Protectionist Responses to the Crisis: Global Trends and Implications[1]

By Matthieu Bussière, Emilia Pérez-Barreiro, Roland Straub, and Daria Taglioni[2]

Abstract

In this paper, we take a systematic look at recent trends in global protectionism and at the potential implications of a protectionist backlash for economic growth, using results from the recent economic literature and new model simulations. We find that, while actual protectionist measures to restrict trade through tariff and non-tariff barriers have risen only moderately so far, public pressure for more economic protection has clearly increased since the mid-2000s. The stronger calls for protectionism have intensified since the start of the financial crisis. However, our model based simulations suggest that the impairment of the global flow of trade would hamper the recovery process from the crisis as well as the long-term growth potential of the global economy. At the same time, it is unlikely that protectionism would help correcting existing current account imbalances. Moreover, the countries implementing protectionist measures should expect a deterioration of their international competitiveness, which would further affect the potential for longer term real GDP growth.

Key words: Protectionism, trade, financial crisis, competitiveness, World Trade Organisation, global imbalances.

JEL: F13, F15, F21, F53.

Word count: 8125 (excluding bibliography)

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[1] The views expressed in this paper do not necessarily represent those of the European Central Bank (ECB). We would like to thank F. Di Mauro, E. Dorrucci, M. Fratzscher, H.-J. Klöckers, G. Noblet, and C. Thimann for helpful comments and discussions at various stages of the project. This paper benefited from contributions and suggestions by T. Bracke, K. Forster and A. Popov.

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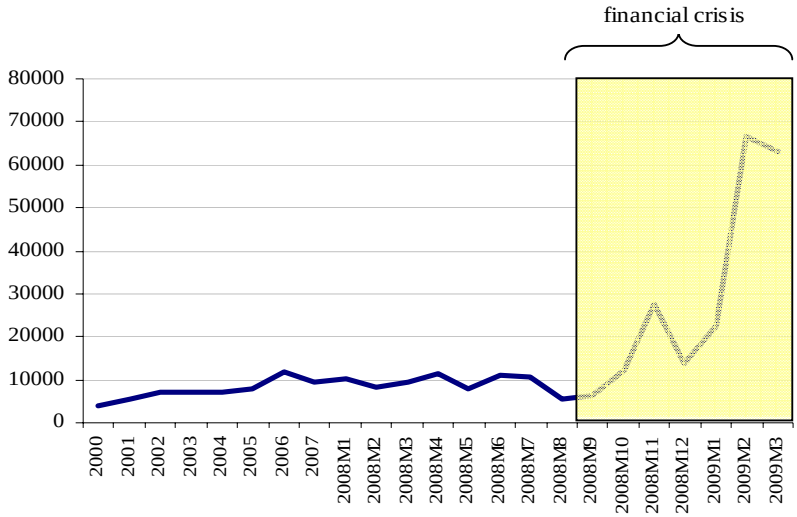
1 Introduction

Since the intensification of the crisis in September 2008, the issue of trade protectionism has started receiving considerable attention in the media, reflecting a perceived rise in protectionist *pressures* in the world (the number of press articles including the word "protectionism" has first doubled, before increasing by a factor 6 or 7 as of the start of 2009, see Figure 1). Such escalation of protectionist pressures may trigger high-intensity protectionism as a reaction to the crisis. Indeed some incipient but worrisome signs have already surfaced. Shortly after the commitment made by G20 leaders on November 15, 2008, to *"refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing World Trade Organization (WTO) inconsistent measures to stimulate exports"*, 17 out of these 20 nations have actually announced protectionist measures (see Gamberoni and Newfarmer, 2009). According to the WTO (2009a), by August 2009 the announced measures where implemented by at least 13 of the G20 and concerns have been increasingly raised about "buy/invest/lend/hire local" requirements officially or unofficially attached to the recent fiscal stimulus programmes and industrial and financial support programs, which owing to their nationalistic appeal could become targets for retaliation and proliferate. Fears of rising protectionism come at a delicate time for the world economy, as global trade flows have considerably weakened since the end of 2008: not only has world trade been hit severely by the drop in world demand but, also, trade itself has contributed to propagate the crisis across borders, making it a truly global phenomenon. Against this background, a resurgence of trade protectionism would significantly impair the recovery process, by further affecting already weak trade flows and global demand.

The consequences of a rise in protectionism are potentially very substantial. The outburst of protectionism that followed the 1929 market crash is considered to have contributed to the propagation of the crisis and to a marked worsening of the Great Depression (Kindleberger, 1986). Between 1929 and 1933, world trade followed a downward spiral and ultimately contracted by 66% (Figure 2). The protectionist policies implemented at the time of the Great Depression took a variety of forms. The most cited example of such measures is perhaps the sharp increase in tariffs on US imports introduced by the Smoot-Hawley Act on 17 June 1930, but many other non-tariff measures were introduced, including quotas, "competitive" exchange rate devaluations, export subsidies, and other indirect measures (Eichengreen and Irwin, 2009).

Figure 1: Importance of the Word "Protectionism" in the News.

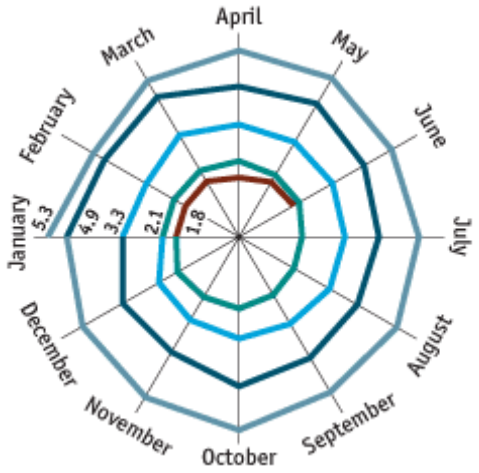
(number of articles including the word "protectionism"; annual frequency between 2000 and 2007, annualised monthly frequency since January 2008)



Source: Dow Jones / Factiva. Latest observation: March 2009.

Figure 2: The Downward Trade Spiral During the Great Depression.

(World Trade, 1929-33, current US dollar, billions)



Source: League of Nations' World Economic Survey, 1932-33, and The Economist.

Importantly, the possibility that a similar event will materialise in the aftermath of the current crisis should not be ruled out. Recent analysis suggests that, contrary to common belief, trade protection in the 1930's was less an instance of special interest run amok than the result of the implementation of second-best macroeconomic policy management at a time when monetary and fiscal policies became severely constrained (Eichengreen and Irwin, 2009).

The intended contribution of the paper is twofold. First, it assesses recent developments in trade in goods and identifies potential sources or calls for future protectionism.[3] It does so by presenting a battery of indicators, including estimated measures of protection, which have not been published previously. The paper also presents evidence on recent protectionist pressures and measures to identify the most recent trends. Second, the paper sets out to evaluate the impact of protectionism using model based simulations.

The main findings of the paper are the following. First, while actual protectionist measures to restrict trade through tariff and non-tariff barriers have risen only moderately so far, public pressure for more protection has clearly increased since the mid-2000s. Second, as model based simulations suggest, the impairment of the global flow of trade would hamper the recovery process from the crisis as well as the long-term growth potential of the global economy. At the same time, it is unlikely that protectionism would help correcting existing current account imbalances. Moreover, the countries implementing protectionist measures should expect a deterioration of their international competitiveness, which would further affect the potential for longer term real GDP growth

The rest of the paper is organised as follows. Section 2 assesses global trends in trade and financial liberalisation by reviewing selected indicators of protectionism over the past two decades. Section 3 turns to protectionist pressures, including some very recent announcements. Finally, Section 4 presents simulations results aiming to evaluate the effect of protectionism on international trade, output and competitiveness. Section 5 concludes.

2 Trade and financial liberalisation since the 1990's

The current financial crisis has challenged many well established economic notions. Yet, the foundations of economic growth theory remain fully valid. Countries' long term growth and welfare continue to hinge on an efficient allocation of resources and on the existence of an environment conducive to innovation. Properly regulated free markets contribute to this process by ensuring an efficient allocation of the world's scarce resources to the most productive activities across the world and by a sharpening of the global competitive environment.[4]

Economic developments over the past two decades confirm the growth and welfare enhancing benefits of open markets. Over this period of time, unprecedented growth of world GDP has been associated with rapidly growing interdependence of economies worldwide via an increase in cross-border transactions in goods and services, natural resources, capital and labour. Moreover, over these years, important countries and regions previously marginally involved in international transactions, have rapidly become important actors in global economic relations. Technical progress, the surge in information and communication technology, and a sizable reduction in tariffs and non-tariff barriers

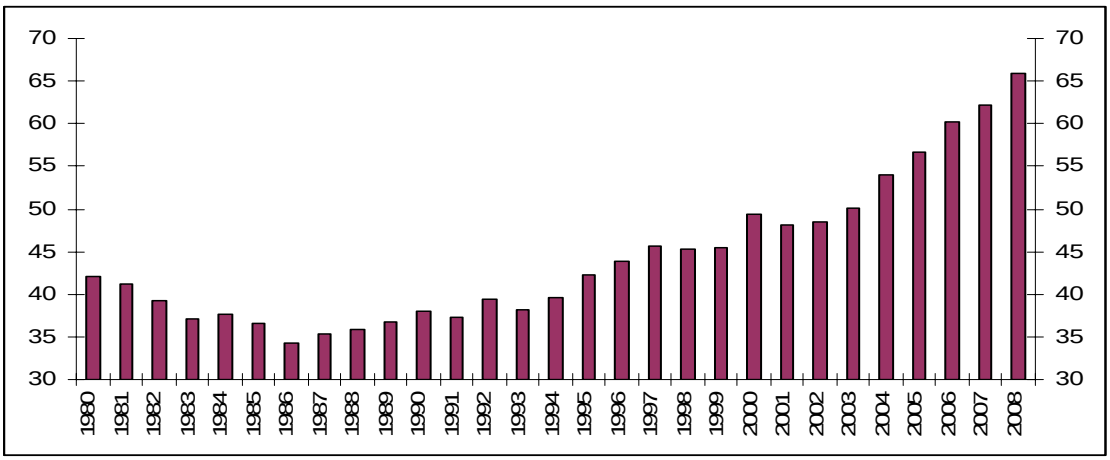
[3] For a corresponding discussion on trade in services and financial flows see Bussiere, Perez, Straub and Taglioni (2009). For an in-depth analysis of trade protection in services see Chen and Novy (2008), Conway and Nicoletti (2006), Dee, Hanslow and Phamduc (2003), Mattoo & Gootiiz (2009), Miroudot and Shepherd (2009), Nordas, Miroudot and Lanz (2009) and OECD (2009). For an assessment of the degree of protectionism in financial services the reader is referred to Chinn and Ito (2005), Quinn (2003), Mody and Murshid (2005), Miniane (2004) and Edwards (2005).

