

**TRADE AND AGRICULTURE DIRECTORATE
TRADE COMMITTEE**

**TAD/TC(2007)4
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TOWARDS A SERVICES TRADE RESTRICTIVENESS INDEX (STRI)

A proposal for a Road Map for future Trade Committee Work on Services

Paris, 27 June 2007

This document was prepared with a view to support the Trade Committee's discussion on how most effectively to focus and deepen its ongoing and future activities on the medium-term priorities discussed at its March 2007 meeting [see TAD/TC(2007)2].

This document sets out a detailed proposal to orient services work towards the design and construction of a services trade restrictiveness index (STRI) for Member countries. The history of past work for the Trade Committee on services appears in the Appendix to this document.

This document is submitted for discussion and guidance by the Committee.

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JT03228697

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TOWARDS A SERVICES TRADE RESTRICTIVENESS INDEX (STRI):

A proposal for a Road Map for future Trade Committee Work on Services

Liberalisation of trade in services.

Services constitute a significant and growing share of the world economy. Trade in services will be increasingly important in meeting the needs of populations in OECD and in non-OECD countries in the coming years and holds the potential to deliver significant economic and social development around the globe. It is difficult to measure the importance of trade in services, and to understand and remove the obstacles to it, because data is lacking and adequate measurement tools have yet to be developed. It will be necessary to commit resources and to sustain work that would, over time, build the knowledge base in this area and develop reliable analytical methods. The aim is to better understand the appropriate regulatory and institutional frameworks needed for effective future liberalisation in different services sectors.

[Trade Committee Draft Medium-term Strategy Paper, TD/TC(2007)2, para 5]

1. In its March 2007 discussion of the second policy priority of its medium-term strategy -- that on trade in services, the Trade Committee expressed its interest in greatly enhancing work on quantitative analysis in the services sector. In order to provide the Committee with information on how such work could be undertaken, and what its resource implications might be, the Secretariat agreed to develop a “road map” for future work on services for consideration at the June Trade Committee meeting. As discussed in the Trade Committee and the Working Party Bureau, the overall objectives of the new orientation in the services work would be to devise restrictiveness indices for services sectors and, in a later phase, to use these indices to measure the impact of regulations on trade in services and the gains from their reform. Work with this orientation will benefit from the extensive experience gained in past work on trade in services done in the Committee, as summarised in the historical overview annexed to this note.

A. Why a restrictiveness index for services?

2. The lack of sectoral indicators to help policy-makers understand the effects of the myriad regulatory policies on trade in services was underscored in the Trade Committee’s recent discussion on its medium-term strategy. Indeed, while partial indicators exist for certain services sectors, no systematic, comparable index has been developed and vetted by the OECD membership which could be used to determine the restrictiveness of barriers to services trade.

3. Future services work therefore has as its central aim the creation of a set of indicators and an index that would measure the overall stance of a Member country’s services economy. Such indicators could be used by national authorities to inform decisions on where to focus reform and as an instrument to assess ongoing national reform efforts. An appropriately designed index would provide an instrument for policy-makers to identify the effects of regulations. This is necessary in order to understand where existing regulations are distortive, as opposed to those regulations that address market imperfections. Services may share characteristics of natural monopolies or be subject to asymmetric information or network externalities, e.g. in important infrastructure services. A restrictiveness index could also provide a basis for comparing performance and policy reform efforts across services sectors within the national economy. A

well-designed index of services restrictiveness would also distinguish regulations hindering entry from those affecting ongoing operations.

B. What is a restrictiveness index?

4. In the analysis of government policies restricting trade in goods, the wedge between domestic and world market prices can be used as a measure of the trade restrictiveness of the policy measures in question, be they tariffs or non-tariff measures that can be converted to tariff equivalents. For services, in contrast, it is often the service provider or the consumer - not the service - that crosses the border and price differences across borders cannot be measured in the same way as for goods. In addition services are heterogeneous and price comparisons are difficult even in the cases where the service does cross a border. Price-based approaches to measuring the restrictiveness of barriers to trade in services can therefore not be applied and indirect measures need to be developed.

5. Restrictions on services trade are usually related to behind the border regulations and often take the form of fixed costs that cannot meaningfully be translated into a tariff equivalent. Another complication is that it is not straight forward to aggregate trade costs in services. Fixed costs from complying with regulatory measures may not be additive, and one binding barrier may render the elimination of other barriers irrelevant. If modes of supply are complementary, trade barriers that restrict one mode of supply will in effect affect all modes, while if modes of supply are substitutes, restrictions on one mode can induce a shift to a less restricted mode, and have little effect other than diverting trade from the preferred mode of supply and increase costs. Binding trade barriers differ between sectors and modes of services delivery and need to be estimated by sector, based on in-depth sector studies.

6. Given these characteristics of the services sector, the major alternative approach to measuring restrictiveness in services trade that has so far been developed in the literature is the construction of restrictiveness indices in which qualitative information on the nature of domestic regulations is converted, through a scale of scores, into a restrictiveness index.

