Bibliography

Abel-Koch, J. (2010), "Endogenous Trade Policy with Heterogeneous Firms", Center for Doctoral Studies in Economics, University of Mannheim, Discussion Paper 93.

Abrego, L., Perroni, C., Whalley, J. and Wigle, R. M. (2001), "Trade and environment: Bargaining outcomes from linked negotiations", *Review of International Economics* 9(3): 414-428.

Acemoglu, D. and Robinson, J. A. (2001), "Inefficient Redistribution", *American Political Science Review* 95(03): 649-661.

Adlung, R. and Roy, M. (2009), "Turning Hills into Mountains? Current Commitments Under the General Agreement on Trade in Services and Prospects for Change", *Journal of World Trade* 39(6): 1161-1194.

Ahn, J. B., Khandelwal, A. K. and Wei, S.-J. (2011), "The role of intermediaries in facilitating trade", *Journal of International Economics* 84(1): 73-85.

Anders, S. M. and Caswell, J. A. (2009), "Standards as Barriers Versus Standards as Catalysts: Assessing the Impact of HACCP Implementation on U.S. Seafood Imports", *American Journal of Agricultural Economics* 91(2): 310-321.

Anderson, S. P. and Schmitt, N. (2003), "Non-tariff Barriers and Trade Liberalization", *Economic Inquiry* 41(1): 80-97.

Ando, M. and Obashi, A. (2010), "The pervasiveness of non-tariff measures in ASEAN – evidences from the inventory approach", in Mikic, M. (Ed.), *Rising Non-Tariff Protectionism and Crisis Recovery*, Bangkok, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

Andriamananjara, S., Dean, J. M., Feinberg, R. M., Ferrantino, M. J., Ludema, R. D. and Tsigas, M. (2004), "The Effects of Non-Tariff Measures on Prices, Trade, and Welfare: CGE Implementation of Policy-Based Price Comparisons", U.S. International Trade Commission, Washington, D.C., Office of Economics Working Paper EC2004-04-A.

Antràs, P. (2011), "Grossman-Hart (1986) Goes Global: Incomplete Contracts, Property Rights, and the International Organization of Production", Washington D.C., National Bureau of Economic Research, Working Paper 17470.

Antràs, P. and Staiger, R. W. (2012a), "Offshoring and the Role of Trade Agreements", *American Economic Review* (forthcoming).

Antràs, P. and Staiger, R. W. (2012b), "Trade Agreements and the Nature of International Price Determination", *American Economic Review: Papers & Proceedings* (forthcoming).

Athey, S. and Schmutzler, A. (1995), "Product and Process Flexibility in an Innovative Environment", *Rand Journal of Economics* 26(4): 557-574.

Auld, G., Gulbrandsen, L. H. and McDermott, C. L. (2008), "Certification Schemes and the Impacts on Forests and Forestry", *Annual Review of Environment and Resources* 33: 187-211.

Babiker, M. H. (2005), "Climate Change Policy, Market Structure, and Carbon Leakage", *Journal of International Economics* 65(2): 421-445.

Bacchetta, M., Richtering, J. and Santana, R. (2012), "How much light do WTO notifications shed on NTMs?", in Cadot, O. and Malouche, M. (eds.), Non-Tariff Measures: A fresh look at trade policy's new frontier, Washington, D.C. and London, World Bank and Centre for Economic Policy Research.

Bagwell, K. and Staiger, R. W. (1989), "The Role of Export Subsidies When Product Quality is Unknown", *Journal of International Economics* 27(1-2): 69-89.

Bagwell, K. and Staiger, R. W. (1990), "A Theory of Managed Trade", *American Economic Review* 80(4): 779-795.

Bagwell, K. and Staiger, R. W. (1999), "An Economic Theory of GATT", American Economic Review 89(1): 215-248.

Bagwell, K. and Staiger, R. W. (2001), "Domestic Policies, National Sovereignty and International Economic Institutions", *Quarterly Journal of Economics* 116(2): 519-562.

Bagwell, K. and Staiger, R. W. (2002), *The Economics of the World Trading System*, Cambridge, MA: MIT Press.

Bagwell, K., Mavroidis, P. C. and Staiger, R. W. (2002), "It's a Question of Market Access", *American Journal of International Law* 96(1): 56-76.

Baier, S. L. and Bergstrand, J. H. (2009), "Bonus vetus OLS: A simple method for approximating international trade-cost effects using the gravity equation", *Journal of International Economics* 77(1): 77-85.

Bajona, C. and Ederington, J. (2009), "Domestic Policies, Hidden Protection and the GATT/ WTO", unpublished working paper.

Baldwin, R. E. (1970), *Nontariff Distortions in International Trade*, Washington, D.C., The Brookings Institution.

Baldwin, R. E. (2000), "Regulatory Protectionism, Developing Nations, and a Two-Tier World Trade System", London, Centre for Economic Policy Research, Discussion Paper 2574.

Baldwin, R. E. (2005), "Heterogeneous firms and trade: testable and untestable properties of the Melitz model", Washington, D.C., National Bureau of Economic Research, Working Paper 11471.

Baldwin, R. E. (2008), "Managing the Noodle Bowl: The Fragility of East Asian Regionalism", *Singapore Economic Review* 53(3): 449-478.

Baldwin, R. E. and Evenett, S. (eds.) (2010), *The Collapse of Global Trade, Murky Protectionism, and the Crisis: Recommendations for the G20,* London, Centre for Economic Policy Research.

Baldwin, R. E. and Robert-Nicoud, F. (2007), "Offshoring: General Equilibrium Effects on Wages, Production and Trade", Washington, D.C., National Bureau of Economic Research, Working Paper 12991.

Baldwin, R. E., Cave, M. and Lodge, M. (2012), *Understanding regulation*, Oxford, Oxford University Press.

Baller, S. (2007), "Trade effects of regional standards. A heterogeneous firms approach", Washington, D.C., World Bank, Policy Research Working Paper 4124.

Bannister, G. J. (1994), "Rent sharing in the multi-fibre arrangement: The case of Mexico", *Review of World Economics* 130(4): 800-827.

Barrett, S. (1994), "Self-Enforcing International Environmental Agreements", Oxford Economic Papers 46(2): 878-894.

Barrett, S. (1997), "The Strategy of Trade Sanctions in International Environmental Agreements", *Resource and Energy Economics* 19(4): 345-361.

Barth, J. R., Caprio, G. and Levine, R. (2008), "Bank Regulations are Changing: For Better or Worse?", *Comparative Economic Studies* 50(4): 537-563.

Barth, J. R., Marchetti, J. A., Nolle, D. E. and Sawangngoenyuang, W. (2006), "Foreign Banking: Do Countries' WTO Commitments Match Actual Practices?", Geneva, World Trade Organization, Working Paper ERSD 2006-11.

Battaglini, M. and Coate, S. (2007), "Inefficiency in Legislative Policy-Making: A Dynamic Analysis", *American Economic Review* 97(1): 118-149.

Battigalli, P. and Maggi, G. (2003), "International Agreements on Product Standards: An Incomplete-Contracting Theory", Washington, D.C., National Bureau of Economic Research, Working Paper 9533.

Beaulieu, E. and Gaisford, J. (2002), "Labour and Environmental Standards: the 'Lemons Problem' in International Trade Policy", *World Economy* 25(1): 59-78.

Beghin, J. C. (2006), "Nontariff Barriers", Center for Agricultural and Rural Development, Iowa State University, Food and Agricultural Policy Research Institute (FAPRI) Working Paper 06-wp438.

Bernard, A. B., Grazzi, M. and Tomasi, C. (2011), "Intermediaries in International Trade: Direct versus indirect modes of export", Washington, D.C., National Bureau of Economic Research, Working Paper 17711.

Bernard, A. B., Jensen, J. B., Redding, S. J. and Schott, P. K. (2010), "Wholesalers and Retailers in US Trade", *American Economic Review: Papers & Proceedings* 100(2): 408-413.

Bhagwati, J. (1968), "More on the Equivalence of Tariffs and Quotas", *American Economic Review* 58(1): 142-146.

Bhagwati, J. (1988), Protectionism, Cambridge, MA, MIT Press.

Bhagwati, J. and Ramaswami, V. K. (1963), "Domestic distortions, tariffs and the theory of optimum subsidy", *Journal of Political Economy* 71(1): 44-50.

Birdsall, N. and Lawrence, R. Z. (1999), "Deep Integration and Trade Agreements: Good For Developing Countries", in Kaul, I. Grunberg, I. and Stern, M. A. (Eds.), *Global Public Goods*, United Nations Development Programme.

Blanchard, E. J. (2007), "Foreign direct investment, endogenous tariffs, and preferential trade agreements", *B.E. Journal of Economic Analysis & Policy* 7(1).

Blind, K. (2001), "The impacts of innovations and standards on trade of measurement and testing products: empirical results of Switzerland's bilateral trade flows with Germany, France and the UK", Information Economics and Policy 13(4): 439-460.

Blind, K. (2004), The Economics of Standards – Theory, Evidence, Policy, Cheltenham, UK, Edward Elgar Publishing.

Boccard, N. and Wauthy, X. (2005), "Enforcing Domestic Quality Dominance through Quotas", *Review of International Economics* 13(2): 250-261.

Bodansky, D. (2010), "The Copenhagen Climate Change Conference: A Postmortem", *American Journal of International Law* 104(2): 230-240.

Bolwig, S. and Gibbon, P. (2009), "Counting Carbon in the Marketplace: Part I – Overview Paper", unpublished working paper.

Bombardini, M. (2008), "Firm Heterogeneity and Lobby Participation", *Journal of International Economics* 75(2): 329-348.

Bond, E. W. (1984), "International Trade with Uncertain Product Quality", *Southern Economic Journal* 51(1): 196-207.

Bora, B., A. Kuwahara and Laird, S. (2002), "Quantification of non-tariff measures", Geneva, United Nations Conference on Trade and Development, Policy Issues in International Trade and Commodities Study Series No. 18,.

Bordoff, J. E. (2009), "International Trade Law and the Economics of Climate Policy: Comment Evaluating the Legality and Effectiveness of Proposals to Address Competitiveness and Leakage Concerns", in Brainard, L. and Sorkin, I. (eds.), Climate Change, Trade, and Competitiveness: Is a Collision Inevitable?, Washington, D.C., Brookings Institution Press.

Botteon, M. and Carraro, C. (1998), "Strategies for Environmental Negotiations: Issue Linkage with Heterogeneous Countries", in Hanley, N. and Folmer, H. (eds.), *Game Theory and Climate Change*, Cheltenham, MA, Edward Elgar.

Bovenberg, A. L. and Goulder, L. H. (2002), "Environmental Taxation and Regulation", in Auerbach, A. J. and Feldstein, M. (eds.), *Handbook of Public Economics, Volume 3*, Amsterdam, North-Holland.

Bown, C. P. and Tovar, P. (2011), "Trade Liberalization, Antidumping and Safeguards: Evidence from India's Tariff Reform", *Journal of Development Economics* 96(1): 115-125.

Bown, C. P. and Trachtman, J. P. (2009), "Brazil – Measures Affecting Imports of Retreaded Tyres: A Balancing Act", *World Trade Review* 8(01): 85-135.

Bradford, S. (2003), "Paying the price: Final goods protection in OECD Countries", *Review of Economics and Statistics* 85(1): 24-37.

Brander, J. A. (1995), "Strategic Trade Policy", in Grossman, G. M. and Rogoff, K. (eds.), *Handbook of International Economics*, Amsterdam, North-Holland.

Brander, J. A. and Spencer, B. J. (1985), "Export Subsidies and International Market Share Rivalry", *Journal of International Economics* 18(1-2): 83-100.

Breinlich, H. and Criscuolo, C. (2011), "International trade in services: A portrait of importers and exporters", *Journal of International Economics* 84(2): 188-206.

Brenton, P., Edwards-Jones, G. and Jensen, M. F. (2009), "Carbon Labelling and Low-Income Country Exports: A Review of the Development Issues", *Development Policy Review* 27(3): 243-267.

Broda, C., Limao, N. and Weinstein, D. E. (2008), "Optimal Tariffs and Market Power: The Evidence", *American Economic Review* 98(5): 2032-2065.

Brou, D. and Ruta, M. (2009), "A Commitment Theory of Subsidy Agreements", unpublished working paper.

Bulow, J. I., Geanakoplos, J. D. and Klemperer, P. D. (1986), "Multimarket Oligopoly: Strategic Substitutes and Complements", *Journal of Political Economy* 93(3): 488-511.

Böcker, A. and Hanf, C.-H. (2000), "Confidence lost and -partially - regained: consumer response to food scares", *Journal of Economic Behavior & Organization* 43(4): 471-485.

Büthe, T. (2010), "Engineering Uncontestedness? The Origins and Institutional Development of the International Electrotechnical Commission (IEC)", *Business and Politics* 12(3): 1-62.

Büthe, T. and Mattli, W. (2011), *The New Global Rulers The Privatization of Regulation in the World Economy*, Princeton, NJ, Princeton University Press.

Cadot, O., Disdier, A.-C. and Fontagné, L. (2010), "North-South Standards Harmonization and International Trade", Centre for Economic Policy Research, London, Discussion Paper 8767.

