Crisis and trade measures: a revival of protectionism?

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Abstract

Both developed and developing countries have taken steps to alleviate the effects of the international crisis. Many of those measures have an impact on trade flows. The present paper introduces the type of instruments used and analyses whether they are unique to some particular group of countries. Yet, it does not intend to quantify the effect of said measures on trade. It is shown that developed countries have mainly based their intervention on the granting of sectoral aid and subsidies, while developing economies have made greater use of trade measures. Both groups of countries have implemented fiscal stimulus plans, but the amounts granted by industrialized countries have broadly exceeded those granted by developing countries. Most support measures have been concentrated in the automotive and agricultural sectors.

1. Introduction

The world economy is undergoing the most acute crisis since the Great Depression in the 1930s. Its effects—originally observed in the financial sector in mid 2007—spread quickly to the real economy, causing significant falls in economic growth rates and a rapid decline in international trade.

The governments of industrialized and developing countries implemented counter-cyclical measures to mitigate the negative effects of the crisis on output and employment levels. Although many of the measures applied can be considered useful to maintain output, their scope goes beyond the domestic market, crossing borders and having an impact on international trade and, consequently, on other countries' economic growth. This is so due to the significant growth of economic interdependence between nations which has taken place during the last half-century.

A country's excessive use of this kind of tool might prompt other countries to adopt measures of retorsion that might exacerbate the damage caused, thus worsening the overall situation.

At the very beginning of the crisis there were fears that protectionism would break out all over the world and, consequently, that there was going to be a trade war similar to that occurred during the Great Depression; however, these fears did not come true due to several factors: greater awareness that both cooperation and policy coordination among countries are important to overcome the crisis and promote recovery, the significant internationalisation of companies, WTO multilateral rules, and the integration processes occurred between countries as a result of increasing economic interdependence.

The aim of this paper is to present, systematise and analyse the trade and sectoral measures as well as stimulus packages implemented as of October 2008 to counter the effects of the global crisis, so as to evaluate—although preliminarily—whether there is a revival of protectionism and what distinctive features it

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presents. It is worth noting that we do not intend to quantify the impact of these measures on trade, but rather to identify those measures having a potential impact on world trade flows.

This study is organised as follows. The next section includes a summary of the effects of the crisis on economic growth and international trade, and a brief comparison between the current crisis and the crisis of the 1930s. Section 3 discusses the data used, describes the methodological provisos, and explains the classification employed. Then we describe the trade measures, sectoral aid and subsidies, and stimulus packages implemented by both developed and developing countries in response to the crisis. Further on we analyse in detail the automotive and agricultural sectors—which have received special attention—as well as "green" measures. And the last section presents the conclusions.

2. Crisis, growth and trade

The outbreak of the financial crisis was triggered by US subprime mortgage losses in mid 2007. The hardening of credit terms led to output deceleration, and thus the economically strongest OECD countries entered a slight recession between the second and the third quarters of 2008.² On the contrary, developing countries continued to grow at a rather steady pace.

The investment bank Lehman Brothers bankruptcy in September 2008 and the bail-out of several financial institutions in the United States and Europe markedly worsened the situation. The turmoil in the financial sector and the credit crunch quickly spread to other countries and other sectors of the economy.

The outbreak of the crisis caused significant liquidation of investments, substantial loss of wealth, greater restrictions on the granting of loans, and higher uncertainty. Companies reduced their investment expenditures, and households postponed their purchases, especially of durable products. The increase in savings for precautionary reasons led to a sharp drop in global investment and output, resulting in a steep fall in international growth and trade.

In Q4 2008 the decrease in trade flows and output triggered the appearance of clear signs of a worsening of the world economy first in developed economies, and then in developing ones.

In the same quarter, OECD countries recorded a GDP reduction of 1.9 percent, as compared to the previous quarter. Japan experienced the greatest fall in output—with a GDP reduction of 3.6 percent with respect to the previous quarter—and GDP in the European Union and the United States fell by 1.8 and 1.4 percent respectively.

In Q1 2009 the fall was even worse. In OECD countries GDP growth rate was at -2.2 percent with respect to Q4 2008, that is, the greatest contraction since OECD began to keep records in 1960. The European Union reported a drop in output of 2.4 percent with respect to the previous quarter, whereas the United States and Japan recorded falls of 1.6 and 3.8 percent respectively.

As for developing economies, although in almost all of them the growth pace decelerated in the last quarter of 2008 with respect to the same period of the previous year, only few countries (among them Mexico, Thailand, Singapore, Hong Kong and Chinese Taipei) recorded GDP reductions. It was not until Q1 2009 that there were falls in the GDP of other countries like Russia, Brazil, South Africa and Malaysia. In turn, China's and India's output continued growing, but at much lower rates than those recorded by these same countries in the last few years.

Different indicators seem to be pointing at certain stabilization and slight economic recovery in some countries. Among these indicators it is worth highlighting the lower volatility of global stock markets, the moderate improvement in exports in several countries, and the slow recovery of consumption. On the other hand, several factors seem to confirm persistent weaknesses: unemployment continues to grow worldwide, housing

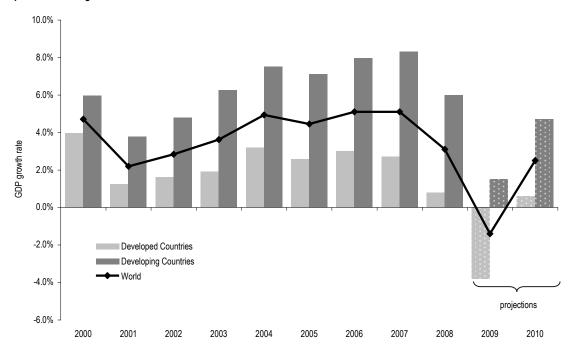
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² In OECD countries GDP fell by 0.1% in Q2 2008 and 0.5% in Q3 2008, in both cases with respect to the previous quarter.

prices continue to decrease in many countries, and bank balances are still weak, requiring greater efforts of consolidation and recapitalization. Due to all these reasons, there is still great uncertainty about both the length of the crisis and world economic recovery.

Global growth estimates for 2009 released by the IMF (FMI, 2009 d), the World Bank (Banco Mundial, 2009) and the OECD (OCDE, 2009 b) range between -1.4 and -2.9 percent, thus confirming the deepest world recession since the 1930s. In 2010 growth rates are expected to be moderate (between 1.9% and 2.3%); still below the potential growth rate (Graph 1).

Industrialized countries would be the most affected ones, recording falls between 3.8 and 4.2 percent in 2009; however, in 2010 GDP is expected to increase gradually at rates that range between 0.6 and 1.3 percent.



Graph 1. Real GDP growth rate

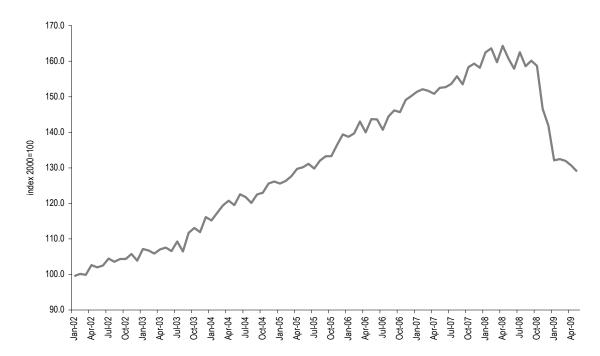
Source: CEI based on IMF

Although developing countries as a whole would grow between 1.2 and 1.5 percent in 2009, the strongest growth is expected to be recorded in the Asian region. According to World Bank forecasts, if China and India were excluded from the group of developing economies, the GDP of the rest of the countries would fall by 1.6 percent in 2009. In line with this, CEPAL (2009 d) forecasts estimate that GDP will drop by 1.9 percent in Latin American and the Caribbean countries.

As regards trade in goods, there was a marked change in trend in the second half of 2008. In the first half of the year, the year-on-year trade growth rate—measured in nominal terms—was over 20 percent. In the second half of the year, however, trade growth suffered a strong deceleration and it finally became negative in November.

In real terms, the evolution of trade was less abrupt, reflecting the behaviour of commodity prices and the value of the US dollar.³ Particularly, trade growth decelerated during the first half of 2008 and came to a halt in the second half of the year.

During Q1 2009, trade continued to contract, dropping over 30 percent—in nominal terms—with respect to Q1 2008. However, the reduction rate seems to have decelerated at the beginning of Q2 2009. Monthly forecasts released by the CPB Netherlands Bureau for Economic Policy Analysis⁴ show a decrease in world trade volume of 11.3 percent in Q1 2009 with respect to the previous quarter, and of only 1 and 1.3 percent in April and May 2009 respectively (Graph 2).



Graph 2. World trade volume index

Source: CEI based on CPB

Trade contraction affected countries of all regions and all levels of development. Exports from developed economies fell by almost 12 percent in Q4 2008, and by more than 30 percent in Q1 2009, with respect to the same period of the previous year. The major industrial exporting countries have been the most affected, especially as regards the automotive and machinery sectors.

Exports have shrunk less in developing than in developed countries; however, the former have not escaped the crisis. In the last quarter of 2008 developing countries' exports dropped by 4.5 percent with respect to the same period of the previous year. This negative tendency persisted during Q1 2009.

³ In the first half of 2008, trade value in US dollars rose due to commodity price rises. Conversely, in the second half of the same year fuel and food prices plummeted. Foreign exchange fluctuations had a similar impact: while in the first half of 2008 the US dollar experienced a strong depreciation against other major currencies, in the second half of the year it appreciated against many of those foreign currencies. Therefore, the evolution of foreign currency boosted nominal trade growth in the first half of 2008, and accentuated the falloff in the second half of the same year.

⁴ CPB World Trade Monitor.

Among the causes that triggered the plummeting in world trade flows, we can mention: the global collapse of consumption and investment demands, the increase in insurance costs and the scarcity of trade financing. Moreover, the implementation of new protectionist measures is likely to be another factor contributing to this fall.

The WTO Secretariat (OMC, 2009 e) envisages that the collapse of global demand triggered by the global economic crisis will lead to a fall in exports of around 10 percent (in volume) in 2009, the greatest contraction since the Second World War. In developed countries the contraction is expected to be of 14 percent, whereas in developing countries exports are expected to fall by 7 percent.

