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LIBERALIZATION OF MONEY MARKETS: A COMPARISON OF JAPAN AND WEST GERMANY

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This paper is a comparison of two money markets that reacted differently to the trend of worldwide financial liberalization during recent years. An analysis of the actual conditions in Japanese and West German money markets as well as an investigation of the stances taken by the respective financial authorities lead to the conclusion that a) an assessment of a given financial system should be based on an understanding of its inherent features; b) these inherent features of the system provide the driving force for the liberalization process; and c) "foreign pressure" cannot exert an influence if it runs counter to existing market conditions and to the financial authorities' choice of monetary policy tools.

1. Introduction

The 1980s is the decade of global financial liberalization, and much has been written about the restructuring of the financial centers in New York, Tokyo, and London. Not only are these the largest financial markets in the world, but they all started from a rather regulated financial system which was exposed to a flood of foreign money. The experience of breaking up these structures has differed between nations. On the other hand, there is no study yet on how Japan's financial market compares to a country whose real economy has often been compared to Japan's: West Germany. The seeming inertia of the West German financial system is partly due to the fact that German interest rates on deposits were totally liberalized as early as 1967, and also because there is a universal banking system in Germany, so that basic structural changes do not seem to be urgent. But it is also true that the market somehow has escaped the global movement of financial restructuring.

The wave of "globalization" is not an automated process, but one that is monitored, if not guided, by financial authorities. If there are differences between the developments of two financial markets, these may either be due to underlying disparities in the institutional settings, or to different attitudes and intentions in monetary policy of the respective financial authorities, or, probably, a combination of the two.

This paper will describe recent developments in the money markets of Japan and West Germany, and it will look for reasons why these markets went in different ways in the 1980s. The paper focuses on the money market, because liberalization

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generally sets in there first, and because it is the point of focus for monetary policy.

The paper is organized as follows. Section 2 introduces the basic similarities and differences in the financial structures of Japan and West Germany. Section 3 describes the recent developments in the Japanese money market, and explains the Japanese financial authorities' stance towards liberalization. Section 4 investigates the German money market and looks for an explanation for the "slow motion" within the system. Section 5 compares the two markets and summarizes the differences between the Japanese and the West-Germany money markets. Finally, section 6 shows that, while different features within the existing system will produce different motors for the evolution of new markets, it is also the selection of monetary policy tools that a central bank wants to use that is decisive in determining how a market is shaped – regardless of the international trends of "liberalization" and "globalization" or "foreign pressure" on the markets.

2. Basic Features of the Japanese and the German Financial Systems

Japan and West German both experienced a period of rapid growth after World War II, which was buoyed up by appropriate ways of channeling funds into growth sectors. Both economies showed a high degree of financial intermediation (termed "indirect financing" in Japanese English), which developed into a distinct "main bank" system. This system implied that leading corporate entities had their "home bank" from which they received funds, and this bank, in turn for offering special services such as favorable credit conditions[1), was partly involved in the managerial process of the company. While in Japan direct financial involvement was limited to 10% of a company's equities (lowered to 5% in the 1980s), German banks could (and still can) hold up to 25% of the equity shares of "their" companies.

When the Japanese economy entered the period of "stable growth" in the 1970s, the corporate sector turned into one of the net creditor sectors of the economy. This meant that companies were not as dependent on bank credit as they had been before, and they became more sensitive to the interest rates paid on their assets. Because of the strict separation of the banking and securities businesses in Japan, one of the major effects of this process of "disentanglement" was the evolution of new market segments: when companies became less dependent on their main banks, securities firms recognized a new business chance and offered new forms of investment. This developed into a fierce competition for market shares and customers between banks and securities firms which challenged each other by offering new financial instruments.

Although there was a similar trend towards "direct financing" in Germany in the late 1970s, there was no such effect on the financial market. In West Germany, there is no separation in the banking sector. Banks are "universal" in that they engage in both credit and investment business at the same counter. Hence, there is no competition between two groups of financial institutions which want to offer different investment or funding options, and no inherent vigor within the system to open up new market segments. This system also contrasts with the British universal banking system, where deliberate specialization by financial institutions resulted in a competition between banks and investment banks.

The development of new market segments in Japan was further spurred by the existence, until the 1980s, of extensive interest rate regulations as specified in the Temporary Interest Rate Adjustment Law[2)]. When new instruments were introduced to the market, they were not made subject to this law. Hence, new instruments meant new ways of circumventing interest rate regulation. In contrast, German interest rates on bank deposits and credits were liberalized with the enactment of the Stability and Growth Act in 1967. The reason was that in the wake of rapid economic growth and due to an overall sense of the importance of the efficiency of market competition and liberal economic policy, no need was felt to regulate these interest rates[3)]. Therefore, the German system also lacks the second decisive feature for an expansion of the money market.

A further major difference between the two countries is the position of the central bank within the financial system. The Bank of Japan is, at least legally, totally subject to the Ministry of Finance, although in practice it maintains an autonomy in most day-to-day operations. However, the Bank of Japan is intimately tied to the management of deficit financing of the government, e.g., monitoring the treasury bills market. Moreover, while the Bank of Japan is fairly independent in

Fig. 1: Volume of the Japanese, West-German, and U.S. Short-Term Money Markets (End of 1986 – End of 1987)

	Japan[a]		F.R.G.[b]		U.S.A.[c]	
	1986	1987	1986	1987	1986	
Interbank market						
call market	102	160	264	272	FF RPs	646
bill discount	88	83	20.9	17.8		
open market						
BA	0.1	0.03[d]	4	3.5		670
TB	21	27	1.1	2		3969
FB	9	9	–	–		
CD	99	108	–	–		4493
Gensaki	41	33	25[d]	27.6		
CP	–	17	–	–		3266
total	360.1	437.03	315	322.9		13044
total in Yen 100 bil.	360.1	437.03	252	258.3		2413.1

[a] in Yen 100 billion

[b] in DM 100 million

[c] in US-$ 100 million

[d] est.

