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Deregulating the German Banking System

by

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Institut für Weltwirtschaft an der Universität Kiel

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Working Paper No. 274

#### Deregulating the German Banking System

by

Joachim Streit

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November 1986

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him.

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## 1. The Idea of Deregulation of Financial Markets

Financial markets all over the world are presently undergoing deep structural changes. Starting in the USA, regulation of financial markets - established after the Great Depression - are being abolished or at least questioned. Existing regulations became less and less effective, as new financial instruments emerged which circumvented the restrictions. They were further undermined by the creation of markets and instruments without such regulations, like the Euro-market.

During the seventies the burden of regulations grew stronger and stronger, since the (opportunity-) costs of holding non-interest bearing deposits or reserves increased with rising inflation and interest rates. The danger of disintermediation became unacceptable as deposit interest rates were restricted in many countries which had the effect of disincentives to hold deposits at banks. As a consequence, regulatory agencies had to decide whether to restrict the regulatory framework even more (with the intention to make it more difficult to circumvent regulations) or to ease the regulatory burden. Compared to other countries, the average rate and the volatility of inflation and interest rates in Western Germany has been less variable. Without question this together with the fact that there were no interest ceilings - has reduced the incentive towards structural changes within the financial sector.

The idea of deregulation of financial markets is that in the long run it is useless to stem market forces and that it is possible to control the monetary aggregates efficiently by other instruments like open market policy. Once the regulators of the dominant financial market were convinced by the idea of deregulation it was difficult for smaller countries to stick to their old view: Too much regulation on financial markets became increasingly costly as the international competitiveness of domestic markets diminished. Thus the idea of deregulation spread to nearly all western industrial countries.

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This paper deals with deregulation of the German banking system, which is one of the most liberal among the OECD member countries [IBRO, 1978]. Nevertheless, there is still some potential for further deregulation. It has to be discussed whether this potential should be exploited.

## 2. Justification of Regulations for the German Banking Sector

Some arguments for regulating financial markets in Germany are more or less the same as in other countries, but there are some circumstances which led to a quite different banking system than - for example - in the USA<sup>1</sup>. All arguments state that in the banking system there is an inherent tendency towards market failure. Basically, the arguments are natural monopoly, ruinous competition and external effects.

## 2a) Natural Monopoly

The argument that it is necessary to regulate the banking sector because there is a tendency towards a natural monopoly, is frequently stated in many countries. In Germany, however, it never played such a role as in the USA. A tendency towards a natural monopoly in banking generally can only exist under increasing economies of scale<sup>2</sup>. In fact, there might be increasing economies of scale, but not very large and only up to a certain size of banks [Kupitz, 1984, Groß, 1985].

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The regulatory framework and the process of deregulation in the USA is analyzed in [Streit, 1984].

Natural monopoly requires sub-additivity of the cost function, which - in the case of a multiproduct enterprise - is compatible with decreasing economies of scale.

Apparently there is a high and increasing degree of concentration in the German banking sector<sup>1</sup>. The true degree of concentration is even higher than might be seen from usual statistical data, because many of the special banks are held by larger ones. Though some economists speak of an oligopolistic banking sector in Germany, there obviously is no single commercial bank which dominates the rest of the market.

### 2b) Ruinous Competition

The second argument that the banking system has to be regulated is that competition reduces the average profit margins of banks so that the slightest occasion would be enough for a wide-spread banking crisis. There is a direct connection to Marx' "law of the declining profit rate", which, like all other "laws" in economic theory, is at least doubtful. The argument of ruinous competition has been important in German banking history<sup>2</sup>.

In economic history there have been few experiments with an unregulated banking system, namely the "free banking era" in the USA from 1837 to 1868. Though it existed only for three decades, there is not the slightest evidence that there was wide-spread ruinous competition [Rolnick, Weber, 1984]. In Germany there was some free banking during the mid 19th century. Today the banks engaged in the Euromarket demonstrate that even if competition is fierce, this does not undermine the stability of the system as a whole.

<sup>&</sup>lt;sup>1</sup> 1967 there were nearly 11.000 credit institutes with more than 26.000 branches in Western Germany; 1985 there were only 4.800 institutes but they then had about 40.000 branches.

<sup>&</sup>lt;sup>2</sup> There, of course, is the problem to define that percentage point of failures at which 'normal competition' ends and 'ruinous competition' begins.