The World Bank (Banco Mundial, 2009), the IMF (FMI, 2009 d) and the OECD (OCDE, 2009 b) estimate that world trade will drop by between 9.7 and 16 percent, with falls being always steeper in developed countries than in developing economies. Trade flows will only resume growth in 2010, but at moderate rates (between 1% and 2%).

In turn, trade in services seems—until now—to have endured the crisis better than trade in goods. According to WTO (OMC, 2009 f), world exports of services fell by 7 percent in Q4 2008, that is, they shrank less than exports of goods. Similarly, in G7 countries⁵ the fall in exports of services in Q4 2008 and in Q1 2009 was of 8.5 and 17.5 percent respectively (falls that were 34% and 46% lower than those recorded for trade in goods) (OECD, 2009 c). According to information available, exports of transport and travel-related services have been the most affected.⁶

Box 1

The current crisis and the crisis of the 1930s: present protectionism is not like past protectionism

When analysing the events and features of the current financial crisis, it is inevitable to make a comparison with the world crisis of the 1930s. In fact, the current fall in world trade is claimed to be the worst crisis since the crisis of those years known as the Great Depression.

According to Eichengreen and O'Rourke (2009), economic indicators seem to be showing that now the situation is the same or even worse: industrial production, trade and stock markets are falling more rapidly than during the crisis of the 1930s.

As for the trade policy of those years, the rise in tariffs was the essential tool hampering the progress of trade. In June 1930 the United States enacted the Smoot-Hawley Act, which increased the tariff on 900 products in such a way that the average tariff rose from 40 to 47 percent (Eichengreen and Irwin, 2009). In addition to this, the Austrian and German financial crises of 1931 prompted other countries to resort to trade barriers to stimulate their economies and promote employment, but at the expense of their neighbours or trading partners—a policy known as "beggar-my-neighbour"a. Thus, the atmosphere of international trade relations became rarer and rarer.

Despite some similarities—such as the use of trade measures as an additional element to offset the consequences of the crisis—the analysis shows that the way of addressing the problem is not the same. Both the international and the institutional contexts have changed, and there is greater awareness of the risks unilateral and isolationist policies may entail. This enables us to be more optimistic about the evolution of the world economic context.

Firstly, at present there is a greater control over the trade measures that a country can adopt. In the 1930s neither the General Agreement on Tariffs and Trade (GATT) nor its successor, the World Trade Organization

⁵ Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

⁶ As informed by the International Air Transport Association (IATA), in June 2009 load traffic contracted by 16.5%, compared to the same month of the previous year, showing a very slight recovery with respect to January when one of the historically minimum levels was hit. In turn, in June 2009 international demand for passenger transport fell by 7.2% y-o-y, marking thus the tenth consecutive month of contraction.

(WTO)—institution which establishes and applies the rules and disciplines of the multilateral trading system and sets limitations to the autonomous policies to which member countries can resort—existed. By way of example, multilateral rules prevent tariffs from increasing over the bound level, that is, the maximum level for each product negotiated and notified by each country in the WTO. Moreover, tariffs—particularly those corresponding to industrial products—have been recently reduced as a result of the consecutive multilateral trade negotiation rounds.

Modern protectionism has been reduced and, at the same time, "refined". At present there are more subtle and varied forms of protection—namely, antidumping duties, technical rules, sanitary and phytosanitary rules, government procurement—whose impact on trade is difficult to determine (The Economist, 2009 d).

As soon as the effects of the crisis were felt in trade flows, the WTO Secretariat started to monitor the evolution of trade. Moreover, it has started to record the trade or trade-related measures adopted by member countries.

Secondly, globalisation has led to a greater interconnection between economies and to the internationalisation of production processes. Vertical specialisation of production has increased^b. Consequently, production processes become very sensitive to changes affecting trade flows, and protectionist measures become much more difficult to implement. In turn, adverse shocks are transmitted more rapidly to the rest of the countries, and trade shrinks in a more synchronised way than if there were no vertical specialisation. The recovery of demand shows the opposite behaviour. Vertical specialisation would lead to a harmonic resurgence of global trade (Yi, 2009).

Thirdly, during the 1930s countries had fewer available economic policy tools to counter the effects of the crisis. The macroeconomic context was different. As Eichengreen and Irwin (2009) mention, during the 1920s many countries had once again resorted to the gold standard. However, this system was not as strong as that applied before the First World War; therefore, the economic policy options were very limited. The decision to maintain the gold standard—which implied a fixed exchange rate—made it impossible to resort to monetary policy. An expansionary fiscal policy could neither be applied, since it was necessary to preserve fiscal balance. A debt-financed fiscal deficit might increase the domestic interest rate, and thus cancel the expansionary effects of fiscal policy. Basically, the alternatives were two: a) to abandon the gold standard and let the exchange rate depreciate; and b) to continue with the gold standard. In the last case, it was possible to choose between i) letting economies face a deflation of prices and salaries in order to restore the domestic balance, and ii) imposing restrictions on trade and payments in order to limit imports and reduce foreign exchange outflow.

The countries sticking to the gold standard were those which most suffered the effects of the crisis. On the other hand, those countries which let their currency fluctuate recovered more rapidly because they could apply monetary and fiscal policies to stimulate the economy. Moreover, the devaluation of their currencies against gold made them competitive. In relation to trade barriers, countries adhering to the gold standard were the most protectionists, because tariffs became a poor substitute for fiscal stimulus policies.

At present, the economic policy tools to cope with the current situation are more varied and flexible. Countries may use—and in fact they do use—expansionary fiscal policies, which might have an impact on their trading partners and stir up controversy. Here lies the importance of the international economic coordination that was absent during the Great Depression of the 1930s.

- a. In a well-known study carried out in the 1930s, Robinson (1937) analyses how measures modifying the trade balance, as for instance import duties and export subsidies, may increase employment levels, but to the detriment of trading partners (Blecker, 2003). In this regard, Bhagwati (1994) remembers how 1930s massive unemployment prompted Keynes to suggest, at the beginning of the crisis, that tariffs might be an adequate response to unemployment in the short run; thus adding a protectionist argument to the traditional infant industry argument.
- b. Vertical specialisation occurs when goods are manufactured in two or more sequential stages, and when at least one production stage depends on imported inputs and some part of the output is exported.

3. Data processing

3.1. Data used

This report presents a summary of trade and sectoral measures, and of the stimulus packages implemented as of October 2008 to counter the effects of the global crisis. We only analyse those measures considered to have some potential effect on international trade. We did not look into financial rescue measures or those measures implemented by the central banks of countries affected by the crisis, because these measures—given their significance—need special analysis.

It is not our intent to quantify the impact of measures on trade, so we do not assign any specific priority to any of them. In general, we mention either the countries which adopted certain type of measures or the number of measures implemented by country. Whenever possible—for instance, in the case of fiscal stimulus packages—we also include the amount announced for each measure.

The information used was taken from the data submitted by Argentine embassies and consulates abroad, from different documents prepared by international organisations,⁷ and from the national and international press. Whenever possible, the data was contrasted with official sources and with the corresponding regulation. The data on stimulus packages was compared with other papers analysing this topic.⁸

Both the countries included⁹ and the number of measures described in this study corresponds to the data available by June 2009.

3.2. Methodological provisos

It is necessary to take into account certain provisos when analysing the data gathered.

On the one hand, the data is subject to a certain margin of error: first, because in many cases the data includes government announcements which do not always come into effect and which can be modified or even reverted; second, because the information from different sources with respect to the same measure sometimes differ. Moreover, since we have considered only those measures arising from the data gathered, it is probable that other measures have been left aside.

On the other hand, it is not always possible to distinguish between the measures adopted as a response to the crisis, those which would have been implemented in spite of the crisis, and those adopted taking advantage of the circumstances created by a crisis of such a magnitude.

Neither is it clear which part of the measures corresponds to planned expenditures nor which one corresponds to new expenditures. For instance, some countries have announced stimulus packages already included in their annual budgets, thus making it difficult to determine the real volume of the new expenditure.

Likewise, although most countries have announced fiscal stimulus packages which differ from their financial rescue plans, in some cases the financial support is included in the fiscal packages and it is not always possible to differentiate the data.

Lastly, in many cases it has not been specified whether the measures adopted are transient or permanent, or the implementation period is not clear.

⁷ OMC (2009 a, 2009 b and 2009 e), Comisión Europea (2009 c), Banco Mundial (Gamberoni *et al..*, 2009) and CEPAL (2009 a, 2009 b and 2009 c).

⁸ Khatiwada (2009), Ortiz (2009), Prasad *et al.* (2009), FMI (2009 a and 2009 b), Comisión Europea (2009 a, 2009 b, 2009 d) and OCDE (2009 a).

⁹ Data from 42 countries—considering the European Union as a single country—was gathered. Data from 21 member states was gathered within the EU.

3.3. Classification employed

The measures have been classified into three thematic areas:

A. Trade measures:

- 1. Import duties
- 2. Antidumping measures
- 3. Safeguards on imports
- 4. Countervailing duties
- 5. Import licenses (automatic and non-automatic)
- 6. Tariff-rate quotas
- 7. Other non-tariff barriers to imports
- 8. Export subsidies
- 9. Export refunds and/or duties
- 10. Other measures on exports

B. Sectoral aid and subsidies:

- 1. Production or consumption subsidies and aid (tradable and non-tradable goods, non-financial services)
- 2. Government procurement

C. Stimulus packages

4. Governments' response to the crisis

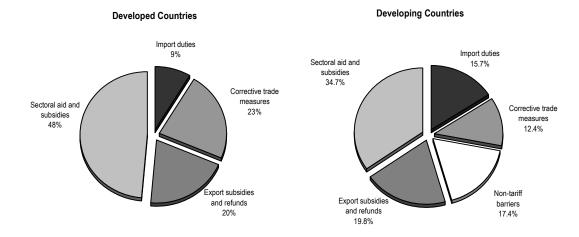
4.1. Summary of measures

Since October 2008, as a result of the spread of the global crisis, there has been a worldwide proliferation of measures intended to protect the domestic market and stimulate different economic sectors.

