View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by University of Strathclyde Institutional Repository

Strathprints Institutional Repository

Vandenbussche, H. and Wooton, I. and Venables, A. (2002) *Enhancing economic cooperation between the EU and the Americas: an economic assessment.* [Report]

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (http://strathprints.strath.ac.uk/) and the content of this paper for research or study, educational, or not-for-profit purposes without prior permission or charge.

Any correspondence concerning this service should be sent to Strathprints administrator: mailto:strathprints@strath.ac.uk

http://strathprints.strath.ac.uk/

Vandenbussche, H. and Wooton, I. and Venables, A. (2002) Enhancing economic cooperation between the EU and the Americas: an economic assessment. Project Report. Centre for Economic Policy Research.

http://strathprints.strath.ac.uk/7195/

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (http://eprints.cdlr.strath.ac.uk) and the content of this paper for research or study, educational, or not-for-profit purposes without prior permission or charge. You may freely distribute the url (http://eprints.cdlr.strath.ac.uk) of the Strathprints website.

Any correspondence concerning this service should be sent to The Strathprints Administrator: eprints@cis.strath.ac.uk

Enhancing Economic Cooperation between the EU and the Americas

An Economic Assessment

Hylke Vandenbussche, *University of Leuven and CEPR*

Ian Wooton, *University of Glasgow and CEPR*

Anthony J. Venables, *London School of Economics and CEPR*

Contents

Executive Summary

This report is a scoping study to investigate the nature of trade and investment relations between the EU and the Americas. Its purpose is to identify potential gains from broader cooperation on a range of economic issues between the regions. The focus thereby lies on potential benefits of developing a positive liberalising agenda or series of initiatives that can be taken forward under existing transatlantic institutional mechanisms.

Recent transatlantic trade disputes are an indication that the EU and both North and South America have reached a crossroads in their trade and investment relationship. While countries on both sides of the Atlantic Ocean are major participants in the global trading system, each region has taken an increasing interest in pursuing regional trade agreements. The risk looms that priority will be given to further integration and liberalisation along regional lines to the detriment of the multilateral trade negotiations. We argue that stronger transatlantic economic cooperation would set a good example for the rest of the world and show the way for a successful WTO trade round.

The mutual benefits of further economic cooperation of the transatlantic partners are potentially very large. The EU and US are each other's largest trading and investment partner and have broadly similar economic structures. Both are service economies with the service sector accounting for roughly 70% of all output. Secondary manufacturing sectors represent about one quarter of output but account for most of the transatlantic trade. In contrast, the primary sectors only account for a minor share of both economies.

This report documents the current economic integration between the EU and the Americas in terms of both trade in goods and services, and in investment. It also discusses the main impediments to trade and investment. While traditional tariff barriers are still significant, the most important impediments to trade nowadays are non-tariff barriers and other forms of contingent protection (including, for example, antidumping measures and safeguard clauses). These newer forms of trade impediments are believed to account for 30% of the total cost of protection.

Dismantling the remaining tariff and non-tariff barriers between the two trade blocs is likely to result in substantial welfare gains. Based on results in the literature and on our own estimates, this report provides an overview of the estimated gains from transatlantic liberalisation. For the EU, the static lower-bound welfare gains are believed to lie between 0.7% and 0.9% of GDP, while the more optimistic upper-bound estimates, including dynamic gains (such as the effects of liberalisation on labour productivity, and gains from service liberalisation), range between 1% and 2% of GDP. These gains reflect the annual income gain to the EU from a transatlantic liberalisation, accruing in perpetuity.

The lower-bound estimates correspond, in value terms, with an increase of between €39 billion and €51 billion, with prices to EU consumers going down by 2.5% and an increase in EU employment of an additional million of jobs. The magnitude of the upper-bound estimates correspond roughly to the gains of the 'Single Market' programme predicted in the original Cecchini report, that ranged between 3% and 4% of GDP.

For the US, the lower-bound estimate of static welfare gains from liberalisation with the EU is around 0.2% of US GDP (1990), the equivalent of some $15 billion. This corresponds to an additional 0.3 million US jobs. However, this is likely to be an underestimate of the true gains, since this lower bound figure only reflects the dismantling of tariffs on goods trade. Allowing for increasing returns to scale, including liberalisation in services and allowing for dynamic welfare gains, pushes the estimated welfare gains for the US from liberalisation with the EU up to between 0.5% and 1% of US GDP.

For Canada, Mexico and Latin-America the welfare gains of tariff liberalisation with the EU are less well documented in the literature. When we trade-weight the estimates in the literature available for the effects of MFN tariff liberalisation for these countries, we get a rough indicator of about 0.001% of GDP welfare gain for Canada, 0.02% for Mexico, and 0.3% of GDP for Latin America.

1. Introduction to the Study

In this study we look at the current trade and the prospects for enhanced trade cooperation between two regions with long and continuing social, political, and economic ties: the European Union (EU) and the Americas, the countries of the North American and South American continents.

The countries on both sides of the Atlantic have been active participants in the multilateral trade rounds organised by the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organisation (WTO). The resulting agreements have seen a substantial reduction in trade barriers, particularly tariffs, over the latter half of the twentieth century. Yet there are still important impediments to international commerce, limiting trade and international investment. Consequently, the forthcoming round of the WTO is important to the EU and the Americas.

In parallel to their involvement in the multilateral negotiations, most countries on both sides of the Atlantic have pursued closer economic ties along geographic lines, in the form of regional trade agreements (RTAs).

- The EU has had substantial success in liberalising trade across the continent of Europe through the common market, the European Economic Area, and association agreements with east European nations (as a preliminary to their accession to full membership of the EU).
- North America has liberalised continental trade through NAFTA (the North American Free Trade Agreement) and has made steps towards hemispheric free trade (e.g., the free-trade agreement between Canada and Chile).
- Latin America has made important moves towards continental free trade through Mercosur, the economic integration of the major economic powers in the southern cone.

It has been argued (by, for example, Baldwin, 1993) that much of the recent RTA activity has arisen because of the perceived glacial pace of the multilateral trade talks. The Uruguay Round lasted much longer than planned and the launch of its successor was delayed by more than a year. Concerns have also been voiced as to the consequences of the potential failure to reach a global agreement, with fears being expressed of trade wars and a rise in protectionism. This may have led many countries to pursuing bilateral negotiations in order to guarantee continued and increasing access to their principal trading partners.

In some respects, the multilateral route may simply be too cumbersome for many issues. If a small group of other countries is of special economic importance to a nation, or there are trade and investment issues of particular importance to a subset of countries, then it may be more efficient to deal with these issues quickly and directly

on a bilateral basis. This justification motivates much of this study.

The EU and the USA are each other's major partners, both in trade and two-way investment, and constitute the most important economic element of the EU-Americas relationship. They are each other's largest single trading partners with a two-way flow of more than €490 billion in 1999. The Americas as a whole account for over 31.2% of European exports, of which 21.3% goes to the US. In comparison, the US ships about 27% of its exports to the EU. Equally, in terms of investment flows, the EU and US are each other's most important source and destination for foreign direct investment (FDI) with a combined stock in 1998 of €742 billion. Despite the long-term participation of both parties in the multilateral trading system, there are still significant tariff and non-tariff barriers to transatlantic trade. The sheer size of the economic relationship between the EU and the US means that removing the remaining impediments to bilateral trade and investment can offer significant gains to the countries.

While the magnitude of the trade relationship between the EU and Latin America is less large, in terms of export shares, it is still substantial. The EU is a very important export market for Latin America. Latin America directs about 26% of total exports to Europe, while it receives only a very small fraction (0.5%) of total EU exports. In addition, in 1999, about 10% of the EU's total stock of FDI was placed in Latin America and overall growth in FDI in Latin America is particularly high (European Union, Foreign Direct Investment Yearbook, 2000). The growing importance of this transatlantic relationship can be encouraged through enhanced economic cooperation.

In contrast, Mexico and Canada have weaker trade links with the EU. Europe has diminished in importance as a destination market, particularly since the creation of NAFTA. Most of Canada's and Mexico's exports go to the other Americas, in particular the US, and relatively little to Europe. Of course, the proximity of the huge US market to producers in both Canada and Mexico makes high bilateral trade flows very likely, yet NAFTA appears to have resulted in important trade-diversionary effects. Mexico and Canada are also relatively less important for the EU as destination markets. This, once again, probably reflects the fact that both are contiguous with the US, a major producer of goods and services closely similar to competing EU exports, and European products do not have the preferred access to these markets that is enjoyed by US exports. Steps towards liberalising trade between the EU and both Mexico and Canada would help redress this imbalance.

In summary, given the obvious mutual dependence between the EU and the Americas, it is clear that it is in the interests of all to reinforce the existing transatlantic institutional mechanisms. The remainder of this study examines the benefits that arise from international trade and foreign investment, the nature of the transatlantic economic relationship, the barriers that exist to commerce, and the potential gains that could arise from pursuing an agenda of further liberalisation and closer economic cooperation across the Atlantic.

2. Economic Gains from Closer Transatlantic Cooperation

Why is liberalisation of goods, services, and factor markets desirable and what are the potential gains of extending these market reforms to transatlantic interactions? Free trade has long been recognised as an appropriate policy goal because of potential gains from trade. We provide, here, a brief review of the established theories on the gains from trade and factor mobility.

2.1 Gains from trade

These arise from a number of sources, encompassing the traditional arguments of competitive trade theory and the 'new' trade theory that acknowledges scale economies and imperfectly competitive behaviour.

2.1.1 Comparative advantage

The most familiar explanation for the existence of trade between any two nations is the theory of comparative advantage. Such trade arises due to underlying differences between the countries, arising inter alia from differences in technology, factor endowment disparities, and differences in national tastes. International trade permits resources to be allocated more efficiently between the countries, such that each country exports the goods in which it has a comparative advantage. In general, the greater the differences in the countries' economic structures, the greater the potential benefits of trade based on comparative advantage.

Exploiting comparative advantage is, in general, expected to result in mutual overall gains to both countries.

2.1.2 Scale economies

The existence of increasing returns to scale in production may mean that an individual country's domestic market is too small for efficient production. Trade liberalisation can permit the rationalisation of production into a smaller number of plants, resulting in the benefits of large-scale production.

Manufactures of particular products, particularly consumer goods, are frequently differentiated from one another, embodying different characteristics. Access to a wider range of varieties through international trade yields additional benefits to consumers through increased choice.

2.1.3 Mitigating trade diversion

Regional trade agreements (RTAs) have led to an increase in intra-regional trade flows, sometimes at the expense of inter-regional flows. Canada, for example, since its

integration in NAFTA has seen its exports towards Europe fall in favour of intra-American flows.

The benefits and costs of regional trade agreements have been the subject of debate since the seminal work of Viner (1950). At the heart of the issue is the degree to which a preferential RTA takes the country towards free trade. Reducing tariffs on imports will always directly benefit consumers by reducing prices. However, as the tariff reduction is only implemented on imports with the country's partners in the RTA, relative prices of imports from different (partner and non-partner) countries become distorted. As a result, a country may switch its source of imports to a partner, despite the non-partner being the cheaper source. This is trade diversion and, if the price disparity between exporters is sufficiently large, can result in a country losing from membership of an RTA. In any event, the non-partner country is worse off through the loss of its export market.

These undesirable side effects of RTA formation can be offset by more broadly based trade liberalisation. This would be most effective in the form of a multilateral trade agreement, such as the successful completion of a round of the WTO. In the absence of that, major trading partners can seek to reduce barriers to trade between them as a complement to their regional RTAs.

2.1.4 Dislocation

Despite the aggregate benefits that trade may be expected to generate, there are potentially serious problems, both in the short and long run.

In the short run, there may be adjustment costs due to the reorganisation of production activity in a country or region. While those sectors of the economy in which a country has a comparative advantage are expected to grow, others will go into decline. This may result in regional unemployment, obsolescent skills, or redundant capital.

Further, international trade may have long-lasting effects on the distribution of income within a country. While the earnings of some factors of production will decline, others will rise. This can result in strong political lobbying on behalf of the detrimentally affected factors, seeking compensation or protection against import penetration.

2.1.5 Abuse of market power

A clear implication of the rationalisation arising from increasing returns to scale is the reduction in the number of firms in an industry. The more concentrated an industry, the greater the market power of its incumbents, and the greater the risks of the abuse of this power.

There is an offsetting element to this argument for an individual nation. While we expect fewer firms at a global level as a result of the trade liberalisation, there may, in fact, be more competition within a country, as domestic firms are faced with international competitors, disciplining their behaviour in the marketplace.

2.1.6 Dynamic gains

Beyond these static gains are the, somewhat less easily quantifiable, effects that a liberal trade environment may have on a nation's growth. These may arise for a number of reasons. For example, it is argued that technological spillovers and the international transmission of knowledge through international trade can accelerate a nation's growth (Grossman and Helpman, 1991). Exposure to rival firms in the marketplace may also force enterprises to imitate or innovate, inducing higher growth.

Lowering trade barriers reduces the distortion in domestic prices and encourages a country to specialise according to its comparative advantage, a static gain from trade. But it has also been shown (e.g., Easterly, 1989 and 1993) that such price distortions adversely affect accumulation and growth. Thus, trade liberalisation can encourage growth through the elimination of these distortions.

There is a large empirical literature on the effects of openness on growth. For example, Wacziarg (2001) examines the links between openness to trade and economic growth. He shows that openness does have a positive impact on economic growth, with the majority of the effect being through the increased accumulation of physical capital that is induced by greater openness. However, the robustness of these results has been widely questioned, largely on the basis of the difficulty of separating out the effects of openness from other aspects of economic reform.

2.1.7 Summary of the gains from trade

There is a strong presumption in favour of trade liberalisation. This argument was rigorous, and vigorously made, when trade research was couched in terms of perfectly competitive market structures. The arguments in favour of a more liberal trade regime are reinforced by the positive impact that openness appears to have on a country's growth rate.

More recent developments (the ‘new’ trade theory) have taken into account the presence of market failures arising from increasing returns to scale and imperfectly competitive market structures. Consequently, a role has been found for more active trade policy, giving nations the opportunity to improve the efficiency of markets and/or capture rents from firms or other countries. This has provided ammunition for protectionists to argue in favour of government intervention through trade restrictions. However, in most circumstances these market failures can be better addressed using domestic instruments, such as competition policy rather than trade restrictions. In most contexts the new trade theory suggests that the benefits of bilateral or multilateral trade liberalisation are larger than are suggested by comparative advantage alone.

Inevitably, changes in industrial structure, whether arising as a result of trade liberalisation or any other phenomenon, will have adverse effects on some parts of the economy. However, the appropriate tools for dealing with any such detrimental aspects of trade liberalisation are domestic, such as restructuring assistance or competition policies, not protectionism.

2.2 International factor mobility

As with our synopsis of the gains from goods trade, we can also consider the sources of benefits to liberalisation of factor markets.

International labour movements could have significant effects on production and efficiency (as they have done in past history, particularly for migrations between Europe and the Americas). Labour migration can be a substitute for international trade, in that it redresses an imbalance between countries' endowments of workers. Thus a labour-scarce economy may either import goods that are labour intensive, or it may permit immigration of the labour and manufacture the good itself. But labour migration can also be complementary to trade in goods. Thus, for example, movements of high-skilled technicians might accompany exports of sophisticated electronic equipment.

Immigration of workers raises many tricky issues that the EU is already facing with the forthcoming eastern enlargement. Even issues of migration of highly skilled workers (the 'brain drain') are contentious, given the intertwining of complex issues involving questions of citizenship, etc. However, a more open immigration policy on the part of the transatlantic countries could foster exchanges of ideas, more rapid assimilation of technology, and enhance trade in goods.

Our focus is, however, on the implications of capital-market liberalisation. Two categories of capital movement are of importance: portfolio capital and foreign direct investment.

2.2.1 Financial (portfolio) capital liberalisation

The benefits for investors of holding capital in more-than-one country are two fold. Firstly, it allows for risk pooling. To the degree that shocks are less correlated across countries than within countries, investors can spread risk through holdings, not only across sectors, but also across nations. Further, movements of financial capital across international frontiers will equalise the cost of capital, making investment in capital-scarce economies cheaper than it would otherwise be.

The perceived disadvantage is the exposure of countries to speculative movements of capital. In response to negative economic shocks, there may be a dramatic exodus of financial capital, resulting in extreme pressure on exchange rates.

2.2.2 Foreign direct investment

Foreign direct investment may be associated with transfers of capital, but more importantly is associated with international relocation of a package of technology, management skills, and brand reputation. These investments are at the heart of the increasing 'globalisation' of productive activity.

For many nations these investments result in increased domestic employment, both directly by employment of domestic labour by the foreign firm and through increased demand for inputs of domestically produced goods and services.

There may additionally be dynamic gains, whereby indigenous firms may emulate the

managerial and production practices of the foreign firm, resulting in spillovers of knowledge. These may be attenuated if the multinational were to use technology that is perceived to be inappropriate for the domestic economy, a particular issue for investment flows between industrialised countries and less-developed nations. Further, there may be few spillovers when the domestic operations of the multinational involve 'screwdriver' assembly, that is, basic low-skilled employment with no local research and development activity. While the benefits of FDI for host countries may depend on the type of FDI, empirical evidence suggests that inward FDI has important implications for economic development, especially when it creates positive spillovers for the host economy in terms of knowledge.

2.3 International barriers to economic activity

The advantages of liberalisation of trade and investment are widely understood and this is reflected, amongst other things, in the massive decline in average tariffs in the latter half of the twentieth century. Yet some areas of economic activity are still highly protected by a range of barriers. We consider the circumstances under which countries have chosen to exclude particular areas of economic activity from foreign competition.

2.3.1 Economic arguments

Contraction of an industry in a country may have serious implications for an economic region, due to the geographic concentration of the industry's activities. Protection might then be introduced as a temporary safeguard for these jobs.

A more sophisticated argument states that protection may be legitimate if the particular industry is the source of externalities for other economic activities. Thus, protection may be warranted, if the sector generates spillovers in research and development to other sectors of the economy that would otherwise be captured by foreign firms.

The strongest proponents of protection during the latter half of the twentieth century were development economists. They argued that secular deterioration in the relative prices of commodities would be harmful to many developing nations and advocated that such nations should industrialise behind a protective wall of tariffs.

While these arguments generally found disfavour in the final years of the twentieth century, there has been something of a resurgence in their popularity due, in part, to the Asian crisis in which the apparent triumph of export-oriented trade strategies was less obvious than previously believed. Further, there is a perception in much of the developing world that the trade liberalisation of the past half century has been predominantly in the interests of the industrialised countries, who have retained barriers against imports of basic manufactures. This has prevented the evolution of comparative advantage and the industrialisation of developing countries who might, in consequence, be resistant to further trade liberalisation themselves.

2.3.2 Non-economic arguments

Protection is sometimes promoted for non-economic reasons. It may be argued that an industry (e.g., steel) is essential in that a continued supply of the product is necessary even when there is a dislocation of trade (as a result of, for example, war, catastrophe, sanctions, etc.)

In addition, particular industries may be important to a nation's culture. Consequently, their decline (resulting, for example, from foreign competition) may be detrimental to the overall well being of the country.

2.4 Trade in services

Most trade liberalisation has been achieved in manufactures, while trade in other goods (especially agriculture, textile, and clothing) still faces significant barriers for many of the reasons discussed above. The levels of protection on trade in services have, however, remained high for a number of reasons.

Services have only recently become part of the multilateral agenda. This may, in part, be due to the focus on goods trade that declined only once free trade in manufactures had been largely achieved.

But there may also be a technological explanation too. Many services were, until fairly recently, non-tradable and required direct interaction between the provider and the customer. Improvements in technology, especially computing and communications, have lowered the once-prohibitive technical barriers to trade. In their absence, services are increasingly tradable and liberalisation of domestic markets might yield gains additional to those for trade in goods.

3. Major Players in the Transatlantic Marketplace

3.1 European Union

European export growth has declined in recent years and their destination has changed. Exports have moved away from Asia, as a result of the financial crisis, and have been more oriented in recent years to the US, Latin America, and Central and Eastern Europe. While no FTA exists with the US, the EU has made large efforts in negotiating FTAs with most countries in Latin America. At the same time, the Association Agreements with Central and East European Countries (CEECs) have led to their deeper integration with the EU.

