

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Erixon, Fredrik; Pehnelt, Gernot

Working Paper

A new trade agenda for transatlantic economic cooperation

ECIPE Working Paper, No. 09/2009

Provided in Cooperation with:

European Centre for International Political Economy (ECIPE), Brussels

Suggested Citation: Erixon, Fredrik; Pehnelt, Gernot (2009): A new trade agenda for transatlantic economic cooperation, ECIPE Working Paper, No. 09/2009, European Centre for International Political Economy (ECIPE), Brussels

This Version is available at: https://hdl.handle.net/10419/174836

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





A New Trade Agenda for Transatlantic Economic Cooperation

Fredrik Erixon

Fredrik Erixon (fredrik.erixon@ecipe.org) is Director of ECIPE

Gernot Pehnelt

Gernot Pehnelt (gernot.pehnelt@ecipe.org) is a Research Associate at ECIPE

ABSTRACT

Few Policy issues in Brussels and Washington DC are met with such a compact unity across political boundaries as the idea of deepened transatlantic economic integration. Twenty years after the fall of the Berlin Wall, the support for transatlantic economic co-operation remains strong. The election of Barack Obama as the new president of the United States has added new political appeal to the transatlantic agenda. Yet post cold-war initiatives to deepen transatlantic economic integration, and they have been many, have largely failed to achieve anything substantial. This paper discusses new approaches to transatlantic economic integration. It examines the trade benefits from a removal of tariffs and surveys different designs of a transatlantic trade deal.



JEL Code: FO2, F13, F15

Keywords: Transatlantic economic integration, Free Trade Agreement,

World Trade Organisation, International Economic Order

www.ecipe.org

info@ecipe.org Rue Belliard 4-6, 1040 Brussels, Belgium Phone +32 (0)2 289 1350

1. INTRODUCTION1

Few Policy Issues in Brussels and Washington DC are met with such a compact unity across political boundaries as the idea of deepened transatlantic economic integration. Twenty years after the fall of the Berlin Wall, the support for transatlantic economic co-operation remains strong. The election of Barack Obama as the new president of the United States has added new political appeal to the transatlantic agenda. The recent past has been marred by a widespread dislike in Europe for the former American president; the Bush administration was not fond of Europe either. But the new administration has empowered the notion of politico-cultural similarities between the two and strengthened the belief, widely shared by the political elites in Washington and European capitals that Europe and the United States need to press ahead with deepened bilateral economic integration to be better prepared for competition from new economic powers in the Far East.

There is only one fly in the ointment: post cold-war initiatives to deepen transatlantic economic integration, and they have been many, have not been successful. In fact, largely all attempts at policy-driven economic integration have failed. One could even make an argument to the opposite end: While American and European producers and consumers have continued to drive real, de facto economic integration between the two, policy initiatives like the Sarbanes-Oxley Act and the EU chemicals directive (REACH) have enforced differences over market regulations and made policy integration more difficult.

The Transatlantic Economic Council (TEC) is the current format for ambitions to deepen bilateral economic integration. The TEC was set up in spring 2007 on the initiative of Angela Merkel, the German chancellor, and deliberately aimed at a limited agenda for regulatory harmonization in selected areas. Two years into the working of the TEC it is difficult to point to any real achievements. In fact, efforts to harmonize regulations have been remarkably ineffective. The key achievement so far, for the numerous delegations that have travelled many air miles to foster common regulatory approaches, appears to be entrenched hostilities toward the other party over its regulation of the use of chlorine when chicken meat is washed.

Nor has the transatlantic axis in global economic policy been visible in the past decade. This is particularly true in the field of multilateral trade policy within the World Trade Organization (WTO). There has been a significant disconnect between Europe and the United States — even at times when they allegedly moved in tandem, as in the preparation for their joint agricultural proposal to the Cancun Ministerial Meeting in 2003. The big new round of trade negotiations was largely a product of Europe and, more specifically, the former EU trade commissioner, Leon Brittan, who pushed for the launch of a new millennium round. Bill Clinton spoiled these ambitions at the WTO ministerial meeting in Seattle in 1999 by refusing to accept a new round of trade negotiations unless labour and environmental standards were front and centre of the round — a demand that safely killed any interest on the part of developing countries in a new round as they correctly viewed it as hidden protectionism. Clinton's obstruction had more to do with domestic US politics than with trade policy, but the disconnection had been visible already before and concerned principle issues for the WTO, such as the role of the so-called Singapore issues in the WTO.²

^{*} The ECIPE Working Paper series presents ongoing research and work in progress. These Working Papers might therefore present preliminary results that have not been subject to the usual review process for ECIPE publications. We welcome feedback and recommend you to send comments directly to the author(s).

During the current Round, the EU and the US have often seemed more inclined to pick fights and engage in various blame games with each other rather than to jointly lead the Round to a successful end. They have, individually, failed to exercise the sort of leadership required from parties with such a big share of world production and world trade. They have also, jointly, failed to move constructively on issues where collective leadership could only be taken by the two – e.g. agricultural tariffs and subsidies.

Why so difficult?

Why has it proved so difficult to constructively engage Europe and the United States in deepened bilateral economic co-operation? There are many explanations, and they range from lack of a *de facto* will on the part of political leaders to actually do something (beyond summitry, rhetoric and speech making) to a wilful neglect of the technical difficulties involved in reducing barriers to trade. Let us add two other explanations that are not mentioned very often in analyses of transatlantic initiatives.

First, transatlantic economic co-operation — especially a transatlantic free trade area or market-place — has been considered to be a cardinal sin in the church of trade multilateralism. That is, it has been viewed as too much of an affront to the GATT/WTO system. There have been two different schools reaching this conclusion. One school has taken a puritan, or clerical, view of multilateralism and argued against free trade agreements in principal. In the case of transatlantic free trade, such concerns have been amplified by the fear that it would destroy the multilateral system if the two biggest trading blocs in the world made such a considerable move outside the GATT/WTO system. The other school builds its case on economics: the major benefits from trade derive from trade between countries with different, and not similar, production profiles and comparative advantages in trade; countries with different factors of specialization.

