

**"THE REGULATION OF FINANCIAL SERVICES
IN THE EC, CENTRALIZATION
OR NATIONAL AUTONOMY?"**

by

Jean DERMINE*

N° 91/35/FIN

* Associate Professor of Finance, INSEAD, Boulevard de Constance,
Fontainebleau 77305 Cedex, France.

Printed at INSEAD,
Fontainebleau, France.

**THE REGULATION OF FINANCIAL SERVICES IN THE EC,
CENTRALIZATION OR NATIONAL AUTONOMY ?**

by Jean Dermine^{*}
INSEAD, Fontainebleau
June 1991

***Paper prepared for the Mentor Forum for the US Supreme Court and the European Court of Justice, Edinburgh, 25th-28th August 1991. The paper was written while the author was Visiting Fellow at New York University Salomon Center. Comments from C. Wilhborg are gratefully acknowledged.**

Abstract

The paper evaluates the regulatory structure of the European financial services industry. It addresses the issue of hierarchy of regulations, that is the eventual need for centralized regulation at the level of a European Central Bank, harmonization of national regulations, competitive (de)regulation or 'host country' regulation. An economic analysis of the sources of market failure concludes that competition between national regulators will benefit consumers of financial services and the efficiency of financial markets in most cases. The paper warns against an abusive interpretation of the 'public interest' criterion which is used too often to restrict competition. Finally, the paper argues that more work remains to be done to achieve open and stable financial markets.

The integration of the financial services industry in Europe is an excellent case of the legal and regulatory issues involved in the creation of a single economic market. As financial services are heavily regulated, the creation of a common market puts into question the need for a centralized regulation, an harmonization of national regulations and an allocation of responsibility among national regulators and supervisors. To refer to a current debate, the issue is to define the 'subsidiarity' role of 'Brussels'¹ in terms of centralization and harmonization. The purpose of the paper is to address these issues as they relate to the financial services industry². The approach that will be taken follows a stream of economic research which analyses the characteristics of financial products, the arguments for potential market failures, the eventual need for public intervention and the issue of hierarchy of regulations. Although primarily related to the integration of European financial markets, the issues are quite broad and relevant for the countries of the European Free Trade Association (EFTA) or of the North American Free Trade Agreement (NAFTA).

The paper is organized as follows. The process of integration of the European

¹The generic term 'Brussels' refers to the European Commission, the Council of Ministers and the European Parliament.

²Federalism and banking have a long history in the United States. The author was reminded of the success of Aaron Burr in having a Water Bill passed by the New York State Assembly in 1799. Part of the funds were used to create the 'Republican' Manhattan Company Bank, a competitor to Alexander Hamilton's Bank of New York that was controlled by the Federalists. Competition between the two men ended tragically in a duel with the death of Hamilton in 1804 (Wandell-Winnigerode, 1925).

banking industry is summarized in the first section. Banking is chosen because it is the industry where most of the regulatory issues arise. Whenever relevant, comments will be made about investment services (investment banking) and insurance, the two other components of the financial services industry. An economic analysis of the potential sources of market failures calling for public intervention is developed in the second section. Finally, the process of integration is evaluated in light of this economic analysis.

The conclusions of the paper are as follows. There are two main economic reasons to regulate and supervise financial markets : Consumer protection and financial stability (the prevention of 'systemic' risk). A third argument, the abuse of market power, is not discussed because it is not specific to the financial services industry. It is argued that the '1992' principles of national regulations, home country control, mutual recognition and competition among regulators will benefit greatly the efficiency of European financial markets. The paper warns against an abusive use of the 'public interest' principle referred to in various European directives and cases of the European Court of Justice. Too often, this principle is used to restrict competition and prevent the entry of domestic and foreign firms. It is argued that a centralization of regulations is not necessary and that an international harmonization is warranted in two cases only : When consumers of financial services are not able to evaluate risks or when implicit subsidies have to be levelled off. Finally, it is argued that more work remains to be done to ensure that the actions of independent Central banks lead to the stability of financial markets.

SECTION ONE : EUROPEAN FINANCIAL SERVICES

The actions taken by the European Commission and the Council of Ministers can be divided in three time periods : Deregulation of entry on domestic markets from 1957 to 1973, various attempts toward harmonization of regulations from 1973 to 1983 and the recent proposals of freedom of cross-border services, single license, home country control and mutual recognition.

Deregulating Entry 1957-1973

The objective of the 1957 Treaty of Rome was the transformation of highly segmented national markets into a common, single market. This objective was achieved by two types of measures : The recognition of the right of establishment and the coordination of legislation whenever necessary³. In June 1973, the Council adopted a directive on the Abolition of Restrictions on Freedom of Establishment and Freedom to Provide Services in Respect of Self-Employed Activities of Banks and other Financial Institutions. This directive applies the national treatment principle⁴ which ensures the equal treatment of national firms of member states on entry in domestic markets and on conditions at which

³see Dassel and Isaacs (1985).

⁴see Walter (1988).

banks are submitted during their activity. It is explicitly recognized that subsidiaries of banks whose parents are established in non-member countries are to be recognized as EC undertakings in every way. Although in 1973 little discrimination remains as to entry in member states, the objective of the initial treaty were still far from being met⁵. International competition through the supply of cross-border services was severely restricted by restrictions on capital flows. Furthermore, there was no coordination of banking supervision, so that banks operating in different countries could be subject to different rules. This leads to the second phase of attempts to harmonize regulations.

1973-1983 Harmonization of Banking Regulations

Progress in harmonization came in 1977 with the adoption of the First Directive on the Coordination of Laws, Regulations and Administrative Provisions Relating to the Taking Up and Pursuit of Credit Institutions. This directive establishes the principle of home country control. The supervision of credit institutions operating in several Member countries will gradually be shifted from the host to the home country of the parent bank. The 1977 directive is a first step towards the harmonization of regulations. It is a general program which, without providing any specific regulation, calls for further directives. Directives on Supervision of Credit institutions on a Consolidated Basis, on a Uniform Format for Bank Accounts and on Consumer Protection were adopted by 1986. The first banking directive initiated work on Winding up and Liquidation and on the Mortgage Market.

⁵see Clarotti (1984).

After the 1977 directive, the European banking markets were still fragmented for the following reasons :

.A bank wishing to operate in an other country still had to be authorized by the supervisors of the other country.

.It remained subject to supervision by the host country and its range of activities could be constrained by host country laws.

.In most countries, branches had to be provided with earmarked capital as if it were a new bank.

.Finally, as already mentioned, the supply of international services was severely impaired by the restrictions on capital flows. For instance, the 1984 exports of financial services represented 2 % of output in France and Germany, while the market share of foreign institutions in the same two countries represented 16 % and 4 % respectively.

The task of complete harmonization of national regulations seemed to be a tentacular task which prompted a new approach towards European integration.

The Completion of the Internal Market by 1992 : 1983-1992

Proposed by the Commission at the 1985 Council of Ministers in Milano, a White Paper on the Completion of the Internal Market by 1992 calls for the removal of the physical, technical and fiscal barriers in all industries.

In the context of banking, the White Paper calls for a single banking license, home

country control and mutual recognition. These principles are incorporated in the Second Banking Directive. All credit institutions authorized in one European country will be able to establish or supply financial services without further authorization⁶. The banking model adopted by the EC is the universal banking model. It permits banks to undertake investment banking activities and allows national supervisors to regulate the eventual links between insurance, commercial and industrial groups, and banks. For instance, it is known that the Bank of England would not favor the ownership of banks by industrial groups, while this would be allowed in France or Belgium. The second directive calls for home country control on solvency, but recognizes explicitly that host country regulations will apply for monetary policy reasons and for market position risks. Recognizing that fair competition requires a fair level playing field and minimal harmonization of regulations, the second banking directive calls for minimal equity, harmonized capital adequacy rules, supervisory control of major shareholders and of banks' permanent participation in the non-financial sector⁷.

Along with this process is the proposal for a full liberalization of capital flows by June 1990. Exceptions include Ireland and Spain (1992) and Greece and Portugal (1995). It should be mentioned that this capital directive contains a safeguard clause authorizing Member State to take necessary measures in the event of balance of payments problems.

The integration of investment services (investment banking) and insurance proceeds in a very similar manner. As far as investment services is concerned, draft directives for

⁶As concerns non-EC banks, the 'single' passport applies only to subsidiaries authorized in one country of the EC. Branches do require national authorization.