Cadot, O., Malouche, M. and Saez, S. (2012), *Streamlining Non-Tariff Measures: A Toolkit for Policymakers*, Washington, D.C., World Bank.

Cafaggi, F. and Janczuk, A. (2010), "Private Regulation and Legal Integration: The European Example", *Business and Politics* 12(3): 1-40.

Carpenter, D. P. (2004), "Protection without Capture: Product Approval by a Politically Responsive, Learning Regulator", *American Political Science Review* 98(04): 613-631.

Casella, A. (2001), "Product Standards and International Trade: Harmonization through Private Coalitions?", *Kyklos* 54(2-3): 243-264.

Cashore, B. (2002), "Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority", Governance: An International Journal of Policy, Administration, and Institutions 15(4): 503-529.

Caswell, J. A. and Mojduszka, E. (1996), "Using Informational Labeling to Influence the Market for Quality in Food Products", *American Journal of Agricultural Economics* 78(5): 1248-1253.

Chaney, T. (2008), "Distorted Gravity: the Intensive and Extensive Margins of International Trade", *American Economic Review* 98(4): 1707-1721.

Chen, C., J. Yang and Findlay, C. (2008), "Measuring the Effect of Food Safety Standards on China's Agricultural Exports", *Review of World Economics* 144(1): 83-106.

Chen, M. (2003), "Factors Affecting the Adoption and Diffusion of XML and Web Services Standards for E-business Systems", *International Journal of Human-Computer Studies* 58(3): 259-279.

Chen, M. X. and Mattoo, A. (2008), "Regionalism in standards: good or bad for trade?", *Canadian Journal of Economics* 41(3): 838-863.

Chen, M. X., Otsuki, T. and Wilson, J. S. (2006), "Do Standards Matter for Export Success?", World Bank, Washington, D.C., Policy Research Working Paper 3809.

Chen, N. and Novy, D. (2011), "Gravity, trade integration, and heterogeneity across industries", *Journal of International Economics* 85(2): 206-221.

Chen, N. and Novy, D. (2012), "On the Measurement of Trade Costs – Direct vs. Indirect Approaches to Quantify Standards and Technical Regulations", unpublished working paper.

Clougherty, J. A. and Grajek, M. (2008), "The impact of ISO 9000 diffusion on trade and FDI: A new institutional analysis", Journal of International Business Studies 39(4): 613-633.

Coate, S. and Morris, S. (1995), "On the Form of Transfers to Special Interests", *Journal of Political Economy* 103(6): 1210-1235.

Collins-Williams, T. and Wolfe, R. (2010), "Transparency as a Trade Policy Tool: the WTO's Cloudy Windows", *World Trade Review* 9(04): 551-581.

Congressional Quarterly (2009), "Vehicle Trade-In Bill has Dual Goals: Fuel Efficiency, Aid to Auto Industry", Washington, D.C., Weekly Report 15 June 2009.

Conway, P. and Nicoletti, G. (2006), "Product market regulation in the non-manufacturing sectors of OECD countries: measurement and highlights", Paris, Organisation for Economic

Co-operation and Development, Economics Department Working Paper 530.

Conway, P., Janod, V. and Nicoletti, G. (2005), "Product Market Regulation in OECD Countries", Paris, Organisation for Economic Co-operation and Development, Economics Department Working Paper 419.

Copeland, B. R. (1990), "Strategic Interaction among Nations: Negotiable and Non-Negotiable Trade Barriers", *Canadian Journal of Economics* 23(1): 84-108.

Copeland, B. R. and Mattoo, A. (2008), "The Basic Economics of Services Trade", in Mattoo, A., Stern, R. M. and Zanini, G. (eds.), *Handbook of International Trade in Services*, Oxford, Oxford University Press.

Copeland, B. R. and Taylor, S. M. (1994), "North-South Trade and the Environment", *Quarterly Journal of Economics* 109(3): 755-787.

Copeland, B. R. and Taylor, S. M. (2005), "Free Trade and Global Warming: A Trade Theory View of the Kyoto Protocol", *Journal of Environmental Economics and Management* 49(2): 205-234.

Corden, W. M. (1974), *Trade Policy and Economic Welfare*, Oxford, Clarendon Press.

Corfee-Morlot, J. and Hohne, N. (2003), "Climate Change: Long-Term Targets and Short-Term Commitments", *Global Environmental Change* 13(4): 277-293.

Costinot, A. (2008), "A comparative institutional analysis of agreements on product standards", *Journal of International Economics* 75(1): 197-213.

Crivelli, P. and Gröschl, J. (2012), "SPS Measures and Trade: Implementation Matters", Geneva, World Trade Organization, Working Paper ERSD-2012-05.

Croome, J. (1996), Reshaping the World Trading System: a History of the Uruguay Round, Geneva, World Trade Organization.

Daly, M. and Kuwahara, H. (1998), "The Impact of the Uruguay Round on Tariff and Non-Tariff Barriers", *The World Economy* 21(2): 207-234.

Dam, K. (1970), *The GATT: Law and international economic organization*, Chicago, University of Chicago Press.

De Bruijn, R., Kox, H. and Lejour, A. (2008), "Economic benefits of an Integrated European Market for Services", *Journal of Policy Modeling* 30(2): 301-319.

De Frahan, B. H. and Vancauteren, M. (2006), "Harmonisation of food regulations and trade in the Single Market: evidence from disaggregated data", *European Review of Agricultural Economics* 33(3): 337-360.

Deardorff, A. V. (1985), "Comparative Advantage and International Trade and Investment in Services", in Stern, R. M. (ed.), *Trade and Investment in Services: Canada/U.S. perspectives*, Toronto, Ontario Economic Council.

Deardorff, A. V. (2001), "International Provision of Trade Services, Trade, and Fragmentation", *Review of International Economics* 9(2): 233-248.

Deardorff, A. V. and Stern, R. M. (1998), *Measurement of Nontariff Barriers*, Ann Arbor, MI, University of Michigan Press.

Deardorff, A. V. and Stern, R. M. (2008), "Empirical Analysis of Barriers to International Services Transactions and the Consequences of Liberalization", in Mattoo, A., Stern, R. M. and Zanini, G. (eds.), *Handbook of International Trade in Services*, Oxford, Oxford University Press.

Dee, P. S. (2010), "International Student Movements and the Effects of Barriers to Trade in Higher Education Services", in Findlay, C. and Tierney, W. G. (eds.), Globalisation and Tertiary Education in the Asia-Pacific: The Changing Nature of a Dynamic Market, Singapore, World Scientific.

Dee, P. S. and Ferrantino, M. J. (eds.) (2005), *Quantitative Methods for Assessing the Effects of Nontariff Measures and Trade Facilitation*, Singapore, Asia-Pacific Economic Cooperation (APEC) and World Scientific.

Delimatsis, P. (2008a), International Trade in Services and Domestic Regulations. Necessity, Transparency and Regulatory Diversity, Oxford, Oxford University Press.

Delimatsis, P. (2008b), "Determining the Necessity of Domestic Regulations in Services - The Best is Yet to Come", *European Journal of International Law2* 19(2): 365-408.

Delimatsis, P. and Sauvé, P. (2010), "Financial Services Trade After the Crisis: Policy and Legal Conjectures", *Journal of International Economic Law* 13(3): 837-857.

Demailly, D. and Quirion, P. (2006), "CO₂ Abatement, Competitiveness and Leakage in the European Cement Industry under the EU ETS: Grandfathering Versus Output-Based Allocation", *Climate Policy* 6(1): 93-113.

Destler, I. M. (1986), *American Trade Politics: System Under Stress*, Washington, D.C., Peterson Institute of International Economics.

Di Maria, C. and Werf, E. (2008), "Carbon Leakage Revisited: Unilateral Climate Policy with Directed Technical Change", Environmental and Resource Economics 39(1): 55-74.

Dickinson, D. L. and Bailey, D. (2002), "Meat Traceability: Are U.S. Consumers Willing to Pay for It?", *Journal of Agricultural and Resource Economics* 27(2): 348-364.

Disdier, A.-C. and Marette, S. (2010), "The Combination of Gravity and Welfare Approaches for Evaluating Nontariff Measures", *American Journal of Agricultural Economics* 92(3): 713-726.

Disdier, A.-C., Fekadu, B., Murillo, C. and Wong, S. A. (2008), "Trade Effects of SPS and TBT Measures on Tropical and Diversification Products", Geneva, International Centre for Trade and Sustainable Development, Issue Paper 12.

Disdier, A.-C., Fontagné, L. and Cadot, O. (2012), "North-South Standards Harmonization and International Trade", London, Centre for Economic Policy Research, Discussion Paper 8767.

Disdier, A.-C., Fontagné, L. and Mimouni, M. (2008), "The Impact of Regulations on Agricultural Trade: Evidence from the SPS and TBT Agreements", *American Journal of Agricultural Economics* 90(2): 336-350.

Dissanayaka, S. M., Kumaraswamy, M. M. Karim, K. and Marosszeky, M. (2001), "Evaluating outcomes from ISO 9000-certified quality systems of Hong Kong constructors", *Total Quality Management* 12(1): 29-40.

Dixit, A., Grossman, G. M. and Helpman, E. (1997), "Common Agency and Coordination: General Theory and Application to Government Policy Making", *Journal of Political Economy* 105(4): 752-769.

Dolan, C. and Humphrey, J. (2010), "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticulture Industry", *Journal of Development Studies* 37(2): 147-176.

Donnelly, W. A. and Manifold, D. (2005), "A Compilation of Reported Non-Tariff Measures: Description of the Information", Washington, D.C., US International Trade Commission, Office of Economics Working Paper 2005-05-A. Dulleck, U., Kerschbamer, R. and Sutter, M. (2011), "The Economics of Credence Goods: An Experiment on the Role of Liability, Verifiability, Reputation, and Competition", *American Economic Review* 101(2): 526-555.

Eaton, J. and Grossman, G. M. (1986), "Optimal Trade and Industrial Policy under Oligopoly", *Quarterly Journal of Economics* 101(2): 383-406.

Ederington, J. (2001), "International Coordination of Trade and Domestic Policies", *American Economic Review* 91(5): 1580-1593

Ederington, J. (2002), "Trade and Domestic Policy Linkage in International Agreements", *International Economic Review* 43(4): 1347-1368.

Ederington, J., Levinson, A. and Minier, J. (2005), "Footloose and Pollution-Free", *Review of Economics and Statistics* 87(1): 92-99.

Engler, A., Nahuelhual, L., Cofré, G. and Barrena, J. (2012), "How far from harmonization are sanitary, phytosanitary and quality-related standards? An exporter's perception approach", *Food Policy* 37(2): 162-170.

Essaji, A. (2010), "Trade Liberalization, Standards and Protection", B.E. Journal of Economic Analysis & Policy 10(1).

Evans, J. W. (1971), *The Kennedy Round in American Trade Policy. Twilight of the GATT?*, Cambridge, MA, Harvard University Press.

Evenett, S. J. (ed.) (2011), Resolve Falters As Global Prospects Worsen: The 9th GTA Report, London, Centre for Economic Policy Research.

Facchini, G., Van Biesebroeck, J. and Willmann, G. (2005), "Protection for Sale with Imperfect Rent Capturing", *Canadian Journal of Economics* 39(3): 845-873.

Falvey, R. E. and Berti, K. (2009), "Does Trade Weaken Product Quality Standards?", The Globalisation and Development Centre, Bond University, Working Paper 29.

Farrell, J. and Saloner, G. (1985), "Standardization, Compatibility, and Innovation", *Rand Journal of Economics* 16(1): 70-83.

Farrell, J. and Saloner, G. (1988), "Coordination through Committees and Markets", *Rand Journal of Economics* 19(2): 235-252.

Fassarella, L. M., Pinto de Souza, M. J. and Burnquist, H. L. (2011), "Impact of Sanitary and Technical Measures on Brazilian Exports of Poultry Meat", unpublished working paper.

Feenstra, R. C. (1986), "Trade Policy with Several Goods and Market Linkages", *Journal of International Economics* 20(3-4): 249-267.

Feenstra, R. C. and Lewis, T. R. (1991), "Distributing the Gains from Trade with Incomplete Information", *Economics & Politics* 3(1): 21-39.

Feinberg, R. M. and Reynolds, K. (2007), "Tariff Liberalization and Increased Administrative Protection: Is There a Quid Pro Quo?", *World Economy* 30(6): 948-961.

Ferrantino, M. J. (2006), "Quantifying the trade and economic effects of non-tariff measures", Paris, Organisation for Economic Co-operation and Development, Trade Policy Working Paper 28.

Ferrantino, M. J. (2012), "Using Supply Chain Analysis to Analyze the Costs of NTMs and the Benefits of Trade Facilitation", Geneva, World Trade Organization, Working Paper ERSD 2012-02. Findlay, Christopher and Warren, T. (eds.) (2000), *Impediments to Trade in Services: Measurement and Policy Implications*, London, Routledge.

Fink, C. and Jansen, M. (2009), "Services provisions in regional trade agreements: stumbling blocks or building blocks for multilateral liberalization?", in Baldwin, R. E. and Low, P. (eds.), *Multilateralizing Regionalism: Challenges for the Global Trading System*, Cambridge, Cambridge University Press.