The EU has a largely open market for industrial products with an unweighted average MFN tariff of 4.2% in 1999. But this average masks wide disparities on individual products. Hoekman et al. (2001) report that, at the 6-digit industrial level, the EU has 317 tariff lines higher than 15%, the highest tariff being 252%. They point out that many of these tariffs are directed towards imports from developing countries. Tariff barriers are especially high on agricultural products. The simple average tariff on agricultural products in 2000 is estimated at 17.3% with 290 products having tariffs in excess of 15%. Agriculture also gets a large amount of direct EU support in terms of subsidies. Around 45% of the EU budget goes to support of agriculture. Textiles and clothing are also subject to above-average tariffs.

The EU has been involved in transatlantic disputes in areas accounting for around 1% to 2% of the total value of transatlantic trade and investment. This includes, for example, complaints from the US and other countries in the Americas regarding trade in both bananas and hormone-treated beef. This has led to retaliation authorised by the WTO against EU exports. The EU also is an aggressive user of antidumping measures especially on imports of iron and steel, electronics, and chemicals. Between 1999-2000 the number of antidumping cases initiated by the EU tripled, which is a worrisome increase (WTO, 2000). In terms of technical barriers, market access is especially difficult in the area of foodstuffs. The EU has recently had a stricter policy on food safety, no doubt the result of several food scares (‘mad cow disease’, swine fever, dioxin poisoning, etc.). Although a number of initiatives have been taken to liberalise services, several sectors such as transport, communication services, and financial services still show structural rigidities whose correction could enhance economic performance and growth. We discuss this in more detail in Section 5 of this report.

3.2 United States

The US has one of the world's most open trade and investment regimes, although a few important barriers to market access persist (WTO, 2001). The average MFN tariff on all goods in 2000 is below 5%. But sharp differences exist between product groups. For agri-food products the average MFN rate is 10.6%, in contrast to an average of 4.5% on all non-agricultural goods. Hoekman et al. (2001) document the fact that 307 product lines face tariffs in excess of 15%, peaking at 121%. In contrast to the EU, the grand majority of the products facing these very high tariffs are not in agricultural products but in apparel and clothing. Once again, the protection is targeted at products imported from developing countries. The level of protection tends to increase with the degree of processing.

In terms of investment, European FDI in to the US has surged substantially in the last decade. In 2002 about one in every twelve factory workers was employed by one of the 4000 European-owned business activities in the US.

That much transatlantic trade is subject to relatively low tariff barriers may create an impression that is not entirely correct. In fact, in many areas protection still prevails but under a different form. While tariff barriers have indeed been reduced substantially in consecutive trade rounds, non-tariff barriers have increased. The US continues to make active use of antidumping measures and countervailing measures, especially in the area of steel. Quantitative restrictions are imposed mainly on textiles and clothing., with over half of clothing imports being subject to import quotas and 32% of textile imports facing quantitative restrictions. The US government employs subsidies principally in support of the agricultural sector. Between 1997 and 2000, government outlays to agriculture nearly tripled.

In the service sector, maritime services ranks amongst the most highly protected sectors of the US. The US air transport industry is also afforded a high level of protection. In particular, foreign ownership and control of US carriers remains restricted and the provision of domestic air services is permitted to US carriers only. In terms of telecommunications, the US is an open market. The federal government of the US does not have authority over professional services, such as accounting and legal services. These industries are the responsibility of the individual states. Hence there are no national regulatory regimes like auditors' independence and the use of International Accounting Standards. As a result, there are divergent market access conditions across states.

In terms of other barriers to trade and investment, WTO (2001) highlights the restrictions on foreign ownership of US carriers. The fact that the US restricts foreign participation in government procurement is an additional area of concern. Under the ‘Buy American Act’, government agencies may in principle only purchase supplies and construction materials defined as 'domestic end products' (comprising a minimum of 50% of US components). Trade restrictions on the basis of 'national security' is a further source of concern.

The US has applied trade sanctions against the EU in disputes on bananas and hormone-treated beef. Countries are allowed to do that if they feel that other WTO

member countries are not complying with the multilateral rulings. However, this raises the question whether trade sanctions are the best way to resolve trade disputes. Areas of friction between the US and the EU have occurred more frequently recently, including enriched uranium and steel products

In sum, protection in agriculture and services continues to be high in the US. The US has submitted proposals for further reforms in these areas at the multilateral level. This report argues that, in addition to the multilateral front, efforts on the bilateral front with major trading partners such as the EU would complement, and potentially accelerate, rapid multilateral trade liberalisation.

3.3 Canada

Canada has long been a major advocate of trade liberalisation through multilateral negotiations. At the same time, Canada has pursued closer economic relations with the US. This first took the form of a free-trade agreement in cars and car parts (the AutoPact of 1965), but was extended to a general RTA during the 1980s. The average MFN tariff rate for Canada in 2000 is 7.1%. As with the EU and US, there are substantial peaks in individual sectors, many directed at products from developing countries, but with the highest tariff of 340% on butter protecting domestic producers from imports from the US.

Canadian producers often seek protection through antidumping actions. This is despite the fact that international trade has played a significant role in sustaining Canada's economic growth. In mid-2000, about 85 definitive antidumping duties were in force, which makes Canada one of the most intensive antidumping users, predominantly in steel products.

While Canada exported mainly resources in the past, most of their present-day exports are in high value-added goods and services. The automotive sector is the leading export sector in Canada. In terms of FDI, inward Canadian FDI reached a total of $240 billion or 25% of GDP. Outward FDI reached $257 billion in 1999, predominantly in finance and insurance.

3.4 Latin America

Most Latin American countries are developing countries where the share of the agricultural sector is still quite substantial. Exports are especially in primary products (e.g., oil for Mexico, copper for Chile). Many of these countries have had limited involvement in multilateral trade talks and, as a result, industrial tariffs have remained quite high. Support to the agricultural sector is relatively small in most countries. While most Latin American countries have implemented the antidumping code of the WTO in their national legislation, the actual use of non-tariff barriers is still relatively small but rising fast. Latin America has experienced a large inflow of FDI in recent years. Brazil, in particular, is attracting a lot of extra- and intra-regional FDI.

Strong efforts at trade liberalisation have been made by many Latin American countries in recent years. The creation of Mercosur in 1991 has boosted intra-regional trade sometimes at the expense of inter-regional trade. Some countries such as Mexico now give priority to negotiating liberalisation in a regional context. Often, trade liberalisation has taken place hand-in-hand with domestic market reform, particularly in areas of competition policy and privatisation of state companies.

4. Transatlantic Trade Levels

Our report now moves from a general discussion of trade barriers, the benefits of trade liberalisation, and a review of country characteristics to a more detailed investigation of the nature of trade between the EU and the Americas. We consider the levels of trade between various regions, in aggregate and at a sectoral level, the remaining barriers to that trade, and the potential gains that might arise from reform of transatlantic trading relations.

Of course, this is merely a scoping study. Detailed analyses of particular sectors will rely upon more in-depth studies of individual industries.

4.1 General description of bilateral transatlantic trade flows

Both the US and the European Union account for about 20% of global GDP, but where the US accounts for only 13% of global trade, the EU accounts for over 40% of global trade when intra-EU trade is included. Excluding intra-EU trade, in the same way as interstate commerce is excluded from US trade data, the shares are more closely comparable with the EU's share falling to about 16% of global trade. Throughout the remainder of this report we shall treat the EU as a single trading nation and ignore the hugely important intra-union trade as the establishment of a single European market is an issue beyond the coverage of this report.

Both the US and EU have predominantly service-oriented economies, with the services sector constituting the largest part of each economy. For example, the US had a GDP per capita of $33,900 in 1999 that can be broken down by sector: agriculture 2%, industry 18%, and services 80%. The primary sectors constitute only a small share of domestic GDP. Further, the secondary sectors produce most of the trade. In comparison, Latin America's share of global GDP is about 9% and its share of global trade is about 5% while its primary sector is relatively more important than for either the US or the EU (IMF World Outlook).

The most important economic element of the EU-Americas relationship is that between the EU and the US. The EU and the US are each other's largest single trading partners with a two-way flow in goods and services of more than €490 billion in 1999. The Americas as a whole account for over 31.2% of European exports, of which 21.3% goes to the US. In comparison, the US ships about 27% of its exports to the EU and is by far the largest exporter on the American continent. This makes the EU relatively more important as a destination for the US than vice versa. Table 1 indicates the importance of the Americas as an export destination for the EU. Table 2 gives the importance of the EU as an export destination for the Americas.

Comparing elements in Tables 1 and 2 reveals the bilateral trade balance of the EU with each of the countries in the Americas. This is illustrated in Figure 1. Trade between the EU and the US is quite balanced. Trade between the EU and Mercosur is relatively unbalanced. In absolute values, the EU is exporting more to Mercosur than it is importing from Mercosur. However, in terms of export shares we can also see from Tables 1 and 2 that the EU is an important destination market for Mercosur. While the EU's exports to Mercosur represent only 3.2% of total EU exports, Mercosur's exports to the EU represent over 26% of total Mercosur's exports (excluding intra-Mercosur trade).

While the magnitude of the trade relationship between the EU and Latin America is less large, in terms of export shares, it is quite substantial. The EU is a very important export market for Latin America. Latin America directs about 26% of total exports to Europe, while it receives only a very small fraction (0.5%) of total EU exports.

In contrast, Mexico and Canada have weaker trade links with the EU. Most markedly since the creation of the regional FTA, NAFTA, Europe has diminished in importance as a destination market. As shown in Figure 4, most of Canada's and Mexico's exports go to the other Americas, in particular the US, and far less so to Europe. For these countries NAFTA appears to have resulted in important trade-diversionary effects. Of course, the proximity of the huge US market to producers in both Canada and Mexico makes high bilateral trade flows very likely. Equally, Mexico and Canada are also relatively less important for Europe as destination markets. This, once again, probably reflects the fact that both are contiguous with the US, a major producer of goods and services closely similar to competing EU exports.

In terms of investment flows, again the relationship between the EU and the US is the most important amongst all the transatlantic relationships. The EU and US are each other's most important source and destination for foreign direct investment (FDI) with a combined stock in 1998 of €742 billion.

While data on both trade in goods and on the tariffs on trade in goods are now readily available, other important data are still hard to come by, such as very disaggregated investment flows, and tariff protection on trade in services. Information on other forms of protection like non-tariff barriers, standard recognition and other regulatory barriers are predominantly descriptive.

In what follows we first discuss overall exports between the EU and the Americas. We then turn to a more detailed sectoral discussion and finally we discuss existing tariff barriers at the sectoral level.

4.1.1 Exports from the EU to Americas

Figure 2(a) is a composite pie chart. The left-hand pie represents the split in export destinations between the Americas and the Rest of the World (ROW). The larger, right-hand pie shows the divisions within the Americas, where the reported shares are those of the total (left-hand) pie. The chart clearly shows that by far the largest trading partner for the EU across the Atlantic is the US. About 21.3% of EU exports in goods and services go to the US. In second position we find Mercosur, accounting for 3.2% of EU exports and in third position we find Canada that attracts about 2.9% of EU

Table 1: EU15 bilateral exports in goods and services to transatlantic partner countries in 1997

Partner in Americas	EU exports ($ millions)	EU export shares (%)
USA	226,696	21.3
Canada	31,030	2.9
Mexico	13,493	1.3
CBI	9,333	0.9
Andean	7,474	0.7
Mercosur	34,245	3.2
Chile	4,991	0.5
Other Latin America	4,889	0.5
Aggregate	332,155	31.2

Source: GTAP 4 compilation (see: McDougall et al., 1998).
Notes: Mercosur: Brazil, Paraguay, Uruguay, Argentina;
Andean: Columbia, Peru, Rest of the Andean Trade Pact;
CBI: Central-America, Caribbean;
ROW: Rest of the World.

Table 2: North and South American countries' total exports of Goods and Services to EU15 in 1997

Partner Exports	Exports to EU15 ($ millions)	Share of Total (%)
USA	240,534	27%
Canada	23,835	10%
Mexico	8,779	7.6%
Andean	7,999	26.9%
Mercosur	6,463	26.6%
Chile	5,305	26.4%

Source: GTAP 4 compilation (see McDougall et al. 1998)

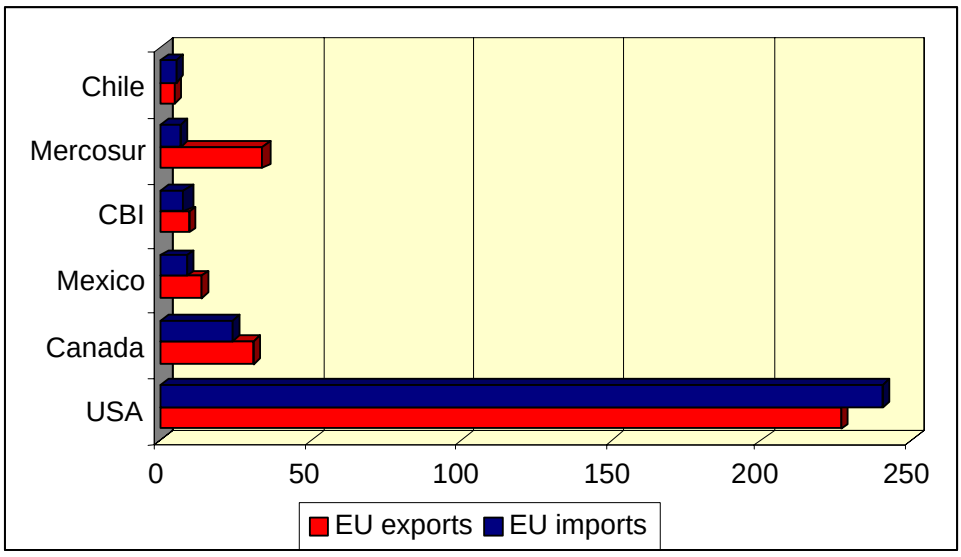


Figure 1: EU bilateral trade balances in $ millions (1997)

exports. Mexico and the Caribbean countries each account for an export share close to 1%. In total the Americas account for 31.2% of the EU's exports, which is a very substantial share, the bulk of which goes to the US. When we split aggregate EU exports into exports in goods and exports in services, shown in Figures 2(b) and 2(c), respectively, it becomes clear that the export shares for services are substantially larger than those for goods. This aspect will be discussed in more detail, below.

4.1.2 Exports from the Americas to the EU

Figure 3 shows that the EU is particularly important as an export market for both the US and the countries of Latin America. In fact, the more south one goes in the Americas, the relatively more important the EU becomes as a trading partner. Mercosur, the Andean countries and Chile all ship in the order of 26% of their exports to the EU market. These export shares indicate that the EU is about as important to Latin America as it is to the US, which ships 27% of its exports to the EU.

In contrast, for Canada, the EU only represents 10% of its total exports, the evidence of which can be seen from Figure 3(a), but Canada trades a far larger share of its GDP than Latin America. This relatively small share of total trade is in the same range as that of Mexico, for which the EU only represents 7.6% of all its exports. Export shares have come down in recent years apparently as a result of trade diversion under NAFTA. Figure 4 shows that most of the exports of Canada and Mexico go to other destinations in the Americas (principally this is the United States). However, when we split up total exports into trade in goods and trade in services, which data are shown in Figures 3(b) and 3(c), respectively, it is clear that the EU continues to be an important destination market for Canadian and Mexican services.

For the other countries in the Americas, Figure 4 shows that transatlantic trade towards the EU is relatively more important than intra-American commerce. For Mercosur, Chile, and the US, only a minority of exports go to the other Americas while Europe as a destination market is much more important.

In fact, the overall picture that we get from Figures 3(b) and 3(c), is the relatively larger importance of services in terms of export shares for the exports of the Americas to the EU. It is fair to say that the EU as a destination is more important to the Americas for services than it is for goods.

