



International Association for the
Study of Insurance Economics

PROGRES

Research Programme on the Service Economy

Geneva Association Information Newsletter

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The Geneva Association

The International Association for the Study of Insurance Economics, or by its short name "The Geneva Association", is a unique world organisation formed by a maximum of 80 chief executive officers from the most important insurance companies in the world (Europe, North and South America, Asia, Africa and Australia). Our main goal is to research the growing importance of worldwide insurance activities in all sectors of the economy. We try to identify fundamental trends and strategic issues where insurance plays a substantial role or which influence the insurance sector. In parallel, we develop and encourage various initiatives concerning the evolution – in economic and cultural terms – of risk management and the notion of uncertainty in the modern economy.

The Geneva Association also acts as a forum for its members, providing a worldwide unique platform for the top insurance CEOs. We organise the framework for our members in order that they may exchange ideas and discuss key strategic issues, especially at the General Assembly where once per year over 50 of the top insurance CEOs gather. The Geneva Association serves as a catalyst for progress in this unprecedented period of fundamental change in the insurance industry and its growing importance for the further development of the modern economy. It is a non-profit organisation.

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The PROGRES Research Programme

The Geneva Association's **Programme of Research on the Service Economy** (PROGRES) organises annual international seminars on the service economy, with a special focus on global financial services, their international dimensions and regulatory standards. The PROGRES Seminars have operated successfully on a non-profit basis since 1983 to provide an annual forum and focal point for up to 60 specialist inter-disciplinary participants – they are private-sector practitioners and experts from representative organisations, academics, officials from governments and intergovernmental organisations – to discuss and debate service issues. The papers presented at these seminars are distributed widely free of charge. In addition, the PROGRES Newsletter is distributed worldwide biannually on a complimentary basis to over 3500 organisations and individuals to raise awareness of selected service-sector research activities, conferences and publications. Selected information from the PROGRES Newsletters can be found on the Internet at www.genevaassociation.org. Anyone wishing to be included on the Newsletter mailing list should contact the Geneva Association Secretariat: at:

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The Geneva Association Information Newsletter – PROGRES, No. 37, June 2003 Newsletter for the European Group of Risk and Insurance Economists

This bulletin of the Research Programme on the Service Economy is meant to contribute to the exchange of information on studies and initiatives aimed at better understanding the new world service economy where insurance and risk management (together with other sectors) play a relevant role. It is published biannually by the Geneva Association. Any suggestions concerning the content or layout of the newsletter are welcome. Please notify us if you are interested in receiving this publication regularly.

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I. EDITORIAL – UNDERSTANDING THE SERVICE ECONOMY FOR A PROPER MANAGEMENT OF UNCERTAINTIES

The first PROGRES Newsletter was published October 1984. It was conceived as a tool to diffuse the work done at the University of Geneva, aimed to study the connotations and fundamentals of the new Service Economy.

This research program centered around the key notion that in modern times, economic value is not built essentially around the production of material goods, but more and more around the utilization of services (within and outside the manufacturing process). This means that the building of the wealth of nations is distributed in time, from the beginning of an initiative or of a technological innovation, down to the manufacturing of tools, the distribution and maintenance process, the utilizations' costs of any systems and finally the costs of waste treatment. The establishment at any point of a contract (fixing a price) also implies the acceptance of costs and results, in the future, for the performance of systems, which are basically uncertain.

The economic game is therefore less and less the one defined by the industrial revolution (and in particular the economic schools deriving from it) which refers to an absolute price equilibrium in a given moment in time, but more and more a question of risk management, where the manager and the human being have to cope with uncertainties and vulnerabilities implicit in our every day life and experience. The expansion of knowledge and science certainly contributes to reduce risks and uncertainties but on the other side, it makes modern men and women increasingly conscious of all sorts of vulnerabilities. Here lies the big paradox: the general situation is improving (see the extraordinary extension of life expectancy even in many developing countries) but the perception of it seems to grow scarily even in many advanced countries.

Managing risks, uncertainties and understanding vulnerabilities is today at the core of society, and the better understanding of the economic role of science and technology in what is now a real new economy, i.e. a Service Economy, is highly due.

This reference background is key to understand in the contemporary economy the role of insurance. This activity is still today, in terms of "academic" acceptance in a backwater. A financial economist once said that insurance is "just an expensive way to collect money for investment". In the last decade of last century, clearly some people were unduly influenced by such a view. We insist in saying that understanding insurance today for what it really is, is key to better understand which type of economy we live in (a Service Economy). A small reminder of this issue is published at the end of this newsletter (point VII).

We have also tried, with this Newsletter and Research Programme, to stimulate discussions and analysis on all the important issues in which services are involved. A great occasion has been the opening up of the old GATT (now WTO) to negotiations on international trade in services. With time this subject, thanks in particular to the contribution of Julian Arkell and various other experts like Brian Woodrow, has been dealt regularly and in depth: we introduce here the program for the next 19th PROGRES Seminar in a serie which has greatly contributed to the reputation of the Geneva Association. This is also an occasion to welcome the contribution of Knut Holmfeld, former Secretary General of the International Association of Insurance Supervisors who will cooperate closer with the Geneva Association. He will add good and sound knowledge on the specificities of insurance.

Other important aspects in the Service Economy are also presented by Eskil Ullberg, concerning the issues of Intellectual Property Rights (another case where the time dimension and its uncertainties is a key element), and by Christophe Courbage and Patrick Liedtke on the Four Pillars strategy, which paves the way of the Service Economy towards a better welfare society.

Orio Giarini
Editor

II. THE 19TH PROGRES INTERNATIONAL SEMINAR

18-19 September 2003, Hotel President Wilson, Geneva

“The Regulation of Financial Services in Relation to Risk”

PROVISIONAL PROGRAMME

Thursday, 18 September 2003

08h45-09h15 **Welcome and opening remarks:**
Patrick Liedtke, Secretary General, The Geneva Association
Julian Arkell, PROGRES Seminar Organiser

Theme for the day: **Systemic risks and financial stability**
 Suggested topics: credit risks, asset management risks, risks linked to derivatives, analysis of risk chains, non-accounting risk indicators, actuarial models, EU Solvency II Directive, IMF Financial Sector Assessment Program, IAIS priorities, Financial Stability Forum objectives.

09h15-12h45: **Presentations and discussion sessions**

12h45-14h30 **Lunch speaker: Therese Vaughan**, Commissioner of Insurance, State of Iowa, Past President, NAIC

14h30-18h00 **Presentations and discussion sessions**

Contributions to the Thursday sessions (In alphabetical order):
Brian Atchinson, Executive Director, Insurance Marketplace Standards Association, Washington DC
 (“The Future for US Insurance Regulation”)
Gunilla Löfvendahl Briatte, Senior Financial Sector Specialist, Financial Stability Institute, Basel
Rudolf Enz, Deputy Head, Economic Research & Consulting, Swiss Reinsurance Company, Zurich
 (“Systemic Risk in Reinsurance”)
Robert Gibbons, President, International Insurance Foundation, Washington DC
 (“On financial stability”)
Yoshihiro Kawai, Director General, International Association of Insurance Supervisors, Basel
 (“Recent developments and future work of the IAIS”)
Speaker, [from the International Actuarial Association
 (“Actuarial models”)
Catherine Weatherford, Executive Vice-President, National Association of Insurance Commissioners, Kansas City

20h00 **27th Annual Lecture of the Geneva Association at the Hotel Mandarin Oriental, Geneva**
Professor Tom Baker, Connecticut Mutual Professor of Law, and Director, Insurance Law Center, University of Connecticut, will speak on:
“Legal Developments Risk”

Friday, 19 September 2003

Theme for the morning: **Developments in legal risk**

09h00-13h00: Presentations and discussion sessions

Contributions from:

Richard Murray, Chief Claims Strategist, Swiss Reinsurance Company, Zurich

("Legal risks and reinsurance")

John Parker, Head, General Insurance Department, Association of British Insurers, London

("The impact of legal risks on insurance")

Eskil Ullberg, Senior Consultant, SMG Consulting, Stockholm

("Financial risk arising from the patent system")

13h00: Lunch speaker: Alejandro Jara, Ambassador of Chile to the WTO, Geneva
[subject to official duties] Formerly Chair, Council for Trade in Services

Theme for the afternoon: **The GATS negotiations and financial services liberalization**

Chair: Julian Arkell, International Trade and Services Policy

14h30-16h00 First Panel

Introduction by: **David Usher**, First Secretary, Permanent Mission of Canada
Chairman, Committee on Trade in Financial Services

16h30-18h00 Second Panel

Introduction by: **Abdel-Hamid Mamdouh**, Director, Trade in Services Division, WTO
("Financial services after Cancun")
Stuart Brahs, Vice President - Federal Government Relations, Principal Financial Group
("The treatment of pensions and fund management")
John Cooke, Head of International Relations, Association of British Insurers, London
("Insurance liberalisation in the light of Cancun")
Nigel Easton, Principal, Insurance Unit, SITE, UNCTAD, Geneva
("Divergent demands of international financial services regulatory bodies")

18h00-18h15 General discussion on Seminar and suggestions for issues to include in the 2004 programme

To register please fill in the form on the last page of this newsletter.

