WORLD TRADE ORGANIZATION

RESTRICTED

S/C/W/26

7 October 1997

(97-4342)

Council for Trade in Services

ECONOMIC EFFECTS OF SERVICES LIBERALIZATION

Background Note by the Secretariat

1. The Secretariat has prepared this Note at the request of the Council for Trade in Services. The Note is intended to form part of a broader information exchange programme, as outlined in the Report of the Council for Trade in Services to the General Council (S/C/3), which seeks to "contribute to the assessment of trade in services which would assist future negotiations in the services sector". In keeping with the Council's request, the following considerations are general in nature and do not elaborate on sector-specific developments. A Bibliography of empirical studies examining the effects of liberalization policies in individual countries and sectors, published since 1990, has been annexed for further information.

A. THE ROLE OF SERVICES IN ECONOMIC DEVELOPMENT

2. While there are many differences in employment and production patterns among countries - reflecting development levels, geographic location or resource endowment - economists have long identified a few common features or trends. These include in particular the strong and, as incomes grow, expanding rôle of services as a source of economic activity. In the mid-1990s, for example, the services sector's share in GDP amounted to some 40 per cent in Uganda, 50 per cent in Zambia, over 60 per cent in Korea and Brazil, and 80 per cent in the United States.[1]

3. The services sector's expansion has been attributed to demand as well as supply factors. On the one hand, demand for many services is highly income-elastic, i.e. as people grow richer, their consumption of services such as tourism, education and health, expands more rapidly than their demand for manufactures and agricultural products. On the other hand, productivity growth is lower in many services sectors than in manufacturing and modern agriculture, reflecting the fact, among other things, that it is generally more difficult to substitute capital for labour in services production (restaurants, hotels, bus transport, etc.). In turn, this has led prices of many traditional services to increase relatively faster than prices of goods.

4. To a certain degree, the growing share of services in GDP, in particular if measured at current prices, also reflects organizational changes in an economy. On efficiency grounds, manufacturing companies have tended increasingly to outsource services such as design, financing or transport, which they previously provided in-house, and purchase them from specialized suppliers. Reflecting their infrastructural nature, many modern services sectors, including telecommunications, financial services and transport, not only provide final consumer products, but basic production inputs for a wide variety of user industries.

[1]The data are taken from recent WTO Trade Policy Reviews. Cross-country comparability may, however, suffer from differences in statistical concepts and other measurement problems (e.g. difficulties in distinguishing between the formal and the informal sector).

5. While also rising over time, the services share in foreign trade has been smaller than its share in production and employment. International trade flows continue to consist predominantly of goods, corroborating the conventional perception of services being less transportable and tradeable than goods. For instance, while accounting for some four-fifths of domestic production, the United States' services sector currently contributes no more than one-fourth of total U.S. exports. (The share in imports is one-sixth.) Overall, according to balance-of-payments statistics, the share of services in total world trade is in the order of one-fifth. In absolute terms, this represented some US$1,200 billion in 1995, which was about twice the value of total world trade in office machines and telecom equipment.

6. Conventional trade statistics, on a balance-of-payments basis, heavily understate the economic stakes involved. First, they do not cover services incorporated in goods, such as design or technical expertise. Second, data on cross-border flows do not capture a critically important mode of services trade, namely production and sales through affiliates abroad. (Hotel and fast-food chains, tour operators, consultants, banks and insurance companies, credit-card operators, etc.) Using a wider definition including such supplies, services prove far more "tradeable" than conventional accounting may suggest.

B. THE CASE FOR MARKET LIBERALIZATION

7. From an economic perspective, there is no difference in principle between the production of goods and services. Both are governed by similar sets of objectives, incentives and constraints. In both cases, the genuine economic task of a firm consists of employing and co-ordinating the use of production factors - capital, labour and technology - with a view to satisfying the demand of potential customers, domestic or foreign. The firm's profitability and, thus, its potential for survival and growth is determined by its capacity to anticipate, and respond to, demand and supply factors such as wages, capital cost, input prices and the market conditions for the final product.

8. In a market economy, private profitability considerations are the driving force in determining the allocation of production within and between firms, sectors and countries. Open markets are expected to encourage quality improvement and product and process innovation; reduce the scope for waste and rent-seeking; constrain the economic power of any individual actor; and ensure users of the continued availability of the relevant goods and services. Market-based structural change is thus helping to promote an optimal balance, from a user's perspective, between product quality, product variety and price. At the same time, the possibility of drawing on alternative sources of supply reduces the risk of economic shocks and disturbances. What does this imply for the orientation and conduct of economic policies?