⁷see Dermine (1990_{a,c}).

Investment Services in the Securities Field and for Capital Adequacy provide for a single license, home country control on shareholders, capital adequacy, risk management and compliance with prudential rules. A major difference with the second banking directive is that substantial powers would be given to host authorities in terms of the design of the rules of conduct of business. These include share registration and new issues procedure, securities prospectuses, investment management, investor protection, insider trading and related market practices.

In the field of insurance, integration is somewhat lagging, although major progress are underway. Two fields have to be distinguished : Life insurance (including life insurance, pension and general annuities) and non-life insurance (including motor vehicle, fire and property, liability and accident). As regards the later, the principle of single license, home country control and mutual recognition applies to large risks only (business firms with more than 250 employees). Host country authorization and supervision still applies for mass risks (second non-life directive). As regards life insurance, the second directive authorizes free cross-border sales when the initiative is taken by the applicant. Otherwise, host country authorization and supervision is the rule. A proposal for a third life insurance directive has been issued recently ; it would allow the home country principle for life insurance by 1994, although marketing practices could be regulated for public interest. As concerns the choice of contract law, the general rule is that the law applying to the country where the risk is located will be chosen, unless it has been waived explicitly.

From this large review of the directives and recommendations, it appears that the

objective pursued by the European Commission is threefold : Free entry and freedom of cross-border services throughout the Community, the establishment of a fair level playing field with single license, home country control, mutual recognition and minimal harmonization of regulations and, finally, consumer protection. In this respect, reference is often made (for instance in the 1985 White Paper) to the 1978 European Court of Justice 'Cassis de Dijon' case according to which control of the quality of a product is warranted, but can be met adequately by the supervisor of the home country. This path-breaking case strengthens considerably the economic integration process in recognizing a principle of limited sovereignty. However, references are also made to a 1986 non-life insurance Court case according to which control by the host authorities are acceptable as long as they are justified on the ground of the 'public interest' : "Insurance is a sensitive area, and until more progress is made in achieving a common regulatory framework, the only way of safeguarding the interest of individual customers is to insist that policies sold in any Member State must accord with the rule prevailing in that country". A further illustration of the perceived need for consumer protection is the recommendation on deposit insurance : "Member states shall ensure that the deposit-guarantee schemes that exist in their territory cover the deposits of branches of institutions having their head office in another Member state. As a transitional measure, pending entry into force of a deposit-guarantee scheme in all Member States, the latter shall ensure that the deposit guarantee scheme, in which the institutions that have their head office in their territory take part, extent cover to deposits received by branches set up in host countries within the Community which have no deposit-guarantee scheme, under the same conditions as those laid down to guarantee deposits

received in the home country."

Both the European Commission and the European Court of Justice appear to accept the premise that consumers of financial services need to be protected. In case of public interest, it has been argued by the Court and recognized again in a draft proposal for a third life-insurance directive that host country regulations could be applied. In order to assess the economic coherence of the European framework, it is useful to review the literature on the sources of market failures calling for public interventions.

SECTION TWO : THE ECONOMICS OF FINANCIAL SERVICES REGULATION

An analysis of the characteristics of financial services and of the market failures calling for regulations follows. It attempts to clarify the maxim : "Competition whenever possible, regulation wherever necessary". Although the services provided by banks are interrelated, it is convenient to distinguish four categories : Portfolio management, payment (transmission) mechanism, risk sharing and monitoring or information-related services.

Portfolio management : At low cost, investors can acquire a diversified portfolio of liabilities issued by deficit spending units. The pure case is the mutual fund or unit trust (called SICAV in France and Luxembourg) which supplies a diversified portfolio to the holders of its shares.

Payment mechanism : A second role for banks in the economy is the management of the payment system, that is to facilitate and keep track of transfers of wealth among individuals. This is the bookkeeping activity of banks realized by debiting and crediting accounts.

Risk sharing services : An essential function of banks is to transform the risks faced by the parties, that is to supply risk sharing contracts. First, banks not only supply diversified assets, they also organize efficiently the distribution of the risky income earned on the asset pool. The deposit holders receive a fixed payment while the shareholders receive the residual income. Other insurance services would include liquidity insurance (option for the deposit holder to withdraw quickly at face value) and interest rate insurance (floating rate lending with various ceilings on interest rates).

Monitoring and Information-related Services : Banks perform a useful function in reducing the costs of screening and monitoring borrowers. Private information held by borrowers results in contracting problems because it is costly to assess the solvency of a borrower and to monitor its actions after lending has taken place. The delegation of screening and monitoring to banks is an efficient allocation mechanism. In addition to the classical lending function of banks, one can include in the information-related services most of the 'investment services' activities, such as underwriting and distribution of securities, market making, trust or fiduciary services, and advisory services on corporate governance, merger and acquisition and risk management.

Two independent explanations have been advanced for the existence of market failure in the financial services industry : Imperfect information and the need to protect

consumers, and the potential for bank runs and systemic crisis. A third source of market power, abuse of market power, will not be discussed as it applies to all industries.

Information and Consumer Protection

The economic literature recognizes that the inability of consumers to evaluate properly the quality of a product can create a market failure. The literature distinguishes three types goods : search goods, whose quality is apparent before purchase, experience goods, whose quality is apparent after consumption, and 'trust' goods, whose quality is not always apparent even after consumption⁸. An inefficiency may arise because the quality of a service is not valued properly by the market and reflected into higher prices so that there is insufficient incentives for firms to produce quality. For instance, it may be difficult for depositors to assess the quality of the assets of a bank and its degree of solvency. Or it could be difficult to evaluate the quality of incompetent or dishonest financial advisors.

Such situations create the need for two types of regulations to protect consumers. Regulations can control entry in a market (the 'fit and proper' criterion) or conduct behavior (capital adequacy, risk taking, insider trading...). In this context, there is an important issue as whether this regulatory task should be performed by private or public organizations, and in an international and global marketplace, whether there is a need to harmonize regulations.

Our analysis of the argument of imperfect information and consumer protection will

⁸see Kay-Vickers (1986) and Mayer-Neven (1991).

proceed in three steps. First, a private market solution to the information problem is searched for. Next, we analyze the set of circumstances under which the regulation of entry and conduct is justified. Finally, the conditions requiring an international harmonization of regulations are analyzed.

A natural solution to the imperfect information problem is the provision of information and regulation of disclosure. However, the evaluation of bank risks is a costly activity which has the nature of a public good. Since it is available to consumers at a very low transfer cost, the evaluation of banks should not be undertaken by each depositors but could be delegated to a public agency or a private rating firm. Furthermore, since small account holders may find the cost of interpreting the rating high and/or since they care about risk free deposits only, two alternatives could be developed. The first is to have deposit insurance. The second is to create risk free banks, that is intermediaries investing all deposits in risk free securities. Depositors would have the choice between banks offering a higher but risky return and those providing quasi-risk free deposits. It would appear that the evaluation of risks is not inherently more difficult in banking than in other industries. A main difference is that it is quite likely that a large fraction of depositors care for risk free deposits, but these could be provided by the markets.

In addition to the disclosure and evaluation of information, there are two alternative private ways to reduce the imperfect information problem : Reputation and industry insurance-warranty. Reputation implies that firms who care for the value of their franchise and long run profits have an incentive to build internal control system to reduce risks and fraud. However, as was shown in the Boesky-Levine case in the United States, a tradeoff will

exist between (high) short term fraudulent profit and the benefits of long term reputation. An alternative is for a firm or an industry to provide a warranty to guarantee the quality of the services offered. For instance, the fund of a stockbrokers association guarantees clients against potential dishonest behavior of its employees. Peer monitoring or industry self-regulation prevent deviant behavior.

This analysis has shown that the information problem can be solved privately on the market in several different ways. However, whenever there is evidence that the market cannot discriminate among firms, then there is a case for the government to regulate entry and ensure a minimal quality, as is done for instance in the medical and legal professions. The argument is that regulation is necessary to maintain a minimum desired level of quality. A question arises as whether this should be done privately or quasi-privately as in Great Britain with the Self-Regulatory Organizations (SRO) or whether it should be public. The benefits of flexibility and industry expertise provided by private self-regulations have to be balanced against the risk of capture by the SROs whose members have an obvious incentive to limit entry and competition. As there is currently no empirical evidence in favor of one system or another, we suggest to let the national regulatory structures compete.