Both objections have merits. But any honest analysis must also acknowledge that these objections are not particularly strong and that they have grown weaker over time. It is true that a transatlantic free trade agreement would have had serious ramifications for the GATT/WTO system if such an agreement had been negotiated in, say, the 1970s. The core economic problem would have been trade diversion: expanding trade with inefficient producers at the expense of trade with efficient producers. Under the overall high levels of tariffs then, trade diversion would have been significant. It would also have presented political problems for the global trading system. In the absence of a preferential transatlantic agreement between them, the GATT/WTO system became the legitimate forum for the joint ambitions of the EU and the US, and their desire to address concerns they had with market access to each other. It broadened the constituency for multilateral trade policy and gave strategic direction to the GATT itself.

But the world economy has changed considerably since then. The volume of global trade has increased at a remarkable speed. Tariffs have been reduced to the point where they are, in many cases, insignificant. This is especially so in Europe and the United States who, in the past decades, have engaged in series of tariff liberalisations, inside and outside of the GATT, which have taken down the tariffs significantly. Geographically, world trade has equalised by moving eastwards and integrating populous and increasingly developed countries into the world economy. Supply chains have fragmented and involve production in many countries. These dense production networks are in most cases unaffected by trade initiatives involving preferential access to markets. Thirty years ago an FTA between big economies would have had serious effects on the world economy. Today one could safely put the emphasis on the policy effects, good or ill, rather than the market effects of new bilateral initiatives between the EU and the US.

It is incorrect to say that strong bilateral co-operation necessarily implies problems for multi-lateralism. The debate over bilateralism, regionalism and multilateralism often tends to become ideological. Nuances are lost and contexts are neglected. Deepened transatlantic co-operation certainly *could* make it more difficult to progress multilateral co-operation. Other countries may feel excluded by this "rich man's club". An FTA between the EU and the US also *could* be interpreted by other economies as a defensive move and — in a worst case scenario — provoke other countries to hold off their ambitions to liberalise or agree on multilateral liberalisation.

However, deepened transatlantic co-operation could also work the other way around: bilateralism and regionalism helping to push multilateralism. One does not have to go far to find relevant examples.

The Uruguay Round of trade negotiations finished around the same time as the EU concluded its single market and the NAFTA was signed. These are two of the most ambitious initiatives of regional and preferential trade co-operation ever undertaken, and they did not prevent members of the GATT from signing a multilateral agreement. In fact, one could make a powerful argument to the opposite end: these regional initiatives *helped* to push the Uruguay Round to a successful end.³ Regional as well as multilateral liberalization was part of the same contemporary drive for general economic liberalisation. Regional liberalization helped others to 'concentrate minds' and push for a multilateral deal in the fear that they would be disadvantageously affected by these initiatives unless overall tariff levels came down.

Similarly, the successes of the Kennedy Round in the 1960s can partly be attributed to the European implementation of the common market and the common commercial policy (starting in 1957). The United States feared, correctly, that reduced barriers within Europe would adversely affect the competitiveness of American firms, relative to European firms, on the European market. Especially so as the formation of the common commercial policy in Europe at that time (the Customs Union) implied increasing tariffs in some of the member states that had run comparatively liberal trade regimes (e.g. Germany). Therefore, the US government made considerable efforts to make sure that a new GATT round was started and that it finished successfully with significant reductions of overall tariff levels.

When at the United States Trade Representative (USTR), Robert Zoellick, currently the head of the World Bank, re-launched the idea of "competitive liberalisation". Building on the recent past of a multi-track trade policy, Zoellick claimed competing ambitions between countries to sign bilateral agreements would not only be a strategic tool of US trade policy but also spur multilateral results as bilateral agreements would be stepping stones to a WTO agreement. The idea of competitive liberalisation has rightly been discredited for its lack of economic rigour. 5 One could also hesitate on grounds of political economy. But it is wrong to say that bilateral initiatives in principal can have no positive effects on multilateral negotiations. It depends on the type of initiatives. Most bilateral trade agreements are of little or no systemic importance. They do not achieve much tariff liberalisation, and seldom go far beyond WTO commitments in key rules. Consequently, they are of little economic importance. The typical bilateral agreement is either between two small economies (south-south) or between a big and a small economy (centre-periphery). Both types of FTAs have adverse effects on the multilateral trading system. They provoke some trade diversion, but do not push other countries towards multilateral liberalisation. Some of them also clog up trade by complex webs of rules-of-origin regulations. But to be fair: the effects are typically marginal. There are also a few bilateral agreements between bigger economies – the US-Australia Free Trade Agreement being the premier one. But there are no agreements between the biggest economies – and it is these agreements that would have systemic effects.

There is a final argument of this ilk which asserts it is undemocratic, or politically illegitimate, for the two big trading blocs to set up the rules for themselves while leaving other countries outside. Again, this *could* be the case, but one has to be blind to contexts and circumstances to run with the argument to its end. Principally, the same argument applies for all agreements two or more countries enter without the full approval, let alone participation, of other countries. Initiatives like the EU and the Nafta cannot be justified under this view.

The notion that trade policy could only be conducted in multilateral forums is a pipe dream. If followed, very little, if anything, would happen as far as trade liberalisation is concerned. Largely, trade liberalization is driven by countries that decide to exercise leadership by pursuing its interest and using appropriate vehicles for liberalization. Sometimes that vehicle is multilaterally agreed trade liberalization, but that is a rare phenomenon in the history of trade policy. More often it is done by unilateral means, and at a later point it is locked up in bilateral/regional or multilateral agreements. Some liberalisation is also achieved in bilateral and regional agreements. This is not to say that multilateral agreements are unimportant. They are important. But they are not solitary phenomena. They reflect the overall patterns of economic liberalisation and what countries have achieved in the recent past. They are embedded in a structure of trade policy which involves other processes of liberalisation. Neglecting these processes at the altar of clerical multilateralism is a disservice to effective multilateralism — to the WTO, its ambitions and relevance.

Finally, this argument assumes that an agreement between Europe and the United States will be locked to other countries. However, many of the proposals that have been made concerning deeper bilateral integration, and transatlantic leadership, have argued for approaches that are open to everyone else that wishes to join on the same conditions. Proposals have rather resembled the ideas behind "open regionalism" or plurilateral agreements, and should not be seen as a transatlantic fortress.

The second explanation to unsuccessful transatlantic initiatives is that the Transatlantic Economic Council, and similar initiatives aimed at regulatory harmonization, has aimed too low. Initiatives have stumbled on bureaucratic minutiae — issues of small significance overall but of great importance to a few. One can easily understand the desire to design limited agendas, especially in the complex field of regulations which is marred by technical difficulties. There are also constitutional constraints, on the part of the EU as well as the federal government in the United States, which limits the scope of what can be achieved in a negotiation. However, small-step incrementalism often tends to lead nowhere. The potential benefits are too small to motivate leaders to devote the energy and political resolve needed to take complicated negotiations to an end. Every negotiation will arouse opposition from parties adversely affected by any form of change. If the potential economic benefits are small, the political costs tend to increase. Hence, Europe and the United States need to 'enlarge the context' if deepened transatlantic economic co-operation is ever to yield the desired results.