The range of measures announced is broad. Whereas some governments have reacted against the crisis imposing trade measures, others have chosen to give government aid and subsidies to certain production sectors.

Graph 3 synthetically shows that both developed and developing countries applied trade measures and granted sectoral aid and subsidies. However, whereas industrialized countries have intervened mainly through the granting of sectoral aid and subsidies, developing countries have made a greater use of trade measures.

Graph 3. Type of measures adopted. Developed and developing countries Share in the whole set of measures



Source: CEI

Moreover, whereas developed countries have implemented a greater number of corrective trade measures, developing countries have resorted mainly to changes in import duties and non-tariff barriers.

Annexe 1 presents more in detail the type of measures adopted by each country.

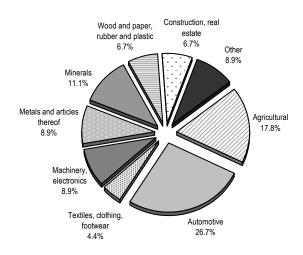
Graph 4 shows that almost 27 percent of the measures adopted by developed countries were aimed at the automotive sector (see Section 4.4.1), whereas in developing economies that sector did not receive much attention. In both groups of countries the measures aimed at the agricultural sector are paramount (see Section 4.4.2); however, the number of measures addressed towards the textile and clothing sector is greater in developing countries than in developed economies.

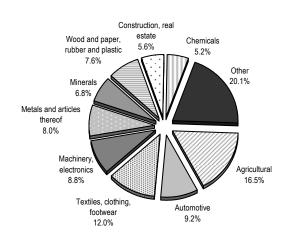
Graph 4. Measures adopted by sector. Developed and developing countries

Share in the whole set of measures

Developed Countries

Developing Countries





Source: CEI

Furthermore, in response to the crisis, numerous countries have announced a large number of fiscal stimulus packages and financial aid. Many of the sectoral subsidies mentioned above are included in these aid packages. Although fiscal packages are not directly aimed at foreign trade, the magnitude of the amounts involved and some of the granting conditions may have significant trade consequences. These packages are analysed in Section 4.5.

4.2. Trade measures

According to information gathered by June 2009, most import-related measures involved tariff changes in the first place, and antidumping measures in the second. As for measures on exports, it is worth highlighting those related to export financing.

a. Import duties

More than half of the 42 countries¹⁰ for which data is available have recorded some change in import duties. Most of the countries which resorted to tariff increases are developing economies. This fact is not striking, since developing countries have greater room for manoeuvre than developed countries when it comes to raising tariffs within WTO limits (this is so because in many of these countries there are significant differences—"water"—between applied and bound tariffs) and, at the same time, they have fewer resources to grant subsidies and support, or to apply counter-cyclical fiscal policies.

Only seven countries increased the tariffs on one or more products, other seven countries reduced them, and eight countries lowered the tariffs on some products and increased those on others. Therefore, the tendency towards increasing applied tariffs is not so clear yet.¹¹

¹⁰ The EU was considered as a single country.

¹¹ Bouët and Laborde (2008) estimate that if WTO member countries increased applied tariffs to their bound level, the average world tariffs would double and trade value would shrink by almost 8%.

Among the countries which liberalized trade, it is worth noting the case of Canada—which reduced machinery and equipment import duties—and of Jamaica—which reduced duties on imports of capital goods and raw material, with the intent of helping the manufacturing sectors to face the impact of the crisis. Tunisia also reduced customs duties on imports of equipment, raw materials and semi-processed products, and Nicaragua temporarily cut or eliminated the import duties on different food products in order to offset the increase in international prices.

Egypt, Ecuador, Indonesia and Kazajstan implemented similar measures, but at the same time they increased the tariffs on other products.

The European Union—which reinstated import duties on cereals—and Korea—which increased the tariff on crude oil imports—are among the developed countries which increased tariffs.

It is worth highlighting the case of Ecuador, which applied a temporary tariff surcharge on more than 600 products by means of a balance-of-payments safeguard. The measure was analysed and approved by the WTO Committee on Balance of Payments Restrictions.

A similar situation occurred in Ukraine. At first, a temporary 13 percent rise in the import tariff on numerous products was approved; however, two weeks after the approval of this surcharge, the Government cancelled the regulation, applying it exceptionally to cars and refrigerators.

Although the range of products whose tariffs rose is varied, the increases are observed more frequently in food, iron and steel products, and cars.

b. Corrective trade measures

Corrective trade measures were designed to be used when domestic industries are hurt. These measures constitute the appropriate legal instrument—agreed at the WTO—to face the anti-competitive behaviour of third countries' exporters (antidumping measures), certain subsidies (countervailing measures) or a sudden increase in imports (safeguards). Therefore, it would not be rare if these measures began to be used more intensively in the current economic situation. In this sense, several studies¹² indicate that, in general, the number of antidumping measures tends to be greater in periods of recession.

However, it is necessary to take into account that due to the fact that companies need time to gather enough information to initiate investigations, there is always certain time gap between the evolution of economic conditions and the new investigations on the application of corrective measures. Therefore, some of the corrective rights established and the investigations initiated in the period under analysis are probably unrelated to the global crisis.

There exists the risk that corrective measures be generalized, instead of being used as an exceptional instrument to face specific situations. If that were to occur, any benefit obtained as a result of temporary restrictions on imports in an area of domestic production could be countered by the effects of similar measures applied by other countries. Moreover, since corrective trade measures are deliberately aimed at limiting trade, the threat of retorsion is likely to be significant.

The data available shows an increase in the implementation of corrective trade measures with respect to previous years. As for antidumping measures, both the number of investigations initiated and the number of measures adopted increased in the second half of 2008 with respect to the same period of 2007 (17% and 45% respectively) (OMC, 2009 c). All over 2008 more procedures for safeguard measures were implemented (38%) (OMC, 2008), and new investigations on countervailing duties were carried out (27%) (OMC, 2009 b).

Bown (2009) finds that the number of investigations initiated on the three types of measure rose by 18.8 percent in Q1 2009 with respect to the same period of 2008, whereas the number of new measures increased by 10 percent in the same period. Most of the definitive measures adopted and the investigations initiated

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¹² For instance, Knetter and Prusa (2003), Irwin (2005), Francois and Niels (2004), Bown (2008) and OMC (2009 e).

referred to antidumping measures. However, the increase in the number of investigations carried out is related mainly to safeguards.

The data gathered by CEI shows the following results:

- Out of the three types of corrective trade measures, antidumping measures were the most used, and safeguard measures were the second most used.
- Twelve countries adopted antidumping measures, 28 investigations were initiated and 10 provisional and 19 definitive measures were implemented. Developing countries resorted to these measures the most, and China was the country on which most new investigations were focused and where new duties were imposed.
- On the other hand, eight countries (only one a developed country among them) applied safeguards on imports. Almost half of the new investigations were initiated by India.
- Only four countries (three industrialized countries among them) applied countervailing duties. In four cases duties were imposed and a new investigation was initiated. In almost all the cases, the country that was subject to said new duties and investigations was China.
- Metals and their manufactures, chemicals, electrical machinery, apparatus and material were the most affected sectors.

c. Non-tariff measures

Non-tariff barriers involve a wide range of interventionist policies (customs and administrative procedures, technical barriers to trade, sanitary and phytosanitary measures, etc.) that affect trade in different ways. For this reason, it is difficult to identify these barriers and to analyse their effects. Furthermore, since multilateral rules have not been fully developed yet in some areas, there is a certain margin of discretion in the use of these barriers to trade.

Among others, import licenses and technical standards stand out within the set of non-tariff measures imposed as a result of the economic crisis. It is worth pointing out that all these non-tariff measures have only been implemented by developing countries.

Seven countries implemented new import licenses. Among them, it is worth highlighting the case of Argentina—which extended the list of products subject to automatic and non-automatic import licenses (as of October 2008, 624 and 192 tariff positions were added respectively)—and that of Indonesia—which implemented licenses for nearly 500 products. In contrast, Malaysia eliminated import licenses for the construction and manufacturing sectors.

On the other hand, five governments applied import quotas. Most of these quotas were applied on imports of meat or other foodstuffs (corn soya, sugarcane).

Eight countries implemented other types of non-tariff barriers on imports, such as: minimum reference values (Argentina, Uruguay), bans (Bolivia, India), technical standards (India, Indonesia, Malaysia), restrictions on ports of entry (Indonesia), rise in toll rates (Russia).

Among the measures recorded, it is worth highlighting the case of India, which in January 2009 banned the import of Chinese toys for six months. Although the ban was lifted two months later, it was decided that imports of Chinese toys would have to comply with certain international standards related to safety and health.

In turn, Indonesia determined that imports of electronics, clothing, toys, footwear, food and beverages could only enter the country through five ports or through international airports. In addition to this, imports would have to be carried out by authorized importers, and the imported products would have to first undergo inspection in their country of origin.

Apart from restrictive measures, trade facilitation measures were also adopted, such as those implemented by Tunisia (elimination of inefficient technical barriers, and facilitation and simplification of customs procedures).

d. Export subsidies

Five countries have granted export subsidies, and the fact that three developed countries reinstated this type of subsidy on food products is outstanding.

The EU reinstated export subsidies on dairy, poultry and egg products, and modified those corresponding to bovine meat, pork meat and sugar. The United States reestablished dairy export subsidies under the Dairy Export Incentive Program, and Switzerland temporarily reinstated export restitutions for cream. (See Section 4.4.2)

e. Export refunds and duties

Measures related to export refunds and duties were implemented in nine countries (all of them developing countries).

Some countries intend to boost exports through an increase in export tax rebate rates, or through the reduction in the terms and number of procedures for refunds (Brazil, China, Ecuador, Peru, Tunisia).

Some countries (China, Viet Nam) have raised export duties on some products, while others (Argentina, China, India, Russia) have lowered them in other products.

f. Other measures on exports

Seventeen countries—both developed and developing—have applied measures. Most of the measures implemented refer to the granting of credit insurance and guarantee, the creation of new credit lines or reinforcement of the already existing ones, and the increase in the number of companies which can access government export financing programmes.