Source: Nihon Keizai Shinbun-Sha 1987/3, p. 24, Nihon Ginko, Deutsche Bundesbank

taking policy steps, its actions could be vetoed by the Ministry of Finance. In practical terms, this means that the Bank of Japan can develop financial markets only with the tacit approval of the Ministry of Finance[4].

In contrast, the *Bundesbank* is (in)famous for being the most independent central bank in the world. Not only is the Ministry of Finance not consulted in questions of monetary policy, but in day-to-day operations the Bundesbank is not bound by short-term federal financing needs either (as explained in Part 4).

Differences in the financial systems of the two countries are also reflected in the composition of money markets. Fig. 1 shows that the German money market is considerably smaller than the Japanese market. The two markets also differ greatly in structure: whereas the interbank and open markets in Japan are of roughly equal size, there is a predominance of interbank market transactions in Germany. Moreover, as will be pointed out in the following sections of the paper, the classifications of "interbank market" and "open market" in the two countries are not fully compatible.

3. The Japanese Money Market

The Japanese money market is divided into the interbank market, where financial institutions adjust fund positions among themselves, and the open market, where various financial instruments are traded, with non-financial institutions participating as well.

3.1. The Interbank Market

The interbank market is the market for the short-term adjustment of liquidity positions within the banking system. The Japanese interbank market is composed of the call money market and, since 1971, the bill discount market. The call market is the oldest segment of the Japanese financial system[5] and it remained the sole market for short-term transactions until the 1970s.

In the 1950s and 1960s, call rates were the only interest rates that were neither subject to the Temporary Interest Rate Adjustment Law nor inofficially linked to the official discount rate. There were different kinds of call money with different maturities, the most actively traded being the very short (one day) and very long (six months) ends of the market.

In May 1971, the financial authorities divided the interbank market into the call market, as it had existed before, but now it was limited to transactions of up to one month, and the bill discount market, which is a market for transactions in maturities of two to six months. The bills traded here are blue-chip industrial and commercial bills or promissory notes and yen-denominated fixed-term export and import bills, as well as "cover bills" (*hyoshi tegata*)[6]. The Bank of Japan opened this new market segment because it relied on the interbank market for policy measures, but faced the problem that more than 80% of all call market funds had a maturity of more than one month and were used as medium-term fixed capital, and thus were not available for very short-term transactions.

Participants in the Japanese interbank market are financial institutions which include money market brokers (*tanshi-gaisha*). *Tanshi* function as intermediaries on

the interbank market, such that participants do not trade with each other directly, but negotiate with a *tanshi*. In the 1970s, the Bank of Japan used a "quotation system" or "posted rate system" (*tatene-seido*) as a means for controlling the money supply. Under this system, each morning, money market brokers posted a rate for the trading day which was based on market evaluation as well as Bank of Japan guidance. In this way, the Bank of Japan could regulate the call market rate by determining a "guidance rate" which was turned into the call rate through the *tanshi* who simply would not accept any differently priced bids or offers. Effectively, this meant that the Bank of Japan set the rate and acted as a residual supplier of credit in a credit rationing system. Even after the abolishment of the posted rate system in 1978/79, *tanshi* still post "sentiment rates" every morning and listen closely to what the Bank of Japan wants the interest level to be, thus giving rise to foreign claims that the market is hard to enter and inefficient in that interest rates do not reflect the market situation, but are set at a negotiated level[7]. The interbank market developed further when securities firms were readmitted to participate in the market as borrowers in 1980[8]. Since 1985, a single market participant can use the interbank market as borrower and lender at the same time[9]. Also in 1985, unsecured call money transactions were introduced, and the range of unsecured transactions (in terms of maturities eligible for unsecured funds) was broadened in 1986 and 1987.

The reason why the financial authorities, especially the Bank of Japan, actively turned to liberalizing what used to be the pillar of monetary intervention, was the general restructuring of the Japanese financial system since the late 1970s. Banks and securities firms began to compete for market shares and tried to find ways to circumvent the interest rate regulations on the call market. As a result it became clear that, with only the guidance of interest rates, an efficient tuning of market conditions could no longer be achieved. In search of a broader base for a monetary policy that would allow for regulating supply and demand in the markets, instead of guiding interest rates, the financial authorities did not interfere in the process that started in the late 1970s. They did, however, try to slow it down in fear that a rapid development would bring about more harm than good.

3.2. The Open Market

The curtain-raiser for the evolution of an open market in Japan was the massive issue of government bonds after the first oil shock in 1973/4, when, for the first time in postwar history, the government financed the budget deficit with the help of bond issues. These bonds were overpriced and market participants made increased use of the Gensaki market, dealing in government bonds with repurchase agreements. When the Gensaki market was officially acknowledged in 1976, there were no rules on interest rates, hardly any regulations for securities companies, and restrictions on other financial institutions were gradually loosened until 1980[10].