A new transatlantic initiative

This paper aims to examine the case for deepened transatlantic leadership in trade and commercial policy. The starting point of the paper is the "unfinished business" agenda in the field of tariffs and the paper presents a calculation on potential trade creation by a full removal of tariffs between Europe and the United States. The paper also discusses other areas for bilateral negotiations. A free trade agreement, with ambitious coverage in all sectors and that clearly goes beyond WTO commitments in non-tariff barriers, is an appealing idea. Such a 'gold standard' FTA would certainly generate significant effects on trade and welfare. It would also have a strong effect on the

multilateral system. However, it is also very ambitious – too ambitious to be feasible, many would say, especially in light of recent experiences of attempts at harmonising regulations. But even if ambitions are scaled down, the trade effects generated could be sufficiently big to generate the political motivation and decisiveness needed to negotiate a bilateral agreement <u>and</u> to push for more ambitious results in the World Trade Organisation.

Specifically, this paper examines the trade and political economy effects of a new transatlantic initiative that does away with all tariffs. Hence, we look at the potential costs and benefits of what has been termed 'shallow integration'. It is unlikely that the benefits generated would be very big. Overall tariffs in Europe and the United States are low, and reductions, or eliminations, of already low tariffs do not tend to have big effects on trade. However, given the volume of already existing trade, the aggregate effects on trade creation could be considerable in absolute terms. Europe and the United States are not only the biggest trade blocs in the world, they are also each other's main trading partner (if all trade, and not only trade in manufactures, is included). As intra-industry trade is significant, we could also expect bigger effects than those derived from general estimates on trade.

This paper only examines the static effects on trade creation by removal of tariffs. This minimalistic choice does not reflect a predisposed or desired design of a new transatlantic trade agenda. It is motivated by reasons of simplicity and political economy. As already shown in an OECD study, there are already good reasons to believe that a 'deep integration' agreement between the EU and the US would generate big net benefits. More detailed analysis is required to get a proper account of these benefits and how they are distributed between sectors and trade measures. Such work is also underway. This paper is especially interested in the political economy of transatlantic leadership in trade policy. The analysis is primarily done to examine whether transatlantic economic co-operation could feasibly be deepened by an alternative approach to the current TEC agenda of regulatory harmonization. In the political-economy, or mercantilist, spirit of trade negotiations, we are interested in finding the sectors and producers that would stand to benefit the most from an elimination of all tariffs.

The paper also discusses the effects of deepened transatlantic cooperation on trade multilateral-ism. The idea we put forward is principally based on the need to find new ways to progress multilateral agreements at a time when the WTO cannot feasibly act as a vehicle for liberalisation. To that end, we examine the experiences from the Doha Round and discuss what can be expected to happen within the remit of the WTO in the medium term. We also draw lessons from the plurilateral negotiations after the Uruguay Round over a zero-tariff agreement in information technology goods.

The next chapter will present the results of the quantitative analysis, and in subsequent chapters the political economy effects will be discussed. In the final chapter we discuss the possible designs of a new transatlantic initiative.

2. ESTIMATING TRADE CREATION

The Economies of Europe and the United States are densely integrated with each other. They are each other's biggest trading partner. China has replaced, or will soon replace, Europe and the United States, respectively, as the biggest source for manufacturing import. Furthermore, emerging Asia has for decades increased their shares in Europe's and America's trade. But if services are added, Europe and the United States are clearly each other's top trading partner. Furthermore, taking foreign direct investment into account, the profile of global commercial ties changes dis-

tinctly in the transatlantic direction. Consequently, sales by foreign affiliates are in many ways mainly a story of transatlantic economic patterns.

Applied tariffs in the EU and the US are comparably low for most goods. The average tariffs are 4.8 percent in the US and slightly less than 7 percent in the EU. Tariffs on agricultural products are significantly higher on both sides, and behind the average levels one could also find significant tariff peaks. For transatlantic trade relations, these peaks are principally to be found in products such as dairy products, other agricultural products, tobacco, beverages and certain types of textiles. For typical manufacturing products, tariff barriers are in the region of 1-4 percent.

For the purpose of this study the effective tariff barriers for EU and US exporters are calculated on the basis of applied ad valorem tariffs and ad valorem equivalents of specific tariffs on a 6 digit code level in the harmonized system. These applied tariffs have been weighted by the volume of US exports to the EU and EU exports to the US respectively in each product category. Table 1 presents the five sectors (HS 6 digit level) with the highest weighted effective tariff rates. Individual tariffs within these sectors (and other sectors) are sometimes very high. It is in the agricultural and textile sectors we find the highest tariffs. They are sufficiently high to seriously prevent trade and economic integration.

TABLE 1: FIVE SECTORS WITH HIGHEST WEIGHTED TARIFFS

	US	EU
Dairy, eggs, honey, etc	12.1	19.6
Textile articles not knitted or crocheted	11.1	15.2
Textile articles knitted or crocheted	12.0	13.7
Textile, knitted or crocheted fabrics	10.3	11.3
Edible vegetables	11.0	6.0

Based on the applied tariffs, which have been calculated for every single product category, we have calculated potential trade creation if tariffs were eliminated. For the calculations we have used two different assumptions: low import elasticity and high import elasticity. We have not integrated dynamic factors in the calculations, but only looked at potential static expansion of trade.

In order to calculate the static bilateral trade creation, we estimated the increase in the quantity of imports (usually kg) for both trading partners based on the assumption that the price of the respective good would decrease by the applied tariff (not the effective weighted tariff barrier presented elsewhere in this paper) given the different scenarios for the own import price elasticity for the very product group:

$$\mathbf{K} = \mathbf{M}_{i,n} \times \left| \mathbf{E}_{i,n} \right| \times \mathbf{q} \mathbf{M}_{i,n}$$
, with

- IC: import creation in country i for product n
- at: applied ad valorem tariff in country i for product n
- ε: own import price elasticity in country i for product n
- qIM: quantity of imports of country i of product n

The increase in the quantity of imports was then converted into EUR terms based on the existing price per unit (imports in EUR/import quantity). The results are displayed in Table 2 below.