## 2c) External Effects and Monetary Control

The third argument for regulation of the banking system is that otherwise there would be external effects. Does a free, unregulated banking system inevitably lead to inflation and crashes? Let's look at some arguments. If there is no central bank and private banks are completely unrestricted and free to issue own money, then we speak of a free banking system. The historical debate between the Currency School and the Banking School refers to the question whether or not there is a limit to the amount of money which private banks can issue. The Banking School stated that competition in the banking sector would lead to an unwanted high expansion of the quantity of money and credit. In the long run inflation would be inevitable. As a consequence, banks have to be regulated (for example by imposing reserve requirements) to protect the society against these external effects.

The Currency School stated that if banks issue fiduciary money (a money which is not completely backed by commodities), then they are limited in respect to their money creation: If a bank is more expansive than the others, then its clients buy more goods and services from clients of other banks than the other way round. Since non-clients do not trust the money issued by the expansive bank as much as money issued by their own bank, they try to exchange that money into money issued by their own bank. The expansive bank then has to pay in a money it cannot create and has to restrict its expansive policy. Hence "bad" money is converted into "good" money (the reverse of Gresham's law). This means that a bank can never issue more money than its clients wish to hold. Thus a limit is drawn to the issue of fiduciary money [v. Mises, 1949, Hayek, 1976, Vaubel, 1978].

Even today the authorities and many economists regard reserve requirements as fundamental for effective and efficient monetary policy and as a measure to ensure confidence in the banking sy-

stem<sup>1</sup>. Here we will focus on the second aspect, while the first one is discussed later. Especially when inflation and interest rates are high, reserve requirements have the same effect as an additional tax, reducing the profitability of banks and increasing the profit of the Bundesbank<sup>2</sup>. But even if today's level of reserve requirements<sup>3</sup> were raised significantly, it could not stop a wide-spread run and restore confidence in the banking system. If this is true, then the requirements might as well be reduced. I think that it is only an illusion that reserves or certain administered capital-asset ratios may prevent wide-spread runs. The limits to the banking business are always drawn by the overall confidence in the banking system. In the absence of reserve requirements the banks would hold voluntarily considerable reserves anyway. Since the bank managers know what might happen if reserves are too low and confidence of customers is diminishing, they are not interested in holding zero-level reserves. The ultimate source of financial stability under such circumstances is that the owners of a bank want to be engaged in a profitable business. This conception is correct for the banking sector as it is for all other sectors of the economy.

## 3. The Present Regulatory Framework

For those who are not completely familiar with the German banking system I will mention the main regulations.

<sup>&</sup>lt;sup>1</sup> This, e.g., was the official argumentation <u>not</u> to exempt the planned DM certificates of deposit from reserve requirements. The Bundesbank feared that otherwise significant shifts from deposits with reserve requirements to DM-CDs without such requirements would occur which could loosen the "brakes of money creation" (Monatsbericht, Jan. 1986).

<sup>&</sup>lt;sup>2</sup> The profit of the Bundesbank is turned over to the Government.

<sup>&</sup>lt;sup>3</sup> The same is true if the required capital- asset -ratio has to be raised by the banks.

## 3a) The Universal Banking System

Compared to other countries, banks in Western Germany live in a rather deregulated environment. They

- perform all traditional commercial banking functions,

- act as stock brokers and investment banks on a national and international scale,
- are allowed to underwrite,
- may deal in secondary markets and
- trade securities at the exchanges.

Foreign banks may enter the German market without discrimination<sup>1</sup>. Banks are privileged compared to corporations in other sectors of the economy as they are allowed to form price cartels [see Seifert, 1984]. Furthermore, banks have the de facto monopoly to deal with shares and bonds for private nonbanks.

## 3b) Barriers to Entry

In Germany the foundation of a banking company must be approved by the Federal banking supervising agency (BAK<sup>2</sup>). The minimum capital required for a universal bank licence is currently set at 6 mill. DM. There must be at least two full-time chief managers with experience in banking (so called "principle of the four eyes"). However, it is not necessary to prove that there is a public need for the new bank, that it will make profits in the long run or that its profit will not reduce the profits of existing banks.

It is possible to argue that these requirements are restrictive with respect to potential smaller banks, since for them it is rather expensive to engage two chief managers. The barriers to

<sup>1</sup> There, however, is a reciprocal clause.