Although most of the measures were implemented across the board, some of them were only aimed at SMEs (Korea, Peru) or at specific sectors (India: textiles, leather; Thailand: food, toys; Uruguay: tanning, automotive sector).

Moreover, some fiscal measures, such as the elimination of the income tax to promote exports (Brazil) or the moratorium on advance income tax for exporters of some sectors (Ecuador), have also been applied.

Only few measures refer to new export permits (Philippines) or to export license cancellations (China).

4.3. Sectoral aid and subsidies

In many countries, there has been an increase in government sectoral aid and subsidies. These measures constitute an alternative to using cross-border trade restrictions to protect economies from foreign competition; however, this course of action is not available for most developing countries.

These measures have the potential to restrict or distort trade, since they can extend the transactions of non-competitive or insolvent companies, thus depriving more efficient manufacturers of market share. In some cases, the granting of government aid and subsidies is subject to specific conditions, as those imposed on investments made by a firm or area of production—for instance, to avoid disinvestment in the country—or to policies aimed at acquiring inputs or hiring workers. In other cases, governments intervene directly in companies' management as a counterpart to state financial participation.

It is also worth mentioning that some countries choose to direct fiscal incentives or subsidies to consumers. As long as this support is granted without restricting consumers' options to buy domestic or foreign products, these measures can contribute to boost both domestic production and imports.

Many governments apply competition laws and policies in order to ensure that the granting of this type of government financial support does not distort markets. However, since there are no equivalent international rules or faculties—except for certain subsidies which are banned by the WTO Agreement on Subsidies and Countervailing Measures—there are fewer multilateral disciplines than in the case of trade measures.

More than three-fourths of the countries for which there is data available granted certain type of sectoral aid or subsidy directly related to tradable goods, 17 adopted measures aimed at other economic sectors, and in 10 cases there were changes in government procurement policies.

a. Sectoral aid and subsidies to production or consumption

More than 75 percent of the countries—both developed and developing—granted sectoral aid or subsidies as a way of buffering the effects of the global crisis. Many of these measures are included in the stimulus packages announced by the governments.

The analysis of the sectors benefited by these measures reveals that the automotive (see Section 4.4.1) and the agricultural (see Section 4.4.2) were the most benefited sectors.

Other sectors which have received sectoral aid are:

- The household appliance sector, through tax reductions (Brazil, Turkey) or through financing plans to replace old products with products with lower energy consumption (Argentina, Mexico).
- The petrochemical industry, through subsidies on fuel and liquefied petroleum gas (Nicaragua, Dominican Republic) and aid to improve the quality of refineries and obtain cleaner fuels (China); and the mining sector, via price stabilization funds (Bolivia, Chile) or government procurement of minerals (China).
- The construction and real estate sectors, including tax benefits for home renovation; tax exemptions for first-time homebuyers; loans for buying, refurbishing and expanding houses; and guarantees for construction loans. Most of these measures were taken by developing countries.
- Few countries adopted measures for the tourism or the transport sector.

b. Government procurement

Government procurement of goods and services is crucial in the functioning of a state, since it furnishes governments with the resources needed to provide public services and comply with their duties. At the same time, procurement is paramount in international trade, since in most countries, the state—together with the other public bodies—constitutes the largest buyer of any type of goods (from commodities to high technology equipment).

If procurement decisions are used to promote certain economic sectors or to give priority to domestic suppliers over their foreign competitors, they can end up limiting competition and restricting international trade.

According to the data gathered, ten countries (eight developing countries among them) have applied measures related to procurement.

Some of the measures are of a general nature, for instance those implemented in Paraguay and Uruguay, where margins of preference for domestic companies were widened, or in Mexico and Jamaica, where a greater preference is given to SMEs.

The most outstanding cases of countries implementing these measures are those of Ukraine—where the government will temporarily buy products and services only to domestic producers—and of China—which has recently modified the "Report on the strengthening of procurement administration", which reestablishes the exemption from the national treatment obligation set out in the Government Procurement Act.

In contrast, other countries implemented sectoral measures: the United States (iron and steel, manufactured products, textiles), the European Union (butter, milk powder) and Russia (cars).

The incorporation and modification of the *Buy American* clause in the American Recovery and Reinvestment Act of 2009 stands out. The stimulus package requires the purchase of American iron, steel and manufactured products for every infrastructure project financed by this plan. Additionally, it raises the threshold for the use of

imported inputs: it is possible to resort to imported inputs only if domestic materials increase the cost of a project by more than 25 percent (the previous limit being 6 percent).¹³

After being sharply criticised—both at the domestic and international levels—the Act was slightly modified by introducing the need for provisions to be implemented in such a way that international trade obligations assumed by the United States are not breached. Therefore, said restrictions would not affect products originating in Nafta member countries and in those countries which have signed bilateral trade agreements with the US. The provisions would not be applicable either to countries that are parties to the WTO Agreement on Government Procurement (GPA)¹⁴ or least developed countries. Despite these exceptions, countries such as Argentina, Brazil, Russia, India and China would not be exempt and could resort to reprisals.

Although the clause on iron and steel was the most controversial one, the Recovery and Reinvestment Act of 2009 contains another *Buy American* clause, which states that the Transportation Security Administration and the coastguards of the United States Department of Homeland Security will have to buy textiles and clothes made up of 100 percent American materials.

Moreover, different bills containing provisions similar to the *Buy American* clause were sent to Congress, including the Water Quality Investment Act—which seeks to grant over USD 15 billion over five years for investment projects aimed at improving water quality—and the 21st Century Green High Performing Public School Facilities Act—which would authorize USD 6.4 billion to school restoration and modernization projects for 2010.

4.4. Most benefited sectors

4.4.1. Automotive sector

Without doubt, the automotive sector can be identified as one of the main beneficiaries of government aid throughout the crisis. There are several reasons for which the authorities of different countries have allocated millions to this industry.

The global automotive industry is thought to have enough installed capacity to produce around 86 million of units, but it will be possible to sell only 55 million during 2009 (Reed, 2009).

It is worth highlighting the importance the automotive industry has in the different economies as a source of technological innovation and as an industry which has a significant share in the demand for industrial workers.

The industry also involves a series of production chains (auto-parts makers, tyre companies, carriers) whose links are affected when demand falls or when there is a break in the chain of payments. As a result of globalisation, this integration occurs not only at the regional or national level, but it has also gone beyond national borders.

In turn, carmakers are aware of this role of the industry and its impact on the economy, so since the end of 2008 they have exerted pressure on authorities to obtain funds which enable them to get their companies back on their feet. Moreover, they have highlighted the multiplier effect of their industry: for every job created in an automotive company, between six and eight jobs are created in the chain (Reed, 2009).

The measures adopted differ considerably in their typology and in the amounts involved. They are not exclusive of developed countries. However, there exists a great disparity in terms of the amounts granted, which implies differences in the effects.

Generally speaking, two broad types of measure can be distinguished:

¹³ See Hufbauer et al. (2009) for an analysis of the implications that the Buy American has on employment.

¹⁴ The GPA is the only WTO legally binding agreement dealing specifically with government procurement. The current GPA version became effective in 1996. It is a plurilateral agreement administered by a Committee on Government Procurement and consists of 41 members: Canada, the EU and its 27 member states, Korea, the US, Hong-Kong-China, Iceland, Israel, Japan, Liechtenstein, Norway, the Netherlands with respect to Aruba, Singapore, Switzerland and Chinese Taipei.

- those aiding supply
- those stimulating demand

Measures aiding supply have been used mainly by developed countries. Their implementation has generated great controversy over the legality of aid in the sphere of the WTO, the presence of conflicts among European Union countries triggered by the consequences these measures might entail, and the granting or not of subsidies to industry. On the contrary, measures stimulating demand were implemented mainly by developing countries.

Developed Countries

Among the rescue measures aimed at companies belonging to the affected sector in the European Union, it is worth noting the loans at preferential rates of 6 percent granted by the French government to Renault and Peugeot-Citroën consisting of EUR 3 billion to each company. Moreover, the Volvo business unit of Renault trucks has received a loan of EUR 500 million. The funds had to be invested in "clean technology", and the companies undertook not to close factories or lay off workers throughout the loan term.

The European Commission authorized Italy to grant a regional aid of EUR 46 million to FIAT. This aid will be applied to an investment of EUR 319 million.

In turn, the Swedish government, in an attempt to save Volvo and Saab (their respective owners, Ford and GM, have put them up for sale), granted USD 3.4 billion in loan guarantees and support for research and development. Some of these funds come from the package given by the European Investment Bank to help carmakers meet environmental targets.

Among the outstanding loans granted by the European Investment Bank, it is worth mentioning: a loan of EUR 400 million granted to Nissan Europe for the development and manufacture of more energy-efficient vehicles in Spain and the United Kingdom, and a loan of EUR 366 million granted to Jaguar Land Rover to reduce atmospheric emissions. Another loan will be granted to a Volkswagen factory based in India which will manufacture utility cars under the new and stricter environmental regulation, even before this regulation is introduced in large Indian cities as of 2010.

The most important cases of industrial rescue are those of General Motors and Chrysler. In December 2008 the US government granted an emergency loan of USD 13.4 billion to General Motors and USD 4 billion to Chrysler. Apart from these loans, in February 2009 General Motors received an additional support of USD 4 billion. Nevertheless, this rescue plan was not enough to get the firm back on its feet, and it finally filed for bankruptcy in June 2009. The idea consisted in purging the company and creating a new one with "healthy" assets.

It is worth mentioning that GM was already carrying along problems, and the global crisis—which entailed a drop in world car consumption—triggered a situation where there was no chance of success.

In spite of the considerable amount of money given by the US government, the bankruptcy discharge would imply the redimensioning of GM, forcing it to shed 14 factories, 21,000 hourly-paid workers, 8,000 white-collar workers and 2,400 dealers, and to settle debts for USD 79 billion.

The US government handed over an additional amount of USD 30 billion and got 60.8 percent of the stock. The Canadian government gave USD 9.5 billion and received 11.7 percent of the stock. The United Auto Workers union (17.5%) and the bondholders (10%) constitute the rest of the shareholders. Although it has become a nationalised firm, the Obama administration—as part of the reorganisation process of the firm—has stated that it has no intention of interfering neither in its management nor in its everyday business matters (The Economist, 2009 a).