TABLE 2: SUMMARY TRADE CREATION BY SECTOR

SECTION	EXPORT CREATION US LOW ELASTICITY (1 000 EUR)	EXPORT CREATION US HIGH ELASTICITY (1 000 EUR)	EXPORT CREATION EU LOW ELASTICITY (1 000 EUR)	EXPORT CREATION EU HIGH ELASTICITY (1 000 EUR)
Animal & Animal Products	10,895	27,237	33,195	82,989
Vegetable Products	22,847	57,119	13,058	32,645
Foodstuffs	87,031	217,578	133,320	333,301
Mineral Products	263,426	658,564	911,110	2,277,774
Chemicals and Allied Industries	426,756	1,066,890	659,020	1,647,551
Plastics & Rubber	222,126	555,316	150,682	376,706
Raw Hides, Skins, Leather & Furs	11,597	28,992	41,986	104,966
Wood & Wood Products	3,036	7,591	12,985	32,464
Textiles	75,662	189,154	242,316	605,790
Footwear & Headgear	3,179	7,947	55,805	139,513
Stone & Glass	108,574	271,435	212,736	531,840
Metals	273,623	684,056	320,980	802,449
Machinery / Electrical	623,775	1,559,438	1,067,785	2,669,462
Transportation	214,946	537,364	573,928	1,434,819
Miscellaneous	206,303	515,759	275,655	689,137
Others	3,125	7,813	1,750	4,375
TOTAL	2,556,901	6,392,252	4,706,312	11,765,781

Under the assumption of rather low price import elasticities in the European Union the total static increase of annual US exports to the EU27 would be about 2.5 billion EUR or about 1.51 percent. The static increase of annual EU exports to the US in this scenario would be about 4.7 billion EUR or about 1.95 percent. In a scenario with high price import elasticities, the static increase in US exports would amount to about 6.4 billion EUR or 3.76 percent. EU exports to the US can be expected to increase by more than 11.7 billion EUR or 4.89 percent. If we sum up the two scenarios, estimated trade creation would be between 7 and 18 billion EUR. On average that would be 12.5 billion EUR.

TABLE 3: TRADE CREATION UNDER TWO SCENARIOS (1 000 EUR)

	LOW ELASTICITY	HIGH ELASTICITY
European Union	4,706,312	11,765,781
United States	2,556,901	6,392,252
SUM	7,263,213	18,158,033

Which sectors stand to experience the biggest volume increase in trade creation? Trade in sectors with the highest tariffs would increase disproportionally, but since the volumes are small they will not experience as much trade creation as big trading sectors with lower tariffs. The most significant trade creation in total terms would occur in the fields of manufactures (machinery/electrical), chemicals, steel and minerals the biggest trade creation would occur. The patterns are similar on both sides. The EU would experience much more export creation in transportation than the US, but the US would create much more trade in plastics and rubber than the EU. The highest increases in US exports are likely to occur in chemicals, some metal products, machinery, vehicles and optical instruments. EU exports to the US would particularly increase in certain chemicals, textiles, turbines and other machinery, and vehicles.

Estimates can also be given for individual countries in the EU. The volume of trade creation is, naturally, a function of the size of the economy: bigger economies will have a bigger aggregate increase. This is also what is shown in Table 4. As in previous tables two estimates are shown: one using low elasticities and another using high elasticities. Of the selected EU countries, Germany will have the biggest increase in terms of volume. Germany also has a higher profile in sectors which are estimated to have the biggest creation of trade. France is also likely to experience a significant increase. Trade creation for Sweden is clearly above what the comparative size of its economy would suggest. Furthermore, it is also worth noting that all examined countries except Poland are likely to have a positive trade-balance effect from deepened transatlantic integration. The proportions are significantly biased in favour of Europe.

TABLE 4: SUMMARY TRADE CREATION SELECTED EU COUNTRIES (EUR)

	INCREASE OF US EXPORTS (LOW ELASTICITY)	INCREASE OF US EXPORTS (HIGH ELAS TICITY)	INCREASE OF EU E- EXPORTS (LOW ELASTICITY)	INCREASE OF EU EXPORTS (HIGH ELASTICITY)
COUNTRY				
Germany	531,632,161	1,329,080,402	1,309,342,384	3,273,355,960
Denmark	26,900,990	67,252,475	67,238,009	168,095,024
France	273,437,979	683,594,948	407,748,578	1,019,371,445
Poland	35,268,612	88,171,530	31,020,425	77,551,063
Sweden	51,926,041	129,815,103	139,543,480	348,858,700
Spain	121,361,780	303,404,449	166,189,935	415,474,839
TOTAL	1,040,527,563	2,601,318,908	2,121,082,812	5,302,707,030

Examining the relative increase in trade for individual EU countries, it is interesting to note that all countries appear to be in the same band of increase of exports. Spain is the only country which stands out, with an estimated expansion of exports to the US of between 2.2 and 5.5 percent. It differs more for European imports.

TABLE 5: SUMMARY TRADE CREATION SELECTED EU COUNTRIES (PERCENT)

	INCREASE OF US EXPORTS (LOW ELASTICITY)	INCREASE OF US EXPORTS (HIGH ELASTICITY)	INCREASE OF EU COUNTRY EXPORTS (LOW ELASTICITY)	INCREASE OF EU COUNTRY EXPORTS (HIGH ELASTICITY)
COUNTRY				
Germany	1.55%	3.88%	1.87%	4.67%
Denmark	1.18%	2.95%	1.74%	4.35%
France	1.33%	3.33%	1.72%	4.29%
Poland	1.74%	4.35%	1.84%	4.60%
Sweden	1.45%	3.63%	1.80%	4.49%
Spain	1.29%	3.24%	2.18%	5.45%

Finally, let's consider transatlantic intra-industry trade (IIT). IIT is of interest for several reasons: it shows patterns of trade and gives an indication of the factors of trade. Basic trade theory, for example, would assert that trade should occur between countries with different structures of production (with different resource endowment). But other drivers of trade – such as specialization and increasing returns to scale – point in a different direction.

Trade could very well increase rapidly between countries of similar endowment structure. Product varieties within the same product group, for example, could be a sufficient condition to distinguish countries and factor advantages from each other. Furthermore, high levels of intra-industry trade also suggest that even small barriers to trade have significant effects on actual trade; there is a trade potential to exploit.