7. Restrictiveness indices are not new in the OECD: two that are relevant for the future Trade Committee work on services are the indicators of product market regulation (PMR), managed in the Economics Department (ECO), and the FDI Regulatory Restrictiveness Index (RRI), recently revised in a joint effort by DAF/INV and ECO. Both of these concentrate heavily, but not exclusively, on services. The most recent PMR indicators cover transport, communication and energy and retail distribution and business services. The FDI RRI covers eight large services sectors (plus manufacturing) and 11 services sub-sectors. Both sets of indicators are constructed in a similar way, viz. by using the so-called "objective" approach as opposed to survey-based indicators. Using an agreed questionnaire, information based on national laws, regulations and market conditions is collected and vetted by Member country officials. The qualitative information is then quantified using an appropriate scoring methodology. Each of the quantitative components can then be aggregated into summary indicators, weighted according to the contribution of each component to the overall restrictiveness of the regime being analysed. The PMR indicators run on a scale from 0-6, from least to most restrictive. For the FDI index, restrictiveness is measured on a 0-to-1 scale, with 0 representing full openness and 1, a prohibition of FDI. (The scale is of course a matter of convention.)

8. In past work for the OECD Trade Committee, restrictiveness indicators have also been estimated and used in a number of studies, as outlined in the note on the history of OECD work on services trade (see Annex). However, the studies concerned were not comprehensive. In particular, none of them covered individual Member countries of the OECD.

C. Country coverage

9. As explained above and outlined in the history of the OECD work on services annexed to this note, previous OECD Trade Directorate work has focussed on non-Members. The new services work will focus on OECD Member countries. Data collection regarding regulations in the OECD area would be done in collaboration with ECO and other Directorates. To the extent that work would also extend beyond the OECD area, collection of additional data for non-Members would be done in cooperation with other international organisations, e.g. World Bank and the OAS where similar work is underway or has been carried out for African and Latin American countries.

D. Sectoral coverage

10. Given the sector specificity of regulations, work in this area needs to be done sector by sector. During the pilot phase covered by the road map presented here, it is suggested that three service sectors be selected before the sectoral coverage is broadened in future work. It is important to take into account a series of criteria in choosing the sectors for the initial phase of the work: relatively good data and policy information or promising prospects of obtaining such; the sector's economic importance; and in-house sectoral expertise. The Secretariat has been consulting closely with the STD unit in charge of services trade data and other parts of the house on foreign affiliates trade statistics (FATS) and FDI data more generally. Concerning policy information, the PMR survey is soon to be updated by ECO and a joint exercise between ECO and DAF and the CMF may be developed on banking. The FDI RRI is to be regularly updated and extended to more services sectors in the future. The World Bank has developed detailed questionnaires on policies for telecoms (fixed, mobile and internet), transport (air and maritime) and financial (banking, insurance and securities). After considering the relevant criteria, the Secretariat suggests the following sectors to be covered on a pilot basis in the first phase of the new services initiative: telecoms, construction and business services. In a further phase, other sectors would be added with a view to achieving comprehensive coverage of major services sectors in due course.

E. The Work Proposal: Five Streams of Work

11. This road map proposes to carry out, in a pilot phase covering the next two years, conceptual and empirical work with the final objective of producing Services Trade Restrictiveness Indices (STRIs) for Member countries in three services sectors. In the first 18 months (July 2007-December 2008), four streams of work are suggested, the first three of which would be carried out concomitantly and the fourth, using the input from the first three, would actually construct and test the STRIs for each one of three pilot sectors. Finally in Q2 2009 a Services Experts Meeting would be held to present the results with collaborating institutions. The five work streams suggested are:

1. Collecting information on regulatory policies;
2. Improvement of services trade data;
3. Conceptual work;
4. Construction and testing of STRIs for the pilot sectors;
5. Services Experts Meeting.

Each of these five streams of work is explained in more detail below.

1. Collecting information on regulatory policies

12. As described above, OECD currently has a certain number of indicators on Member countries services policies: the PMR indicators; the FDI RRI and recently the Competition Law and Policy Index.

While all contain useful information, none of these were constructed with the aim of studying the effects of regulations on services trade, and they tend to focus on the effect of domestic regulations on establishment and operations in the domestic market. As a primary empirical input into the construction of an STRI, information is necessary on regulations i.a. according to: mode of supply; non-discriminatory versus discriminatory (towards foreign services providers) measures; entry/establishment barriers versus those affecting ongoing business operations. Determining which is which is not always straight forward and will also be subject of conceptual work (III below). Information on regulation of cross-border trade (modes 1 and 2) is generally not well covered by existing OECD indices.

13. In the first instance, it is planned to coordinate efforts with the Economics Department's forthcoming survey (September 2007) on product market regulations by adding a certain number of questions to the survey to augment the services-trade relevant information needed to construct the STRI. The Investment Committee's plans to embark upon a major update of countries' positions under the OECD instruments will also be taken into account.

Timing: Q3 2007

2. *Improvement of services trade data*

14. Services trade data has made enormous strides since the appearance in 2002 of the UN Manual on Statistics of International Trade in Services. Nonetheless quality is unequal across modes (e.g. information on mode 3 is poor), level of sectoral detail, coverage of bilateral services transactions, etc. For example, the most important mode of trade in services in terms of transaction value is mode 3, commercial presence. Only a few OECD countries gather data on sales by foreign affiliates in a systematic way, and a comprehensive dataset on this mode from official sources may be years away. Using results from OECD surveys and developing proxies for the FATS data will be complementary approaches used in the work on the STRI.