The GM crisis also affected its European subsidiary as well as the firms OPEL and Vauxhall. In order to avoid OPEL's collapse, the German government decided to grant a EUR 1.5 billion bridge loan until it was determined who its new owners would be.

In the case of Chrysler, the Supreme Court has approved the plan proposed for restructuring, covered by the bankruptcy procedure. The government gave USD 6 billion to finance the reformation process and acquired 9.85 percent of the company shares. The United Auto Workers union owns most of the stock of shares (67.69%), and the remaining 20 percent was acquired by FIAT (The Economist, 2009 a).

One of the policies aimed at favouring developed countries is the introduction of a more energy-efficient and environmentally cleaner technology in the car industry. In this sense, the European Commission, through the European Investment Bank, channels loans to companies by means of the European Clean Transport Facility. This mechanism aims at reducing CO₂ emissions significantly through research, development and innovation, which will allow for the manufacture of cleaner and more energy-efficient cars and other means of transport. The total amount of loans approved and scheduled in the framework of the European Economic Recovery Plan will exceed EUR 7 billion.

In turn, the United States also grants cheap loans to Ford, Nissan and Tesla, so that they are able to re-equip their plants in order to produce a new generation of electric cars and other vehicles running on "efficient" fuels. Out of the USD 25 billion that the government directed to an incentive programme for technological development in the automotive industry in 2007, Ford will receive USD 5.9 billion, while Nissan (Japan) and Tesla will receive USD 1.6 billion and USD 465 million respectively. These loans are only granted to solvent companies, so Chrysler and GM cannot benefit from them. More than 70 firms—including autoparts-makers and carmakers—have applied for said loans (Simon et al., 2009).

Environmental and sustainable energy policies were already included in both the EU and in the United Nations agendas before the global crisis; however, the real purpose of these measures is not so clear. These measures might be currently supported on the grounds of environmental targets, but their real aim is that of granting a subsidy to industry. In other words, their real aim lies behind the veil of said environmental targets. These measures might have an impact on developing countries; first, because the governments of said countries are not in a position to grant support of such magnitude and, secondly, because this "green" technology can be considered a requirement or new standard which impacts negatively on their exports in the future.¹⁵

Developing countries

As mentioned before, developing countries have resorted to other types of tools because of their budgetary restrictions. The measures we will mention below are not exclusively used by developing countries, but these countries applied them most because of the limitations they face.

Developing countries have mainly tried to use mechanisms that stimulate domestic car demand. As shown in Table 1, the main measures applied are: reduction in consumption taxes, loans and guarantees for final consumption, subsidies and discounts for the purchase of units, incentives to "clean cars", loans to the automotive production chain and non-automatic licenses.

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¹⁵ Box 2 expands on the issue of environmental targets in stimulus packages.

Table 1
Selected measures taken in the automotive industry in developing countries

Type of measure	Country	Measure						
	Korea	Thirty percent reduction in the consumption tax applicable to domestic and imported cars between 19 Dec 08 and 30 Jun 09.						
	Brazil	Temporary reduction until June 2009 in the tax on industrialised products applicable to cars with a cylinder capacity of up to 2,000 cc, and trucks.						
Reduction in consumption taxes	China	Reduction from 10% to 5% in the tax on sales of new cars with engines of 1.6 litres or less, until December 2009.						
	Taiwan	Possibility of reducing to a maximum of USD 30,000 the consumption tax applicable to vehicles purchased and registered between 19 Jan 09 and 31 Dec 09.						
	Turkey	Reduction in car-purchase taxes.						
	Uruguay	Tax rebate certificates could be exchanged for cash.						
	Mexico	Credit lines to financing companies aimed at increasing car consumption by USD 310 million. Guarantees so that the commercial banking system grants loans to purchase cars by USD 310 million.						
Loans and guarantees for final consumption	Russia	Partial compensation for the types of credit applicable to vehicles purchased by individu USD 57,4 billion. State guarantee granting: USD 3.7 billion.						
	Argentina	New cars can be acquired through three schemes: prepaid savings plans, fixed-rate collateralized loans, and blended-rate collateralized loans.						
Subsidies for the purchase	Malaysia	A USD 2,000 discount for owners of over ten-year-old cars, so that they can purchase the local brands Perodua and Proton.						
of new cars	China	CNY 5 billion subsidies for farmers to purchase modern vehicles.						
Subsidies on "clean" cars	China	Allocation of USD 1.5 billion to the development of "clean" cars over the next three years.						
Loans to the production chain	Brazil	Remission of BRL 4 billion from the Banco do Brasil to banks linked to vehicle assembling companies. Creation of a special line of BRL 3 billion by the Banco do Brasil to finance the working capital of the auto parts sector. Creation of a special line of BRL 400 million with resources from the Banco do Brasil and the Worker's Protection Fund to finance the working capital of used car dealerships, on condition that jobs be maintained.						
Non-automatic import licenses	Argentina	Tyres, combines, tractors, car seats.						

Source: CEI

Reflections on the measures

The massive flow of funds aimed at companies of the sector stirs up controversies and frictions among the governments of the countries involved. When these measures started to be applied, other countries were obliged to adopt similar policies. In fact, statements such as those by the Germany's finance minister confirm this. Peer Steinbrück has stated that it would be fatal not to support the German automotive industry when their competitors in America were receiving billions of dollars (The Economist, 2009 b).

There have even been clashes among European Union member countries. President Sarkozy's statements in relation to the support plan to Peugeot-Citroën rose questions among Czech and Slovak authorities. Sarkozy mentioned the need to stop the relocalization of French industries and to protect domestic employment.

Peugeot-Citroën has car plants in both the Czech Republic and the Slovak Republic (Wall Street Journal, 2009).

But where do developing countries with no chance of granting aid at that level stand? Undoubtedly, they are at a disadvantage with respect to subsidized industries. This argument contrasts with the idea that it is very difficult to apply the concept of "nationality" to the automotive industry. Due to globalisation and the production chain interconnection, helping manufacturers in one country implies subsidizing other manufacturers or suppliers belonging to that industry in another part of the world.

Anyway, although subsidies to the industry intermingle worldwide as a result of globalisation, the companies based in countries which give them subsidies will have a better and faster response capacity when demand falls. Thus, the countries which grant large amounts of money will try to "save" first those firms based in their territories. Moreover, subsidiary companies located in developing countries depend on the decisions main offices take regarding reconversion plans; this situation proves their vulnerability.

Surely, these measures will affect the competitiveness of unsubsidized industries. It is not yet possible to foresee how developing countries will respond. An option could be to resort to the application of countervailing duties, since specific subsidies are actionable under the WTO Agreement on Subsidies and Countervailing Duties.

With respect to the foregoing, those who do not favour these subsidies point out that the amount of aid granted prevents the real adjustment needed in the industry. The overall installed capacity—already oversized before the crisis—exceeds demand in 30 million of vehicles a year in good economic times. Some people state that when trying to maintain this level of capacity, governments do not allow a natural selection process, or in other words, do not allow the industry to get more competitive and efficient (The Economist, 2009 c).

4.4.2. Agricultural sector

Diversity is, without doubt, a distinctive feature of the measures adopted in the agricultural sector as a result of the global crisis. It is not easy to determine a policy pattern in developed and developing countries. Yet, as in the case of the car industry, there are still great differences in the amount of aid granted.

The fact that the European Union and the United States have resorted once again to export subsidies is outstanding. The adoption of these subsidies has been strongly criticised by the main agricultural exporting countries, because these subsidies were supposed to be eliminated once the Doha Round is finally concluded. The main sector benefiting from this measure is the dairy sector, since there was an attempt to shield it from the sharp fall in international prices.

Together with the significant amount of aid granted through the Common Agricultural Policy (CAP)—in the case of the EU—and the Farm Bill—in the case of the United States—the following measures, among others, have been adopted: tariff increase, government procurement to prevent prices from falling and the injection of considerable amounts of money (sectoral subsidies) channelled through credits, facilities for the sector in terms of infrastructure and commodity programmes.

In turn, developing countries have mainly adopted trade-related measures such as increases in import tariffs, and the application of import licenses, tariff-rate quotas, and antidumping and safeguard measures. They have also granted sectoral subsidies, but these are far from reaching the amounts granted in developed countries.

Developed Countries

European Union

With regard to the protectionist policies used to buffer the effects of the crisis, export subsidies have had the greatest impact of all.

The European Union has a permanent export subsidy regime—which they call restitutions—in sectors such as the bovine meat, poultry meat, pork meat, dairy products, eggs and egg products. These subsidies are granted via a periodic tender mechanism where maximum restitutions are fixed for the export of certain products. ¹⁶

Over 2008 this instrument was barely used as a consequence of the high international prices of commodities. At the beginning of 2009 restitutions started to be applied again when prices fell. On 17 July 2009 the Commission Regulation (EC) No 612/2009 was published in the EU Official Journal. This document includes all the regulations published by the European Community up to that date, and it establishes common provisions on how to apply the restitution regime for agricultural exports. These restitutions can be given to the following products: cereals, rice, sugar, beef, milk and dairy products, pork meat, eggs, poultry, and products elaborated by the following sectors: cereals, rice, sugar, milk and eggs, fresh grape wine, grape juice, must, sugars, glucose and glucose syrup.

The dairy sector has benefited the most from this type of measure. As stated in a communication from the Commission to the Council on 22 July 2009 (Comisión Europea, 2009 e), the dairy market situation has deteriorated since mid-2008. Milk prices have dropped from 30–40 cents of euro per litre to a weighted average of 24 cents, with prices at around 20–21 cents of euro per litre or less for many dairy producers. The report mentions that the Commission acknowledged the seriousness of the situation and acted accordingly through an interventionist policy. Moreover, it points out that the EU has been able to maintain exports at the same level as in the previous year, due to the reactivation of export subsidies on all the products of the sector. Yet in June there was a strong decline in the demand for export certificates, which could be pointing at a greater reduction in demand.