Fischer, R. and Serra, P. (2000), "Standards and Protection", *Journal of International Economics* 52(2): 377-400.

Fiszbein, A. and Schady, N. (2009), Conditional Cash Transfers: Reducing Present and Future Poverty, Washington, D.C., World Bank.

Fliess, B. (2003), "Overview of Non-Tariff Barriers: Findings from Existing Business Surveys", Paris, Organisation for Economic Co-operation and Development, Trade Directorate/Trade Committee Working Paper 38.

Foletti, L. (2011), "Sanitary and phytosanitary measures: health protection or protectionism?", unpublished working paper.

Fontagné, L., Guillin, A. and Mitaritonna, C. (2010), "Estimations of Tariff Equivalents for the Services Sectors", Paris, Centre d'Etudes Prospectives et d'Informations Internationales, Working Paper 2011-24.

Fontagné, L., Mimouni, M. and Pasteels, J.-M. (2005), "Estimating the Impact of Environmental SPS and TBT on international trade", Integration and Trade Journal 22(9): 7-37.

Fontagné, L., Orefice, G., Piermartini, R. and Rocha, N. (2012), "Standards and margins of trade: firm level evidence", Geneva, World Trade Organization, Working Paper (forthcoming).

Food and Agricultural Organization (FAO), International Fund for Agricultural Development (IFAD), International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), World Food Programme (WFP), World Bank, et al. (2011), Price Volatility in Food and Agricultural Markets: Policy Responses, Rome and Paris, FAO and OECD.

Francois, J. and Hoekman, B. (2010), "Services Trade and Policy", *Journal of Economic Literature* 48(3): 642-692.

Francois, J. and Woerz, J. (2008), "Producer Services, Manufacturing Linkages, and Trade", *Journal of Industry, Competition and Trade* 8(3-4): 199-229.

Francois, J. and Wooton, I. (2001), "Market structure, trade liberalization and the GATS", *European Journal of Political Economy* 17(2): 389-402.

Francois, J. and Wooton, I. (2010), "Market Structure and Market Access", *World Economy* 33(7): 873-893.

Francois, J., Van Mejil, H. and Van Tongeren, F. (2003), "Trade Liberalization and Developing Countries Under the Doha Round", London, Centre for Economic Policy Research, Discussion Paper 4032.

Fulponi, L. (2006), "Private voluntary standards in the food system: The perspective of major food retailers in OECD countries", Food Policy 31(1): 1-13.

García Martinez, M. and Poole, N. (2004), "The development of private fresh produce safety standards: implications for developing Mediterranean exporting countries", *Food Policy* 29(3): 229-255.

Gardner, R. N. (1956), Sterling Dollar Diplomacy: The Origins and Prospects of Our International Economic Order, New York, McGraw Hill.

Gawande, K. and Bandyopadhyay, U. (2000), "Is Protection for Sale? Evidence on the Grossman-Helpman Theory of Endogenous Protection", *Review of Economics and Statistics* 82(1): 139-152.

Gawande, K., Krishna, P. and Olarreaga, M. (2005), "Lobbying Competition over Trade Policy", Washington, D.C., National Bureau of Economic Research, Working Paper 11371.

Gebrehiwet, Y., Ngqangweni, S. and Kirsten, J. F. (2007), "Quantifying the Trade Effect of Sanitary and Phytosanitary Regulations of OECD Countries on South African Food Exports", *Agrekon* 46(1): 23-40.

Geraats, P. M. (2002), "Central Bank Transparency", *Economic Journal* 112(483): 532-565.

Gereffi, G., Humphrey, J. and Sturgeon, T. (2005), "The governance of global value chains", *Review of International Political Economy* 12(1): 78-104.

German Institute for Standardization (DIN) (2000), *Economic Benefits of Standardization - Summary of results*, Berlin, DIN.

Gervais, J.-P., Larue, B., Otsuki, T., Rau, M.-L., Shutes, K., Wieck, C. and Winchester, N. (2011), "New Data and Analysis on Non-tariff Measures in Agri-food Trade", Paper prepared for presentation at the Agricultural & Applied Economics Association's 2011 AAEA & NAREA Joint Annual Meeting, Pittsburgh, Pennsylvania, 24-26 July 2011.

Goldberg, P. K. and Maggi, G. (1999), "Protection for Sale: An Empirical Investigation", *American Economic Review* 89(5): 1135-1155.

Goldberg, P. K. and Pavcnik, N. (2005), "Trade, wages, and the political economy of trade protection: evidence from the Colombian trade reforms", *Journal of International Economics* 66(2005): 75-105.

Gootiiz, B. and Mattoo, A. (2009a), "Restrictions on Services Trade and FDI in Developing Countries", unpublished working paper.

Gootiiz, B. and Mattoo, A. (2009b), "Services in Doha: What's on the Table?", *Journal of World Trade* 43(5): 1013-1030.

Grajek, M. (2004), "Diffusion of ISO 9000 standards and international trade", Berlin, Wissenschaftszentrum Berlin (WZB), Markets and Political Economy Working Paper SP II 2004-16.

Gregory, R., Henn, C., McDonald, B. and Saito, M. (2010), "Trade and the Crisis: Protect or Recover", Washington, D.C., International Monetary Fund, IMF Staff Position Note 2010/07.

Grossman, G. M. and Helpman, E. (1994), "Protection for Sale", *American Economic Review* 84(4): 833-850.

Grunert, K. G. (2005), "Food quality and safety: consumer perception and demand", *European Review of Agricultural Economics* 32(3): 369-391.

Grünfeld, L. A. and Moxnes, A. (2003), "The Intangible Globalization: Explaining the Patterns of International Trade and FDI in Services", Oslo, Norwegian Institute of International Affairs, NUPI Working Paper 657.

Guibourg, G. (2001), "Interoperability and Network Externalities in Electronic Payments", Stockholm, Sveriges Riksbank, Working Paper 126.

Guillin, A. (2011), "Assessment of Tariff Equivalents for Services considering the Zero-Flows", unpublished working paper.

Gulati, S. and Roy, D. (2007), "How Standards Drive Taxes: The Political Economy of Tailpipe Pollution", *B.E. Journal of Economic Analysis & Policy* 7(1).

Gulotty, R. (2011), "Political Fragmentation: Issue Specialization in International Economic Agreements", Conference Proceedings from the Sixth Annual Meeting of the International Political Economy Society, University of Wisconsin.

Hammoudi, A., Hoffmann, R. and Surry, Y. (2009), "Food safety standards and agri-food supply chains: an introductory overview", *European Review of Agricultural Economics* 36(4): 469-478.

Handley, K. (2011), "Exporting Under Trade Policy Uncertainty: Theory and Evidence", unpublished working paper.

Handley, K. and Limao, N. (2010), "Trade and Investment under Policy Uncertainty: Theory and Firm Evidence", unpublished working paper.

Hanson, G. H., Mataloni, R. J. J. and Slaughter, M. J. (2005), "Vertical Production Networks in Multinational Firms", *Review of Economics and Statistics* 87(4): 664-678.

Harrington, W., Morgenstern, R. D. and Nelson, P. (2000), "On the accuracy of regulatory cost estimates", *Journal of Policy Analysis and Management* 19(2): 297-322.

Helble, M., Shepherd, B. and Wilson, J. S. (2009), "Transparency and Regional Integration in Asia Pacific", *World Economy* 32(3): 479-508.

Helpman, E. (2011), "Trade, FDI, and the Organization of Firms", *Journal of Economic Literature* 44(3): 589-630.

Helpman, E. and Krugman, P. R. (1989), *Trade Policy and Market Structure*, Cambridge, MA, MIT Press.

Helpman, E., Melitz, M. J. and Yeaple, S. R. (2004), "Export Versus FDI with Heterogeneous Firms", *American Economic Review* 94(1): 300-316.

Henn, C. and Mcdonald, B. (2011), "Protectionist Responses to the Crisis: Damage Observed in Product-Level Trade", Washington, D.C., International Monetary Fund, IMF Working Paper 11/139.

Henson, S. (2008), "The Role of Public and Private Standards in Regulating International Food Markets", *Journal of International Agricultural Trade and Development* 4(1): 63-81.

Henson, S. and Caswell, J. A. (1999), "Food safety regulation: an overview of contemporary issues", Food Policy 24(6): 589-603.

Henson, S. and Humphrey, J. (2009), "The Impacts of Private Food Safety Standards on the Food Chain and on Public Standard-Setting Processes", Rome, Food and Agriculture Organization and World Health Organization, Codex Alimentarius Commission, ALINORM 09/32/9D-Part II.

Henson, S. and Humphrey, J. (2010), "Understanding the complexities of private standards in global agri-food chains as they impact developing countries", *Journal of Development Studies* 46(9): 1628-1646.

Henson, S. and Loader, R. (1999), "An Assessment of the Costs for International Trade", Paris, Organisation for Economic Co-operation and Development, Trade Committee Working Paper 99/8.

Henson, S. and Mitullah, W. (2004), "Kenyan Exports of Nile Perch: Impact of Food Safety Standards on an Export-Oriented Supply Chain", Washington, D.C., World Bank, Policy Research Working Paper 3349.

Henson, S. and Reardon, T. (2005), "Private agri-food standards: Implications for food policy and the agri-food system", *Food Policy* 30(3): 241-253.

Herguera, I. and Lutz, S. (1998), "Oligopoly and Quality Leapfrogging", *World Economy* 21(1): 75-94.

Hindley, B. (1988), "Service Sector Protection: Considerations for Developing Countries", *World Bank Economic Review* 2(2): 205-224.

Hiratsuka, D. (2005), "Vertical Intra-Regional Production Networks in East Asia: A Case Study of Hard Disk Drive Industry", Chiba City, Japan External Trade Organization, Institute of Developing Economies Working Paper.

Hoekman, B. (1996), "Assessing the General Agreement on Trade in Services", in Martin, W. and Winters, A. (eds.), *The Uruguay Round and the Developing Countries*, Cambridge, Cambridge University Press.

Hoekman, B. and Kostecki, M. M. (2001), *The Political Economy of the World Trading System*, Oxford, Oxford University Press.

Hoekman, B. and Nicita, A. (2011), "Trade Policy, Trade Costs, and Developing Country Trade", *World Development* 39(12): 2069-2079.

Hoekman, B. and Primo Braga, C. A. (1997), "Protection and Trade in Services: A Survey", Washington, D.C., World Bank, Policy Research Working Paper 1747.

Hoekman, B. and Trachtman, J. P. (2010), "Continued suspense: EC-Hormones and WTO disciplines on discrimination and domestic regulation", *World Trade Review* 9(01): 151-180.

Hoekman, B. and Zarrouk, J. (2009), "Changes in Cross-Border Trade Costs in the Pan-Arab Free Trade Area: 2001-2008", Washington, D.C., World Bank, Policy Research Working Paper 5031.

Hoekman, B., Mattoo, A. and Sapir, A. (2007), "The political economy of services trade liberalization: a case for international regulatory cooperation?", *Oxford Review of Economic Policy* 23(3): 367-391.

Hoel, M. (1996), "Should a Carbon Tax be Differentiated Across Sectors?", *Journal of Public Economics* 59(1): 17-32.

Hooker, N. H. (1999), "Food safety regulation and trade in food products", Food Policy 24(6): 653-668.

Horn, H. (2006), "National Treatment in the GATT", *American Economic Review* 96(1): 394-404.

Horn, H., Maggi, G. and Staiger, R. W. (2010), "Trade Agreements as Endogenously Incomplete Contracts", *American Economic Review* 100(1): 394-419.

Houser, T. (2010), "Copenhagen, the Accord, and the Way Forward", Washington, D.C., Peterson Institute for International Economics, Policy Brief 10-5.

Howse, R. (2000), "Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organization", *Michigan Law Review* 98(7): 2329-2357.

Hudec, R. E. (1975), The GATT Legal System and World Trade Diplomacy, New York, Praeger Publishers.

Hudec, R. E. (1993), Enforcing international trade law: the evolution of the modern GATT legal system, Salem, NH, Butterworth Legal Publishers.

Hudec, R. E. (1999), "GATT/WTO constraints on national regulation: requiem for an 'aim and effects' test", *International Lawyer* 32: 619-649.

Hudec, R. E. (2003), "Science and 'Post-Discriminatory' WTO Law", *Boston College International and Comparative Law Review* 26(2): 185-195.

Hummels, D. L., Ishii, J. and Yi, K.-M. (2001), "The Nature and Growth of Vertical Specialization in World Trade", *Journal of International Economics* 54: 75-96.

Hummels, D. L., Lugovsky, V. and Skiba, A. (2009), "The trade reducing effects of market power in international shipping", *Journal of Development Economics* 89(1): 84-97.

Hussey, K. and Kenyon, D. (2011), "Regulatory divergences: a barrier to trade and a potential source of trade disputes", *Australian Journal of International Affairs* 65(4): 381-393.

International Trade Center (ITC) (2011), Sri Lanka: Company Perspectives, Geneva, ITC.

Ismer, R. and Neuhoff, K. (2007), "Border Tax Adjustment: A Feasible Way to Support Stringent Emission Trading", *European Journal of Law and Economics* 24(2): 137-164.