C. POLICY IMPLICATIONS

9. The focus of market-based policies is on creating and improving the institutional framework for private decision-making. In this context, emphasis is placed on ensuring competitive conditions on factor and product markets, enhancing transparency, removing entry barriers and price distortions, and avoiding divergences between private and social efficiency considerations. Appropriate initiatives might thus include, depending on the actual situation in a sector and country, (a) pro-competitive policy initiatives to abolish, for example, traditional exclusivity rights and access barriers; (b) external market opening to confront domestic industries with best international practice; (c) information requirements and, in sensitive areas, prudential rules to protect public interests; (d) institutional reforms providing for independent regulatory supervision; and (e) measures to incorporate social costs, attributable to environmental impacts and other externalities, in production and investment decisions.

10. While such policy initiatives are likely to benefit any sector of economic activity, it may be argued that they tend to be more urgent and, at the same time, more challenging and promising in key services industries. The need for, and the potential benefits of, institutional reforms in services sectors are underscored by the following considerations:

The traditional framework of administrative regulation and control in many services areas, intended to ensure reliability and stability of supplies, is ill-suited to an environment characterized by rapid technological and economic change.

The quantity of investment and the expertise required to up-grade and operate modern services sectors, like telecom, may go well beyond what government bureaucracies are normally prepared to handle. At the same time, empirical evidence suggests that early liberalization can contribute substantially to a country's locational attractiveness for new investment in modern services industries.

Large services sectors have long been tightly regulated, suggesting that the potential for liberalization, and the ensuing economic benefits, are particularly high.

In many countries, liberalization and deregulation initiatives have initially eluded services, reflecting the operation of long-entrenched public monopolies (e.g. in basic telecommunications, insurance, retail banking and rail transport) and the traditional view of services as being less transportable and tradeable - and thus less amenable to trade liberalization - than goods. However, this view has been confounded by regulatory and technical developments (e.g. the emergence of satellite communications and electronic banking) and the attendant reduction of both policy-induced and technological barriers to competition and trade.

In the absence of market-driven reforms, the secular expansion of many services sectors in the development process would gradually broaden government regulation and control.

Demand and supply shifts benefiting sectors such as financial services, telecommunications or air transport would expand, if current régimes were maintained, the reach of regulatory control over production and employment in an economy.

Given the infrastructural nature of many services sectors, efficiency enhancing reforms - including regulatory and institutional changes - are likely to promote the competitiveness of many downstream activities and, thus, improve overall economic performance.

From that perspective, services liberalization would not be viewed as a concession to other countries, but a precondition for enhancing domestic industrial performance. The inclusion of services into the mainstream of the multilateral system, in the Uruguay Round, enables governments to lock in such reforms in an international context and, thus, protect them from slippages and reversals.

11. In many cases, a distinction between international and domestic liberalization would be artificial. From a trade policy perspective, external and internal market opening should normally go hand in hand in order to ensure that the potential benefits of more liberal access conditions are not contravened by persisting internal barriers. This is also reflected in the scope of market access commitments assumed by WTO Members under the GATS. The disciplines of Article XVI extend to both discriminatory and non-discriminatory restrictions, covering measures targeted specifically against foreign suppliers as well as others affecting all market participants.

D. ADJUSTMENT-RELATED COSTS AND BENEFITS

12. Adjustment is at the core of a market system, and adjustment is not without cost. While economic policies may aim to improve the conditions for investment and growth - through infrastructural improvement, tax and tariff reform, and prudent macroeconomic management - they can not reasonably guarantee prosperity without pain. Governments thus tend to be confronted with demands for protection, in particular if large and well-organized sectors come under pressure.

13. Most obvious, from a social policy perspective, are the costs associated with labour displacement, the depreciation of skills, the need for professional re-training and, possibly regional relocation. Although there may be a case for government assistance to facilitate adjustment, it is doubtful whether such costs could justify initiatives to suspend market signals and slow down or prevent structural change. First, adjustment processes tend to be temporary in nature and any ensuing losses would need to be set against future income flows. Second, from an economy-wide perspective, such losses should be compared with the consequences of non-adjustment and the dynamic costs inflicted on taxpayers, consumers and/or user industries. Governments would also need to contemplate the possibility, if one sector is shielded from market forces, that this might serve as a precedent for many others. Sectoral protection can prove extremely contagious.

14. It may be argued with some justification, however, that the direct social consequences of adjustment are less serious in many services sectors than in traditional mining and manufacturing industries or in agriculture. Consider the following hypotheses:

> Adjustments in services industries, such as banking, insurance or telecommunications, generally occur within a dynamic sectoral environment, where expanding segments rapidly offer employment alternatives for redundancies in shrinking areas.
>
> Owing to a lower degree of sector-specific professional specialization, service sector employees tend to be more mobile in general than, for example, miners or farmers.
>
> Professionals in some traditionally protected services areas - such as air transport or legal services - are not normally at the bottom of the national income league and, thus, may have more scope for "concessions" than workers in sunset manufacturing industries.

Moreover, it is worth recalling that liberalization-induced adjustment is likely to generate significant dividends, in terms of overall economic performance, given the infrastructural nature of many modern services sectors. Potential "losers" will find it easier to re-position themselves within a dynamic economy generating favourable income and employment opportunities than in a stagnant system defying change.