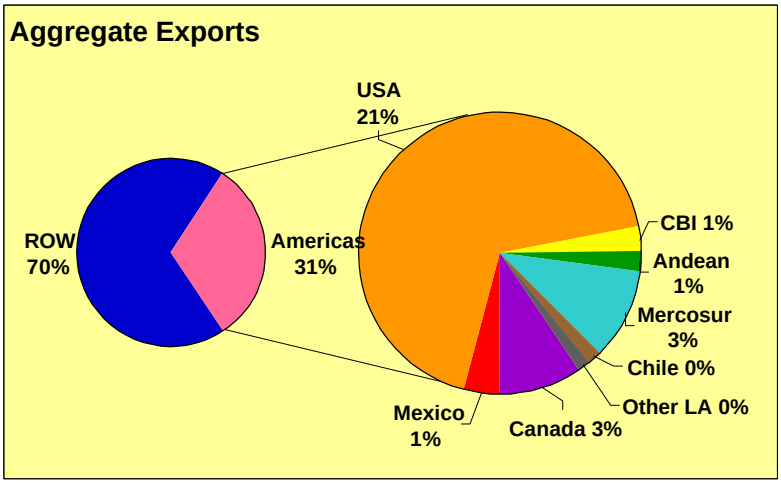


Figure 2(a): EU15 bilateral exports to transatlantic partners in 1997

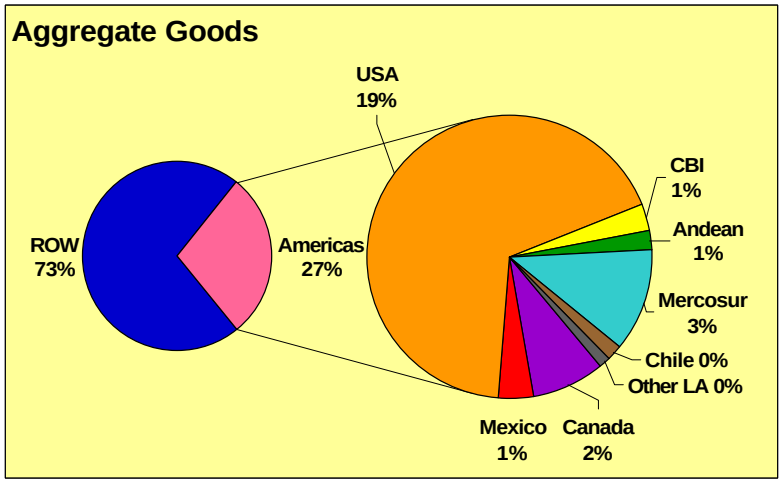


Figure 2(b): EU15 exports in goods

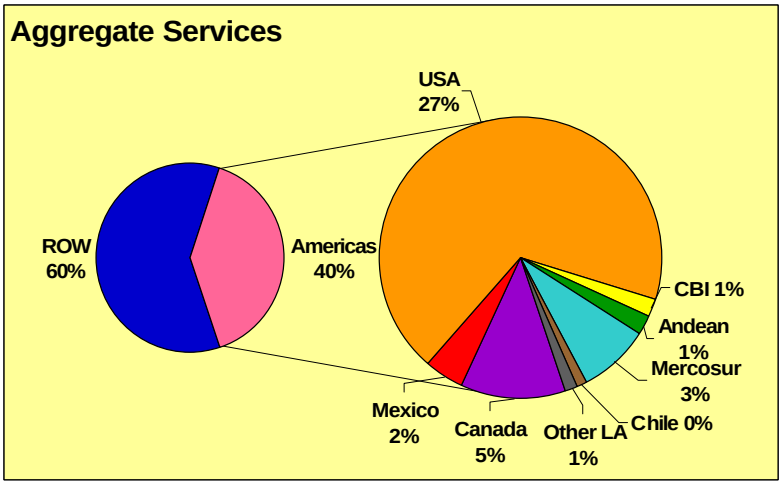


Figure 2(c): EU15 exports in services

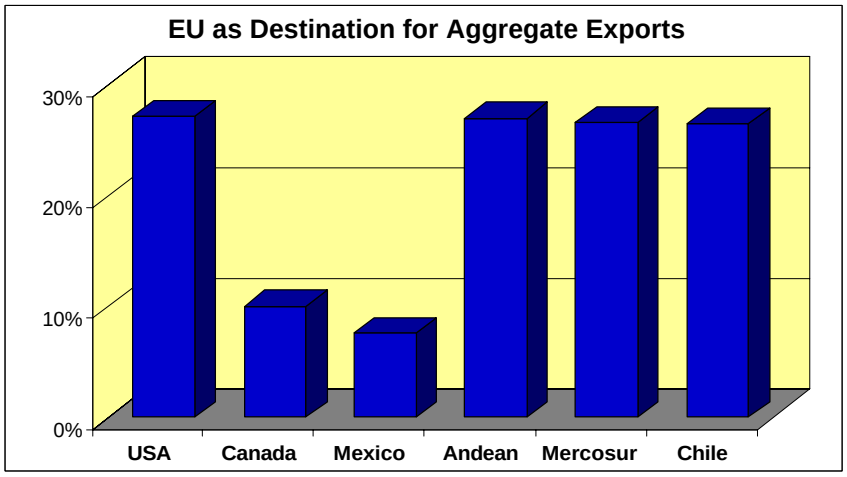


Figure 3(a): Total export shares from countries in the Americas to EU15 in 1997

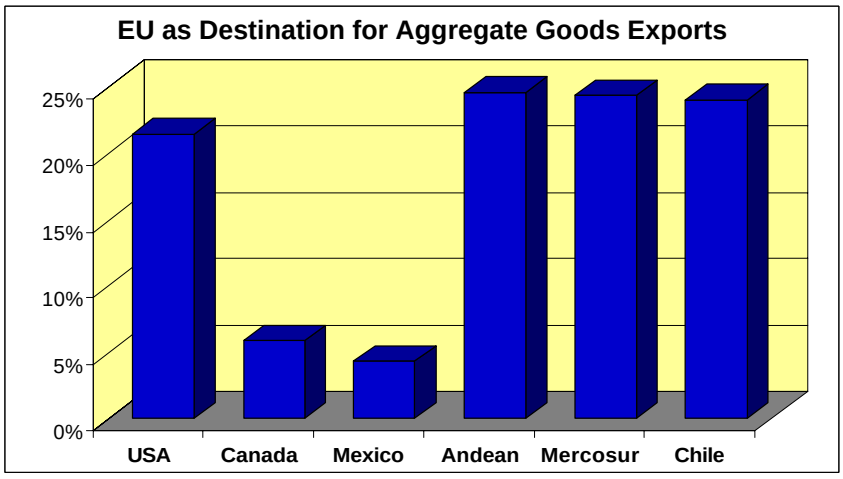


Figure 3(b): EU as a destination for goods from the Americas

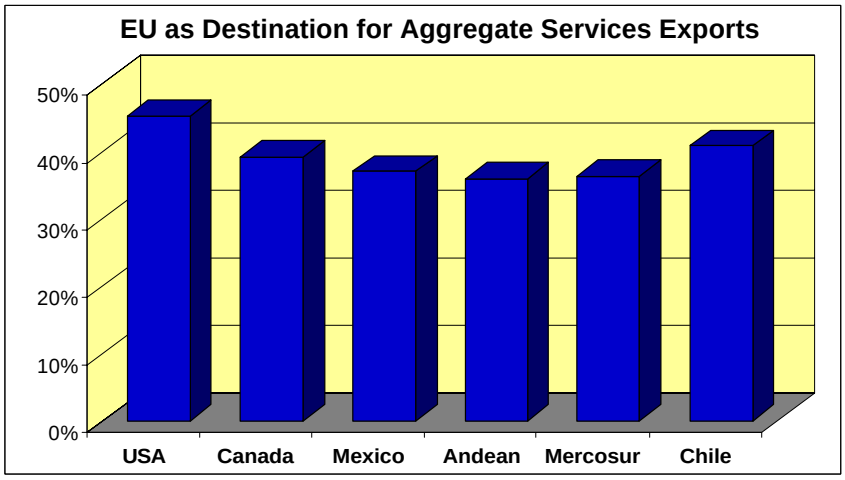
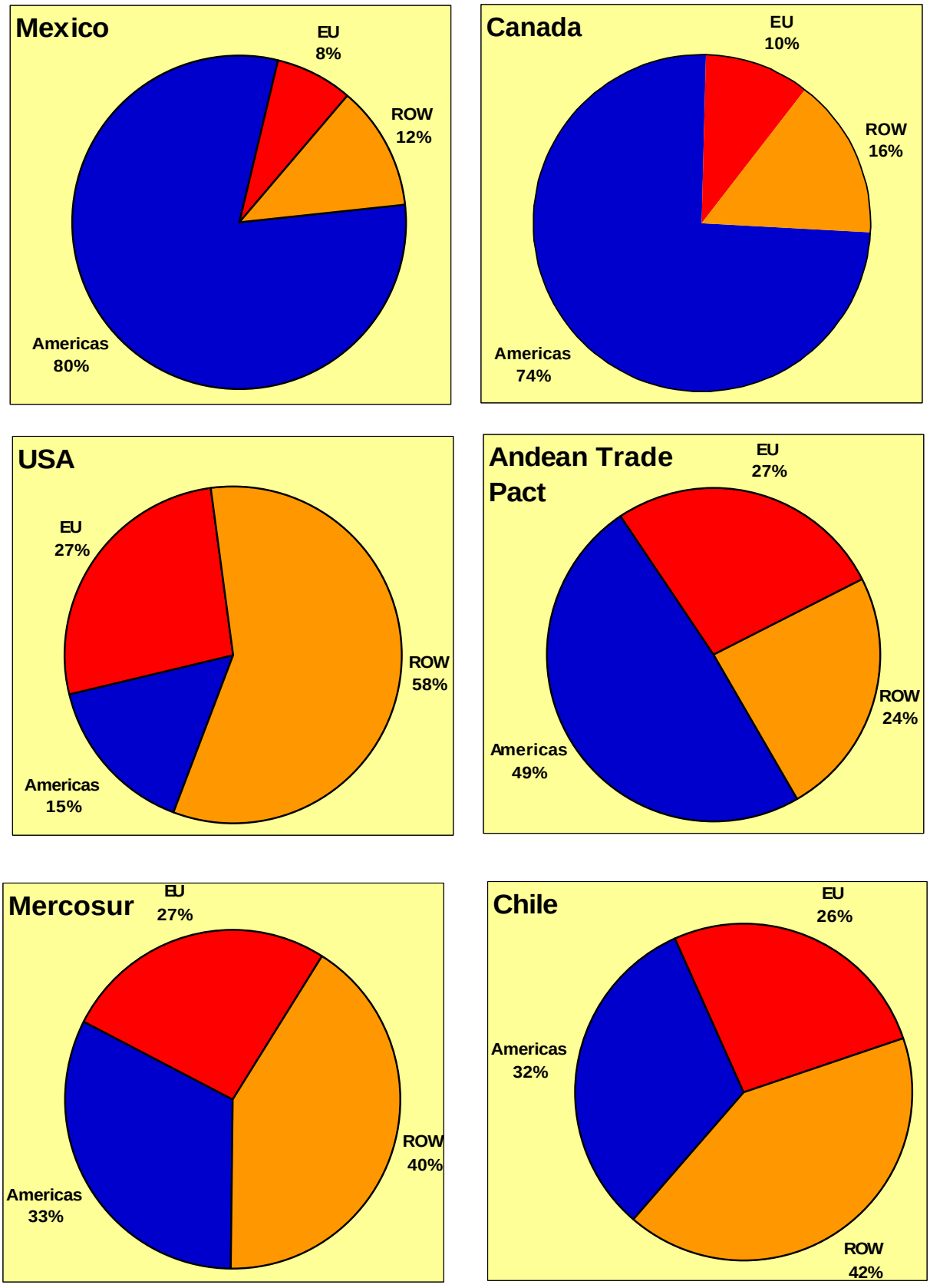


Figure 3(c): EU as a destination for services from the Americas

Figure 4: Export destinations of countries in the Americas



4.2 Sectoral level trade flows in goods

Our sector-level data consist of twenty-three different sectors, which we aggregate into four categories, consisting of 'primary goods,' 'food & clothing,' 'manufactures,' and 'services'. The sector classification stems from GTAP 4[1].

4.2.1 Exports from EU to Americas

In Table 3 we can see the sectoral extra-EU value of exports for different country groupings: the US, other countries in the Americas, and the Rest of the World (ROW, excluding intra-EU trade). Exports in manufactures are the largest category, followed by exports in services. Food & clothing and primary goods are less important export products in total EU exports.

Table 3: Total value of sectoral extra-EU exports in 1997

Value of EU Exports ($US millions)	ROW	USA	Other countries in Americas
Primary Goods	18,226	3,157	1,708
Food & Clothing	103,391	15,651	6,816
Manufactures	686,426	138,120	64,543
Services	268,932	72,781	32,933
Total	1,064,499	226,696	105,459

In Figure 5 we show the percentage of EU exports destined for the Americas for subsectors within these goods categories. Figure 5 shows that the EU's export share to the Americas in terms of primary goods and food & clothing is limited compared to the export share of manufactures. Within the category food & clothing it is mainly the export shares in leather and processed foods that stand out. Within the group of manufactures, the EU's exports concentrate predominantly in motor vehicles & and other machinery, with a EU export share to the Americas in those sectors of 36.4% and of 31.3%, respectively.

[1] GTAP stands for Global Trade Analysis Project, based at Purdue University, US.

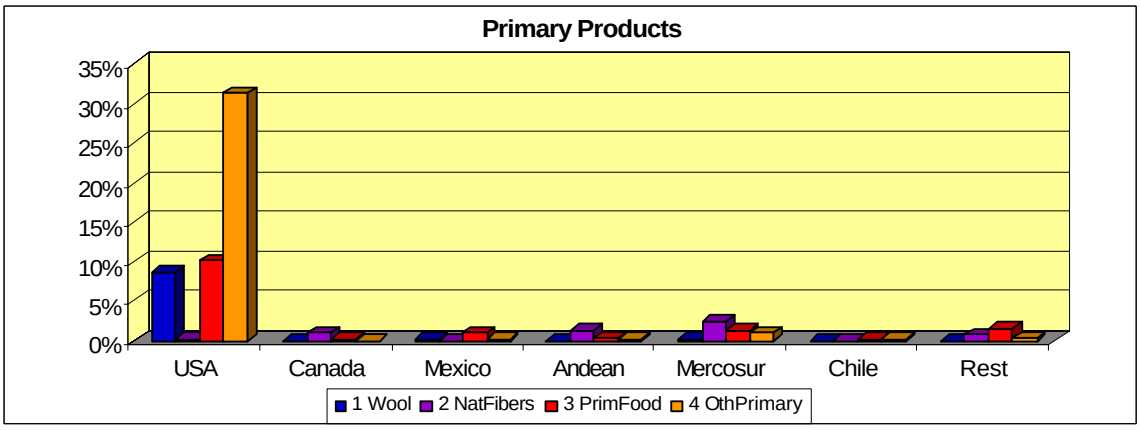


Figure 5(a): Percentages of EU exports in primary goods destined for the Americas

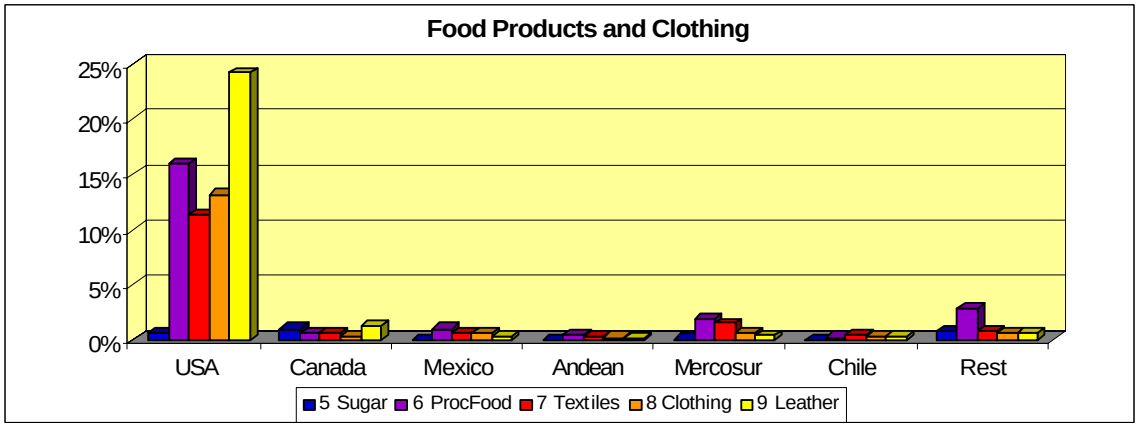


Figure 5(b): Percentages of EU exports in food & clothing destined for the Americas

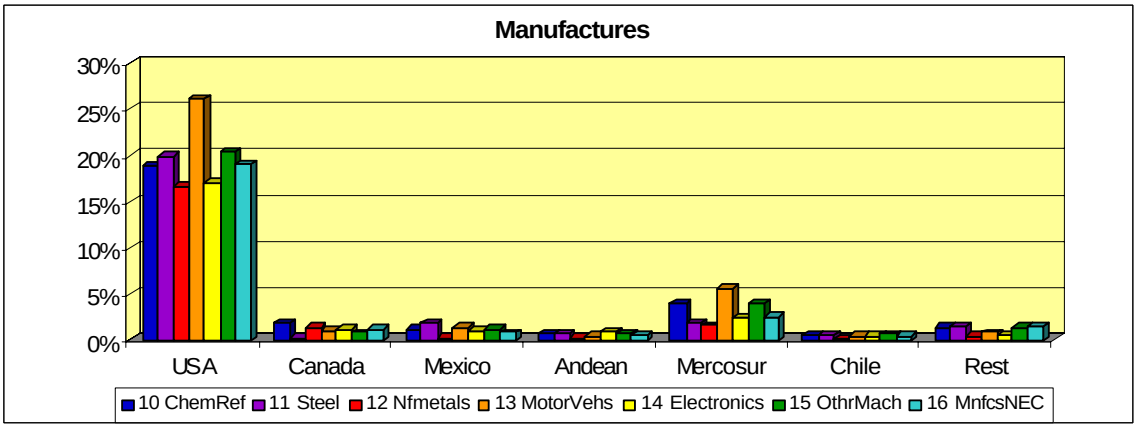


Figure 5(c): Percentages of EU exports in manufactures destined for the Americas

4.2.2 Exports from Americas to the EU

Table 4 shows the total values of exports by the US worldwide, to the EU, and to other countries in the Americas. The differences in composition of exports between the latter two regional groupings is marked, with services exports accounting for much more of the trade with the EU, as compared to trade with the rest of the Americas or, indeed, worldwide.

Table 4: Total value of sectoral US exports in 1997

Value of US Exports ($US millions)	Total	EU	Other countries in Americas
Primary Goods	46,857.6	8,345.0	11,738.0
Food & Clothing	54,655.1	7,941.7	20,713.8
Manufactures	574,694.8	128,657.9	223,615.7
Services	212,376.9	95,986.9	18,716.3
Total	886,153.2	240,534.1	273,989.1

Figure 6 gives us the export shares of the Americas destined for the EU15. In the group of the primary products, wool stands out. Both the US and Mercosur ship more than 70% of their exports in wool products to the EU. In the group of food & clothing, we see that the EU is relatively less important as an export market for the US. In contrast, for the Andean countries, Mercosur and Chile, a large part of their exports in textiles, clothing and leather go to the EU.

For manufactures, the EU is an important export market for the US. Particularly in the case of non-ferrous metals, the EU is an important destination for US exports. Also noteworthy are the large shares of Andean exports that are going to the EU, especially in steel and electronics. Chile also directs much of its exports in non-ferrous metals and in chemicals & refineries to the EU. While Mercosur predominantly orients its food & clothing to the EU, it also sells a substantial proportion of its exports of manufactures to the EU.

4.3 Sector level trade flow in services

In services, we distinguish between wholesale and retail trade; transport services; communication services; construction services; finance, insurance and real estate (FIRE); commercial services, and other services.

Figure 7 shows the EU's export shares in services destined for the Americas, while Figure 8 shows the Americas' export shares in services destined for the EU. As a first observation, we note that the EU is a more important destination market for exports of services from the Americas than vice versa.

Figure 7 clearly shows that by far most of the EU's exports in services go to the US. Exports of communication services, transport services, FIRE, and commercial services are especially important. EU exports to Canada are particularly large in construction

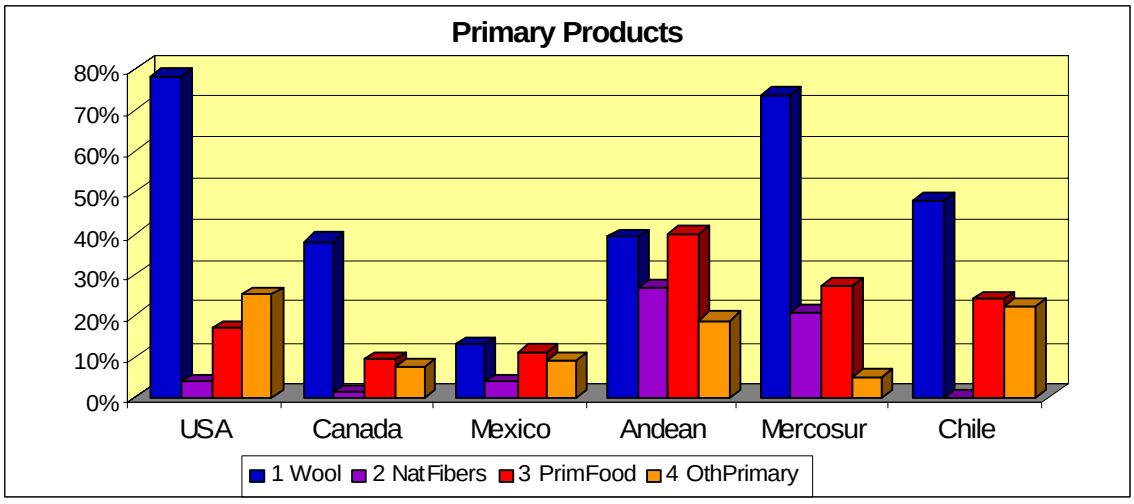


Figure 6(a): Percentages of the Americas' exports in primary products destined for the EU

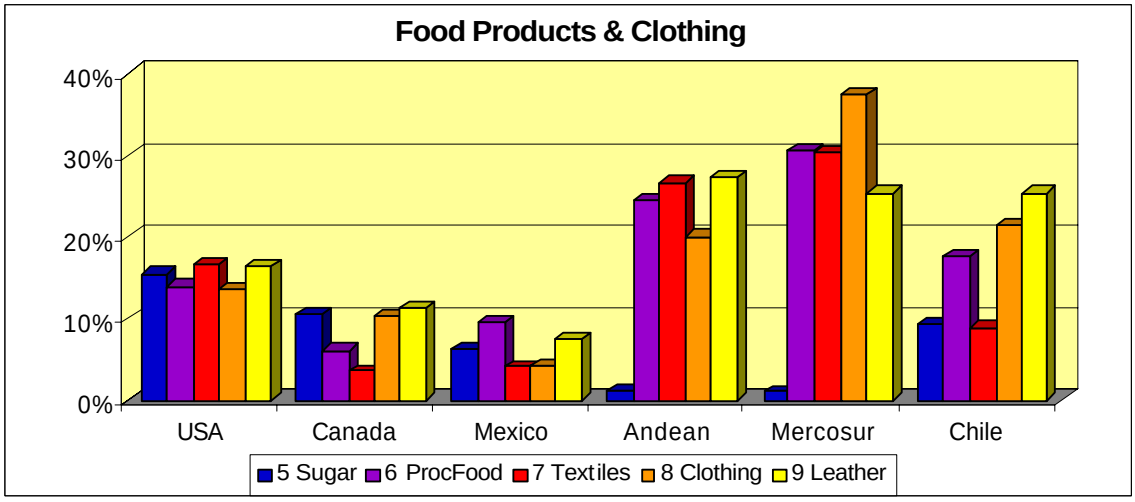


Figure 6(b): Percentages of the Americas exports in food & cothing destined for the EU

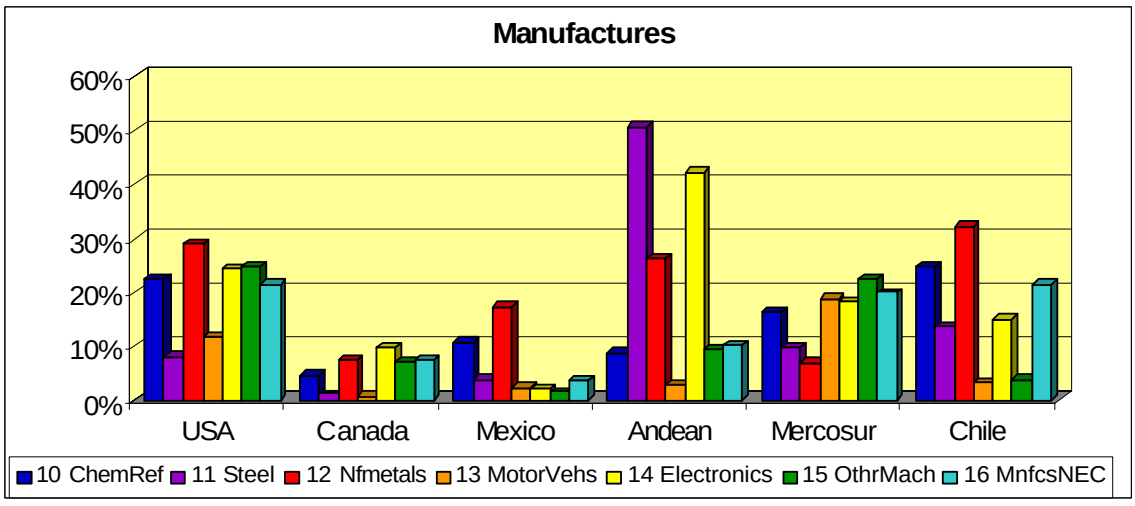
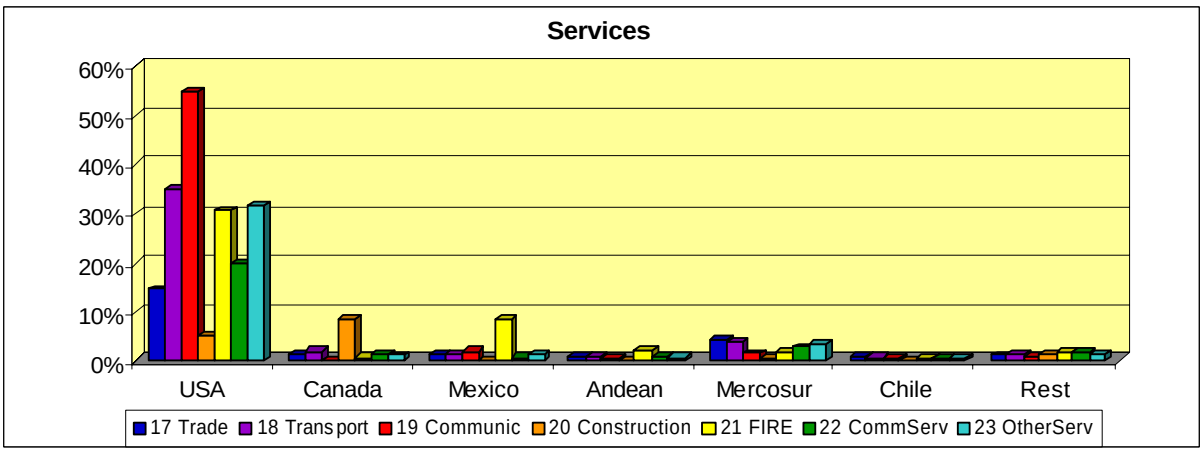


Figure 6(c): Percentages of the Americas exports in manufactures destined for the EU

services, while the EU's export shares to Mexico is mainly important in finance, insurance and real estate (FIRE).