This phase of the work would be carried out in close collaboration with STD and the Inter-agency Task Force on Services Statistics and STI. The World Bank and the WTO are also interested in collaborating to improve services data.

Timing Q3 2007- Q3 2008.

3. *Conceptual work*

15. Despite important improvements concerning the quantification of services barriers, a number of limitations still constrain the reliability of various restrictiveness indices. In particular, it would be desirable to assess and improve the approaches that have so far been used to score the individual elements of policy information (i.e. to convert qualitative information on regulations into a quantitative score of their restrictive impact), and to apply weights to these scores in aggregating them into an overall STRI for the sector concerned. To be carried out in the period during which the information on policies is being collected, several important conceptual issues will be addressed in a series of output results. To the extent possible, this work would be done in collaboration with other OECD Directorates, international organisations and research institutes. Towards the end of this period, viz. in Q3-Q4 2008, expert workshop(s) may be organised to solicit reactions on major conceptual and empirical issues for each of the pilot sectors. In addressing the conceptual issues, this work would be tailored to apply and test such advances specifically to the three pilot sectors.

16. Conceptual issues to be addressed can be grouped into four modules:

How to address the distinction between trade enhancing and trade restricting regulatory measures.

17. Distinguishing between regulations that address market imperfections (e.g. asymmetry of information, natural monopolies and network externalities); public policy including distributional objectives (e.g. environmental or universal access policies) and others which create economic rents, by restricting market access, or inhibiting competition is an important step in determining restrictiveness.

Timing: Q4 2007 – Q3 2008

Mode of supply

18. Existing indices offer an incomplete picture with regard to modal coverage. As noted, these deficiencies would be among those addressed by drafting pertinent questions for inclusion in the forthcoming surveys. Nonetheless, in addition, it would be necessary to determine, for each sector,

- What is the preferred mode of supply and how does such preference vary with characteristics of the country of origin and destination of trade flows, and how does it vary with characteristics of firms?
- Are modes of supply complements, substitutes or independent for the sector in question?

Timing: Q4 2007 – Q3 2008

How to determine the trade restrictive nature of regulations?

19. Two major questions need to be considered in this context:

- *Which regulations affect entry/establishment and which affect ongoing operations? Which impose fixed and which variable costs? Which barriers are truly binding for each mode*

20. It is not straight forward to aggregate trade costs in services. Fixed costs from complying with regulatory measures may not be additive, and one binding barrier may render the elimination of other barriers irrelevant. If modes of supply are complementary, trade barriers that restrict one mode of supply will in effect affect all modes, while if modes of supply are substitutes, restrictions on one mode can induce a shift to a less restricted mode and have little effect other than diverting trade from the preferred mode of supply and increase costs. Identifying and quantifying the binding trade barriers are therefore a major challenge. Binding trade barriers differ between sectors and mode. Conceptual work here would again be illustrated directly by estimates for the pilot TSRI sectors.

- *Which regulations are de jure discriminatory and which de facto?*

21. Some potential problems relate to the subjective selection of components that are relevant for assessing the restrictiveness of regulations for domestic and the foreign suppliers. Certain regulations may not explicitly be discriminatory towards foreign suppliers, nevertheless owing to different ways of entry and operation between domestic and foreign undertakings, may effectively have a more restrictive impact on the latter. Therefore, rather than arbitrarily selecting which barriers are relevant for the domestic and foreign indices, another conceivable approach would be to develop a single set of modal indices that contain all identified modal barriers. The impact on foreign or domestic firms would be determined

subsequently by an econometric exercise which identified the two groups of firms on the basis of a criterion of ownership or control.

Timing: Q4 2007 – Q3 2008

Methodologies for scoring policies and weighting resulting indicators into an STRI

22. Existing restrictiveness indices assign scores to each reply to the underlying questionnaire and aggregate them by calculating weighted averages. The weights are typically either assigned by expert judgment or through the use of statistical methods, such as factor analysis (which identifies the items that contribute the most to the variation among countries).

23. The first approach, employed, inter alia, by the Australian Productivity Commission, uses weighting methods that take into account information on types of barrier and their likely relative economic impact, reflecting expert, but nonetheless somewhat subjective judgement about the importance of each type of barrier. While such an approach is intuitively appealing, it contains somewhat subjective judgements as to the likely economic impact of different measures. To overcome this problem, OECD pioneered the use of factor analysis in its work on product market indicators. The same method was employed in the Trade Directorate's work on modal restrictiveness indices. This statistical method groups index components into linear combinations that are similar to each other, but different from other groups, and examines the effects of these linear combinations on economic outcomes. Despite criticism related to the fact that this approach selects components which explain most of the variation in the original data on regulatory restrictions based on little or no relationship with true economic importance of those factors, this methodology is becoming increasingly popular in the applied literature, primarily because it is data-driven.