Intra-industry trade between the EU and the US is very significant. The total bilateral trade volume in those product categories where the Grubel-Lloyd Index 8 , one of the standard measures of intra-industry trade, is 0.85 or higher amounts to roughly 95 billion EUR. The bilateral trade volume in the Top-5 product categories (GL Index > 0.85) alone is about 45 billion EUR (see Figure 1).

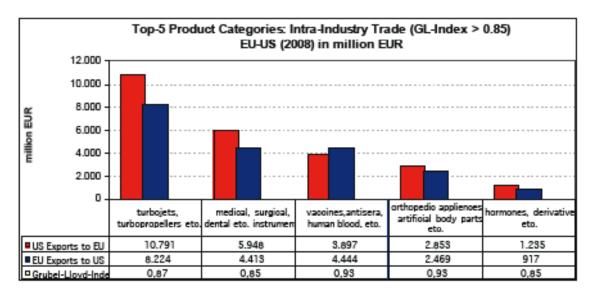


FIGURE 1: INTRA-INDUSTRY TRADE - TOP-5 PRODUCT CATEGORIES (GL INDEX > 0.85)

The bilateral trade volume in the Top-20 Product Categories, where the Grubel-Lloyd Index is higher than 0.85, amounts to more than 60 billion EUR (see Table 6). The effective trade barriers in these product categories US exporters are facing are actually pretty low — ranging from zero in some sectors (e.g. medical instruments and orthopaedic appliances) to 4.63 percent for some articles of plastics.

However, there are significant trade barriers in some sectors where the vast majority of bilateral trade is intra-industry trade, reaching two-digit levels for some products (e.g. 'motor vehicles for transport of goods' or 'pigments dispersed in non-aqueous media'). Reducing these trade barriers could create additional benefits for consumers and for producers on both sides of the Atlantic without affecting trade patterns with other trading partners.

TABLE 6: INTRA-INDUSTRY TRADE EU-US - TOP 20 PRODUCT CATEGORIES (GL INDEX > 0.85)

PRODUCT CATEGORY	US-EXPORTS TO EU IN MILLION EUR (2008)	EU-EXPORTS TO US IN MILLION EUR (2008)	GRUBEL- LLOYD INDEX EUR
turbojets, turbopropellers etc	10,791	8,224	0.87
medical, surgical, dental etc. instruments	5,948	4,413	0.85
vaccines,antisera, human blood, etc	3,897	4,444	0.93
orthopaedic appliances, artificial body parts, etc	2,853	2,469	0.93
hormones, derivatives etc	1,235	917	0.85
printing machinery	1,086	1,215	0.94
engines and motors (nesoi) and parts thereof	847	802	0.97
machines (nesoi)	797	1,058	0.86
tractors (other than works trucks)	776	835	0.96
lifting, handling, loading & unloading machines (nesoi)	627	600	0.98
beauty, make-up & skin-care preparations, etc.	616	742	0.91
insulated wire, cable etc., optical sheath fibre cables	599	553	0.96
articles of plastics (nesoi)	588	654	0.95
instruments to measure or check flow, level etc	560	595	0.97
automatic regulating or control instruments	490	577	0.92
transmission apparatus for cameras, telephones etc.	445	368	0.91
optical fibers, optical fiber bundles etc.	435	383	0.94
parts for television, radio and radar apparatus	419	417	1.00
cyclic hydrocarbons	411	359	0.93
surveying, hydrographic etc. instruments	409	445	0.96
SUM	33.829	30.071	

3. DESIGNING A NEW APPROACH TO TRANSATLANTIC TRADE

The previous section has shown that a full elimination of tariffs between the EU and the United States would have a positive effect on trade creation. The effect itself is not very big, which is what one would expect from such an agreement between countries that generally have low tariffs. If other barriers are taken into account, the effect is likely to be significantly bigger as the tariff equivalents of non-tariff barriers are bigger than current tariffs. Furthermore, subsidies in the agricultural sector often distort trade more than tariffs do; any improvements on subsidies will thus increase trade. But the size of the two economies also implies that small relative increases translate into big absolutes.

Given the fact that EU-US trade is characterized by intra-industry trade to a large extent, the dynamic gains of an FTA between the EU and the US would be even more important than the static trade creating effect. Especially intra-firm and intra-industry trade would significantly benefit from an elimination of tariffs and other border obstacles. Furthermore, when a large part of trade is intra-industry trade, trade liberalization basically leads to the expansion of both exports and imports in the same sector and in both regions. That is why lay-offs and outsourcing of labour in these sectors will not occur to a large extent and employment in these sectors may even increase in both partner regions. Hence, the political economy of transatlantic trade liberalisation looks favourable.

Trade diversion

HOWEVER, BILATERAL TRADE agreements also trigger trade diversion and, by nature, imply discrimination against non-members. Such discrimination would not only be to the detriment of these third party countries but might also impair the interests of consumers and producers within the free trade area because of abolition of cheap sourcing for production and consumption.

Economic theory does not provide a clear normative view of whether free trade agreements are good or bad. Empirical evidence shows that the effects of trade creation and trade diversion are rather mixed. Expression are rather mixed.

There is potential for trade diverting effects of a transatlantic deal of the type discussed above. The US and EU's diminishing share of world exports in manufactures in recent years — not least due to the rise of the new trading giants in Asia — suggests a significant potential for trade-diverting effects arising from bilateral free trade agreements between the two regions. In other words, given that the dynamic elements in world trade today are rooted more in extra-transatlantic than in transatlantic trade, the welfare-decreasing effects of extra-area trade discrimination (due to a new initiative relative to the welfare-increasing effects of intra-area trade enhancement) weigh more today than they did 25 years ago. ¹¹

However, fears that a zero-tariff agreement could create welfare losses within and outside this area due to trade diversion are exaggerated. It can safely be expected that the trade creating and – not least – efficiency enhancing effect of a bilateral free trade agreement would outweigh the comparably small diverting effect that might occur. Given the already low applied tariffs in most manufactured goods, a free trade agreement between the EU and the US cannot divert the tide of dynamics of extra-transatlantic trade in favour of transatlantic flows. Furthermore, most of the remaining tariff peaks applied in the EU and the US are found in labour-intensive consumer goods and some 'sensitive' categories that are mainly imported from the developing world and emerging countries. Given the rather low potential for transatlantic trade in these product categories (very little substitutability at all), there is little trade diversion to be expected from the maintenance of peak tariffs against non-transatlantic supply and an elimination of transatlantic trade barriers. Moreover, many developing countries already enjoy preferential access, with lower than the MFN tariff rates, to the US and EU markets.