Competitive (de)regulation raises immediately the issue of the need to harmonize regulations at the international level. The answer to this question is again related to imperfect information. Competition among national regulators or private clubs is desirable whenever the parties can evaluate the quality of regulatory systems. For instance, competition among regulators in Paris, Frankfurt, London and New York will shape the development of local stock exchanges and the outcome will be optimal if participants can

discriminate among different regulatory systems. Harmonization of rules to ensure minimal quality would be necessary only if the market cannot discriminate. This suggests that the degree of international harmonization could vary for different activities and classes of investors, the 'informed' and the 'non-informed'.

It is fair to recognize that different countries may wish different degree of protection and regulations, so that an international harmonization is unlikely to satisfy fully all members. But the alternative to free international trade with (imperfect) international harmonization is a 'closed economy' with domestic regulation. The author has little doubt that the benefits of international trade and competition will weigh favorably against the benefits provided by a possibly more satisfactory domestic regulation in a 'closed' economy.

It has been argued that imperfect or asymmetric information creates the potential for a market failure, but appropriate rules on disclosure of information and competition between firms or regulators can solve a large part of the problem. One has to be extremely careful to avoid permanent regulatory interference which can create the 'raison d'etre' of public intervention. For instance, the creation of a safe and publicly insured deposits market reduces the market for information gathering and the creation of risk free funds. A clear example of a potentially perverse effect of intervention is the money market funds market in France which, so far, is virtually risk free. In a case where a distribution company CODEC was close to defaulting on its commercial paper (held by money market funds), the banks intervened to absorb the losses. The argument was that this was necessary to stabilize the money market funds market. The argument of market stability is understandable, but

the intervention creates a false sense of safety and reduces the private incentives to create rating agencies evaluating the riskiness of money market funds⁹.

Facing a remarkably similar situation in May 1970, the Federal Reserve Bank of New York refused to lend to Penn Central which was defaulting on its commercial paper. It only did create a liquidity cushion available to banks to absorb temporary disturbances on the commercial paper market¹⁰. This 'laissez faire' policy should not imply that there is no ground for public intervention to compensate the unlucky or imprudent investors. The argument is that transitory transfer policies should be used in these cases rather than direct and permanent interference with the functioning of private markets.

The second major argument for the regulation of financial institutions is the fear of systemic risk in the banking industry.

The Stability of Financial Markets

Banks are special because the financial contract that emerges -illiquid loans funded by short-term deposits- creates the potential market failure and the need for public intervention. The financial contract creates the risk that depositors run to withdraw their funds. A run can be triggered by a bad news about the value of bank assets or by any unexplained fear. In both cases, there may be a loss since illiquid assets will be sold at a

⁹The first ratings on French money market funds were made public in April 1991, ten years after the creation of the market.

¹⁰see Brimmer (1989).

discount. Moreover, a bank failure could eventually trigger a signal on the solvency of other banks, leading to a systemic crisis. A market failure exists because a cooperative solution among depositors cannot be enforced. Collectively, there is no incentive to run, but individually, there is the incentive to be the first on the line to collect the deposits at full value.

This market failure explains banking regulations and the establishment of safety nets to guarantee the stability of banking markets. They have taken the form of deposit insurance and lender of last resort interventions. In Europe, deposit insurance systems have been created recently in most countries.

Country	Coverage (Domestic currency)	Coverage (ECU)
Belgium	BEF 500,000	11,870
France	FF 400,000	57,520
Germany	30 % of equity per deposit	
Italy	Lit 1 billion (100 % for first 200 mil. and 75 % for next 800)	526,400
Netherlands	DG 35,000	15,120
Spain	Pta 1,500,000	11,930
United Kingdom	75 % of deposits up to £ 20,000	21,600
Japan	Yen 10,000,000	60,600
United States	\$ 100,000	83,890

Table 1 : Deposit Insurance Systems in Selected Countries.

As is well known, the interventions by Central Banks to protect the banks too-big-to-fail or the setting up of deposit insurance systems create a 'moral hazard' problem. The reason is that the risks taken by some banks are not appropriately priced into higher deposit rates because the depositors are insured. The owners of some banks can reap the potential of high profits, leaving large losses to the insurance agency. The prevention of bank runs and the insurance of deposits disturb the pricing of risks and reduces the incentives for safety and information analysis. The logical response of bank regulators has been to constrain the risks taken by banks which have access to a lender of last resort or a deposit insurance mechanisms. Control of banks' shareholders and equity capital, limits on risks taking and restrictions of activities have been used by public authorities to limit the potential exposure of the lender of last resort or of the deposit insurance agency. This raises naturally the question of international harmonization of regulations from a perspective quite different than the one discussed for consumer protection. In the later case, harmonization was seen as necessary to ensure a minimum level of quality that consumers would not be able to evaluate. In this case it is felt that laxist regulation can give a competitive advantage to some participants who benefit from a free insurance subsidy. To ensure a fair level playing field, international harmonization could be required.

Two sources of market failure calling for public intervention and harmonisation have been discussed : consumer protection and systemic risk. It has been argued that in many cases a market for private information will be developed so that regulation and international

harmonization should apply to very specific activities and classes of consumers. The existence of safety nets finds a case for prudential regulations and international harmonization to level the playing field. In the next section, the proposals of the European Commission are evaluated from this perspective.

SECTION THREE : AN EVALUATION OF EUROPEAN BANKING REGULATIONS

It is striking to observe that the motivation for regulation advanced by the European Commission follows very much the first argument for market failure, the need to protect consumers. Leaving aside the freeing of entry and the development of fair competition, banking regulations seem to be perceived as a necessity to protect consumers against losses. Although the principle of home country control is recognized as an efficient way to foster integration, there are several references to 'public interest' and the possibility to rely on host country rules to restrict competition and protect consumers. In contrast, the banking literature is less concerned with risk per se. As long as information flows properly, the risk will be priced into higher deposit rates and investors will have a menu ranging from risk free to 'junk' banks. The 'public interest' criterion should be applied exclusively to cases where consumers cannot discriminate properly. One should avoid policies that restrict competition and most importantly the market incentives to collect, analyze and disseminate information. As was argued, there is a reasonable case to protect the 'small' uninformed investor. The provision of the third life insurance directive which applies the law of the applicant (except when it has been waived explicitly) and leave a time to cancel the policy seems in this

respect quite effective. In banking, risk free funds or banks whose assets are invested exclusively in risk-free government securities could be created to meet the needs of investors who care for riskless asset or who are uninformed.

In contrast to the argument of consumer protection, the economic literature is more concerned with the stability of the banking industry and the fear that there can be circumstances leading to bank runs. Therefore a case is made for some form of insurance - deposit insurance or lender of last resort- to prevent runs. Although a lender of last resort policy is not mentioned explicitly in the European Commission's proposals, there are references to the national deposit insurance systems.

Three features of the European insurance systems make them unique. The first is that, contrary to the FDIC in the United States or the CDIC in Canada, they are totally ignored by the public. Publicity is even forbidden in Germany. The argument seems to be that the announcement of their creation could reduce the confidence in the banking system. Since the coverage per deposit is small and even incomplete in the United Kingdom and Italy, they are unlikely to contribute much to the stability and one would have to rely on lender of last resort intervention of central banks to ensure stability. Secondly, since the coverage is different across countries, it could be destabilizing if depositors start to chase the best coverage. A third feature of the deposit insurance systems is that they cover the deposits of domestic and foreign banks operating locally. This could create an 'accountability' problem. Indeed, any insurance activities require the monitoring of risks taken by the insurer, but the principle of home country supervision would not allow the

control of the foreign entities by the domestic lender of last resort or the deposit insurance agency.

One is left wondering about the creation of deposit insurance systems in Europe. As has been argued, they are unlikely to contribute to the stability of the banking systems. Deposit insurance systems can be interpreted as a tool to create small risk free deposits while putting the cost of bailing out on the insurance fund funded by the banking industry.

It seems to us that the creation of safe deposits should be done without recourse to insurance. European deposit insurance mechanisms should be dismantled. Risk free funds can be created and the market will decide how much will flow into these funds. As to risky banks, they will be evaluated by rating agencies who can provide adequate information.