24. Another approach consists of constructing weights by aggregating the underlying scores on the basis of how much a measure contributes to total trade costs. Undertaking econometric estimates of the trade cost function, and studying the relation between the restrictiveness indicators and trade by mode would contribute to do this. Under this approach, devising a cost function for trade in each services sector (which regulatory measures induce fixed costs, which induce variable costs, which are additive, which are binding etc.) would represent an advance in constructing STRIs by sector and mode.

Timing: Q4 2007- Q3 2008

4. Construction and testing of STRIs for the pilot sectors

Construction of the STRIs

25. Indicators would be constructed with the input from the extended information about regulatory policies by assigning scores to each trade and regulatory barrier. As explained above, weighting of these various scores can be done either on the basis of expert judgement from the in-depth sectoral studies or by using statistical methods. The weighting technique(s) retained would be informed by the respective conceptual paper (see III.4 above) and the preliminary empirical results carried out under that exercise, as well as by results of module III.3 on which regulatory measures are entry barriers and which affect ongoing operations; which measures are binding in their effects, etc. The conceptual work in Q4 2008 would blend naturally into this fourth phase of the work, scheduled for Q1 2009, as results from the surveys become available.

Testing of the STRIs

26. STRIs would be tested in two ways by
- a) Conducting sensitivity and robustness tests (e.g. the random weights procedure) that examine the extent of variation of the computed index in response to alternative weights.
 - b) Comparing results by using the gravity model.

Timing: Q1 2009

27. The timing of the construction of the sectoral STRIs and *a fortiori* their testing would be dependant on the arrival of the extended information from the sectoral surveys. This is estimated, according to current plans, for Q4 2008 for the three pilot sectors.

5. *Services Experts Meeting*

28. A Services Experts Meeting would be organised with institutions having collaborated in developing the STRIs to present the results of the first phase of the project with a view to obtaining reactions from services experts in international organisations, research institutes and the private sector. It would be followed up with a publication of the proceedings.

Timing: Q2 2009

F. Summary of the pilot phase of intensified services work, Q3 07 – Q2 09

29. Output results expected in mid-2009 are:
1. A sectoral study for each of three pilot sectors, containing, i.a.
 - a) improved bilateral data base, by mode
 - b) information base with scored regulatory policies
 - c) STRIs by mode for OECD Member countries
 2. Four conceptual papers, each illustrated by the pilot sectors, would address:
 - distinguishing trade-enhancing from trade-restricting regulations
 - determining preferred mode of supply, at sector and firm levels and the complementarity and substitutability of modes.
 - which regulations have the most trade restrictive effects and which are discriminatory
 - methodologies for scoring and weighting
 3. A Services Experts Meeting and publication of proceedings.

G. Resource Implications

30. The Secretariat estimates the above results will, over all, require 92 person months in analysts' and administrators' time, including a junior consultant, 12 months of a statistician (half time) and 3 months of sectoral expertise from outside consultants. These resources could be found by restructuring parts of the 2007-08 trade work programme and devoting resources to this work in the upcoming 2009-2010 PWB. The statistician would come from other TAD resources or a voluntary contribution. More precise

implications for the PWB would be made explicit for the October meeting of the Trade Committee. These would also be a function of the degree and type of co-operation which could be arranged with other agencies.

H. Possible future work

31. If the pilot work proposed here is successful, further work along similar lines can be envisaged in future phases of services work, after mid-2009. For the time being, three major areas of such future work may be suggested. (i) Further refinement of the approach to estimating STRIs developed during the pilot phase to mid-2009; (ii) extension of the sectoral coverage to include more than the three sectors included during the pilot phase; (iii) estimating the trade and welfare effects of removing the restrictions reflected in the calculated STRIs for the first series of pilot sectors.

I. Next Steps

32. The Committee is invited to discuss this proposed roadmap for work to develop STRIs, and in particular to consider the following questions:

1. *Does the proposal, including the individual streams of work outlined, effectively address the desire for enhanced quantitative work on services set out in the Committee's medium-term strategy paper (document TD/TC(2007)2)?*
2. *Does the Committee support the substance of work proposed in these five streams of work, leading to an empirical estimate of STRIs for the Member countries of the OECD?*
3. *The Secretariat suggests that the three pilot sectors be telecoms, construction and business services. Does the Committee consider this choice of sectors appropriate?*

33. Based on the Committee's responses to these questions, the Secretariat will further develop the details of this proposal, and in particular the resource implications of the outputs to be delivered, and the related timetable. On that basis, a formal proposal for adjusting the 2007-08 PWB will be submitted to the Committee, to be decided in the Committee's October 2007 meeting.

34. In anticipation of that decision, the Secretariat will immediately begin to implement the first elements of this work proposal. In addition it will further develop the details of this proposal and in particular the resource implications of the outputs to be delivered and the related timetable for consideration at the Committee's October 2007 meeting.