The growth of the Gensaki market was spurred by the inflation of 1979/1980 when customers drew their money out of the banks in order to keep it dear on the very short-term end of the market. In response, banks called for a means of fighting the securities firms' advances. In 1979, they were allowed to issue CDs, which soon developed into the major instrument of the money market (see Fig. 2). The CD market started out with numerous regulations regarding term, minimum denomina-

tion, and the ratio of outstanding CDs to net assets of the issuing bank. These rules were modified over the years (see Fig. 3), making the CD an instrument with at least two weeks of maturity and a denomination of at least Yen 50 million. However, until April 1984 Japanese financial institutions were not allowed to deal in foreign CDs; in autumn 1984 the ban on Euroyen-CDs was lifted.
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Fig. 2: Changes in Volume and Structure of the Japanese Money Market, 1970 – 1987 (in trillion Yen, %)

	1970	1975	1980	1985	1986	1987	in % of total market volume					
							1970	1975	1980	1985	1986	1987
Interbank market	1.8	4.4	6.7	14.5	19.0	24.3	100.0	71.0	44.4	39.9	45.3	46.8
call market	1.8	2.3	4.1	5.1	10.2	16.0	100.0	37.1	27.2	14.0	23.3	30.8
(unsecured)	(–)	(–)	(–)	(0.5)	(1.6)	(2.9)	(–)	(–)	(–)	(1.4)	(3.8)	(5.6)
bill discount market	–	2.1	2.6	9.4	8.8	8.3	–	33.9	17.2	25.9	21.0	16.0
Open market	–	1.8	8.4	21.8	22.9	27.6	–	29.0	55.6	60.1	54.7	53.2
CD	–	–	2.4	9.7	9.9	10.8	–	–	15.9	26.7	23.6	20.8
bond gensaki	–	1.8	4.5	4.6	4.1	3.3	–	29.0	29.8	12.7	9.8	6.4
Yen conversion (broadly defined)	–	–	1.5	5.8	5.2	7.2	–	–	9.9	16.0	12.4	13.9
CP	–	–	–	–	–	1.7	–	–	–	–	–	3.3
overseas CD/CP	–	–	–	0.7	0.7	1.0	–	–	–	1.9	1.7	1.9
FB	–	–	–	–	0.9	0.9	–	–	–	–	2.1	1.7
TB	–	–	–	1.0	2.1	2.7	–	–	–	2.8	5.0	5.2
total	1.8	6.2	15.1	36.3	41.9	51.9	100.0	100.0	100.0	100.0	100.0	100.0
for reference: Deposit Market												
deposits with regulated rates	63.1	148.0	242.7	326.7	320.0	314.8	100.0	99.9	99.3	94.2	89.8	80.8
free rates deposits	–	0.1	1.7	20.1	36.4	75.0	–	0.1	0.7	5.8	10.2	19.2
non-residents' yen deposits	–	–	0.9	2.0	1.4	1.4	–	–	0.4	0.6	0.4	0.3
foreign-currency deposits	–	0.1	0.8	7.1	7.0	5.7	–	0.1	0.3	2.0	2.0	1.5
MMC	–	–	–	6.3	9.5	17.9	–	–	–	1.8	2.6	4.6
large-scale deposits	–	–	–	4.7	18.5	50.0	–	–	–	1.4	5.2	12.8
total	63.1	148.1	244.4	346.8	356.4	389.8	100.0	100.0	100.0	100.0	100.0	100.0

Source: Bank of Japan

Fig. 3: Deregulation of large-scale deposits, MMC, and CD, 1985–1988

	large-scale deposits		money market certificates (MMC)				certificates of deposit (CD)		
	minimum denomination	term	interest	denomination	term	ratio[a]	denomination	term	ratio[a]
1985/10	1 bil.	3–24 months	CD rate minus 0.75%	50 mil.	1–6 months	150%	100 mil.	1–6 months	150%
1986/4	500 mil.	↓	↓	↓	1–12 months	200%	↓	1–12 months	200%
1986/9	300 mil.	↓	↓	30 mil.	↓	250%	↓	↓	250%
1987/4	100 mil.	↓	up. to 1 year CD – 0.75% 1 – 2 years CD – 0.5%	20 mil.	1–24 months	300%[b]	↓	↓	300%[b]
1987/10	↓	1–24 months	↓	10 mil.	↓	abolished	↓	↓	abolished
1988/4	50 mil.		↓	↓	↓	↓	50 mil.	2 weeks – 2 years	↓

[a] ratio of MMC/CD issued to the Bank's net assets

[b] abolished for foreign banks in Japan

Source: Nihon Ginko Chosa Geppo 10/1987; Nihon Keizai Shinbun

Next on the Bank of Japan's agenda was the promotion of the short-term government bonds (FB, financing bills) that had existed since the 1960s but were unable to attract attention until the Bank of Japan a) allowed investors other than financial institutions to participate in the market; b) eased many of the restrictions; and c) allowed for tax exemptions in 1981. FB are discounted, short-term government bonds with a maturity of 60 days and a minimum denomination of Yen 50 million. They are issued for financing short-term deficits in the current budget under conditions prescribed by the Ministry of Finance, with interest rates being set at the level of the official discount rate or below, because the Ministry wants to keep its refinancing costs as low as possible. FB are distributed through the Bank of Japan, which either keeps the bills herself or sells them either to designated financial institutions or to *tanshi* who pass them on to securities firms and banks. Participation by non-banks is limited. The Bank of Japan would like to enhance interest arbitrage with the interbank market and use the FB as an instrument for open market policy. However, because of unattractive pricings for FB, the market volume remains small (see Fig. 2) and FB are mostly traded as gensaki because as such they are reasonably liquid.

In 1986, a different kind of short-term government financing paper called treasury bills (TB) was introduced in order to smooth out the repayment of the 10-year government bonds that were issued on a massive scale from 1976. The maturity is up to six months, the minimum denomination is Yen 50 million, and TB are almost as badly priced as FB. However, because TB are refunding bonds, the Bank of Japan is not allowed to take them up, so that they are issued directly on the market. Individuals are not allowed to invest in them[11].

Further liberalization measures include the introduction of a BA (banders' acceptance)-market in June 1985, the opening up of an offshore market in 1986[12], and the introduction of a CP-market in 1987[13].