15. The key rôle played by telecommunications, banking and other services in a modern-day economy is not without risks. Technical or financial disturbances emanating from these sectors may have profound economy-wide implications. It would be next to impossible, for example, to shield even the smallest producer in a remote region from the shockwave of a larger bank crash. Similarly, the interruption of transport and telecommunication links could, within a very short time period, bring any economic activity to a halt. In turn, such risks have inspired the enactment of myriad regulatory constraints - capital adequacy and asset quality requirements, telecommunications technical standards and the like - intended to ensure the continued availability of core technical and commercial services.

16. There is nothing in the GATS - or in the GATT - that would oblige governments to sacrifice any reasonable level of technical or commercial regulation.[2] The GATS imposes constraints, however, on the use of unnecessarily restrictive or discriminatory requirements in scheduled sectors. Governments may thus be required to complement market-opening measures with a review of domestic regulation. The ensuing reforms may imply political costs, in particular if the income interests of well-defined producer groups are at stake, but should not normally result in lower levels of consumer or creditor protection.

17. Considerable research has been done in recent years to verify whether and under what conditions such expectations materialize. The following Bibliography provides an overview of publications issued since 1990. Its sector and country focus has been determined exclusively by the availability of published material and does not reflect any *a priori* selection by the Secretariat.

[2]See, for example, Kono, M. et al (1997), Opening Markets in Financial Services and the Role of the GATS, WTO Special Studies, Geneva.

BIBLIOGRAPHY

I. TELECOMMUNICATIONS

ABDALA, Manuel (1992);
Desregulación, privatización y regulación del sector argentino de las telecomunicaciones; Estudios, No. 63 (Instituto de Estudios Económicos sobre la realidad Argentina y Latinoamericana).

AGATA, Koichiro (1997);
Three contentious issues in the political process of telecommunications liberalization in Japan: neglect of infrastructural problems? in: State and Administration in Japan and Germany; Berlin.

AHDAR, Rex J. (1995);
Battles in New Zealand's deregulated telecommunications industry; *Australian Business Law Review*, No.2.

ARZT, Clemens et al. (1990);
Telekommunikationspolitik in Grossbritannien: Auswirkungen von Privatisierung und Liberalisierung; Köln.

BANCEL-CHARENSOL, Laurence (1996);
La déréglementation des télécommunications dans les grands pays industriels; Paris.

BAUMOL, William J. (1994);
Toward competition in local telephony; Cambridge, Mass.

CHOI, Jay-pil (1995);
Telecommunications reform in Central and Eastern Europe; Wien.

CRANDALL, Robert W.; WAVERMAN, L. (1995);
Liberalization, deregulation and private networks: telecommunications infrastructure in the 1990s; Tokyo Club Papers, Tokyo.

DONALDSON, Hunter (1994);
Implementing Reforms in the Telecommunications Sector: Lessons from experience (ed. by Bjorn Wellenius and Peter A. Stern); The World Bank, Washington D.C.

DOWLING, Micheal J. (1996);
Deregulierung und Liberalisierung der Telekommunikationsbranche in Europe und den USA: Einflüsse auf Wettbewerb und Unternehmensstrategie; in: Regulierung und Unternehmenspolitik; Wiesbaden.

HIGGINS, Richard S. (1995);
Deregulating telecommunications: the Baby Bells case for competition; Chichester.

IMAI, Hiroyuki (1994);
Assessing the gains from deregulation in Japan's international telecommunications industry; *Journal of Asian Economics*, No. 3.

KLODT, Henning (1995);
Wettbewerb und Regulierung in der Telekommunikation; Tübingen.

MAJUMDAR, Sumit K. (1992);
Performance in the US telecommunication services industry: an analysis of the impact of deregulation; *Telecommunications Policy*, No. 4.

NOAM, Eli M. (ed.) (1994);
Asymmetric deregulation: the dynamics of telecommunications policy in Europe and the United States; Ablex.

ONIKI, Hajime et al. (1994);
The productivity effects of the liberalization of Japanese telecommunication policy; *Journal of Productivity Analysis*, No. 1.

PANDOLFELLI, Michele (1991);
Regolamentazione e deregolamentazione nelle telecomunicazioni: l'esperienza statunitense, inglese, giapponnese; *Economia Publica*, No. 7/8.

SCHWARTZ, Marius (1996);
Telecommunications reform in the United States: promises and pitfalls; in: Telecommunications and Energy in Systemic Transformation; Berlin.

VOETH, Markus (1996);
Entmonopolisierung von Märkten - das Beispiel Telekommunikation; Baden-Baden.

WELFENS, Paul J. J.; GRAACK, Cornelius (1996);
Telecommunications in Western Europe: liberalization, technological dynamics and regulatory developments; in: Telecommunications and Energy in Systemic Transformation, Berlin.