There is always a balance between trade creation and trade distortion in trade agreements based on discrimination against third parties. The volume of creation and diversion tends to be a function of the comprehensiveness of the trade agreement: trade-light agreements neither create nor divert much trade while agreements that considerably liberalise trade also have strong effects on creation and distortion. As has been argued here, the trade creation effect of a zero-tariff transatlantic agreement would be driven by the 'logic of big numbers', while little trade would be diverted as overall tariffs are low.

Furthermore, even in sectors where a substantial trade diversion might occur, this effect will not necessarily lead to welfare loss. First, because of the increased exports to the partner and the accompanied higher output of the domestic industries both regions might lower their production cost due to economies of scale and will get more competitive and maybe even become the lowest cost producing countries in the world. ¹²This is not likely to be the overall pattern, but for some sub-sectors such an effect could off-set some of the welfare-decreasing effects of trade diversion. Second, as imports are also used as inputs, the elimination of tariffs will reduce production cost in the partner countries, making the final products cheaper and more competitive, both on domestic and foreign markets. Third, the elimination of trade barriers will set import-competing domestic industries under pressure which will most definitely lead to increased efficiency. If domestic in-

dustries cannot resist the pressure coming from the competing industries in the partner country, they will lose market shares. This will most probably reduce their economic and political influence and therefore their ability to campaign for protectionist measures against third countries. As a consequence, there would be less resistance against further trade liberalization in the political sphere of the partner countries which could eventually lead to a dawn of multilateral trade agreements. Fourth, liberalization measures adopted in regional economic blocs might be successfully transmitted to the multilateral trade negotiations. Fifth, liberalization initiatives at regional level may have a demonstration effect to economic agents, facilitating overall liberalisation by creating an atmosphere conducive to economic reforms. Sixth, a transatlantic free trade area would not only eliminate tariffs and ease other border-related trade-impediments between its members, but — most probably — also reduce domestic barriers that hinder market access for third parties. Finally, additional growth due to the liberalization — though not expected to be too high in the short term — within the transatlantic market would benefit third country's exports.

An alternative approach is to target a transatlantic agreement which goes beyond the goods sector and addresses deep integration barriers in services and non-tariff measures. ¹⁵ Clearly, such an agreement would have much stronger effects on trade creation as it would venture into areas with significant barriers to trade. As existing barriers are high, the welfare effect on an agreement would also be significantly higher compared to the zero-tariff agreement. Nor is it necessarily the case that the trade diversion effects would be strong. It appears more likely that such liberalisation would release trade that is depressed today. High barriers to trade, as in many service sectors today, prevent all forms of trade and not just trade with one or some partners. Furthermore, some liberalisation would have to be done on a MFN basis as it is somewhat difficult and costly to build in a third-party discriminatory element in non-tariff measures. Any judgement on the economic desirability of such a deep integration approach requires a deeper understanding of the trade effects, which has yet to come forward.

The oft-repeated critique against such an approach is not based on economics so much as on political economy: it is politically difficult to achieve such an agreement as it requires considerable political reform, some of which might be of a constitutional nature. The critique is not necessarily of sufficient calibre to undermine a 'deep-integration approach', but they need to be addressed.

First, there tends to be a particular taxonomy of trade liberalisation, especially when big economies are involved, which suggests a sequenced approach (rather than big bang) and is biased in favour of tariff elimination over NTB reductions and services liberalisation. The European Union is itself an example of such a taxonomy. Post-war regional trade liberalisation in Europe started with a goods approach and an elimination of internal tariffs. Thirty years later new steps were taken as Europe prepared for, and subsequently launched, the single market for goods. In the 2000s, initial reforms have been done to create a single market for services (but these reforms do not put openness in services markets in Europe on a par with openness in the goods markets – far from it).

This taxonomy is partly a product of economic history: Europe, as well as other liberalisers, has had more outward-oriented industrial firms in the past than similar service suppliers. That is why there has been a stronger push effect in industrial sectors than in services. Today, things are different as far as developed countries are concerned (developing/emerging countries tend to integrate with the world economy through goods), but there is still political-economy structures favouring tariff reductions.

There are also other reasons behind this bias. It is considerably easier to reduce tariffs than to reform NTBs or regulations protecting the service sectors. Not only are tariffs possible to quantify in a clear and undisputable way, it is also easier to assess their effects on trade and the overall economy, compared with the effects of an NTB reduction or elimination. Also, NTBs and regula-

tions are sometimes a reflection of constitutional structures and of culture, which makes them harder to change.

None of this is an argument in favour of the status quo. Nor is it impossible to reform NTBs and regulations protecting services. Lessons from the past, however, suggest that it could be useful to look at a transatlantic trade initiative as a series of barrier reductions — not as a 'single-bullet' approach that does away with all relevant barriers to trade in goods and services in one sweep. A very ambitious free trade initiative runs the risk of preventing anything from being liberalised as the difficulties are many. Negotiations step in to the 'Doha trap': no sub-deal can be done until the entire agreement is finished, but the entire agreement cannot be achieved. An alternative approach is to build a process and institutional structure that underpins a series of efforts to liberalise and give them impetus.

Second, the global leadership exercised by the EU and the US in a bilateral initiative varies with the content of the agreement. There is a difference between goods and services. Trade in manufactures have already been liberalised globally to a significant degree. Global liberalisation of services remains scant and fragmented. The difference in trade patterns also affects the likely effect of a transatlantic initiative on multilateral trade policy.

A zero-tariff agreement is likely to have a clear push effect on liberalisation in other countries. This can manifest itself in different ways: other countries joining a transatlantic initiative, a concerted plurilateral initiative within the framework of the WTO, or a new zero-tariff multilateral agreement in NAMA (agriculture is subject to other restrictions). Hence, the institutional tracks already exist, which also provide for a comparatively smooth and quick process to "multilateralise" or expand the geographical scope of a transatlantic initiative. Lack of motivation is unlikely to prevent many countries from joining such an initiative. Not only would the signal effect of standing outside be a problem; the process of 'competitive emulation' would also start to operate. Two recent examples are of particular interest: the Information Technology Agreement (ITA) and the effect of China's autonomous liberalisation. There is a big difference between the two examples — the ITA was a negotiated agreement while China did not hinge its liberalisation upon reciprocal moves from trading partners. But the dynamics have similarities: other countries were provoked to liberalise as a consequence of the initiatives of others, despite having strong reservations or hesitations about liberalisation.

