the change of the incentive structure and the opening up of the economy, net foreign assets in bank balances increased (Figure 7).

Figure 7



However, does the financial structure affect economic growth in Japan? In general, there exists a considerable debate about the relationship between financial development and growth. Nevertheless, it is difficult to draw conclusions about the Japanese patterns of financial development when considering solely the standard indicators mentioned here. These indicators give evidence of a stopped financial development in Japan. Even opening up the economy and financial liberalization did not improve financial intermediation. Therefore, from the observed development in the financial sphere, no positive impact on economic growth can be assumed in the case of Japan. However, measuring the performance of only one part of the financial system, here the banking sector, may indicate a misleading indicator for the functioning of the whole system.

5. Conclusion

Financial sector reforms of the kind that have been underway in Japan for more than a decade require not only changes within the legal framework, but also changes in the internal institutions and values of the society. As regards the banking sector, to meet the goal of increasing transparency and improving information on the de facto transactions and decisions, it is necessary not only that a well designed law on banking supervision is implemented, but also that the existing close, more or less informal relations between enterprises, the public sectors and banks are cut. This can only happen with the acknowledgement of the need for major changes within society. And this affects the “internal rules and values” of the society. Concerning Japan, international law and underpinning it with internal institutions seems to be difficult since these new rules widely neglect the traditional Japanese financial market characteristics such as the importance of personal relationships. Furthermore, especially in the financial sector, tensions between the legal framework and the rules of the game within the society might lead to further uncertainties and therefore to higher transaction costs.

A growing body of empirical analysis, including micro-economic studies and broad cross-country comparisons demonstrate a strong positive link between the performance of the domestic financial system and growth. Since existing cross-country studies seem to provide some evidence that the recent financial development is a good predictor of future growth rates, the prospects for the near future are only dim for Japan. Nevertheless, the existing theoretical and empirical work makes it difficult to conclude that financial systems simply respond to real sector developments or that financial development automatically result in economic growth. Thus, we need considerably more research concerning individual countries’ experiences with financial liberalization, domestic values of the society and international institutional changes in the financial sphere.

References

- Allan, F., and D. Gale (2000): Comparing Financial Systems. Cambridge, Mass.
- Aoki, M., P. Hughl and P. Sheard (1994): The Japanese main bank system: An introductory overview. In: M. Aoki and P. Hugh (eds): The Japanese Main Bank System. Its Relevance for Developing and Transforming Economies. Oxford, 1–50.
- Ballon, R. J., and K. Honda (2000): Stakeholding: The Japanese Bottom Line. Tokyo.
- Beck, T., R. Levine and N. Loayza (1999): Finance and the Sources of Growth. World Bank, Working Papers. Washington, D. C.
- Bencivenga, V. R., and S. D. Smith (1995): Financial intermediation and endogenous growth. In: Review of Economic Studies, Vol. 44, No. 2, 195–209.
- Black, B. S., and R. J. Gilson (1998): Venture capital and the structure of capital markets. Banks versus stock markets. In: Journal of Financial Economics, Vol. 47, 243–277.
- Corbett, J. and T. Jenkinson (1996): The financing of industry, 1970–1989: an international comparison. In: Journal of the Japanese and International Economies, Vol. 10, 71–96.
- Demirguc-Kunt, A., and R. Levine (1999): Bank-based and Market-based Financial Systems. Cross-country Comparisons. World Bank. Washington, D. C.
- Demirguc-Kunt, A., and V. Maksimovic (1998): Law, finance and firm growth. In: Journal of Finance, Vol. 53, No. 6, 2107–2137.
- Deutsches Institut für Wirtschaftsforschung (DIW): Grundlinien der Wirtschaftsentwicklung. In: DIW-Wochenbericht, various issues. Berlin.
- Deutsches Institut für Wirtschaftsforschung Berlin (DIW), HWWA-Institut für Wirtschaftsforschung Hamburg, ifo Institut für Wirtschaftsforschung München, Institut für Weltwirtschaft an der Universität Kiel (IfW), Institut für Wirtschaftsforschung Halle (IWH) and Rheinisch-Westfälisches Institut für Wirtschaftsforschung Essen (RWI): Die Lage der Weltwirtschaft und der deutschen Wirtschaft. In: DIW-Wochenbericht, various issues. Berlin.
- Dewatripont, M., and J. Tirole (1994): The Prudential Regulation of Banks. Cambridge.
- Diamond, D. W. (1984): Financial intermediation and delegated monitoring. In: Review of Economic Studies, Vol. 51, 393–414.
- Diamond, D. W., and P. H. Dybvig (1983): Bank runs, deposit insurance and liquidity. In: Journal of Political Economy, Vol. 91, No. 3, 401–419.
- Eichengreen, B. (1999): Toward a New International Financial Architecture. A Practical Post-Asian Agenda. The Institute for International Economics. Washington, D. C.
- Engerer, H., and M. Schrooten (2001): Institutionen, Finanzsysteme, Transformation. In: DIW-Diskussionspapiere, Nr. 264. Berlin.
- Flath, D. (1993): Shareholding in the Keiretsu, Japan's financial groups. In: The Review of Economics and Statistics, Vol. 75, 249–257.
- Fry, M. (1995): Money, Interest, and Banking in Economic Development. 2nd ed. London.
- Fukuda, A., and S. Hirota (1996): Main bank relationships and capital structure in Japan. In: Journal of the Japanese and International Economies, Vol. 10, 250–261.
- Greenwood, J., and B. Jovanovic (1990): Financial development, growth and distribution of income. In: Journal of Political Economy, Vol. 98, No. 5i, 1076–1107.
- Greenwood, J., and B. D. Smith (1993): Financial Markets in Development and the Development of Financial Markets. Rochester.
- Hoshi, T. (1998): Japanese corporate governance as a system. In: K. J. Hopt et al. (eds): Comparative Corporate Governance — The State of the Art and Emerging Research. Oxford, 847–875.
- <http://web.mit.edu/krugman/www/japtrap.html>
- <http://www.mac.doc.gov/tcc/data/commerce—html/countries/countries2/Japan/nationaltrade/2000/country-report.html> (cited 16 August 2001).
- International Monetary Fund (IMF): International Financial Statistics. Various issues. Washington, D. C.
- Kang, J., and R. M. Stulz (1997). Is Bank-Centered Corporate Governance Worth It? A Cross-sectional Analysis of the Performance of Japanese Firms during the Asset Price Deflation. National Bureau of Economic Research (NBER), Working Paper 6238. Cambridge, Mass.
- King, R. G., and R. Levine (1992): Financial Indicators and Growth in a Cross Section of Countries. World Bank, Working Papers No. 819. Washington, D. C.
- King, R. G., and R. Levine (1993a): Finance and growth: Schumpeter might be right. In: Quarterly Journal of Economics, Vol. 108, No. 3, 717–737.
- King, R. G., and R. Levine (1993b): Finance, entrepreneurship, and growth: theory and evidence. In: Journal of Monetary Economics, Vol. 32, No. 3, 513–542.
- Kleinert, J. (2001): Japan's Integration into the World Economy in the 1990s. In this volume, 475–488.