As there remains a need to foster stability, discretionary lenders of last resort will be necessary. The major advantage of a discretionary safety net as opposed to a more systematic insurance is that it increases the private incentives for monitoring and evaluating bank riskiness. The stability system through deposit insurance or lender of last resort creates two additional problems. They concern the potential liability of the lender of last resort and the implicit subsidy that can be given to domestic banks.

As lenders of last resort will be concerned primarily with their domestic markets and banks operating domestically¹¹, it would seem legitimate that they keep some supervisory power on all institutions operating domestically. That is, host country regulation could

¹¹ It is well known that the Bank of Italy did not intervene to prevent the collapse of the Luxembourg-based Banco Ambrosiano Holdings.

apply¹² to limit the exposure of the domestic central bank. A first alternative to host country control is to harmonize completely the solvency standards, but experience has shown that it would be very difficult to get an agreement on common harmonization of regulations and supervisory practices. A second alternative is to pursue further the process of harmonization and delegate supervision and regulation to a European Central Bank. The problem of accountability would be solved at the European level but not at the world level. Moreover, we do not believe that a centralized regulation at the level of a European Central Bank is necessary, nor desirable. Competition between national regulators will produce efficient standards and prevent the regulatory capture by the regulatees as has happened so often in banking in the last sixty years. It thus seems reasonable to let domestic lender of last resorts keep some host supervisory powers on all banks operating domestically.

A second and related issue is the recognition that public safety net or deposit insurance systems can provide an implicit subsidy that can alter competition. For instance, the leverage of a bank (increased degree of indebtedness) reduces the cost of funding loans, transferring the cost of eventual bank failure to the lender of last resort. To create a level playing field, the Bank for International Settlements and the European Commission have enforced minimal capital requirement and are working on lending limits to a single borrower. The harmonization of prudential regulations is warranted when the objective is to create a level playing field. But harmonization should only be limited to that objective. For instance, the current effort to harmonize the regulation on interest rate risk and foreign

¹²A provision in the second banking directive allows host country control for 'public policy' or 'monetary policy' reasons. The control of the liability of the lender of last resort could fall in these cases (Dermine, 1990_b).

exchange exposures do not appear desirable because they do not provide clear competitive advantage to banks(Dermine, 1991). Quite often the identification of a regulatory subsidy will be questionable. For instance do links between banks and industrial groups provide a competitive advantage which is subsidized by the central bank who takes a greater risk ? It would seem to us that there is no case for harmonization as long as the joint existence of a competitive advantage and a subsidy is not demonstrated. Such a case was pretty clear in the context of loan funding and capital adequacy. It is much debatable in the context of the links between banks and industrial groups.

An economic argument has been developed for a discretionary lender of last resort and for an international harmonization of regulations, not to ensure quality, but rather a level playing field. It should be observed that the host country regulation of risks and the minimal harmonization principle will reduce potential excess in competitive deregulation, so that flexibility and safety would be maintained.

CONCLUSION

The purpose of the paper has been to analyze the integration of European financial markets. While most international agreement have used the national treatment principle and kept domestic authorization and supervision, the European Commission has used a powerful innovative method of integration : The opening of markets with single license, home country control, mutual recognition and very minimal harmonization. Our analysis of the financial services industry has shown two main sources of economic failure calling for national

regulations and the eventual harmonization of regulations. The first source of market failure is the traditional need to protect consumers. It has been argued that domestic regulation of quality is only warranted in those cases where consumers cannot evaluate the quality of a product. Similarly, international harmonization of regulation is necessary if the market participants cannot discriminate among different regulatory structures. It is the author's view that information disclosure, competition between public or private regulators and the creation of risk free funds will be satisfactory in most situations. In any case, different products and classes of consumers will require different regulatory treatment. A call has been made to limit the 'public interest' argument which not only may limit competition but also harm the spontaneous development of private markets. A second market failure calling for regulation and harmonization comes from the need to provide a safety net and the legitimate need to limit moral hazard and risk taking. From this angle, host regulation may be justified to limit the exposure of domestic lender of last resort and the international harmonization of regulations may be necessary to limit implicit public subsidies. It has been argued that harmonization of prudential regulations should only be done when there is a clear case of implicit subsidy and competitive advantage.

As was the case in the last sixty years, the powers given to national regulators in terms of limits on entry, price competition and marketing practices will no doubt shape the degree of competition and the efficiency of the European financial markets. The European Commission and the European Court of Justice will very likely play a major role in the coming years to limit the discretionary powers of national regulators to what is strictly necessary for consumer protection, the control of the exposure of the lender of last resort

and the level playing field.

REFERENCES

- Brimmer, Andrew F. (1989) : "Central Banking and Systemic Risks in Capital Markets", The Journal of Economic Perspectives, Spring.
- Dassesse, Marc and Stuart Isaacs (1985) : EEC Banking Law, London : Lloyds of London Press.
- Clarotti, Paolo (1984) : "Progress and Future Developments of Establishment and Services in the EC in Relation to Banking", Journal of Common Market Studies.
- Dermine, Jean (1990_a) : "The Specialization of Financial Intermediaries, the EC Model", Journal of Common Market Studies, March.
- Dermine, Jean (1990_b) : "Home Country Control and Mutual Recognition", in Financial Institutions in Europe under New Competitive Conditions, C. de Boissieu and D. Fair eds, Amsterdam : Kluwer Academic Publishers.
- Dermine, Jean (Editor) (1990_c) : European Banking in the 1990's, Oxford : Basil Blackwell.
- Dermine, Jean (1991) : "The BIS Proposals for the Measurement of Interest Rate Risk, Some Pitfalls", Journal of International Securities Markets, Spring.
- Kay, John and John Vickers (1988) : "Regulatory Reform in Britain", Economic Policy, 7.
- Mayer, Colin and Damien Neven (1991) : "European Financial Regulation : A Framework for Policy Analysis" in European Financial Integration, A. Giovanini and C. Mayer eds, Cambridge : Cambridge University Press.
- Walter, Ingo (1988) : Global Competition in Financial Services, New York : Ballinger.
- Wandell, Samuel and Meade Winnigerode (1925) : Aaron Burr, New York : G.P. Putnam's Sons.

INSEAD WORKING PAPERS SERIES

			88/12	Spyros MAKRIDAKIS	"Business firms and managers in the 21st century", February 1988
			88/13	Manfred KETS DE VRIES	"Alexithymia in organizational life: the organization man revisited", February 1988.
<u>1988</u>			88/14	Alain NOEL	"The interpretation of strategies: a study of the impact of CEOs on the corporation", March 1988.
88/01	Michael LAWRENCE and Spyros MAKRIDAKIS	"Factors affecting judgemental forecasts and confidence intervals", January 1988.			
88/02	Spyros MAKRIDAKIS	"Predicting recessions and other turning points", January 1988.	88/15	Anil DEOLALIKAR and Lars-Hendrik RÖLLER	"The production of and returns from industrial innovation: an econometric analysis for a developing country", December 1987.
88/03	James TEBOUL	"De-industrialize service for quality", January 1988.	88/16	Gabriel HAWAWINI	"Market efficiency and equity pricing: international evidence and implications for global investing", March 1988.
88/04	Susan SCHNEIDER	"National vs. corporate culture: implications for human resource management", January 1988.	88/17	Michael BURDA	"Monopolistic competition, costs of adjustment and the behavior of European employment", September 1987.
88/05	Charles WYPLOSZ	"The swinging dollar: is Europe out of step?", January 1988.	88/18	Michael BURDA	"Reflections on "Wait Unemployment" in Europe", November 1987, revised February 1988.
88/06	Reinhard ANGELMAR	"Les conflits dans les canaux de distribution", January 1988.	88/19	M.J. LAWRENCE and Spyros MAKRIDAKIS	"Individual bias in judgements of confidence", March 1988.
88/07	Ingemar DIERICKX and Karel COOL	"Competitive advantage: a resource based perspective", January 1988.	88/20	Jean DERMINE, Damien NEVEN and J.F. THISSE	"Portfolio selection by mutual funds, an equilibrium model", March 1988.
88/08	Reinhard ANGELMAR and Susan SCHNEIDER	"Issues in the study of organizational cognition", February 1988.	88/21	James TEBOUL	"De-industrialize service for quality", March 1988 (88/03 Revised).
88/09	Bernard SINCLAIR-DESGAGNÉ	"Price formation and product design through bidding", February 1988.	88/22	Lars-Hendrik RÖLLER	"Proper Quadratic Functions with an Application to AT&T", May 1987 (Revised March 1988).
88/10	Bernard SINCLAIR-DESGAGNÉ	"The robustness of some standard auction game forms", February 1988.			
88/11	Bernard SINCLAIR-DESGAGNÉ	"When stationary strategies are equilibrium bidding strategy: The single-crossing property", February 1988.			