APPENDIX: A SHORT HISTORY OF OECD TRADE COMMITTEE WORK ON SERVICES, 1996-2007

This note summarises work on services done over the last decade in the OECD Trade Directorate, focussing in particular on attempts to quantify barriers to services trade and assess welfare gains from their removal. It shows that in four phases over the last ten years, work to quantify services barriers has been undertaken and that substantial progress has been made, despite limited data and recognised deficiencies in methodologies, in devising indices for a number of sectors for non-Member countries and assessing gains from the reform of services barriers. A few general points are made and tentative lessons drawn from the decade of work. A list of relevant documents prepared for the Trade Committee on services appears at the end of this Appendix.

A. Services work done in the past

A resurgence in services work in the Trade Directorate was decided in 1996, after the GATS came into force and with a view to the forthcoming GATS 2000 negotiations. In its *initial phase* the Trade Committee agreed to explore the scope for developing tariff-equivalent measures of protection covering international transactions in services. Two initial studies were carried out on telecommunications and accountancy, the latter using an innovative approach examining the cumulative effect of domestic regulations. Following these two pilot studies, the Working Party expressed a certain scepticism about continuing along the same lines, due to lack of data, concerns underlying the tariff-equivalent approach, and the complexity of the approach used to assess accountancy regulations. The emphasis shifted from “*Measuring* barriers to trade in services” to “*Assessing* barriers to trade in services”, that is adopting a more qualitative approach, which ranks the barriers by assigning them one of five levels of restrictiveness. Sectoral studies undertaken in 1998-2000 covered: financial information and advisory services; environmental services; computer services; air freight; wholesale and retail distribution. This led to a consolidated inventory of barriers to services trade, but it was not possible to reach consensus as had been hoped on the relative restrictiveness and a numerical ranking of the barriers identified.

Emphasis shifted to horizontal and cross-sectoral analyses including on modalities for liberalisation of services trade. Studies were prepared, *inter alia*, on: cross-cutting or formula approaches to liberalisation; strengthening regulatory transparency; negotiating on the basis of “clusters” of interdependent services; scheduling economic needs tests; MFN exemptions; and possible generic approaches to anticompetitive practices, focussing on interconnection disciplines. These were highly appreciated by the Working Party and published in a volume entitled *Services Negotiations: Negotiating Issues and Approaches*, but much of this horizontal work, including suggestions for formula approaches, could not be directly used in the negotiations. Indeed, in March 2001, the WTO adopted guidelines and procedures for the negotiations on trade in services which foresaw bilateral request-offer approaches as the main method for the services market access negotiations.

In a *second phase* of the work, the Secretariat prepared a literature review on quantification of the costs for national welfare from barriers to trade in services and scoped further work in this area. As a follow-up to the literature review, sectoral work to measure OECD Member country barriers was however not accepted, in view of the GATS negotiations which were underway. Nonetheless detailed work by the

Trade Directorate was carried out in 2001-2003 on South Eastern Europe, the Baltic States and transition economies, under the aegis of the relevant CCNM programmes. Significant progress both in terms of collecting data and information on services barriers was made for these non-Members, particularly for the banking, telecommunications, distribution and professional services sectors. The SEE and Baltic States projects were wrapped up in 2004. Restrictiveness indices were developed for a number of services sectors for the countries studied.

In a *third phase* of Trade Committee work on services barriers, “Services trade liberalisation: assessing opportunities and gains” [Part 2, “Modelling the economic benefits of services trade liberalisation” of TD/TC/WP(2003)23/FINAL] provided results of econometric and CGE studies to identify the gains from services liberalisation, focussing on developing countries. The study, (together with its first part illustrating developing country services exports for a dozen sectors), was presented to the WTO Council for Trade in Services in Special Session in April 2004 and provoked considerable interest by developing countries. As a follow-up to the literature overview, the Working Party agreed to a new quantification study focussing on non-Members; the full technical study “The Economy-wide effects of services trade barriers in selected developing countries”, used the 2-stage methodology developed by the Australian Productivity Commission of creating sectoral restrictiveness indices and then assessing the impact with derived tax equivalents. A non-technical summary was also prepared. Averages for the OECD zone as a whole were noted, as a point of comparison, but no indices for individual OECD Members were presented.

Building on this 2004 study and its new data for several developing countries, plus those collected on SEE countries and new information from World Bank/OAS surveys on 8 Latin American countries, further country-specific work, again on non-Members, was undertaken to improve the sectoral restrictiveness indices. This new study included an improved methodology on (i) the construction of restrictiveness indices for different modes of supply and tax equivalents and (ii) econometric specifications including sector-specific regulatory variables, such as transparency of existing regulations and the status of national regulatory agencies. These were illustrated for the banking, insurance, telecoms, transport, distribution and professional services sectors in 9 transition economies, 4 Asian countries, 8 Latin American countries, 4 in Africa and one in the Middle East. From the experience gained in extending the analysis to a larger number of developing countries and testing the robustness of results through refinements in the methodology, it was recognised that in view of the difficulty to differentiate between the nature of barriers (whether their impact is cost-increasing or rent-creating) detailed policy conclusions should be of a more flexible, qualitative interpretation, combined with a rank ordering of countries for indicative purposes.