<sup>&</sup>lt;sup>2</sup> Bundesaufsichtsamt für das Kreditwesen.

entry in the German banking sector, however, are lower than in many other countries and a higher capital/asset ratio for new banks might be justified on the ground that their risk of illiquidity is higher than for established banks.

## 3c) Barriers to Exit

In Germany there are no legal restrictions to intentionally or unintentionally leave the banking system<sup>1</sup>. But if a bank runs into troubles which might have strong repercussions on the other banks, there is now a new policy of socialisation of the defaulting bank (e.g., see the present handling of the SMH-bank). In 1974, a major bank (Herstattbank) went bankrupt without other banks feeling they were better off to help that institute. This event had tremendous repercussion on the standing of German banks on foreign capital markets.

## 3d) Portfolio Regulations

Rules concerning the structure of assets and liabilities are set and supervised by the BAK. There are three main portfolio regulations<sup>2</sup>:

- "Principle 1" relates credit volume<sup>3</sup>, open positions in foreign currency<sup>4</sup> and in precious metals held by the bank to their capital. "Principle 1" is intended to limit the risk/capital ratio of credit institutions.
- I It is the 'privilege' of the BAK to state that a bank is bankrupt.
- <sup>2</sup> These portfolio regulations are codified in the credit business law (Kreditwesengesetz) of 1961, amended in 1985.
- <sup>3</sup> The credit volume must not exceed the capital of the bank, multiplied by 18.
- <sup>4</sup> This is a reaction to the crisis of the Herstatt bank in 1974 ("principle la").

Principles 2 and 3" are aimed to ensure liquidity. The maximum value and maturity of assets is related to the value and maturity of deposits<sup>1</sup>. These regulations are rather complex and need not to be described here. In effect, "principles 2 and 3" limit the degree of maturity transformation.

The portfolio regulations were quite effective: Euro-branches of German banks would not fulfill German regulations. However, since January of 1985 German banks have to report to the BAK on a consolidated basis. That means that circumvention of portfolio regulations has become more difficult. Today there are still some operations which are not to be reported to the supervising agency, namely, revolving underwriting facilities (RUFs) and note issuing facilities (NIFs)<sup>2</sup>. These financial innovations on Euromarkets do not show up in balance sheets so that the perceived risk/capital ratio might be biased. I think that it is only a matter of time until these innovations will be incorporated in the above mentioned principles.

Of course there are reserve requirements which have to be held against the deposits at banks<sup>3</sup>. As instruments of monetary policy they are rarely used, however.

<sup>&</sup>lt;sup>1</sup> "Principle 2" refers to long-term assets and liabilities, "principle 3" to short and medium term maturities.

<sup>&</sup>lt;sup>2</sup> Currenctly it is discussed to incorporate the off- balancesheet - transactions into the portfolio regulations.

<sup>&</sup>lt;sup>3</sup> For domestic residents they are structured depending on the size and character of the deposit. Their value currently lies between 6,4 and 10,15 per cent on demand deposits, 4,5 and 7,15 per cent on time deposits and 4,2 and 4,5 per cent on savings deposits. For deposits of nonresidents the maximum rates are applied.

3e) Activity Rules

Credit banks have to inform the BAK, if they want to credit a single creditor with more than 15 per cent of the capital of their bank. Each large single credit must not exceed 50 per cent of the capital and the sum of all large credits are limited to 800 per cent of the capital of the bank. This regulation is intended to improve the diversification of risks.

Beside this there are more regulations concerning the above mentioned special banks:

- Mortgage banks must not participate in the normal credit and deposit business. They have the privilege to issue certain bonds<sup>1</sup>, if they want to refinance<sup>2</sup>.
- The activities of building S&Ls are restricted by law.

## 3f) Regional Regulation

In Germany for commercial banks there are virtually no legal restrictions concerning where to have headquarters and branches. The business area of the state-controlled<sup>3</sup> savings and loan institutions, however, is limited ("Regionalprinzip") and their activity radius (in accordance to their "regional principle") is

<sup>1</sup> These are "Pfandbriefe" and "Kommunalobligationen".

<sup>2</sup> This is not true for state-owned institutes.