WEYHENMEYER, Stefan (1994);
Integrierte Unternehmensstruckturen in der Telekommunikation und staatliche Industriepolitik; Baden-Baden.

II. FINANCIAL SERVICES

(a) Banking

ALAWODE, Abayomi A. (1992);
Financial deregulation and the effectiveness of bank supervision in Nigeria; *Savings and Development*, No. 1.

ANDERSEN, Torben M. (1994);
Deregulation of the Danish banking sector: new patterns of interest representation; Kobenhavn (COS-forskningsrapport; 94,8).

BASCH, Miguel (ed.) (1995);
Expanding access to financial services in Latin America; Washington D.C. (Inter-American Development Bank).

BENNETT, Michael S. (1995);
Banking deregulation in Indonesia; *University of Pennsylvania Journal of International Economic Law*, No. 3.

BIANCHI Andres (1994);
Liberalización, regulación y supervisión bancaria: notas sobre la experiencia chilena; in: Reformas y reestructuración de los sistemas financieros en los países de América Latina, México.

BINHADI (1994);
Financial Deregulation and Bank Supervision: The case of Indonesia; in: S. Faruqi (ed.), Financial Sector Reforms, Economic Growth, and Stability: Experiences in Selected Asian and Latin American Countries; The World Bank, Washington D.C.

BONITSIS, Theologos H.; RIVERA-SOLIS, Luis E. (1995);
External liberalization of banking and industrial concentration: the evidence from Spain; *The Journal of Applied Business Research*, No. 3.

BORDO, Michael; SCHWARZ, Anna J. (1995);
The performance and stability of banking systems under "self-regulation": theory and evidence; *The Cato Journal*, No. 3.

BUCH, Claudia-Maria (1996);
Creating efficient banking systems: theory and evidence from Eastern Europe; Tübingen.

CURTIS, Wayne C. (1990);
The effects of financial deregulation on consumer lending by commercial banks: 1982-1989; *The Journal of Private Enterprise*, Vol. 6.

DALE, Richard (1994);
International banking deregulation: the great banking experiment; Oxford.

DIAZ-ALEJANDRO, Carlos (1985);
Good-bye Financial Repression, Hello Financial Crash; *Journal of Development Economics*, No. 19.

ELYASIANI, Elyas (1995);
The comparative efficiency performance of small and large US commercial banks in the pre-and post-deregulation eras; *Applied Economics*, No.11.

FISHMAN, James J. (1993);
The transformation of threadneedle street: the deregulation and reregulation of Britain's financial services; Durham: Carolina Academic Press.

GIRG, Joachim (1995);
Australiens Bankwesen im Wandel: Einflüsse der Deregulierungspolitik auf Struktur und Standorte; Frankfurt am Main.

GLOWER, Carlos J. (1994);
Interest rate deregulation: a brief survey of the policy issues and the Asian experience; Manila (Asian Development Bank).

GONZALEZ MENDEZ, Hector E. (1993);
Desregulación financiera en México; *Monetaria*, No. 2 (Centro de Estudios Monetarios Latinoamericanos).

GOODFRIEND, Marvin S. (1991);
Desregulación financiera, política monetaria y banca central; el papel de la banca central en la actualidad; México.

GRABOWSKI, Richard L et al. (1994);
The effect of deregulation on the efficiency of US banking firms; *Journal of Economics and Business*, No. 1.

GRUBEN, William C. (1997);
Liberalization, privatization, and crash: Mexico's banking system in the 1990s; *Economic Review*, No. 1 (Federal Reserve Bank of Dallas).

HARPER, Ian R.; SCHEIT, T. (1992);
The effects of financial market deregulation on bank risk and profitability; *Australian Economic Papers*, No. 59.

HAWTREY, Kim M. et al. (1991);
The impact of bank regulation on Australian manufacturers; North Ryde, NSW (Research paper, Macquare University, School of Economic and Financial Studies).

HELD, Günther (1990);
Regulación y supervisión de la banca en la experiencia de liberalización financiera en Chile (1974 - 1988); in: Sistema financiero y asignación de recursos; Buenos Aires.

HOOKS, Linda M. (1994);
Bank failures and deregulation in the 1980s; New York.

HUMPHREY, David B.; PULLEY, Lawrence P. (1997);
Banks' responses to deregulation: profits, technology, and efficiency; *Journal of Money, Credit and Banking*, No. 1.

HUMPHREY, David B. (1993);
Costs and technical change: effects from bank deregulation; *Journal of Productivity Analysis*, No. 1/2.

HUMPHREY, David B. (1991);
Productivity in banking and effects from deregulation; *Economic Review*, No. 2 (Federal Reserve Bank of Richmond).

ISHIGAKI, Kenichi (1993);
Effects of financial deregulation on Australian financial system; *Kobe Economic & Business Review*, Vol. 38.

ISMAIL, Abdul G. (1993);
Deregulation and bank behaviour in the mixed markets; *The Asian Economic Review*, No. 2.