The ITA, a zero-tariff agreement covering ICT products, is largely a function of transatlantic leadership. ¹⁶ The agreement was initiated and principally negotiated by the EU and the US together with Japan. Other countries were informed about developments and were invited to join when the structure of the agreement was in place. Many countries also did join; the ITA today has 44 members (counting the EU as one). There are notable absentees — e.g. Brazil — but the agreement covers almost all trade in the ICT goods covered by the ITA. Furthermore, many countries decided to sign up and eliminate their tariffs despite having protective instincts and defensive interests in some of the ITA sectors. They did it on fear to be left outside and be disadvantageously positioned against other countries. In particular, the fear of being excluded from the globalisation of supply chains prompted several countries to join the ITA. If other countries pressed ahead with their ambitions to liberalise, an absentee would lose trading opportunities and inward investments to other countries.

China has been the great vehicle of global trade liberalisation in the past 15 years. Its programme for opening up has been comprehensive and ambitious, which is reflected in the fact that China's WTO commitments go far beyond what other countries of similar development status has committed themselves to in the WTO. China's trade reforms have also spurred liberalisation in other

countries, notably South and Southeast Asia. Countries that have been unwilling to liberalise has felt greater pressure because they don't want to be disadvantageously positioned when other countries liberalise. Hence, China's liberalisation has been emulated in other countries.

There are good reasons to expect a transatlantic initiative would spur other countries to liberalise. It is primarily not the fear of diversion of existing trade that would trigger liberalisation; it is only in some sub-sectors that tariffs are high enough to provoke trade diversion. It is the signalling effect and the process of competitive emulation that will steer other countries toward liberalisation.

Services, however, is somewhat different. Not only could discrimination have a bigger economic effect, there are fewer institutional opportunities to 'multilateralise' a bilateral agreement or expand the geographical coverage. Motivations also differ. Reduction of NTBs and liberalisation of services trade often occurs through regulatory harmonization. Some countries would consider it too expensive to set up the regulatory systems needed to participate in a transatlantic initiative. Other key countries, like China, are not particularly interested at all be ambitious about service liberalisation. Many countries would have to start with significant domestic liberalisation before they can open up, which complicates matter. This is not to say such a move is impossible, but it is technically more difficult. In the event there would be a strong and considerably liberalising transatlantic agreement involving services, it would take long time before other countries could join on the same conditions. Sequenced approaches would have to be designed.

But a new initiative between the EU and the US would not pass unnoticed by other trading partners. Other countries would like to join such an initiative – for reasons of profit or fear. How could a transatlantic initiative best be organised to spur widespread liberalisation?

A zero-tariff initiative could have a wide coverage of all goods, including agricultural goods, but it is very unlikely that neither Europe nor the United States would agree to take away all agricultural tariffs outside a bilateral setting. Political-economy conditions are fairly favourable to a bilateral deal on agricultural tariffs: both parties would gain and lose, largely in an equal fashion. Both parties also use other tools to protect agriculture: subsidies and standards (e.g. precautionary principle in the EU) are widely used but can only be addressed by an agreement that goes beyond tariffs. The overall effect of full liberalisation is not very big, mainly because initial conditions do not favour significant agricultural trade between the EU and the US. With other countries involved, that is likely to change.

There are thus two options: agriculture is entirely carved out from a bilateral initiative or the sensitive tariff lines will be exempted or subject to implementation flexibilities. In bilateral trade volume terms, there is not a very big difference between the two options. Of the estimated tradecreation effects of transatlantic removal of tariffs, less than 5 percent will be attributed for by the agricultural sector. If agriculture is entirely carved out, however, the initiative will be subject to vociferous critique on the basis of GATT principles on discriminatory agreements. If agriculture is covered by a transatlantic initiative, the two parties would have to exempt the tariff lines they refuse to liberalise in a bigger context of countries. If they are conscious about the participation of other countries, they would also have to exempt tariff lines that are no-go areas for them.

The choice matters. If agricultural goods are also covered, the EU and the US have the option of extending the coverage outside the realm of the WTO. If they go for a NAMA-type (non-agricultural goods) agreement, they will at some point have to bring it to the WTO, possibly as a plurilateral agreement covering 80 percent of all trade. Then the principle of MFN would also have to be front and centre. This option is not impossible, but a NAMA-type deal limits the op-

portunities. It also gives the initiative less appeal for countries with main interests in agriculture liberalisation.

4. A NEW INITIATIVE FOR TRANSATLANTIC AND MULTILATERAL TRADE

Principally there are many good arguments for the EU and the US to take a new initiative of transatlantic trade negotiations with the view of spurring global liberalisation. The world economy has changed considerably in the past decades, but the two transatlantic partners remain the leaders of world trade and the world trading system. It is primarily they who could exercise leadership in a fashion that brings global trade policy forward. In contrast to a similar initiative several decades ago, it would not lead to a transatlantic fortress or divert a lot of trade. A transatlantic deal, however, would give a significant push to other countries to liberalise trade in manufactures. The level of benefits depends on the ambitions. Similarly, the way to ensure compatibility with other countries' trading interests depends on how a bilateral agreement is initially designed.

This is not an optimal way to liberalise trade. But we do not live in an ideal world. It should be clear to most people who follow trade policy and share the belief in the benefits of trade liberalisation that not much actual trade liberalisation is likely to emerge from Geneva in the near future if countries stick to the business-as-usual approach. In an optimistic scenario, the Doha Round would finish in 2010-11. An implementation period of five years, which also is optimistic, would take us beyond 2015. If another five years passes before a new round of trade negotiations starts, and if that round has a trajectory of the duration of previous rounds, the next phase of global trade liberalisation could start in 2030. Clearly, this is not desirable. It would also be detrimental to the WTO as it would slide further into irrelevance as a vehicle for trade liberalisation. There are of course other options, but none of them is based on a 'business-as-usual' approach. They all also involve a significant diversion away from the 'clerical' view of trade multilateralism.

The main issue for the future of trade liberalisation is one of leadership. There have been plenty of opinions about how to change the institutional structure in the WTO to make it more effective. Proposals have been put forward, but many of them stand little chance of surviving as they neglect two fundamental aspects of multilateral trade policy: first, the WTO is an intergovernmental body and countries cannot be forced to sign up to an agreement against their will; second, only big economies with big stakes in world trade can exercise leadership. Many middle powers have the capacity to block, but less than a handful have the capacity to lead.