In what can be considered a new, *fourth phase* of work on quantifying the effect of services regulations, a recent piece has examined natural and regulatory barriers to services trade, focussing on domestic regulation. It analyses the impact of domestic regulation on market entry and trade flows, using cross-border trade data for all services, business services and financial services. This methodology recognises, and takes into account, the fact that services trade entails both fixed and variable costs, that is, it is different from *ad valorem* tariffs being applied to goods trade. The econometric work uses indicators derived from the Economics Department’s product market regulation (PMR) data base and re-composed for this analysis. TAD plans to extend the above analysis to incorporate information on mode 3 (commercial presence).

B. Lessons learnt and gaps in past work

The following general points and tentative lessons can be drawn, based on the work undertaken for the Trade Committee since 1996.

- * Services trade is different in nature from goods trade and, analysis must focus on the barriers which are typically behind-the-border, non-price regulations. As information on such regulations is qualitative, it must be assessed and converted into quantitative indicators to develop the restrictiveness indices.
- * The early approaches using frequency indices applied to GATS schedules (with their positive lists of specific commitments) for a number of reasons do not provide sufficient information to capture the effects of the barriers to trade in individual services sectors.
- * Following on the several literature reviews produced by the Trade Directorate on measuring the effects of barriers to services trade, and in co-operation with other national and international institutions, the Secretariat has also contributed to improving existing methodologies, for example by extending the analysis to incorporate estimates for supply modes 1, 3 and 4.
- * OECD work on individual countries has focussed on non-Members, with original data and information on regulations gathered for South Eastern European countries, Baltics and transition economies; work has begun now on the MENA region.
- * Systematic gathering of information on individual OECD Members relevant for constructing indices on services has not taken place in the Trade Committee work. Average indices used in modelling work were based on estimates carried out by other institutions.
- * Services data and information on regulations is much poorer than that for goods. Existing data bases, e.g. the product market regulation (PMR) indicators (ECO), the FDI-restrictiveness index (ECO and DAF/INV) are useful tools and do provide information on Member country policies, but would need to be adapted and augmented to provide necessary inputs for devising restrictiveness indices for services.
- * The choice of sectors which have been analysed in the past has been made on the basis of the sector's economic importance and relative data availability in order to provide the basis for a solid, economically rigorous approach to subsequent analysis.
- * Methodologies are still at a relatively early stage and above mentioned OECD work has tended to use those estimating both the direct incidence of regulatory restrictions (converting qualitative information into a quantitative index of restrictiveness) and using econometrics to estimate the effects of the restrictiveness index on prices, costs, price-cost margin, quantities or productivity.

C. Key studies on services trade: 1996-2007

1. Empirical, quantification studies

Services trade and domestic regulation [TD/TC/WP(2006)20/FINAL]

Analyses the impact of domestic regulation on market entry and cross-border trade flows for all services, financial services and other business services. This methodology recognises, and takes into account, the fact that services trade entails both fixed and variable costs, that is services barriers are different from *ad valorem* tariffs applied to goods trade.

Logistics and time as a trade barrier [TD/TC/WP(2006)3/FINAL]

Analyses the impact of time for exports on market entry, focusing on time sensitive products of export interest to developing countries. It found that not only does time reduce the volume of exports; time also significantly reduces the probability that a country will enter export markets at all in time-sensitive products.

Modal estimates of services barriers [TD/TD/WP(2005)36/FINAL]

The paper includes an improved approach to (i) the construction of modal restrictiveness indices and tax equivalents by using alternative weighting methods and (ii) econometric specifications that include additional sector-specific regulatory variables. These improvements are illustrated for banking, insurance, telecom, transport, distribution and professional services. Covers 26 developing and transition economies.

Services trade liberalisation: Identifying opportunities and gains [TD/TC/WP(2003)23/FINAL] and Key Findings [TD/TC/WP(2003)25/FINAL]. Part II summarises results of econometric work to identify the gains from services liberalisation, in particular for developing countries. (Part I is listed under advocacy below).

The economy-wide effects of services trade barriers in selected developing countries [TD/TC/WP(2002)42]
Analyses the impact of services barriers on the effective rates of protection in manufacturing sectors.

Quantification of the costs to national welfare of barriers to trade in services [TD/TC/WP(2000)32]

A literature review on quantification of the costs to national welfare from barriers to trade in services [TD/TC/WP(2000)24/FINAL]

The above two studies appear in the publication: *Quantifying the Benefits of Liberalising Trade in Services*.

Assessing barriers to trade in services: extended project outline [TD/TC/WP(98)35]

After the Working Party found the initial approaches to be too complicated, a simplified format was developed to rank services barriers through a five-tiered scale of restrictiveness for categories of services barriers. The aim was then to proceed sectorally studied in this phase of the project: financial information, environmental, computer, tourism, air-freight, retail and wholesale trade services.

Assessing Barriers to Trade in Services: A Pilot Study on Accountancy Services [TD/TC/WP(97)26]

Measuring Barriers to Trade in Services [TD/TC/WP(96)38]

Following agreement in the Trade Committee on a feasibility outline for developing a set of indicators and tariff-equivalents measures of protection covering international transactions in services,

2. Advocacy, outreach and services experts meetings

OECD-UNCTAD Workshop on Trade in Services

The workshop, held in June 2006, helped WTO Members, and particularly developing countries, to gain a greater insight into the particular issues in services sectors and how they might be approached in the negotiations. The sectors covered include business support services, logistics and related services, construction and related engineering services, energy services and environmental services. The six sectoral checklists were made available to participants (See under Sectoral Studies below).