ISMAIL, Abdul G. (1994);
Financial deregulation in Malaysian banking; *Savings and Development*, No. 4.

KHAN, Shahrukh R.; AFTAB, Safiya (1994);
Assessing the impact of financial reforms on Pakistan's economy; *Pakistan Journal of Applied Economics*, No. 1/2.

KOO, Bon-Ho (1993);
Industrial policy and financial reforms in Korea; in: S. Faruqi (ed.), Financial Sector Reforms in Asian and Latin American Countries; The World Bank, Washington D.C.

LAMBERTS, Mario B. (1993);
Assessment of the financial market reforms in the Philippines: 1980-1992; *Journal of Philippine Development*, No. 37.

LeFORT, G. (1994);
The financial system and macroeconomic stability, the Chilean experience; in: S. Faruqi (ed.), Financial Sector Reforms, Economic Growth and Stability: experiences in selected Asian and Latin American countries; The World Bank, Washington D.C.

LeFORT VARELA, Guillermo R. (1994);
The Chilean experience in financial development and macroeconomic stability: 1975-1992; *Money Affairs*, No. 1 (Centre for Latin American Monetary Studies).

LLEWELLYN, David T. (1992);
The performance of banks in the UK and Scandinavia: a case study in competition and deregulation; *Quarterly Review*, No.3 (Central Bank of Sweden).

LOPEZ-De-SILANES, Florencio; ZAMARRIPA Guillermo (1995);
Deregulation and privatization of commercial banking; *Revista de analisis economico*, No. 2.

MacCALLIE, John D. (1990);
The impact of deregulation and deposit insurance on the thrift industry: an empirical analysis; Auburn, Alabama.

MacLAUGHLIN, Susan (1995);
The impact of interstate banking and branching reform: evidence from the states; *Current Issues in Economics and Finance*, No. 2 (Federal Reserve Bank of New York).

MacLEOD, Ross H. (1996);
Control and competition: banking deregulation and deregulation in Indonesia; Canberra, (Dep. of Economics, Research School of Pacific and Asian Studies).

MARSHALL, Kathryn G. (1994);
Competition and growth: changes in Indonesia's banking sector since 1988; *Journal of Asian Business*, No.3.

MILBOURNE, Ross D.; CUMBERWORTH, Matthew (1991);
Australian banking performance in an era of deregulation; *Australian Economic Papers*, No. 57.

MILKOVE, Daniel L.; SULLIVAN, Patrick J. (1990);
Deregulation and structure of rural financial markets; Washington D.C. (Rural development research report, United States Department of Agriculture).

NAUGHTON, Tony; HARVIE, Charles (1996);
The performance of foreign banks in a deregulated environment: evidence from Australia and Korea; *Economic Papers*, No. 1 (Economic Society of Australia).

OKUNO, Hiroyuki (1996);
The reform of the Japanese financial system and finance for small and medium-size enterprises; in: Integration and Adjustment of Global Economies; Berlin.

REINICKE, Wolfgang H. (1995);
Banking, politics and global finance: American commercial banks and regulatory change, 1980-1990; Aldershot, Hants.

Reserve Bank of Australia (1991);
The deregulation of financial intermediaries: proceedings of a conference; Sydney.

REZVANIAN, Rasoul; RANGAN, Nanda (1992);
Market structure and banking production economies: evidence from the 1980's deregulation; *The Journal of Applied Business Research*, No. 3.

ROCHET, Jean-Charles (1991);
Déréglementation et risque du secteur bancaire; *La revue d'économie financière*, No. 19.

SAUNDERS, Anthony (1990);
Ownership structure, deregulation, and bank risk taking; *The Journal of Finance*, No. 2.

SELGIN, George A. (1996);
Bank deregulation and monetary order; London.

SINGH, Supriya S. (1992);
Banking deregulation and its effects on Australian consumers: the policy debate; *Journal of Consumer Policy*, No. 1.

SINGH, Supriya S. (1994);
Consumer responses to a deregulated banking industry; South Melbourne, Victoria (Centre for International Research on Communication and Information Technologies).

SOYIBO, Adedoyin (1997);
Financial liberalisation and bank restructuring in sub-saharan Africa: some lessons for sequencing and policy design; African Economic Research Consortium Plenary Sessions 1994-95.

TELLA, Adewale S.; OKOSUN, G. (1993);
Banking deregulation: the interest rate phenomenon in the Nigerian context; in: African Review of Money, Finance and Banking, Milan.

TSUDA, Kazuo (1994);
Japanese banks in deregulation and the economic bubble; *Japanese Economic Studies*, No. 3/4.

VELASCO, Andres (1991);
Liberalization, crisis, intervention: the Chilean financial system, 1975-85; in: Banking Crises; Washington D.C.

WILLIAMS, Marion V. (1996);
Liberalising a regulated banking system: the Caribbean case; Aldershot.