<sup>&</sup>lt;sup>3</sup> Historically, S&Ls were meant to collect small savings. The official justification that S&Ls must be owned and controlled by the state is that their aim is to finance public households of regions and communities and to finance sectoral and regional investment projects and to promote the housing sector. Of course, all these functions might as well be financed by privately owned banks. In fact the difference between S&Ls and credit banks nearly vanished during the last decades.

smaller than that of commercial banks<sup>1</sup>. Today the central institutions of the S&Ls nearly all have branches in foreign countries. The mutual banks<sup>2</sup> are formally unrestricted. After recent insolvencies, however, their deposit insurance tends to restrict their "asset area" to their "deposit area". In fact this regulation might be circumvented since their clearinghouses and central institutions<sup>3</sup> - like those of the S&Ls - expanded beyond state limits.

## 3g) Supervising Agencies and Deposit Insurance

In Germany there are four supervising agencies. These are the
- Central Bank (Deutsche Bundesbank), which has the power to
regulate all credit banks,

- Federal supervising agency for the banking business (Bundesaufsichtsamt für das Kreditwesen, BAK) which has to supervise all banks in respect to the above mentioned regulations (especially the banking law, "Kreditwesengesetz"),
- cartel supervising agency (Kartellamt), which, however, is subordinated to the BAK and the
- ministry of finance which supervises the issuance of bonds and notes.

Instead of a Federal deposit insurance there is a segmented insurance system. Each segment (private banks, mutual banks and savings and loan associations) has its own insurance system which fully guarantees the deposit risks of nonbanks<sup>4</sup>. The insurance is financed by its members, and all banks have to insure their business. The private banks guarantee up to 30 per cent of the liable

- <sup>2</sup> "Genossenschaftsbanken".
- <sup>3</sup> these are the "Zentralkassen der Volks- und Raiffeisenbanken" and the "Deutsche Genossenschaftsbank".
- <sup>4</sup> The insurance systems are maintained by the "Bundesverband deutscher Banken", the "Bundesverband der Deutschen Volksbanken und Raiffeisenbanken", and the "Deutscher Sparkassen- und Giroverband".

<sup>&</sup>lt;sup>1</sup> Of course the activities of large S&Ls might reach beyond the limits of small commercial banks.

capital of the defaulting bank for each depositor. The other two insurances guarantee the interests of the depositors by guaranteeing the liquidity of their members (indirect deposit insurance). Of course, each insurance system has its own supervising agency, which has the role of limiting the risks of illiquidity and moral hazard. This is not the place to discuss the regulatory institutions but see, e.g., [Groß, 1986, Geigant, 1984 and Morgan, 1981].

## 4) Deregulating the German Banking Sector

## 4a) Arguments for Deregulation

## International Competitiveness

The attractiveness of financial markets depends on their relation between regulation of domestic and of foreign markets. If foreign financial markets which previously were heavily restricted become more liberal or if new markets without regulations are "invented", capital will flow out of the more regulated areas. In other words, the currency area in which the more regulated currency is traded begins to expand. Since the regulatory agencies are hardly able to control money and credit creation beyond their state limits, the regulatory power of these institution diminishes. If the amount of money traded beyond state limits is not predictable this implies difficult questions in respect to monetary policy<sup>1</sup>. Depending on the volume of the money traded in foreign countries relative to the volume of domestic financial markets, this country is likely to have large fluctuations of the exchange rate or has to intervene heavily to maintain a targeted exchange rate. In any case the demand for money function will show significant and probably unpredictable shifts.

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<sup>&</sup>lt;sup>1</sup> For a long time the Bundesbank considered it as undesirable to see the DM in the function of a major reserve currency of the world. During recent years a re-thinking about this issue seems to have begun.

Therefore, a relatively small country like West Germany has difficulties to maintain the current degree of regulation when dominant financial markets become deregulated. Since financial markets in the USA are deregulated since the beginning of the eighties, regulatory agencies in Germany had to think about deregulation in Germany. It is no coincidence that the discussion about deregulation of the German banking system started when the DM was very weak against the US-\$. This argument for deregulation has its basis in the attractiveness of domestic financial markets for foreign investors or for domestic investors and banks who are able to go abroad.

## Efficiency of Financial Markets

The second argument for deregulation refers to the efficiency of domestic financial markets. There is a trade-off between regulation and efficiency: If regulations become more restrictive, their costs will generally tend to rise as

- costs for circumvention of regulations increase,
- profits of financial intermediaries decline,
- incentives for savings and investments are set in the wrong way so that scarce resources are wasted,
- the danger of disintermediation increases,
- the "regulatory dialectic process" (Kane, 1983) starts, leading to ever increasing numbers of regulations.

This means that regulations on financial markets (perhaps regulations generally) lead to smaller growth and less prosperity than otherwise would be possible.