The establishment of the BA-market was a result of U.S. pressure on Japanese financial liberalization[14]. There were, however, numerous regulations placed on the market in the fear that BA would be used as a kind of CP which was highly debated at the time[15]. One year after its inception the BA-market had still not developed and the Ministry of Finance lowered the minimum denomination to Yen 50 million, prolonged the maturity to one year and, above all, changed the system of taxation in order to encourage the market. None of these measures, however, could prevent the market from declining further. BA seem to have lost further importance with the introduction of CP in late 1987, and the episode provides evidence that a market segment introduced without real demand within the financial system, but based on a (foreign) political decision, will not turn out to be a success.

In contrast to definitions used in other countries, non-negotiable deposits are counted as part of the open market in Japan, because the process of interest rate liberalization in these markets is closely linked with developments in the open market (see Fig. 3). Also, these markets show an increasing volume (see Fig. 2). These instruments are MMC, large-scale deposits with freely floating interest rates, and foreign currency deposits where the interest rates had been liberalized as early as 1980. MMCs were introduced in 1985 as a means for banks to fight the increased attraction of the medium-term government bond investment funds (*chukoku-fando*)

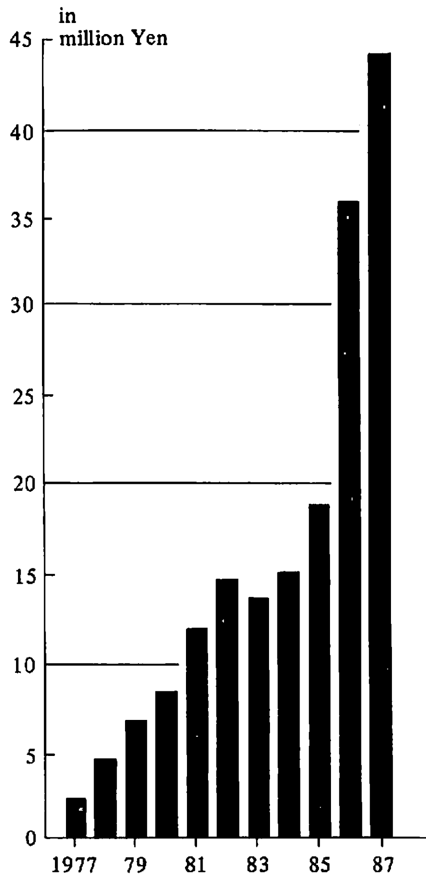
offered by securities firms. Interest on these MMCs moves parallel to the average weekly CD-rate. The regulations on these certificates are being modified gradually (see Fig. 3), and the same holds for the definition of what "large-scale" deposits are: the minimum requirements have been lowered gradually over the last few years.

It is significant that these non-negotiable instruments make up an increasing part of the Japanese money market. This shows (1) enhanced sensitivity concerning interest payments among investors, (2) increased investment of surplus funds on the medium-term end of the market by corporate entities, (3) growing competition in this kind of medium-term investment instrument between banks and securities companies, and (4) generally, the gyrations that are provoked in a market where free and regulated market segments coexist[16].

3.3. Internationalization

Next to changes in the domestic flow of funds, the fast growth of the money market was stimulated by an international impetus when the Foreign Exchange and Foreign Trade Control Law was revised in 1980. While everything had been prohibited that was not *expressis verbis* permitted before, everything is allowed now that is not explicitly forbidden. The simultaneous increase in cross-border transac-

Fig. 4: Volume of the Tokyo Call-Market (average daily turnover, 1987 = Jan. – March)



Source: Nihon Keizai Shinbun, 27. 5. 1987

tions and domestic liberalization spurred interest rate arbitrage and thus the break-down of traditional regulations and money market practices.

Money market instruments used for cross-border transactions are foreign currency transactions on the Tokyo dollar-call market as well as Yen-denominated CDs and CP. In particular, turnover on the Tokyo dollar-call market has increased rapidly over the last few years (see Fig. 4).

The Tokyo dollar-call market materialized in April 1972 and is a market for short-term unsecured transactions in foreign currency. This market is a part of the interbank market in a broader sense, and the participants are 200 of the Japanese banks authorized to conduct foreign exchange transactions[17] and all of the 81 foreign banks in Tokyo. There are eight intermediaries, among whom six are *tanshi* who also act on the interbank market. After the abolition of the "real-demand-principle" in 1984, transactions in foreign currency did not need to be trade-related any longer. The demand for foreign-currency denominated funds increased and the market volume doubled between 1985 and 1987.

4. The West German Money Market

The West German interbank market is the market for dealing in central bank money between all banks except the central bank (*Bundesbank*)[18]. In contrast, the open market is the market for dealing in "money market paper", with almost all transactions being conducted between banks and the Bundesbank, and with little non-bank participation[19].

4.1. The Interbank Market

Officially termed the "market for dealings in central bank money", the interbank market serves the purpose of adjusting and redistributing high-powered money within the banking system. Participants are roughly 200 of the more than 4500 German banks[20]. The *Bundesbank* does not take part in central bank money transactions. Further, while non-banks are not excluded, money market transactions between banks and non-banks are termed "marginal business", implying that there is no real wholesale money market for institutional investors[21].

There are different kinds of transactions which resemble the various kinds of call money in Japan. A major difference is that maturities on the German money market may be as long as two years. Transactions are divided according to maturity into short-term funds of up to three months and "term money" of up to one year or longer. "Daily money" (overnight funds) make up the largest part of all transactions and, accordingly, interest rates on overnight funds are the most significant for an evaluation of money market conditions. Term money has to be held until maturity, hence a certain illiquidity and inactivity in the market[22].

Interbank credits are in principle unsecured[23]. Banks deal which each other directly, and accounts are held at regional central banks or *Landeszentralbanken*: in each state, including West Berlin, the Bundesbank has a "main office" where the banks of the respective states have an account and are granted credit lines. All transactions between banks are cleared at these *Landeszentralbanken*.

4.2. The Open Market

The second part of the German money market is called the "money market in the broader sense" or the "market for money market paper". There is good reason for the authorities to make use of the clumsiness of the German language, because this market is hardly equivalent to the open markets as known in the United States or Japan.