(b) Insurance

BARROS, Pedro (1996);
Competition effects of price liberalization in insurance; *The Journal of Industrial Economics*, No. 3.

BASTIANI, Adriano (1995);
Die private Krankenversicherung in ausgewählten Ländern der Europäischen Union: eine vergleichende Analyse vor und nach der Deregulierung; Karlsruhe.

BOSSELMANN, Eckhard H. (1994);
Versicherungsmakler und deregulierte Versicherungsmärkte; Karlsruhe.

HAUFLER, Virginia (1997);
Financial deregulation and the transformation of international risks insurance; in: The New World Order in International Finance; Basingstoke, Hampshire.

Institut für Finanz und Aktuarwissenschaften, Universität Ulm (1994);
Produktinnovationen im deregulierten Versicherungsmarkt: aktuarielle und technische Aspekte dargestellt mit Fallbeispielen; Ulm.

RABE, Thomas (1997);
Liberalisierung und Deregulierung im Europäischen Binnenmarkt für Versicherungen; Berlin.

SKAMLJIC, Thomas (1993);
Deregulierung der EG-Versicherungsmärkte und die Auswirkungen auf den österreichischen Versicherungsmarkt; Wien (Forschungsberichte, Ludwig-Boltzmann-Institut für ökonomische Analysen Wirtschaftspolitischer Aktivitäten).

WENNING, Joachim (1995);
Aufsicht, Wettbewerb und Verbraucherschutz in der deutschen Lebensversicherung nach der EU-Liberalisierung 1994: Fakten, Trends und alternative Ansätze zum Abbau vorhandener Verbraucherschutzdefizite; Karlsruhe.

WILL, Reiner (1997);
Solvabilität und Solvabilitätspolitik von Lebensversicherungsunternehmen im deregulierten deutschen Lebensversicherungsmarkt; Lohmar.

ZIMPELMANN, Manfred (1995);
Folgen des Versicherungsmarktes für die Schadenversicherung unter besonderer Berücksichtigung der Kraftfahrtversicherung; Karlsruhe.

(c) General

ALIBER, Robert Z. (1994);
Financial reform in South Korea; in: Korea's Political Economy; Boulder.

BATTEN, Jonathan (1995);
Foreign banks and the Australian financial system a decade after deregulation; *Journal of Global Business*, No. 10.

Bank of Japan (1991);
Developments following the deregulation of retail deposits in major European countries and the United States; Tokyo (Translation of an article in *Monthly Bulletin* of September 1990).

BONIN, John P. (ed.) (1994);
The development and reform of financial systems in Central and Eastern Europe; Aldershot, Hants.

CHENG, Hang-sheng (1991);
A competitive assessment of recent financial reform in three Asian developing economies: Thailand, Indonesia, and Taiwan; *Journal of Asian Economics*, No. 2.

CHUNG, Choon Taik (1994);
Financial sectors reforms and liberalization in the Republic of Korea: current status and prospects; in: S. Faruqi (ed.), Financial Sector Reforms, Economic Growth, and Stability: Experiences in Selected Asian and Latin American Countries; The World Bank, Washington D.C.

CLIFTON, Eric V. (1994);
Financial liberalization in Israel; Washington D.C. (International Monetary Fund).

ENGLUND, Peter et al. (1996);
Loan-to-value ratios in Sweden: the impact of financial deregulation; *Scandinavian Housing & Planning Research*, No. 3.

EYZAGUIRRE, Nicolas G. (1993);
Financial crisis, reform and stabilization: the Chilean experience; in: S. Faruqi (ed.), Financial Sector Reforms in Asian and Latin American Countries; The World Bank, Washington D.C.

FORMBY, M. John P. et al. (1990);
Costs under regulation and deregulation: the case of US passenger airlines; *The Economic Record*, No. 195 (Economic Society of Australia).

FRENKEL, Roberto (1994);
El fortalecimiento del sector financiero en el proceso de ajuste: liberalización y regulación; Buenos Aires (Centro de Estudios de Estado y Sociedad).

FUKUCHI, Takao (1995);
Liberalization effect in financially repressed economy: the case of Indonesia, 1982 - 90; *The Developing Economies*, No. 3 (Institute of Developing Economies).

GUPTA, Kanhaya L.; LENSINK, Robert (1996);
Financial liberalization and investment; London.

GUTIERREZ PEREZ, A.; PERROTINI, Ignacio (1994);
Liberalización financiera y estabilización macroeconomica en México: desafíos y perspectivas; *Investigación Económica*, No. 209.

MELITZ, Jacques; BORDES, Christian (1991);
The macroeconomic implications of financial deregulation; *European Economic Review*, No. 1.

PENNER, R. (1994);
Financial liberalization in an Agrarian Economy: the case of Paraguay; in: S. Faruqi (ed.), Financial Sector Reforms, Economic Growth and Stability: Experiences in Selected Asian and Latin American Countries; The World Bank, Washington D.C.