[4] All else being equal, economic theory suggests that stronger international competition should bring about lower costs for firms and lower prices of traded goods for consumers worldwide while also increasing the availability of new product varieties. Moreover, it should promote technological advances and knowledge transfers as well as productivity and economic growth.

have resulted in a massive fall in the cost of transporting goods, services and information, as well as a sharp increase in cross-border activities, all of which have encouraged a further rapid integration of economies worldwide. More and more goods and services have become tradable, and domestic companies have become increasingly involved in international trade. Indeed the dynamism of world trade is self evident. World trade has grown significantly faster than worldwide output, by around one and a half times since 1991 (Figure 3), and the degree of openness of many countries – measured by the sum of total exports and total imports as a ratio of GDP – has increased significantly.

Figure 3: World Trade as a Percentage of World Output.

Percents



Source: IMF World Economic Outlook.
Notes: Trade refers to the sum of exports and imports of goods and services. Data for 2008 are estimated.

The rest of this section presents evidence of the great roll-back of protectionism since the early 1990's focusing on developments of barriers to trade. The main message is that a lot of efforts have been deployed to decrease the level of protectionism, which partly explains why world trade has risen faster than world output. However, progress has been uneven across countries and across sectors. In particular, tariffs remain higher among emerging market economies than in advanced countries; they also tend to be higher for agricultural goods than for manufactured goods.

Barriers to trade can be measured through different types of indicators, which are often classified as "quantitative" or "qualitative" measures. "Quantitative" measures include mainly tariffs, but also import quotas and limitations, subsidies and exchange controls.[5] "Qualitative" barriers, by contrast, refer more broadly to government policies and regulations that directly or indirectly hinder free trade.

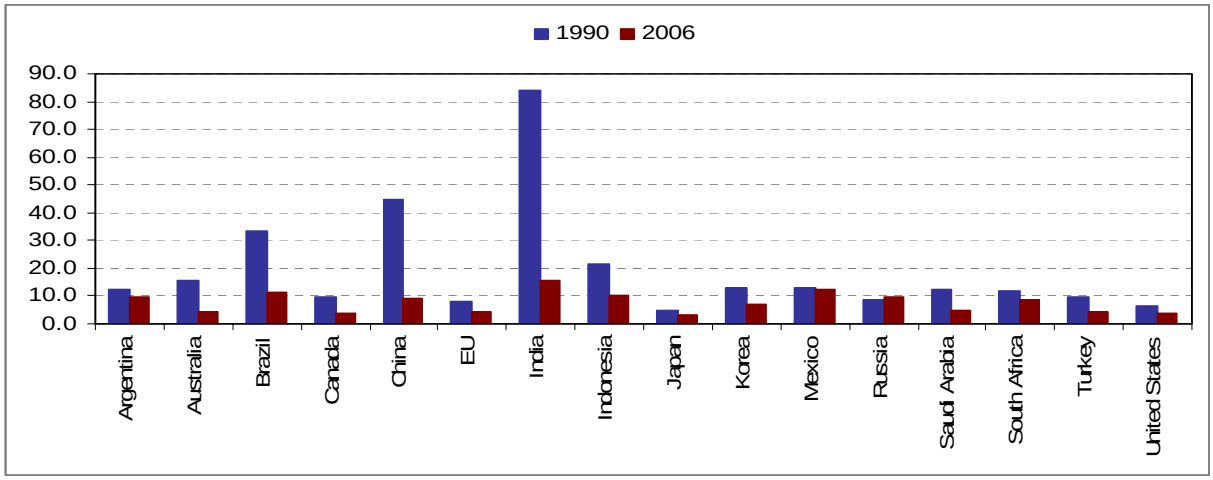
2.1 Quantitative measures

Tariffs represent one of the most important components of the quantitative measures that restrict international trade. While their precise quantification is methodologically problematic (see Bouët et al., 2008, for a discussion) the overall assessment of market openness trends over time is robust to changes in the chosen methodology. Against this background, one prominent statistical series to evaluate tariffs at the world level is the one reported by the United Nations Conference on Trade and Development (UNCTAD) in the Trade Analysis and Information System (TRAINS). According to it,

[5] In this paper we discuss tariffs. For a corresponding discussion on other indicators of other quantitative barriers see Bussiere, Perez, Straub and Taglioni (2009).

tariffs fell over the period 1990-2006 both in major advanced economies (the United States, the EU and Japan) and in large emerging economies such as Brazil, India and China, as shown in Figure 4.

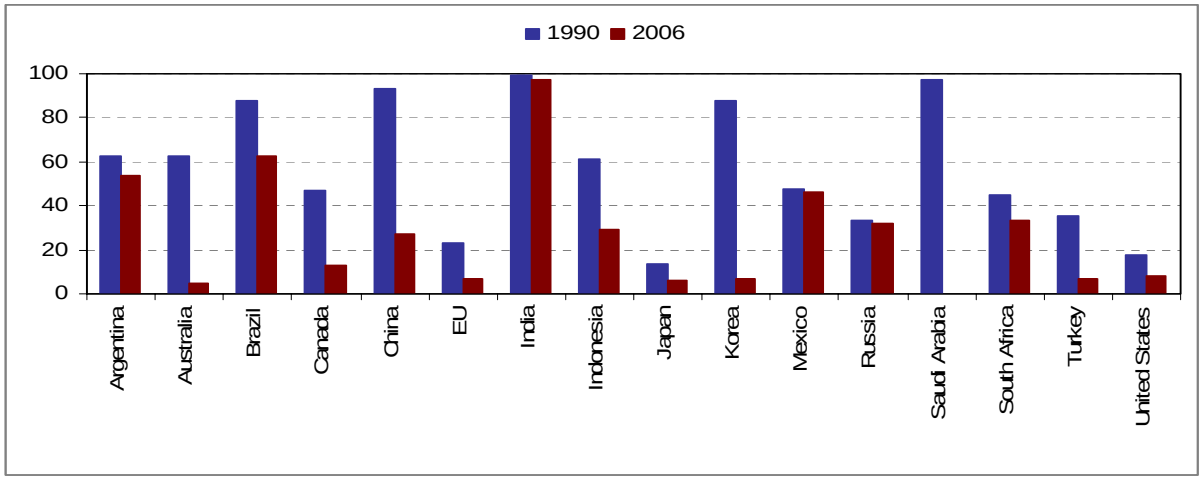
Figure 4 : Average of the MFN Applied Import Tariff Rates on Manufactured Goods.
Percents



Source: UNCTAD Handbook of Statistics 2008.
Notes: 1990 data is not available for Argentina (1992), Australia (1991), Canada (1993), China (1992), Mexico (1991), Russia (1993), Saudi Arabia (1994) and Turkey (1993).
2006 data is not available for India and Russia, therefore 2005 data was used instead.

While the gap with advanced economies has decreased since the early 1990s, tariffs are still markedly higher in emerging economies. In the latter around 60% of the tariffs are above 10%, while in developed countries this share is below 20% (Figure 5). Moreover, contrary to developed economies, emerging countries still apply high tariffs to most manufactured goods. This compounded to the fact that emerging markets have gained market share since 1990, leads to the perception that worldwide market protection might have increased over the period under analysis. =

Figure 5 : Percentage of Manufactured Goods Subject to MFN Import Tariffs above 10%.
Percents

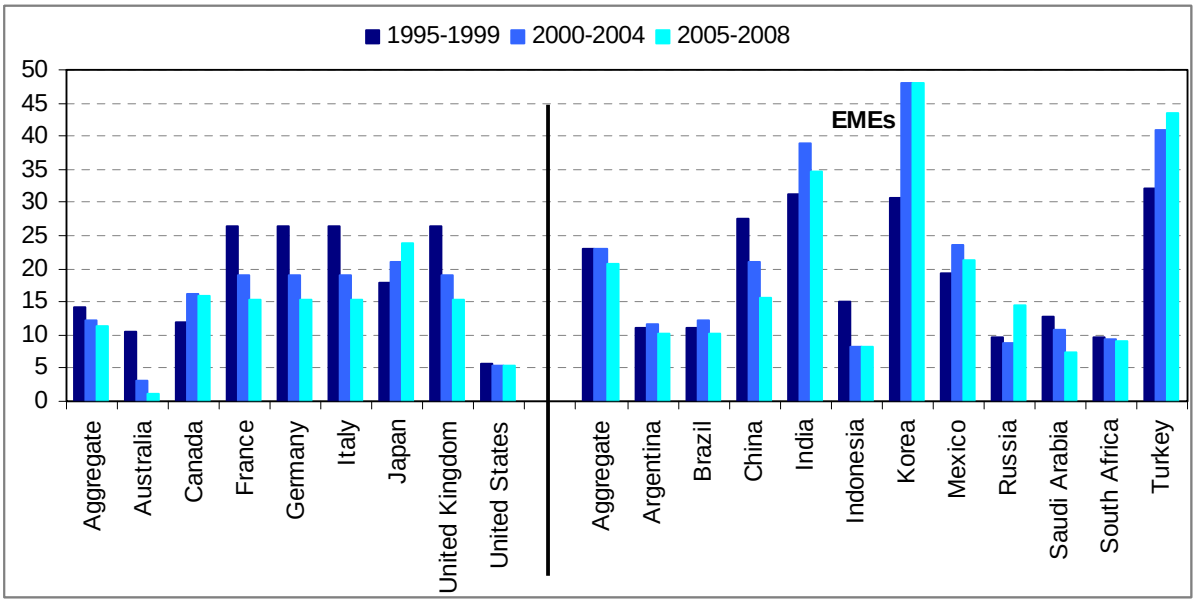


Source: UNCTAD Handbook of Statistics 2008.
Notes: 1990 data is not available for Argentina (1992), Australia (1991), Canada (1993), China (1992), Mexico (1991), Russia (1993), Saudi Arabia (1994) and Turkey (1993).
2006 data is not available for India and Russia, therefore 2005 data was used instead.

