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Latin America and the Caribbean: trade relations in the face of global geopolitical fragmentation risks

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Rationale

A geopolitical fragmentation of world trade, i.e. the emergence of two blocs that restrict trade with countries in the other bloc, has recently become a more likely prospect. How does this geopolitical risk affect the trade and economic outlook for Latin America and the Caribbean?

Takeaways

- Countries in Latin America and the Caribbean differ in terms of both their trade openness and the geographical structure of their trade.
- They are therefore heterogeneously exposed to the risk of geopolitically fragmented trade.
- We quantify each country's exposure and analyse how Latin America can harness greater trade integration with the European Union to reduce the costs of a potential fragmentation of world trade.

Keywords

Latin America and the Caribbean, geopolitics, international trade.

JEL classification

F13, F14, F15.

Authors:

Rodolfo Campos
International Economics and Euro Area Department. Banco de España

Jacopo Timini
International Economics and Euro Area Department. Banco de España

LATIN AMERICA AND THE CARIBBEAN: TRADE RELATIONS IN THE FACE OF GLOBAL GEOPOLITICAL FRAGMENTATION RISKS

Introduction

Geopolitical developments are increasingly affecting the globalisation process of recent decades.[1] Trade tensions have mainly arisen in recent years between the West, on one side, and China and Russia, on the other. Two recent examples of these tensions are the export controls implemented by the United States in October 2022 on advanced semiconductors and chip manufacturing equipment to firms with facilities in China and the sanctions imposed on Russia following its invasion of Ukraine.

A hypothetical trade war between the two blocs could affect third countries, with consequences for their international trade. The severity of the effects will depend on how high the tensions are and on the hypothetical alignment of these third countries with the two main geopolitical blocs. This article studies the potential impact on Latin America and the Caribbean (LAC), a region which has close trade relations with both the West and China, of a geopolitical conflict in which its trade with either of the two blocs was restricted.

Latin America and the Caribbean's international trade

The exports and imports of LAC, taken as a whole,[2] total 20% and 19%, respectively, of regional GDP (see Charts 1.a and 1.b). These percentages are lower than those of other reference emerging market economy regions, such as eastern Europe (49% and 51%, respectively) and the South-East Asian nations (39% and 36%, respectively). LAC's main trading partners are the United States, China and the European Union (EU). Trade with these three blocs accounts for close to 65% of the region's total international trade. The United States is the main recipient of LAC's exports (42% of the region's total exports, equal to 8.5% of the region's GDP). China and the EU are relatively less important, receiving 15% and 9% (3% and 1.7% of GDP), respectively, of the region's exports. For imports, the differences between the blocs are somewhat smaller. The United States, China and the EU account for 34%, 20% and 12% (6.3%, 3.7% and 2.2% of GDP), respectively, of the region's total imports. However, these figures for the region as a whole conceal differences in the trade openness and the origin and destination of international trade of its individual countries.

Charts 1.a and 1.b depict the trade openness and the origin and destination of trade for the six main Latin American countries. Mexico is a special case, with a high degree of trade openness that is similar to the EU average. Its international trade is mostly conducted with one country (the

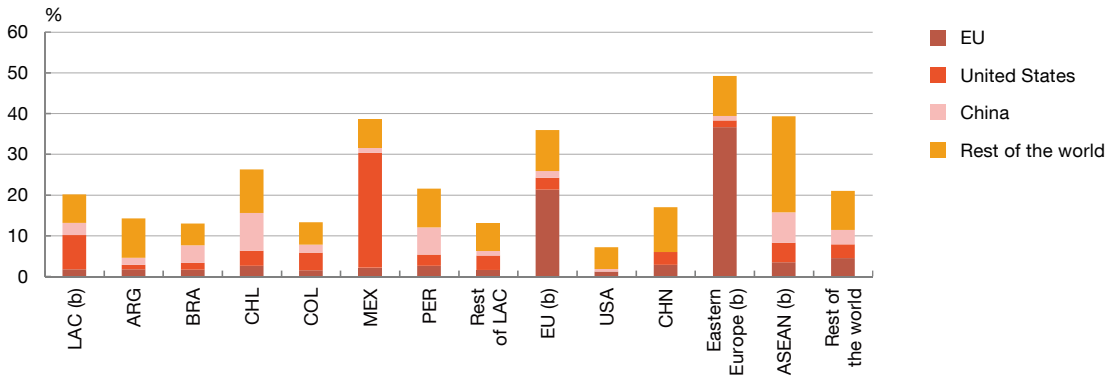
1 Georgieva (2023) and Ioannou and Pérez (2023).