Jackson, J. H. (1989), The World Trading System: Law and Policy of International Economic Relations, Cambridge, MA, MIT Press.

Jackson, L. A. (2008), "Agricultural Trade and Climate Change", Georgetown Journal of International Affairs 9(1): 25-32.

Jackson, L. A. and Jansen, M. (2010), "Risk assessment in the international food safety policy arena. Can the multilateral institutions encourage unbiased outcomes?", *Food Policy* 35(6): 538-547.

Jaffe, A. B., Peterson, S. R., Portney, P. R. and Stavins, R. N. (1995), "Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?", *Journal of Economic Literature* 33(1): 132-162.

Jaffee, S. and Henson, S. (2004), "Standards and Agro-food Exports from Developing Countries: Rebalancing the Debate", Washington, D.C, World Bank, Policy Research Working Paper 3348.

Jaffee, S., Henson, S. and Rios, L. D. (2011), Making the Grade: Smallholder Farmers, Emerging Standards, and Development Assistance Programs in Africa (A Research Program Synthesis), Washington, D.C., World Bank, Report 62324-AFR.

Johnson, H. G. (1954), "Optimum Tariffs and Retaliation", *Review of Economic Studies* 21(2): 142-153.

Johnson, R. C. and Noguera, G. (2012), "Accounting for intermediates: Production sharing and trade in value added", *Journal of International Economics* 86(2): 224-236.

Jones, R. W. and Kierzkowski, H. (1990), "The Role of Services in Production and International Trade: A Theoretical Framework", in Jones, R. W. and Krueger, A. O. (eds.), *The Political Economy of International Trade: Essays in honor of R.E. Baldwin*, Oxford, Basil Blackwell.

Jones, R. W. and Kierzkowski, H. (2000), "A Framework for Fragmentation", Rotterdam, Tinbergen Institute, Discussion Paper 2000-056/2.

Jorgensen, J. and Schroder, P. (2008), "Fixed export cost heterogeneity, trade and welfare", *European Economic Review* 52(7): 1256-1274.

Josling, T. E., Roberts, D. and Orden, D. (2005), "Food Regulation and Trade: Toward a Safe and Open Global System", Journal of International Economic Law 8(3): 793-802.

Kalaitzandonakes, N., Marks, L. A. and Vickner, S. S. (2004), "Media Coverage of Biotech Foods and Influence on Consumer Choice", *American Journal of Agricultural Economics* 86(5): 1238-1246.

Kalemli-Ozcan, S., Papaioannou, E. and Peydró, J.-L. (2010), "What lies beneath the euro's effect on financial integration? Currency risk, legal harmonization, or trade?", *Journal of International Economics* 81(1): 75-88.

Kalenga, P. (2012), "COMESA-EAC-SADC Tripartite Mechanism on Non-Tariff Barriers to Trade", Background paper for the World Trade Report 2012.

Kalinova, B., A. Palerm and S. Thomsen (2010), "OECD's FDI restrictiveness index: 2010 update", Paris, Organisation for Economic Co-operation and Development, Working Paper on International Investment 2010/3.

Katz, M. L. and Shapiro, C. (1985), "Network Externalities, Competition, and Compatibility", *American Economic Review* 75(3): 424-440.

Katz, M. L. and Shapiro, C. (1986), "Product Compatibility Choice in a Market with Technological Progress", *Oxford Economic Papers* 38(Supp): 146-165.

Katz, M. L. and Shapiro, C. (1994), "Systems Competition and Network Effects", *Journal of Economic Perspectives* 8(2): 93-115.

Kee, H. L., Nicita, A. and Olarreaga, M. (2009), "Estimating trade restrictiveness indices", *Economic Journal* 119(534): 172-199.

Kemp, M. C. (1960), "The Mill-Bastable Infant-Industry Dogma", *Journal of Political Economy* 68(1): 35-67.

Kimura, F. and Ando, M. (2005), "Two-Dimensional Fragmentation in East Asia: Conceptual Framework and Empirics", *International Review of Economics and Finance* 14(3): 317-348.

Kimura, F. and Lee, H.-H. (2006), "The Gravity Equation in International Trade in Services", *Review of World Economics* 142(1): 92-121.

Kommerskollegium (2010), Arrangements to Avoid Technical Barriers to Trade, Stockholm, Department for Trade Agreements and Technical Rules, National Board of Trade (Kommerskollegium).

Kono, D. (2006), "Optimal Obfuscation: Democracy and Trade Policy Transparency", *American Political Science Review* 100(3): 369-384.

Koopman, R., Powers, W., Wang, Z. and Wei, S.-J. (2010), "Give Credit where Credit is Due: Tracing Value Added in Global Production Chains", Washington, D.C., National Bureau of Economic Research, Working Paper 16426.

Kovacs, K. F., Haight, R. G., McCullough, D. G., Mercader, R. J., Siegert, N. W. and Liebhold, A. M. (2010), "Cost of potential emerald ash borer damage in U.S. communities, 2009-2019", *Ecological Economics* 69(3): 569-578.

Kox, H. and A. Lejour (2005), "Regulatory heterogeneity as obstacle for international services trade", Amsterdam, CPB Netherlands Bureau for Economic Policy Analysis, Discussion Paper 49.

Kox, H. and Nordås, H. K. (2007), "Services Trade and Domestic Regulation", Paris, Organisation for Economic Co-operation and Development, Trade Policy Working Paper 49.

Krajewski, M. (2008), "Article VI GATS (Domestic Regulation)", in Wolfrum, R., Stoll, P.-T. and Feinäugle, C. (eds.), WTO – Trade in Services, Max Planck Commentaries on WTO Trade Law, Leiden, Martinus Nijhoff Publishers.

Krishna, K. and Tan, L. H. (1992), "Rent-sharing in the multi-fibre arrangement: evidence from U.S.-Hong Kong trade in apparel", Washington, D.C., World Bank, Policy Research Working Paper 1003.

Krueger, A. O. (1974), "The Political Economy of the Rent-Seeking Society", *American Economic Review* 64(3): 291-303.

Kuijper, P. J. (1995), "The Conclusion and Implementation of the Uruguay Round Results by the European Community", *European Journal of International Law* 6(2): 222-244.

Kutas, G., C. Lindberg and Steenblik, R. (2007), *Biofuels – At What Cost? Government support for ethanol and biodiesel in the European Union*, Geneva, International Institute for Sustainable Development, Global Subsidies Initiative Report.

Laffont, J.-J. (1999), "Competition, Information, and Development", in Pleskovic, B. and Stigliz, J. E. (eds.), *Annual World Bank Conference on Development Economics*, Washington, D.C., World Bank.

Laffont, J.-J. and Tirole, J. (1991), "The Politics of Government Decision-Making: A Theory of Regulatory Capture", *Quarterly Journal of Economics* 106(4): 1089-1127.

Laird, S. and Yeats, A. J. (1990), *Quantitative methods for trade-barrier analysis*, New York, New York University Press.

Lanz, R. and Miroudot, S. (2011), "Intra-Firm trade patterns determinants and policy implications", Paris, Organisation for Economic Co-operation and Development, Trade Policy Working Paper 114.

Latouche, K., Rainelli, P. and Vermersch, D. (1998), "Food safety issues and the BSE scare: some lessons from the French case", Food Policy 23(5): 347-356.

Lawrence, R. Z. (1996), Regionalism, multilateralism, and deeper integration, Washington, D.C., The Brookings Institution.

Lehmann-Grube, U. (1997), "Strategic Choice of Quality When Quality is Costly: The Persistence of the High-Quality Advantage", *Rand Journal of Economics* 28(2): 372-384.

Lennon, C. (2009), "Trade in Services and Trade in Goods: Differences and Complementarities", Vienna, The Vienna Institute for International Economic Studies, Working Paper 53.

Lennon, C., Mirza, D. and Nicoletti, G. (2009), "Complementarity of Inputs across Countries in Services Trade", *Annals of Economics and Statistics* 93/94: 183-205.

Lerner, A. (1936), "The Symmetry between Import and Export Taxes", *Economica* 3(11): 306-313.

Lester, S. (2011), "The Intent of a Measure and the 'Likeness' / 'Less Favorable Treatment' Elements." Retrieved May 4, 2012, from http://worldtradelaw.typepad.com/ielpblog/2011/11/ the-intent-of-a-measure-and-the-likeness-less-favorable-treatment-elements.html.

Levy, P. I. (2003), "Non-tariff barriers as a test of political economy theories", in Mitra, D. and Panagariya, A. (eds.), *The Political Economy of Trade, Aid, and Foreign Investment Policies*, Amsterdam. Elsevier B.V.

Li, Y. and Beghin, J. C. (2012), "A Meta-Analysis of Estimates of the Impact of Technical Barriers to Trade", *Journal of Policy Modeling* (forthcoming).

Liebowitz, S. J. and Margolis, S. E. (1994), "Network Externality: An Uncommon Tragedy", *Journal of Economic Perspectives* 8(2): 133-150.

Limao, N. (2005), "Trade policy, cross-border externalities and lobbies: do linked agreements enforce more cooperative outcomes?", *Journal of International Economics* 67(1): 175-199.

Limao, N. and Tovar, P. (2011), "Policy choice: Theory and evidence from commitment via international trade agreements", *Journal of International Economics* 85(2): 186-205.

Lockwood, B. and Whalley, J. (2010), "Carbon Motivated Border Tax Adjustments: Old Wine in Green Bottles?", *World Economy* 33(6): 810-819.

Lodefalk, M. (2010), "Servicification of Swedish manufacturing", Stockholm, Kommerskollegium.

Low, P. (1993), *Trading Free*, New York, The Twentieth Century Fund Press.

Low, P. and Yeats, A. J. (1994), "Non-Tariff Barriers and Developing Countries: Has the Uruguay Round Leveled the Playing Field?", Washington, D.C., World Bank, Policy Research Working Paper 1353.

Low, P., Marceau, G. and Reinaud, J. (2011), "The Interface Between the Trade and Climate Change Regimes: Scoping the Issues", Geneva, World Trade Organization, ERSD Working Paper 2011-01.

Maertens, M. and Swinnen, J. F. M. (2009), "Trade, Standards and Poverty: Evidence from Senegal", *World Development* 37(1): 161-178.

Mafra, I., Ferreira, I. M. P. L. V. O. and Oliveira, M. B. P. P. (2008), "Food authentication by PCR-based methods", *European Food Research and Technology* 227(3): 649-665.

Maggi, G. and Rodríguez-Clare, A. (1998), "The Value of Trade Agreements in the Presence of Political Pressures", *Journal of Political Economy* 106(3): 574-601.

Maggi, G. and Rodríguez-Clare, A. (2000), "Import Penetration and the Politics of Trade Protection", *Journal of International Economics* 51(2): 287-304.

Maggi, G. and Rodríguez-Clare, A. (2007), "A Political-Economy Theory of Trade Agreements", *American Economic Review* 97(4): 1374-1406

Maggi, G. and Staiger, R. W. (2011), "The Role of Dispute Settlement Procedures in International Trade Agreements", *Quarterly Journal of Economics* 126(1): 475-515.

Majone, G. (1994), "The rise of the regulatory state in Europe", West European Politics 17(3): 77-101.

Mangelsdorf, A., Portugal Perez, A. and Wilson, J. S. (2012), "Food Standards and Exports: Evidence from China", Washington, D.C., World Bank, Policy Research Working Paper 5976.

Manifold, D. (2002), "USITC Nontariff Measures Database: overview and preliminary findings", Washington, D.C., US International Trade Commission, International Economic Review.

Marceau, G. and Trachtman, J. P. (2009), "Responding to National Concerns", in Bethlehem, D., McRae, D., Neufeld, R., Van Damme, I. (eds.), *The Oxford Handbook of International Trade Law*, Oxford, Oxford University Press.

Marchetti, J. A. and Mavroidis, P. C. (2011), "The Genesis of the GATS (General Agreement on Trade in Services)", *European Journal of International Law* 22(3): 689-721.

Marette, S. and Beghin, J. C. (2010), "Are Standards Always Protectionist?", *Review of International Economics* 18(1): 179-192.

Markusen, J. R. (1976), "Production and Trade from International Common Property Resources", *Canadian Journal of Economics* 9(2): 309-319.

Martimort, D. (2001), "Optimal Taxation and Strategic Budget Deficit Regime Under Switching Political", *Review of Economic Studies* 68(3): 573-592.

Martinez, A., Mora, J. and Signoret, J. E. (2009), "The CoRe NTMs Database: A Compilation of Reported Non-Tariff Measures", Washington, D.C., US International Trade Commission, Office of Economics Working Paper 2009-12A.

Marucheck, A., Greis, N., Mena, C. and Cai, L. (2011), "Product Safety and Security in the Global Supply Chain: Issues, Challenges and Research Opportunities", *Journal of Operations Management* 29: 707-720.

Mathews, K. H., Bernstein, J. and Buzby, J. C. (2003), "International Trade of Meat/Poultry Products and Food Safety Issues", in Buzby, J. C. (ed.), *International Trade and Food Safety*, Washington, D.C., United States Department of Agriculture.