Moreover, as progress in tariff reduction has varied considerably across sectors, developments in average tariffs may hide important differences in the treatment of individual products. A declining average may be misleading if countries maintain very high tariffs on certain strategic products. Accordingly, from the sectoral breakdown it emerges that tariffs on agricultural goods are higher (Figure 6) than tariffs on non-agricultural goods (Figure 7).

Figure 6: MFN applied tariff - Simple Average - Agricultural Goods (%).

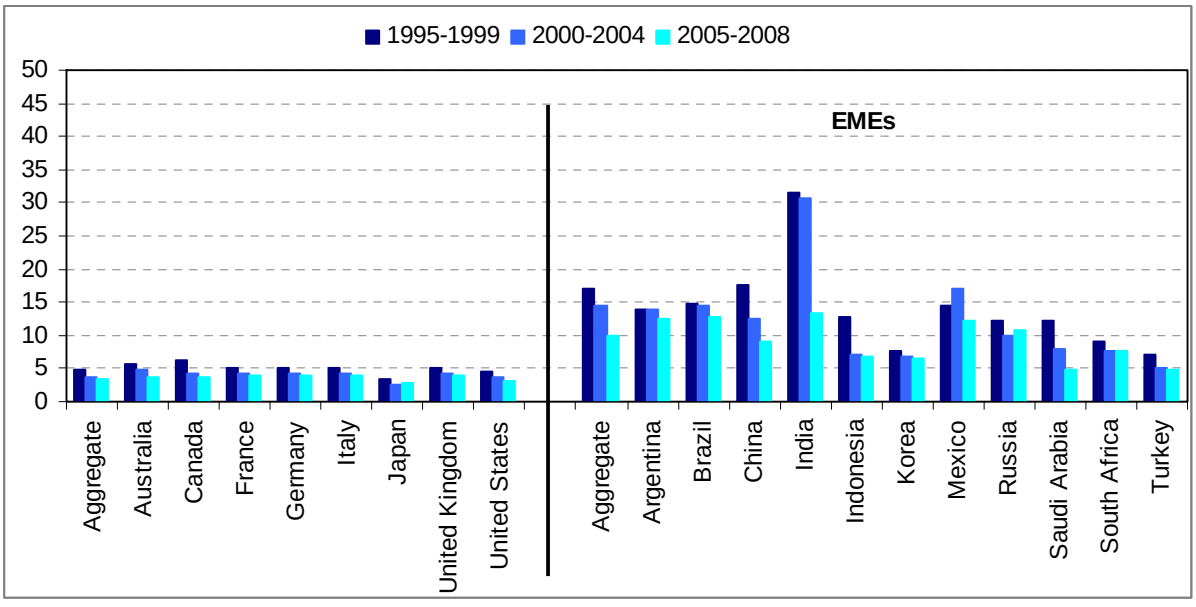
Percents



Sources: World Trade Indicators 2008 and ECB calculations.
Notes: The aggregates were computed using 2008 GDP weights converted to the same currency using purchasing power parity.

Figure 7: MFN applied tariff - Simple Average - Non-Agricultural Goods (%).

Percents



Source: UNCTAD Handbook of Statistics 2008.
Notes: 1990 data is not available for Argentina (1992), Australia (1991), Canada (1993), China (1992), Mexico (1991), Russia (1993), Saudi Arabia (1994) and Turkey (1993).

2006 data is not available for India and Russia, therefore 2005 data was used instead.

However, tariffs only provide a very partial indication of the degree of protectionism. Countries are unlikely to increase tariffs by a large amount as these are capped through international agreements in the context of the World Trade Organization (WTO); instead, many recent protectionist measures are more likely to come in the form of non-tariff measures. Non-tariff barriers are very difficult to monitor and analyse as they include a wide range of requirements which vary from country to country. Moreover, even in those cases in which such barriers are in principle easy to identify – as for export subsidiess – they may take very indirect forms whose application however constitutes an obstacle to trade (such as funding for productivity-enhancing research programmes).

2.2 Non-tariff measures

As non-tariff measures include various government policies and regulations that cannot be quantified directly, official data on this type of barriers are indeed very scarce and mainly confined to cross-country comparisons at a given point in time, which does not allow an assessment of trends over time.[6] Some private institutions provide quantified indices, such as the ratings developed and provided by the Fraser Institute.[7] Although these measures are subject to caveats, they constitute useful proxies with which to assess non-tariff barriers.

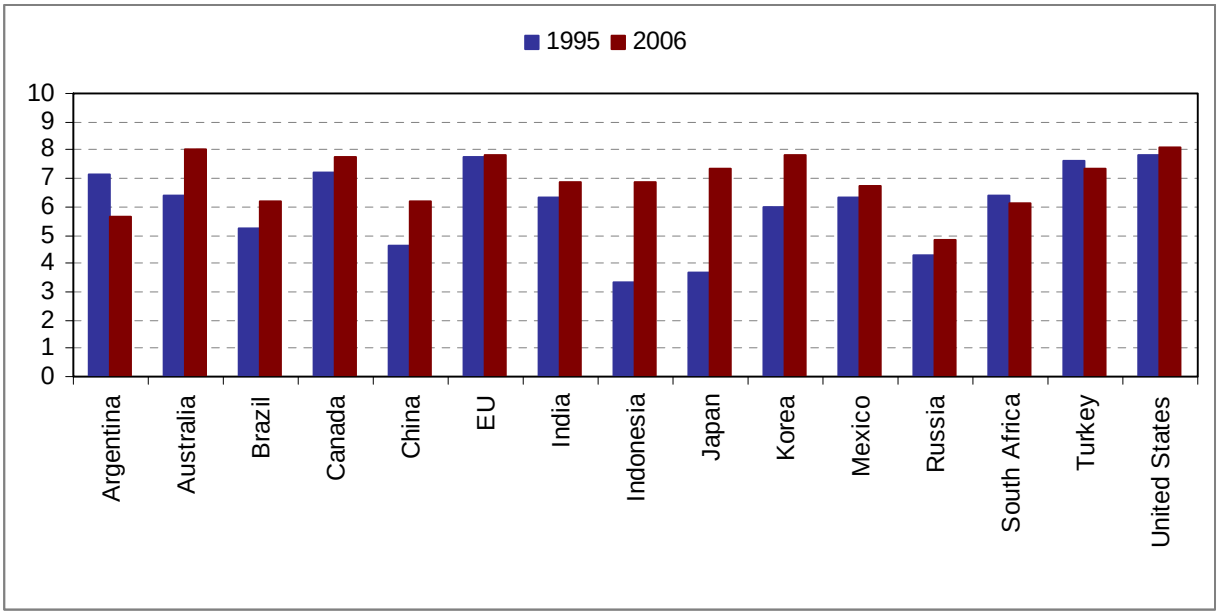
Indicators provided by the Fraser Institute suggest that non-tariff barriers have remained broadly stable in both advanced and emerging economies since 1995, with important differences across countries: regulatory measures appear stronger in EMEs than in advanced economies (Figure 8). These indicators proxy non-price and non-quantity-related import barriers, providing a summary measure of hidden import barriers that ranges between 0 and 10, whereby a higher score represents a higher degree of freedom to trade. The strength of non-tariff barriers is quantified via surveys, in which interviewees rate the extent to which they agree with the statement "In your country, tariff and non-tariff barriers significantly reduce the ability of imported goods to compete in the domestic market"

[6] In recent years the OECD has undertaken detailed studies on trade barriers through time and logistics. See, e.g., Kyvik Nordås, H. (2006). These studies provide insightful comparisons across countries but they do not provide a perspective on the development of such barriers over time.

[7] See "Economic Freedom of the World 2008 Annual Report" for more detail on the several ratings. This report is available on-line: http://www.freetheworld.com/release.html.

Figure 8: Index of Regulatory Trade Barriers

(An increase indicates lower trade barriers)



Sources: Fraser Institute and ECB staff calculations.

Notes: For detailed information on this index see "Economic Freedom of the World 2008 Annual Report", http://www.freetheworld.com/release.html. The values provided for the EU were computed as a weighted average of the 27 Member States, using GDP weights converted to the same currency using purchasing power parity. They are therefore not directly comparable with the other countries presented in this chart. 1995 data is not available for Bulgaria (2000), Cyprus (2003), Estonia (2000), Latvia (2000), Lithuania (2000), Malta (2002), Romania (2000) and Slovenia (2000).