As a general reference paper for this seminar you can download the study by Julian Arkell on the GATS: Negotiations On Financial Services: Government Proposals from the following <http://www.genevaassociation.org/gats.pdf>

III. SHOULD THE GATS 'PRUDENTIAL CARVE-OUT' FOR FINANCIAL SERVICES MEASURES BE REVISITED NOW - RATHER THAN LEFT TO STORE UP A CRISIS FOR THE WTO DISPUTE SETTLEMENT SYSTEM?

Julian Arkell explores the issues raised by this question.¹

In the early 1980s there was a wide gulf between the proponents for an agreement on services and the developing countries, which rejected the need for an accord. Thus at the outset of the Uruguay Round the services negotiations were placed on a separate track from other issues. Furthermore back then, the US Treasury was advocating that financial services should form a separate agreement, and many of its OECD counterparts were in support. It took some years for their resistance to be withdrawn, and at the end of the Round it was finally agreed to make the General Agreement on Trade in Services (GATS) part of the World Trade Organisation (WTO), with all services included in principle. This was acceptable to the developing countries because the framework enshrines the concept of progressive, or step by step, liberalisation. The financial services supervisors were satisfied by the 'carving out' from the GATS disciplines of all measures taken on 'prudential grounds' by financial services authorities. The exception was purposely drawn very broadly, and furthermore the term 'prudential' was left undefined, although a few examples are given of what is included - as quoted in full below.

More recently at the Committee on Trade in Financial Services (CTFS) the "desirability of developing a definition or common understanding of the meaning of 'prudential regulation'" was voiced.¹ There was support from Members for "discussing the matter for transparency purposes, given that the general policy regarding prudential regulation should be transparent, and to enhance their understanding of the possible issues." During subsequent discussions there was support for discussion on prudential regulation "to enhance understanding of the specific issues involved", but also on objections by those not seeing the need for clarification.² There is no doubt about the complexity of the issue, and there should be caution when deciding whether or not to embark upon the process of clarification. At the same time, the proponents of further discussion appear to have failed to give examples of over-regulation that could result in clear restrictions on trade in financial services.

However, in May 2001, Switzerland tabled its proposal for negotiations on financial services.³ This stated that: "Because of its difficulty and complexity, prudential regulation can be implemented disproportionately depending on the problems involved. The measures involved can make financial markets less attractive and jeopardize their operation. We would like the CTFS to begin working on a more precise definition of the exceptions that can be invoked in relation to prudential regulation. A clearer definition would help to improve transparency of financial markets for users and operators, and this, in its turn, would have a positive impact on their attractiveness." It added that it is essential that "the CTFS should seek to cooperate closely with the international organisations that are actively involved in the supervision of financial services (the Basel Committee, the International Association of Insurance Supervisors, the International Organisation of Securities Commissions, and the Joint Forum on Financial Conglomerates)."

Observers point out that the economic and legal literature does not contain any consensus definition of prudential regulation. Indeed there are disagreements on some central issues

¹ The author is grateful to Elisabeth Tuerk of the Centre for International Environmental Law in Geneva for her input over a lengthy period of drafting, and to Juan Marchetti of the WTO Trade in Services Division for his comments on an early draft. The views, and any errors or omissions are the responsibility of the author alone, who is not a lawyer.

² See WTO document S/CSS/M/3 of 26 June 2000.

³ See WTO document S/CSS/M/4 of 18 September 2000.

³ "GATS 2000: Financial Services", Communication from Switzerland, 4 May 2001 (S/CSS/W/71).

including its aim,⁴ and how to approach 'conduct of business' regulation. Given this impasse, there is arguably a need for more precision for the definition of the exceptions that can be invoked in relation to prudential regulation, in the light of a decade of changes in the financial sector. Also as time passes, the likelihood increases that there could be a dispute relating to measures affecting trade in financial services.

The Annex on Financial Services

Financial services are central to all economies, and the GATS reflects this by including an Annex on Financial Services. The Annex contains exceptions for governmental activities and prudential measures (ie the carve-out). Furthermore the financial services sector is the only one that has warranted the setting up of a dedicated standing group: the Committee on Trade in Financial Services, already referred to.

Exception for governmental activities

Article I (b) of the Annex states that "services supplied in the exercise of governmental authority" (this refers back to the 'governmental exception' in GATS Article I:3) includes the activities of central banks and other authorities in pursuit of monetary and exchange rate policies, statutory social security and public retirement plans and "other activities conducted by a public entity for the account or with the guarantee or using the financial resources of the government." It also states that "the term 'financial service supplier' does not include a public entity."

Exception for prudential measures (the 'carve-out')

The prudential exception is included in Article 2 of the Annex, which is headed "Domestic Regulation". The term 'domestic regulation' may here be used in a general sense, but given the context most likely refers back to Article VI of the GATS with the same heading, though this question does not seem to have been raised in the Committee on Trade in Financial Services. The prudential exception is succinctly set out: "Notwithstanding any other provisions of the Agreement, Members shall not be prevented from taking measures for prudential reasons, including for the protection of investors, depositors, policy holders or persons to whom a fiduciary duty is owed by a financial service supplier, or to ensure the integrity and stability of the financial system". The way this is phrased shows that it is intended to be an indicative list, and not an exhaustive one.

The Annex also lists the definitions of the services to which the prudential exception applies, and this classification has been generally followed in country schedules of specific commitments.

A further provision lays down that panels for disputes on prudential issues and "other financial matters shall have the necessary expertise relevant to the specific financial service under dispute". Finance Ministries must have deemed this necessary, foreseeing that a WTO dispute panel would have to interpret the purpose and scope of the prudential carve-out.

What are the implications of the absence of a definition of the term 'prudential', should a challenge arise relating to trade in financial services being adversely affected by the actions of a supervising authority? How would a panel go about setting its scope? According to Article 3.2 of the Dispute Settlement Understanding of the WTO, panels and the Appellate Body have to interpret the WTO Agreements "in accordance with customary rules of interpretation of public international law."⁵

⁴ Given the need to balance micro- and macro-regulations, such as the solvency of an individual firm and systemic stability,

⁵ The provisions of GATS Article XXIII Dispute Settlement and Enforcement similarly must be taken into account. It provides that: "If any Member should consider that any other Member fails to carry out its obligations or specific commitments under this Agreement, it may with a view to reaching a mutually satisfactory resolution of the matter have recourse to the DSU".

A treaty interpreter would define the term 'prudential' by applying the customary rules of interpretation, including those contained in the Vienna Convention on the Law of Treaties. The panel would start by looking at the ordinary meaning of the word. For example the Shorter Oxford English Dictionary gives the following definition of prudential, as an adjective: "of the nature of, or involving prudence; characterised by forethought and deliberation", whereas the New Oxford Dictionary of English gives: "involving or showing care and forethought, typically in business; acting with or showing care and thought for the future". Both dictionary definitions are extremely wide, forming a 'virtual' or shimmering logical space for panels to apply, perhaps as intended by the lawyers who drafted the WTO Agreement.