88/23	Sjur Didrik FLAM and Georges ZACCOUR	"Equilibres de Nash-Cournot dans le marché européen du gaz: un cas où les solutions en boucle ouverte et en feedback coïncident", Mars 1988.	88/34	Mihkel M. TOMBAK	"Flexibility: an important dimension in manufacturing", June 1988.
88/24	B. Espen ECKBO and Herwig LANGOHR	"Information disclosure, means of payment, and takeover premia. Public and Private tender offers in France", July 1985, Sixth revision, April 1988.	88/35	Mihkel M. TOMBAK	"A strategic analysis of investment in flexible manufacturing systems", July 1988.
88/25	Everette S. GARDNER and Spyros MAKRIDAKIS	"The future of forecasting", April 1988.	88/36	Vikas TIBREWALA and Bruce BUCHANAN	"A Predictive Test of the NBD Model that Controls for Non-stationarity", June 1988.
88/26	Sjur Didrik FLAM and Georges ZACCOUR	"Semi-competitive Cournot equilibrium in multistage oligopolies", April 1988.	88/37	Murugappa KRISHNAN Lars-Hendrik RÖLLER	"Regulating Price-Liability Competition To Improve Welfare", July 1988.
88/27	Murugappa KRISHNAN Lars-Hendrik RÖLLER	"Entry game with resalable capacity", April 1988.	88/38	Manfred KETS DE VRIES	"The Motivating Role of Envy : A Forgotten Factor in Management", April 88.
88/28	Sumantra GHOSHAL and C. A. BARTLETT	"The multinational corporation as a network: perspectives from interorganizational theory", May 1988.	88/39	Manfred KETS DE VRIES	"The Leader as Mirror : Clinical Reflections", July 1988.
88/29	Naresh K. MALHOTRA, Christian PINSON and Arun K. JAIN	"Consumer cognitive complexity and the dimensionality of multidimensional scaling configurations", May 1988.	88/40	Josef LAKONISHOK and Theo VERMAELEN	"Anomalous price behavior around repurchase tender offers", August 1988.
88/30	Catherine C. ECKEL and Theo VERMAELEN	"The financial fallout from Chernobyl: risk perceptions and regulatory response", May 1988.	88/41	Charles WYPLOSZ	"Assymetry in the EMS: intentional or systemic?", August 1988.
88/31	Sumantra GHOSHAL and Christopher BARTLETT	"Creation, adoption, and diffusion of innovations by subsidiaries of multinational corporations", June 1988.	88/42	Paul EVANS	"Organizational development in the transnational enterprise", June 1988.
88/32	Kasra FERDOWS and David SACKRIDER	"International manufacturing: positioning plants for success", June 1988.	88/43	B. SINCLAIR-DESGAGNÉ	"Group decision support systems implement Bayesian rationality", September 1988.
88/33	Mihkel M. TOMBAK	"The importance of flexibility in manufacturing", June 1988.	88/44	Essam MAHMOUD and Spyros MAKRIDAKIS	"The state of the art and future directions in combining forecasts", September 1988.
			88/45	Robert KORAJCZYK and Claude VIALLET	"An empirical investigation of international asset pricing", November 1986, revised August 1988.
			88/46	Yves DOZ and Amy SHUEN	"From intent to outcome: a process framework for partnerships", August 1988.
			88/47	Alain BULTEZ, Els GUSBRECHTS,	"Asymmetric cannibalism between substitute items listed by retailers", September 1988.

	Philippe NAERT and Piet VANDEN ABEELE		88/59	Martin KILDUFF	"The interpersonal structure of decision making: a social comparison approach to organizational choice", November 1988.
88/48	Michael BURDA	"Reflections on 'Wait unemployment' in Europe, II", April 1988 revised September 1988.	88/60	Michael BURDA	"Is mismatch really the problem? Some estimates of the Chelwood Gate II model with US data", September 1988.
88/49	Nathalie DIERKENS	"Information asymmetry and equity issues", September 1988.	88/61	Lars-Hendrik RÖLLER	"Modelling cost structure: the Bell System revisited", November 1988.
88/50	Rob WEITZ and Arnoud DE MEYER	"Managing expert systems: from inception through updating", October 1987.	88/62	Cynthia VAN HULLE, Theo VERMAELEN and Paul DE WOUTERS	"Regulation, taxes and the market for corporate control in Belgium", September 1988.
88/51	Rob WEITZ	"Technology, work, and the organization: the impact of expert systems", July 1988.	88/63	Fernando NASCIMENTO and Wilfried R. VANHONACKER	"Strategic pricing of differentiated consumer durables in a dynamic duopoly: a numerical analysis", October 1988.
88/52	Susan SCHNEIDER and Reinhard ANGELMAR	"Cognition and organizational analysis: who's minding the store?", September 1988.	88/64	Kasra FERDOWS	"Charting strategic roles for international factories", December 1988.
88/53	Manfred KETS DE VRIES	"Whatever happened to the philosopher-king: the leader's addiction to power, September 1988.	88/65	Arnoud DE MEYER and Kasra FERDOWS	"Quality up, technology down", October 1988
88/54	Lars-Hendrik RÖLLER and Mihkel M. TOMBAK	"Strategic choice of flexible production technologies and welfare implications", October 1988	88/66	Nathalie DIERKENS	"A discussion of exact measures of information asymmetry: the example of Myers and Majluf model or the importance of the asset structure of the firm", December 1988.
88/55	Peter BOSSAERTS and Pierre HILLION	"Method of moments tests of contingent claims asset pricing models", October 1988.	88/67	Paul S. ADLER and Kasra FERDOWS	"The chief technology officer", December 1988.
88/56	Pierre HILLION	"Size-sorted portfolios and the violation of the random walk hypothesis: Additional empirical evidence and implication for tests of asset pricing models", June 1988.	<u>1989</u>		
88/57	Wilfried VANHONACKER and Lydia PRICE	"Data transferability: estimating the response effect of future events based on historical analogy", October 1988.	89/01	Joyce K. BYRER and Tawfik JELASSI	"The impact of language theories on DSS dialog", January 1989.
88/58	B. SINCLAIR-DESGAGNÉ and Mihkel M. TOMBAK	"Assessing economic inequality", November 1988.	89/02	Louis A. LE BLANC and Tawfik JELASSI	"DSS software selection: a multiple criteria decision methodology", January 1989.

89/03	Beth H. JONES and Tawfik JELASSI	"Negotiation support: the effects of computer intervention and conflict level on bargaining outcome", January 1989.	89/13	Manfred KETS DE VRIES	"The impostor syndrome: a disquieting phenomenon in organizational life", February 1989.
89/04	Kasra FERDOWS and Arnoud DE MEYER	"Lasting improvement in manufacturing performance: In search of a new theory", January 1989.	89/14	Reinhard ANGELMAR	"Product innovation: a tool for competitive advantage", March 1989.
89/05	Martin KILDUFF and Reinhard ANGELMAR	"Shared history or shared culture? The effects of time, culture, and performance on institutionalization in simulated organizations", January 1989.	89/15	Reinhard ANGELMAR	"Evaluating a firm's product innovation performance", March 1989.
89/06	Mihkel M. TOMBAK and B. SINCLAIR-DESGAGNÉ	"Coordinating manufacturing and business strategies: I", February 1989.	89/16	Wilfried VANHONACKER, Donald LEHMANN and Fareena SULTAN	"Combining related and sparse data in linear regression models", February 1989.
89/07	Damien J. NEVEN	"Structural adjustment in European retail banking. Some view from industrial organisation", January 1989.	89/17	Gilles AMADO, Claude FAUCHEUX and André LAURENT	"Changement organisationnel et réalités culturelles: contrastes franco-américains", March 1989.
89/08	Arnoud DE MEYER and Hellmut SCHÜTTE	"Trends in the development of technology and their effects on the production structure in the European Community", January 1989.	89/18	Srinivasan BALAK- RISHNAN and Mitchell KOZA	"Information asymmetry, market failure and joint-ventures: theory and evidence", March 1989.
89/09	Damien NEVEN, Carmen MATUTES and Marcel CORSTJENS	"Brand proliferation and entry deterrence", February 1989.	89/19	Wilfried VANHONACKER, Donald LEHMANN and Fareena SULTAN	"Combining related and sparse data in linear regression models", Revised March 1989.
89/10	Nathalie DIERKENS, Bruno GERARD and Pierre HILLION	"A market based approach to the valuation of the assets in place and the growth opportunities of the firm", December 1988.	89/20	Wilfried VANHONACKER and Russell WINER	"A rational random behavior model of choice", Revised March 1989.
89/11	Manfred KETS DE VRIES and Alain NOEL	"Understanding the leader-strategy interface: application of the strategic relationship interview method", February 1989.	89/21	Arnoud de MEYER and Kasra FERDOWS	"Influence of manufacturing improvement programmes on performance", April 1989.
89/12	Wilfried VANHONACKER	"Estimating dynamic response models when the data are subject to different temporal aggregation", January 1989.	89/22	Manfred KETS DE VRIES and Sydney PERZOW	"What is the role of character in psychoanalysis?" April 1989.
			89/23	Robert KORAJCZYK and Claude VIALLET	"Equity risk premia and the pricing of foreign exchange risk" April 1989.
			89/24	Martin KILDUFF and Mitchel ABOLAFIA	"The social destruction of reality: Organisational conflict as social drama" zApril 1989.