2.3 Estimated indicators of trade frictions

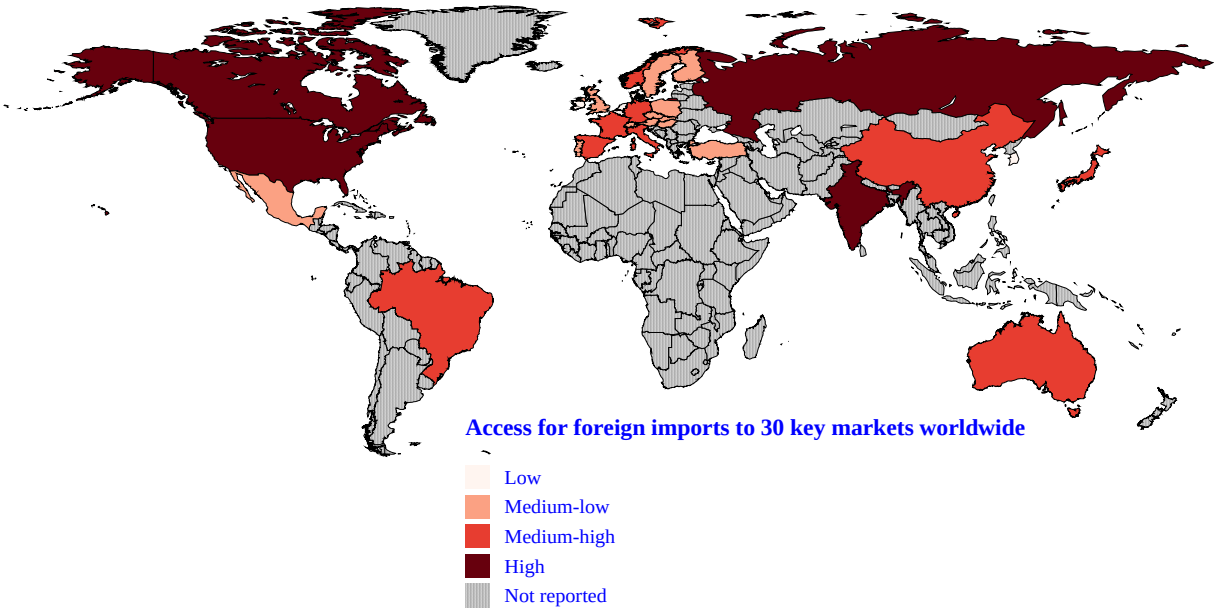
Trade frictions can also be estimated. We do so by means of a gravity equation computed following standard procedures.[8] As a result, the estimated trade frictions infer from trade flows the size of the obstacles that hamper trade among the countries analysed. Transport costs as well as tariffs and other man-made trade frictions are taken into account. The estimation covers the period 2001-2004, as a full set of more recent data was not available at the time of estimation (see Table 1). The methodology provides the overall degree of a country's accessibility to foreign imports (mathematically the inverse of trade frictions coefficients) but it also allows disentangling natural trade barriers, such as distance from man-made protection, which we denote under the heading "border effect". Differences in the border effect across main trading countries appear overall relatively small in absolute terms. For twenty-one out of thirty major trading countries[9], the border effect lies within two standard deviations from the overall average. Nevertheless, on average, in the period 2001-2004 smaller countries resulted relatively more accessible than larger counterparts. It emerges that in the period 2001-2004, on average, exporters of manufacturing encountered the highest difficulties in accessing the Canadian,

[8] The method is explained in detail in Head and Mayer (2004a) and also referred to in Head and Mayer (2004b).

[9] These include Australia, Austria, Belgium, Brazil Canada, China, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Ireland, Italy, Japan, Korea, Mexico, Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

Indian, Russian and United States markets. By contrast, Belgium, Denmark, the Republic of Korea and the Netherlands seemed relatively open to foreign manufacturing imports.

Figure 9: Level of man-made barriers limiting the access to the domestic market of thirty large countries (total manufacturing)



Source: Authors' calculations

Table 1: Estimated man-made and overall trade frictions for thirty large trading countries

Country	Openness to foreign manufactured imports	Border effect
Australia	2%	-2.99
Austria	24%	-2.08
Belgium	100%	-0.40
Brazil	2%	-3.14
Canada	2%	-4.46
China	31%	-3.25
Czech Republic	3%	-2.38
Denmark	20%	-0.80
Finland	12%	-2.25
France	43%	-3.06
Germany	6%	-2.71
Hungary	15%	-1.71
India	8%	-3.68
Ireland	18%	-1.19
Italy	28%	-3.02
Japan	3%	-2.82
Korea Rep.	36%	-1.14
Mexico	7%	-2.33
Netherlands	6%	-0.40
Norway	18%	-3.06
Poland	4%	-2.25
Portugal	83%	-2.31
Russia	10%	-4.19
Slovakia	15%	-2.24
Spain	13%	-3.10
Sweden	2%	-2.03
Switzerland	22%	-1.97
Turkey	14%	-2.54
United Kingdom	7%	-1.97
United States	1%	-3.78

Source: Author's calculations
Note: countries' openness to foreign goods is measures relative to most open importer in the sample, i.e. Belgium

3 Are We at a Turning Point? The Rise in Protectionist Pressures and Incipient Signs of New Protectionism

While the indicators presented in Section 2 are useful to assess developments in the medium to long run, they are less convenient for analysing short run developments or to develop a forward looking perspective. It is not easy to gauge the full extent of recent or contemporaneous initiatives towards more protection. The data necessary to producing such an assessment become usually available with considerable delay and many forms of non-tariff barriers or complex forms of protection are anyway very difficult to identify and quantify. For instance, monitoring the impact on trade of fiscal stimulus programmes and industrial and financial support programs presents a particular challenge because of the paucity of data available, in particular on the specifics of how these programs are implemented and on the introduction of "buy/invest/lend/hire local" clauses.

Often statistics on the use of contingent protection, including safeguards measures, anti-dumping and countervailing duties are used as an early indicator of trade protectionism. However according to the WTO (2009b), significant gaps exist in this evidence, making it difficult to gather general trends from these data. Hence, a timely assessment of protectionist trends necessarily tends to rely on indirect evidence.

In this section, we therefore turn to measures that we identify with the general heading of "protectionist pressures". The rise of protectionist pressures can be gauged through the state of progress of free trade negotiations and from the level of public support for open markets and globalisation.

3.1 The slowing pace of trade negotiations

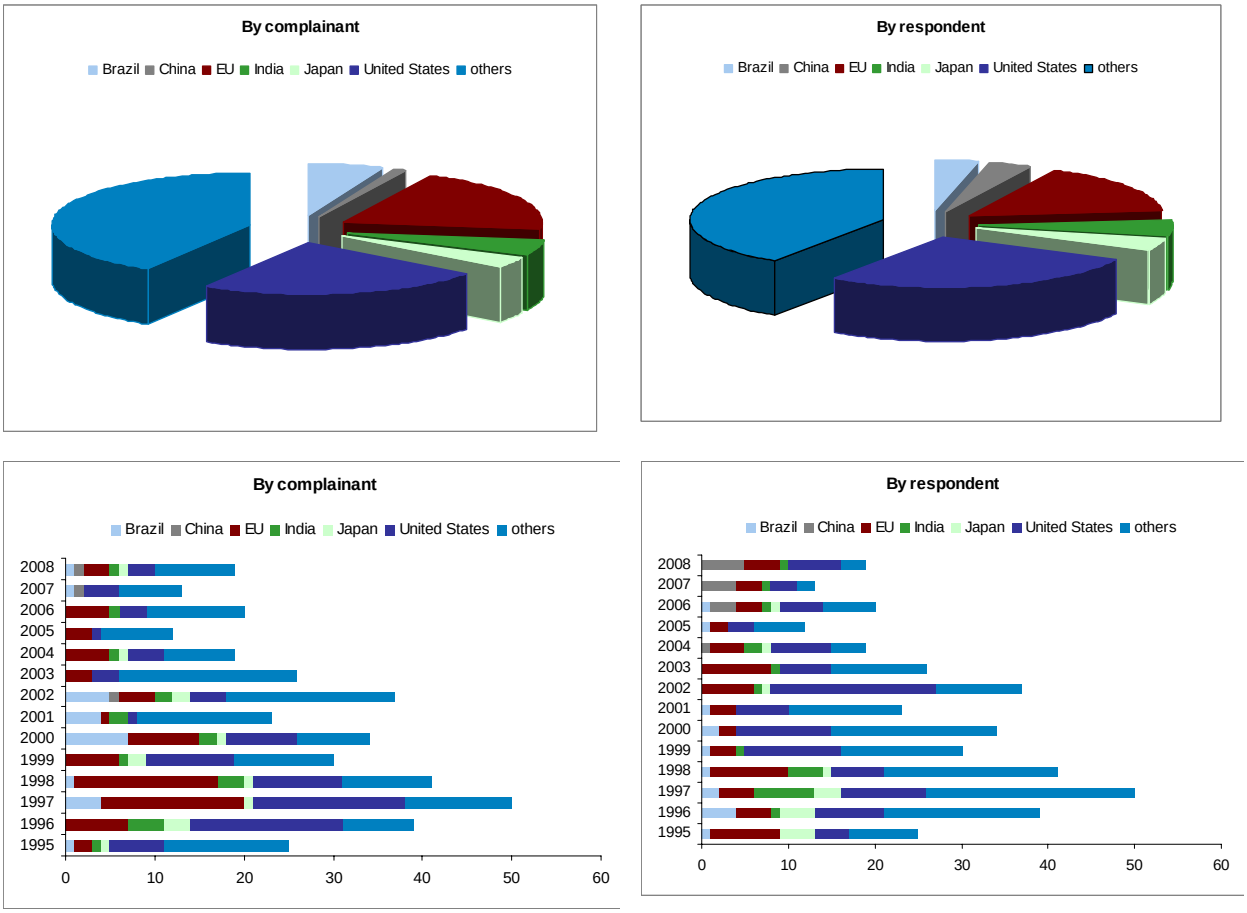
The free trade agenda is languishing. Progress in trade negotiations (or the lack thereof) is an indirect indicator that reveals the degree of protectionist pressures on governments. In this respect, important delays in the completion of international trade agreements can be interpreted as a worrying sign of rising protectionist pressures.

The Doha round of WTO trade negotiations that aims at liberalising agriculture and services and to boost trade and development of poor countries, has been the longest ever round of multilateral trade negotiations. Having begun in 2001, it was initially scheduled to be completed by 1 January 2005. Burdened by a jungle of loopholes and exemptions codified during years-long negotiations, it was indefinitely suspended in July 2006; negotiations resumed thereafter but were again halted in July 2008, when India and the United States failed to agree about the extent to which poor countries should be allowed to be shielded from competition. To date, it remains unclear whether the parties will move towards the concessions necessary to strike an agreement. On the positive side, the danger of a failure of the negotiations has been acknowledged at international policy summits, as reflected for instance in the final statement of the G20 summit that took place in Washington, D.C. on 15 November, 2008. Although pledges to reject protectionism and calls for a quick conclusion of the stalled Doha round of talks were made at the G-20 Meeting of London, on 2 April 2009 and by the Group of Eight (G-8) at the 8 July 2009 meeting in L'Aquila (Italy), the negative signal sent by the repeated failures to complete the Doha Round is significant enough to be taken seriously as signal of a generally weak public support for free trade.