Market participants are, above all, the *Bundesbank* and financial institutions, while transactions between the *Bundesbank* or commercial banks and non-banks are as "marginal" as on the interbank market.

The market for money market paper is much smaller than the interbank market (see Fig. 1). There are four groups of money market paper: (a) treasury bills and treasury discount paper, divided into those that are and those that are not eligible for rediscount at the central bank; (b) mobilisation paper and liquidity paper; (c) prime acceptances; and (d) trade acceptances which are traded with repurchase agreement as well as a kind of reverse repos based on notes or bonds issued by public bodies such as the Federal Railways, the Federal Post Office or the state governments. All of these instruments function mainly as instruments for monetary policy, such that each transaction on this segment of the market has the signal effect of indicating the *Bundesbank's* future intentions. Also, this means that interest rates on all segments of the market are guided by the *Bundesbank*.

Treasury bills have a maturity of 6, 12, 18 or 24 months and used to be eligible for rediscount at the central bank at any time during their term, without being part of the respective banks' rediscount contingencies[24]. Since 1975, when the *Bundesbank* ceased to issue these highly liquid bills[25], and rather relied instead on "N-paper" (discounted treasury bills not rediscountable at any time), market volume has shrunk remarkably.

The only difference between treasury bills and treasury acceptances is maturity: acceptances run for 90 days at the most, with an average maturity of 30 days. Since 1973, the *Bundesbank* occasionally has issued treasury acceptances that are rediscountable before maturity, while their term is as short as 3 to 10 days.

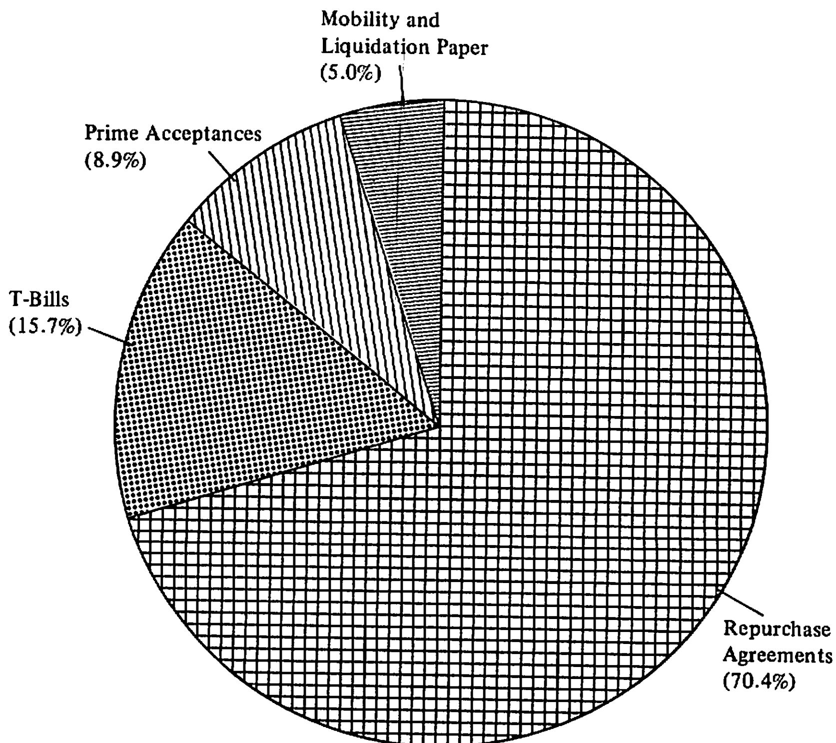
Both treasury bills and treasury acceptances are created by fund-raising public bodies (e.g., the Federal Government, The Federal Railway and others). On the contrary, mobilisation and liquidity paper have their origin in a "fund" especially designed for monetary policy measures that are independent of the public authorities' need for finance. At the time of the currency reform in 1948, the Bundesbank Act was modified such that the central bank is able to convert all or part of the DM 8 billion of so-called equalisation claims into treasury bills or treasury acceptances[26]. In case these claims are insufficient for influencing the money market, the Stability and Growth Act of 1967 allows for the issuance of liquidity paper in the form of treasury bills or acceptances of up to DM 8 billion. Thus, mobilisation and liquidity paper render possible money market intervention irrespective of the federal budget.

Prime acceptances (PA) are special bankers' acceptances issued for financing imports, exports, or international commission processing transactions with an overall maturity of no more than 180 days, but being eligible as prime acceptances with a remaining maturity of only 90 days. There are regulations on denomination and on

the creditworthiness of the issuer and the accepting credit institute. Also, PA, have to be based on real commercial activity (the equivalent to the "real demand principle" which was abolished in Japan in 1984). Although dealings in PA between commercial banks are possible, these are rather the exception; the *Bundesbank* sets interest rates on PA below the official discount rate, opens special "PA-rediscount lines" for banks and buys all outstanding PA.

Every transaction runs via an intermediary, which is called the Prime Acceptance Cooperation (*Privatdiskont-AG*, PAG). The original idea in establishing this broker was close to the notion of the Japanese *tanshi* system, in that the PAG should be the center of the market and take positions in her own interest if there was excess supply of acceptances, or ration available acceptances if there was excess demand. However, the PAG could never live up to this idea because PA are too cheap to be actively traded: banks are not interested in investing in paper with interest rates below the market level, and top-notch companies will have to pay fees, commissions and taxes, which make PA more expensive than Euromarket funds or term money. Nevertheless, the *Bundesbank's* PA-rediscount lines are always filled because banks generally appreciate easy access to central bank money. Also, the *Bundesbank* maintains these rediscount lines as a means of monetary fine-tuning. It cannot issue money market paper of its own and the DM 16 billion granted by mobilisation and liquidity paper turned out to be insufficient in recent years, so

Fig. 5: The West German Open Market Segments in %-Share



Source: Deutsche Bundesbank, Monatsberichte

the *Bundesbank*, will sell its stock of PA in case of excess liquidity in the financial system. Thus, the PA-market is not an actively used segment of the open market (see Fig. 4), but PA-lines at the Bundesbank are "political lines".