The main question with respect to the second argument is the following: Is there an optimum level of regulation? To answer that question we have to look at the extreme positions: The extreme liberal case would be a country without monopoly for the issuance of money, complete competition between banks which issue their own money and financial markets which are characterized by a vast amount of domestic and foreign denominations<sup>1</sup>. The other extreme would be a country in which banks are practically branches of the central bank. In that country only one single currency would exist, and foreign capital markets could not be reached by domestic residents.

During the last twenty years the capital asset pricing model (CAPM), which was developed by Sharpe [1964] and Lintner [1965] has been further improved. The CAPM states that if financial markets are efficient and market participants are risk averse and rational there is no possibility that an individual investor can increase the yield of his portfolio beyond that of the market portfolio at a given risk level. Since banks manage two portfolios - the portfolio of assets and the portfolio of liabilities this model has great relevance for the banking business. The spread is just the difference between the yield of the asset portfolio and that of the liability portfolio. However, the maturity and risk transformation is limited by the above mentioned regulations. If financial markets are efficient then there should be an inherent tendency for the yield of the asset portfolio converging towards the yield of the liability portfolio. So far the implications of the theoretical model.

If we look at international financial markets we can clearly observe that there is a tendency for smaller margins, faster processing of information and quicker reaction to information. On the Euro-Money market the margins today are in the order of sixteen base points. In other words: if banks want to improve their profitability they have to put up with higher risks of their asset portfolios. There is no free lunch - if there ever was one. Profitability of the banking business as a whole can be promoted by abandoning portfolio regulations. The regulatory agencies have to decide whether they want a 'sure' financial system with a

<sup>&</sup>lt;sup>1</sup> The issue of currency competition need not be discussed here in full detail [see Hayek, 1976 and Vaubel 1978].

tendency for decreasing profitability or a system which is functioning like a growth industry - that means high average profitability <u>and</u> the risk of wrong decisions (failures). But it is not possible to have the cake and eat it.

## Market Needs

Another argument, for deregulation stems from the observation that in a changing environment it is unwise to insist on regulations which once were justified on grounds now obsolete. Today there is a need for new financial instruments, and banks feel that their customers are no longer satisfied with standard solutions. Customers now insist on individual solutions to their individual problems. Generally speaking, the existing regulations hinder the development of new financial instruments or even the spread of (in foreign countries) long established instruments like certificates of deposit (which until recently were not allowed to be issued in Germany). This argument for deregulation states that further development of financial markets is possible only when banks are allowed to "learn by doing" and to satisfy customers needs. In the long run, increased sophistication even might reduce the overall risk of the banking system, thus improving its stability.

## European Economic Integration

Finally, there is the political aim to integrate financial markets of the different member countries of the EEC. Harmonizing the different rules concerning the financial markets in the member countries is a difficult task and surely will take some time. The less restrictive the overall regulation of financial markets in the EEC will be, the better are the chances that market forces will shape the European financial markets, thus improving their importance relative to U.S. and Asian financial markets.

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#### 4b) Recent Deregulatory Measures

In Germany the main steps towards a liberal financial system were made during the 1960s, when administrative control of interest rates was phased out. Remaining restrictions on capital imports were abolished in the early 1980s<sup>1</sup>. Then in spring 1985 the Bundesbank allowed German banks to issue

- Floating rate notes,
- zero-coupon-bonds<sup>2</sup> and
- dual currency bonds.

Furthermore, branches of foreign banks were allowed to act as lead manager (Konsortialführer) of DM denominated foreign bonds. These new instruments were readily accepted by banks (especially the FRNs), but there was no 'run' into these new instruments after the initial euphoria. The Bundesbank called this package of measures the "Rest-Liberalisierung", which suggests that there is nothing more to liberalize.

That this interpretation was not correct became obvious when in January 1986 the Bundesbank announced another "Rest-Liberalisierung". Banks with German charters soon will be able to issue DM denominated certificates of deposit. Furthermore, until now the structure of reserve requirements tends to discriminate against foreign deposits. It is planned to reduce the reserve requirements which banks have to hold against time and savings deposits of foreigners in the order of 2.65 and 0.75 percentage points respectively. The new ratios will be the same as for domestic depositors. However, the ratio for demand deposits would be increased and be the same as the maximum for residents. Some discrimination remains even under the new reserve requirements, which will become effective during spring '86.