The EU and the US could exercise positive leadership on trade and trade policy by a transatlantic trade initiative. The exact design of such an initiative has to be subject to further examination. There are two choices: a shallow integration approach or a deep integration approach. The main effect of shallow integration would probably not be to release a lot of untapped bilateral trade potential. Such potential exists, but is primarily not restricted by tariffs. The trade-creation effect of a transatlantic zero-tariff agreement is not insignificant, but is far smaller than the effect it will have on other countries. Hence, the main effect would rather be to give a significant push to global trade policy and to establish processes and institutions that could facilitate more trade liberalisation in the future.

A deep integration approach would release considerable amounts of trade and would take trade policy much deeper into 'new' types of barriers: NTBs and regulations protecting services. But it would also require unprecedented trade policy leadership, principally by pursuing domestic economic reforms that previously have not been subject to much change in trade negotiations.

REFERENCES

Baier, S.L. and Bergstrand, J.H. (2004). Economic Determinants of Free-Trade Agreements. *Journal of International Economics* 64(1): 29-63.

Baier, S.L. and Bergstrand, J.H. (2007). Do Free Trade Agreements Actually Increase Members' International Trade? *Journal of International Economics* 71(1): 72-95.

Bergsten, F.C. (1997). Open Regionalism. IIE Working Paper 97-03.

Bhagwati, J. (1996). Preferential Trade Agreements: The Wrong Road. Law and Policy in International Business 27(4): 865-871.

Bhagwati, J. and Panagariya, A. (1996). Preferential Trading Areas and Multilateralism - Strangers, Friends, or Foes? In Bhagwati, J. and Panagariya, A. (Eds.). *The Economics of Preferential Trade Agreements*, Washington DC.

Bolskesjo, T. F. (2005). Projecting Pulpwood Prices under Different Assumptions on Future Capacities in the Pulp and Paper Industry. *Silva Fennica* 39(1): 103-116.

Clausing, K.A. (2001). Trade Creation and Trade Diversion in the Canada - United States Free Trade Agreement. *The Canadian Journal of Economics* 34(3): 677-696.

Corden, W.M. (1972). Economies of Scale and Customs Union Theory. *Journal of Political Economy* 80(3): 465-75.

Dreyer, I. & Hindley, B. (2008). *Trade in Information Technology Goods: Adapting the ITA to 21st Century Technological Change*. Working Paper 06/2008. European Centre for International Political Economy.

Erkel-Rousse, H. and Mirza, D. (2002). Import price elasticities: reconsidering the evidence. *Canadian Journal of Economics* 35(2): 282-306.

Erixon, F. (2008). From Twin Towers to Fawlty Towers: The Story of the Doha Round. Mimeo. European Centre for International Political Economy.

Erixon, F., Freytag, A. & Pehnelt, G. (2007). *The Rome Treaty at* 50. Policy Brief 2007:4. European Centre for International Political Economy.

Evenett, S. and Meier, M. (2007). An Interim Assessment of US Trade Policy of 'Competitive Liberalization'. Discussion Paper no. 2007:18. University of St. Gallen.

Gallaway, M. and McDaniel, C. (2003). Short-run and long-run industry-level estimates of U.S. Armington elasticities. *North American Journal of Economics and Finance* 14 (2003): 49-68.

Haaland, J. and Norman, V. (1992). Global production effects of European integration. In Winters, L.A. (Ed.) *Trade Flows and Trade Policy after 1992*, Cambridge.

Krueger, A. (1999). Trade creation and trade diversion under NAFTA. NBER Working Paper No. 7429.

Langhammer, R.J. (2008). Why a Marketplace Must Not Discriminate: The Case against a US-EU free Trade Agreement. Kiel Working Papers 1407, Kiel Institute for the World Economy.

Park, S.H. (2002). East Asian Economic Integration - finding a balance between regionalism and multilateralism. EIAS Briefing Paper, February 2002-01, European Institute for Asian Studies.

Richardson, M. (1993). Endogenous Protection and Trade Diversion. *Journal of International Economics* 34(3-4): 309-324.

Rose, A.K. (2004). Do We Really Know that the WTO Increases Trade? *American Economic Review* 94(1): 98-114.

De la Torre, A. and M.R. Kelly. (1992). Regional trading arrangements. International Monetary Fund, Washington DC.

USDA. (2009). The Economic Research Service. U.S. Department of Agriculture. [Online]. Available at: http://www.ers.usda.gov/Data/Elasticities/ [Accessed August 20 2009].

Viner, J. (1950). The customs union issue. New York: Carnegie Endowment for International Peace.

FOOTNOTES

- We gratefully acknowledge financial support from the Confederation of Swedish Enterprise. We would
 also like to thank Roderick Abbott, Olof Erixon and Razeen Sally for excellent comments on earlier
 versions of the paper. The usual disclaimer applies: the views in this paper only reflect the opinion of the
 authors.
- 2. The Singapore issues are investment, competition, government procurement, and trade facilitation.
- 3. Erixon, Freytag & Pehnelt (2007); Erixon (2008).
- 4. Erixon, Freytag & Pehnelt (2007) document tariff harmonization in Europe around the time of the Kennedy Round and the establishment of the common commercial policy.
- 5. Evenett & Meier (2007) walk through the arguments against the theory of competitive liberalisation.
- OECD (2005) gives an estimate on the welfare benefit of an elimination of all tariffs, ease of restrictions of FDI and removal of significant NTBs.
- 7. For most product categories, tariffs are given in percent of the value of the respective good. For some product categories, we had to convert specific tariffs to an ad valorem tariff. For some products, the calculation of ad valorem tariffs might be a bit blurred and inconclusive since the specific tariff refers to units, heads or the like and the quantity data for trade flows are usually only available on a kg or 100 kg basis. However, this slight haziness in the calculation of effective trade barriers for some products does not jeopardize our results at all.
- 8. The Grubel-Lloyd Index measures the fraction of total trade in an industry that is accounted for by intraindustry trade.
- 9. Viner (1950).
- 10. See Clausing (2001); Krueger (1999); de la Torre & Kelly (1992); Haaland & Norman (1992).
- 11. Langhammer (2008).
- 12. Corden (1972).
- 13. Richardson (1993).
- 14. Park (2002).
- 15. Messerlin and van der Marel (2009) examine transatlantic service liberalisation.
- 16. Dreyer & Hindley (2008).