89/25	Roger BETANCOURT and David GAUTSCHI	"Two essential characteristics of retail markets and their economic consequences" March 1989.	89/36	Martin KILDUFF	"A dispositional approach to social networks: the case of organizational choice", May 1989.
89/26	Charles BEAN, Edmond MALINVAUD, Peter BERNHOLZ, Francesco GIAVAZZI and Charles WYPLOSZ	"Macroeconomic policies for 1992: the transition and after", April 1989.	89/37	Manfred KETS DE VRIES	"The organisational fool: balancing a leader's hubris", May 1989.
89/27	David KRACKHARDT and Martin KILDUFF	"Friendship patterns and cultural attributions: the control of organizational diversity", April 1989.	89/38	Manfred KETS DE VRIES	"The CEO blues", June 1989.
89/28	Martin KILDUFF	"The interpersonal structure of decision making: a social comparison approach to organizational choice", Revised April 1989.	89/39	Robert KORAJCZYK and Claude VIALLET	"An empirical investigation of international asset pricing", (Revised June 1989).
89/29	Robert GOGEL and Jean-Claude LARRECHE	"The battlefield for 1992: product strength and geographic coverage", May 1989.	89/40	Balaji CHAKRAVARTHY	"Management systems for innovation and productivity", June 1989.
89/30	Lars-Hendrik ROLLER and Mihkel M. TOMBAK	"Competition and Investment in Flexible Technologies", May 1989.	89/41	B. SINCLAIR-DESGAGNE and Nathalie DIERKENS	"The strategic supply of precisions", June 1989.
89/31	Michael C. BURDA and Stefan GERLACH	"Intertemporal prices and the US trade balance in durable goods", July 1989.	89/42	Robert ANSON and Tawfik JELASSI	"A development framework for computer-supported conflict resolution", July 1989.
89/32	Peter HAUG and Tawfik JELASSI	"Application and evaluation of a multi-criteria decision support system for the dynamic selection of U.S. manufacturing locations", May 1989.	89/43	Michael BURDA	"A note on firing costs and severance benefits in equilibrium unemployment", June 1989.
89/33	Bernard SINCLAIR-DESGAGNÉ	"Design flexibility in monopsonistic industries", May 1989.	89/44	Balaji CHAKRAVARTHY and Peter LORANGE	"Strategic adaptation in multi-business firms", June 1989.
89/34	Sumantra GHOSHAL and Nittin NOHRIA	"Requisite variety versus shared values: managing corporate-division relationships in the M-Form organisation", May 1989.	89/45	Rob WEITZ and Arnoud DE MEYER	"Managing expert systems: a framework and case study", June 1989.
89/35	Jean DERMINE and Pierre HILLION	"Deposit rate ceilings and the market value of banks: The case of France 1971-1981", May 1989.	89/46	Marcel CORSTJENS, Carmen MATUTES and Damien NEVEN	"Entry Encouragement", July 1989.
			89/47	Manfred KETS DE VRIES and Christine MEAD	"The global dimension in leadership and organization: issues and controversies", April 1989.
			89/48	Damien NEVEN and Lars-Hendrik RÖLLER	"European integration and trade flows", August 1989.

89/49	Jean DERMINE	"Home country control and mutual recognition", July 1989.	89/62 (TM)	Arnoud DE MEYER	"Technology strategy and international R&D operations", October 1989.
89/50	Jean DERMINE	"The specialization of financial institutions, the EEC model", August 1989.	89/63 (TM)	Enver YUCESAN and Lee SCHRUBEN	"Equivalence of simulations: A graph approach", November 1989.
89/51	Spyros MAKRIDAKIS	"Sliding simulation: a new approach to time series forecasting", July 1989.	89/64 (TM)	Enver YUCESAN and Lee SCHRUBEN	"Complexity of simulation models: A graph theoretic approach", November 1989.
89/52	Arnoud DE MEYER	"Shortening development cycle times: a manufacturer's perspective", August 1989.	89/65 (TM, AC, FIN)	Soumitra DUTTA and Piero BONISSONE	"MARS: A mergers and acquisitions reasoning system", November 1989.
89/53	Spyros MAKRIDAKIS	"Why combining works?", July 1989.			
89/54	S. BALAKRISHNAN and Mitchell KOZA	"Organisation costs and a theory of joint ventures", September 1989.	89/66 (TM,EP)	B. SINCLAIR-DESGAGNÉ	"On the regulation of procurement bids", November 1989.
89/55	H. SCHUTTE	"Euro-Japanese cooperation in information technology", September 1989.	89/67 (FIN)	Peter BOSSAERTS and Pierre HILLION	"Market microstructure effects of government intervention in the foreign exchange market", December 1989.
89/56	Wilfried VANHONACKER and Lydia PRICE	"On the practical usefulness of meta-analysis results", September 1989.			
			<u>1990</u>		
89/57	Taekwon KIM, Lars-Hendrik RÖLLER and Mihkel TOMBAK	"Market growth and the diffusion of multiproduct technologies", September 1989.	90/01 TM/EP/AC	B. SINCLAIR-DESGAGNÉ	"Unavoidable Mechanisms", January 1990.
89/58 (EP,TM)	Lars-Hendrik RÖLLER and Mihkel TOMBAK	"Strategic aspects of flexible production technologies", October 1989.	90/02 EP	Michael BURDA	"Monopolistic Competition, Costs of Adjustment, and the Behaviour of European Manufacturing Employment", January 1990.
89/59 (OB)	Manfred KETS DE VRIES, Daphna ZEVADI, Alain NOEL and Mihkel TOMBAK	"Locus of control and entrepreneurship: a three-country comparative study", October 1989.	90/03 TM	Arnoud DE MEYER	"Management of Communication in International Research and Development", January 1990.
89/60 (TM)	Enver YUCESAN and Lee SCHRUBEN	"Simulation graphs for design and analysis of discrete event simulation models", October 1989.	90/04 FIN/EP	Gabriel HAWAWINI and Eric RAJENDRA	"The Transformation of the European Financial Services Industry: From Fragmentation to Integration", January 1990.
89/61 (All)	Susan SCHNEIDER and Arnoud DE MEYER	"Interpreting and responding to strategic issues: The impact of national culture", October 1989.	90/05 FIN/EP	Gabriel HAWAWINI and Bertrand JACQUILLAT	"European Equity Markets: Toward 1992 and Beyond", January 1990.