The sales tax for foreign buyers of DM denominated papers was eliminated in 1984.

<sup>&</sup>lt;sup>2</sup> Until now the development of the German zero-bond market was disappointing compared to the initial expectations. There still has to be made a final decision how to treat the yield as taxable income.

## 4c) Potentials for Further Deregulation

Beyond the recent deregulatory measures there is potential for further deregulatory steps. The international competitiveness of the German banking system could be improved<sup>1</sup> by

- further reductions of reserve requirements to a level below the working balances which banks voluntarily hold at the central bank<sup>2,3</sup>
- encouraging competition by lowering the barriers to enter the depository business,
- approval of financial instruments which are already established in foreign financial markets including,
  - i) money market funds with demand deposit features
    - ii) financial futures and other commodity and stock exchange instruments,
    - iii) an equivalent for US Treasury Bills, issued by the German Federal Government, and
  - iv) indexed bonds.

<sup>2</sup> Currently the working balances are estimated to be in the order of 25 billion DM, whereas the reserve requirements are set at 50 billion DM.

<sup>3</sup> This proposal recently was made by the German banking association. It is unlikely that the instrument of reserve requirements is really necessary for monetary policy, although they have the function of a 'built-in-stabilizer': Even in Germany this instrument has been rarely used (the last time was in October 1982), not to speak of other industrial countries where open market policy has clearly dominated. Open market policy can be used very smoothly, whereas a change in reserve requirements or the discount rate has a very high signal character. If such "noise" is wanted by the Bundesbank, it could introduce reserve requirements temporarily. Abolishing reserve requirements would have the further advan-

tage that the current discussion how to consider the new DM-CDs could be ended immediately. Banks would voluntarily hold working balances against CDs, so that the Bundesbank need not to calculate the "adequat" reserve ratio.

Finally, to repeal reserve requirements would be superior to artificially create an off-shore financial zone in Germany. This deregulatory step should be accompanied by doing away with the stamp duty at the exchanges.

I It is clear that the historically grown and tax-based advantages cannot be reversed in the short run by the following measures.

- abolishing the need for approval for the issue of bonds (§§ 795 and 808a BGB) of which only government bonds are exempted. This would allow shorter maturities than today and would eliminate the regulations which limit the relation of bonds issued to the liable capital (Umlaufgrenzen). This, however, could bring some difficulties for mortgage banks.

The transition to more competition in the German banking system should not come as a shock rather as a smooth transformation. Preannounced deregulation after intense discussion - I think - is the best way to proceed. With respect to this remedy the German Bundesbank during the last years has performed very well. In the future the deregulation of the German stock exchanges<sup>1</sup> - which is not discussed here - should be an additional element of improvement.

## An Off-Shore Financial Zone in Germany?

The Council of Economic Advisers (Sachverständigenrat) and commercial banks recently recommended an off-shore financial zone in Germany. The reasoning was that such an unregulated area would attract and re-locate banking business back to Germany. It is not possible here to discuss this proposal in detail but there are two arguments against a free financial zone in Germany: First, if unregulated banking business is good for German financial markets then why not make the whole state a free banking area? In fact,

<sup>&</sup>lt;sup>1</sup> There is a large potential for deregulation in the German stock exchange: Financial instruments like options on bonds, futures on interest rates and indexes, options on futures, currency swaps might be allowed, the sales tax on the value of traded stocks (stamp duty) may be abolished and the official time during which stocks are traded could be expanded significantly. Recently there has been an agreement between the eight regional stock exchanges on organizational reform. New legislation intends to facilitate the access of small and mediumsized corporations by legalizing a kind of an unlisted securities market ("geregelter Markt") and the restrictions for institutional investors are reduced. Furthermore, the barriers to entry in the over-the-counter business is set too high compared with the official exchanges [Weichert, 1985].

an off-shore financial zone is a poor substitute for an overall unregulated banking sector. Second, there already is an off-shore financial zone for German banks - but not in Germany: Luxemburg. Many German banks have branches there. Anyhow, currently there is no public discussion about introducing off-shore banking in Germany.

## The European Currency Unit as Parallel Currency?

Another less promising proposition is to introduce the European currency unit (Ecu) as a parallel currency in Germany. Being a basket of the currencies of the member states of the EEC, the Ecu is a weighted average of 'good' and 'bad' money. In Germany, a country in which there is a high preference for price stability, it is very unlikely that the Ecu ever will play an important role as legal tender.