4.3.1 Services exports from the Americas to the EU

Figure 8 shows that all countries in the Americas direct a very large share of their services to the EU market. Europe is almost as important to Latin America as it is to North America as an export market for services. Export shares to Europe are high particularly in transportation services and lie over 40% for all countries. The US ships over 50% of its exports in communications services and FIRE to the EU and close to 50% of its construction services. For the other countries in the Americas, on both the North and South American continents, large portions of trade in communication services, FIRE, and wholesale & retail trade are destined for the EU.



Legend: Trade: wholesale and retail trade; FIRE: Finance, Insurance and Real Estate, CommServ: Commercial Services

Figure 7: Percentage of EU exports of services destined for the Americas

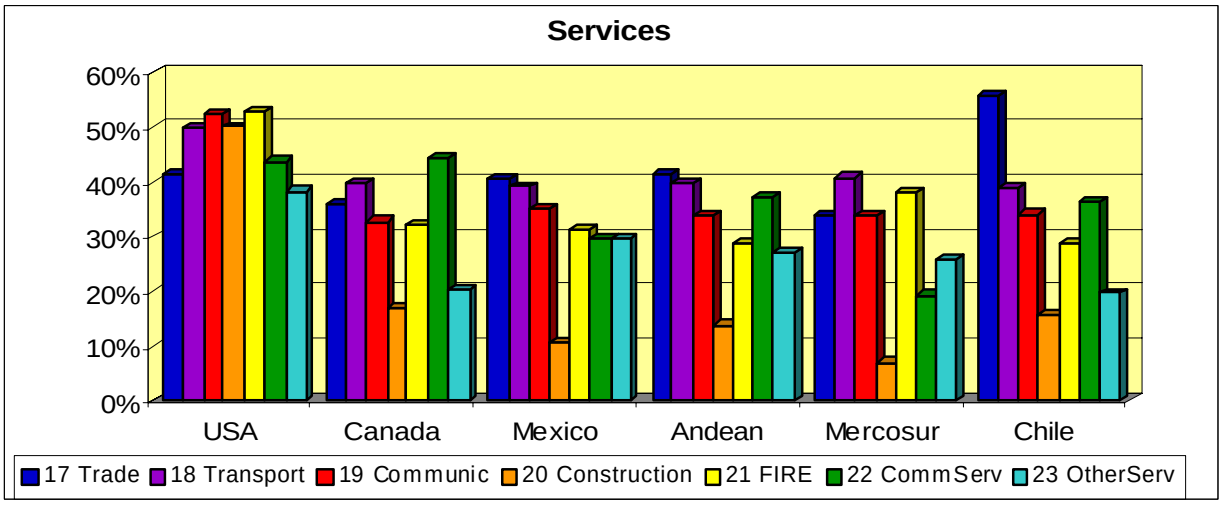


Figure 8: Percentage of exports in services destined for EU

5. Barriers to Trade

Figure 9 shows the trade-weighted average tariff levels on imports of goods by the Americas from the EU. A clear pattern emerges, with the northerly nations having the lower tariff rates. As the US and Canada have long been active participants in multilateral trade negotiations, it is unsurprising that they should have the lowest barriers on imports from Europe.

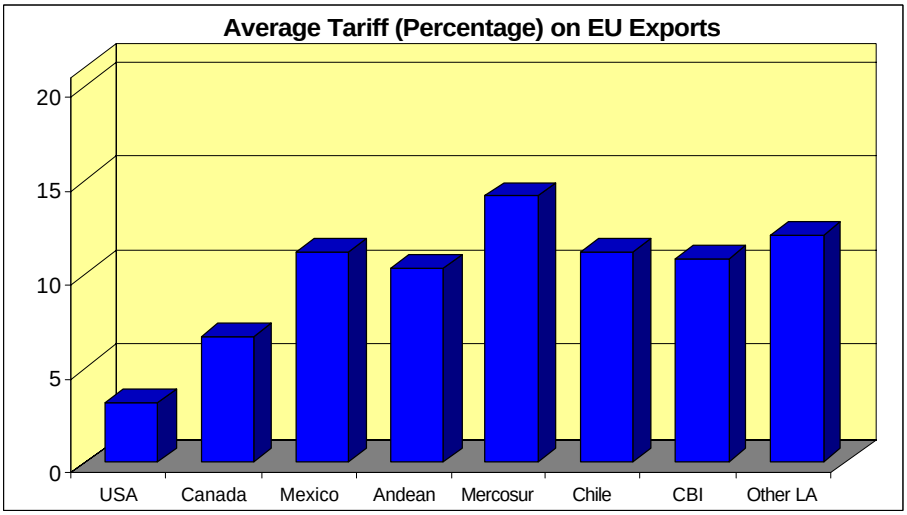


Figure 9: Levels of protection on EU goods by countries in the Americas

Source: Authors' calculations from GTAP data

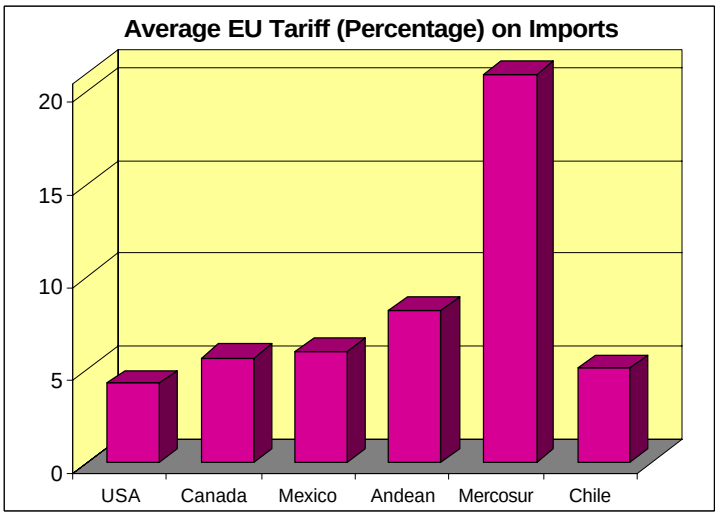


Figure 10: Aggregate tariffs set by the EU on imports from the Americas

Source: Authors' calculations from GTAP data

Table 5: Protection in agriculture compared to the average level of protection

Country/Region	Average MFN tariff on goods	Average MFN tariff on agri-goods
US	5%	10.6%
EU	4.2%	17.3%
Latin America	13.5%	limited

Source: Most recent WTO, Trade Policy Review Reports of US, EU and countries in Latin America

This is not reciprocated in terms of European imports from the Americas, shown in Figure 10. As virtually all of the countries in the Americas are members of the WTO, they have access to the lowest tariffs set by the EU. Consequently, differences in the average tariff faced by each country are the result of the composition of trade.

As was shown in the previous sector, Mercosur's exports to the EU are predominantly in primary products and food & clothing. These commodities are subject to higher levels of protection than those in manufacturing which constitutes larger shares of the exports to the EU of the other countries in the Americas.

Both the EU and the US have MFN tariffs on agricultural goods that lie far above the average MFN tariffs for industrial goods. In Latin America the opposite applies. Their tariffs on industrial goods are higher than those on agricultural imports. This can be seen from Table 5.

5.1 Sectoral tariff levels of protection on trade in goods

Figures 11(a), 11(b), and 11(c) show tariff levels faced by EU exports in the Americas for each sector. Figures 12(a), 12(b), and 12(c) show the corresponding sectoral tariffs on European imports from the Americas.

5.1.1 EU exports of goods destined for the Americas

Figure 11(a) shows that American tariffs on primary goods exports from Europe overall are low. Figure 11(b) shows that tariff levels in the group of food & clothing overall are higher than on primary goods. The US has relatively high tariffs on European sugar exports. Canada has a relatively high tariff on processed food coming from Europe while Mexico's tariffs on imports of clothing coming from Europe are quite high.

In manufactures, shown in Figure 11(c), North America (USA, Canada) have low tariffs while Latin America has higher tariffs on manufactures exported by Europe, especially on motor vehicles & parts. However, overall American tariffs on manufactures are relatively low. The data confirm the fact that richer countries (USA, Canada) have the highest barriers on food & clothing, while the developing countries have the highest barriers on manufactures.

5.1.2 The Americas' exports of goods destined for Europe

From Figures 12(a), 12(b), and 12(c) it is evident that, in general, European tariffs are low on imports of manufactures from the Americas. The highest tariff barriers are found in the food & clothing category, where European tariffs are particularly high on imports of sugar and of processed foods coming from the Americas.

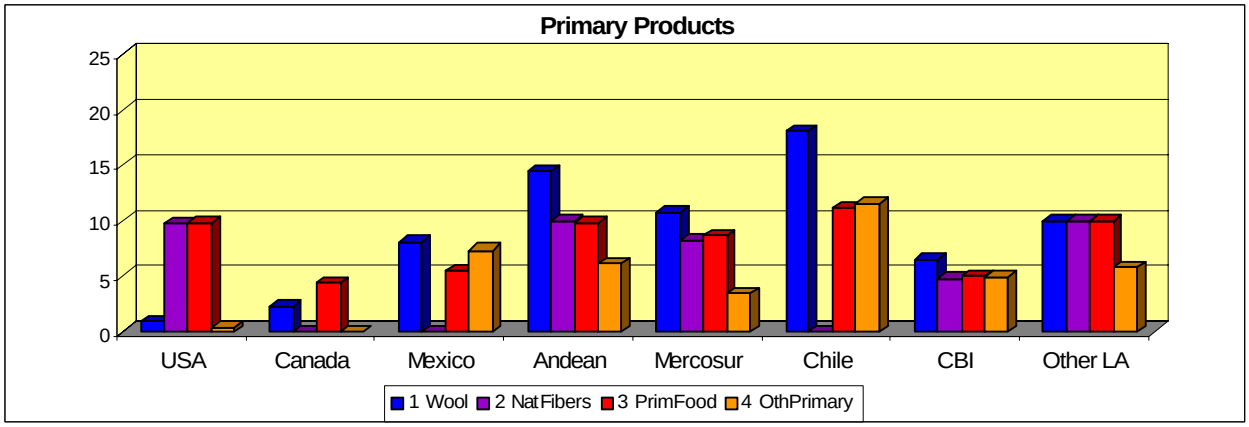


Figure 11(a): Tariffs on EU exports of primary goods to Americas

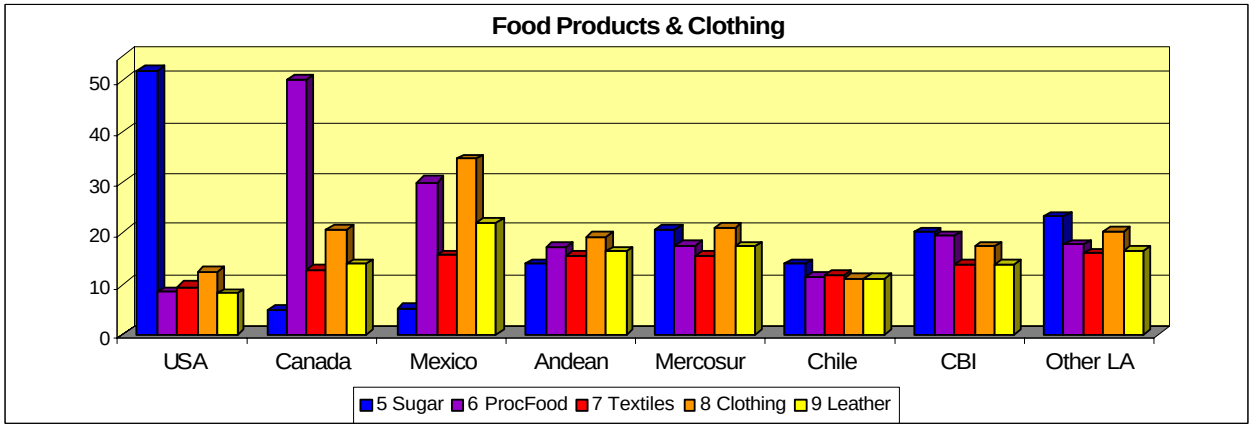


Figure 11(b): Tariffs on EU exports of food & clothing to Americas

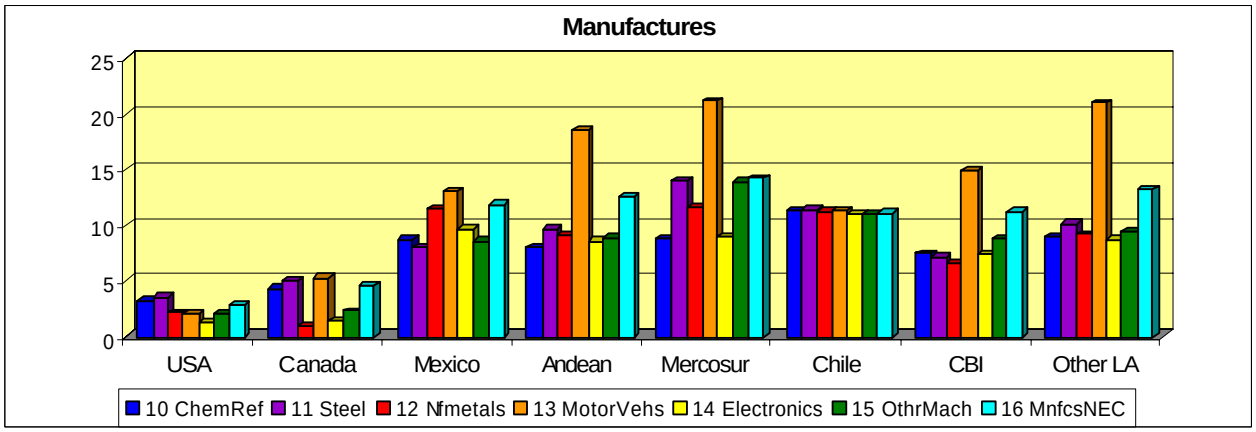


Figure 11(c): Tariffs on EU exports of manufactures to Americas

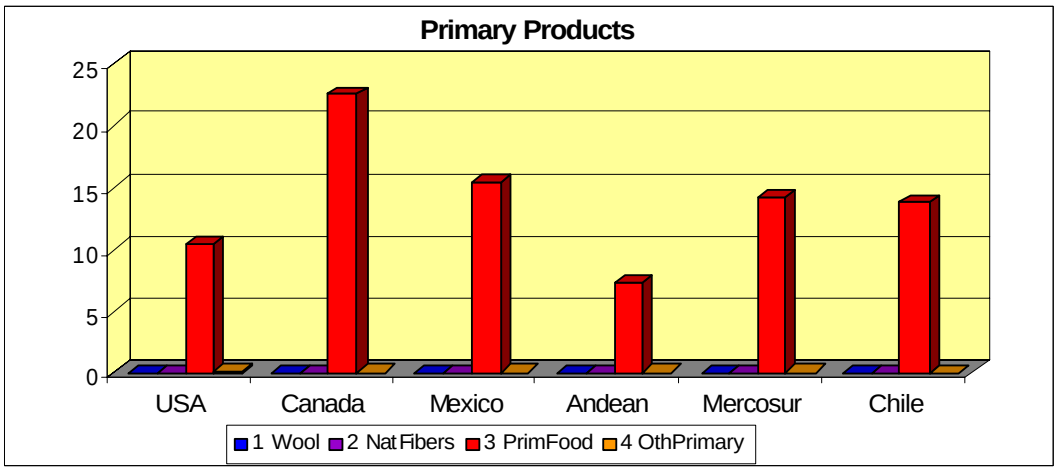


Figure 12(a): EU Tariffs on imports of primary goods from the Americas

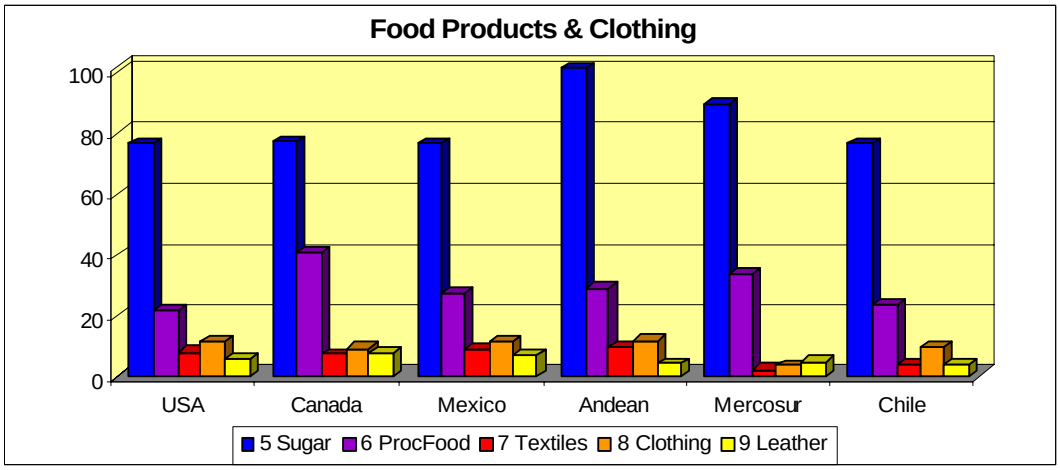


Figure 12(b): EU Tariffs on imports of food & clothing from the Americas

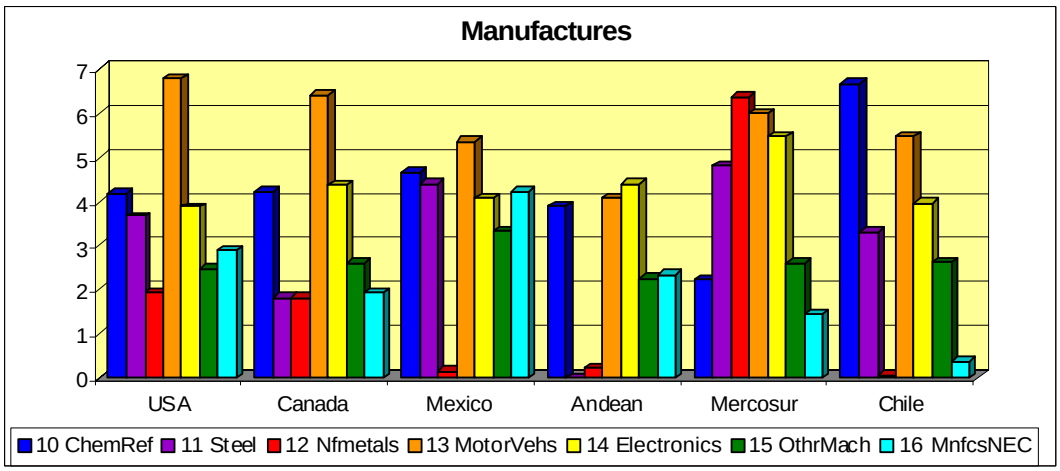


Figure 12(c): EU Tariffs on imports of manufactures from the Americas

5.2 Tariff-equivalent levels of protection on trade in services

Protection data on services are not as readily available as they are for trade in goods. One of the complications is that the classification of what is a traded service is less evident than for trade in goods. Unlike goods, many internationally traded services do not pass through customs houses (Gampson and Snape, 1985). Information and electronically transmitted data may move via satellites or telephone lines, as is also the case for international news transmissions and various entertainment services.