PEREZ CAMPANERO, Juan (1991);
Liberalization and financial crisis in Uruguay: 1974 - 87; in: Banking Crises, Washington D.C.

SHEA, Jia-dong (1992);
The welfare effects of economic liberalization under financial market segmentation: with special reference to Taiwan; Taipei.

SJAHRIR (1992);
Indonesian financial and trade policy deregulation: reform and response; in: The Dynamics of Economic Policy Reform in South-East Asia and the South-West Pacific; Singapore.

SOYIBO, Adedoyin; AADEKANYE, Femi (1992);
Financial system regulation, deregulation and savings mobilization in Nigeria; Nairobi (AERC research paper).

STERN, Andrew (1992);
Financial institutions and monetary control in an era of deregulation, liberalization and reform: a comparison of recent developments in the United States, Japan, and China (PRC); *Research in Asian Economic Studies*, B.

SUWANDI, Titin (1995);
Indonesian banking post-deregulation: moral hazard and high real interest rates; Canberra (Economics Division Working Papers; Research School of Pacific and Asian Studies, ANU).

TANDON, Rameshwar P. (1996);
Japanese financial deregulation since 1984; Geneva (UNCTAD Discussion Paper No. 114).

III. TRANSPORT

(a) Aviation

BALTIGI, Badi et al. (1995);
Airline deregulation: the cost pieces of the puzzle; *International Economic Review*, No.1.

BORENSTEIN, Severin (1992);
The evolution of US airline competition; *The Journal of Economic Perspectives*, No.2.

BUTTON, Kenneth J. (1991);
Airline deregulation: international experiences; London.

BUTTON, Kenneth J. (1996);
Aviation deregulation in the European Union: do actors learn in the regulation game? *Contemporary Economic Policy*, No.1.

BUTTON, Kenneth J. (1993);
International interdependencies between the deregulation of domestic service industries: a case study of aviation in North America; *The Service Industries Journal*, No.3.

BUTTON, Kenneth J.; SWANN, Dennis (1992);
Transatlantic lessons in aviation deregulation: EEC and US experiences; *The Antitrust Bulletin*, No. 1.

CARD, David E. (1996);
Deregulation and labor earnings in the airline industry; Cambridge, MA (Working Paper Series, National Bureau of Economic Research).

COLOMA, German, et al. (1994);
La privatización de Aerolineas Argentinas; Santiago de Chile (Comisión Economica para America Latina y el Caribe).

DEMPSEY, Paul S.; GOEK, Andrew R. (1992);
Airline deregulation and laissez-faire mythology; Westport, Conn.

EDELMAN, Richard B.; BAKER, Nent A. (1996);
The impact of implementing the airline deregulation act on stock returns; *Journal of Economics and Finance*, No. 1.

EVANS, William N.; KESSIDES, Ioannis (1993);
Structure, conduct, and performance in the deregulated airline industry; *Southern Economic Journal*, No.3.

FISHMAN, James J. (1996);
Flying high: liberalizing civil aviation in the Asia Pacific; Washington D.C. (Institute for International Economics).

HEDLUND, Daniel C. (1994);
Toward open skies: liberalizing trade in international airline services; *Minnesota Journal of Global Trade*, No. 2.

KEELER, Theodore E. (1991);
Airline deregulation and market performance: the economic basis for regulatory reform and lessons from the US experience; in: Transport in a free market economy; Basingstoke, Hampshire.

KENNET, David M. (1993);
Did deregulation affect aircraft engine maintenance? An empirical policy analysis; *The Rand Journal of Economics*, No. 4.

KINUGASA, Tatsuo (1994);
Cost structure after deregulation of Japanese aviation; Saint Lucia, Queensland (Department of Economics Discussion Papers).

KUNASEK, Gregory L. (1990);
The evolution of the airline industry since deregulation; *Midwestern Business and Economic Review*, No. 12.

MacDONALD, James M. (1996);
Railroad deregulation: pricing reforms, shipper responses, and the effects on labor; *Industrial & Labor Relations Review*, No. 1.

MacMULLEN, B. Starr (1993);
Profits and the cost of capital to the US trunk airline industry under CAB regulation; New York.

MAILLEBIAU, Eric G. (1995);
Demand and consumer welfare impacts of international airline liberalisation: the case of the North Atlantic; *Journal of Transport Economics and Policy*, No. 2.

MAILLEBIAU, Eric G. (1993);
The impact of international aviation liberalization: the North Atlantic routes as a case study; Berkeley.

MARIN, Pedro L. (1995);
La desregulación del transporte aéreo en Europa y sus efectos sobre la estructura de mercado; Regulación y competencia en la economía española, Madrid.

MARIN, Pedro L. (1995);
The remains of regulation: airlines' profits after liberalization; London (Suntory-Toyota International Centre for Economics and Related Disciplines, London School of Economics).

MAROLLES, Olivier de; LENOIR, Alexis (1993);
La déréglementation du transport aérien en Australie; Paris.