Though it is true that the Bundesbank has no reason to fear the Ecu as parallel currency (§ 3 of the law of the currency has to be amended) it might be that the Ecu is a vehicle to undermine the authority of the Bundesbank. I think that in Germany there is a unamimous vote for the Bundesbank in this respect. Currency unification in the EEC should come through harmonizing the economic policies and currency competition but not through the introduction of symbols.

## Over-Innovation?

Is there a danger that financial markets may "over-innovate" i.e. develop more instruments than the market can bear? In fact, who knows all the details about BECS, TIGRs, RUFs and NIFs? To outsiders these sound like magic words spoken by medieval astrologers to transform quicksilver into gold. It must be admitted that the fungibility of some papers is hampered by extreme complicated constructions. The costs for calculating the market value must then be incorporated by a discount on such papers. In other words: if financial innovations become too complicated they are unlikely to be accepted in the long run. That the market mechanism prevents over-innovation can be observed in the Euro-markets where some innovations where not accepted by market participants.

## 5. <u>The Impacts of Deregulation and Financial Innovations on Mone-</u> tary Policy

Does more deregulation endanger central bank control over the monetary development? As long as there is a monopoly on the supply of legal-tender currency and as long as the economy demands this legal-tender currency, the central bank will be able to control the quantity of money and the level of money-market interest rates. Nonbanks demand currency because they intend to make certain payments or because they are not quite sure about the safety of the banking system. As long as banks either un-(through reserve voluntarily requirements) or voluntarily (working balances) hold reserves in legal-tender currency against liabilities created by banks, the supply of money is limited. They have to make payments in a currency which they cannot create. This is true even if - as a consequence of deregulation the money multiplier becomes very large. However, it is likely that changes in the structure of the financial system lead to different monetary transmission mechanisms.

In principal deregulation of financial markets and financial innovation can influence monetary policy in several ways:

- Since financial innovations normally induce large shifts in the portfolio decisions of market participants, their impact on money creation can be large. If, for example, deposits with high reserve requirements are withdrawn from a bank and invested in a kind of money market fund - which is not a bank with quasi-money characteristics, then there is a liquidity creation in the banking system: The monetary base might decline somewhat (since there are no reserves to hold against MMFs), but the decline of the money stock is much larger (in the order of the money multiplier). The money multipliers will become more unpredictable, since nobody knows in advance how large this deposit-shifting will be. This would <u>not</u> be true, if the money created by the MMFs would be incorporated in reserve requirements and would be considered as a component of the conventional monetary statistic. Large shifts between deposits are - especially when they are induced by financial innovations - a strong argument for uniform reserve requirements.

- Secondly, effective deregulation of financial markets is an argument against setting monetary targets in an old fashioned way and to stick to these limits. In fact, not only the currency area might expand, but the opportunity costs of holding money are likely to change significantly. Policymakers will ex post observe a shift of the demand for money function, its magnitude being dependent on the definition on just what money is.
- The limits between money, credit and capital will become very difficult to observe. Is a stock portfolio with characteristics like a demand deposit to be considered as money or not? The answer to this question will be available only after some time, as experience with these new features grows. Monetary policymakers have to be aware of the danger, that the effectiveness of conventional monetary instruments will be less than before.

We think that these problems will be comparatively small in Germany because of two factors. Firstly, the need for deregulation is much smaller than in other industrial countries. The impact of deregulation is to be expected much smaller. Secondly, in the case of preannounced, orderly deregulation in small steps the substitution process will be smoother so that the central bank has enough time to react adequately.

## 6. <u>The Electronic Evolution and the Future of the German Banking</u> <u>Sector</u>

As the cost for processing and transmitting information is declining very rapidly and a very large portion of the banking business is exactly this, it is quite clear that banking in the future will be influenced heavily by this technological development. The speed of transformation of the transaction system, however, will not only depend on the costs of information but also on the overall acceptance by the bank's customers and on legal restrictions which protect individual property rights ("Datenschutz"). But let me abstract from the very sensitive and complicated political and legal process and focus on economic arguments.

The spread of automated teller machines (ATMs) which in Germany today is yet very thin<sup>1</sup>, will expand significantly as they are a means of reducing standard operating costs of the banking business. Currently the "smartness" of ATMs is to be considered relatively low, as they are dominantly used to exchange demand deposits into cash. For a broad acceptance it is important to develop a compatible national or even a European international ATM system and to make it attractive to use these new instruments. This could be done by simply reducing the userfees relative to fees for traditional transactions.