The Vienna Convention then requires that the provision being interpreted be placed 'into its context', which could be creatively achieved by reference to the financial services Annex paragraph, the entire Annex, or indeed the GATS as a whole. This could even involve consideration of the 'object and purpose' of the WTO, which opens up the prospective field wider still. If all this does not clarify the provision, then the intentions of the treaty drafters could be considered, including any records of the negotiations and the documents dealt with at the time. Additionally, under international law, the principle of effective treaty interpretation might also be brought into play which requires that a treaty be interpreted to give meaning and effect to all its terms, so as to avoid one of its provisions nullifying the effect of another.

In the context of the Annex on Financial Services this could be relevant in case the notion of 'prudential' were interpreted too narrowly with the effect of nullifying the broad 'right to regulate' which is enshrined in the GATS. On the other hand, the prudential exception should not be so broad as to undermine the needed trade disciplines, which form the underlying purpose of the GATS.

There would also be the principles and standards to consider, as adopted by the relevant international standard setting bodies, such as those already mentioned, and any other international regulatory practices in this particular field.

It does seem likely that in a dispute, only one particular element of the prudential carve-out might be concretised, because any ruling would address the specific situation arising from the precise facts of the case. In successive cases light might be shed on some aspects, but not on others. Appellate Body decisions traditionally exercise judicial restraint, and thus no light would be thrown on the total extent of the carve-out. Also the focus of litigation might be in one direction, in line with the interests of the parties involved, but fail to address issues in this domain of concern to developing countries which are not parties to a dispute, or to civil society groups more broadly.

Nine years after the end of the Uruguay Round, some services negotiators are reluctant to enter into a debate on such a difficult subject as the scope of the prudential carve-out, and how dispute panels might interpret it. However, it might be that the fall-out from future disputes could be damaging to the GATS, and that however important it was to create the GATS with such a large 'hole' in it, times have moved on and the issue needs airing. This is because the Annex on Financial Services also includes the following provision: where prudential "measures do not conform with the provisions of the Agreement, they shall not be used as a means of avoiding the Member's commitments or obligations under the Agreement." Where relevant such obligations would have to be taken into account by an Appellate Body. This last sentence of the Annex Article 2 (a) is ambiguous in relation to non-violation - as recognised under GATS Article XXIII, - when it speaks of "as a means of avoiding", as it could be viewed as referring either to violation or non-violation. Presumably it would only refer to non-violation if the 'non-conforming measure' were maintained under the prudential carve-out or other exception.

Specific commitments on liberalisation in Members' schedules form part of the GATS, and are in addition to general obligations. It seems likely that a wide range of challenges could potentially be levelled against measures affecting financial services providers, contending that measures or decisions of a supervisor have been used as a means of avoiding commitments and obligations. Even so, such challenges would be difficult to maintain under any WTO dispute, because at the outset the burden of proof would fall on the complainant.

The burden of proof only falls on the defendant Member once that Member makes an affirmative defence.⁶ In both cases, the party bearing the burden of proof has successfully to establish what in law is termed 'a prima facie case', whereupon the burden of proof switches across to the other party. This underlines the importance of the distinction to be drawn between provisions which are obligations and those which define exceptions, and how each is drafted. In the case of the prudential carve-out there is as yet no case law bringing up the rule exception issue so as to indicate whether this might be relevant to the outcome of the case, and the subject has not been raised by officials.

In addition to a dispute on a violation of financial services undertakings, GATS Article XXIII *Dispute Settlement and Enforcement*, establishes an additional avenue. It states that: "If any Member considers that any benefit it could reasonably have expected to accrue to it under a specific commitment of another Member ... is being nullified or impaired as a result of the application of any measure which does not conflict with the provisions of this Agreement, it may have recourse to the DSU". This language, usually referred to as a non-violation clause, allows prudential measures to be challenged, which do not conflict with the GATS as they are in accordance with the 'carve-out'. It follows that prudential measures may thus be subject in principle firstly to the violation test, and then, even if they pass successfully, secondly to the non-violation ('avoidance') test.⁷

Both tests raise the issue of what would comprise the scope or coverage of prudential measures, and whether further examples need to be spelt out, in order to avoid difficult political choices being addressed by adjudicators. Clarification of the prudential carve-out would follow the right political course, avoid an overload on the dispute process, and also the possible squandering of the scarce resources of qualified panellists and developing country officials in dispute cases. The DSU would then be left with the less controversial field where only peripheral situations were contested.

Whereas the GATS disciplines limit the prerogatives of financial regulators, with the aim of ensuring sound and trade-compatible measures, the practical effects resulting from the above analysis are now considered.

It could be argued that the activities of the prudential supervisors of financial services should be subject to disciplines, to ensure that the measures they introduce provide adequate transparency for their rules and procedures, the setting of objective and numerical criteria (where feasible), and the subjection of financial services directors and managers to the same 'fit and proper' tests as are the highly regulated professions. If as a result the definition of the coverage of prudential measures were to be reduced to a clearer core set of responsibilities and more sharply defined activities, would it provide a calmer, less troubled arena, and fewer contested boundary problems? Or could an attempt to do so backfire politically?

⁶ For example, where country A complains that country B has violated an obligation not to introduce quantitative restrictions, and a panel finds this to be the case, the panel then has to decide whether this violation is allowed under a general exception, which country B would have put forward as an affirmative defence. See 'US Shirts and Blouses', AB-1977-1, WT/DS33/AB/R pp 15-16.

⁷ Not only is the burden of proof lower, but also the consequences of finding a non-violation are different from finding a violation. In the latter case the violating party has to withdraw the measure, whilst in non-violation cases "the Member affected shall be entitled to a mutually satisfactory adjustment ... which may include the modification or withdrawal of the measure." Article XXIII:3, penultimate sentence.

If the definition were to be reduced successfully, without challenging the prudential objectives, the focus of the dialogue between the services negotiators and the financial services supervisors could then turn to ways of making legitimate prudential measures less trade restrictive, (the tougher test of 'least trade restrictive' possibly not being reasonable in this context), and not more burdensome than is necessary, in parallel to the provisions of Article VI *Domestic Regulation*. This could involve the exchange of information on 'best practices' and perhaps some form of benchmarking, and due consideration of the principle of proportionality, which is not mentioned in the GATS. Related issues arising here include what is being optimised in terms of trade benefits under the concept of economic efficiency, whether in a single jurisdiction, or a group of countries, and whether the distributional effects of such benefits have to be taken into account.

For legal coherence it would seem logical for the relevant prudential measures to be aligned with any future new provisions of the important *Domestic Regulation* Article of the GATS, from which perhaps they should not be excepted. Article VI:4 is as follows, in full:

"With a view to ensuring that measures relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services, the Council for Trade in Services shall, through appropriate bodies it may establish, develop any necessary disciplines. Such disciplines shall aim to ensure that such requirements are, inter alia:

- (a) based on objective and transparent criteria, such as competence and the ability to supply the service;
- (b) not more burdensome than necessary to ensure the quality of the service;
- (c) in the case of licensing procedures, not in themselves a restriction on the supply of the service."

The clause potentially opens up the debate - in its context - on how to test for 'unnecessary barriers', and whether 'trade restrictiveness' and 'burdensome' are synonymous or not, which it can be argued are distinct and can be additive. It is important to note that VI:4 does not mention specific commitments, and is of general application covering even non-discriminatory measures which do not have to be scheduled under the market access and national treatment Articles (XVI and XVII) - but can voluntarily be inscribed as 'additional commitments' (Article XVIII).

The next clause - at VI:5 (a) - deals with the case of specific commitments, as follows:

"In sectors in which a Member has undertaken specific commitments, pending the entry into force of disciplines developed in these sectors pursuant to paragraph 4, the Member shall not apply licensing and qualification requirements and technical standards that nullify or impair such specific commitments in a manner which:

- (i) does not comply with the criteria outlined in subparagraphs 4(a), (b) or (c); and
- (ii) could not reasonably have been expected of that Member at the time the specific commitments in those sectors were made."

It should be noted that this is a temporary provision⁸ until VI:4 is further fleshed out, though in the meantime it forms part of the obligations that DSU panels have to interpret.

⁸ See the informal note by the WTO Secretariat "Application of the necessity test: issues for consideration" (Job No. 5929, 8 October 1999 on the WTO web site): "Considering that Article VI:5 is a temporary provision, ie pending the entry into force of disciplines developed under VI:4, Members may wish to consider making a reference to international standards a permanent part of the necessity test of any generally applicable disciplines."