But this is not the only tool used to support the shaken European dairy sector. Since 1 March 2009 the European Union has intervened in the market through government procurement of butter and skimmed milk powder so as to avoid a greater drop in prices. The government bought approximately 8 percent of the production of butter between January and June 2009—that is, 81,900 tonnes—and around 43.5 percent of the production of skimmed milk powder during the same period—that is, 231,000 tonnes.

Moreover, aid for private storage started to be given in January, two months before the usual time. Until 28 June 2009, 105,800 tonnes had been stored, that is 14,000 tonnes less than in 2008. Likewise, the Commission will allow member states to advance direct payment outlays by up to 70 percent as of 16 October 2009 instead of 1 December 2009. Member states could also give government support or loans to help dairy producers facing liquidity problems.

These measures raise questions about the CAP budgetary revision process, which should start in 2010. Moreover, some of the financial advisors of European authorities have started to worry about the impact of interventionist measures on the Community budget. The fact that one-fifth of the European Economic Recovery Plan is intended for rural development—almost all of which will be directed to the dairy sector—shows the relevance agriculture has to the Community. It can be said that member states are still willing to give agriculture a relevant place, even against the principles of the CAP reform. Some estimates indicate that, if government procurement continues to be carried out at this pace, the government will purchase 340,000 tonnes of powder milk and around 95,000 tonnes of butter—which, in both cases, would be around the triple of the annual intervention limit. The cost of said procurement would total EUR 571 million for skimmed milk powder and EUR 209 million for butter. If the costs of storage and of export subsidies were considered together, then the value of the support to the dairy sector for 2009 would exceed EUR 1 billion (Agra Europe Weekly, 2009). Conversely, according to the Commission the estimated cost of the measures adopted—which contemplates postponing intervention—is of EUR 600 million (Comisión Europea, 2009 e).

On 1 January 2009 the EU also reinstated import duties on cereals. From October 2007 until December 2008 cereals entered without paying any tariff.

¹⁶ In the List of Commitments of the Uruguay Round, the EU has established which products can receive this subsidy, the budgetary outlay ceilings, and the maximum quantity per product.

Furthermore, through the Commission Regulations 313 and 434 of 2009, the EU modified the triggers to establish additional tariffs on some agricultural products: tomatoes, apricots, lemons, plums, peaches—including nectarines—pears, table grapes, cucumbers and cherries—except for morello cherries.

United States

The dairy sector is also protected by countries other than the European Union. On 22 May 2009 the United States Department of Agriculture (USDA) presented the outlays of the Dairy Export Incentive Program for the period July 2008 to 30 June 2009.¹⁷ The USDA Secretary, Tom Vilsack, defended the use of this tool and considered it fully consistent with their WTO commitments. He claimed that the programme helps dairy exporters face low world prices, and encourages the development of export markets in areas where dairy producers are not competitive due to the subsidies other countries apply (Rural news, 2009). In turn, a spokeswoman in the Office of the US Trade Representative, Nefeterius McPherson, pointed out that the EU revival of dairy subsidies "is seriously undermining the competitiveness of US dairy products and has forced the United States to respond...". Moreover, she stated that the United States could consider lifting this measure if the European Union stopped granting subsidies to the sector (Inside US Trade, 2009).

As for the quantities involved, the US Secretary of Agriculture has announced that the United States will subsidize 92,362 tonnes of dairy products, or USD 116 million. Subsidies include 68,201 tonnes of non-fat milk powder, 21,097 tonnes of butter, 3,030 tonnes of different kinds of cheese and 34 tonnes of other dairy products.

Another measure that is being considered by the United States is the implementation of a tax on imported dairy products (Dairy Import Assessment). On 19 May 2009 the US Department of Agriculture—with the aim of encouraging promotion and research in the sector—published a proposal establishing a tax on dairy product imports of 7.5 cents of dollar for every 11 pounds (4.99 kg) of imported fluid milk or its equivalent according to the content of other dairy products. The proposal consisted in the modification of Section 1150.111 of the 2002 Farm Bill, which sets forth that the Dairy Promotion and Research Order should be amended to implement a duty applicable to imported dairy products. The 2008 Farm Bill had fixed a rate of 7.5 cents for every 100 pounds instead of every 11 pounds.

With regard to the agricultural sector as a whole, on 24 June 2009 the USDA announced an additional set of export loan guarantees for an amount of USD 1 billion, thus raising the total amount given under this programme for the year 2009—ending on 30 September 2009—to USD 5.35 billion, that is, very close to the legal limit allowed by the programme. Said additional set contains a regional distribution where USD 200 million correspond to exports destined to Argentina, Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay. The total amount of money distributed for exports destined to said countries in 2009 adds up to USD 750 million.

Moreover, as part of the American Recovery and Reinvestment Act of 2009, the US Department of Agriculture has taken, among others, the following measures:

- USD 24 million is destined to construction, repairs and improvement of agricultural buildings.
- An additional amount of money is allocated to direct loans and guaranteed loans. Funds for rural insurances will be available: USD 1 billion for direct loans and USD 10.47 billion for non-subsidized guaranteed loans.
- USD 150 million is allocated to facilities in rural communities and an additional amount will be granted to finance loans and concessions.
- USD 1.38 billion is allocated to finance direct loans and guarantees for rural water, sewage waters and waste management programmes.

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¹⁷ This programme became effective in 1985 and was reintroduced by the Farm Bill in 2008.

- Commodity programmes: i) USD 150 million will be available for food support programmes, and ii) the USDA will be able to allocate additional support to farmers suffering a production loss worth millions as a result of natural disasters.

Switzerland, Canada and Japan

Other developed countries such as Switzerland, Canada, and Japan have applied protectionist measures. Switzerland temporarily reinstated export restitutions for cream all throughout 2009, and eliminated the production quota regime applicable to milk as of 1 May 2009 (Federal Law on Agriculture). In turn, for the period 1 April 2009 to 31 March 2010 Canada established a tariff-rate quota (10,000 tonnes)—with zero tariff within the quota and a tariff of 270 percent outside the quota—on imports of milk protein substances with a milk protein content of 85 percent or more, and which do not come from the United States, Mexico, Chile, Costa Rica or Israel. Lastly, Japan applied a special safeguard measure on food preparations of flour, semolina and starch from 1 February 2009 to 31 March 2009.

Some effects produced by these measures

It was not long before the reactions to the new dairy export subsidies flared up. On 27 May 2009, a statement by the Cairns Group¹⁸ defined the measure adopted by the United States as "a backward step" and criticised the United States and the EU for reinstating said subsidies, since this move could result in other countries responding with similar measures, such as raising export subsidies and/or tariffs to the bound level agreed at the WTO, thus undermining the effectiveness and credibility of this institution.

Being important exporters of dairy products, New Zealanders have shown their concern. The New Zealand Institute for Economic Research (NZIER) has carried out an impact assessment of those measures. Their research concludes that a 5 percent increase in EU and US subsidies would cause New Zealand's output to shrink by 5 percent, and the value of exports would drop by 8 percent (Rural news, 2009).

Developing countries

With regard to trade measures, developing countries have mainly resorted to raising import duties and tariffrate quotas as tools to protect their agricultural sector. They have also applied safeguards on imports, import licenses and antidumping measures, but to a lesser extent. Table 2 shows these conclusions.

Moreover, it is worth noting that developing countries have announced that they will grant sectoral aid and subsidies of a very different nature; besides, the amounts of money involved are, in general, far from the amounts granted by developed countries. Table 3 shows the measures adopted by each country.

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¹⁸ Group of 19 agricultural exporting countries.

Table 2 Selected trade measures taken in the agricultural sector in developing countries

Type of measure	Country	Affected sectors
	Colombia	Yellow corn, milk and clotted cream.
	China	Cake of soybeans, pork and neem oil.
	Egypt	White sugar.
	Philippines	Wheat.
	India	Soybean oil, white sugar.
Increase in import duties	Nicaragua	Edible oil, beans, nutritious pasta and barley, among others.
port dates	Russia	Butter, certain dairy products, milk and clotted cream, rice and grain mill products.
	Turkey	Wheat, meslin, buckwheat, rye, barley and oats, unprepared cereal straws and husks, dried apricots, plums and apples.
	Ukraine	Bovine meat, pork meat, giblets, apples, pears, cold cuts, sugar, wines.
	Viet Nam	Fresh and frozen chicken, chicken legs, wings and liver, animal food (chicken and pork), fresh and frozen bovine meat, pork meat, and frozen by-products from bovine meat, pork, lamb, goat and horse.
	Colombia	Annual tariff-rate quotas for the import of yellow corn, white corn and soya beans, originating in countries which are not members of the Andean Community of Nations.
	Indonesia	The government will impose tariff-rate quotas on bovine meat imports.
Tariff-rate quotas	Paraguay	The imports of certain meat products and giblets may not exceed, as a whole, 20 tons per month, which will be assigned among importers according to 2008 imports.
	Russia	Reduction in the tariff-rate quota on meat and increase in the tariff outside the tariff-rate quota on pork meat (from 60% to 75%) and poultry (from 60% to 95%).
	Ukraine	Tariff-rate quota on cane sugar imports.
Safeguards on imports	Taiwan	Special safeguard based on the volume for other fluid milks.
Import licenses	Paraguay	A register of importers and a preliminary import license for meat products and giblets are implemented.
Antidumping measures	Indonesia	The introduction of antidumping duties on flour from Sri Lanka, Turkey and Australia is under consideration.