A second area in which the electronic evolution is taking place is the spread of point-of-sale terminals<sup>2</sup> (POS-terminals), which enables cashless transactions at the point of sale either immediately (on-line POS) or periodically (for example during the night, off-line POS). The competitiveness of these systems heavi-

<sup>&</sup>lt;sup>1</sup> Currently there are about 2000 ATMs in Germany. This represents 32 ATMs per million inhabitants or about one tenth of the ATM-density of the USA.

<sup>&</sup>lt;sup>2</sup> Sometimes also called EFTPOS (electronic funds transfer at the point of sale).

ly depends on the informational infrastructure which in Germany is expanding very rapidly<sup>1</sup>. This system can be made very fooland fraud-proof through the introduction of "smart cards". They are already used in a pilot project in France .

These "smart cards" function as a debit card or even as a credit card, if bank and customer agree to do so. This is possible because these cards contain a computer chip which is debited at the point of sale. Once this card is overdrawn it may be made active again by the customer's bank. It will be only a matter of time until this electronic money will be the main transaction medium. We are - slowly, but steadily - moving towards a cashless society.

A third system already exists; it is the customer-located banking system (that is home-banking for private households and office banking for the business sector). The acceptance, however, is rather low since the equipment<sup>2</sup> - at least for private households - is rather expensive and inconvenient. This might change once private households are connected with additional data nets beside the telephone net.

What does all this mean to banking business? I think that the personal-intensive transaction segment in the long run will become highly automated. These rather unsophisticated services are likely to become less profitable for commercial banks as new competitors enter this segment of the banking business. Banking automation also means that the 'loyality' of bank customers might diminish. Corporate identity is an important issue in this con-

<sup>&</sup>lt;sup>1</sup> Services introduced by the German postal system include DATEX-P, DATEX-L and Teletex.

<sup>&</sup>lt;sup>2</sup> The necessary equipment is a television set, a telephone, a computer and a modem, which transforms digital signals into analog and reverse.

text. The trade with unsophisticated services could become as standardized as the trade with commodities. The electronic evolution might lower the barriers for entering the banking business by non-banks and near-banks. Traditional banking services could as well more proliferated by them. Building societies, retail enterprises and the postal<sup>1</sup> system are obvious candidates to play a role as nonbank-banks. The requirements of customers will shift to more and better consultation by the bank. The location of banks will become less important since ATM principally function as branches. Traditional sales organizations, the branch network of banks, then would become too expensive compared with electronic banking. A simple combination of debit card, POS and Money Market Mutual Funds could satisfy the largest part of customer's needs. Upgrading, regional concentration and a concentration of bank-related decisions, will shape the future banking system in Germany.

## 7. The Trend to Securitization

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The trend to securitize credit - i.e. to make credit tradeable which clearly developed in the Euromarket will probably spread to Germany. Financial innovations like the Euro-facilities mean that corporate customers can finance themselves with these facilities at lower costs compared to traditional syndicated loans. Banks guarantee the provision of liquidity up to back-up lines in case of need for which they are compensated. Currently the problem with these innovations is that they are not fully reported in the balance sheets, so their nature is to provide the bank with a better 'optic' through off-balance-sheet transactions. Again, this is a good example for the regulatory dialectic process, since now regulators think about the possibility of restricting these activities.

In the Netherland and in Sweden, for example, the postal system has the function of a full bank.

A second aspect of the securitization process is that corporations some day may get <u>direct</u> access to bond and note markets, thus circumventing the whole banking system. This could heavily influence the whole banking sector. Possibly departments of large corporations then would act like banks.

Thirdly, if there are secondary markets for securitized credit, then market forces will value the assets of banks. This reduces the bank's discretionary margins to value its assets. The worldwide debt crisis surely would have developed quite differently if credit would have to be booked at market value. The rating of different creditors would come through market forces - with all its implication for the asset-portfolio of banks.

#### 8. Summary

In contrast to most other countries, the German banking system is relatively unregulated. Nevertheless, there are some regulations which could easily be eliminated without having negative effects on the stability of the monetary system or monetary control. The competition between banks and between banks and nonbanks is likely to become more intense as new financial instruments spread to German markets. In the long run standardized banking products like the payments services will become less profitable for commercial banks. They have to upgrade if the banking sector is to remain a growth industry.

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