Consideration of paragraph VI:5 (a)(ii) raises the issue of 'reasonable expectations', which is not defined in the GATS, nor has it been fully scoped out under international law, and so opens a further route for the lawyers to explore.⁹ In practice it might be very difficult to divine definitively what had been expected by a Member at the end of the Uruguay Round, now almost a decade ago.

Article 3, "General Provisions" of the DSU of the WTO indicates in its second paragraph, that the DSU is to provide "security and predictability to the multilateral trading system", and that it "serves to preserve the rights and obligations of Members" and to "clarify the existing provisions of [the WTO] agreements." Recommendations and rulings of the [Dispute Settlement Body] "cannot add to or diminish the rights and obligations provided" in the WTO agreements. This is intended to prevent panels from changing treaty text, but where they are vague, terms have in the past been susceptible to being stretched.

A former chairman of the Appellate Body recommends that WTO Members should make use of WTO Article IX:2 which states: "The Ministerial Conference and the General Council shall have the exclusive authority to adopt interpretations of this Agreement and of the Multilateral Trade Agreements", and in the case of the GATS, for example, "they shall exercise their authority on the basis of a recommendation of the Council overseeing the functioning" of the GATS.¹⁰ He points out that "Article 3.9 of the DSU states expressly that 'the provisions of [the DSU] are without prejudice to the rights of Members to seek authoritative interpretations of provisions of covered agreements through decision-making under the WTO Agreement.'" He further points out that "Neither a *panel* nor the *Appellate Body* is entitled to refuse to address a claim because the panellists or the Appellate Body members want to avoid deciding a legal question that has delicate political consequences."

This paper has attempted to highlight both the politically sensitive nature of some of the issues, and the need to avoid the dispute process having to fill in aspects not resolved politically, as well preventing panels and the Appellate Body becoming overloaded. Given such a clutch of complex issues, some of which will be contentious, and could be subject to long running debate, it would seem wise for governments to ring fence only strictly core measures within the prudential carve-out, and release their energies to address contingent issues on how in practical terms any desired liberalisation of trade in financial services can be put into effect for the benefit of consumers worldwide.

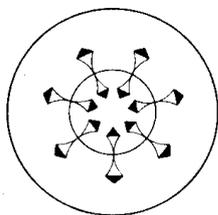
As a parting thought, dictionary definitions show that the adjective 'precautionary' is derived from words having the sense of 'prudent foresight', and thus prudential measures could be seen as falling into the ambit of activities addressed by the precautionary principle. Whether the protection of financial soundness and stability covered by the prudential carve-out constitute precautionary acts is a further difficult issue, which involves the debate on whether precaution is indeed a principle under international law, or part of customary law, given that it has been included in some multilateral environmental agreements. But this takes the debate too far from the main focus of this paper.

* * * * *

⁹ The protection of good faith is a concept of international law, and would include *legitimate* expectations.

¹⁰ "Tensions between the dispute settlement process and the diplomatic and treaty-making activities of the WTO", Claus-Dieter Ehlermann, *World Trade Review*, page 301, Vol. 1, No. 3, November 2002

IV. 4TH ASEC SEMINAR ON SERVICES IN MANUFACTURING, FINANCE & BUSINESS: CRITICAL INFRASTRUCTURES AND SERVICES



4th ASEC Seminar on Services in Manufacturing, Finance & Business

Applied Services Economic Centre

Rescheduled for Spring 2004
Venue: Northeastern University , USA, 2004

Supported by The Geneva Association

This 4th **ASEC Seminar on Services in Manufacturing, Finance & Business** will focus specifically on the notion of *criticality* as it applies to services in contemporary business, finance and manufacturing. Originally planned for the fall of 2003, the seminar has now been rescheduled for the spring of 2004 to take place at a venue in the northeastern US. Following on a successful Third Seminar in Toronto, the **Fourth ASEC Seminar** will extend and deepen our recent examination of the theme of Vulnerability and Services, dominated as it was by the events of September 11th and their aftermath, to the related theme of Critical Infrastructures and Services.

As is so often the case with emerging themes such as vulnerability and criticality, popular culture and commercial advertising give initial early warning of the emergence of such a theme. Consider the following examples drawn from the realm of TV advertisements by major technology and services companies featured over the past year and what they imply about the notion of Critical Infrastructures and Services:

- ◆ An IBM commercial shows a group of high tech workers involved in network management quickly working themselves into a panic after one of them shouts 'The Stapler is Down'. No one knows how to cope with this unforeseen crisis and there is much scurrying about and great concern until one of them comes to the rescue with replacement staples and shows everyone how to fix the stapler. The commercial concludes with the comforting words that, by comparison, properly managed network infrastructure and services need not face such a crisis. What indeed constitutes a "critical infrastructure and service"? Are all infrastructures and services – even the lowly stapler – potentially critical? Is it the "network effects" of an infrastructure or

service that makes it critical? By what criteria and how does one make a determination of criticality?

- ◆ A Computer Associates commercial begins with two security guards at their post guarding a long, modern building. Suddenly, an alarm sounds warning of an intruder and the guards give chase through the building, gradually gaining on the intruder until it seems that he will be caught. Unexpectedly, the guards stop running as they pass from Sector 12 to 13, allowing the intruder to move on to other parts of the building, but proudly radio back to central control with the message “Sector 12 is Secure”. How can security be provided for “critical infrastructure and services” which involve many separate but interrelated elements? What happens when individual elements perform their assigned task but lack of coordination with others leads to critical failure? In a world of increasing specialization and growing complexity, can anyone be ultimately held responsible for overall security?
- ◆ Another commercial is set in a small British town and features the local bank managers of three different bank branches briskly walking home after the workday has finished. Each seems happy and satisfied with his day’s work. We are then told that the critical task of tallying up each of the bank’s daily balances will be performed overnight and outsourced to a single company – UNYSIS in this case – which supplies its services separately to each of the banks. Each bank manager can then return to work the next morning, confident that his bank’s books are in order and ready to compete with his rivals another day, while customers should presumably feel secure that their chosen bank is handling their business appropriately. In what ways and how can competition and collaboration be reconciled in dealing with critical business operations? What are the implications of outsourcing competing services to the same third party supplier? In a broader sense, how can accountability for maintaining “critical infrastructure and services” in an increasingly integrated business environment be maintained?

Services in manufacturing, finance and electronic business have traditionally been viewed as safe, reliable, constant and benign inputs to production/consumption processes and the broader economy and society. Risk, hazard, and vulnerability are not terms or concepts usually associated with services and the service economy. Nevertheless, we were increasingly reminded that services and the service economy are indeed premised upon *limits to certainty*. Services in manufacturing, finance and business harbour their own particular sets of vulnerabilities, *process vulnerabilities* which arise directly from and within the way each set of activities is organized and operates, and *system vulnerabilities* which are lodged in the policy and regulatory context and environment within which the sector is grounded. Beyond both of these types of vulnerabilities lie *external risks*, precisely those occurrences such as the events of September 11th which cannot be anticipated explicitly because not subject to direct control but which must nevertheless be planned for on a contingency basis. By way of counterpoint, modern economies and societies also continually face up to *hazards natural and man-made (and including moral hazard)* which essentially represents a propensity to accept and act upon appropriate assessment of risk and vulnerability.

Criticality – even though this is a word not yet well established in common usage -- is a concept well understood in the hard sciences which is only coming to be applied in the social sciences, business and public affairs. Often only in extreme circumstances do we become aware that certain infrastructures and services are critical to the continuance and operation of modern economies and societies. When the lights go out or electric power to a city or region must be cut back, when a rampant virus attacks computer systems and software or causes disruption on the Internet, when technological glitches or excessive volatility disrupt the efficient operation of financial markets – these are instances when the notion of what constitutes critical infrastructures and services and what can be done to protect them are raised. Particularly in the aftermath of September 11th, it is no longer realistic to limit the discussion of critical infrastructures and services primarily to national security and military concerns, but rather our focus should be broadened to cover threats and vulnerabilities throughout modern economies and societies.