Services trade liberalisation: Identifying opportunities and gains [TD/TC/WP(2003)23/FINAL] and Key Findings [TD/TC/WP(2003)25/FINAL] Part I provides concrete examples of services exports by developing countries and was presented to the WTO Council for Trade in Services.

Policy Briefs

Opening Up Trade in Services: Crucial for Economic Growth

Opening Up Trade in Services: opportunities and Gains for Developing Countries

Policy briefs prepared in 2005 and 2003 for, respectively the Hong Kong and Cancún WTO Ministerials

Open Services Markets Matter

This advocacy publication addresses the benefits of services liberalisation. A **policy brief** was also prepared for the WTO Doha Ministerial.

*Services Experts Meetings**Sixth Services Experts Meeting on Domestic Regulation, with the World Bank, February 2007*

Focussed on professional services, including empirical and sectoral (legal, accountancy, architectural, engineering and medical services) studies. Report in TAD/TC/WP(2007)5

Fifth Services Experts Meeting on Universal access policies, with the World Bank, February 2005, including the publication: Liberalisation and Universal Access to Basic Services

Like the meeting, the publication brings together the sectoral overview papers and national case studies on access policies for telecommunications, financial, energy and environmental network services (water and sanitation).

Fourth Services Experts Meeting on Mode 4, with the World Bank and IOM, November 2003

Focussed on the temporary movement of service providers under GATS Mode 4. A summary, together with background material from the meeting, appears in the OECD publication *Trade and Migration: Building Bridges for Global Labour Mobility*. Report in TD/TC/WP(2004)12

Third Services Experts Meeting on Domestic Regulation and Quantification, with the World Bank, in March 2002

Sectoral and issues papers on domestic regulatory practice and services trade liberalisation including with background papers on accountancy, financial, energy, health, transportation and telecommunications, as well as horizontal issues. A second item concerned measuring the benefits of services trade liberalisation. Publications: *Domestic Regulation and Service Trade Liberalisation* (World Bank) and *Quantifying the Benefits of Liberalising Trade in Services* (OECD).

Second Services Experts Meeting, May 2000 [TD/TC/SE(2000)2]

The meeting was structured around: trade-related domestic regulations; cross-sectoral issues (including “clusters,” the consolidated list of barriers and economic needs tests); and sectoral studies.

First Services Experts Meeting, June 1999 [TD/TC/WP(99)4]

Focussed on developing practical approaches to scheduling and rule-making for the GATS 2000 negotiations: improving user-friendliness of schedules, domestic regulation, and developing indexes of barriers according to their trade-restrictiveness.

3. Sectoral studies*Services trade and tourism development [TD/TC/WP(2006)24/REV1]*

Effects of more liberal trade and investment policies in the range of services and infrastructure that are needed to support tourism.

Education services

In the 2007 OECD/World Bank publication, *Capacity building in tertiary education through cross-border higher education*, a chapter analyses opportunities and challenges of liberalising trade and investment in higher education. In 2004, the two publications *Internationalisation and Trade in Higher Education: Opportunities and Challenges* and *Quality and Recognition in Higher Education: the Cross-border Challenge* were prepared in co-operation between CERI and the Trade Directorate.

OECD-UNCTAD Sectoral checklists

Under this joint OECD-UNCTAD project, six sectoral checklists on managing request-offer negotiations under the GATS were prepared on insurance (OECD), energy (UNCTAD), legal (OECD), environmental (OECD), construction (UNCTAD) and logistics services (UNCTAD). (See also Joint workshop under advocacy).

Managing Request Offer Negotiations Under the GATS:

the Case of Logistics Services [TD/TC/WP(2006)3/FINAL]

the Case of Construction Services [TD/TC/WP(2005)10/FINAL]

the Case of Environmental Services [TD/TC/WP(2004)8/FINAL]

the Case of Legal Services [TD/TC/WP(2003)40/FINAL]

the Case of Energy Services [TD/TC/WP(2003)24/FINAL]

the Case of Insurance Services [TD/TC/WP(2003)17/FINAL]

(The finalised checklists on logistics, construction and energy services can be found at:
www.unctad.org)

Health Services

The Secretariat assisted the WHO in adapting the checklist for trade in health services in preparation for WHO's second international workshop on health services and the GATS, held in July 2003 in Canada; this became a chapter in the WHO publication.

E-commerce

Regulation of services traded electronically [TD/TC/WP(2002)32/FINAL]

Electronic commerce: a cluster approach to the negotiation of input services

[TD/TC/WP(2000)33/FINAL] on the possibility of taking a cluster approach to the negotiation of commitments for input or infrastructure services for electronic commerce.