Matsuyama, K. (1990), "Perfect Equilibria in a Trade Liberalization Game", *American Economic Review* 80(3): 480-492.

Mattoo, A. (2003), "Shaping Future Rules for Trade in Services: Lessons from the GATS", in Ito, T. and Krueger, A. O. (eds.), *Trade in Services in the Asia Pacific Region*, Chicago, University of Chicago Press.

Mattoo, A. and Sauvé, P. (2003), "Domestic Regulation and Trade in Services: Looking Ahead", in Mattoo, A. and Sauvé, P. (eds.), Domestic Regulation and Service Trade Liberalization, Washington, D.C., World Bank and Oxford University Press.

Mattoo, A. and Sauvé, P. (2010), "The Preferential Liberalization of Services Trade", Bern, World Trade Institute, Swiss National Centre of Competence in Research, Trade Working Paper 2010/13.

Mattoo, A., Subramanian, A., Van der Mensbrugghe, D. and He, J. (2009), "Reconciling Climate Change and Trade Policy", Washington, D.C., Center for Global Development, Working Paper 189.

Mayer, W. (1981), "Theoretical Considerations on Negotiated Tariff Adjustments", Oxford Economic Papers 33(1): 135-153.

Mazzocchi, M., Lobb, A., Bruce Traill, W. and Cavicchi, A. (2008), "Food Scares and Trust: A European Study", *Journal of Agricultural Economics* 59(1): 2-24.

McGuire, G. (2008), "Measuring and modelling restrictions on trade in service: a case of Asia-Pacific economic cooperation economies", in United Nations Economic and Social Commission for Asia and the Pacific (ed.), Emerging Trade Issues for Policymakers in Developing Countries in Asia and the Pacific, Bangkok, ESCAP.

Meade, J. E. (1952), "External Economies and Diseconomies in a Competitive Situation", *Economic Journal* 62(245): 54-67.

Melitz, M. J. (2003), "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity", Econometrica 71(6): 1695-1725.

Melitz, M. J. (2005), "When and How Should Infant Industries be Protected?", *Journal of International Economics* 66(1): 177-196.

Meuwissen, M. P. M., Velthuis, A. G. J., Hogeveen, H. and Huirne, R. B. M. (2003), "Traceability and Certification in Meat Supply Chains", *Journal of Agribusiness* 21(2): 167-181.

Miroudot, S., Lanz, R. and Ragoussis, A. (2009), "Trade in Intermediate Goods and Services", Paris, Organisation for Economic Co-operation and Development, Trade Policy Working Paper 93.

Mitchell, D. (2008), "A Note on Rising Food Prices", Washington, D.C., World Bank, Policy Research Working Paper 4682.

Mitchell, M. F. and Moro, A. (2006), "Persistent Distortionary Policies with Asymmetric Information", *American Economic Review* 96(1): 387-393.

Moenius, J. (2004), "Information versus Product Adaptation: The Role of Standards in Trade", Northwestern University, Kellogg School of Management, International Business and Markets Research Center Working Paper.

Moenius, J. (2006), "Do National Standards Hinder or Promote Trade in Electrical Products", Geneva, International Electrotechnical Commission, Centenary Challenge Papers.

Moore, M. O. (2011), "Implementing Carbon Tariffs: A Fool's Errand?", World Economy 34(10): 1679-1802.

Moore, M. O. and Zanardi, M. (2011), "Trade Liberalization and Antidumping: Is There a Substitution Effect?", *Review of Development Economics* 15(4): 601-619.

Motta, M., Thisse, J.-F. and Cabrales, A. (1997), "On the Persistence of Leadership or Leapfrogging in International Trade", *International Economic Review* 38(4): 809-824.

Nelson, P. (1970), "Information and Consumer Behavior", *Journal of Political Economy* 78(2): 311-329.

Nguyen-Hong, D. (2000), "Restrictions on Trade in Professional Services", Canberra, AusInfo, Productivity Commission Staff Research Paper.

Nicoletti, G. and Mirza, D. (2004), "What is so special about services trade?", University of Nottingham, Research Paper 2004/02.

Nicoletti, G. and Scarpetta, S. (2003), "Regulation, productivity and growth: OECD evidence", *Economic Policy* 18(36): 9-72.

Nicoletti, G., Golub, S., Hajkova, D., Mirza, D. and Yoo, K.-Y. (2003), "Policies and International Integration: Influences on Trade and Foreign Direct Investment", Paris, Organisation for Economic Co-operation and Development, Economics Department Working Paper 359.

Nocke, V. and Yeaple, S. R. (2008), "Globalization and the Size Distribution of Multiproduct Firms", London, Centre for Economic Policy Research, Discussion Paper DP6948.

Nordås, H. K. (2008), "Gatekeepers to consumer markets: the role of retailers in international trade", *International Review of Distribution, Retail and Consumer Research* 18(5): 449-472.

Nordås, H. K. (2010), "Trade in goods and services: Two sides of the same coin?", *Economic Modelling* 27(2): 496-506.

Oates, W. E. (1972), *Fiscal Federalism*, New York, Harcourt Brace Jovanovich.

Organisation for Economic Co-operation and Development (OECD) (2003), *Quantifying the Benefits of Liberalising Trade in Services*, Paris, OECD.

Organisation for Economic Co-operation and Development (OECD) (2005), Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade, Paris, OECD.

Organisation for Economic Co-operation and Development (OECD) (2006), *Final Report on Private Standards and the Shaping of the Agro-Food System*, Paris, OECD.

Organisation for Economic Co-operation and Development (OECD) (2009a), *Agricultural Policies in Emerging Economies: Monitoring and Evaluation*, Paris, OECD.

Organisation for Economic Co-operation and Development (OECD) (2009b), "Methodology for Deriving the Services Trade Restrictiveness Index", unpublished working paper.

Otsuki, T. and Wilson, J. S. (2004), "To spray or not to spray: pesticides, banana exports, and food safety", *Food Policy* 29(2): 131-146.

Otsuki, T., Wilson, J. S. and Sewadeh, M. (2001), "Saving two in a billion: quantifying the trade effect of European food safety standards on African exports", *Food Policy* 26(5): 495-514.

Pant, S. and Ravichandran, T. (2001), "A Framework for Information Systems Planning for e-business", *Logistics Information Management* 14(1/2): 85-98.

Park, I. and Park, S.-C. (2011), "Regional Liberalisation of Trade in Services", *World Economy* 34(5): 725-740.

Park, S.-C. (2002), "Measuring Tariff Equivalents in Cross-Border Trade in Services", Seoul, Korea Institute for International Economic Policy, Working Paper 02-15.

Pauwelyn, J. (2007), "U.S. Federal Climate Policy and Competitiveness Concerns: the Limits and Options of International Trade Law", Duke University, Nicholas Institute for Environmental Policy Solutions, Working Paper 07-02.

Pelkmans, J. (2006), European Integration: Methods and Economic Analysis, Harlow, Pearson Education Limited.

Pienaar, N. (2005), "Economic Applications of Product Quality Regulation in WTO Trade Agreements", Stockholm University, Ph.D. Thesis.

Ponte, S. and Gibbon, P. (2005), "Quality standards, conventions and the governance of global value chains", *Economy and Society* 34(1): 1-31.

Porges, A. and Trachtman, J. P. (2003), "Robert Hudec and Domestic Regulation: The Resurrection of Aim and Effects", *Journal of World Trade* 37(4): 783-799.

Porter, M. E. and Van der Linde, C. (1995), "Toward a New Conception of the Environment-Competitiveness Relationship", *Journal of Economic Perspectives* 9(4): 97-118.

Potipiti, T. (2006), "Import Tariffs and Export Subsidies in the WTO: A Small-Country Approach", unpublished working paper.

Preeg, E. H. (1995), *Traders in a Brave New World: The Uruguay Round and the Future of the International Trading System*, Chicago, University of Chicago Press.

Reardon, T. and Barrett, C. B. (2000), "Agroindustrialization, globalization, and international development. An overview of issues, patterns, and determinants", *Agricultural Economics* 23: 195-205.

Reardon, T., Codron, J.-M., Busch, L., Bingen, J. and Harris, C. (1999), "Global Change in Agrifood Grades and Standards: Agribusiness Strategic Responses in Developing Countries", *International Food and Agribusiness Management Review* 2(3-4): 421-435.

Rebeyrol, V. and Vauday, J. (2009), "Live or Let Die: Intra-Sectoral Lobbying on Entry", Paris, Centre d'Economie de la Sorbonne, Université Paris 1, Working Paper 2008-36.

Redding, S. J. (2010), "Theories of Heterogeneous Firms and Trade", Washington, D.C., National Bureau of Economic Research, Working Paper 16562.

Regan, D. H. (2003), "Further Thoughts on the Role of Regulatory Purpose Under Article III of the General Agreement on Tariffs and Trade: A Tribute to Bob Hudec", *Journal of World Trade* 37(4): 737-760.

Regan, D. H. (2007), "The meaning of 'necessary' in GATT Article XX and GATS Article XIV: the myth of cost-benefit balancing", *World Trade Review* 6(03): 347-369.

Reinaud, J. (2008), "Issues behind Competitiveness and Carbon Leakage: Focus on Heavy Industry", Paris, Organisation for Economic Co-operation and Development and International Energy Agency, IEA Information Paper.

Reinhardt, E. (1996), "Posturing parliaments: ratification, uncertainty, and international bargaining", Columbia University, Ph.D. Thesis.

Reyes, J.-D. (2011), "International Harmonization of Product Standards and Firm Heterogeneity in International Trade", Washington, D.C., World Bank, Policy Research Working Paper 5677.

Robinson, J. A. and Torvik, R. (2005), "White elephants", *Journal of Public Economics* 89(2-3): 197-210.

Rodrik, D. (2011), *The Globalization Paradox*, New York, W. W. Norton & Company.

Roessler, F. (2003), "Beyond the Ostensible: A Tribute to Professor Robert Hudec's Insights on the Determination of the Likeness of Products Under the National Treatment Provisions of the General Agreement on Tariffs and Trade", *Journal of World Trade* 37(4): 771-781.

Roessler, F. and Gappah, P. (2005), "A Re-appraisal of Non-Violation Complaints Under the WTO Dispute Settlement Procedures", in Macrory, P. F. J., Appleton, A. E. and Plummer, M. G. (eds.), *The World Trade Organization: Legal, Economic and Political Analysis*, New York, Springer.

Rotemberg, J. J. and Saloner, G. (1988), "Tariffs vs Quotas with Implicit Collusion", Canadian Journal of Economics 22(2): 237-244.

Roy, M., Marchetti, J. A. and Lim, H. (2007), "Services Liberalization in the New Generation of Preferential Trade Agreements (PTAs): How Much Further than the GATS?", Geneva, World Trade Organization, Working Paper ERSD-2006-07.

Rubin, O. D., Carriquiry, M. and Hayes, D. J. (2008), "Implied Objectives of U.S. Biofuel Subsidies", Iowa State University, Center for Agricultural and Rural Development Working Papers 08-WO-459.

Rubin, P. H. (1975), "On the Form of Special Interest Legislation", *Public Choice* 21(1): 79-90.

Santana, R. and Jackson, L. A. (2012), "Identifying Non-Tariff Barriers: Evolution of Multilateral Instruments and Evidence from the Disputes", *World Trade Review* 11(3) (forthcoming).

Santana, R. and Jackson, L. A. (2012), "Identifying Non-Tariff Barriers: Evolution of Multilateral Adjustments and Evidence from Disputes (1948-2011)", Geneva, Worlde Trade Organization, unpublished working paper.

Sathaye, J., Najam, A., Cocklin, C., Heller, T., Lecocq, F., Llanes-Regueiro, J., Pan, J., et al. (2007), "Sustainable Development and Mitigation", in Metz, B., Davidson, O. R., Bosch, P. R., Dave, R. and Meyer, L. A. (eds.), Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge, Cambridge University Press.

Schlueter, S. W., Wieck, C. and Heckelei, T. (2009), "Regulatory Policies in Meat Trade: Is There Evidence for Least Trade-distorting Sanitary Regulations?", *American Journal of Agricultural Economics* 91(5): 1484-1490.

Schmitt, N. and Yu, Z. (2001), "Economies of scale and the volume of intra-industry trade", *Economics Letters* 74(1): 127-132.

Schwellnus, C. (2007), "The Effect of Domestic Regulation on Services Trade Revisited", Paris, Centre d'Etudes Prospectives et d'Informations Internationales, Working Paper 08/2007.

Shepherd, B. (2007), "Product Standards, Harmonization, and Trade: Evidence from the Extensive Margin", Washington, D.C., World Bank, Policy Research Working Paper 4390.

Sidaoui, J., Ramos-Francia, M. and Cuadra, G. (2011), "Global Liquidity, Capital Flows and Challenges for Policymakers: The Mexican Experience", in Bank for International Settlements (ed.), Capital flows, commodity price movements and foreign exchange intervention, Basel: 239-260.

Sijm, J. P. M., Kuik, O. J., Patel, M., Oikonomou, V., Worrell, E., Lako, P., Annevelink, E., et al. (2004), *Spillover of Climate Policy: An Assessment of the incidence of Carbon Leakage and Induced Technological Change Due to CO2 Abatement Measures*, The Hague, PBL Netherlands Environmental Assessment Agency, Report 500036002.