In addition, because services are generally intangible and non-storable, they are generally not subject to import tariffs but to other forms of trade impediment. These can take the form of prohibitions, quantitative restrictions (QRs), and government regulation. The QRs are frequently complemented by other measures, limiting the number of firms that may contest a market or controlling the nature of their operations (Hoekman, 1995).

When QRs are used in goods trade, it is a fairly straightforward exercise to convert them into a 'tariff equivalent'. An import quota set at a particular number of units restricts the supply of goods on the domestic market, driving up the equilibrium price. The increase in the price as a result of the quota is the tariff equivalent, as the same outcome as the QR could have been achieved by directly taxing imports at this rate. Ideally, we would like to generate similar tariff equivalents for the restrictions countries impose in services trade. Sadly, the multidimensional nature of these restrictions makes it extremely difficult to generate measures that could be used to make cross-country comparisons of openness to trade[2].

The most comprehensive exercise to date is that by Hoekman (1995). We consider measures of tariff equivalents for some of the countries in our study, as reported in Hoekman (1995) Annex 2. These are calculated on the basis of the countries' participation in the General Agreement on Trade in Services (GATS). Rather than providing true estimates of the tariff levels that would have equivalent effects to the non-tariff barriers encountered for trade in services, these numbers should be considered as providing information on the relative restrictiveness of policy regimes imposed by particular countries in specific industries.

The measure is constructed from two elements. The first considers the coverage of a country's GATS schedule, that is, the proportion of the sector that the country agrees to make subject to GATS disciplines. The greater the coverage, the less restrictive the country's trade regime for the specific service. Let x be the coverage of a specific sector in the country and y be the total possible coverage in the category, then (1 - x/y) is the country's weighting. This has then to be multiplied by the second element, the 'tariff equivalent' for the most restrictive (benchmark) country. This is an arbitrary measure. The tariff is set at 200% for sectors in which access is prohibited, while the rest are in the range of 20 to 50%.

Given the unavoidable arbitrariness of the benchmark tariff equivalents (due to the absence of data on barriers to trade), it is very difficult to quantify the benefits to liberalisation of trade in services. Nonetheless, it is possible to make useful

[2] There are also data problems, as national reporting of service-trade restrictions is not nearly as comprehensive as for restictions of trade in goods

comparisons across countries regarding their restrictiveness in particular sectors of the service economy. Figures 13(a), 13(b), and 13(c), illustrate the tariff equivalents in five industrial groupings and for six regions or countries. Hoekman does not provide numbers for Mercosur and, consequently, those for its largest member, Brazil, are reported.

Transport services are very restricted across Europe and the Americas. The EU and Chile are both close to the prohibitive tariff level of 200%. From the more detailed numbers provided in Hoekman (1995), it is clear that the major restrictions lie in the Maritime Transport and Air Transport industries, which are almost entirely protected from foreign competition. Francois and Wooton (2001a) show that the concentration of shipping ownership resulting from the high levels of national protection is a serious impediment to consumers fully realising the gains from trade. They argue that liberalisation of transportation is a necessary complement to trade liberalisation.

In Figure 13(b), we see that there are marked differences in the barriers to trade in construction, wholesale distribution, and retail distribution between the more industrialised countries of the EU, US, and Canada and the countries in Latin America. The Latin American countries have barriers that are several times higher than those of the more northerly nations. But it is also the case that Canada, and particularly the US, have much lower protection relative to that imposed by the EU.

Figure 13(c) shows that tariff equivalents on trade in financial services are still substantial, though lower in the EU, US, and Canada than in Latin America. Francois and Schuknecht (1999) conducted cross-country growth regressions and find that there is a strong positive relationship between growth and financial sector openness and between growth and financial sector competition. They estimated that moving from a closed to a relatively open financial services regime is correlated with significant pro-competitive pressures and ultimately with large differences in growth rates. Countries with a relatively more closed financial sector, such as those in Europe, would get a significant potential growth bonus when moving to a more open financial sector. The underlying reason is that the financial sector is at the heart of the savings and investment mechanism that underlies economic growth. In addition, a study by Levine (1997) has shown that there is a positive relationship between financial sector development and growth.

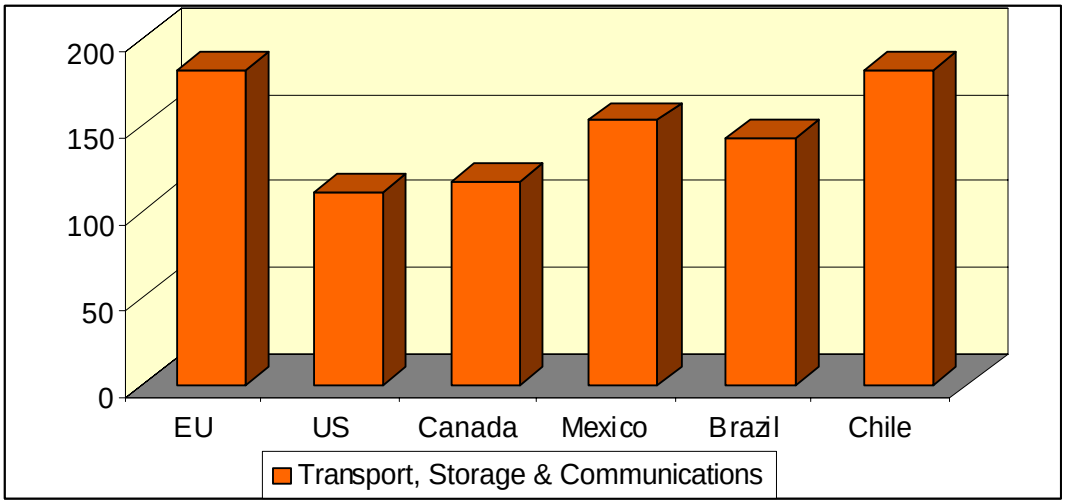


Figure 13(a): Tariff equivalents on Transport, Storage and Communication Services

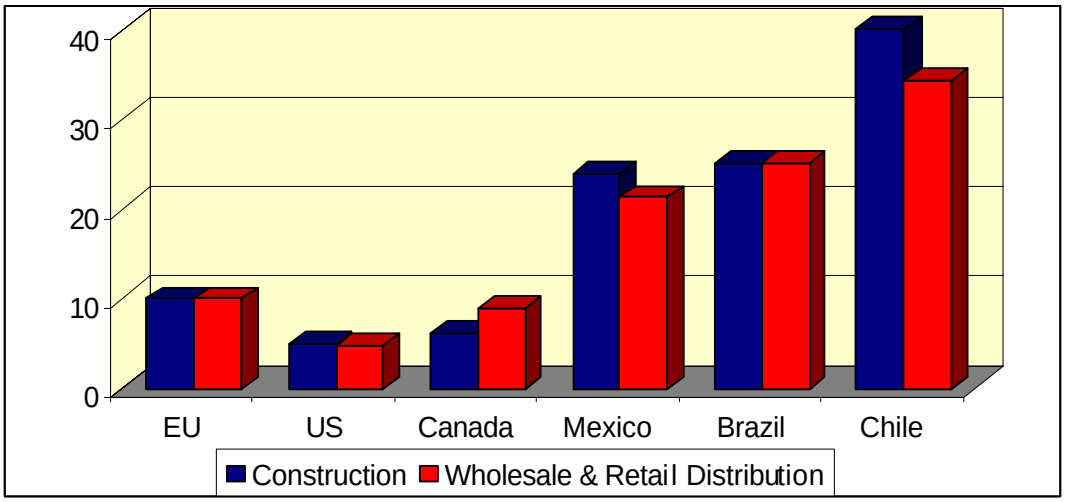


Figure 13(b): Tariff equivalents on Construction and Distribution Services

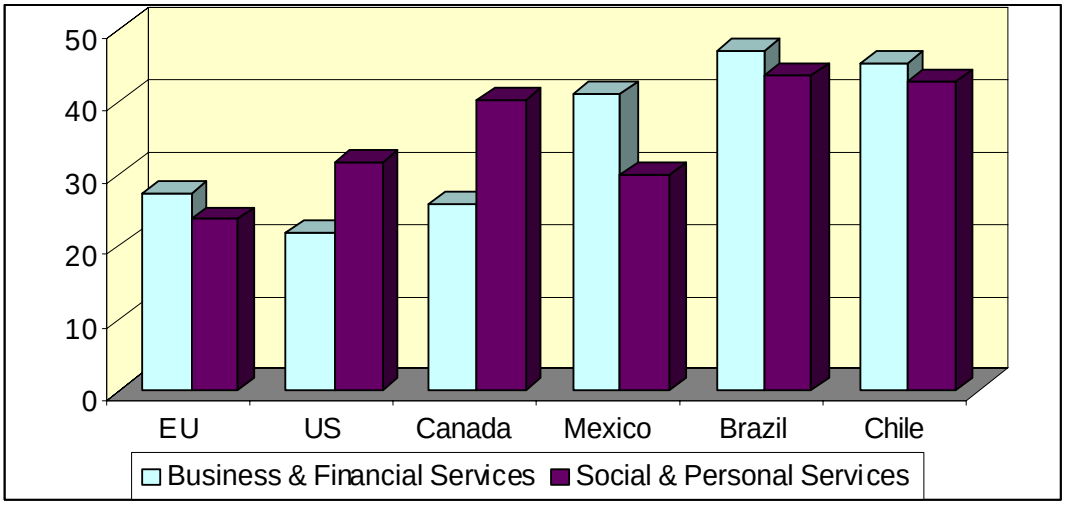


Figure 13(c): Tariff equivalents on Financial and Other Services

6. Investment Flows

In this section, we discuss both the stocks and flows of investment between the EU and the Americas. We start with a more general discussion on the importance of Foreign Direct Investment (FDI) for each of the trade blocs before we move into a discussion of the bilateral investment relationships. Sales by multinational firms in developed countries, such as the US and the EU, by now exceed their trade in goods and services. While the EU is the largest international investor worldwide, the US is the largest recipient of FDI. Latin America is the second largest recipient of EU investment, after the US. Although EU investment flows towards Latin America are still relatively small, and far less in size than those to the US, they are growing exponentially. Latin America's outward investment predominantly goes to other Latin American countries.

6.1 FDI outflows and inflows

The European Union has the largest amount of FDI outflows, which makes it the world's largest investor abroad. In 1999, total FDI outflows amounted to €570 billion. The EU accounted for about 50% of world FDI outflows. The US is the second biggest investor abroad with a share of 25% of global FDI outflows. Latin America's FDI outflows amounted to €25 billion in 1999, which was about 4.3% of total global FDI outflows. Although the share of Latin America is still relatively small, it has grown substantially in the latter half of the nineties. Figure 14 shows the FDI outflows in € billion for both the EU and the trade blocs in the Americas.

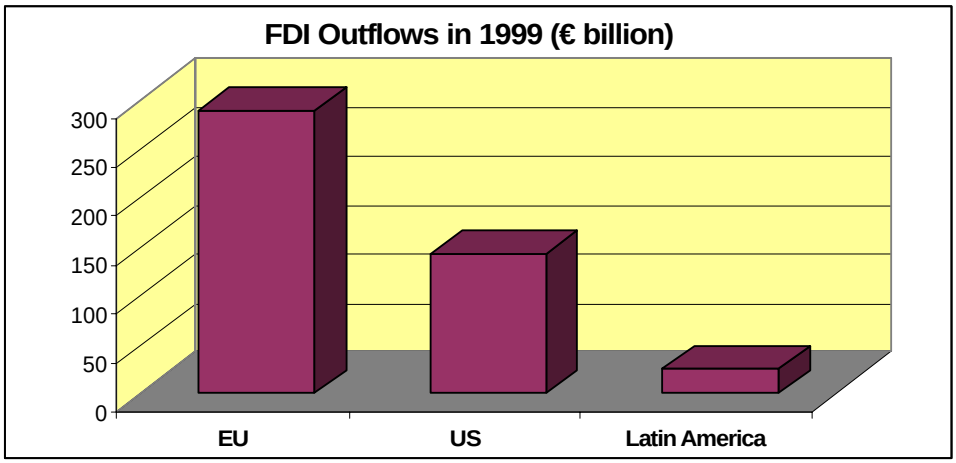


Figure 14: Outflows of FDI in 1999

Source: Authors' compilation of European Commission, DG Trade, FDI 1996-1999

In terms of FDI inflows, the US has always received the largest share of FDI in the world. Figure 15 shows yearly averages of FDI inflows by country groupings for the latter half of the 1990s. There it can clearly be seen that the US ranks ahead of the EU and ahead of Latin America in terms of destination of FDI. Latin America received about 14% of world FDI inflows, an average of €62 billion during the latter half of the 1990s. Moreover the trend is positive. In 1999, Latin- America received almost €85 billion in FDI.

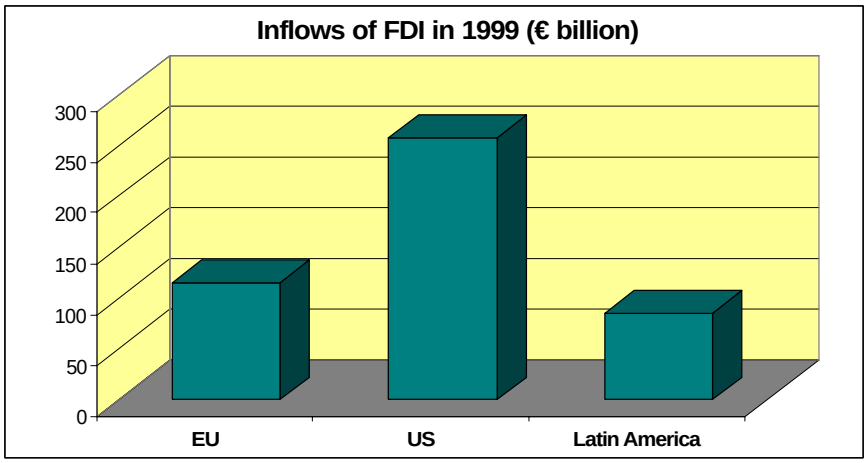


Figure 15: Inflows of FDI

Source: Authors' compilation of European Commission, DG Trade, FDI 1996-1999

6.2 Aggregate FDI inflows and outflows between the EU and the Americas

6.2.1 European outflows of FDI to the Americas

The US has always been the main recipient of European foreign direct investment. Outflows of European FDI to the US have increased at an accelerating rate in recent years. This can be seen from Figure 16. However, FDI flows (although not stocks) are volatile, and have fallen sharply recently.

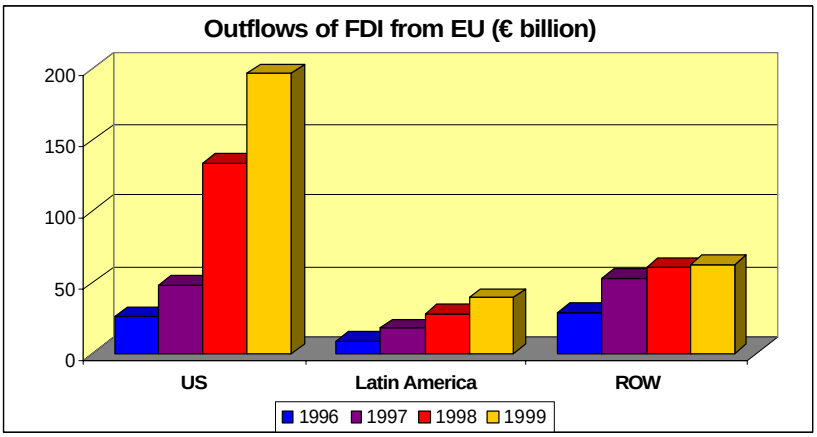


Figure 16: EU FDI outflows towards the Americas

Source: Authors' own compilation of European Commission, DG for Trade, Foreign Direct Investment 1996-1999.

Latin America is the second largest recipient of European FDI. In 1999, outflows of European FDI to Latin America amounted to €39 billion. While still at a relatively low level, the growth European FDI to Latin America has been spectacular. More than half of these flows are destined for Mercosur.

6.2.2 The Americas' outflows of FDI to the EU

The US is the second largest investor in the world and accounts for about 25% of world FDI outflows. The US is by far the largest investor in the EU. In 1999 about 65% of all FDI inflows into the EU came from the US, as shown in Figure 17. Moreover, US FDI towards the EU has increased threefold since 1996.

Latin America is still a net recipient of FDI, but a few Latin American multinationals have emerged and are starting to invest abroad. They are located in those countries where FDI inflows most concentrate: Chile, Brazil, Argentina, and Mexico. FDI outflows from Latin America to other countries reached €25 billion in 1999. This represented an increase of 205% over the previous year. However, as is shown in Figure 17, virtually none of these funds flowed into the EU.

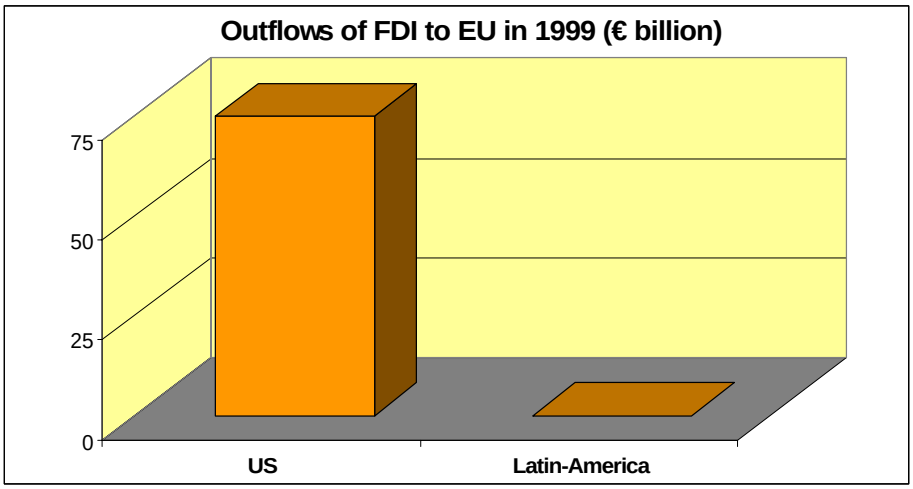


Figure 17: FDI outflows towards the EU in € billion

Source: Authors' compilation of European Commission, DG Trade, FDI, 1996-1999

Table 6: Total extra-EU FDI stocks held abroad at end of 1999

Stock of outward extra-EU FDI	Value (€ billions)	Share (%)
Total	1,187	
USA	622.5	52.4%
Canada	30.3	2.5%
Latin America	110.4	9.3%

Source: Eurostat News release, 8 Nov 2001

Table 6 shows the total stock of extra EU FDI held by partners in North and Latin America. In 1999, over 50% of the stock of European FDI is in the US, while about 10% is in Latin America.