Source: CEI

Table 3
Subsidies and aid granted to the agricultural sector in developing countries

Country	Measure
Argentina	ARG 1.7 billion for prefinancing the exports and working capital of the agricultural sector.
China	CNY 120 billion subsidies will be offered to farmers who grow rice, wheat, corn, cotton, rapeseed and soya. The purchase of energy-efficient machinery will be subsidized. Credit support will be given to farms dedicated to livestock and aquaculture in order to improve the scale, quality and healthiness of the activities. A 13% expansion in government subsidies so that farmers can buy, among other things, mobile phones, washing machines and computers. The government announced a 20% increase in agricultural expenditure. State intervention in the purchase of grains at higher than market price.
Guatemala	Implementation of rural development programmes with a USD 70 million budgetary allocation for 2009.
India	State intervention through the purchase of cotton. Increase in the minimum price paid to farmers. Subsidies on imported edible oils rose by INR 10 per kg. The government decided to increase the agricultural expenditure in its budget to i) subsidize fertilizers (approximately USD 8.97 billion) and food costs (approximately USD 2.19 billion), ii) write off debts and iii) create a scheme of support for debt reduction (USD 3 billion). USD 2.7 billion financial support and loans at subsidized interest rates of up to USD 6,000 at 7% annually. Different programmes have been designed with the aim of helping improve the living conditions of rural population: i) fund for the development of rural infrastructure (USD 2.8 billion), including an amount of USD 800 million for the construction of rural roads and the Indira Awas Yojana programme, which would build 6,000,000 houses.
Kazakhstan	USD 1 billion was destined to the agricultural sector to encourage production and keep food prices stable.
Mexico	The credit for the rural sector will grow by 10% (USD 6.4 billion), through the Financiera Rural and the Fideicomisos Instituidos en Relación con la Agricultura (Agricultural Trust Funds) (FIRA).
Nicaragua	The procedures for gaining exemption benefits for essential goods in the agricultural sector will be simplified, and tax exemptions will ge given to the sector. Different types of subsidies and aid have been offered in relation to food, through the strengthening of government programmes.
Dominican Republic	Subsidies representing 0.17% of GDP have been allocated.
Russia	Special package of support measures for SMEs, including agricultural companies (USD 1.2 billion).
Thailand	The government will raise the intervention price for rice.
Tunisia	Exemption from the payment of registration duties in all lease agreements for lands destined to cereal production, and from the payment of income tax on cereal crop producers.
Uruguay	Milk subsidy for three months. The support has a credit component and a subsidy component; the amount is UYU 1.2 per litre for farmers producing less than 500 litres, UYU 1.1 per litre for those producing between 500 and 1,000 litres, and UYU 0.6 per litre for those producing between 1,000 and 1,500 litres. This credit is determined as follows: those producing up to 500 litres must return 10% of the amount received, those producing up to 1,000 litres must return 80%, and those producing up to 1,500 litres must return 70%. A preferential zero-interest loan will be given to seed farmers growing 50 thousand hectares of pastures and grasslands. This measure will also benefit dairy farmers.
Viet Nam Source: CEI	Loans to the agricultural sector and rural areas for: a) machinery, mechanic equipments and means of production in the agricultural sector: maximum loan equal to purchase value, with a 100% loan interest subsidy during 24 months; b) agricultural manufacturing materials: maximum loan equal to purchase value, but not greater than USD 412, with a 4% loan interest subsidy during 12 months; c) construction materials in rural areas: maximum loan equal to purchase value, but not greater than USD 2,940, with a 4% loan interest subsidy during 12 months.

Source: CEI

4.5. Stimulus packages

A great number of countries, both developed and developing, have announced important fiscal stimulus programmes aimed at counteracting the world recession by boosting aggregate demand.

Although boosting demand is the main objective of stimulus packages, these considerable injections of public money into the economy and the influence governments have on the way this money is spent have the potential to distort markets and competition, thus having an impact on international trade.

Due to their sheer size, many of these programmes can negatively affect foreign manufacturers specialised in activities which receive government aid in other countries. Those countries which are unable to offer similar support to their own firms will be in a highly biased and unfavourable competitive position in the world market.

Another cause for concern is that public funds granted for specific sectors or firms to face a certain problem are not withdrawn once the problem has been solved. The longer those subsidies remain in place, the greater the influence on production and investment decisions will be, and the greater the threat of chronic trade distortions will become.

Moreover, some stimulus packages include conditions for the use of the financing, whose aim is to concentrate the impact of the stimulus on domestic companies and on the creation of domestic jobs. These conditions produce the same impact as import barriers: prices increases, fewer possibilities of choice in the acquisition of goods and services, and less efficient allocation of resources. Ultimately, they have a negative impact on the competitiveness of countries which do not apply subsidies.

According to the information gathered, since October 2008 more than 50 countries have announced fiscal stimulus packages. By June 2009, these aid packages totalled nearly USD 2.3 trillion (3.8% of world GDP). Most of the plans announced extended over a period of two years, with most of the stimulus occurring in 2009.

The scope and composition of the fiscal packages announced vary considerably from one country to another; not only because the impact of the crisis is different in each country and, therefore, the tools used to offset this impact are not the same, but also because of the differences existing among countries in terms of resource availability, and the ability each country has to carry out different initiatives.

The amount announced by country ranges from less than USD 1 billion (Nicaragua, Paraguay, Honduras, Viet Nam) to more than USD 100 billion (Germany and Japan). In China and the United States the plans announced exceed USD 500 billion.

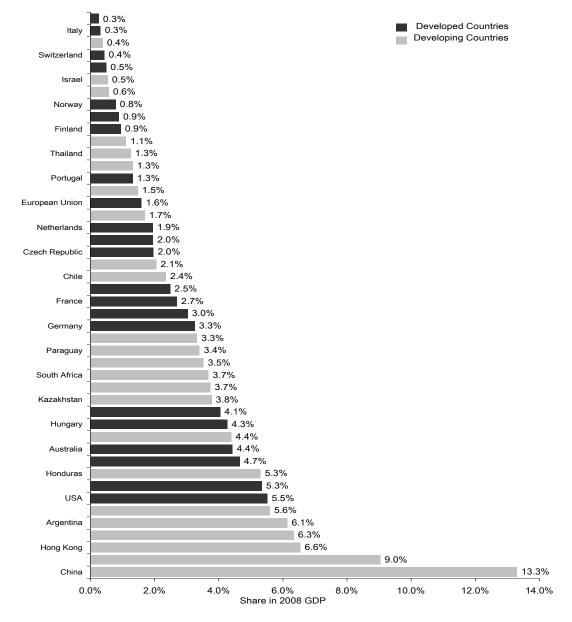
In relative terms, the countries which have implemented more stimulus packages are China (13.3% of GDP) and Malaysia (9% of GDP). The IMF recommendation was 2 percent of GDP, but more than half of the countries have surpassed that figure (Graph 5).

It is worth highlighting the case of China, which in November 2008 announced a stimulus package for CNY 4 billion (USD 586 billion) to reactivate the economy through incentives to domestic demand and government investment mainly in ten sectors (automotive, steel, non-ferrous metals, logistics, light industry, petrochemical industry, electronics, textiles, machinery, and ship construction).

Another plan which stands out because of the amount of money involved is that of the US, which—through the Recovery and Reinvestment Act enacted in February 2009—will allocate USD 787 billion during the following ten years to create sources of employment, restore economic growth and strengthen the middle class. The Act also includes the controversial *Buy American* provisions (see Section 4.3).

In turn, in December 2008 the European Union agreed upon the creation of a European Economic Recovery Plan to increase purchasing power, reactivate growth and create jobs, with a EUR 200 billion budget. Eighty-five percent of this amount will come from domestic budgets, and the rest will be charged to the European budget and the European Investment Bank. With regard to the plans announced by member states, the most ambitious are those of Germany, France, Spain and the United Kingdom.

Altogether, the stimulus packages announced by developed countries account for 65 percent of the total amount announced. In the case of developing countries, the stimulus package announced by China accounts for 25 percent of said total, whereas the rest of the developing economies account for only 10 percent of it.



Graph 5. Stimulus packages as a percentage of GDP

Note: the amount announced for each stimulus package was used as numerator, and the 2008 GDP obtained from the IMF World Economic Outlook Database for April 2009 was used as denominator. Source: CEI

With respect to the composition of the stimulus packages, in most countries, measures related to increases in public expenditure exceed in value those on tax. In developing countries, the percentage of stimulus devoted to increase public expenditure accounts for nearly 90 percent. On the other hand, tax cuts account for more than one-third of the fiscal stimulus measures announced in developed countries. Tax measures are based

mainly on income tax and, to a lesser extent, on corporate taxes, whereas public expenditure is almost entirely allocated to investment in infrastructure.

Classification of measures

The measures announced can be classified into four categories: i) increase in expenditure on public goods and services; ii) fiscal incentives to consumers; iii) fiscal incentives to companies; and iv) measures aimed at maintaining employment levels (Graph 6).

i) Expenditure on public goods and services:

It is the most important component in the stimulus packages, and it mainly includes investment in infrastructure. On average, in developing countries three-fourths of the amount of the stimulus packages is allocated to expenditures on infrastructure, whereas in the packages announced by industrialized countries the share of infrastructure spending is much lower (28%).

In general, these expenditures include road or railway works, schools, hospitals, rural infrastructure, etc. Some countries intend to increase the availability of low cost housing (China and a significant number of Latin American countries). Others, such as Canada, China, Japan, the US, and several EU members, included energy efficiency projects and environmental protection programmes.

ii) Fiscal incentives to consumers:

With the aim of stimulating consumer demand, 30 countries included different incentives, such as tax reductions, money transfers to low-income families or expansion of social security programmes. In the total amount of plans, the share of these measures is much more important in developed countries than in less developed economies.

Many countries made reductions in income tax, especially for low-income people (Canada, the US, Spain, Italy, Brazil, Chile, Philippines, Indonesia, Malaysia, South Africa). Other countries reduced sales taxes, either across the board, such as the United Kingdom—which applied a general reduction in VAT—Switzerland, Italy, China and India; or in a sectoral way, such as Brazil or Germany did with the automotive sector.

On the other hand, Mexico, Malaysia and Indonesia chose to subsidize basic goods, and other countries resorted to transfers to low-income families (Australia, Korea, Japan, Chile, Paraguay), expansion of social security programmes (Australia, Canada, the US, Japan, Spain, China, India, Mexico, several EU members, Philippines, Indonesia, Peru, South Africa) and incentives to buy houses (Canada, Japan, Germany), which in some cases include measures to encourage household energy efficiency (Australia, Canada).

iii) Fiscal incentives to companies:

Stimulus measures for companies can be observed in 34 countries. These measures include, among others, subsidies to companies—especially to the automotive, construction and real estate sectors—tax cuts, and incentives to SMEs and to export sectors. In relative terms, developing countries have resorted to this type of measure to a greater extent than industrialized economies.

In Korea, the US, Japan, Norway, Switzerland, several EU members, Brazil, Chile, China, Philippines, Indonesia, Malaysia and Russia corporate taxes were temporarily reduced in some cases, and permanently reduced in some others.