The number of disputes brought to the WTO since 1995 (Figure 10) has been often cited as an indirect indication of protectionist pressures. However, one important caveat with this measure is that it can be interpreted in two ways: an increase could reveal higher protectionist pressures, but also increased confidence in the legal support provided by the WTO. It is noticeable that in the two years following the establishment of the WTO the number of cases per year increased markedly, which could be interpreted as a learning phase. Thereafter and up to 2007, the number of disputes followed a downward trend, excluding a peak in 2002 at around 50 submissions (of which 20 by the EU, 17 by the United States and 4 by the BRICs) and a temporary increase in 2006. Although the year 2008 marked a substantial increase relative to the previous year, the number of disputes for 2008 remains lower than in all the previous years, except 2005 and 2007. Therefore, the increase in antidumping initiations in 2008 relative to 2007 is not necessarily attributable to the economic crisis. This notwithstanding, historical patterns of anti-dumping and safeguard activity in previous business cycles suggest that the current economic crisis is likely to result in a significant increase in the use of these

measures, but only after a lag given the procedural requirements involved before applying definitive duties (WTO, 2009b).

Figure 10 : Number of Disputes at the WTO.
Percents (upper panel) and numbers (lower panel)



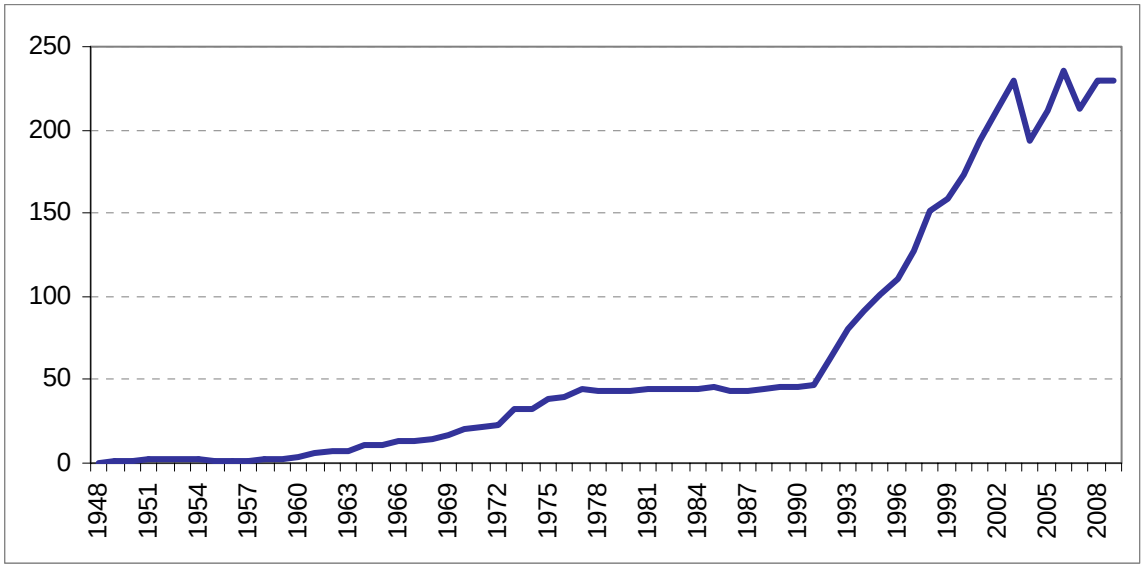
Source: WTO. Note: Disputes are classified by the year of their submission (cut-off date 23 April 2009).

Another indirect measure of the support for free trade is provided by the proliferation of regional trade arrangements (RTAs) over time, with about 421 RTAs notified to the GATT/WTO up to December 2008 and 230 in force (Figure 11). Yet, it is difficult to assess whether the increasing popularity of RTAs represents a sign of support for free trade or rather indicates lack of willingness to increase commitment in the framework of the multilateral trading system. While promoting free trade, such agreements do so at regional or bilateral level rather than at global level and can therefore be seen either as an alternative path towards free global trade or as a stumbling block (see, for example, Limao, 2006, and Limao and Karacavaoli, 2008, for recent discussions). Their increase should be interpreted with caution, therefore, because the literature remains divided with regard to the effect of free trade arrangements and, in particular, whether they complement or substitute the WTO-led process (see, for example, Baldwin, 2006, for a discussion of how RTAs can be viewed as building blocks of globalisation).

Their proliferation at times when the multilateral trade negotiations languished, may indicate a public preference for such smaller scale agreements. Interestingly, their surge, which had continued unabated since the early 1990s, seems to have halted recently. A series of important free trade agreements, such as the ones negotiated by the last US administration with Columbia, South Korea and Panama remain

pending. The stall of both multilateral and regional trade negotiations represents a further indication of the muted public support for free trade recently.

Figure 11: Number of Regional Trade Arrangements (Cumulated Over Time)



Sources: WTO Secretariat and ECB calculations.

Note: Arrangements are classified by the year of their entry into force.

3.2 Changing attitudes towards globalization

Survey data provide a useful indicator of the general perception of globalisation, which, compared to the indicators presented in Section 2, is timelier and perhaps more forward looking, to the extent that it captures ongoing trends. In spite of this undeniable advantage, one potential drawback is that surveys are carried out using a small sample of the population and that they are very question-specific. Interestingly, some surveys[10]show support for trade globalisation to be falling in the EU and the United States but to be increasing in emerging market economies and developing countries. In fact, support for trade globalisation seems to be high and stable over time in emerging market economies and developing countries, particularly in Asia and Africa, with nearly 90% of the population agreeing with the statement that trade with other countries is good[11]. This result may not be surprising, given that trade liberalization should benefit poorer countries especially (Figure 12).

In the United States, in 2005 60% of respondents to the poll considered that globalisation, "especially the increasing connections of their country's economy with others around the world" was mostly

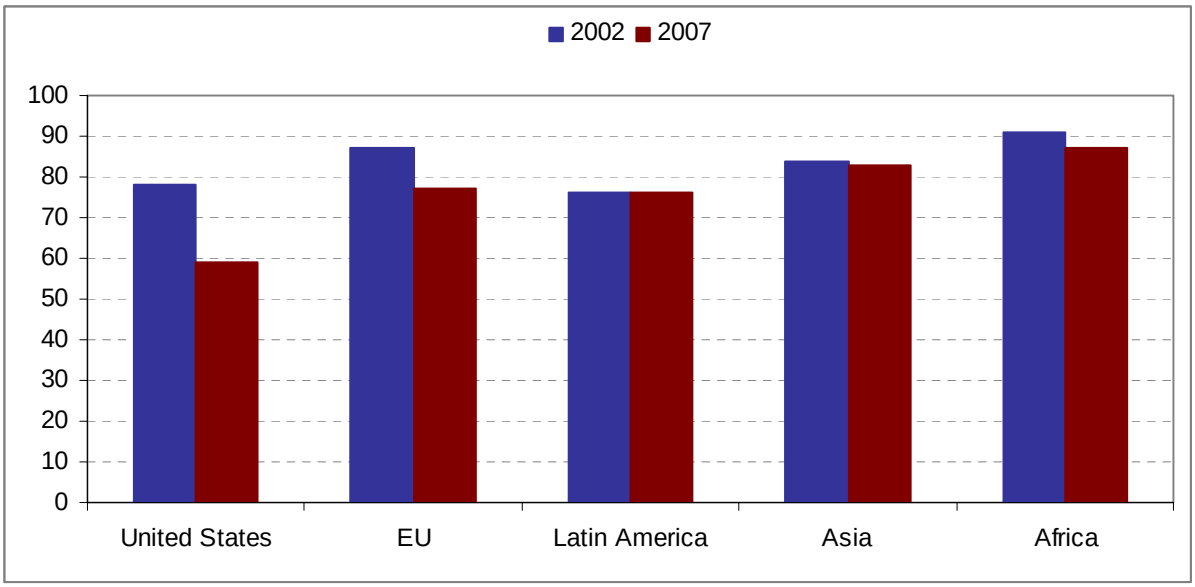
[10] The Pew Global Attitudes Project (October 2007), "World Publics Welcome Global Trade -- But Not Immigration", http://pewglobal.org/reports/display.php?ReportID=258.

[11] Globalisation finds wide support in Asia's rising economic powers, such as China, South Korea, or Thailand (with, respectively, 87%, 86% and 75% of their populations supporting globalisation), while this support is somewhat lower in India, at 54%.

"good". This figure was 20 percentage points lower than in 2002 (see WorldPublicOpinion, 2007[12]). In the EU, the perception of globalisation has also deteriorated over time and varies considerably across countries. It is lower, in particular, among some of the countries that have joined the EU since 2004. Taking the EU27 as a whole, opinion is almost evenly split between supporters and opponents of globalisation.[13] In 2008 39% of EU citizens considered globalisation "a good opportunity for national companies thanks to the opening-up of markets", while 39% considered it a "threat to employment and national companies" and 18% responded "don't know".

Figure 12 : Support for Globalisation in Selected Regions of the World

(percentage of positive answers to the question "Is trade with other countries good?")



Sources: The Pew Global Attitudes Project (2007) and ECB calculations.

Note: Figures may not add up due to rounding.

1) EU: arithmetic average of Germany, France, Italy and the United Kingdom.

2) Latin America: arithmetic average of Argentina, Bolivia, Mexico, Brazil, Peru and Venezuela.

3) Asia: arithmetic average of Bangladesh, Pakistan, China, India, Japan, Korea and Indonesia.

4) Africa: arithmetic average of Kenya, Ghana, Tanzania, South Africa, Côte d'Ivoire, Nigeria and Uganda.

Beyond these results, broad political and societal concerns about the impact of free trade can be an important source of protectionist pressure. These concerns arise from the fact that globalisation is perceived to contribute to widening wage inequalities in developed countries. Although overall research tends to find that trade globalization does not increase inequality, this perception is difficult to tame as the issue is very complex and findings are subject to caveats due to methodological and data

[12] The Chicago Council on Global Affairs, World Public Opinion (2007), http://www.thechicagocouncil.org/UserFiles/File/POS_Topline%20Reports/POS%202007_Global%20Issues/WPO_07%20full%20report.pdf.