Table 7: US FDI stock held abroad (in $ billion US) for 1998

Stock of outward US FDI	Value ($ billions)	Share (%)
Total	980	
EU15	433	44.0%
Canada	103	10.5%
Mexico	25.8	2.6%
Latin America	102.6	10.4%

Source: US Government (2000), US data for given trade partners in rank order of US exports, http://www.tr.gov.

Similarly we show, in Table 7, the total US FDI stock held abroad. It turns out that just over 40% of US outward FDI is in Europe. This compares to a share for NAFTA partners, Canada and Mexico, of respectively 11.6% and 3% of the total US FDI stock.

6.3 Sectoral level FDI

In terms of sectoral level data on FDI flows, EU-USA investment flows can be summarised as follows. Less than half of all investment has been in manufacturing, with most investment across the Atlantic being in services. For the US, outward investment flows are more than twice the size of their exports of goods, and manufacturing sales by US affiliates in Europe are around four times larger than EU imports from the US. Most of the transatlantic investment flows have been in services, with investment in banking and finance exceeding that in manufacturing (Baldwin and Francois, 1997).

Detailed sectoral level data are not available for all countries or all sectors, but the US provides such data for US manufacturing investments in the EU and EU manufacturing investments in the US, and the next two sub-sections discuss some of the main features of these investments.

6.3.1 Affiliate sales, exports, and imports: the case of US subsidiaries.

Table 8 reports the activities of US subsidiaries in the EU, giving their shares of employment and of trade with the US. We find that US subsidiaries account for 7% of EU employment in manufacturing as a whole, and is highest for medical and precision instruments, transport equipment, chemical products, electronic equipment and industrial machinery. The shares of US subsidiaries in EU trade with the US are much larger: approximately 20% of EU manufacturing trade with the US is carried out by US subsidiaries based in Europe. There is an astonishing peak in office and computing equipment, where US subsidiaries account for 77% of imports and 92% of exports to the US. The difference between the employment and the trade shares is due to the facts that a large share of EU employment is in small and medium size enterprises that normally cater to domestic markets, and that this is only trade with the US.

There is strong support for the fact that most US investments in the EU are horizontal investments, aimed at serving the EU market. If we look at the destination of the sales

of US subsidiaries, we find that 56.3% of them go to the local market (the country where the subsidiary is based) and 35.4% to other EU countries. Altogether more than 90% of US subsidiaries' sales are undertaken within the EU. We also know that US subsidiaries do not rely much on imported inputs from their home country. The ratio between these imports and subsidiaries' sales is 5.7% for total manufacturing in 1998, with peaks a little over 10% for industries like computing and accounting equipment.

The overall importance of subsidiaries' sales relative to imports is given in Table 9. For manufacturing, as a whole, subsidiaries' 1998 sales are 3.75 times larger than imports from the US. Across sectors, all activities except transport equipment have subsidiaries' sales exceeding imports, with a peak at 23 times larger for food and beverages[3].

Table 8: Share of US subsidiaries in EU total employment, total imports from the US and total exports to the US (1997-1998 averages - percentages). Breakdown by industry.

Industry	Employment	Imports	Exports
Manufacturing	7.01	22.50	19.07
Food and beverages	6.60	39.52	13.11
Chemicals and chemical products	12.12	30.96	28.82
Basic metals	1.68	2.74	2.93
Fabricated metal products	2.48	26.09	11.06
Industrial machinery and equipment	9.78		
Machinery and equipment		16.34	16.17
Office accounting and computing machinery	77.40	91.49	
Electronic and other electric equipment	10.38	16.43	30.39
Household appliances, audio, video, & comm. equipment	(D)	(D)	(D)
Electrical machinery and apparatus	(D)	(D)	46.89
Transportation equipment	14.30	(D)	(D)
Motor vehicles trailers and semi trailers	(D)	(D)	(D)
Other transportation equipment	(D)	(D)	(D)
Textile products and apparel	2.60	6.20	0.79
Lumber, wood, furniture, and fixtures	1.72	0.66	0.16
Paper and paper products	8.49	27.05	4.42
Printing and publishing	1.47	3.83	4.84
Rubber and plastic products	8.04	24.36	17.39
Glass, stone, clay, and other non-metallic mineral products	3.64	28.02	3.63
Medical, precision, optical instruments, watches & clocks	17.38	29.44	18.84
Other manufacturing	2.06	(D)	(D)

Notes: (a) data on US subsidiaries refer to all European countries and trade data to the EU15. Data on European countries approximate EU15 data by 96% on average for the manufacturing sector (b) "(D)" indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies. (c) the industrial classification used is ISIC rev3 (d) employment data only refer to 1998
Sources: U.S. Department of Commerce, Bureau of Economic Analysis (BEA), International Investment Division.
COMEXT database (EUROSTAT)
UNIDO Industrial Statistics Database (1998)

[3] The dominance of subsidiaries' sales in food and beverages may be taken as an indication that trade policies matter for the choice of mode of supply

Table 9: Ratio of sales of goods by US subsidiaries based in EU15 relative to total EU15 imports from the US

Industry	1995	1996	1997	1998
Manufacturing	4.32	4.30	4.02	3.75
Food and beverages	16.87	21.85	25.44	23.44
Chemicals and chemical products	6.57	6.20	6.29	6.04
Basic metals	1.45	1.66	1.55	1.51
Fabricated metal products	5.15	6.58	5.54	5.55
Machinery and equipment	(D)	5.08	(D)	4.95
Office accounting and computing machinery	(D)	5.86	6.61	5.75
Household appliances, audio, video, and comm. equipment	(D)	(D)	(D)	1.09
Electronic comp., accessories and other electric equipment	(D)	(D)	(D)	3.39
Motor vehicles trailers and semi trailers	(D)	(D)	(D)	(D)
Other transportation equipment	0.11	0.12	0.12	0.10
Textile products and apparel	2.24	2.27	2.72	2.54
Lumber, wood, furniture, and fixtures	0.72	1.07	1.13	1.64
Paper and paper products	4.54	4.45	5.67	5.91
Printing and publishing	1.58	1.83	1.79	1.77
Rubber and plastic products		6.83	5.82	6.13
Glass, stone, clay, and other non-metallic mineral products	6.65	6.02	5.85	5.07
Medical, precision, optical instruments, watches & clocks	(D)	(D)	(D)	(D)
Other manufacturing	(D)	0.81	(D)	1.04

Notes: (a) data on US subsidiaries refers to all European countries and trade data to the EU15. Data on European countries approximate EU15 data by 96% on average for the manufacturing sector (b) "(D)" indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies. (c) the industrial classification used is ISIC rev3
Sources: U.S. Department of Commerce, Bureau of Economic Analysis (BEA), International Investment Division.
COMEXT database (EUROSTAT)

The size of the activities by US subsidiaries explains why they account for a large share of EU-US bilateral trade, even though their sales and purchases mostly take place within the EU.

The findings above bear important policy implications. First, for policies that seek to protect rents of firms producing in the EU, up to 40% of the protected production may be foreign owned. Second, as regards the effects of import policy on the profits of US firms, EU production of US subsidiaries in manufactures is around 3.7 times larger than imports from the US (Table 9). Consequently, if the policy reduces the profits of importers and raises the profits of subsidiaries producing in Europe, its effects will be ambiguous or perverse.

6.3.2 EU affiliate sales, exports and imports: activities in the US.

We now move to the analysis of the activities of the foreign subsidiaries of EU MNEs based in the US. No other comprehensive data for EU investments in any other

destination country are available[4].

The share of foreign subsidiaries owned by Europeans[5] in the total sales of foreign subsidiaries in the US goes from an average of 61% between 1982 and 1985 to 63% between 1994 and 1998. The presence of EU subsidiaries in total US employment and US trade with the EU is given in Table 11. For manufacturing as a whole, 8.6% of US employment is in EU subsidiaries. This varies across industries, with peaks of 36.6% for chemicals, 14% for electric and electronic equipment and 13% for transportation equipment.

Particularly important from the standpoint of EU trade policy is the share of EU subsidiaries in US exports to the EU, reported in the final column of Table 10. This measures the extent to which EU imports from the US are owned by EU firms, and we see that for manufacturing as a whole this averages 12.5%, with peaks in food and beverages (24%), chemicals (23%), and glass and stone etc (21%).

As was the case with US activity in the EU, the size of the activities of EU subsidiaries is far larger than bilateral trade flows. Total sales of EU subsidiaries based in the US are 3.62 times larger than total US manufacturing imports from the EU (Table 11). This ratio varies by industry: the four highest are 7.8 for chemical products, 7.6 for food and beverages, 6.3 for glass, stone, etc., and 6.2 for paper and paper products.

EU subsidiaries in the US partly depend on imports from the EU (9.4% of their sales). Around two-thirds of these are inputs for further processing and the reminder are goods for resale in the US market, without any further processing. In Table 10 we also report the share of imports for further reprocessing on total imports by industry. In most industries they are the dominant components of imports. We can therefore conclude that the imports undertaken by EU subsidiaries are predominantly caused by the geographical fragmentation of the production process rather than by mere trading activities.

Finally, it is interesting to combine the data on trade by US subsidiaries in the EU (Table 8) with that on trade by EU subsidiaries in the US (Table 10) to assess the proportion of US-EU trade that is undertaken by MNEs (of both regions). Summing the trade shares in the two tables, we find that 47.3% of EU manufacturing exports and 35% of EU manufacturing imports are undertaken by EU and US subsidiaries. For some industries these shares are much larger. The combined US and EU subsidiaries shares in EU exports are 95.4% in chemical products, 92% in office accounting and computing machinery, 82.3% in electronic components and other electronic equipment. Conversely, their shares in EU imports, are 67.4% in electronic components and other electronic equipment and 54.3% in chemical products.

[4] Data on several variables are available for Swedish MNEs and data on emplyment and output are also available for Italian FDI.

[5] The data for European subsidiaries in teh US include all European countries and not just the EU country, as only this aggregate is available in the US Department of Commerce datatset. Anyhow, the Europe aggregate approximates very closely the EU15 aggregate: the share of the EU15 countries in total emplyment of the Europe aggregate in total manufacturing was 96% in 1998

Table 10: Share of EU subsidiaries in US employment, US imports from the EU, and US exports to the EU (1997-1998, as percentages). Breakdown by industry

Industry	Employment 1998	Total Imports (d) 1997	Of which imports for further manufacturing (d), (e)	Exports (d) 1997
Manufacturing	8.64	28.25	18.57	12.52
Food and beverages	7.47	27.38	15.32	24.29
Chemicals and chemical products	36.63	66.64	43.01	23.42
Basic metals	6.31	21.37	11.80	9.12
Fabricated metal products	5.66	42.85	14.14	17.64
Industrial machinery and equipment	6.70	19.10	15.56	14.52
Machinery and equipment	(D)	11.07	7.11	13.23
Office accounting and computing machinery	(D)	2.72	2.69	0.50
Electronic and other electric equipment	14.38	51.98	25.60	16.26
Hous. appliances, audio, video, and comm. equipm.	(D)	54.28	49.10	19.51
Elec. comp., accessories & other electric equipm.	(D)	48.80	11.91	8.90
Transportation equipment	13.08	8.63	6.53	4.49
Motor vehicles trailers and semi trailers	(D)	12.68	(D)	15.67
Other transportation equipment	(D)	3.54	(D)	1.73
Textile products and apparel	2.42	5.10	3.92	4.76
Lumber, wood, furniture, and fixtures	1.50	(D)	(D)	1.75
Paper and paper products	11.09	(D)	(D)	13.97
Printing and publishing	0.59	14.24	14.24	1.13
Rubber and plastic products	6.85	0.81	0.29	17.65
Glass, stone, clay, and other nonmetallic mineral products	18.41	17.72	7.93	20.87
Medical, precision, optical instruments, watches & clocks	6.30	(D)	(D)	3.63
Other manufacturing	2.52	16.95	12.36	(D)

Notes:(a) "(D)" indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies.(b) the industrial classification used is ISIC rev3(c) The aggregate Europe includes Norway, Iceland and Switzerland. Employment for the EU15 aggregate corresponds to approximately 96% of Europe's employment in manufacturing.(d) Estimated: the BEA data set does not provide data on exports and imports by country of origin and destination and country of ultimate beneficial owners at the industry level. European subsidiaries' imports and exports from Europe by industry are estimated by multiplying the share of imports and exports from Europe in imports and exports of European subsidiaries from and to all countries by industry specific imports and exports of European subsidiaries from and to all countries. 1997 data (e) The shares of imports for further manufacturing are computed using ha share of further manufacturing in total EU subsidiaries imports from all countries, as also in this case imports by source country are not available

Sources:

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), International Investment Division.

UNIDO Industrial Statistics Database (1998)

Table 11: Ratio of sales of goods by EU subsidiaries in the US relative to total US imports from the EU

Industry	1994	1995	1996	1997	1998
Manufacturing	3.36	(D)	2.97	3.52	3.63
Food and beverages*	7.70	(D)	7.57	(D)	(D)
Chemicals and chemical products	9.37	9.44	8.34	8.20	7.79
Basic metals	1.92	1.72	1.81	1.81	1.83
Fabricated metal products	6.88	5.74	6.25	5.33	4.67
Machinery and equipment	(D)	1.20	1.38	1.62	1.19
Office accounting and computing machinery	(D)	0.63	0.50	0.26	0.23
Household appliances, audio, video, & comm. equipment	1.72	1.23	1.42	(D)	(D)
Electronic comp., accessories and other electric equipment	8.60	6.18	5.53	(D)	(D)
Motor vehicles trailers and semi trailers	0.86	0.72	0.68	1.18	(D)
Other transportation equipment	0.46	0.54	0.75	0.55	0.35
Textile products and apparel	1.12	1.15	1.08	101.80	0.84
Lumber, wood, furniture, and fixtures	1.37	0.53	0.47	0.48	0.48
Paper and paper products	10.17	5.18	5.95	5.21	6.20
Printing and publishing	14.44	(D)	14.23	(D)	(D)
Rubber and plastic products	5.99	5.43	5.55	5.36	4.95
Glass, stone, clay, and other nonmetallic mineral products	5.32	5.40	6.05	6.52	6.30
Medical, precision, optical instruments, watches and clocks	2.30	2.07	1.89	(D)	(D)
Other manufacturing	(D)	(D)	(D)	3.49	3.79

Notes: (a) data on US subsidiaries refers to all European countries and trade data to the EU15. Data on European countries approximate EU15 data by 96% on average for the manufacturing sector (b) "(D)" indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies. (c) the industrial classification used is ISIC rev3

* includes also tobacco

Sources:

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), International Investment Division. OMEXT database (EUROSTAT)

7. Alternative Barriers to Trade in Goods and Services

In addition to tariff barriers, transatlantic trade faces a number of additional barriers. We briefly discuss the most important of these.

7.1 Contingent protection

The previous sections have shown that tariffs in industrial products have been substantially reduced especially between the EU and US, through their participation in all multilateral trade rounds[6]. Despite this, there are major impediments to the free movement of goods in the form of non-tariff barriers such as antidumping measures, countervailing duties, safeguard clauses, and export subsidies. Antidumping measures by now form the core of existing protection. Both the US and the EU have seen the number of antidumping initiations between 1999 and 2000 triple, most prevalently in steel products. By 1999, 67 antidumping cases were under investigation by the European Commission, by far the sector with the largest number of cases that year.

Prusa (1997) has calculated that antidumping measures in the US have led to a substantial amount of trade diversion away from suppliers affected by protection towards new suppliers. This could involve substantial welfare losses, since these new suppliers are most likely less cost-efficient than the original suppliers selected by the market. For the EU, a similar trade-diversion study was carried out by Vandenbussche et al. (1999). They found that, in contrast to the case of the US, very little trade diversion has taken place after the imposition of antidumping measures. This suggests that the antidumping barriers in the EU perform better in protecting domestic producers (rather than merely redirecting the source of imports), but possibly at an even higher welfare loss. Vandenbussche et al. (1999) see three possible explanations as to why import diversion in the EU is smaller than in the US. One reason could be the lower duty levels imposed by the EU as a result of injury margin protection which puts a limit on potential benefits of antidumping protection for non-named importers. Another reason for the lower amount of import diversion observed in the EU could be the greater extent of uncertainty and information asymmetries surrounding the EU decision making process. This lower degree of transparency and predictability in the EU could explain the more prudent reaction of non-named importers in terms of their increasing import values. A third reason could be related to the effects of AD-actions on decisions of firms to engage in foreign direct investment. Empirical studies have shown tariff-jumping as a result of antidumping protection is more likely in the EU than it is in the US. In the case of 'antidumping-jumping' FDI in Europe, imports from named countries are replaced by local production which could explain the lower

[6] Prior to European integration, many of the current members of the EU were participants in the trade rounds.

benefits to non-named countries through import diversion in Europe compared to the US.

Import diversion from named to non-named countries' imports in the US, implies that consumers can shift away from protected imports to new suppliers. Due to the absence of import diversion, EU consumers apparently have less of an option in that respect and are therefore likely to pay higher prices. A theory paper by Veugelers and Vandenbussche (1999) points out another channel of antidumping protection that affects consumer prices upwards, namely that antidumping duties can enforce cartel behaviour. A recent empirical paper by Konings and Vandenbussche (2002) finds that European antidumping protection raises European firms' mark-ups (price over marginal cost) by around 10% on average.

The risk therefore exists that there will be a continuing substitution of antidumping barriers for tariffs, which could result in a great setback to free trade. Table 12(a) gives an overview of EU antidumping cases between 1980-99 by trading partner across the Atlantic. Table 12(b) splits up the number of EU antidumping cases per five-year period. The rise in the number of cases in the last second half of the nineties is cause for concern.

Table 12(a): EU Antidumping cases by trading partner, 1980-1999

Country	Number of cases	Share of total cases
United States	36	4.6%
Mercosur	25	3.2%
Mexico	14	1.8%
All countries	766	

Source: Authors' own compilation of Official Journal

Table 12(b): EU antidumping cases, 1980-1999

Period	Number of cases
1980-84	212
1985-89	173
1990-94	176
1995-99	205
Total	766

Source: Messerlin (2001)

Table 12(c): EU sectors most frequently involved in AD-cases, 1985-90

Sector (NACE 2digit)	% of EU cases
Chemical industry	26.54
Production and preliminary processing of metals	16.05
Mechanical engineering	12.35
Electrical engineering	8.64
Manufacture of office machinery and data-processing machinery	4.94
Man-made fibres industry	4.94
Manufacture of non-metallic mineral products	4.94
Textile industry	4.32
Timber and wooden furniture industries	3.70
Manufacture of metal articles Instrument engineering	3.09
Processing of rubber and plastics	2.47
Manufacture of paper and paper products	1.85
Footwear and clothing industry	1.85
Other manufacturing industries	1.85
Extraction of minerals other than metalliferous and energy-producing minerals	1.23
Extraction and preparation of metalliferous ores	0.62

Source: Vandenbussche et al. (1999).

Table 12(c) gives an overview of the sectoral bias in European antidumping cases. It turns out that the chemicals industry, the metal industry, and the mechanical engineering industry are particularly involved in applying for EU antidumping protection. Although we do not have a similar overview of US sectors involved in US antidumping cases, Prusa (1997) has pointed out the similarity of the EU and US in terms of the type of sectors and products occurring in antidumping cases.

Table 13 gives an overview of the number of antidumping cases initiated by the US and other countries of North and South-America during the nineties. A recent study by Knetter and Prusa (2000) relates the variation in the number of antidumping cases to the cyclicality of the economy. Domestic GDP growth seems to have a statistically significant effect on antidumping filings but in a negative way. A reduction in GDP growth results in more antidumping filings, which suggests that antidumping filings are counter-cyclical.

The welfare cost of antidumping protection has been estimated for the US at $4 billion by Gallaway, Blonigen, and Flynn (1999). A similar study for the European market does not exist at present.

Table 13(a) not only shows that the US is also a frequent user but also that the countries of Latin America have all started adopting the antidumping clause of the WTO and have become active users in recent years.

Other types of contingent protection are safeguard measures dealt with under article XIX of the GATT/WTO code. This clause was recently used by the US as a justification to impose duties of 30% on all steel imports.