Each of the recent commercials highlight a growing concern about this feature of our modern services economy which deserves specific attention. *Criticality* refers to the condition where certain systems or processes are essential to the continuing functioning, operation and survival of particular infrastructures and services. In modern integrated manufacturing, supply chain management and “lean production” models such as are perhaps most highly developed in the automotive manufacturing and supply industries of North America are rife with potential logistical bottlenecks and just-in-time scheduling problems which could bring production to a halt. In modern financial services, “network effects” and global customer servicing place a premium on secure and continuous systems and software which guarantee market access for service providers and clients, essentially irrespective of time and place. And across the burgeoning realm of electronic business, “reliability and robustness” of the network , systems and software -- including the problems associated with each these elements whether it be cyberterrorism, hacking, viruses, flaws or whatever – pose major and constant threats to critical infrastructures and services. Through a set of invited papers and presentations by academics, business representatives, governmental and non-governmental officials, the seminar will explore the various dimensions of criticality and vulnerability affecting systems and services in the crucial fields of integrated manufacturing, modern finance, and electronic business.

For information on the seminar over the coming months, please consult the **ASEC Webpage** at www.genevaassociation.org or contact the organizers directly through:

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V. ECONOMIC ASPECTS OF PATENTING IN THE GLOBAL ECONOMY: TWO SEMINARS ON PATENTING AND GLOBAL TRADE

by Eskil Ullberg (SMG Consulting, Sweden)

This is the summary of a research focusing on key economic aspects of patenting from a risk management and a global free trade market point of view.

1. Strategic questions for the patenting system – global market access needs IPR protection

1.1 The role of patenting or “Have you wondered why all new cars, computers, television sets look so much the same”?

The role patenting is playing in corporate strategy and more generally in the global economy at large is changing drastically. During the last two decades, it has become a key instrument for *market access* and *trade* strongly associated with economic development in a more “co-productive” fashion.

The previous “monopoly right” focus and “invention = blockbuster” belief is converging in the *usage* or the patent right towards an instrument to secure *market access* through intellectual assets, or property.

For example, a car may contain 2000-3000 (!) patents¹¹. These are not all held by GM, Mercedes and BMW but by maybe 200-300 *different* rights owners. However, in order to produce a car today, you need all that technology to be able to *sell* the car at the end of the day. Hence, cars tend to perform the same and even look the same – or at least similar – since the same software – which is patented or copyright protected – is used to produce them! Very little (sustainable) uniqueness can be created through a product alone approach. The same is true for (technical) services.

The sole purpose of patenting, from a corporate perspective, is then to *manage the risk and uncertainty* in the (global) market. This view of patenting best explains the usage of the patenting system. It also gives a way of thinking for changing the system to become more efficient in absorbing risks and uncertainties better in today’s more complex and uncertain world¹².

1.2. Knowledge becomes tradable through the patenting process

The patent *right* is transferable with mutual consent and thereby provides a basis for a “market in ideas”. Not only the customer’s are customers but also strategic partners become customers to the technology an inventor has developed. This transferability or right puts competition closer to the customer like in the car example. Knowledge becomes a tradable *commodity* in the patenting process. This commodity can be traded, licensed, cross-licensed, introduced in international standards and securitized (to get a financial value and access to capital markets), etc. However, this issue more discussed from a legal point of view – the right – and less discussed from an *economic* point of view – the *usage* of the right to create economic value.

1.3 From patent to patenting – the usage perspective explored

The usage and scope of patents has thus changed since first conceived. During the 18:th century “protection” was on the agenda. The development of national industry required trade barriers. Manufacturing monopolies in the UK allowed boosting the industrial revolution. This protection was the fundament of the system: The industrial manufacturing logic – “the product”.

¹¹ According to EPO sources.

¹² *Risk management issues discussed: Risk Management – from portfolio strategy to value creating systems strategy, Ullberg, et. al. Geneva Papers, July 2002.*

During the 19:th and 20:th century, the formula changes somewhat to “innovation and information for monopoly”. The idea was to enable companies to recover R&D expenses by monopoly pricing of products.

Towards the end of the 20:th century and now in the 21:st century, it seems that the usage is changing again towards “market access”. Patenting becomes “a business” (through extensive licensing/cross licensing). With more complex products that turn into systems not a single supplier can make all R&D investments. A multiple of patents are needed to make a “system”. This development moves into services as indicated above.

Different strategies are developing in this more competitive global, innovation driven, service economy. Leading IT industry actors for example, among which we find “the inventors” of modern patent portfolio management only patents in the large patenting markets in the world. Here large patent portfolios are built up. These are used to cross license with actors from small countries. In that way both actors get a wider market access – but at lower cost for those with portfolios in the larger markets.

Telecom companies used to have “gentlemen’s agreements” on innovation and patenting. Towards the end of the 1980’s, this lack of patenting strategy “stopped” European manufacturers to enter the US market. Now these “gentlemen’s agreements” are replaced by global competitive market where IPR plays a role. Companies also tend to include patented technologies in to world standards. This give the *right* to licensing revenues (under RAND conditions), replacing the original “monopoly idea” of patenting with a market access idea where standards play the most important role for market access: example GSM, GPRS, etc for mobile telephony.

Patent Licensing Revenues, 1980 - 1999

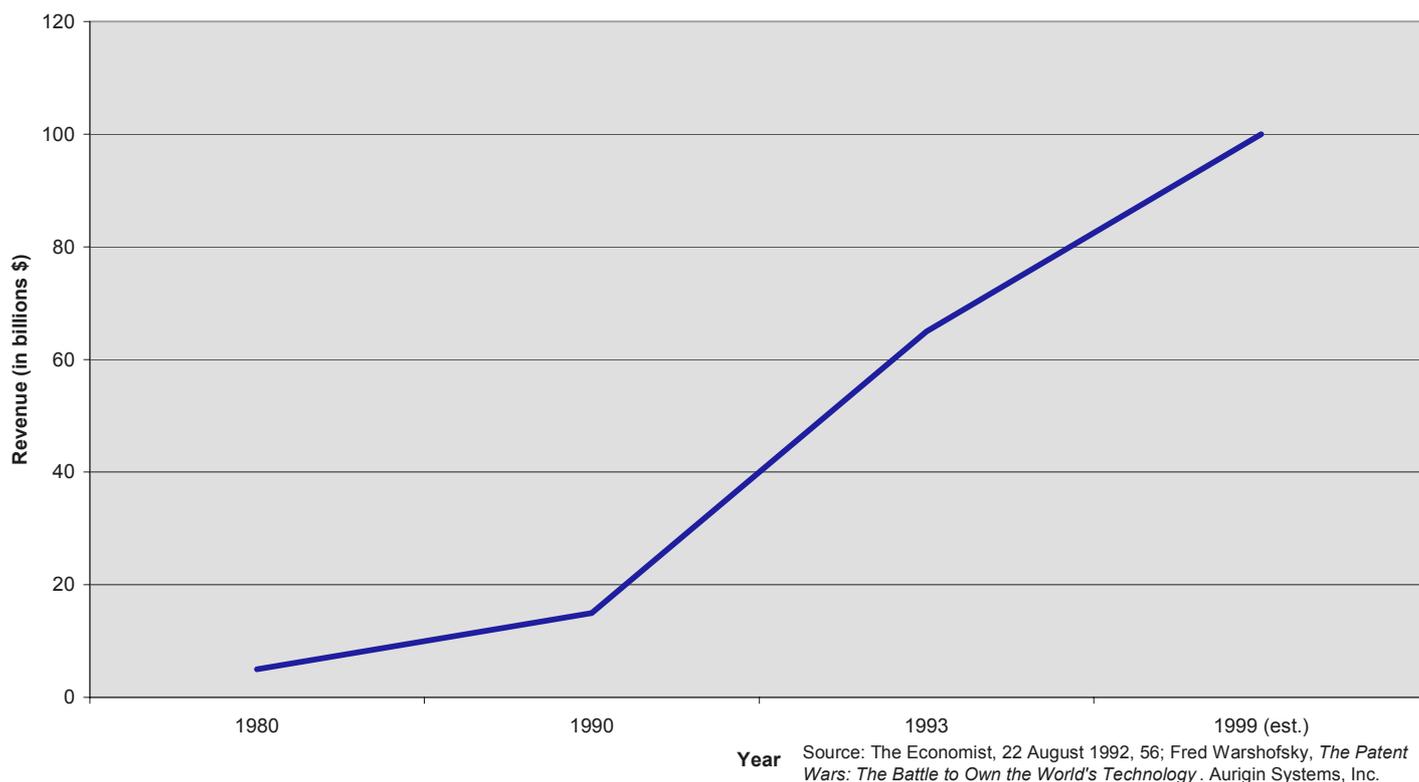


Fig. World Licensing revenues have gone up 10-fold during a decade.