MECHLING, George W. (1991);
Deregulation and the capacity, productivity and technical efficiency of equipment of former trunk airlines; *Journal of Transport Economics and Policy*, No. 1.

MEYER, John R. (1992);
From closed set to open set deregulation: an assessment of the US airline industry; *The Logistics and Transportation Review*, No. 1.

MORRISON, Steven A. (1995);
The effects of airline deregulation in the United States; in: On Privatization and Deregulation in the United States, Tokyo (Discussion Paper, Economic Research Institute, Economic Planning Agency).

NIJKAMP, Peter (1996);
Liberalisation of air tranport in Europe: the survival of the fittest? *Schweizerische Zeitschrift für Volkswirtschaft und Statistik*, No. 3.

NORMAN, Victor D.; STRANDENES, Siri P. (1994);
Deregulation of Scandinavian Airlines: a case study of the Oslo-Stockholm route; in: Empirical Studies of Strategic Trade Policy; Chicago.

OBERMANN, Stefan (1992);
Deregulierung und dynamischer Wettbewerb; das Beispiel des US-Luftverkehrsmarktes; *List-Forum für Wirtschafts - und Finanzpolitik*, No. 1.

OPITZ, Michael (1994);
Der Einfluss der EG-Liberalisierung auf die Netzbildung im europäischen Luftverkehrssystem; Nürnberg.

OUM, Tae-hoon (1991);
Airline deregulation in Canada and its economic effects; *Transportation Journal*, No. 4.

PEOPLES, James H. (1991);
Airline deregulation and industry wage levels; *Eastern Economic Journal*, No. 1.

PHU, Son H. (1991);
The effects of US airline deregulation on public intercity passenger travel demand: an econometrics analysis; Oklahoma.

REYNOLDS-FEIGHAN, Aisling J. (1992);
The effects of deregulation on US air networks; Berlin.

REYNOLDS-FEIGHAN, Aisling J. (1997);
The impact of US airline deregulation on airport traffic patterns; Dublin (Centre for Economic Research Working Paper Series).

SAMUELS, George E. (1990);
Airline deregulation: its effects and the competitive environment; *International Journal of Transport Economics*, No. 2.

WILLIAMS, George (1994);
The airline industry and the impact of deregulation; Aldershot, Hants.

WOERZ, Claudia (1997);
Deregulierungsfolgen im Luftverkehr: Handlungsempfehlungen für Marktordnung und Umweltpolitik; Heidelberg.

YARROW, George K. (1995);
Airline deregulation and privatization in the UK; in: On privatization and deregulation in the United Kingdom; Tokyo (Discussion Paper/Economic Research Institute, Economic Planning Agency).

(b) Maritime Transport

BENNATHAN, Esra (1993);
Deregulation of shipping: lessons from Chile; in: Regulatory Reform in Transport; Washington D.C.

(c) Rail Transport

BARNEKOV, Christopher C.; KLEIT, A.N. (1990);
The efficiency effects of railroad deregulation in the United States; *International Journal of Transport Economics*, No. 1.

BURTON, Mark L. (1993);
Railroad deregulation, carrier behaviour, and shipper response : a disaggregated analysis; *Journal of Regulatory Economics*, No. 4.

DUNLOP, Ian T. (1995);
Implementing competition reform - coal haulage by rail: a case study; *Economic Papers*, No. 3 (Economic Society of Australia).

WILSON, Wesley W. (1997);
Cost savings and productivity in the railroad industry; *Journal of Regulatory Economics*, No. 1.

WILSON, Wesley W. (1994);
Market-specific effects of rail deregulation; *The Journal of Industrial Economics*, No. 1.

(d) Road Transport

ALEXANDER, Donald L. (1992);
Motor carrier deregulation and highway safety: an empirical analysis; *Southern Economic Journal*, No. 1.

ALLEN, Benjamin J. et al. (1993);
Intrastate trucking deregulation: have both the negative and positive impacts been overstated? *Transportation Journal*, No. 1 (American Society of Transportation and Logistics).

CORSI, Thomas M. et al. (1992);
The impact of deregulation on LTL motor carriers: size, structure, and organization; *Transportation Journal*, No. 2.

KLING, Robert W. (1990);
Deregulation and structural change in the LTL motor freight industry; *Transportation Journal*, No. 3.

TRAYNOR, Thomas L.; McCARTHY, Patrick S. (1991);
Trucking deregulation and highway safety: the effect of the 1980 Motor Carrier Act; *Journal of Regulatory Economics*, No. 4.

YAMAUCHI, Hirotaka (1995);
Regulatory reform and changes in the Japanese trucking industry; in: On Privatization and Deregulation in Japan; Tokyo (Discussion Paper/Economic Research Institute; Economic Planning Agency).

IV. PROFESSIONAL SERVICES

MURRAY, James (1996);
Liberalisation and the consumer; in: International Trade in Professional Services; Paris.