Table 13(a): Number of antidumping investigations by country

	Year									
Country	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
US	63	82	32	48	14	22	15	36	47	47
Canada	11	46	25	2	11	5	14	8	18	21
Argentina	1	14	28	17	27	22	15	8	24	45
Brazil	7	9	35	9	5	18	11	18	16	11
Mexico	9	26	71	22	4	4	6	12	11	7
Peru	0	0	0	3	2	7	2	3	8	1
Venezuela	0	0	3	0	3	2	6	10	7	1

Source: WTO Semi-annual Report

Table 13(b): Number of Countervailing measures initiated by the reporting country

Reporting country	Year							**Total**
	1995	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	
EU	0	1	4	8	19	0	6	38
US	3	1	6	12	11	7	18	58

Countervailing duties can be considered to fall into the category of contingent protection. Countervailing duties can be imposed if imports have been subsidised by the country of origin. They are more popular in the US, and the EU is a less frequent user of countervailing duties. The number of initiated countervailing duty cases in the latter half of the nineties for the EU and US respectively are given below.

7.2 Less visible impediments to trade

In addition to worries over the surge in antidumping protection, the business community has often expressed concerns about regulatory issues. Mutual recognition of standards, licenses, practices often constitute hidden barriers that can seriously hinder business and increase the costs to consumers.

Newer types of protection are looming such as the Technical Barriers to Trade (TBT). By and large they refer to regulatory hindrances to trade and investment. Messerlin (2001) reports indicators for a number countries. He uses a scale of 0, for the least restrictive, to 6, the most restrictive environment. At the aggregate country level they are reported in Table 14(a).

We see that the US has the least restrictive regulatory environment, while the EU has the highest. This is particularly the case for the European automotive industry, where the number of standards and regulations has increased exponentially (Messerlin, 2001). These country indicators are average indicators over the following industries: air transport, mobile telephony, road freight, electricity, railways, and retail distribution. Table 14(b) gives more disaggregated levels of the index per sector. We note that the US is fairly restrictive in the 'electricity' sector, while the EU is in 'air passenger transport' and 'railways'.

Table 14(a): Indicators of regulatory environment by country

Country	Average indicator of regulatory environment*
US	1.7
EU	3.3
Canada	2.8
Mexico	2.7

Note: *the indicator ranges from 0 to 6, from least to most restrictive
Source: Messerlin (2001)

Table 14(b): Indicators of regulatory environment by sector

Country	Sector						
	Air pass'r transport	Road freight	Mobile Telephony	Fixed Telephony	Electricity	Railways	Retail distribution
EU	3.66	2.73	2.66	2.92	3.77	4.83	2.69
US	1.2	1.5	na	0.4	4.3	2.2	na
Canada	3.6	2.1	na	1.2	0.8	na	1.1
Mexico	3.5	2.3	2.5	2.5	na	4.1	1.8

Source: Messerlin (2001)

7.2.1 The 'New Transatlantic Trade Agenda'

In December 1995, the US and the EU signed the 'New Transatlantic Trade Agenda' in which a commitment was made by both partners to reduce impediments to the flow of goods, services and investments between the EU and the US. This bilateral action plan does not only refer to tariff barriers and contingent protection (antidumping, safeguard clause and export subsidies) but is predominantly aimed at measuring and reducing the less visible and less well documented areas of protection that are in place.

- Technical barriers to trade (TBT). These barriers refer to differences in regulatory settings, such as safety norms, rules of origin, approval for distribution of products, etc. Below, we list a number of examples of TBT faced by exporters on both sides of the Atlantic.

  In the automotive industry, the Transatlantic Automotive Industry Conference on International Regulatory Harmonization (April 1996), has shown that there are substantial differences in the way that the US and the EU regulate automobile safety. This implies that car manufacturers have to produce different models for different markets, which is costly. If these differences in norms and attitudes could be bridged, larger economies of scale could be realised in car production. This would likely to result in lower consumer prices, higher profits for car manufacturers, and higher consumer welfare

  Another example of a TBT, often identified by the business community, is that exporters on both sides often face so-called 'behind-the-border impediments to trade'. Regulation at the state/country level may be different from international norms, which implies that manufacturers can not directly export to the US or the EU as a whole. For example, at present the US does not recognise the EU as a country of origin. Tyres imported into the US marked 'made in the EC' are not acceptable as a label of origin. This implies that EU firms have to follow

supplementary procedures, which can be a source of additional costs. If tyres 'made in the EC' were accepted, market access would be improved and trade less onerous.

Another difficulty EU firms often face is in getting approval for their products by the Food and Drug Administration (FDA). That same FDA agency also must approve new medicinal products before they can be commercialised. Delays in approval of non-US, new medicinal products appear to be longer than for US-developed medicinal products.

- Mutual recognition of goods. Mutual recognition agreements have focused on conformity assessments that goods comply with national regulations of product standards. The problems have been the largely legal, institutional, and technical differences between the regulatory frameworks. A positive sign in this respect is that there have been recent announcements of voluntary guidelines designed to promote more effective US-EU regulatory cooperation in goods. Further cooperation could lie in the EU and US sharing better mutual access to the process of developing regulations in the manufacturing sector.
- Environment. Environmental standards differ across countries. Such differences could give one production location a cost advantage over rival nations. There is consequently a common perception that governments have an incentive to use their environmental policies, not as instruments to limit pollution, but as means of attracting investment. Given this possibility, individual countries have asked the international institutions, such as the United Nations, to set a number of environmental standards to which countries should adhere. This would prevent a race to the bottom in terms of environmental standards and also to avoid dislocation of firms from more environmentally protected countries to less regulated locations.
- Transport. Important non-tariff barriers exist in the air and maritime sectors. For example, the EU and US take different positions in terms of recognition of air crew and pilot qualifications. The aeronautics industry worldwide is consolidating, many airlines are suffering but are being bailed out by national governments often because it is felt important to have a 'national carrier'. This direct or indirect support of governments to the Aeronautics industry is an area for concern. Further, difficulties have been encountered in achieving an "Open Skies" agreement, such that currently only selected airlines are permitted on transatlantic routes, based upon bilateral deals between the US and individual member states of the EU. Restrictions on foreign ownership also exist in the transport sector.
- Competition law is not regulated at the supra-national level. Hence differences both in competition policies themselves and in their interpretation can be the cause for transatlantic disputes. Given that competition policy is not regulated at the supra-national level, unilateral incentives and interests in terms of how strict competition rules are applied may diverge from the joint interest. Agreements between the EU and the Americas in terms of the application of competition rules may prevent these welfare losses from occurring. Indeed, EU and US policy has converged over recent years and high-profile disputes are now

exceptional. The interaction between competition policy and law is also important. The absence of strict and equivalent competition polices will mean that unregulated cartel behaviour in certain industries, like cement and steel, will limit the benefits from trade liberalisation. Cuts in tariff rates may not have the expected result of opening up the market to foreign competition. In this way, public barriers to competition are merely replaced by private barriers to competition.

- Information society, technology, and telecommunications. Significant improvement in the area of ICT has recently been made with the GATS Basic Telecommunications Agreement in 1998. Nonetheless significant barriers continue to exist: investment restrictions, conditionality of market access. One example is the current restrictions on access to the satellite communications market in the US. On the EU's side, the telecommunications sector in many countries was previously monopolised by state-owned enterprises. New entrants in the market face serious impediments in access to infrastructure. As a result of the EU's failure to liberalise purchases of telecom equipment, the US decided in 1993 to impose sanctions against the EU which bar EU suppliers from bidding for US federal Government contracts below a certain threshold value. The EU responded with counter-sanctions that also bar US bidders from applying contracts awarded by central government agencies below a threshold value. In view of the EU's liberalisation of the telecoms sector, both sides have been investigating the possibility of lifting sanctions and counter-sanctions. But no concrete decisions have been taken so far (EU, 2001).
- Government procurement. Often there are nationality conditions involved when tendering for government contracts. Openness in this area would improve quality and reduce abuse and rent-seeking behaviour. Of particular interest, given the levels of spending by governments on both sides of the Atlantic, would be the potential liberalisation of defence procurement.
- Steel. The EU has recently been one of the principal targets of the steel safeguard approved by President Bush on 5 March 2002. This will affect EU steel exports of 4 million tonnes and worth $2.3 billion.
- Agriculture. Attention has been focused recently on the trade impact of the Farm Security and Rural Investment Act of 2002. This will push up US spending on farm support quite considerably. Although the size of the impact cannot be estimated precisely, its direction is clear. The Congressional Budget Office estimates spending at $248.6 billion over ten years, of which $83 billion is additional support to that foreseen under the Fair Act. Expenditure on commodity programmes will rise from a annual level of around $10 billion under the Fair Act to $15 billion per year.

7.2.2 Resolving issues with the rest of the Americas

To our knowledge there is no agreement similar to 'New Transatlantic Trade Agenda' between the EU and the rest of the American continent. For the countries of Latin America, the EU's strategy has recently been one of negotiating free-trade agreements on a bilateral basis. This can be seen from Table 15, which lists to date all the recent free trade agreements of the EU with individual countries of Latin America.

7.3 Foreign Direct Investment limitations

Table 15: EU15 Regional Trade Agreements (situation in August 2001)

Partner Country	Type of Agreement	Date of entry into force	Notification to WTO
Mexico	PTA under GATT XXIV	01 July 2000	Yes
Mexico	PTA under GATS V	01 July 2000	Under preparation
Argentina	FTA under negotiation	Negotiation began in 2000	
Brazil	FTA under negotiation	Negotiation began in 2000	
Paraguay	FTA under negotiation	Negotiation began in 2000	
Uruguay	FTA under negotiation	Negotiation began in 2000	
Chile	FTA under negotiation	Negotiation began in 2000	
Belize	Partnership Agreement	01 March 2000	Request for MFN waiver
St. Charles & Nevis	Partnership Agreement	01 March 2000	Request for MFN waiver
Haiti	Partnership Agreement	01 March 2000	Request for MFN waiver
Bahamas	Partnership Agreement	01 March 2000	Request for MFN waiver
Dominican Republic	Partnership Agreement	01 March 2000	Request for MFN waiver
Antigua	Partnership Agreement	01 March 2000	Request for MFN waiver
Dominica	Partnership Agreement	01 March 2000	Request for MFN waiver
Jamaica	Partnership Agreement	01 March 2000	Request for MFN waiver
St. Lucia	Partnership Agreement	01 March 2000	Request for MFN waiver
St. Vincent	Partnership Agreement	01 March 2000	Request for MFN waiver
Barbados	Partnership Agreement	01 March 2000	Request for MFN waiver
Trinidad & Tobago	Partnership Agreement	01 March 2000	Request for MFN waiver
Grenada	Partnership Agreement	01 March 2000	Request for MFN waiver
Guyana	Partnership Agreement	01 March 2000	Request for MFN waiver
Surinam	Partnership Agreement	01 March 2000	Request for MFN waiver

Source: European Union, DG Trade, web site information on EC Agreements

Barriers to trade in goods and services also have implications for FDI. While in the past it was felt that FDI mainly arose as a substitute for exports, now many studies have shown that, in fact, FDI and exports are often positively linked. This implies that countries' fear of losing jobs and employment resulting from the dislocation of firms need not be justified. If outward FDI creates extra trade flows with the host economies, jobs may actually be gained. The effects of inward FDI on the host economy's welfare often depend on the type of FDI. While trade openness and FDI seem prerequisites for economic development (UNCTAD, World Investment Report, 1999), it is FDI that leads to technical spillovers and industrial restructuring in the host country, without crowding out investment by domestic producers, that seems to result in substantial welfare gains (Blomstrom and Kokko, 1997).

Below we list a number of impediments to the 'right to establishment' which transatlantic FDI faces.

- National Security Issues

  In the US, the so-called Exon-Florio amendment of the Trade Act 1988 makes it possible to for the US government to screen mergers, acquisitions or take-overs when they are considered to affect or threaten 'national security'. This often acts as a deterrent to foreign investment. In effect, a significant number of EU firms' acquisitions in the US are subject to pre-screening.

• Foreign ownership restrictions

In many areas of economic activity the application for a grant or licence is still subject to nationality conditions. For example in the US fishery, a vessel has to be 75% owned by US nationals in order to be able to get a fishing licence.

• Conditional National Treatment

- Reciprocity: market access of foreign investors is often linked to access of national investors overseas.

- Performance requirements: local-content rules exist on both side of the Atlantic. These rules are often imposed to make sure that producers source locally and to favour domestic suppliers over foreign ones.

- Public subsidies: the granting of R&D subsidies is often linked to conditions of nationality which limits the eligibility for these subsidies to domestic parties

• Tax discrimination

- As an example, in the US Internal Revenue Service code it is stipulated that tax deductibility of interest payments is limited for interest payments made to 'related parties' not subject to the US tax. There is a clear discrimination between 'domestic' related parties and 'foreign' related parties. This takes away incentives for US firms or US subsidiaries of foreign firms to get loans from foreign banks. Implicitly this is a barrier on trade in financial services.

- Foreign Sales Corporations (FSC). Under this system, US firms have been obtaining favourable tax treatment to encourage the export of US manufactured goods. Recently this tax treatment has been condemned by the WTO because it is effectively an export subsidy.

8. Estimates of Welfare Gains

In this section we provide tentative estimates of EU and US welfare gains from liberalisation of trade based on the literature. We start by discussing the static gains from liberalisation. Our own trade-weighted estimates of liberalisation (following Messerlin, 2001) for the EU show that the gains from EU liberalisation towards the Americas (US, Canada, and Latin America) range between 0.7 and 0.9% of EU GDP in 1990. These benefits are annual gains accruing in perpetuity. The analysis is documented below. The elimination of trade barriers should result in increased EU employment of about one million extra workers. These figures correspond quite closely to those reported by the EU Commission in the 'New Transatlantic Market Place: an analysis of economic impact' (1998), where the gains of tariff liberalisation on industrial goods on a MFN basis would result in an increase of EU GDP by 0.7% annually.

However, these static welfare gains are believed to be underestimates of the true welfare gains for a number of reasons. First, the Messerlin (2001) study only includes a limited number of service sectors, due to a lack of available data. Highly protected sectors, such as maritime services and financial services, are left out. Furthermore the analysis is based on data for 1990. During the nineties, trade flows between the EU and US have increased. In Section 8.3 we argue that taking these and other issues into account is likely to push up welfare gains for the EU from transatlantic liberalisation. According to the most optimistic sources, the gains range between 1% and 2%.

Our trade-weighted estimates of static US welfare gains from tariff liberalisation in goods trade with the EU are based on the Hufbauer-Elliott (1994) study. Our results indicate an estimated increase of 0.2% of US GDP in 1990, which translates to an additional 0.3 million US jobs. How these results were obtained is discussed in detail in Section 8.2. Again this welfare figure corresponds quite well with the EU Commission's (1998) estimate. They calculated gains for the US of eliminating tariffs on industrial goods on a wide MFN basis that amounted to 0.5% of US GDP annually. According to that same study, the welfare gains of industrial tariff reduction for other North and South American countries were Canada 0.03%, Mexico 1.78%, and Latin-America 3.32% of GDP, respectively. Weighting these with the import shares of EU imports to total imports of each of these countries gives us a rough idea of the welfare gains that tariff liberalisation with the EU would entail, namely 0.001% of GDP for Canada, 0.02% for Mexico, and 0.3% of GDP for Latin America.

Recent studies however, give reason to believe that these welfare gains are an underestimation of the true welfare effects for a number of reasons. First, the studies only discuss tariff barriers on trade in goods. Since we know that services constitute the largest part of the US economy, including them in the analysis will push up welfare

gains. Also, non-tariff barriers and dynamic gains are not covered by these studies. Finally, the studies were carried out under constant returns to scale and on 1990 data. Allowing for increasing returns to scale and including the higher trade flows between the US and EU today, is likely to generate higher welfare gains. In Section 8.3 we discuss how taking these issues into account, results in tentative estimates of welfare gains for the US from liberalisation with the EU in the range of 0.5% to 1% of US GDP on an annual basis.

8.1 Welfare gains for EU, based on Messerlin (2001)

When perfectly competitive markets are assumed, Messerlin (2001) finds the cost of protection to EC consumers (on the basis of data in 1990) to be equal to €92-93 billion. Of that €51 billion the cost of protection is in, what Messerlin identifies to be, the 22 highly protected sectors in the EU. The remaining €41 billion is the cost of protection (tariffs and NTBs) on the rest of the goods sectors (excluding services). These estimates can be found in the second column of Table 17. Messerlin finds that 28% of the gains of liberalisation comes from agricultural goods, 43% comes from liberalising industrial goods and 27% comes from liberalising services. This suggests that the gains are especially high from further liberalisation in industrial goods. This may initially seem surprising, since the general notion is that tariffs are largest in agricultural and related products. The reason is that merely considering tariff barriers leads to the wrong conclusion. Messerlin (2001) finds that about 24% of the cost of protection (another way of describing the gains from liberalisation) is collected in the form of tariff revenues, whereas non-tariff barrier rents account for 30% of the cost of protection.

When allowing initial market structures in some sectors to substantially diverge form perfect competition, further benefits of liberalisation can be reaped from a reduction of existing market imperfections. Out of the original 22 highly protected sectors, Messerlin classifies 14 as imperfectly competitive. The cost of protection in this case amounts to €120 billion. While the amplification factor for industrial goods from perfect to imperfect competition is about 135%, for services it corresponds to a doubling of the costs of protection. For Messerlin, this is one of the reasons why welfare gains from liberalisation differ between the EU and the US. The US has long been a single market and the assumption of perfect competition is more likely to be appropriate. In contrast, the integration between EU member states is still very much in progress.

The estimates reported by Messerlin are made with respect to all trade partners. Our interest is in transatlantic trade liberalisation. Accordingly, we make a simple calculation using the shares of the US, Canada, and Latin America in EU imports as weights to qualify the welfare gains reported above. In Table 17, we present the trade-weighted welfare gains under perfect competition. These are the more conservative estimates. In Table 18, we present the more optimistic scenario by using Messerlin's estimates under imperfect competition.

From Table 17, we see that welfare gains from transatlantic liberalisation in goods and services for the EU amounts up to 0.7% of GDP (1990) or € 30 billion. As a result of

trade liberalisation, EU imports would rise and domestic prices would fall by 2.5%. From Table 18 we get that welfare gains in case of imperfectly competitive European sectors would be 0.9% of EU GDP (1990) or the equivalent of €51 billion.

8.2 Welfare gains for US, based on Hufbauer and Elliott (1994)

Hufbauer and Elliott (1994) estimated the cost of protection for the US in 1990 to be 1.2% of US GDP or $70 billion ($32 billion from elimination of all tariffs in 21 highly protected sectors and another $38 billion from the imposition of tariffs in other sectors). We trade- weight these welfare gains by the EU's imports in the US. In Table 18, we compare our estimates with those of Hufbauer and Elliott (1994). We find the welfare gains of US liberalisation with respect to EU imports to amount to 0.2% of US GDP or the equivalent of $15 billion. These figures correspond quite closely to those reported by the EU Commission in the 'New Transatlantic Market Place: an analysis of economic impact' (1998), where the US gains of tariff liberalisation on industrial goods on a most-favoured nations (MFN) basis would result in an increase of US GDP of 0.5% annually.

The gains reported in both these US studies are, however, likely to be underestimates since they only consider tariffs on goods. Further liberalisation gains lie in the reduction of non-tariff barriers and impediments to trade in services. A study that takes this into account is USITC (1999). The welfare gains for the US reported there from a reduction of all trade barriers in manufacturing, agriculture and services amount up to $12.4 billion based on data in 1996.

Table 16: Lower-bound estimated welfare effects of liberalising EU-Americas imports in 22 protected sectors in Europe under the perfectly competitive scenario

Imports liberalisation	Messerlin (2001) € billions	Total EU € billions D=A+B+C	US € billions A	Canada € billions B	Latin America € billions C
Total 22 sectors (1)					
Agriculture	15.1	6.35	5.7	0.34	0.31
Manufacturing	23.4	9.92	8.9	0.53	0.49
Services	13.0	5.46	4.9	0.29	0.27
Other sectors (2)	41.1	17.4	15.6	0.94	0.86
Total gains (1+2)	92.0	39.0	34.9	2.1	1.9
Induced increase in c.i.f. imports	98.0	41.25	37.0	2.25	2.0
Percentage of EU (1990) GDP	1.7%	0.7%	0.7%	0.04%	0.035%
Increase in workers (millions)	2.5 (a)	1	0.9	0.05	0.05
Changes in domestic prices	-6.16% (b)	-2.5%			

Source:Authors own compilation of Messerlin (2001) data table 3.2 p 47. We used aggregate EU import shares in 1990 of imports from US (38%), from Canada (2.3%) and from Latin America (2.1%) to weigh the effects of European liberalisation with respect to the Americas.