Repurchase agreements (repos), comparable to Japanese Gensaki, are the biggest part of the open market (see Fig. 5) and they are also the only instrument that comes close to "open market transactions", because repos are traded between banks and non-banks as well[27]. The *Bundesbank* offered repos for the first time in 1973, when she was looking for new ways of influencing the money stock in a period of monetary stringency. When deemed necessary, the *Bundesbank* purchases domestic trade acceptances, eligible for rediscount at the central bank, from banks with no restriction on denomination and volume. At the time of contracting, banks are obliged to repurchase the acceptances by a forward contract. That is, repos are temporary credit given by the *Bundesbank* outside the banks' credit facilities. Since 1979, fixed-interest securities that are listed on the exchange as well as bills issued by public bodies with a remaining maturity of up to one year are used as securities for repurchase agreements. Generally, repos have a term of 5, 10, or 20 days; in 1988, 30-days-repos could also be observed.

Although the broad spectrum of maturities enhances market liquidity, the disadvantage is that interest rates are determined by the central bank: acceptances used for repos are discounted, and the *Bundesbank* prescribes a "special discount rate" for the "open market transactions". Furthermore, direct participants are restricted to those banks that have a credit line at the *Bundesbank*. Banks engage in repos when they expect call rates to rise above the level of repo-rates during the term of the repo, with a margin wide enough to compensate for the additional expenditure.

Finally, there are three types of transactions labelled "marginal money market transactions", implying that they are detached from the center of money market action. These include the above-mentioned transactions between banks and nonbanks, dealings in trade acceptances between banks, and dealings in so-called "shortrunners" (*Kurzläufer*). These market segments are not significant in volume, but interest on acceptances and shortrunners are call market-oriented and can, at times, influence the overnight funds rate[28].

The latest movement on the German money market was the introduction of CDs (certificate of deposit) in 1986. Following a public discussion on whether or not Germany's money market had to participate in the international trend of financial innovation, the *Bundesbank* opened the market, but made CDs subject to minimum reserve requirements, which killed the market before it was born. More than being concerned about the money stock, the *Bundesbank* feared that otherwise the minimum reserve, which is one of her dearest instruments of monetary policy, would lose importance. On the other hand, there was no real demand for CDs in Germany anyway: under the universal banking system, where there is no competition such as there is between banks and securities firms in Japan, a CD competes with bank deposits. All banks believed that CDs would do harm to their own business, and thus there was no real lobby for CDs from the very beginning.

There is criticism from abroad that the "provincial" German market offers no money market segment for securities, but is a mere cash money market. In Germany, this cash money trading is considered to be efficient, practicable, and uncom-

plicated, and it does no harm either that cash transactions are totally unsecured, because the banking system is regarded to be stable. The reasons why no market for short-term transactions in securities developed are:
(1) a satisfying record of the existing "cash market",
(2) the universal banking system, which impedes competition that would lead to a securitization of transactions, and
(3) the early liberalization of interest rates, which ruled out any impetus to circumvent existing markets.

The *Bundesbank* regulates the market by relying on direct interest rate interventions, instead of affecting supply and demand. This need not necessarily be a deficiency, because in this way the *Bundesbank* is independent from the federal government's budget volume and refinancing instruments. However, whereas the short-term end of the financial market is fully controlled by the central bank, there is no regularity in the transmission of monetary impulses to other segments of the financial market.

4.3. Internationalization

In contrast to Japan, there is no obvious move towards an increase in cross-border transactions in Germany. In May 1985, the *Bundesbank*, being concerned about exchange rate stability and her restricted influence on international transactions, declared transactions such as Euro-DM-loans, floating rate notes, swaps in connection with Deutschmarks and the like, as "politically not desirable". Also, the *Bundesbank* asked banks to refrain from issuing CDs denominated in DM abroad, and to stay home when issuing DM-bonds. Banks obeyed, and there is thus no international market for short-term DM-denominated funds. While the Euro-DM-CD market was hindered within Germany by the moral suasion of the central bank, it does not fully develop without there being German issuers outside Germany either.

However, whereas for a long time the *Bundesbank* did not want the German currency to be a leading international currency, her attitude has changed in recent years and restrictions on the general usage of Deutschmarks in international markets were lifted. The reason for this change in attitude was that the *Bundesbank* realized that there was nothing much she could do against the international preference for strong DM-assets, and she did not want to prohibit something that could not be hindered anyway; she would have lost authority in national and international finance. However, this change of policy has not yet developed into increased international money market transactions.

5. The Japanese-German Comparison

Reflecting the size of the real economy, the Japanese money market is larger in volume than the German market. Whereas during the period of rapid growth the money markets of both countries centered on the interbank market for distributing central bank money within the financial system, the Japanese money market has become more diversified in the number of instruments since the late 1970s. The two markets do not only differ in composition, but financial instruments serve different functions regarding central bank monetary policy.

The Japanese call market is characterized by a comparatively high degree of central bank intervention, whereas the *Bundesbank* does not participate in German call transactions. While a kind of credit rationing has for a long time been exerted on the Japanese call market, supply and demand rule the adjustment of high-powered money within the German banking system. Partly in response to this guidance of the Japanese market, financial institutions shifted to new instruments for refinance which are offered on the open market.

There is no direct control of open market transactions by the Bank of Japan, whereas the German "open market" constitutes the major playing field for the *Bundesbank*. Given that there is hardly any non-bank participation in this market, it may be questioned whether there is such a thing as an "open market" in Germany at all.