Smith, G. (2009), "Interaction of Public and Private Standards in the Food Chain", Paris, Organisation for Economic Co-operation and Development, Food, Agriculture and Fisheries Working Paper 15.

Souza-Monteiro, D. and Caswell, J. A. (2004), "The Economics of Implementing Traceability in Beef Supply Chains: Trends in Major Producing and Trading Countries", University of Massachusetts, Department of Resource Economics Working Paper 2004-6.

Spagnolo, G. (2001), "Issue Linkage, Credible Delegation, and Policy Cooperation", London, Centre for Economic Policy Research, Discussion Paper 2778.

Spence, M. (1973), "Job Market Signaling", *Quarterly Journal of Economics* 87(3): 355-374.

Staiger, R. W. (2012), "Non-tariff measures and the WTO", Geneva, World Trade Organization, Working Paper ERSD 2012-01.

Staiger, R. W. and Sykes, A. O. (2009), "International Trade, National Treatment, and Domestic Regulation", *Journal of Legal Studies* 40(1): 149-203.

Staiger, R. W. and Tabellini, G. (1987), "Discretionary Trade Policy and Excessive Protection", *American Economic Review* 77(5): 823-837.

Stephenson, S. M. (1997), "Standards, Conformity Assessment and Developing Countries", Washington, D.C., World Bank, Policy Research Working Paper 1826.

Stern, N. (2007), *The Economics of Climate Change*, Cambridge, Cambridge University Press.

Stigler, G. J. (1971), "The theory of economic regulation", *Bell Journal of Economics* 2(1): 3-21.

Sturm, D. M. (2006), "Product Standards, Trade Disputes, and Protectionism", Canadian Journal of Economics 39(2): 564-581.

Swann, G. P., Temple, P. and Shrumer, M. (1996), "Standards and Trade Performance: the UK Experience", *Economic Journal* 106(438): 1297 - 1313.

Swinnen, J. F. M. and Maertens, M. (2009), "Standards, Trade and Developing Countries", unpublished working paper.

Swinnen, J. F. M. and Vandemoortele, T. (2009a), "Are food safety standards different from other food standards? A political economy perspective", *European Review of Agricultural Economics* 36(4): 507-523.

Swinnen, J. F. M. and Vandemoortele, T. (2009b), "Trade, Development, and the Political Economy of Public Standards", K. U. Leuven, Centre for Institutions and Economic Performance, Discussion Paper 23609.

Swinnen, J. F. M. and Vandemoortele, T. (2011), "Trade and the Political Economy of Food Standards", *Journal of Agricultural Economics* 62(2): 259-280.

Sykes, A. O. (1999), "The (Limited) Role of Regulatory Harmonization in the International Goods and Services Markets", *Journal of International Economic Law* 2(1): 49-70.

Sykes, A. O. (2002), "Domestic regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View", *Chicago Journal of International Law* 3(353): 366-368.

Sykes, A. O. (2003), "The Least Restrictive Means", *The University of Chicago Law Review* 70(403): 403-419.

Sykes, A. O. (2006), "Domestic regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View", in Bermann, G. and Mavroidis, P. C. (eds.), *Trade and Human Health and Safety*, Cambridge, Cambridge University Press.

Temple, P. and Urga, G. (1997), "The competitiveness of UK Manufacturing: Evidence from Imports", *Oxford Economic Papers* 49(2): 207-227.

Trachtman, J. P. (1998), "Trade and... problems cost-benefit analysis and subsidiarity", *European Journal of International Law* 9(1): 32-85.

Trachtman, J. P. (2008), *The Economic Structure of International Law*, Cambridge, MA, Harvard University Press.

Trebilcock, M. J. and R. Howse (1999), *The Regulation of International Trade* (2nd ed.), New York, Routledge.

Tullock, G. (1983), Economics of Income Redistribution, Boston, MA, Kluwer Academic Publishers.

UK Department of Trade and Industry (DTI) (2005), "The Empirical Economics of Standards", London, DTI, Economics Paper 12.

United Nations Conference on Trade and Development (UNCTAD) (2006), Measuring Restrictions on FDI in Services in Developing Countries and Transition Economies, Geneva,

United Nations Conference on Trade and Development (UNCTAD) (2010), Non-tariff Measures: Evidence from Selected Developing Countries and Future Research Agenda, Geneva, UNCTAD.

United Nations Conference on Trade and Development (UNCTAD) (2012), Non-Tariff Measures to Trade: Economic and Policy Issues for Developing Countries, Geneva, UNCTAD.

Van Beers, C. and Van den Bergh, J. C. J. M. (1997), "An Empirical Multi-Country Analysis of the Impact of Environmental Regulations on Foreign Trade Flows", *Kyklos* 50(1): 29-46.

Van Tongeren, F., Beghin, J. C. and Marette, S. (2009), "A Cost-Benefit Framework for the Assessment of Non-Tariff Measures in Agro-Food Trade", Paris, Organisation for Economic Co-operation and Development, Food, Agriculture and Fisheries Working Paper 21.

Van Tongeren, F., Disdier ,A.-C., Komorowska, J., Marette, S. and Lampe, M. V. (2010), "Case Studies of Costs and Benefits of Non-Tariff Measures: Cheese, Shrimp and Flowers", Paris, Organisation for Economic Co-operation and Development, Food, Agriculture and Fisheries Working Paper 28.

Van der Marel, E. and Shepherd, B. (2011), "Services trade, regulation, and regional integration: Evidence from sectoral data", unpublished working paper.

Vancauteren, M. and Weiserbs, D. (2005), "Intra-European Trade of Manufacturing Goods: An Extension of the Gravity Model", U. C. Louvain, Département des Sciences Économiques Working Paper 26.

Walsh, K. (2006), "Trade in Services: Does Gravity Hold? A Gravity Model Approach to Estimating Barriers to Services Trade", Dublin, The Institute for International Integration Studies, Discussion Paper 183.

Weingast, B. R., Shepsle, K. A. and Johnsen, C. (1981), "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics", *Journal of Political Economy* 89(4): 642-664.

Weitzman, M. L. (1974), "Prices vs. Quantities", Review of Economic Studies 41(4): 477-491.

Whalley, J. and Chia, N. C. (1997), "A Numerical Example Showing Globally Welfare-Worsening Liberalization of International Trade in Banking Services", *Journal of Policy Modeling* 19(2): 119-127.

Wilcox, C. (1949), A Charter for World Trade, New York, MacMillan.

Winham, G. (1986), International Trade and the Tokyo Round Negotiation, Princeton, NJ, Princeton University Press.

Wolfe, R. (2003), "Regulatory Transparency, Developing countries and the WTO", World Trade Review 2(2): 157-182.

Wolfe, R. (2005), "See you in Geneva? Legal (Mis) Representations of the Trading System", *European Journal of International Relations* 11(3): 339-365.

Wolfe, R. (2012), "Protectionism and Multilateral Accountability During the Great Recession: Drawing Inferences from Dogs Not Barking", *Journal of World Trade* 46(4).

World Bank (2008a), A survey of non-tariff measures in East Asia and Pacific Region: Policy Research Report, Washington, D.C., World Bank.

World Bank (2008b), Non-tariff measures on goods trade in the East African Community, Washington, D.C., World Bank.

World Health Organization (WHO) (2012), "Zoonoses and veterinary public health (VPH)." Retrieved April 16, 2012, from http://www.who.int/zoonoses/en/

World Trade Organization (WTO) (2004), A Handbook on the WTO Dispute Settlement System, Geneva, WTO.

World Trade Orga*nization (WTO) (2005a), A Handbook on the GATS Agreement*, Geneva, WTO.

World Trade Organization (WTO) (2005b), World Trade Report 2005: Trade, standards and the WTO, Geneva, WTO.

World Trade Organization (WTO) (2006), World Trade Report 2006: Exploring the links between subsidies, trade and the WTO, Geneva, WTO.

World Trade Organization (WTO) (2008), World Trade Report 2008: Trade in a globalizing world, Geneva, WTO.

World Trade Organization (WTO) (2010), World Trade Report 2010: Trade in natural resources, Geneva, WTO.

World Trade Organization (WTO) (2011a), *Trade policy review:* Cambodia, Geneva, WTO.

World Trade Organization (WTO) (2011b), World Trade Report 2011: The WTO and preferential trade agreements: From co-existence to coherence, Geneva, WTO.

World Trade Organization (WTO) and United Nations Environmental Programme (UNEP) (2009), *Trade and Climate Change*, Geneva, WTO and UNEP.

Wölfl, A., Wanner, I., Kozluk, T. and Nicoletti, G. (2009), "Ten Years of Product Market Reform in OECD Countries", Paris, Organisation for Economic Co-operation and Development, Economics Department Working Paper 695.

Yeung, K., Zhou, H., Yeung, A. C. L. and Cheng, T. C. E. E. (2012), "The impact of third-party logistics providers' capabilities on exporters' performance", *International Journal of Production Economics* 135(2): 741-753.

Yi, K.-M. (2003), "Can Vertical Specialization Explain the Growth of World Trade?", *Journal of Political Economy* 111(1): 52-102.

Yu, Z. (2000), "A model of substitution of non-tariff barriers for tariffs", Canadian Journal of Economics 33(4): 1069-1090.

Zhang, Z. X. and Baranzini, A. (2004), "What Do We Know about Carbon Taxes? An Inquiry into Their Impacts on Competitiveness and Distribution of Income", *Energy Policy* 32(4): 507-518.

Zhao, K., Xia, M. and Shaw, M. J. (2007), "An Integrated Model of Consortium-Based E-business Standardization: Collaborative Development and Adoption with Network Externalities", *Journal of Management Information Systems* 23(4): 247-271.

Technical notes

Composition of reg	ions and other econd	omic groupings		
North America				
Bermuda	Canada*	Mexico*	United States of America*	
	on not elsewhere specified (Officed States of America	
South and Central Ameri	· · · · · · · · · · · · · · · · · · ·	n.e.s.)		
Antigua and Barbuda*	Chile*	El Salvador*	Netherlands Antilles	Saint Vincent and
				the Grenadines*
Argentina*	Colombia*	Grenada*	Nicaragua*	Suriname*
Bahamas**	Costa Rica*	Guatemala*	Panama*	Trinidad and Tobago*
Barbados*	Cuba*	Guyana*	Paraguay*	Uruguay*
Belize*	Dominica*	Haiti*	Peru*	Bolivarian Rep. of Venezuela*
Bolivia, Plurinational State of*	Dominican Republic*	Honduras*	Saint Kitts and Nevis*	
Brazil*	Ecuador*	Jamaica*	Saint Lucia*	
Other territories in the regi	on n.e.s.			ı
Europe				
Albania*	Czech Republic*	Hungary*	Malta*	Slovak Republic*
Andorra**	Denmark*	Iceland*	Montenegro*	Slovenia*
Austria*	Estonia*	Ireland*	Netherlands*	Spain*
Belgium*	Finland*	Italy*	Norway*	Sweden*
Bosnia and Herzegovina**	France*	Latvia*	Poland*	Switzerland*
Bulgaria*	FYR Macedonia*	Liechtenstein*	Portugal*	Turkey*
Croatia*	Germany*	Lithuania*	Romania*	United Kingdom*
Cyprus*	Greece*	Luxembourg*	Serbia**	
Other territories in the regi			55.5.5	
Commonwealth of Indep				
Armenia*	Georgia*a	Moldova, Republic of*	Turkmenistan	
Azerbaijan**	Kazakhstan**	Russian Federation**	Ukraine*	
Belarus**	Kyrgyz Republic*	Tajikistan**	Uzbekistan**	
Other territories in the regi	, 6, 1	rajiniotan	O L D O M O L D M	
Africa				
Algeria**	Congo*	Guinea*	Morocco*	South Africa*
Angola*	Côte d'Ivoire*	Guinea-Bissau*	Mozambique*	Sudan**
Benin*	Dem. Rep. of the Congo*	Kenya*	Namibia*	Swaziland*
Botswana*	Diibouti*	Lesotho*	Niger*	Tanzania*
Burkina Faso*	Egypt*	Liberia, Republic of**		Togo*
Burundi*		Libya**	Nigeria* Rwanda*	Tunisia*
Cameroon*	Equatorial Guinea** Eritrea	Madagascar*	São Tomé and Príncipe**	Uganda*
Cameroon*	Ethiopia**			
<u>'</u>	·	Malawi*	Senegal*	Zambia*
Central African Republic* Chad*	Gabon* Gambia*	Mali*	Seychelles** Sierra Leone*	Zimbabwe*
Comoros**		Mauritania*	Sierra Leone [*] Somalia	
	Ghana*	Mauritius*	Sullialia	
Other territories in the regi	on n.e.s.			
Middle East	II*	Laborate D. (18.88	Canali Arabia IZI a da a f#	V**
Bahrain, Kingdom of*	Israel*	Lebanese Republic**	Saudi Arabia, Kingdom of*	Yemen**
Iran**	Jordan*	Oman*	Syrian Arab Republic**	
Iraq**	Kuwait, State of*	Qatar*	United Arab Emirates*	
Other territories in the regi	on n.e.s.			
Asia	11 1/ 01 +	N. 1	D N 0: +	T: 1 .
Afghanistan**	Hong Kong, China*	Malaysia*	Papua New Guinea*	Timor-Leste
Australia*	India*	Maldives*	Philippines*	Tonga*
Bangladesh*	Indonesia*	Mongolia*	Samoa*	Tuvalu
Bhutan**	Japan*	Myanmar*	Singapore*	Vanuatu**
Brunei Darussalam*	Kiribati	Nepal*	Solomon Islands*	Viet Nam*
Cambodia*	Korea, Republic of*	New Zealand*	Sri Lanka*	
China*	Lao People's Dem. Rep.**	Pakistan*	Taipei, Chinese*	
Fiji*	Macao, China*	Palau	Thailand*	

^{*}WTO members

^{**}Observer governments

a. Georgia is not a member of the Commonwealth of Independent States but is included in this group for reasons of geography and similarities in economic structure.