Notes: (a)To calculate the increase in the number of jobs, we multiplied total employment in the EU in 1990, 144 million workers by 1.7%, the increase in GDP. (b)The price effects were translated to liberalisation with the Americas only as follows. Total trade liberalisation for the EU would result in € 98 billion additional c.i.f. imports. From that we make a back-of-the-envelope calculation by saying that if liberalisation occurs with the Americas alone, imports increase by € 41.25 billion, resulting in a 2.5% price decrease.

Table 17: Upper-bound estimated welfare effects of liberalising EU-Americas imports in 22 protected sectors in Europe under the imperfectly competitive scenario

Imports Liberalisation	Messerlin (2001) € billions	Total EU € billions D=A+B+C	US € billions A	Canada € billions B	Latin America € billions C
Total 22 sectors (1)					
Agriculture	15.6	6.6	5.9	0.35	0.32
Manufacturing	31.6	13.3	12	0.72	0.66
Services	13.0	13	11.7	0.7	0.64
Other sectors (2)	41.1	17.4	15.6	0.94	0.86
Total gains (1+2)	120	50.8	45.6	2.76	2.52
Percentage of EU (1990) GDP	2.2%	0.92%	0.83%	0.05%	0.046%
Increase in workers (millions)	3.2	0.92	0.83	0.07	0.06

Source: Authors own compilation of Messerlin (2001) data table 3.4 p 60. We used aggregate EU import shares in1990 of imports from US (38%), from Canada (2.3%) and from Latin America (2.1%)

Table 18: Estimates of welfare gains from liberalisation in 21 highly protected US sectors in 1990

	Hufbauer & Elliot $ billions	EU(*) $ billions
Gains from the highly protected sectors	32	6.9
Gains from the other sectors	38	8.2
Total	70	15.1
Percentage increase in GDP (1990)	1.2%	0.2%
Induced increase of c.i.f. value of imports in the highly protected sectors	16.0	3.4
Increase in workers (millions)	1.54	0.3

Source: Authors' own estimations on the basis of Hufbauer and Elliott (1994), table 1.2 p 9.
Note: *We used the imports share of the EU in US imports (21.6% in 1990) as a weight to allocate welfare gains to liberalisation with the EU.

So far, all these studies on the US economy look at first-order direct effects of trade liberalisation. In Section 8.3, we will also turn to studies that have looked at the dynamic long-run gains that can result from increased R&D activity or technological progress as a result of trade liberalisation which are believed to push welfare gains up further.

8.3 Additional gains from liberalisation

There are a number of reasons why the welfare estimates listed above are lower-bound estimates of what are likely to be the true effects of liberalisation. For the US, the analysis was predominantly carried out under constant returns to scale. Allowing for increasing returns to scale is likely to push estimates up. For example, in a study assessing NAFTA through computed general equilibrium (CGE) models, US welfare gains went up by almost 1% from 1.67 to 2.55 %, with even higher increases for Canada and Mexico (Roland-Holst et al., 1992).

In addition, the studies listed above only included static gains from trade. It is, however, likely that an enlarged transatlantic market place would also give rise to gains of a more dynamic nature. For example, liberalisation and competition could yield increased incentives to undertake R&D, which in turn accelerates productivity growth on both sides of the Atlantic. Another example of dynamic gains is increased labour productivity. These dynamic gains are more difficult to quantify (see Baldwin and Venables, 1995, for a discussion of the literature) but could yield long-run growth benefits whose effects would dwarf short run static gains. For example, a study on the impact of the Canada-US free trade agreement on labour productivity suggests that tariff reductions helped boost manufacturing labour productivity by a compounded rate of 0.6 to 2.1% per year (Trefler, 2001). These gains are achieved not through scale effects or investment but through plant turnover and rising technical efficiency within plants. This suggests that productivity gains from liberalisation may actually be more important than standard gains. Hence dynamic gains are likely to a multiplicative impact and push up the static welfare estimates discussed above.

Liberalisation in the financial sector may also raise welfare estimates substantially. A recent study by Mattoo et al. (2001) constructed a measure of openness for financial services and telecommunications, sectors that were omitted in the Messerlin (2001) and Hufbauer-Elliott (1994) studies. This indicated that developing countries that fully liberalised these sectors tended to have annual GNP growth that was up to 1.5% faster during the 1990s. Of course, countries such as the EU and US have long had more open financial sectors than most developing countries and consequently the predicted gains would be smaller. Francois and Schuknecht (1999) have also confirmed this strong link between financial sector openness and growth.

Increasing returns to scale in production, dynamic welfare gains, and gains from the liberalisation of services are important factors mentioned in the literature that should be included when discussing welfare gains from liberalisation. Adding up their contributions, as suggested in the literature mentioned above, leads to (what we consider to be) upper-bound estimates of EU GDP growth gains ranging between 1% and 2%.

The upper-bound welfare gains from transatlantic liberalisation can usefully be compared to the estimates reported in the original Cecchini report on the implementation of the 1992 single market programme. There it was estimated that removal of internal barriers in the EU would increase GDP by between 3% and 4%. The European Commission's (1998) study on the welfare effects of trade liberalisation

with the US, when incorporating non-tariff barrier elimination and the liberalisation of the service sector, finds a total gain of 1.1% of EU GDP. It needs to said, though, that this study did not allow for long-run indirect effect of trade liberalisation.

For the US, welfare gains from opening to the EU are also likely to rise once increasing returns to scale are incorporated. In a study on the impact of NAFTA, resulted in a additional 1% increase of GDP for the US over-and-above the gains under constant returns to scale (Roland-Holst et al., 1992). If we consider that the EU is an even larger trade partner for the US than its NAFTA partners, allowing for increasing returns to scale in production is likely push up the static welfare gains for the US from liberalisation with the EU. Taking into account the potential gains from liberalisation for the financial services and considering the labour productivity gains that liberalisation has been shown to generate (Trefler, 2001), a more optimistic estimate of welfare gains for the US would range between 0.5% and 1% of GDP.

The predominant reason for the smaller welfare gains on the US side is the higher level of market segmentation that exists today in the EU compared to the US. The additional gains being reaped by the EU are a result of the pro-competitive effects of trade liberalisation on the internal marketplace.

9. An Action Plan for Closer Transatlantic Cooperation

At the heart of transatlantic trade is the relationship between the EU and US, the two largest industrial economies in the world. Much has already been achieved in liberalising trade and investment between the regions, but there are still opportunities for further mutual benefits.

The estimates of potential welfare gains from EU-US liberalisation in the literature differ depending on the scope of the studies surveyed. Lower-bound estimates of welfare gains from transatlantic liberalisation for the EU lie between 0.7% and 0.9% of GDP, while the most optimistic estimates range between 2% and 3% GDP growth. For the US, the lower-bound estimates we found from liberalising with the EU are around 0.2% of GDP, with the most optimistic estimates ranging between 0.5% and 1.5% of US GDP.

For Canada, Mexico, and Latin-America the welfare gains of tariff liberalisation with the EU are less well documented in the literature. When we trade-weight the estimates in the literature available for the effects of MFN tariff liberalisation for these countries we get a rough indicator of about 0.001% of GDP welfare gain for Canada, 0.02% for Mexico, and 0.3% of GDP for Latin America.

We conclude our report by prioritising the targets for transatlantic discussion :

- The highest barriers to trade between the two regions are in the agricultural industries. The average MFN tariff on agri-goods in the EU is 17.3% and in the US is 10.6%. Agricultural reform is extremely important to the EU, both internally and in terms of its international trade. Agriculture is once again a central element of the multilateral trade negotiations and both regions have an interest in lowering trade barriers. As agriculture is a relatively small sector of the economies of both the EU and US, agricultural liberalisation may bring with it relatively modest gains. The effects for developing countries of liberalising agricultural trade barriers could however be substantial.
- In contrast, trade in manufactures is much larger. While the average tariffs on trade in manufactures between the EU and the US are low (the average MFN tariff for the EU being 4.2% and 5% for the US), the high volume of trade guarantees that further reductions in these barriers will still yield significant benefits.
- But tariffs are not the only impediment to trade. Indeed, as tariffs have declined, they have been supplanted by contingent protection (antidumping, countervailing duties, and safeguard measures) and other barriers, undermining the achievements of multilateral negotiations. Contingent protection now accounts for around 30% of the total cost of protection. A bilateral understanding between the US and the EU could form the cornerstone of a global

agreement on limiting the unilateral use of these trade restrictions. For the US, the welfare cost of the active antidumping cases in one year has been estimated to be $4 billion. No estimate is available for the EU at present. Regulatory barriers to trade in goods and services are paramount. Mutual access to the process of developing regulations would be beneficial.

- The share of trade in services is growing fast. Many services have moved from being non-tradeable to a tradeable. Protection is particularly high in maritime services, financial, and telecommunications services. Welfare gains from liberalisation are potentially large, especially in the financial sector.
- Investment flows between the US and EU are large and growing. Efforts need to be made on both sides of the Atlantic to ensure that foreign-owned firms face the same regulatory environment as indigenous companies and have access to the same markets. This is particularly important in the service sectors. The EU's Single Market Programme provides guidance on how to proceed with liberalising these sectors, and lessons learnt from this programme could be usefully applied to EU-US relations.
- While Latin America accounts for a much less significant share of trade with the EU, its markets are growing and will, over time, become increasingly important to the EU.
- Traditional barriers to trade between the EU and these countries are still significant and impede Latin American access to EU markets in a number of areas important for their development. Liberalisation of this trade will be mutually beneficial. A series of initiatives, in addition to those already in place between the EU and Latin American nations should be investigated. Further, the interaction between these and regional integration schemes in the Americas should be studied to make sure that the costs of trade diversion are avoided
- Non-tariff barriers between the EU and Latin American countries should be identified and efforts undertaken to eliminate these in parallel with the more traditional trade liberalisation that is taking place.

References

M. R. Agosin and R. Mayer (2000), "Does Foreign Investment in Developing Countries Crowd in Domestic Investment?" UNCTAD Discussion Paper No. 146, Geneva.

R. Baldwin (1993), "A Domino Theory of Regionalism." CEPR Discussion Paper No. 857, London.

R. Baldwin and A. J. Venables (1995), "Regional Economic Integration." In G. Grossman and K. Rogoff, (eds.), Handbook of International Economics, vol. III, Amsterdam: North-Holland.

R. Baldwin and J. Francois (1997), "Preferential Trade Liberalization in the North-Atlantic." CEPR Discussion Paper No. 1611, London.

R. Baldwin, J. Francois, and R. Portes (1997), "EU Enlargement: Small Costs for the West, Big Gains for the East." Economic Policy, pp. 127-176.

R. Baldwin and R. Forslid (2000), "Trade Liberalization and Endogenous Growth: A q-Theory Approach." Journal of International Economics, vol. 50, pp.497-517.

R. Barro, G. Mankiw and X. Sala-I-Martin (1995), "Capital Mobility in Neo-Classic Models of Growth." American Economic Review, vol. 85(1), pp. 103-115.

M. Blomström and A. Kokko (1997), "How FDI Affects Host Countries." World Bank Policy Research, Working Paper No. 1745, World Bank, Washington DC.

J. Budd, J. Konings and M. Slaughter (2002), "International Rent-sharing in Multinational Firms." NBER Discussion Paper No. 8809.

R. Cameron and K. Loukine (2001), “Canada-European Union Trade and Investment Relations.” pp. 1-46

M. Casario and K. M. Dhadkhah (1995), "1992-Its Impact on US trade. A VAR Approach." Applied Economics, vol. 27(1), pp 1-10.

D. Collie and H. Vandenbussche (2001), "Trade, Location and Unions.",CEPR Discussion Paper No. 2772, London.

P. Dee (2000),"Trade in Services", paper prepared for conference on Impacts of Trade Liberalization Agreements on Latin-America and the Inter-American Development Bank.

J. De Gregrio (1992), "Economic Growth in Latin America." Journal of Development Economics, vol. 39, pp. 59-84.

J. De Gregrio and P. Guidotti (1995), "Financial Development and Economic Growth."

World Development, vol. 23, no. 3, pp. 433 448.

P. O. Demetriades and K. A. Hussein (1996), "Does Financial Development Cause Economic Growth? Time Series Evidence From Sixteen Countries." Journal of Development Economics, vol. 51(2), pp. 386-411.

W. Easterly (1989), "Policy Distortions, Size of Government, and Growth." NBER Working Paper No. 3214, Cambridge, MA.

W. Easterly (1993),. "How Much Do Distortions Affect Growth?" Working Paper World Bank, Washington, DC.

European Commission (2001a), Report on United States Barriers to Trade and Investment.

European Commission (2001b), "USA General Features of Trade Policy." Sectoral and Trade Barriers Database.

European Commission (2000), Foreign Direct Investment Yearbook 2000.

European Commission (2001), Foreign Direct Investment 1996-1999. DG Trade.

European Commission for Latin America and the Caribbean (1999), Foreign Investment in Latin America and the Caribbean.

European Commission (1998),New Transatlantic Market Place: analysis of Economic Impact.

Eurostat (2001), News Release, 8 November 2001.

J. F. Francois (1995), "Dynamic effects of Trade in Financial Services." International Economic Journal, vol. 9(3), pp. 1-14.

J. F. Francois and B. Hoekman (1999), "Market Access in the Service Sectors." Tinbergen Institute, manuscript.

J. F. Francois and I. Wooton (2001a), "Trade in International Transport Services: The Role of Competition." Review of International Economics, vol. 9(2), pp. 249-261.

J. F. Francois and I. Wooton (2001b), "Market Structure, Trade Liberalization, and the GATS." European Journal of Political Economy, vol. 17(2), pp. 389-402.

J. F. Francois and L. Schuknecht (1999), "Trade in Financial Services, Procompetitive Effects and Growth Performance." CEPR Discussion Paper No. 2144.

GTAP 4 (1998), see: R. A. McDougall, A. Elbehri, and T. P. Truong.

M. P. Gallaway, B. A. Blonigen, and J. E. Flynn (1999), "Welfare Costs of the US Antidumping and Countervailing Duty Laws." Journal of International Economics, vol. 49, pp. 211-244.

G. M. Grossman and E. Helpman (1991), Innovation and Growth in the Global Economy. Cambridge: MIT Press.

B. Hindley (1999), "New Institutions for Transatlantic Trade." International Affairs vol. 75(1), 45pp.

B. Hoekman (1994), "Conceptual and Political Economy Issues in Liberalizing Transactions in Services." In A. Deardorff and R. Stern (eds.), Analytical and Negotiating Issues in The Global Trading System, Studies in International Trade Policy, Ann Arbor, University of Michigan Press, pp 501-38.

B. Hoekman (1995), "Tentative First Steps: An Assessment of the Uruguay Round Agreement on Services." CEPR Discussion Papers no 1150, London.

B. Hoekman, F. Ng, and M. Olarreaga (2001), "Tariff Peaks in the Quad and Least Developed Country Exports." CEPR Discussion Paper No. 2747, London.

G. C. Hufbauer and K.A. Elliott (1994), "Measuring the Costs of Protection in the United States." Institute for International Economics: Washington DC.

Inter-American Development Bank (IDB) (1999), Characteristics of Foreign Direct Investment in Latin America. February.

International Financial Services London (2002), Impact of Liberalising Financial Services, January.

J. J. Kastner and R. K. Pawsey (2002), "Harmonising Sanitary Measures and Resolving Trade Disputes Through the WTO-SPS Framework. Part I: A Case Study of the US-EU Hormone Treated Beef Dispute." Food Control 13(1), pp. 49-55.

R. G. King and R. Levine (1993), "Finance and Growth: Schumpeter Might Be Right." Quarterly Journal of Economics, vol. 108 (3), p 717-37.

J. Konings and H. Vandenbussche (2002), "Does Antidumping Protection Raise Market Power? Evidence from EU Firm-level Data." Working Paper, Catholic University of Leuven

M. Kono, P. Low, M. Luanga, A. Mattoo, M. Oshikawa, and L. Schuknecht (1997), "Opening Markets in Financial Services and The Role of The WTO." Geneva, WTO Special Study.

S. Lariviere and K. Meilke (1999), "An Assesment of Partial Dairy Trade Liberalization on The USA, EU15 and Canada." Canadian Journal of Agricultural Economics, vol. 47(5), pp. 59-73.

R. Levine (1997), "Financial Development and Economic Growth: Views and Agenda." Journal of Economic Literature, vol. 35, pp. 688-726.

A. Levinson (1997), "Environmental Regulations and Industry Location: International and Domestic Evidence." In J. Bhagwati and R. E. Hudec (eds.), Fair Trade and Harmonization: Prerequisites for Free Trade? vol. 1, Cambridge, MA: MIT Press.

R. A. McDougall, A. Elbehri, and T. P. Truong (1998), "Global Trade Assistance and Protection: The GTAP 4 Data Base." Center for Global Trade Analysis, Purdue University

J. Markusen (1989), "Trade in Producer Services and in Other Specialised Intermediate Inputs." American Economic Review, 79:1, pp. 85-95.

J. Markusen and A. J. Venables (1999), "FDI as a Catalyst for Industrial Development." European Economic Review, vol. 43, pp. 335-336.

A. Mattoo, R. Rathindran, and A. Subramanian (2001), "Measuring Services Trade Liberalisation and Its Impact on Economic Growth: An Illustration." World Bank Working Paper No. 2655.

G. McGuire and M. Schuele (2000), "Restrictiveness of International Trade in Banking Services." In C. Findlay and T. Warren (eds.), Impediments to Trade in Services: Measurement and Policy Implications. London: Routledge, chapter 12.

P. A. Messerlin (2001), "Measuring the Cost of Protection in Europe." Institute for International Economics: Washington, DC.

M. Odedokun (1996), "Alternative Econometric Approaches for Analysing the Role of the Financial Sector in Economic Growth: Time Series Evidence From LDCs." Journal of Development Economics, vol. 50(1), pp. 119-146.

T. Prusa (1997), "The Trade Effects of US Antidumping Actions." In R. Feenstra (ed.), The Effects of US Trade Protection and Promotion Policies. Chicago: University of Chicago Press, pp. 191-214.

D. Puga and A. J. Venables (1999), "Agglomeration and Economic Development: Import Substitution Versus Trade Liberalisation.." Economic Journal, vol. 109, pp. 292-311.

D. Roland-Holst, K. Reinert and C. Schiells (1992), "North America Trade Liberalisation and The Role of Non-tariff Barriers." USITC publication 20436.

G. Sampson and R. H. Snape (1985), "Identifying the Issues in Trade in Services." World Economy, vol. 8, pp. 171-182.

J. Schott (1994), "The Uruguay Round: An Assessment." Institute for International Economics: Washington, DC.

H. Siebert, R. Langhammer, and D. Piazolo (2001), "TAFTA: Fuelling Trade Discrimination or Global Liberalization?" Kiel Institute of World Economics, Working Paper Series.

A. Smith and A. J. Venables (1988), "Completing the Internal market in the European Community: Some Industry Simulations." European Economic Review, vol. 32, pp. 1501-1525.

D. Trefler (2001), "The Long and Short of The Canada-US FTA." NBER Working Paper, No. 8293.

UNCTAD (1999), World Investment Report, United Nations publication, Geneva.

USITC (1999), "The Economic Effects of Significant US Import Restraints." Publication 3201, May.

H. Vandenbussche, J. Konings and L. Springael (1999), "Import Diversion under European Antidumping Policy." NBER Discussion Paper, N°. 7340.

H. Vandenbussche, R. Veugelers and J Konings (2001),"Unionization and European Antidumping protection", Oxford Economic Papers 53, pp. 297-317.

H. Vandenbussche and X. Wauthy (2001),"Inflicting injury through product quality: how EU antidumping policy disadvantages European producers", European Journal of Political Economy, vol 17, pp. 101-116.

R. Veugelers and H. Vandenbussche (1999), "European Antidumping Policy and the profitability of national and international collusion", European Economic Review, vol. 43, pp. 1-28.

J. Viner (1950), “The Customs Union Issue.” New York: Carnegie Endowment for International Peace.

R. Wacziarg (2001), "Measuring the Dynamic Gains from Trade." World Bank Economic Review, vol. 15(3), pp. 393-429.

T. Warren and C. Findlay (1999), "How Significant are The Barriers? Measuring Impediments to Trade in Services." Paper presented at 'Services 2000' at the University Club, Washington, DC, June.

WTO (2000), Trade Policy Review Report on the US. Washington, DC.

WTO (2001), Trade Policy Review Report on the EU. Washington, DC.