The largest segment of the German open market is the market for repurchase agreements, which closely resembles the Japanese Gensaki. Correspondingly, CDs and CP traded as Gensaki constitute the most liquid segment of the Japanese money market, even if the market volume on bond-Gensaki has decreased in recent years. A CD-market is not at all well developed in Germany, whereas it is Japan's largest market segment. Further differences can be observed in the TB and FB markets: while the Bank of Japan, legally bound to manage government debt, would like these markets to expand in order to establish an effective instrument for open market policy, the *Bundesbank* does not use government financing instruments for monetary fine-tuning. Finally, the German PA-market is the residual of a failed advance towards a more liquid market for acceptances and it is only kept alive because the *Bundesbank* appreciates the existence of what could be a "credit rationing instrument of last resort", in case other instruments turn out to be insufficient for absorbing market liquidity. On the other hand, the Japanese BA-market is the residual of a failed effort by the United States to open the Japanese financial market by requesting new market segments. The market was introduced in order to react to foreign pressure, but it never lived up to its expectations because there was no inherent need for its existence.

Cross-border short-term money transactions were deregulated earlier in Japan than in West Germany. Regulations governing domestic markets made Japanese financial institutions advance actively into international finance. This advance seems to have been furthered by the strategy of Japan's financial authorities to first let financial institutions "practice" a new instrument abroad, before it is permitted in Japan; e.g., transactions in foreign commercial paper were allowed three years before the domestic market started. In contrast, the *Bundesbank* has been very cautious in terms of cross-border money market transactions. However, because domestic regulations on the capital market drove German financial institutions into the Euromarket, a German advance into international money markets similar to the Japanese one could be expected, if the *Bundesbank's* moral suasion was loosened.

6. Conclusion

The Japanese money market is in the midst of a very dynamic development, while the Germans seem to move in slow motion. There are three underlying factors for this difference: a) different "starting positions" in terms of interest rate regula-

tion; b) the process of "securitization" and competition between banks and securities firms in Japan, which led to a decline of the predominance of the main bank system and griggered competition for market shares; and c) a difference in attitude between the two central banks.

When the global wave of "liberalization" set in, interest rates had already been deregulated in Germany, hence there was no pressure to circumvent such rules by creating new market segments. Furthermore, the universal banking system prevented any competition for the introduction of new market segments, because market participants (banks) do not have to deal in securities when they can deal in cash. Thus, the two fundamental reasons for the development of new market segments in Japan were not given in Germany. Also, institutional investors in Germany are not as rich and influential as their Japanese counterparts: investment funds are not yet very common, and insurance companies surely lack the Japanese supply of funds. For the same reason – the small volume of securitized money market instruments – the German *Hausbank* (main bank) system is even stronger than it is in Japan, where ties between banks and certain companies have become less close-knit since the corporate sector, being a net creditor since the end of the 1970s, turned to securities for fund managing.

A further difference that is crucial for the development of the money market is the respective financial authorities' view of how the market should react to monetary impulses. While the *Bundesbank* relies solely on regulating interest rates, i.e., central bank credit rationing, in order to control the money supply, the Bank of Japan is on her way away from interest rate control to focus on fine-tuning demand and supply on the open market, as is common in the United States. For regulating supply and demand, however, a greater variety of instruments and a greater market liquidity is needed for the monetary impulse to be transmitted in the desired way. For this reason, the Bank of Japan is highly motivated in enhancing market liberalization and interest arbitrage, while the *Bundesbank* is glad to keep an eye on only a restricted number of interest rates: if there were more instruments, the *Bundesbank* could easily loose her grip on the market. Underlying these opposite points of view is the determined independence of the *Bundesbank* from the Ministry of Finance: the *Bundesbank* is happy not to have to take care of a treasury bills market. On the other hand, the Bank of Japan is in charge of "managing" the government debt, and if she has to do so, she wants to be able to do it in an efficient way, and, therefore, tries to foster the FB- and TB-markets.

It has often been claimed that foreign pressure has achieved a lot in opening up Japanese financial markets. Although it is true that the Japan-U.S. Yen-Dollar Committee has set up a list which was consecutively put into practice, it is clear that this was only possible because the Japanese financial system was beginning to "break up" anyway. The committee may have at best accelerated the development of certain issues, which would have taken longer without "foreign pressure". The Japanese BA-market and the German CD-market display this point: although their introduction was regarded as an appropriate step in order to keep pace with international developments, it was not needed on the domestic market and therefore did not grow. This is to say, foreign pressure on financial liberalization does not achieve anything if it runs counter to given domestic structures and the intentions of the monetary authorities.

In its present shape, the German system seems to be incompatible with financial developments abroad. Cross-border transactions will increase in the future, even if German banks remain at present inert. When barriers to international transactions break down, we will see whether different international arrangements can coexist which each other or whether the German system will be subject to changes introduced from abroad. For example, banks obey the *Bundesbank's* moral suasion concerning international issues of DM-denominated short-term instruments, because they mainly rely on central bank money for short-term funds. However, who is going to exploit the profit opportunities created by the *Bundesbank's* regulations? And if profit opportunities emerge, moral suasion by the central bank might not be strong enough to continue to hold back German financial institutions.

At the time being, the *Bundesbank* is happy with the German money market as it is, but she may face the same problems that the Bank of Japan experienced in the 1970s: with an increase in international transactions and ongoing financial innovation, central bank credit rationing through interest rates might become inefficient in the future.