[13] See European Commission, "Eurobarometer 69, the Europeans and globalisation", November 2008, p. 31. http://ec.europa.eu/public_opinion/archives/eb/eb69/eb69_globalisation_en.pdf

issues (See IMF (2006) for a thorough review of the subject).[14] One indication of concern about free trade relates to official programmes providing personalised support (income support and job retraining) to workers who lose their jobs as a result of trade liberalisation, which have been adopted by a number of countries. Such programmes have a long tradition in the United States. Trade Adjustment Assistance (TAA) programmes were first introduced in 1962 at the start of the Kennedy round of discussions on trade liberalisation. Expenditure under this kind of programme has increased steadily over recent years and was budgeted at around USD 650 million in the fiscal year 2007, compared with around USD 100 million in the early 1990s. In 2006 the EU established a broadly similar programme, the European Globalisation Adjustment Fund (EGF), which will provide funds of up to €500 million per year over the period 2007-13.[15]

3.3 Incipient evidence of increased protection

Since the intensification of the crisis in September 2008, a number of protectionist measures have been announced or implemented. While it is difficult to provide an exhaustive list of all measures taken and to assess their full protectionist content in a timely fashion, the Global Trade Alert, an initiative of a network of five independent research institutes across the world, monitors and publicly reports many state measures that have been taken during the current global downturn and that are judged likely to affect foreign commerce.[16] According to the information reported on the website of the Global Trade Alert, 87 new measures that discriminate against foreign commercial parties have been proposed or implemented between the beginning of the current economic downturn (last quarter of 2008) and July 2009 by as many as 52 countries (see Table 2). Over the same period of time only 3 trade enhancing measures have been implemented by an equal number of countries.

Table 2: State measures taken during the global downturn (period November 2008-July 2009) and likely to affect foreign trade

[14] "Globalization and Inequality", IMF World Economic Outlook, October 2007. See also Guscina (2006) for a study of the impact of globalization on the share of labour in national income.

[15] Information on the European Globalisation Adjustment Fund can be found on http://ec.europa.eu/employment_social/egf/index_en.html.

[16] The internet address of the Global Trade Initiative is http://www.globaltradealert.org/

Measure	Total	Almost certainly discriminatory and already implemented	Potentially discriminatory or not yet implemented	Implementing countries of discriminatory measures	Affected countries (estimate)	Liberalising or not discriminatory
Tariffs and quantitive restrictions						
Tariff measures	18	10	8	13	>100	0
Quota (including tariff rate quota)	1	0	1	1	74	0
MFN liberalisation	1	0	1	1	139	0
Subsidies, state-aid and trade restrictions						
Export subsidies	5	4	1	30	>100	0
Export taxes or restrictions	4	2	1	5	>100	1
Import ban	7	4	3	5	>100	0
Bail outs	2	1	0	1	n.a.	1
Local content requirement	3	1	2	1	at least 13	0
Public procurement	8	2	5	4	22	0
State trading enterprise	1	1	0	1	5	0
Trade defence measure (not otherwise classified)	7	2	5	4	41	1
Trade in services, cross-border investment and movement of natural persons						
Investment	2	0	2	1	27	0
Migration and movement of natural persons	5	4	1	4	53	0
Other service sector	6	2	3	2	>40	0
Other barriers and measures						
Intellectual property protection	2	0	2	28	n.a.	0
Sanitary and phytosanitary measure	5	3	2	4	n.a.	0
Technical barrier to trade	5	5	0	1	>30	0
Non-tariff barrier (not otherwise classified)	5	5	0	3	>100	0

Source: Global Trade Alert

Of the protectionist measures recently announced or implemented, only few were aimed at increasing tariffs. These new tariffs moreover do not appear to have triggered large-scale retaliatory responses or to have had a major impact on world trade flows, according to an analysis of the changes in the tariff rates between 2008 and 2009, recently undertaken at the International Trade Centre (Mimouni, Averbeck, Skorobogatova and Gamberoni 2009). Three possible reasons exist for the lack of large scale retaliatory tariff increases as the ones observed in the 1930's when the world experienced an economic downturn of similar size (Evenett, Hoeckman and Cattaneo, 2009). First, in the current juncture, countries showed the willingness to recur to expansionary macroeconomic policy. By contrast, in the 1930s these instruments could not be used to the same extent due to the gold standard and balanced-budget orthodoxy (Irwin and Eichengreen, 2009). Secondly, the current complex web of multilateral, regional and bilateral trade agreements may have acted as a deterrent. Indeed most tariff increases have been carried out by countries that are less or not at all integrated in the multilateral trading system or in deep regional and bilateral agreements. Thirdly, globalisation may have induced firms to lobby for other forms of trade protection, more effective given the current dominance of internationally fragmented production. Indeed, the countries that have taken overt protectionist actions (i.e. tariff and quantitative restrictions) tend to be less integrated in global supply chains.

More salient protectionist tendencies have been associated with "buy/invest/lend/hire local" requirements officially or unofficially attached to the massive governments stimulus packages, bailouts, and subsidies. Indeed, the Global Trade Alert reports 68 restrictions other than tariffs and quotas over the first nine months of the global downturn (see Table 2).

While this number still remains arguably limited, in an economic environment that risks deteriorating further, the most crucial danger is that owing to their nationalistic appeal these measures could become targets for retaliation and proliferate. Some analysts find that there are already signs of this. For example, the Chinese government requirement of May 2009 that only Chinese companies should receive contracts for government stimulus projects was – according to some – partly retaliation for what the Chinese government perceived as protectionist measures against Chinese goods (Jenny, 2009). In turn the Chinese imposition of export quotas and tariffs on raw material (such as bauxite and fluor-spar used to make aluminium products) led to a rash of complaints and antidumping investigations by Chinese trade partners.

Looking forward, a source of additional pressure for more protection may arise from financial markets. In response to the financial crisis, many governments are taking initiatives to stabilise the domestic economy by imposing inward-oriented measures on banks and other financial services firms, such as requiring them to curb foreign lending and boost domestic credit. Such domestic-oriented finance measures fragment the international financial system while also disrupting trade and direct investment abroad. They penalise in particular countries with less developed financial markets while also undermining the free flow of international capital, thereby representing a possible future aggravating factor for the already severely depressed international trade and global demand.

4 Predicting the Potential Consequences of a Protectionist Backlash: Review of the Literature and Simulation Results

The consequences of a rise in protectionism can be severe. To start with, protectionism generates a large variety of market-distortions, leading to substantial medium and long run costs, in particular for the implementing countries. Subsidies to domestic industries – including direct state-aid, guarantees, and bail-outs — artificially push down the costs for local firms while, tariffs or antidumping and countervailing duty orders artificially push up the cost of imported goods and services. In addition, these measures carry the intrinsic risk to result in less welfare for all as traditionally higher fiscal spending has been associated with more discretionary powers for politicians, indiscriminate subsidies, rent-seeking behaviour and corruption.[17]

4.1 Assessing the Macroeconomic effects of protectionism: a scenario analysis using the multi-country version of the ECB New Area-Wide Model

In recent years, the appearance of sizable trade surpluses in emerging Asia and oil-exporting countries, accompanied by large current account deficits in countries such as the United States, has led to a lively debate in policy circles. Rising external imbalances have, among other things, fuelled protectionism sentiment in a number of countries. Protectionist measures have to some appeared to be an appealing recipe for addressing internal and external imbalances. The effectiveness of protectionist measures in reducing global imbalances is, however, highly disputed and subject to controversy.

To facilitate the discussion, it is helpful to provide a quantitative assessment of the implications of a potential resurgence in protectionism for the world economy. In what follows, the macroeconomic

[17] A brief review of the literature on protectionism is available in Bussiere, Perez, Straub and Taglioni (2009)

effects of a rise in protectionist measures are analysed using the multi-country version of the New Area-Wide Model (MCNAWM).[18]

In what follows, three different scenarios are analysed. The first is a baseline scenario that is constructed to replicate the observed correlation of GDP growth and trade balances in the United States and emerging Asia in the previous years. In this scenario, global imbalances, a terminology implying widening current account positions in advanced and emgering economies, are fuelled by temporary productivity shocks in the tradable sector in emerging Asia and a permanent increase in non-tradable sector productivity in the United States. While there are a dozen of alternative scenarios that have been contemplated as the driver of global imbalances in the literature, we have chosen a rather simple and intuitive one, as our main goal is not identifying the true drivers of global imbalances. but the effects of tariffs in a set-up that can replicate certain stylized facts (such as the positive correlation of GDP growth and trade balance in emerging Asia and the negative correlation of these variables in the United States) associated with global imbalances[19].

While the scenario is certainly stylised, it is able to capture the positive correlation of GDP growth and trade balance in emerging Asia and the negative correlation of these variables in the United States.

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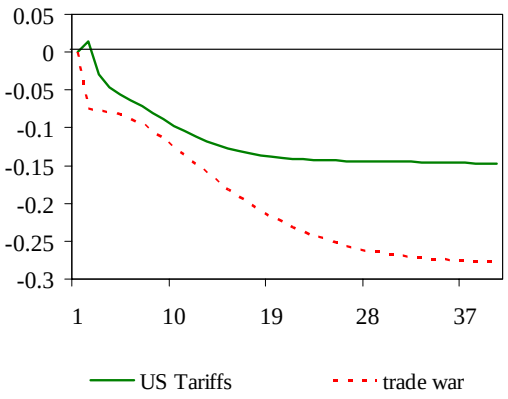
[18] The multi-country version of the NAWM builds on recent advances in developing micro-founded Dynamic Stochastic General Equilibrium (DSGE) models suitable for quantitative policy analysis, as exemplified by the closed-economy model of the euro area by Smets and Wouters (2003), the International Monetary Fund's Global Economy Model (GEM; Bayoumi, Laxton and Pesenti, 2004), the Federal Reserve Board's new open economy model named SIGMA (Erceg, Guerrieri and Gust, 2005), and the two-country version of NAWM as discussed in Coenen, McAdam and Straub (2007). Thus, it incorporates a relatively large number of nominal and real frictions in an effort to improve its empirical fit regarding both the domestic and the international dimension. For further details of the MCNAWM see Jacquinot and Straub (2008).