Australia, Canada, Korea, Japan, New Zealand, India, Jamaica, Mexico, Peru and South Africa gave specific incentives to SMEs; while Spain, Brazil, India and also Peru granted support to export sectors.

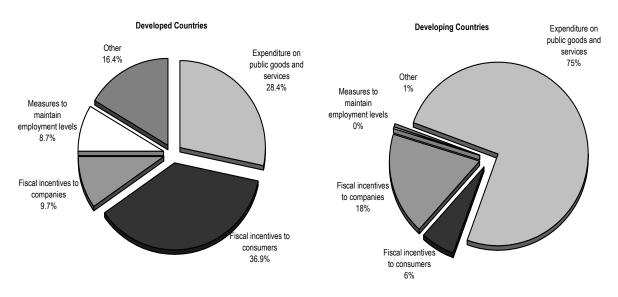
There were few cases of accelerated depreciation (Canada, Spain) and tariff reduction regimes for capital goods (Canada, Indonesia, Jamaica). Incentives related to "green" production can also be observed, but only in countries of greater industrial development.

iv) Measures aimed at maintaining employment levels:

Few countries have applied measures to maintain employment levels (17 countries, most of them industrialized). These measures include, among others, training programmes (Australia, Canada, Chile, China, France, Germany, Indonesia, Japan, Korea, the United Kingdom), incentives for companies to hire the unemployed (Spain, the United Kingdom), extension of benefits for the unemployed (Japan, the US, Canada, China, Korea), and reduction in working hours schemes (Germany).

Graph 6. Breakdown of stimulus packages. Developed and developing countries

In percentage of total amount announced



Note: Based on the stimulus packages of 29 countries (14 developed countries and 15 developing countries). Source: CEI

Box 2 Environmental measures in stimulus packages

A strong interest in topics related to the environment and renewable energy sources is observed in developed countries' stimulus packages. The United States and the European Union members have allocated significant amounts of money from their stimulus packages to environmental, energy efficiency and clean energy projects. Within the group of developing countries, China is the country giving the greatest emphasis to this issue.

Although these measures are aimed at encouraging the use of certain technologies—in accordance with the greater present and future requirements of environmental policies which will affect both domestic and imported goods—there is the risk that they are used as a way of disguising the subsidies granted to certain industrial sectors or that they pave the way for the development of "green protectionism".

According to Robins *et al.* (2009), around 15 percent of the total amount of stimulus packages can be associated with environment-related investments. The issue receiving the greatest attention—around two-thirds of the total—is energy efficiency, including measures to improve the energy efficiency of buildings and to promote low energy consumption cars, multimodal transport and electrical network development. Issues related to water and waste management control follow in importance. Very few countries pay attention to the

issue of renewable energy, and no allocation of money has been made at all to the issue of carbon bond market.

Almost 40 percent of China's stimulus package is allocated to energy efficiency projects and expenditures related to environmental improvements. This stimulus package includes subsidies for automotive companies to develop alternative-energy vehicles, and it increases the expenditure for freight rail infrastructure, for the expansion of energy transmission lines and for waste treatment. Moreover, there have been tax cuts in sales of low CO₂ emission cars.

In the US twelve percent of the amount of the stimulus package corresponds to environmental expenditures. A significant amount of money is allocated to the development of renewable energies and energy efficiency. Expenditures related to environmental sanitation are also included.

The amount allocated by the EU to environmental issues accounts for almost 60 percent of its stimulus package. Both energy efficiency and the manufacturing of green cars are encouraged. Among the EU members, the plans implemented by Germany and France are the most relevant, allocating 13 and 21 percent of their stimulus packages to environmental expenditures respectively.

In Germany, an important boost is given to the energy efficiency of buildings and vehicles, and to public transport systems, whereas France is granting incentives to the purchase of low consumption cars, and has announced renewable energy investments. Italy has designed a plan to promote vehicles with lower fuel consumption, and has announced investments in rail infrastructure. The United Kingdom destined part of its stimulus package to the energy efficiency of both buildings and cars.

Other countries which include environmental expenditures in their fiscal stimulus packages are Korea, Australia, Japan, and Canada.

5. Conclusions

Almost all governments of both developed and developing countries have adopted measures to mitigate the effects of the global crisis.

The information gathered by CEI shows that industrialized countries have intervened mainly through the implementation of sectoral aid and subsidies, while developing countries have made a greater use of trade measures, probably due to the fact that they have lower resource availability to grant subsidies and support.

Furthermore, developed countries have implemented fiscal stimulus packages that involve higher amounts of money than those implemented in developing economies, which can also alter competitive conditions and investment decisions.

The automotive and the agricultural sectors stand out over the other sectors due to the concentration of support measures they receive both in developed and developing countries.

In the automotive sector developed countries generally use supply side tools, while developing countries stimulate demand. European countries and the United States have carried out significant bail-out operations for automotive companies.

With regard to the agricultural sector, the tools adopted are very varied, and it is difficult to determine a policy pattern for each group of countries. Yet we can say that the implementation of export subsidies is a measure characteristic of developed countries, and that developing countries have mainly adopted border protection measures.

The main developed countries and China have shown a great interest in environmental and renewable energy projects in accordance with the present and future requirements of environmental policies. However, these measures can be used as a way of disguising subsidies behind the veil of the environmental target.

All these measures modify production and investment decisions, and distort trade and competition, but they do so to various extents and through different means. Within trade measures, tariffs have a direct effect that can be quantified. In the case of non-tariff measures, they also affect trade directly but, given their characteristics, it is more difficult to assess the magnitude of their commercial impact.

On the contrary, government subsidies and aid affect trade indirectly, favouring domestic output and exports instead of imports. Unlike in the case of trade measures, little is known about the way in which government subsidies and aid can affect competition in global markets.

The sheer size of the measures adopted also needs to be considered. Whereas it is more likely that a US dollar paid as a tariff or other border measure has a greater commercial impact than a US dollar given as domestic support or subsidy, this conclusion may change when the amounts of support are very high, like the ones that are currently being given.

At present, countries do not have total freedom to adopt trade policy measures and other related measures aimed at favouring the domestic industry. First of all, WTO rules help control the degree to which some of these measures can restrict international trade. Thus, the application of trade measures and the granting of domestic subsidies and export subsidies are restricted. Moreover, the WTO provides mechanisms through which the countries affected by the imposition of certain trade measures can raise complaints against importing countries.

Secondly, public information can narrow governments' room for manoeuvre. Although countries have to inform the WTO of many of the measures they take, there is still a lack of reporting disciplines, information and transparency criteria for most of the aid and subsidies granted in the framework of stimulus packages.

WTO Secretariat's reports¹⁹ and the scrutiny tasks involved in trade policies and other related policies carried out by other international organisations (World Bank), academic centres (Global Trade Alert of the Centre for Economic Policy Research), and the press in general are in keeping with this trend for transparency.

The spread of the measures that are being adopted can be dissuasive at the time of deciding to apply certain political tool. Such a decision is also influenced by the outcome of the meetings of blocks of countries, like the G20, which are aimed at avoiding an escalation of protectionist trends. Furthermore, international organisations and groups of countries are of vital importance to curb non-cooperative behaviours, which would worsen the intricate international outlook. However, the pressure exercised by peers and by the public opinion may not be enough, especially when almost all countries have implemented similar measures.

¹⁹ In this regard, Argentina submitted a communication (OMC, 2009 d) asking that WTO reports on protectionist measures provide more information about all the measures used and their effects, in favour of a greater transparency of the multilateral trading system.

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Annexe
Trade and sectoral measures applied due to the global crisis, by country

I. Trade measures											II. Sectoral aid and subsidies	
	Corrective trade measures			Non-tariff barriers			Measures on exports			Draduation and		- III.
Tariffs	Antidumping	Safeguards	Countervailing duties	Licenses	Tariff-rate quotas	Other non- tariff measures	Export subsidies	Export refunds or duties	Other measures on exports	consumption subsidies	Government procurement	Stimulus packages
	X									X		Х
Х	Х		X							Х		Х
Х									Х	Х		Х
	х		Х				х			х	Х	Х
		Х										Х
									Х			Х
									Х			Х
							х					Х
Х	Х		Х				Х			Х	Х	Х
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Countries	I. Trade measures											II. Sectoral aid and subsidies	
		Corrective trade measures			Non-tariff barriers			Measures on exports			Draduation and		· .
	Tariffs	Antidumping	Safeguards	Countervailing duties	Licenses	Tariff-rate quotas	Other non- tariff measures	Export subsidies	Export refunds or duties	Other measures on exports	Production and consumption subsidies	Government procurement	Stimulus packages
Developing Countries													
Argentina		X			Χ		X		X		X		X
Bolivia							X			Х	X		Х
Brazil		X							X	X	X		X
Colombia	Х	Х			Х	Х							х
Chile											X		Х
China	Х	Х							Х	Х	Х	Х	х
Ecuador	Х					Х			х	Х			
Egypt	Х		Х										Х
Philippines	Х		Х							Х			Х
Guatemala											Х		Х
Honduras											Х		Х
Hong Kong										Х			Х
India	Х	Х	Х	Х	Х		Х		Х	Х	Х		Х
Indonesia	Х	Х			Х	Х	Х			Х			Х
Israel										Х	Х		Х
Jamaica	Х										Х	Х	Х
Kazakhstan	Х										Х		Х
Kuwait													Х
Malaysia	Х	Х			Х		Х				Х		Х
Mexico	Х										Х	Х	Х
Nicaragua	Х										Х		Х
Paraguay					Х	Х						Х	Х
Peru									Х	Х	Х	Х	Х
Dominican Republic											Х		Х
Russia	Х					Х	х	Х	Х		Х	Х	Х
South Africa													Х
Thailand	Х									Х	Х		x
Taiwan			Х								Х		Х
Tunisia	Х						х	Х	Х	Х	Х		Х
Turkey	Х	Х	Х								Х		Х
Ukraine	Х	Х			Х	Х					Х	Х	
Uruguay	Х						Х			Х	Х	Х	X
Viet Nam	Х								Х		Х		Х

Source: CEI