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			South Africa
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Eritrea	Madagascar	Saint Kitts and Nevis	Tonga
Ethiopia	Malawi	Saint Lucia	Trinidad and Tobago
Fiji	Mali	Saint Vincent and the Grenadines	Tuvalu
Gabon	Marshall Islands	Samoa	Uganda
Gambia	Mauritania	São Tomé and Príncipe	United Republic of Tanzania
Ghana	Mauritius	Senegal	Vanuatu
Grenada	Micronesia	Seychelles	Zambia
Guinea	Mozambique	Sierra Leone	Zimbabwe
Guinea-Bissau	Namibia	Solomon Islands	
Guyana	Nauru	Somalia	
Egypt	Libva	Morocco	Tunisia
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Guinea	Maii	Nigeria	Togo
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Chad	Dem. Rep. of the Congo	Gabon	São Tomé and Príncipe
Ethiopia	Mauritius		United Republic of Tanzania
Kenya	Seychelles	Sudan	Uganda
Madagascar			
Lesotho	Mozambique	South Africa	Zambia
Malawi	Namibia	Swaziland	Zimbabwe
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Indonesia Japan Kiribati Lao People's Dem. Rep. Macao, China Malaysia Bhutan India ries in Asia and the Pacific n	Myanmar New Zealand Papua New Guinea Philippines Republic of Korea Maldives Nepal ot elsewhere specified	Singapore Solomon Islands Taipei, Chinese Thailand Tonga Pakistan	Vanuatu Viet Nam Sri Lanka
Indonesia Japan Kiribati Lao People's Dem. Rep. Macao, China Malaysia Bhutan India ries in Asia and the Pacific necountries)	Myanmar New Zealand Papua New Guinea Philippines Republic of Korea Maldives Nepal oot elsewhere specified Central African Republic	Singapore Solomon Islands Taipei, Chinese Thailand Tonga Pakistan Djibouti	Vanuatu Viet Nam Sri Lanka Gambia
Indonesia Japan Kiribati Lao People's Dem. Rep. Macao, China Malaysia Bhutan India ries in Asia and the Pacific n	Myanmar New Zealand Papua New Guinea Philippines Republic of Korea Maldives Nepal ot elsewhere specified	Singapore Solomon Islands Taipei, Chinese Thailand Tonga Pakistan	Vanuatu Viet Nam Sri Lanka
	Fiji Gabon Gambia Ghana Grenada Guinea Guinea-Bissau Guyana Egypt Gambia Ghana Guinea Central African Republic Chad Ethiopia Kenya Madagascar Lesotho Malawi	Cuba Haiti Dem. Rep. of the Congo Jamaica Djibouti Kenya Dominica Kiribati Dominican Republic Lesotho Equatorial Guinea Liberia, Republic of Eritrea Madagascar Ethiopia Malawi Fiji Mali Gabon Marshall Islands Gambia Mauritius Grenada Micronesia Guinea Mozambique Guinea-Bissau Namibia Guyana Nauru Egypt Libya Gambia Guinea-Bissau Ghana Liberia, Republic of Guinea Mali Central African Republic Congo Chad Dem. Rep. of the Congo Ethiopia Madagascar Lesotho Mozambique Mozambique Mozambique Mozambique Central Seychelles Madagascar	Cuba Haiti Niger Dem. Rep. of the Congo Jamaica Nigeria Djibouti Kenya Niue Dominica Kiribati Palau Dominican Republic Lesotho Papua New Guinea Equatorial Guinea Liberia, Republic of Rwanda Eritrea Madagascar Saint Kitts and Nevis Ethiopia Malawi Saint Lucia Fiji Mali Saint Vincent and the Grenadines Gabon Marshall Islands Samoa Gambia Mauritania São Tomé and Príncipe Ghana Mauritius Senegal Grenada Micronesia Seychelles Guinea Mozambique Sierra Leone Guinea-Bissau Namibia Solomon Islands Guyana Nauru Somalia Egypt Libya Morocco Gambia Guinea-Bissau Mauritania Gambia Guinea-Bissau Mauritania Gambia Guinea-Bissau Mauritania Guinea Mali Niger Guinea Mali Nigeria Central African Republic Congo Equatorial Guinea Chad Dem. Rep. of the Congo Gabon </td

Kiribati	Maldives	Niger	Solomon Islands	Uganda
Lao People's Dem. Rep.	Mali	Rwanda	Somalia	United Republic of Tanzania
Lesotho	Mauritania	Samoa	Sudan	Vanuatu
Liberia, Republic of	Mozambique	São Tomé and Príncipe	Timor-Leste	Yemen
Madagascar	Myanmar	Senegal	Togo	Zambia
Malawi	Nepal	Sierra Leone	Tuvalu	
Six East Asian traders			'	1
Hong Kong, China	Republic of Korea	Singapore	Taipei, Chinese	Thailand
Malaysia				
Regional Integration	Agreements			
Andean Community (CA				
Bolivia.	Colombia	Ecuador	Peru	
Plurinational State of	Colombia	2000001	. 5.4	
ASEAN (Association of	South East Asian Nations)	/ AFTA (ASEAN Free Trad	e Area)	
Brunei Darussalam	Indonesia	Malaysia	Philippines	Thailand
Cambodia	Lao People's Dem. Rep.	Myanmar	Singapore	Viet Nam
CACM (Central America	n Common market)		'	
Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua
CARICOM (Caribbean C	ommunity and Common M	arket)		
Antigua and Barbuda	Belize	Guyana	Montserrat	Saint Vincent and the Grenadines
Bahamas	Dominica	Haiti	Saint Kitts and Nevis	Suriname
Barbados	Grenada	Jamaica	Saint Lucia	Trinidad and Tobago
CEMAC (Economic and	Monetary Community of C	entral Africa)		
Cameroon	Chad	Congo	Equatorial Guinea	Gabon
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Burundi	Egypt	Libya	Rwanda	Uganda
Comoros	Eritrea	Madagascar	Seychelles	Zambia
Dem. Rep. of the Congo	Ethiopia	Malawi	Sudan	Zimbabwe
Djibouti	Kenya	Mauritius	Swaziland	Ziiiibabwe
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	1	I .	Gabon	São Tomá and Drínaina
Angola Burundi	Central African Republic Chad	Dem. Rep. of the Congo Equatorial Guinea	Rwanda	São Tomé and Príncipe
		Equatorial Guinea	Rwanda	
Cameroon	Congo			
	mmunity of West African S		NA P	0 1
Benin	Côte d'Ivoire	Guinea	Mali	Senegal
Burkina Faso	Gambia	Guinea-Bissau	Niger	Sierra Leone
Cape Verde	Ghana	Liberia, Republic of	Nigeria	Togo
EFTA (European Free Tr	1			
Iceland	Liechtenstein	Norway	Switzerland	
European Union (27)		I		
Austria	Estonia	Ireland	Netherlands	Spain
Belgium	Finland	Italy	Poland	Sweden
Bulgaria	France	Latvia	Portugal	United Kingdom
Cyprus	Germany	Lithuania 	Romania	
Czech Republic	Greece	Luxembourg	Slovak Republic	
Denmark	Hungary	Malta	Slovenia	
GCC (Gulf Cooperation				
Bahrain, Kingdom of	Oman	Qatar	Saudi Arabia, Kingdom of	United Arab Emirates
Kuwait, State of				
MERCOSUR (Southern 0	Common Market)			
Argentina	Brazil	Paraguay	Uruguay	
NAFTA (North American	Free Trade Agreement)			
Canada	Mexico	United States		

SAPTA (South Asian Preferential Trade Arrangement)				
Bangladesh	India	Nepal	Pakistan	Sri Lanka
Bhutan	Maldives			
SADC (Southern African Development Community)				
Angola	Lesotho	Mauritius	South Africa	Zambia
Botswana	Madagascar	Mozambique	Swaziland	Zimbabwe
Dem. Rep. of the Congo	Malawi	Namibia	United Republic of Tanzania	
WAEMU (West African Economic and Monetary Union)				
Benin	Côte d'Ivoire	Mali	Senegal	Togo
Burkina Faso	Guinea-Bissau	Niger		

WTO members are frequently referred to as "countries", although some members are not countries in the usual sense of the word but are officially "customs territories". The definition of geographical and other groupings in this report does not imply an expression of opinion by the Secretariat concerning the status of any country or territory, the delimitation of its frontiers, nor the rights and obligations of any WTO member in respect of WTO agreements. The colours, boundaries, denominations and classifications in the maps of the publication do not imply, on the part of the WTO, any judgement on the legal or other status of any territory, or any endorsement or acceptance of any boundary.

Throughout this report, South and Central America and the Caribbean is referred to as South and Central America. The Bolivarian Republic of Venezuela; Hong Kong Special Administrative Region of China; the Republic of Korea; and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu are referenced as Bolivarian Rep. of Venezuela; Hong Kong, China; Korea, Republic of; and Taipei, Chinese respectively.

The closing date for data used within this report is 12 April 2012.

Abbreviations and symbols

ACP African, Caribbean and Pacific Group of States

AD anti-dumping

ALOP appropriate levels of protection
AMS Aggregate Measurement of Support
AOA Agreement on Agriculture (WTO)
APC Australia Productivity Commission

AQSIQ General Administration of Quality Supervision, Inspection and Quarantine of China

APEC Asia Pacific Trade Agreement ASEAN Association of Southeast Nations

ASP American selling price
ATFS American Tree Farm System
AVE ad-valorem equivalent
BE barriers to entry

BFAI Foreign Trade Information Office of Germany

BSE bovine spongiform encephalopathy
BT barriers to trade and investment

c.i.f. cost-insurance-freight

CARS Consumer assistance to recycle and save
CEPR Centre for Economic Policy Research
CERFLOR Forest Certification Programme
CIS Commonwealth of Independent States

COMESA Common Market for Eastern and Southern Africa

CoOP country of origin principle
DCs Developing countries

DG SANCO European Commission Directorate-General for Health and Consumers

DP discriminatory procedures
EAC East African Community

ECLAC Economic Commission for Latin America and the Caribbean

EEMRA Electrical and Electronic Equipment Mutual Recognition Arrangement

EFTPOS Electronic funds transfer at point of sale

EFW Economic Freedom of the World ERM environment-related measures

ESCAP Economic and Social Commission for Asia and the Pacific

ETCR electricity, gas, transport and communications

ETI Enabling Trade Index
EU European Union
f.o.b. free-on-board

FAO Food and Agricultural Organization

FDI Foreign direct investment
FER foreign equity restrictions
FSAP Financial Services Action Plan
FSC Forest Stewardship Council

GATS General Agreement on Trade in Services GATT General Agreement on Tariffs and Trade

GFSI Global Food Safety Initiative
GRP Good Regulatory Practices

GTA Global Trade Alert

HACCP hazard analysis and critical control points

HS harmonized system

IASC International Accounting Standards Committee
IEC International Electrotechnical Commission
IFAC International Federation of Accountants
IFO German Institute for Economic Research
IMS Information Management Systems

IOSCO International Organization of Securities Commissions

IPCC Intergovernmental Panel on Climate Change
IPPC International Plant Protection Convention
ISO International Organization for Standardization

ITC International Trade Centre

I-TIP Integrated Trade Intelligence Portal
ITO International Trade Organization
ITU International Telecommunications Union

KPE key foreign personnel
LDCs least-developed countries
LEI Indonesian Ecolabelling Institute

LTA Long-term-arrangement MFN most favoured nation

MRA mutual recognition agreement MRLs maximum residual levels

MTCS Malaysian Timber Certification Scheme

NAMA Non-Agriculture Market Access
n.e.s. not elsewhere specified
NMS non-manufacturing sectors
NMR non-manufacturing regulation
NTE National Trade Estimate
NTMs non-tariff measures

OECD Organization for Economic Cooperation and Development

OIE World Organization for Animal Health

OTR other restrictions

OTRI Overall Trade Restrictiveness Index PCA principal component analysis

PEFC Programme for the Endorsement of Forest Certification

PMR product market regulation
PSI Pre-shipment inspection
PTA preferential trade agreement

RAPEX Rapid Alert System for Non-Food Products
SADC Southern African Development Community
SARSO South Asian Regional Standards Organization