1.4. Patenting system competition

Innovation is now taking place on a global basis. The competition is national versus “regional” in Europe. US – Europe – Japan when it comes to where to patent first. This is guided by language, market size, presumption of validity, enforcement, etc.¹³. Competing systems then gets increased importance for market access. Today, when many international customers choose, they use increasingly the PCT route since it manages risk better, faster, more uniform (one standard), etc.

2. Workshop on Intellectual Property Rights and Trade Facilitation, UNECE in co-operation with The European Patent Office and Service Management Group¹⁴

This workshop was created as a response to the fact that practically all products and services *traded* today have IPRs attached to them. The focus was to identify “roadblocks” but also opportunities related to trade and IPR. It was also an attempt to begin to place the IPR issues on the Trade and Trade Facilitation agenda – without “duplicating” the WTO/TRIPS forum. 4 themes were covered:

- 1) The general role of IPR and patent rights in international trade flows (Mr. Schatz, The EPO)
- 2) The territorial aspects of IP and patenting rights and the lack of cross-border recognition as possible roadblocks (Mr. Heath, The Max Plank Institute Germany);
- 3) IPR in the development of international standards (Mr. Marsh, Dickinson Dees, UK)
- 4) The balance between IPR enforcement and international trade flows (Mr. Trainer, The International Anti Counterfeiting Association).

Several roadblocks to trade both policy and technical were identified.

2.1 IPR and patenting on the “social agenda”

Only very recently, about 15 years ago, was IP related to trade. Prior to this patenting had to do with technology and products but the trade aspect were not explicitly recognized. This resulted in that the TRIPS agreement became the third pillar of WTO besides GATT (goods) and GATS (services).

Today the social aspects of IP are at stake since IPR in general are granted for certain territories and thereby create limitations to trade both in respect to the right and the products and services which falls under the scope of protection of that right. This directly impacts the pricing of the products. Suppliers (who hold patents) then use the system for local pricing. This procedure does not go very well in hand with global trade of goods and services. In the pharmaceutical case, the developing countries favor *global* exhaustion of rights. This would introduce some sort of global pricing different from today’s “supplier pricing”. It would also challenge manufacturing worldwide and parallel imports. This has lead to a de-facto change of the TRIPS agreement in the Doha round. The success of the patenting and IPR system has therefore first to be based on a *social* success.

The **cost / benefit** “equation” then has to take into account the *social aspects*. This may challenge current mechanisms of for example pricing and the national exhaustion of patent rights for a global exhaustion within certain fields related to public health, etc.

2.2 Patent density

The patent density, i.e. the number of patents per capita, GDP, etc, has a highly uneven distribution between countries. A high patent density is needed for trade facilitation. It is necessary to have something to trade! This is true between the developed and developing countries. This is due to:

¹³ In the US, since early 1980, a change in principle was made regarding the presumption of validity. The view used to be that the courts made a fresh investigation upon challenge of a patent. Now the courts presumed that it was valid.

¹⁴ Workshop on Intellectual Property Rights (IPR) and trade facilitation: Identifying Opportunities and Roadblocks. In the framework of the International Forum on Trade Facilitation, 14-15 May 2003. Proceedings will be published by UNECE.

- 1) The territoriality of patents (they are geographically limited)
- 2) The cost/benefit is *negative* for developing countries (at least initially)
- 3) Market access or “network access” (access to knowledge, finance, trade infrastructure in general) is limited for developing countries

One way of solving this issue is to internationalize patent granting mechanisms. Here centralization is a good idea due to the fact that any system has to compare with the “prior art”. To have skilled people in *every* field is an insurmountable obstacle for many nations. This would call for a central body or centrally managed database used for prior art searches. The views on patents and IPR are many. A more coherent global patenting system is welcome.

2.3 Maximum Standards

The developed countries are here setting the standards according to their needs. During TRIPS these standards, as mentioned above, were set at European and US and Japanese levels. The “minimum standards” required by TRIPS therefore became, in reality, “maximum standards”.

2.4 Complexity is expanding

In trade facilitation simplification is a theme. However, in patenting and IPR issues the complexity of the issues is expanding due to technology expansion. Contract law and other laws are implicated to changes in IP policy. Free and fair trade needs IPR. A level of confidence in the national system is also important. This means that the industry is part of the solution.

2.5 Bilateral versus multilateral

Trade policies are in practice much too single sided or “export” oriented. This is true also when it comes to IPR. A very central and critical issue is here the development of the multilateral trading system versus bilateral agreements. Bilateral standards represent great risks to trade since they 1) are inequitable and imposed by superior economic powers 2) Disturb equal economic conditions for trade. Bilateral standards then de facto are raised above multi lateral standards, imposing even a higher degree of challenges. This issue was also raised in the workshop due to the recent agreement between Singapore and USA where Singapore promises to not infringe US IPR in exporting to the US. This is a very strategic issue and currently a top priority on the WTO agenda.

2.6 The validation system

The “validation system” was presented by EPO as being a successful solution for developing countries. It provides free access to world-class patents provided you want it without any obligation. It is available to all PCT member states.

2.7 UNECE Standards and IPR (CEFACT)

Due to technology development and that patents are more about *intangibles* (software, business process patents in US) than *tangibles* the used patented technology in goods/services challenges the UN in setting standard “free of charge”. This challenges the legal environment. The IPR has to be carefully crafted in this more “competitive” environment for technical standards setting. A proposal is made for “royalty free licensing” of IPRs included in UN standards.

2.8 Recommendations:

- 1) Better understanding of the cost/benefit equation for developing countries
- 2) Better understanding of global market by IPR experts and of IPR issues by the international community

A coordinated approach to capacity building assistance on IPR issues

VI. SUSTAINABLE GROWTH AND AGE SEGREGATION: AN IMPOSSIBLE EQUATION¹

by Christophe Courbage and Patrick M. Liedtke

According to the OECD, the increase in the labour force is responsible for one quarter of the growth of GDP in industrialized countries over the past 25 years. Such growth of the active population is mainly explainable by the baby-boom effect. This trend is now reversing and the labour force is beginning to contract. Several studies have estimated that such a decline will lead to a decrease of 0.4% of the GDP per capita annually in Europe during the next 25 years. Even with productivity still on the increase, the estimated growth of GDP could drop below 1% in 2020.

For nearly 20 years, through the 4 pillars concept, the Geneva Association has been putting emphasis on a positive economic and social approach of ageing. By making more flexible both, labour market and pension schemes, persons of age 60 years and over, who are currently excluded from the labour market, could off-set the negative effects of ageing and then contribute to the growth of our economies.

Important advances in medicine and hygiene as well as economic and social progress have led to a tremendous improvement in life expectancy, and particularly in life expectancy in good health. Nowadays, a 60 year-old man in France has a life expectancy in good health of 18 years. This number was equal to 10 two decades ago. The age of retirement is getting increasingly disassociated from the age at which people become old.

Besides, figures show that the proportion of persons of age 60 years and over relative to the rest of the population will grow at an exponential rhythm over the next half-century. From 2020, the population of persons of 60 years of age and over is expected to exceed the population of under 20 year-olds in many European countries.

We can easily understand the incoherency of the actual situation. By excluding nearly automatically an important part of the population from the labour market, we deprive voluntarily and unnecessarily the society from their contribution to the development of our economy.

The right question to examine is the one of the management of a work force of relatively mature years, usually better qualified, and who, up to now, has been discriminated on the basis of its age. Working longer is possible if the working conditions in firms are modified - gradual retirement, flexible work schedules, continuing training, and so on.

By being active longer, persons of age 60 years and over could continue to support the labour force. They could also contribute to lighten social insurance systems by partly satisfying their own needs. It will then lead to decrease the financial burden weighting on the active population to finance these systems. At last but not least, by being productive longer, these persons will stay integrated in society, a factor known as primordial to stay in good health, and then to limit future spending of our health systems. There is no doubt that all these factors together will have a non-negligible impact on future growth.