90/06 FIN/EP	Gabriel HAWAWINI and Eric RAJENDRA	"Integration of European Equity Markets: Implications of Structural Change for Key Market Participants to and Beyond 1992", January 1990.	90/17 FIN	Nathalie DIERKENS	"Information Asymmetry and Equity Issues", Revised January 1990.
90/07 FIN/EP	Gabriel HAWAWINI	"Stock Market Anomalies and the Pricing of Equity on the Tokyo Stock Exchange", January 1990.	90/18 MKT	Wilfried VANHONACKER	"Managerial Decision Rules and the Estimation of Dynamic Sales Response Models", Revised January 1990.
90/08 TM/EP	Tawfik JELASSI and B. SINCLAIR-DESGAGNÉ	"Modelling with MCDSS: What about Ethics?", January 1990.	90/19 TM	Beth JONES and Tawfik JELASSI	"The Effect of Computer Intervention and Task Structure on Bargaining Outcome", February 1990.
90/09 EP/FIN	Alberto GIOVANNINI and Jae WON PARK	"Capital Controls and International Trade Finance", January 1990.	90/20 TM	Tawfik JELASSI, Gregory KERSTEN and Stanley ZIONTS	"An Introduction to Group Decision and Negotiation Support", February 1990.
90/10 TM	Joyce BRYER and Tawfik JELASSI	"The Impact of Language Theories on DSS Dialog", January 1990.	90/21 FIN	Roy SMITH and Ingo WALTER	"Reconfiguration of the Global Securities Industry in the 1990's", February 1990.
90/11 TM	Enver YUCESAN	"An Overview of Frequency Domain Methodology for Simulation Sensitivity Analysis", January 1990.	90/22 FIN	Ingo WALTER	"European Financial Integration and Its Implications for the United States", February 1990.
90/12 EP	Michael BURDA	"Structural Change, Unemployment Benefits and High Unemployment: A U.S.-European Comparison", January 1990.	90/23 EP/SM	Damien NEVEN	"EEC Integration towards 1992: Some Distributional Aspects", Revised December 1989
90/13 TM	Soumitra DUTTA and Shashi SHEKHAR	"Approximate Reasoning about Temporal Constraints in Real Time Planning and Search", January 1990.	90/24 FIN/EP	Lars Tyge NIELSEN	"Positive Prices in CAPM", January 1990.
90/14 TM	Albert ANGEHRN and Hans-Jakob LÜTHI	"Visual Interactive Modelling and Intelligent DSS: Putting Theory Into Practice", January 1990.	90/25 FIN/EP	Lars Tyge NIELSEN	"Existence of Equilibrium in CAPM", January 1990.
90/15 TM	Arnoud DE MEYER, Dirk DESCHOOLMEESTER, Rudy MOENAERT and Jan BARBE	"The Internal Technological Renewal of a Business Unit with a Mature Technology", January 1990.	90/26 OB/BP	Charles KADUSHIN and Michael BRIMM	"Why networking Fails: Double Binds and the Limitations of Shadow Networks", February 1990.
90/16 FIN	Richard LEVICH and Ingo WALTER	"Tax-Driven Regulatory Drag: European Financial Centers in the 1990's", January 1990.	90/27 TM	Abbas FOROUGHFI and Tawfik JELASSI	"NSS Solutions to Major Negotiation Stumbling Blocks", February 1990.
			90/28 TM	Arnoud DE MEYER	"The Manufacturing Contribution to Innovation", February 1990.

90/29 FIN/AC	Nathalie DIERKENS	"A Discussion of Correct Measures of Information Asymmetry", January 1990.	90/40 OB	Manfred KETS DE VRIES	"Leaders on the Couch: The case of Roberto Calvi", April 1990.
90/30 FIN/EP	Lars Tyge NIELSEN	"The Expected Utility of Portfolios of Assets", March 1990.	90/41 FIN/EP	Gabriel HAWAWINI, Itzhak SWARY and Ik HWAN JANG	"Capital Market Reaction to the Announcement of Interstate Banking Legislation", March 1990.
90/31 MKT/EP	David GAUTSCHI and Roger BETANCOURT	"What Determines U.S. Retail Margins?", February 1990.	90/42 MKT	Joel STECKEL and Wilfried VANHONACKER	"Cross-Validating Regression Models in Marketing Research", (Revised April 1990).
90/32 SM	Srinivasan BALAK- RISHNAN and Mitchell KOZA	"Information Asymmetry, Adverse Selection and Joint-Ventures: Theory and Evidence", Revised, January 1990.	90/43 FIN	Robert KORAJCZYK and Claude VIALLET	"Equity Risk Premia and the Pricing of Foreign Exchange Risk", May 1990.
90/33 OB	Caren SIEHL, David BOWEN and Christine PEARSON	"The Role of Rites of Integration in Service Delivery", March 1990.	90/44 OB	Gilles AMADO, Claude FAUCHEUX and André LAURENT	"Organisational Change and Cultural Realities: Franco-American Contrasts", April 1990.
90/34 FIN/EP	Jean DERMINE	"The Gains from European Banking Integration, a Call for a Pro-Active Competition Policy", April 1990.	90/45 TM	Soumitra DUTTA and Piero BONISSONE	"Integrating Case Based and Rule Based Reasoning: The Possibilistic Connection", May 1990.
90/35 EP	Jae Won PARK	"Changing Uncertainty and the Time-Varying Risk Premia in the Term Structure of Nominal Interest Rates", December 1988, Revised March 1990.	90/46 TM	Spyros MAKRIDAKIS and Michèle HIBON	"Exponential Smoothing: The Effect of Initial Values and Loss Functions on Post-Sample Forecasting Accuracy".
90/36 TM	Arnoud DE MEYER	"An Empirical Investigation of Manufacturing Strategies in European Industry", April 1990.	90/47 MKT	Lydia PRICE and Wilfried VANHONACKER	"Improper Sampling in Natural Experiments: Limitations on the Use of Meta-Analysis Results in Bayesian Updating", Revised May 1990.
90/37 TM/OB/SM	William CATS-BARIL	"Executive Information Systems: Developing an Approach to Open the Possibles", April 1990.	90/48 EP	Jae WON PARK	"The Information in the Term Structure of Interest Rates: Out-of-Sample Forecasting Performance", June 1990.
90/38 MKT	Wilfried VANHONACKER	"Managerial Decision Behaviour and the Estimation of Dynamic Sales Response Models", (Revised February 1990).	90/49 TM	Soumitra DUTTA	"Approximate Reasoning by Analogy to Answer Null Queries", June 1990.
90/39 TM	Louis LE BLANC and Tawfik JELASSI	"An Evaluation and Selection Methodology for Expert System Shells", May 1990.	90/50 EP	Daniel COHEN and Charles WYPLOSZ	"Price and Trade Effects of Exchange Rates Fluctuations and the Design of Policy Coordination", April 1990.

90/51 EP	Michael BURDA and Charles WYPLOSZ	"Gross Labour Market Flows in Europe: Some Stylized Facts", June 1990.	90/63 SM	Sumantra GHOSHAL and Eleanor WESTNEY	"Organising Competitor Analysis Systems", August 1990
90/52 FIN	Lars Tyge NIELSEN	"The Utility of Infinite Menus", June 1990.	90/64 SM	Sumantra GHOSHAL	"Internal Differentiation and Corporate Performance: Case of the Multinational Corporation", August 1990
90/53 EP	Michael Burda	"The Consequences of German Economic and Monetary Union", June 1990.	90/65 EP	Charles WYPLOSZ	"A Note on the Real Exchange Rate Effect of German Unification", August 1990
90/54 EP	Damien NEVEN and Colin MEYER	"European Financial Regulation: A Framework for Policy Analysis", (Revised May 1990).	90/66 TM/SE/FIN	Soumitra DUTTA and Piero BONISSONE	"Computer Support for Strategic and Tactical Planning in Mergers and Acquisitions", September 1990
90/55 EP	Michael BURDA and Stefan GERLACH	"Intertemporal Prices and the US Trade Balance", (Revised July 1990).	90/67 TM/SE/FIN	Soumitra DUTTA and Piero BONISSONE	"Integrating Prior Cases and Expert Knowledge In a Mergers and Acquisitions Reasoning System", September 1990
90/56 EP	Damien NEVEN and Lars-Hendrik RÖLLER	"The Structure and Determinants of East-West Trade: A Preliminary Analysis of the Manufacturing Sector", July 1990	90/68 TM/SE	Soumitra DUTTA	"A Framework and Methodology for Enhancing the Business Impact of Artificial Intelligence Applications", September 1990
90/57 FIN/EP/ TM	Lars Tyge NIELSEN	Common Knowledge of a Multivariate Aggregate Statistic", July 1990	90/69 TM	Soumitra DUTTA	"A Model for Temporal Reasoning in Medical Expert Systems", September 1990
90/58 FIN/EP/TM	Lars Tyge NIELSEN	"Common Knowledge of Price and Expected Cost in an Oligopolistic Market", August 1990	90/70 TM	Albert ANGEHRN	"Triple C': A Visual Interactive MCDSS", September 1990
90/59 FIN	Jean DERMINE and Lars-Hendrik RÖLLER	"Economies of Scale and Scope in the French Mutual Funds (SICAV) Industry", August 1990	90/71 MKT	Philip PARKER and Hubert GATIGNON	"Competitive Effects in Diffusion Models: An Empirical Analysis", September 1990
90/60 TM	Peri IZ and Tawfik JELASSI	"An Interactive Group Decision Aid for Multiobjective Problems: An Empirical Assessment", September 1990	90/72 TM	Enver YÜCESAN	"Analysis of Markov Chains Using Simulation Graph Models", October 1990
90/61 TM	Pankaj CHANDRA and Mihkel TOMBAK	"Models for the Evaluation of Manufacturing Flexibility", August 1990	90/73 TM	Arnoud DE MEYER and Kasra FERDOWS	"Removing the Barriers in Manufacturing", October 1990
90/62 EP	Damien NEVEN and Menno VAN DUJ	"Public Policy Towards TV Broadcasting in the Netherlands", August 1990	90/74 SM	Sumantra GHOSHAL and Nitin NOHRIA	"Requisite Complexity: Organising Headquarters- Subsidiary Relations in MNCs", October 1990