SCR screening and approval

SCSC Sub-committee on Standards and Conformance SITC Standard International Trade Classification

SPS sanitary and phytosanitary STCs Specific Trade Concerns

STDF Standards and Trade Development Facility

STEs State trading enterprises

STRI Services Trade Restrictiveness Indexes

TBT technical barriers to trade
TPP Trans-Pacific Partnership
TPR Trade Policy Review
TPRB Trade Policy Review Body

TRAINS Trade Analysis and Information System

TRIPS trade-related aspects of intellectual property rights
TTMRA Trans-Tasman Mutual Recognition Arrangement

TTRI Tariff Trade Restrictiveness Index

UK United Kingdom

UNCTAD United Nations Conference on Trade and Development UNECE United Nations Economic Commission for Europe

UNEP United Nations Environmental Programme

UNESCO United Nations Educational, Scientific and Cultural Organization UNFCC United Nations Framework Convention on Climate Change

UR Uruguay Round US United States

USITC United States International Trade Commission

USO Universal services obligation
USTR United States Trade Representative

VAT value-added tax

WHO World Health Organization
WITS World Integrated Trade System
WTO World Trade Organization

The following symbols are used in this publication:

... not available

O figure is zero or became zero due to rounding

- not applicable US\$ United States dollars

 \in euro $\mathfrak L$ UK pound

List of figures, tables and boxes

Part I

Figures		
Figure 1.1	gure 1.1 Growth in volume of world merchandise trade and GDP, 2000-11	
Figure 1.2	Volume of world merchandise exports, 1990-2011	19
Figure 1.3	Real GDP growth and trade of euro area economies, 2008-11	21
Figure 1.4	igure 1.4 Quarterly world exports of manufactured goods by product, 2008Q1-2011Q4	
Figure 1.5 Nominal dollar exchange rates, January 2005 – February 2012		24
Tables		
Table 1.1	GDP and merchandise trade by region, 2009-11	20
Table 1.2	World prices of selected primary products, 2000-11	21
Table 1.3	World exports of merchandise and commercial services, 2005-11	22
Appendix figures		
Appendix Figure 1	Seasonally adjusted quarterly merchandise trade volume indices, 2008Q1 - 2011Q4	26
Appendix Figure 2	Monthly merchandise exports and imports of selected economies, January 2008 – February 2012	27
Appendix tables		
Appendix Table 1	World merchandise trade by region and selected economies, 2011	28
Appendix Table 2	World trade in commercial services by region and selected country, 2011	29
Appendix Table 3	Merchandise trade: leading exporters and importers, 2011	30
Appendix Table 4	Merchandise trade: leading exporters and importers (excluding intra-EU(27) trade), 2011	31
Appendix Table 5	Leading exporters and importers in world trade in commercial services, 2011	32
Appendix Table 6	Leading exporters and importers in world trade in commercial service (excluding intra-EU(27) trade), 2011	33
Part II		
A Introduction		
Tables		
Table A.1	Non-tariff measures notified by GATT/WTO members for non-agricultural products	44
B An economic	perspective on the use of non-tariff measures	
Figures		
Figure B.1(a)	Effect of TBT/SPS measures on trade and welfare: both increase	63
Figure B.1(b)	Effect of TBT/SPS measures on trade and welfare: both decrease	63
Tables		
Table B.1	Coverage ratio and frequency index of STCs and tariffs	73
Table B.2	Typology of measures affecting services trade	77
Table B.3	Coordination game	81
Table B.4	Prisoner's dilemma game	81

Boxes		
Box B.1	Defining transparency in non-tariff measures	
Box B.2	Choice of NTMs and cost-benefit analysis	
Box B.3	Network effects/externalities and private standards	57
Box B.4	Is it possible to identify disguised protectionism in NTMs?	59
Box B.5	Effect of TBT/SPS measures on trade and welfare	63
Box B.6	Policy substitution – evidence from specific trade concerns	72
Box B.7	Examples of services-specific measures to pursue public policy objectives	76
C An invento	ry of non-tariff measures and services measures	
Figures		
Figure C.1	GATS Article III:3 notifications received, 2000-2011	98
Figure C.2	Shares of product lines and trade value covered by NTMs, 1996-2008	105
Figure C.3	SPS and TBT notifications, 1994-2010	106
Figure C.4	New and resolved SPS specific trade concerns, 1995-2010	107
Figure C.5	New TBT specific trade concerns, 1995-2011	107
Figure C.6	Maintaining and raising countries in specific trade concerns, 1995-2010	108
Figure C.7	Average value of initiated SPS and TBT concerns, 1995-2010	109
Figure C.8	Coverage ratio and frequency index of STCs aggregated by year, 1995-2010	109
Figure C.9	Burdensome NTMs by type of measure, 2010	112
Figure C.10	TBT/SPS import-related measures by sub-type, 2010	113
Figure C.11	NTMs applied by home country on exports by sub-type, 2010	114
Figure C.12	Non-tariff measures facing US and EU exporters, 2009	114
Figure C.13	Number of STC "maintaining" and "raising" countries as a share of the total number of countries by level of development, 1995-2010	115
Figure C.14	Burdensome NTMs applied by partner countries by level of development, 2010	116
Figure C.15	Incidence of NTMs by sector, 2010	117
Figure C.16	Type of NTM by sector, 2010	117
Figure C.17	Share of NTMs with and without procedural obstacles, 2010	119
Figure C.18	Shares of reported procedural obstacles by type, 2010	119
Figure C.19	Shares of NTMs with and without procedural obstacles by type of NTM, 2010	120
Figure C.20	Composition of new restrictive trade measures, 2008-2011	121
Figure C.21	Time trend of NMR indicators in selected services sectors	122
Figure C.22	FDI restrictiveness in services, evolution over time	125
Tables		
Table C.1	Measures covered by trade policy reviews	99
Table C.2	International classification of non-tariff measures	101
Table C.3	ITC list of procedural obstacles	102
Table C.4	Agreements cited in disputes related to trade in goods, 1995-2011	111
Table C.5	Complaints about NTMs in COMESA-EAC-SADC, 2008-11	116
Table C.6	Agreements cited in disputes related to trade in agricultural and non-agricultural products	118
Table C.7	Trade and trade-related measures, 2008-2011	121
Table C.8	Decomposition of growth of FDI restrictiveness in total services, 1997-2010	126

Boxes		
Box C.1	Methodology for constructing indices from UNCTAD TRAINS and STC database	
Box C.2	Trade restrictiveness indexes for services	123
Box C.3	Decomposition of changes in FDI restrictiveness	126
Appendix Table		
Appendix Table C.1	Coverage ratio and frequency index: intermediate-intensive sectors	133
	fects of non-tariff measures and services measures	
Figures Figure D.1	AVEs of NTMs and economic development	139
Boxes		
Box D.1	Methodology used for estimating the AVE of NTMs	137
Box D.2	Cumulation of trade costs in a global supply chain	141
Box D.3	Complementarities between trade in services and trade in goods	142
Box D.4	Environment-related measures	145
Box D.5	Reporting of conformity assessment procedures as barriers to trade: selected examples	148
Box D.6	Harmonization versus mutual recognition	150
Appendix tables		
Appendix Table D.1	Effects of SPS measures on export performances by firm	157
Appendix Table D.2	Effects of TBT measures on export performances by firm	158
Appendix Table D.3	Impact of SPS measures on agricultural and food trade, 1996-2010	159
E International	cooperation on non-tariff measures in a globalized world	
Boxes		
Box E.1	Economic theories of the GATS	164
Box E.2	Examples of private standards	167
Box E.3	Examples of regulatory cooperation in the TBT area	177
Box E.4	Equivalence in the SPS Agreement	180

WTO members

(As of 10 May 2012)

Albania The Gambia Nicaragua Angola Georgia Niger Antigua and Barbuda Germany Nigeria Argentina Ghana Norway Armenia Greece Oman Australia Grenada Pakistan Austria Guatemala Panama

Bahrain, Kingdom of Guinea Papua New Guinea

Bangladesh Guinea-Bissau Paraguay Barbados Guyana Peru Belgium Haiti **Philippines** Belize Honduras Poland Benin Hong Kong, China Portugal Bolivia, Plurinational State of Hungary Qatar Botswana Iceland Romania Brazil India Rwanda

Brunei Darussalam Indonesia Saint Kitts and Nevis

Bulgaria Ireland Saint Lucia

Burkina Faso Israel Saint Vincent & the Grenadines

Burundi Italy Samoa

Cambodia Jamaica Saudi Arabia, Kingdom of

CameroonJapanSenegalCanadaJordanSierra LeoneCape VerdeKenyaSingaporeCentral African RepublicKorea, Republic ofSlovak RepublicChadKuwait, the State ofSlovenia

ChadKuwait, the State ofSloveniaChileKyrgyz RepublicSolomon IslandsChinaLatviaSouth AfricaColombiaLesothoSpainCongoLiechtensteinSri Lanka

Costa Rica Lithuania Suriname Côte d'Ivoire Luxembourg Swaziland Croatia Macao, China Sweden Cuba Madagascar Switzerland Cyprus Malawi Chinese Taipei Czech Republic Malaysia Tanzania Democratic Republic of the Congo Maldives Thailand

Denmark Mali Togo Djibouti Malta Tonga

Dominica Mauritania Trinidad and Tobago

Dominican RepublicMauritiusTunisiaEcuadorMexicoTurkeyEgyptMoldova, Republic ofUgandaEl SalvadorMongoliaUkraine

Estonia Montenegro United Arab Emirates
European Union Morocco United Kingdom

Fiji Mozambique United States of America

Finland Myanmar Uruguay

Former Yugoslav Republic of Namibia Venezuela, Bolivarian Republic of

Macedonia (FYROM)NepalViet NamFranceNetherlandsZambiaGabonNew ZealandZimbabwe

Previous World Trade Reports

The WTO and preferential trade agreements: From co-existence to coherence

2011



The ever-growing number of preferential trade agreements (PTAs) is a prominent feature of international trade. The Report describes the historical development of PTAs and the current landscape of agreements. It examines why PTAs are established, their economic effects, the contents of the agreements themselves, and the interaction between PTAs and the multilateral trading system.

Trade in natural resources

2010



The World Trade Report 2010 focuses on trade in natural resources, such as fuels, forestry, mining and fisheries. The Report examines the characteristics of trade in natural resources, the policy choices available to governments and the role of international cooperation, particularly of the WTO, in the proper management of trade in this sector.

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2009



The 2009 Report examines the range and role of contingency measures available in trade agreements. One of the Report's main objectives is to analyse whether WTO provisions provide a balance between supplying governments with the necessary flexibility to face difficult economic situations and adequately defining these in a way that limits their use for protectionist purposes.

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2008



The 2008 Report provides a reminder of what we know about the gains from international trade and highlights the challenges arising from higher levels of integration. It addresses the question of what constitutes globalization, what drives it, what benefits it brings, what challenges it poses and what role trade plays in this world of ever-growing inter-dependency.

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2007



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2006



The World Trade Report 2006 focuses on how subsidies are defined, what economic theory can tell us about subsidies, why governments use subsidies, the most prominent sectors in which subsidies are applied and the role of the WTO Agreement in regulating subsidies in international trade. The Report also provides brief analytical commentaries on certain topical trade issues.

Trade, standards and the WTO

2005



The World Trade Report 2005 seeks to shed light on the various functions and consequences of standards, focusing on the economics of standards in international trade, the institutional setting for standard-setting and conformity assessment, and the role of WTO agreements in reconciling the legitimate policy uses of standards with an open, non-discriminatory trading system.

Coherence

2004



The World Trade Report 2004 focuses on the notion of coherence in the analysis of interdependent policies: the interaction between trade and macroeconomic policy, the role of infrastructure in trade and economic development, domestic market structures, governance and institutions, and the role of international cooperation in promoting policy coherence.

Trade and development

2003



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World Trade Report 2012

The World Trade Report 2012 ventures beyond tariffs to examine other policy measures that can affect trade. Regulatory measures for trade in goods and services raise new and pressing challenges for international cooperation in the 21st century. More than many other measures, they reflect public policy goals (such as ensuring the health, safety and well-being of consumers) but they may also be designed and applied in a manner that unnecessarily frustrates trade. The focus of this report is on technical barriers to trade (TBT), sanitary and phytosanitary (SPS) measures (concerning food safety and animal/plant health) and domestic regulation in services.

The Report examines why governments use non-tariff measures (NTMs) and services measures and the extent to which these measures may distort international trade. It looks at the availability of information on NTMs and the latest trends concerning usage. The Report also discusses the impact that NTMs and services measures have on trade and examines how regulatory harmonization and/or mutual recognition of standards may help to reduce any trade-hindering effects.

Finally, the Report discusses international cooperation on NTMs and services measures. It reviews the economic rationale for such cooperation and discusses the efficient design of rules on NTMs in a trade agreement. It examines how cooperation has occurred on TBT/SPS measures and services regulation in the multilateral trading system, and within other international forums and institutions. A legal analysis is provided regarding the treatment of NTMs in WTO dispute system and interpretations of the rules that have emerged in recent international trade disputes. The Report concludes with a discussion of outstanding challenges and key policy implications.