¹ This text is a shorter and translated version of an article that appeared this month in a book published by *Economica* entitled "Des idées pour la croissance".

VII. SOME BASIC ISSUES ON THE ECONOMICS OF THE SERVICE ECONOMY¹

1. A Service Economy or an economy of services?

Both the classical and neoclassical schools of economic thinking have maintained that all economic activities can be divided into three sectors: agricultural, industrial or manufacturing and services (primary, secondary and tertiary sectors). These subdivisions are due to an historic fact. At the time of the foundation of modern economic theory, priority was given to what was believed to be the most efficient tool for building the wealth of nations: the process of industrialisation. Agriculture remained an important but "traditional" activity, industrial manufacturing was centre stage, and the tertiary sector was a way to classify secondary activities.

It has, however, been the very efficiency of the manufacturing processes through technology that has brought about today's situation, where almost all manufacturing activities depend, for 70 to 80 % of their costs, on service activities within their production structures. These activities include research and development, financing, distribution, storage, maintenance, security, waste management, etc. Many traditional service activities, on the other hand, are using manufacturing tools in a way that makes it difficult to distinguish them from, for instance, a control system in a chemical company.

Hence, in all industrialising countries, manufacturing jobs have been constantly diminishing over the last decades while jobs in service functions within and outside the so-called tertiary sector have been making the dominant contribution to employment.

Another fundamental issue is the fact that services do not merely signify a radical alteration of the structure of manufacturing and production processes in a strict sense. The entire process of wealth production is now arranged across an entirely new time-dimension:

- R & D intervene before any manufacturing takes place.
- Maintenance and distribution systems as well as waste management costs take place after a product or a system has been sold.

Many economists have tried to fit the notion of services in the "normal order of things" by treating them as a kind of "invisible" products. In fact, no products are used without services and no services are performed without material products. It is a matter of relative importance: during the Industrial Revolution, obvious priority was given to the production of material goods while in modern contemporary economies, by far the major issue is the running of service systems which integrate the proper handling of material inputs.

This discussion about the structure of the production or supply (and indeed of productive activities in general) is fundamental to the business of identifying comprehensive policies capable of successfully addressing the employment problem.

2. Economic and social value, the pricing system, uncertainty and risk

Classical and neoclassical economics are based on a notion of value built into an "equilibrium system". Prices are supposed to represent the equilibrium point between supply and demand at a given point in time. At that point, all prices together represent the general equilibrium system.

While classical economics underlined the importance of the supply-side in this equation, the neoclassical school emphasized the priority of demand. But in either cases, reference to the equilibrium system was identical: one side of the equation being by definition considered equal to the other.

¹ The first three issues are taken from the book "The employment dilemma and the future of work" by Orio Giarini and Patrick Liedtke. After being published in different languages, German (and was here in the list of the top 10 best sellers in economics), French, Spanish, Italian, Korean, Rumanian, as well as Bulgarian, the book is considered to be translated also into English. The fourth point is an abstract of a lecture given in June 2001 a UN/ECE (Economic Commission for Europe) conference in Geneva.

It is here that the notion of performance as measurement of value as well as the increasing importance of service functions in the economic system necessitate a fundamental change in approach. Indeed, the notion of performance cannot be identified with a point in time but must refer to a period of time. Now, the very period during which the system is utilised is of necessity uncertain and can be expressed only as a probability. In the second place, the functioning of such a system will also occur within a context of events, some of which are bound to be uncertain. All future costs, linked to performance, can be understood – even when they are strictly monetarized – only in terms of probability.

Therefore, the economic system which the Service Economy is introducing to is an economic system that is by definition uncertain. In classical economics, uncertainty is equated with inadequate, insufficient or asymmetric information, as if such information could ever be obtained completely. In the case of the Service Economy and the notion of performance value, uncertainty, and more generally disequilibrium as a condition to the development and dynamic systems, is a key factor.

Given the functioning of a very large number of economic activities in today's world, it is clear that any price set at a given moment merely represents a probability which will be confronted with costs arising in the future and which cannot be precisely determined.

This has always been the case for the activity of the insurance industry and also explains why this discipline has largely been overlooked by both classical and neoclassical economic theory as taught in universities around the world today.

It is indeed paradoxical that increasingly the price fixing mechanism of all sorts of activities is beginning to resemble the probabilistic one that faces an insurance manager. This is true for example for a research manager having to choose investment in different projects with varying probabilities of success. This applies to all investments or mechanisms having to do with the leasing of any kind of material and also to any type of production process likely to face unknown future costs related to waste management, pollution and other liabilities. It is another paradox of history that insurance, neglected particularly by economic thinking for the last two centuries, is becoming centre stage in much the same way as the textile industry symbolised practical application of the new methods of industrial production in the 18th century.

All of this points clearly to the fact that the equilibrium system of classical and neoclassical economic theory is based on a deterministic philosophy which the hard sciences abandoned at the beginning of last century. The notion of price uncertainty and disequilibrium is rooted in the philosophy linked to indeterministic systems, which for many decades have indicated the way forward in physics and other hard sciences. This means also that the notion of risk, within an indeterministic framework, is not the equivalent of threat but of opportunity.

3. The importance of demand in the Service Economy

Any proper analyse of changes in the process in which the wealth of nations is produced in the modern economy, must first have carefully considered what economists call the «supply-side», that is the systems whereby goods and services are produced. At first, it might appear that we are advocating a return to the doctrines giving priority to the supply side as proposed by classical economists from Adam Smith to Karl Marx and many others until the beginning of this century.

But we should also stress that in the new Service Economy, demand is not simply confined to its traditional function as an indicator of equilibrium. For in the changed circumstances of the Service Economy, systems of production and consumption are extended in a time whose length in each specific case is merely a probabilistic assumption.

In this context, the role of demand is much more important than it was in classical economics. Demand represents a selection mechanism which is not only confined to selecting products and services offered on the market. Even production proposals and ideas for new products are submitted to this selection process and might never reach the market and will never be priced. This is particularly the case with formulating strategies for technological innovation which frequently

involve a portfolio of projects each requiring separate investment, only one or two of which have any chance of success and will actually "appear" on the market.

This role of demand, recognised as being essentially a selection system, is also an indication of the change of the philosophical system of reference. As Karl Popper noted, in the Lamarckian system, selection functioned as a kind of normative activity of nature, whereby demand would indicate to production what was to do. This might be partly true for known products, but clearly no consumer ever told Mozart to compose his operas or a computer manufacturer to invent computers. In fact, selection is essential to maintaining the normal working of a system and to checking the efficiency for production in the economic and social sense. It is the "producer" who invents and proposes new or different "products".

It is furthermore obvious that, in the moment when performance represents the value of production, the consumer becomes much more than a simple "user": he invests time or money, or both, in the utilisation of systems, products and services in order to insure that they work and perform satisfactorily. The consumer has become prosumer, to use Alvin Toffler's neologism.

It seems clear that in the modern Service Economy, consumers are ceasing to be passive buyers and are beginning to make their own contributing to the utilisation and wealth creation which have very much become a part of production. They often co-produce.

4. The integration of investment and trade in the service economy

If more and more business (turn-over or sales) is done not where the manufacturing process takes place, but where products and systems are utilized and then finally disposed of, then it is clear that a greater part of the "production system" is displaced to where the clients are. What has always been largely true for insurance (where one knows that you cannot cover a fire in Sicily using the same criteria one would use in Holland or in Asia) now is true of all economic activities: the selling of hardware and even automobiles, produce costs, turn-over or sales where products, systems and services are distributed, used and then disposed of.

Of course, the international exchange of products as such still exists, and is important, but it is bypassed increasingly by the fact that investments are needed in foreign countries for creating distribution and utilization infrastructures as a first priority.

It is quite obvious that, following this logic, the internationalization for instance of Europe and even of the world in many economic sectors has rather led to acquisitions and investments through strengthening of the distribution capabilities of companies, taking into account the differences of the markets and of the types of products they could sell or propose to each market. The transnational sales of products directly from a foreign base, although important and favoured by a powerful communication technology, are in the end only a second-level priority in this context.