Electronic commerce: Case studies on the Downloadable Digital Products [TD/TC/WP(99)60]

Assessing Barriers to Trade in Services:

Tourism Services [TD/TC/WP(2000)10/FINAL]

Air cargo services [TD/TC/WP(99)57/FINAL]

Retail Trade Services [TD/TC/WP(99)41/FINAL]

Wholesale Trade Services [TD/TC/WP(99)18/FINAL]

Environmental services [COM/TD/ENV(98)68 and Annex]- examined by both the WPTC and JWPTC and published in 2001 in *Environmental Goods and Services: the benefits of further global trade liberalisation*

Financial information advisory services [TD/TC/WP(98)51/FINAL and ANNI]

A Pilot Study on Accountancy Services [TD/TC/WP(97)26]

4. Cross-sectoral studies

The linkages between open services markets and technology transfer [TD/TC/WP(2005)9/FINAL]

In two parts, Part I explores how open services markets increase exposure to foreign technologies. In Part II, the study investigates how open services markets can reduce the cost of technology transfer and help to build better absorptive capacities.

Inter-modal linkages in services trade [TD/TC/WP(2004)41/FINAL]

The report discusses the various kinds of intermodal linkages that are found in services sector trade, using evidence from companies, countries, and surveys and from a wide range of services.

Liberalising network infrastructure services and the GATS [TD/TC/WP(2004)51/FINAL]

Part I investigates how regulatory objectives can be achieved in liberalised markets by exploring experience with competition in network infrastructure services (communication, energy and environmental services) previously provided solely by governments. Part II discusses opportunities and challenges of bound liberalisation of these services under the GATS.

Special and differential treatment under the GATS [TD/TC/WP(2005)24/FINAL] analyses the use and effectiveness of SDT in terms of market access in services sectors of export interest to developing countries. Discussed at the OECD Global Forum on Trade, held in June 2005.

Managing Request-Offer Negotiations Under The GATS: Survey of Country Preparations for the Negotiations [TD/TC/WP(2002)47/FINAL] surveys preparations for the GATS negotiations in terms of both intra-governmental co-ordination and stakeholder consultation. Responses received from 17 OECD Members and observers, and selected non-OECD countries.

Managing request-offer negotiations under the GATS [TD/TC/WP(2002)13/FINAL] A guide to negotiations: Part I looks at how countries may position themselves in terms of consultation with stakeholders and intra-governmental co-ordination. Part II is a guide to assess negotiating options and includes the generic checklist on which the six sectoral checklists were based.

A Roadmap to GATS MFN exemptions [TD/TC/WP(2001)25/FINAL] depicts the universe of 424 MFN exemptions listed by WTO Members, highlighting the sectoral and regional incidence of exemptions through tables and charts.

**Transparency in domestic regulation: prior consultation [TD/TC/WP(2000)31/REV1]*

TAD/TC(2007)4

**The scheduling of economic needs tests in the GATS: An overview [TD/TC/WP(2000)11/FINAL]*

**Using 'cluster' approaches to specific commitments for interdependent services [TD/TC/WP(2000)9/REV2]*

**Cross-cutting ("Formula") Approaches to Multilateral Services Negotiations [TD/TC/WP(99)42/FINAL]*

**Consolidated List of Cross-sectoral and Sector-specific Barriers [TD/TC/WP(99)58].*

(*Published in OECD 2001 volume: Trade in Services: Negotiating Issues and Approaches)

Potential interconnection disciplines and their relevance to specific sectors [TD/TC/WP(99)44/FINAL]

Mode 4

Service Providers On The Move: Mutual Recognition Agreements [TD/TC/WP(2002)48/FINAL]

Current Regimes For Temporary Movement Of Service Providers Case Study: The United States Of America [TD/TC/WP(2002)23/FINAL]

Current Regimes For Temporary Movement Of Service Providers Case Study: Australia [TD/TC/WP(2002)22/FINAL]

Service Providers On The Move: The Economic Impact Of Mode 4 [TD/TC/WP(2002)12/FINAL]

Service Providers On The Move: a closer look at labour mobility and the GATS [TD/TC/WP(2001)26/FINAL]

Modes 1 and 2

Existing Commitments for Online Supply of Services [TD/TC/WP(99)37/FINAL & ADD] contains a detailed presentation on the existing scope of GATS specific commitments for modes 1 and 2

5. Country or regional focus

South-south services trade [TD/TC(2006)7/FINAL]

A first attempt to shed some light on the nature and scale of South-South services trade. The paper also shows that the gravity model can successfully be applied to trade in services using FDI stocks in services sectors as a proxy for trade in services through mode 3. Finally, it analyses the impact of lifting restrictions on services performance.

Services barriers and their economic impact: examples of banking and telecommunication services in selected transition economies [TD/TC/WP(2004)32/FINAL]

Measures services barriers to calculate the restrictiveness and impact of services barriers in the Baltic States and 8 SEE countries (for banking and telecoms) and Russia (for telecoms only)

The Trade in Services in South Eastern Europe project

This final report focuses on the main achievements of the project and the evaluation of the capacity building seminars organised during the last phase of the project. See <http://www.oecd.org/trade/see> on the SEE capacity building seminars

Meeting on Strategies for Developing Regional and Multilateral Trade in Services in Transition Economies: The experience of the Baltic States, Russia and South East Europe CCNM/TD/M(2003)9/FINAL