[19] As discussed in the literature, see e.g. Cole and Obstfeld (1991), a temporary productivity shock in the tradable sector triggers a current account surplus in a basic dynamic general equilibrium model. This is due to the fact that in these models forward looking households are smoothing consumption over the life-cycle , i.e. a temporary increase in current income increases savings rather than consumption, which triggers a current account surplus. On the other hand, a permanent productivity shock is driving current consumption, as forward looking households expect a permanent increase in income. As a result, the current account is turning into a deficit. Furthermore, there is convincing evidence that indicates (see Obstfeld and Rogoff, 2005) that the tradable sector in Asia, and technology improvements in the non-tradable sector (e.g. service sector) in the United States were the main drivers of economic growth at the time when global imbalances emerged.

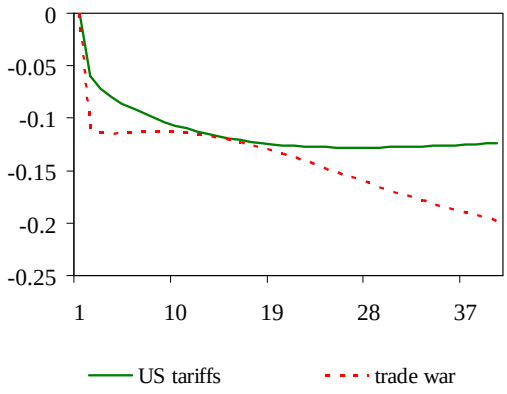
Furthermore, we consider (i) a scenario that alters the baseline scenario to account for the unanticipated imposition of a 5% import tariff on goods from emerging Asia in the United States and (ii), a scenario labelled a “trade war” scenario, which additionally assesses the effects of a simultaneous introduction of import tariffs in the United States and emerging Asia on bilateral trade flows. The results are presented in Figure 13. The figures show the deviations from the above discussed baseline scenario which assumes no tariffs.

Figure 13: Macroeconomic effects of protectionism: a scenario analysis using MCNAWM
(deviation from baseline in percentage of GDP; quarters after the shock)

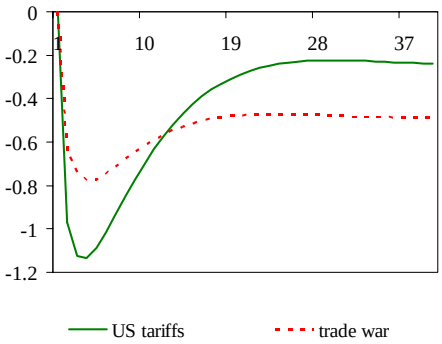
US - GDP



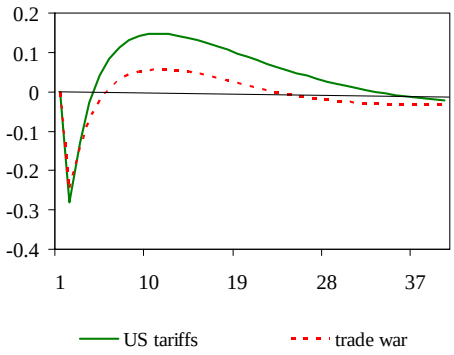
US - trade balance as a percentage of GDP



Emerging Asia - GDP



Emerging Asia - trade balance as a percentage of GDP



The main message of the analysis is that imposing import tariffs is unlikely to mitigate widening external imbalances, but has negative effects on GDP growth in the medium term. By potentially boosting demand for domestic goods, imposing tariffs implies an expenditure switching effect, reducing the quantity of imports from the affected foreign economy. However, imposing tariffs on goods from one country cannot reduce a widening external imbalance as long as the fundamental drivers behind the imbalance are still in place. In fact, imposing tariffs can help to reduce bilateral imbalances with respect to certain counterparts at the cost of widening other bilateral surpluses/deficits. This is confirmed by the simulation exercise presented in Figure 13 which indicates that deficits in the US and surpluses in Asia in the medium term are higher compared to the benchmark scenario[20]. It should also be noted that import tariffs have significant negative impact on

[20] While the overall trade balance generally declines following the introduction of tariffs, the trade balance as a share of GDP rises due to the negative effect of tariffs on GDP.

GDP in both emerging Asia and the United States compared with the benchmark scenario. This can reach up to 1 percent of steady state GDP 4 years after the introduction of import tariffs in our model. The negative impact of protectionist measures on GDP growth is, as expected, amplified under a trade war scenario.

4.2 Impact on competitiveness

While in the short-run protectionism may succeed in preserving domestic production capacities, it bears additional costs in the longer-run, namely by obstructing an efficient reallocation of resources, thereby implying losses in terms of efficiency of production and international competitiveness. In addition, protectionist measures reduce welfare, by curbing product variety on the domestic market and strengthening the market power of firms, at the expenses of consumers. The main objective of this section is therefore to quantify, for different countries and industries, the impact that an increase in protectionism may have on the productivity and, therefore, the international competitiveness of firms.

Four elements emerge as key in determining the competitiveness of firms, as well as of the countries where these firms are located thereby increasing average productivity and consumer welfare (through richer product variety, lower average prices and mark-ups). First accessibility: regions granting a better overall access to foreign and domestic firms are generally characterised by tougher competition and, therefore, by a more efficient allocation of resources. This occurs because these countries are usually seen as better export bases, attracting a greater number of firms from neighbouring countries. Second, market size: in a world where economies of scale are important, larger and more integrated local markets also tend to be associated with tougher competition and, hence, richer product variety, higher productivity and lower prices. Third, diffusion and level of technology: technologically advanced regions are characterised by tougher competition and higher productivity levels. Fourth, institutional and political framework: the quality and resilience of the domestic institutions, which also facilitate access to new markets and promote innovation, are key elements of success amid global competition. A country's ability to adapt swiftly to external shocks depends on its ability to implement timely structural reforms in areas such as product and labour markets, innovation and research.

Following Ottaviano, Taglioni and di Mauro (2009) we calibrate a general equilibrium multi-country multi-sector model of international trade with firms that differ in productivity from one another and use it to simulate a worldwide increase in protectionism. With a view to reproduce a setting as realistic as possible, the model also features differentiated goods, monopolistic competition and variable mark-ups. Countries served by a large number of domestic and foreign firms end up generating more productive and internationally competitive firms and posting, on average, lower mark-ups, lower prices and ultimately higher welfare levels.

The parameters of the theoretical model are calibrated using industry level bilateral trade data and firm level productivity data. With the aim of connecting transparently the model to the empirical estimations, we take the following steps:

1. We use the estimates of trade frictions presented in Section 2, which allow inferring from trade flows the obstacles that hamper trade among the countries analysed.

2. We estimate total factor productivity (TFP) at the firm level ("firm competitiveness") and derive the resulting distributions of firms' productivity across countries and sectors.

3. The above estimates, based on theoretical derivations, are complemented with data on countries' size (population and GDP) and on average sectoral labour productivity to generate two competitiveness indices: an index of countries' overall competitiveness and one of countries' producer competitiveness. The first index aims at reflecting, as realistically as possible, the actual competitive position of countries. The second index, instead, abstracts from countries' differences in size and from trade frictions and other international factors to focus on a country's technological and institutional determinants of competitiveness. In so doing it assesses the ability of a country to generate more productive firms in a hypothetical world without geographical and country size differences.

4. As a final step, keeping countries' producer competitiveness as given, we use the calibrated model to simulate changes in trade frictions associated with an increase of market accessibility. By means of this procedure we infer counterfactual cross-country productivity distributions. In particular, we quantify the impact of a 5% increase in trade barriers on the productivity of firms in the markets. The microeconomic mechanisms of adjustment to this shock are discussed further.

Our sample consists of fifteen countries: Australia, Austria, Belgium, Denmark Finland, France, Germany, Italy, Japan, Netherlands, Portugal and Spain, Sweden, United Kingdom and United States. Table 3 compares the rankings of countries in terms of overall competitiveness and producer competitiveness.

Starting with overall competitiveness we find that the most competitive countries appear to be those that are either easily accessible relative to their export markets – such as Belgium– or those endowed with a large domestic market – such as the United States. Portugal, Spain, Australia and Italy are at the bottom of the table because of their geographical location and a possible technology disadvantage, which may be also a signal of high entry costs.

When isolating producer competitiveness, the ranking of countries may change dramatically. To begin with, Finland and Japan become the most competitive countries in terms of producer competitiveness: A disadvantage in terms of location (rank in terms of overall competitiveness) is compensated by a strong technology advantage and/or a good institutional environment. The opposite is true for Belgium and the Netherlands. Finally, countries such as Portugal, Spain and Italy are consistently at the bottom of the competitiveness ranking, no matter how this is measured, suggesting the presence of parallel negative impacts of all the determinants of competitiveness identified in the model, namely geographical location, market access, technological and institutional (dis)advantage.

There are some caveats to this methodology arising from the important data limitations used in this type of analysis. In particular, currently available firm level data are not detailed and homogenous enough across countries to allow for a consistent and full-fledged econometric investigation. This is the reason why the above framework is estimated by means of a computable general equilibrium methodology that should be thought of as a second-best solution. As a consequence, a margin of error in the point estimates presented in Table 3 should be allowed, in particular for those countries whose firm-level data exhibit poorer coverage. Against this background and given the often small differences in scores across countries, country rankings should also be treated with caution.

Table 3: Overall versus producer competitiveness

Country	Overall Competitiveness Ranking	Producer Competitiveness Ranking
Australia	13	7
Austria	8	5
Belgium	1	11
Denmark	9	6
Finland	3	1
France	7	8
Germany	6	9
Italy	12	12
Japan	5	2
Netherlands	4	10
Portugal	15	15
Spain	14	14
Sweden	10	4
United Kingdom	11	13
United States	2	3

Source: Authors' Calculations

Firms' adjustments to an increase in trade protection

How would an increase in trade protection affect the intensity of competition, globally? How would it affect the efficiency of markets? Which countries are likely to be the most affected? To answer these questions, we simulate a counterfactual scenario where access to trade is reduced worldwide by 5%.