Therefore, a global business strategy, whatever the sector today is, and because of the logic of the service economy, tends to combine investment with trade (through acquisitions or other means) developing local human capital and resources: this is a fundamental issue to understand, and which directly concerns the ideas that we can have on global economic policies. The world becomes without frontiers, but in a situation which goes much deeper than a simple increase in international trade, because the investment side of it creates a much more articulate and compelling situation. It also stimulates autonomy.

Hence, from a world economic standpoint, the crucial difference between the classical industrial revolution and the present service economy is that, with the former, investment in a foreign country was an alternative to exports, whereas with the service economy exports are closely related to investment, because investment is linked to utilization and because, in turn, utilization is linked to consumer presence and active participation.

There is a great message of hope in this situation which far outweighs the theory of comparative advantage (sometimes effective in a classical industrial economy). There now exists a vested interest for all world producers to establish efficient local utilization systems where their investment opportunities for gain are better guaranteed. Thus we rediscover, in an economic sense also, a great general interest that all can share, in that the poorer become richer because they are the terrain in which new markets can develop on the basis of their ability to use as prosumers and properly manage available systems.

This situation will probably soon have a profound impact on the activities of international institutions such as the World Trade Organization (WTO). The WTO's predecessor, the GATT, had in fact already commenced its involvement in services at the time of the Tokyo Round via the discussion on non-tariff barriers to trade. All such barriers were in reality system conditions for product utilization, and although the idea of the service economy was not as yet explicitly defined, a first step was already being taken. On the occasion of the Uruguay Round, the initial ideas were that if services could be defined as simply another type of good, then fostering international trade would raise no major problem. In the event, things turned out differently, and the Uruguay Round negotiators, stimulated by economic reality, were finally able to establish (anchor, secure) such principles as the right of establishment and national treatment which are in fact the foundation stones of any investment policy worthy of the name in service-economy terms.

Once economists and economic leaders are more conscious of the realities and potentials of the service economy, the way will be open for much more optimistic, productive and fair strategies for developing the world economy. In that process, the WTO could prove a prime mover in relaunching the wealth of nations worldwide. The key to the global economy is to have the right vision of the service economy.

VIII. OPPORTUNITIES FOR INSURANCE SCHEMES TO COVER MICRO-ENTERPRISES

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OPPORTUNITIES FOR INSURANCE SCHEMES TO COVER MICRO-ENTERPRISES

Millions of **micro-enterprises** are now developing rapidly towards 2005, the UN Year of Micro-Credit. The insurance industry, however, has not yet addressed this vast market, because the people concerned are too poor to pay premiums, namely for disasters like earthquakes, floods and epidemics. But new **joint solutions** between experienced insurance companies and governmental bodies could now emerge, as shown at the April 2003 "10th Joint Geneva Association – EALE Conference on Insurance and Catastrophic Accidents" in Rotterdam. The INTEREST project about Sustainable Development admits: "The concept of insurability and its significance for actors beyond the insurance sector... has been underestimated in the past." (cf. Risk Management No. 32 (Nov. 2002) and No. 33 (May 2003)). A better dialogue will be suggested in the July 2003 issue of The Geneva Papers.

At the April 2003 Rotterdam Workshop it appeared that a first step should consist of a systematic risk analysis. For this, the CHARM framework (Comprehensive Hazard And Risk Management) of the Pacific region (including Thailand and Vietnam) provides the Australian/New Zealand Standard 4360 (www.risksociety.org.nz). For damages to crops, a Commodity Price Risk Management Fund now exists (www.itf-commrisk.org). Health issues are addressed by the ILO's SocialRe Programme, i.e. Reinsurance for Community Health Schemes (www.ilo.org/socialre). In the West Godavari District of Andhra Pradesh, India, a population of about 50'000 village people is being enrolled into an eye-care scheme (qnrao@lvpeve.stph.net). Flood issues are not yet addressed in developing countries, but schemes in the UK (www.lse.ac.uk/collections/CARR) and Germany (www.muenchenerre.de) could be useful. To insert these new mechanisms into governmental and NGO activities, young economists could be obtained via organisations like ODI, London (www.odi.org.uk).

IX. LIST OF OUR RECENT PUBLICATIONS

Geneva Papers Issues and Practice - July 2003 – vol. 28, nr.3 : Special issue on Risk Management - special editor: Walter Stahel

Risk Management

Editorial : P.M. Liedtke

W. Stahel

A. F. Dlugolecki

K. Dahlström, J. Skea & W. Stahel

A. Beard

H. Caplan

C. Parsons

J. M. Navare

Insurance misundrestood

Role of insurability & insurance

Climate change & the financial services sector

Innovation, insurability & sustainable development

Safety Management System Model

War & Terrorism Insurance

Moral Hazard and Liability Insurance

Changing Risk Patterns and Behaviour: Pensions

Insurance Distribution and Strategy

I. Falautano & E. Marsiglia

G. Perissinotto & A. Zimolo

D. Went

C. J. Hood

A. D. Morrison

30th Anniversary of The Geneva Association

P. M. Liedtke

Integrated distribution: challenges ahead

Creation of value

Irish life

Outsourcing of insurance claims

Economics of capital regulation

The GA - operating today and tomorrow

Working papers series of The Geneva Association “Etudes et Dossiers”

No 265 / January 2003

Insurance Research Compendium: The Geneva Association's List of Useful Contacts and Links, Geneva

No 266 / February 2003

The paradigm of value: the integrated distribution of Insurance and financial services
Rome, 18 October 2002

No 267/ March 2003

INTEREST; Insurance, Technological Risks And Emerging Science And Technology Policies; Final Report

No 268/ March 2003

The Development of Pension Systems, A Project with Fondation Avenir Suisse

No 269/ March 2003

Fifth Meeting of The Geneva Association's Amsterdam Circle of Chief Economists
Amsterdam, February 13-14, 2003

No 270/ April 2003

International Conference on Insurance Accountancy
London, 3 March, 2003

No 271/ April 2003

Work Beyond 60: Preparing for the Demographic Shock
Vienna, 6-7 March, 2003

No 272/ May 2003

Fondation Avenir Suisse
Encouraging an extended working life – Recent policies and best practice in Europe

Books and Monographs

- ◆ “September 11 – One Year After: Impact, Lessons and Unresolved Issues”, edited by Patrick M. Liedtke and Christophe Courbage, published by The Geneva Association, August 2002.
- ◆ “The Search for an International Accounting Standard for Insurance”, special report to the Accountancy Task Force of The Geneva Association, by Gerry Dickinson, published by The Geneva Association, February 2003.
- ◆ “Ventures in Insurance Economics: 30 Years The Geneva Association”, edited by Patrick M. Liedtke, printed by Blackwell Publishers in London, May 2003.



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Conferences organised and /or sponsored by The Geneva Association

2003

June

12-14 London **30th General Assembly of the Geneva Association (members only)**

September

15-17 Zurich **30th Seminar of the European Group of Risk and Insurance Economists (EGRIE)**

18-19 Geneva **19th PROGRES Seminar on Regulation, Supervision and Global Trade Issues**

26 Rome **Montepaschi Vita "The Paradigms of Value: The risk shift from public to private: what role for insurance and financial groups?"**

November

5 Athens **1st Annual Round Table of C.R.O.s (Chief Risks Officers)**

6-7 Athens **18th M.O.R.E Seminar on Uninsured Risks**

20-21 Washington **4th ASEC Seminar on Vulnerabilities in Infrastructure: Rethinking the New Service Economy**

25 Geneva **President's Lecture** on the occasion of the 30th Anniversary of the Geneva Association

27-28 Zurich **Seminar on The Economics of an Aging Society: The Future of Funded Systems in Europe** in co-operation with SwissRe Rüşchlikon Dialogue Centre and Fondation Avenir Suisse

December

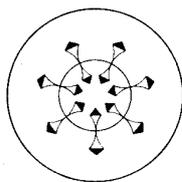
4-5 Zurich **1st Chief Communication Officers' Meeting**, hosted by Zurich Financial Services

tba Paris **3rd International Conference on Risk and Insurance Economics**, co-organised with the FFSA

2004

January

13 New York **Joint Industry Forum for P&C Insurance Industry**, co-sponsored by the Geneva Association



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 I shall have dinner on Thursday, 18 September yes no
 I shall have lunch on Friday, 19 September yes no

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