Notes

1) Whether or not Japanese companies are granted favorable interest rates by their main banks is highly debated in Japanese literature. Banks do offer low credit rates, but at the same time they require compensating balances (elegantly termed "collateral deposits") which earn very low interest, so that effective credit costs can increase considerably.
2) The idea of this law was to influence the overall level of interest rates in such a way that funds necessary for economic growth were cheap. The discount rate was kept at a low level, while all other interest rates were, directly or indirectly, pegged to it. See Suzuki (1987) and Schaede (1989) for details.
3) The major motive for the Japanese financial authorities not to fully deregulate banks' interest rates is the postal savings system, where interest rates are set by the Minister for Posts and Telecommunications. In order to attract the banks' customers, interest rates on postal savings deposits are not set competitively, but above the market level. The Minister has a strong lobby in the cabinet because funds raised in the postal savings system are used for financing government expenditure. The West German postal savings system is similar to the Japanese one, with the crucial difference that the German population would not allow a public institution to work in such a blatantly inefficient manner. Therefore, the lobby of the West German Minister of Post and Telecommunication is not comparable to that of his Japanese colleague.
4) In an early episode of financial liberalization in the late 1970s, contrary points of view between the Ministry of Finance and the Bank of Japan led to a – highly unusual – public argument between the two, because the Ministry did not want liberalization to "get out of hand". In the 1980s, however, the Ministry's stance has changed in that the necessity of restructuring the market has been agreed upon, and disparity of opinions is basically limited to questions of detail.
5) The call market materialized in 1902, after the so-called bill clearance system was introduced for settling the balances of newly emerging bills in the 1890s. Although the structure of financial institutions changed in the first third of this century and then again after World War II, the interbank market always functioned as the liquidity pool, even if under different degrees of direct government intervention. On the history of the Japanese banking system and the money market, see Goto (1986).

6) A cover bill is written by a financial institution with a number of other eligible bills used as collateral and a *tanshi* acting as the payee.
7) For details on the foreign criticism and foreign banks in Japan, see Tschoegl (1988).
8) Prior to the collapse of the Japanese stock market in 1965, securities firms could fully participate in the money market.
9) Up to that time, simultaneous lending and borrowing on the market had been prohibited out of fear that this would spur speculative use of the market.
10) New instruments such as CDs, (certificates of deposit) or CP (commercial paper) also began to be traded as Gensaki. Even if Fig. 2 suggests a decreasing role for government bond-gensaki in recent years, these other Gensaki derivatives make up an important part of the money market. In particular, CD-Gensaki are the most liquid instrument in the Japanese money market and thus come close in their function to the role of treasury bills in the United States.
11) For further details see Nihon Keizai Shinbun-Sha (1987/3) pp. 160-173.
12) For details, see Kyuno (1986).
13) For details, see Schaede (1988).
14) On the U.S.-Japan Yen-Dollar Committee and its report of November 1984, see Frankel (1984).
15) Only authorized foreign exchange banks are allowed to underwrite and issue BA, because bills that are issued by domestic or foreign importers for raising yen-funds (*jikihane-tegata*) would be basically the same as a CP. Limiting the original sellers to banks was designed to prevent the disguised use of BA as commercial promissory notes. See Suzuki (1987), p. 121-122 for details. The discussion on whether or not a CP market is appropriate within the Japanese financial system centered around the banking industry (being against it for fear of losing customers), investment banks (being positive in order to lure customers away from banks) and the industrial sector (wanting CPs as an alternative to bank credit for raising funds). See Schaede (1988).
16) For a detailed discussion of interest rate relationships in Japan, see Takagi (1988).
17) Banks authorized for foreign exchange are the Bank of Tokyo as the only "Specialized Foreign Exchange Bank" and 247 commercial banks that are licensed under the Foreign Trade and Foreign Exchange Law.
18) Basic introductions to the German banking system in English are Dufey/Krishnan (1983) and Bundesverband deutscher Banken (1982).
19) In order to broaden the base for monetary policy, the *Bundesbank* tried to involve large corporate entities in money market transactions by directly offering treasury bills to them in the early 1970s.
20) This difference in numbers is explained by the fact that the more than 4000 savings and co-operative banks are organized under central institutions, with the clearing of surplus and demand funds being done within the organization in such a way that these banks only count as two money market participants. Also, not all banks have a high enough creditworthiness, and some do not want to participate (e.g., private banks).
21) There is, however, evidence that non-banks are playing an increasing role in money market transactions in that so-called "industry-clearing" transactions (wholesale money transactions between corporate entities) have been decreasing in the 1980s. Also, the banks' margin on overnight and term money on the call market used to be as high as 1%, but has been on the decline in recent years. Transactions with non-banks rather take the form of a different kind of bank credit to big business: banks grant a credit line to a certain customer, and up to 50% of this line can be filled with money market credits (Herrmann (1986), p. 54.). In this sense, non-banks are not direct participants in the market. Also, because money market transactions between banks are liable for minimum reserve requirements, banks will charge their customers the money market rate plus the minimum reserve rate, and the resulting rate competes with

rates on short-term Euromarket funds.

22) The longer end of the market shows only very small market volume and is mostly used for mutual loans within the savings and cooperatives banks' organizations. Medium-term financing by other banks concentrates on bank deposits and on the Euromarket.
23) There are certain requirements for private banks which are not regarded to be of first-class standing by other market participants. Therefore, it is a question of negotiation between market participants whether or not interbank market credit is secured or unsecured; see Herrmann (1986), pp. 113-120.
24) Bills eligible for rediscount are the so-called "U-Schätze", "*unverzinsliche Schatzanweisungen*" or discounted treasury bills. For an introduction to German monetary policy see Schlesinger/ Bockelmann (1973).
25) During the period of stringent bank liquidity in 1979/1980, the *Bundesbank* repurchased "*N-Schätze*" in so-called "special actions".
26) see Deutsche Bundesbank (1982), p. 30, for details.
27) Because the *Bundesbank* does not track these private repurchase transactions, there are no official data on the size of the market including private transactions.
28) see Herrmann (1986), pp. 46-55 for details.

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