The simulation is carried out by recomputing the bilateral and sectoral trade frictions and by using these latter to calculate the implied change in overall competitiveness. The baseline is the actual cross-country pattern of overall competitiveness estimated and whose ranking is reported in the previous section. In the counterfactual scenarios, we let countries change the degree of access to their domestic economy. Then, holding all other parameters in the underlying model constant, we simulate the resulting overall competitiveness for the alternative scenario, and compare with the baseline.

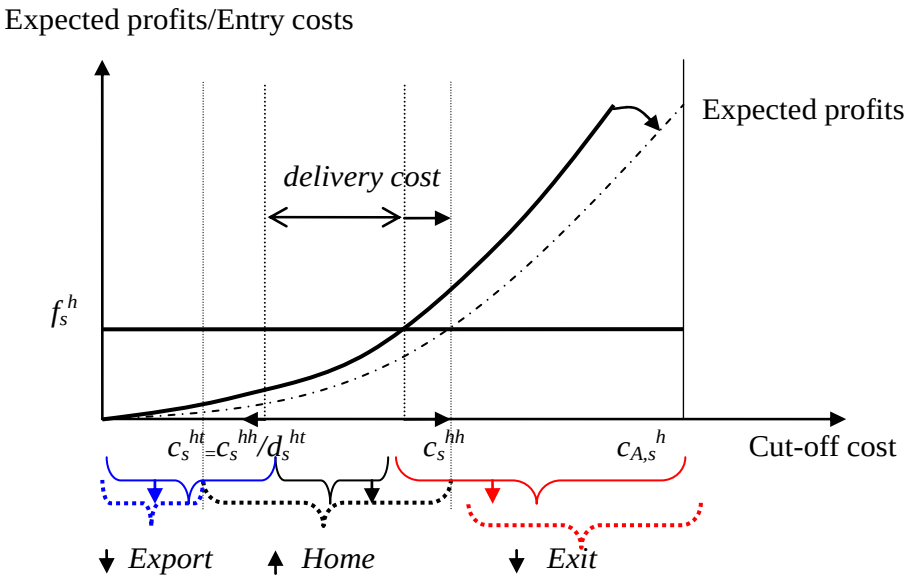
The aggregate outcome for the economy is portrayed in Figure 14 where we assume that both the domestic country and the foreign counterparts reduce the access by foreign firms to the respective domestic market. This situation is realistic as countries usually retaliate to foreign commercial policies that they consider aggressive.

In order to follow the mechanisms of firms' adjustments to a change in trade barriers, the key parameter to retain is the domestic cut-off. The cut-off is an inverse number of the minimum productivity that a firm needs to survive in a given market. It is also a determinant of overall competitiveness, inversely correlated to it.

Hence, at a given level of domestic cut-off c_s^{hh}, the effect of a "multilateral" protectionist move is shown graphically by the downward shift of the Expected profits curve and the corresponding shift to the right of the intersection point between the curves representing respectively Expected profits and Entry costs. As shown graphically, the new equilibrium domestic cut-off c_s^{hh} will have a higher level, i.e. firms will become on average less productive.

This outcome is due to the following sequence of events. The lower expected profits result in the exit of some foreign firms from the domestic market. This fact has the immediate effect to release some of the import competition in the market, thereby allowing the weakest domestic firms to survive somewhat more easily by selling on the domestic market. However this result comes at an important aggregate welfare cost with the average efficiency of the industry dropping. This *de-selection effect* is also accompanied by an increase in the average price and mark-up as well as a reduction in (i) the number of products and varieties sold on the domestic market and (ii) the average scale of firms. In summary, protectionist moves trigger anti-competitive effects at the detriment of consumer welfare and prevent healthier firms from exploiting scale economies, thereby weakening the whole productive apparatus of a country. At the same time, as a consequence of less accessible foreign markets, profits of domestic exporters will be further depressed.

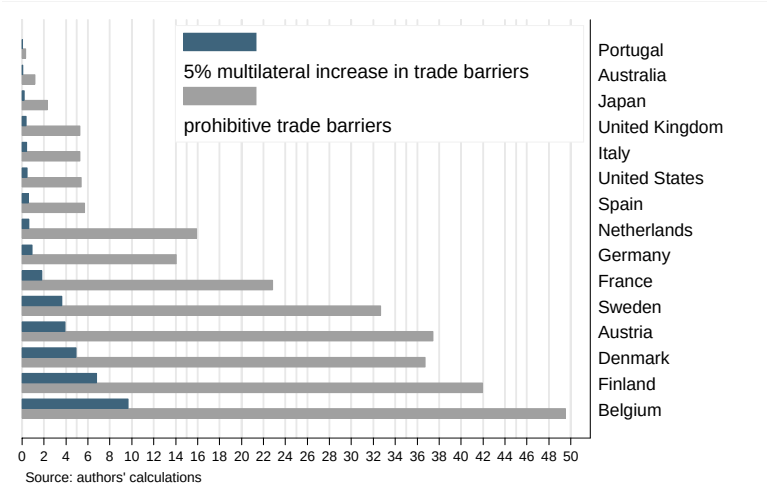
Figure 14: Industry reallocations following a multilateral move towards protectionism



The results of the simulation, reported in Figure 15, are shown as a difference with respect to the previously computed level of overall competitiveness, used as a baseline. The results can be interpreted as follows: If all fifteen countries in the sample increased their barriers to imports from abroad, in a hypothetical trade-war, the loss in overall worldwide competitiveness would be substantial. As expected, in terms of international competitiveness, all countries would lose to some extent. This is due to the fact that an increase in protection forces firms to reduce their average scale of

operations. This in turn leads to a less efficient productive environment, higher average prices for consumers and higher markups.[21] The expected losses would however be larger for the smaller and more competitive countries (most notably Belgium, Finland and Denmark). In comparison, losses for relatively disadvantaged countries – either because of a poor level of producer competitiveness (Portugal) or because geographically remote (Australia and Japan) – would be of a relatively small magnitude, primarily owing to an already poor performance prior to the move towards protectionism. At the same time, countries that benefit from a large domestic market, such as the United States would also be likely to be less affected by an increase in trade protection. The reason for such the smaller impact is that a large home market allows allocating resources efficiently within the domestic boundaries, despite the decrease in foreign competition.

Figure 15: Simulation results of an increase in trade protection on overall competitiveness
(in percent)



Note: Percentage changes relative to baseline overall competitiveness ranking; A positive sign indicates losses in overall competitiveness.

In order to provide a benchmark for the gains/losses resulting from increasing trade barriers by 5%, Figure 15 also shows ranges resulting from a comparison of the effects of imposing prohibitive trade barriers, i.e. barriers that prevent any trade, in all countries in the sample. The extent of the losses in overall competitiveness resulting from an increase in trade protection of 5% ranges from 4% (Netherlands) to 20% (Belgium) of the losses in competitiveness countries would experience should they impose prohibitive trade barriers. This indicates that the effect of protection on countries competitiveness, while being consistently negative, is non-linear. A combination of domestic and international factors contributes to determine its impact.

In conclusion, protectionism leads to a worldwide loss in efficiency and firms' productivity. It does so by reducing the average scale of firms. This in turn leads to higher average prices for consumers and higher markups. These effects are stronger for smaller and/or more open countries. They are also

[21] In general, the losses in terms of efficiency, scale and prices are associated with ambiguous effects in terms of product variety. Mélitz and Ottaviano (2008) shows that in this model the former always dominate. This implies that a lower domestic competitiveness necessarily delivers lower national welfare.

stronger for countries specialised in sectors with higher trade freeness and higher sensitivity to firm selection or countries whose firms are on average highly competitive.

5 Conclusions

After three decades of steady progress towards liberalization of international trade and financial flows, which witnessed a marked rollback of protectionist pressures, the issue of protectionism has suddenly come back on the policy agenda with the outburst of the financial crisis. This reversal was especially noteworthy that it coincided with a strong collapse in trade flows. Whereas trade was a powerful driver of integration in the past decades, weakening trade flows have contributed to propagate the crisis across borders. In addition, whereas trade integration allowed developing countries and emerging market economies to develop at unprecedented speed, EMEs have been strongly affected by the drying up of financial flows and by lower demand for their exports. Against this background, the resurgence of protectionist pressures would have devastating effects on the recovery, by further hampering trade and financial flows.

The aim of this paper was to evaluate the seriousness of the protectionist threat, by monitoring protectionist measures over the medium to long run, by reporting on protectionist pressures, and by providing an evaluation of a potential protectionist backlash on the global economy and on competitiveness. This evaluation drew in particular on model-based simulations using models developed at the ECB: the MCNAWM model (Jacquinot and Straub, 2008) and the framework of Ottaviano, Taglioni and di Mauro (2008, 2009).

Some key results stand out. First, while actual protectionist measures to restrict trade through tariff and non-tariff barriers have risen only moderately so far, public pressure for protectionist measures have clearly increased since the mid-2000s. In this respect, the paper presented a battery of indicators that can be used in future work to monitor protectionist trends in the world economy. Second, the increasing calls for protectionism, which have intensified since the start of the financial crisis, appear clearly linked to the widening of global imbalances over the recent years. Third, the economic literature, supported by our own simulations, suggests that a rise in protectionism is unlikely to mitigate widening external imbalances; moreover, protectionist measures would have negative implications for real GDP growth and competitiveness in the medium term.

Overall, therefore, the risks attached to protectionism should not be neglected. They relate to trade in goods but also, importantly, to trade in services and to financial flows. While our indicators do not point to a substantial rise in protectionist measures so far, the rise in protectionist pressures that we have recorded could signal a forthcoming increase in actual measures. Looking forward, the comparison with the 1930s may not be fully justified: first, public opinion is still attached to free trade; second, emerging market economies have benefited a lot for globalization and are therefore unlikely to revert it; third, countries are now bound by a series of treaties and free trade agreements that considerably limit the scope for protectionism. Yet, the risks of protectionism remain elevated, which would take the form of indirect measures, as repeatedly explained by WTO Director Pascal Lamy. This calls for heightened vigilance and for continuing to systematically monitor protectionism.

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