90/75 MKT	Roger BETANCOURT and David GAUTSCHI	"The Outputs of Retail Activities: Concepts, Measurement and Evidence", October 1990	90/87 FIN/EP	Lars Tyge NIELSEN	"Existence of Equilibrium in CAPM: Further Results", December 1990
90/76 MKT	Wilfried VANHONACKER	"Managerial Decision Behaviour and the Estimation of Dynamic Sales Response Models", Revised October 1990	90/88 OB/MKT	Susan C. SCHNEIDER and Reinhard ANGELMAR	"Cognition in Organisational Analysis: Who's Minding the Store?" Revised, December 1990
90/77 MKT	Wilfried VANHONACKER	"Testing the Koyck Scheme of Sales Response to Advertising: An Aggregation-Independent Autocorrelation Test", October 1990	90/89 OB	Manfred F.R. KETS DE VRIES	"The CEO Who Couldn't Talk Straight and Other Tales from the Board Room," December 1990
90/78 EP	Michael BURDA and Stefan GERLACH	"Exchange Rate Dynamics and Currency Unification: The Ostmark - DM Rate", October 1990	90/90 MKT	Philip PARKER	"Price Elasticity Dynamics over the Adoption Lifecycle: An Empirical Study," December 1990
90/79 TM	Anil GABA	"Inferences with an Unknown Noise Level in a Bernoulli Process", October 1990			
90/80 TM	Anil GABA and Robert WINKLER	"Using Survey Data in Inferences about Purchase Behaviour", October 1990	<u>1991</u>		
90/81 TM	Tawfik JELASSI	"Du Présent au Futur: Bilan et Orientations des Systèmes Interactifs d'Aide à la Décision," October 1990	91/01 TM/SM	Luk VAN WASSENHOVE, Leonard FORTUIN and Paul VAN BEEK	"Operational Research Can Do More for Managers Than They Think!," January 1991
90/82 EP	Charles WYPLOSZ	"Monetary Union and Fiscal Policy Discipline," November 1990	91/02 TM/SM	Luk VAN WASSENHOVE, Leonard FORTUIN and Paul VAN BEEK	"Operational Research and Environment," January 1991
90/83 FIN/TM	Nathalie DIERKENS and Bernard SINCLAIR-DESGAGNE	"Information Asymmetry and Corporate Communication: Results of a Pilot Study", November 1990	91/03 FIN	Pekka HIETALA and Timo LÖYTTYNIEMI	"An Implicit Dividend Increase in Rights Issues: Theory and Evidence," January 1991
90/84 MKT	Philip M. PARKER	"The Effect of Advertising on Price and Quality: The Optometric Industry Revisited," December 1990	91/04 FIN	Lars Tyge NIELSEN	"Two-Fund Separation, Factor Structure and Robustness," January 1991
90/85 MKT	Avijit GHOSH and Vikas TIBREWALA	"Optimal Timing and Location in Competitive Markets," November 1990	91/05 OB	Susan SCHNEIDER	"Managing Boundaries in Organisations," January 1991
90/86 EP/TM	Olivier CADOT and Bernard SINCLAIR-DESGAGNE	"Prudence and Success in Politics," November 1990	91/06 OB	Manfred KETS DE VRIES, Danny MILLER and Alain NOEL	"Understanding the Leader-Strategy Interface: Application of the Strategic Relationship Interview Method," January 1990 (89/11, revised April 1990)

91/07 EP	Olivier CADOT	"Lending to Insolvent Countries: A Paradoxical Story," January 1991	91/19 MKT	Vikas TIBREWALA and Bruce BUCHANAN	"An Aggregate Test of Purchase Regularity", March 1991
91/08 EP	Charles WYPLOSZ	"Post-Reform East and West: Capital Accumulation and the Labour Mobility Constraint," January 1991	91/20 MKT	Darius SABAVALA and Vikas TIBREWALA	"Monitoring Short-Run Changes in Purchasing Behaviour", March 1991
91/09 TM	Spyros MAKRIDAKIS	"What can we Learn from Failure?", February 1991	91/21 SM	Sumantra GHOSHAL, Harry KORINE and Gabriel SZULANSKI	"Interunit Communication within MNCs: The Influence of Formal Structure Versus Integrative Processes", April 1991
91/10 TM	Luc Van WASSENHOVE and C. N. POTTS	"Integrating Scheduling with Batching and Lot-Sizing: A Review of Algorithms and Complexity", February 1991	91/22 EP	David GOOD, Lars-Hendrik RÖLLER and Robin SICKLES	"EC Integration and the Structure of the Franco-American Airline Industries: Implications for Efficiency and Welfare", April 1991
91/11 TM	Luc VAN WASSENHOVE et al.	"Multi-Item Lotsizing in Capacitated Multi-Stage Serial Systems", February 1991	91/23 TM	Spyros MAKRIDAKIS and Michèle HIBON	"Exponential Smoothing: The Effect of Initial Values and Loss Functions on Post-Sample Forecasting Accuracy", April 1991 (Revision of 90/46)
91/12 TM	Albert ANGEHRN	"Interpretative Computer Intelligence: A Link between Users, Models and Methods in DSS", February 1991	91/24 TM	Louis LE BLANC and Tawfik JELASSI	"An Empirical Assessment of Choice Models for Software Evaluation and Selection", May 1991
91/13 EP	Michael BURDA	"Labor and Product Markets in Czechoslovakia and the Ex-GDR: A Twin Study", February 1991	91/25 SM/TM	Luk N. VAN WASSENHOVE and Charles J. CORBETT	"Trade-Offs? What Trade-Offs?" April 1991
91/14 MKT	Roger BETANCOURT and David GAUTSCHI	"The Output of Retail Activities: French Evidence", February 1991	91/26 TM	Luk N. VAN WASSENHOVE and C.N. POTTS	"Single Machine Scheduling to Minimize Total Late Work", April 1991
91/15 OB	Manfred F.R. KETS DE VRIES	"Exploding the Myth about Rational Organisations and Executives", March 1991	91/27 FIN	Nathalie DIERKENS	"A Discussion of Correct Measures of Information Asymmetry: The Example of Myers and Majluf's Model or the Importance of the Asset Structure of the Firm", May 1991
91/16 TM	Arnoud DE MEYER and Kasra FERDOWS et.al.	"Factories of the Future: Executive Summary of the 1990 International Manufacturing Futures Survey", March 1991	91/28 MKT	Philip M. PARKER	"A Note on: 'Advertising and the Price and Quality of Optometric Services', June 1991
91/17 TM	Dirk CATTRYSSÉ, Roelof KUIK, Marc SALOMON and Luk VAN WASSENHOVE	"Heuristics for the Discrete Lotsizing and Scheduling Problem with Setup Times", March 1991	91/29 TM	Tawfik JELASSI and Abbas FOROUGHII	"An Empirical Study of an Interactive, Session-Oriented Computerised Negotiation Support System (NSS)", June 1991
91/18 TM	C.N. POTTS and Luk VAN WASSENHOVE	"Approximation Algorithms for Scheduling a Single Machine to Minimize Total Late Work", March 1991			