- Laporta, R., F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny* (1997): Legal determinants of external finance. In: *Journal of Finance*, Vol. 52, 1131–1150.
- Laporta, R., F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny* (1998): Law and finance. In: *Journal of Political Economy*, Vol. 106, No. 6, 1113–1155.
- Levine, R.* (1997): Financial development and economic growth. Views and agenda. In: *Journal of Economic Literature*, Vol. 35, No. 2, 688–726.
- Levine, R., and S. Zervos* (1998): Stock markets, banks and economic growth. In: *American Economic Review*, Vol. 88, No. 3, 537–558.
- Matthews, R. C. O.* (1986): The economic institutions and the sources of growth. In: *Economic Journal*, Vol. 96, 903–918.
- Nabor, A.* (2001): Financial market regulation. In this volume, 504–514.
- North, D. C.* (1992): Institutionen, institutioneller Wandel und Wirtschaftsleistung. Tübingen.
- Obstfeld, M., and K. Rogoff* (1996): *Foundations of International Macroeconomics*. Cambridge, Mass/London.
- OECD*: Economic Surveys, various issues. Paris.
- OECD*: Main Economic Indicators, various issues. Paris.
- Pagano, M.* (1993): Financial markets and growth. An overview. In: *European Economic Review*, Vol. 37, 613–622.
- Porter, M.* (1997). Capital choices: changing the way America invests in industry. In: D. H. Chew (ed.). *Studies in International Corporate Finance and Governance Systems — A Comparison of the US, Japan, and Europe*. New York, 5–17.
- Romer, P. M.* (1994): The origins of endogenous growth. In: *Journal of Economic Perspectives*, Vol. 8, No. 1, 3–22.
- Schnabl, G.* (2001): Weak Economy and Strong Currency — The Origins of the Strong Yen in the 1990's. In this volume, 489–503.
- Schrooten, M.* (2002): *Financial Markets and Growth. Conceptual Considerations*. (forthcoming).
- Schulz, M.* (2001): The Reform of (Corporate) Governance in Japan. In this volume, 527–545.
- The World Bank* (2001): *World Development Indicators on CD-ROM*. Washington, D. C.
- Tsuru, K.* (2000): *Finance and Growth. Some Theoretical Considerations and a Review of the Empirical Literature*. OECD Economics Department Working Papers No. 228. Paris.
- Weinert, G.* (2001): What Went Wrong in Japan: A Decade-Long Slump. In this volume, 460–474.

Zusammenfassung

Einige Anmerkungen zum japanischen Finanzsystem, Wachstum und zur internationalen Integration

Obwohl das letzte Jahrhundert im Allgemeinen durch eine starke Ausweitung der internationalen Kapitalverflechtung gekennzeichnet, blieb Japan bis in die 90er Jahre hinein eine relativ geschlossene Volkswirtschaft. Erst mit dem Platzen der so genannten „Bubble“ wurde die Öffnung der Volkswirtschaft und damit eng verbunden die Liberalisierung des Finanzsektors vorangetrieben. Üblicherweise sieht die ökonomische Theorie in der internationalen Finanzmarktintegration ein wichtiges Instrument zur Steigerung der gesamtwirtschaftlichen Produktivität. Japan allerdings befindet sich auch nach diesem Schritt in einer anhaltend tiefgreifenden gesamtwirtschaftlichen Krise. Um dieses Phänomen besser zu verstehen, stellt das vorliegende Papier einen Zusammenhang zwischen Überlegungen von endogener Wachstumstheorie und der Einführung neuer Spielregeln auf dem Finanzmarkt her. Empirisch lässt sich zeigen, dass in Japan die „alten“ internen Institutionen auf dem Finanzmarkt auch nach der Veränderung der externen Institutionen Bestand haben. Vor dem Hintergrund dieser Spannungen sind auch in der nahen Zukunft von dem formal liberalisierten Finanzsektor keine nennenswerten positiven Impulse auf die gesamtwirtschaftliche Entwicklung zu erwarten.