2 The definition of LAC used in these calculations coincides with the International Monetary Fund's country classification. The aggregates calculated for this region include all of its countries, except where data are missing.

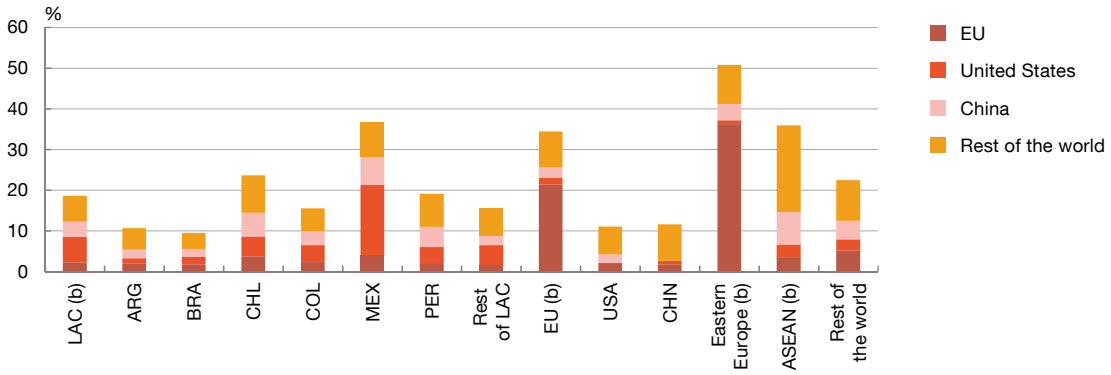
Chart 1

Countries in Latin America and the Caribbean differ in terms of their trade openness and the geographical structure of their trade

1.a Destination of exports as a % of GDP (a)



1.b Origin of imports as a % of GDP (a)



SOURCES: Banco de España and Centre d'Études Prospectives et d'Informations Internationales.

a The ratio of nominal trade flows (expressed in current US dollars) to nominal GDP (also expressed in current US dollars) is calculated for each country's imports and exports. The GDP values of each individual country comprising a group of countries are added together. The data refer to 2019.

b The groups of countries are defined as follows: LAC: Latin America and the Caribbean; EU: European Union; Eastern Europe: eastern European countries that are EU Member States, but not members of the euro area (Bulgaria, Croatia, Hungary, Poland, Czech Republic and Romania); ASEAN: Association of Southeast Asian Nations.

United States), whose relative importance in Mexico's exports exceeds the high share of intra-EU trade in the EU average. As a percentage of the total, exports to the United States are close to the relative importance of exports to the EU for eastern Europe, which could be a more appropriate comparison group for Mexico.[3] Mexico's imports are more diversified than its exports. However, in this case trade with the United States likewise by far exceeds imports from the EU or China.

Countries in South America are not as open to trade as Mexico. Among them, Brazil has the most closed economy. In addition, except for Colombia and Ecuador (not depicted in this chart), the countries' main trading partner is China. Trade with China is particularly important for Chile and

3 Exports to the United States account for 73% of Mexico's total exports, while exports to the EU account for 74% of eastern Europe's total exports.

Peru. As a result of mineral commodity exports (especially copper), China is a more important export destination for Chile and Peru than for countries in the Association of Southeast Asian Nations, despite these countries' greater geographical proximity to China. China also plays a key role in terms of imports, although, as is the case with Mexico, import origins tend to be more diversified among the United States, China and the EU.

Heterogeneity and exposure to the risk of trade fragmentation

Because the trade relations of LAC countries are heterogeneous, their exposure to the risk of a geopolitical fragmentation of world trade is highly uneven. To illustrate this heterogeneity, Chart 2.a quantifies the possible medium-term impact on each country's international trade (measured as the average of imports and exports) of three different simulation exercises, based on whether each country ceases to trade with the United States, with China or with the EU. The calculation is performed using a general equilibrium model, which takes into account the possibility of some of the trade lost due to ceasing trade with one country or group of countries being diverted towards other trading partners.

The theoretical model used is the model in Allen, Arkolakis and Takahashi (2020). In this model, each country produces a differentiated good and these goods are traded internationally. Each country's consumers value the goods traded across all countries according to a utility function with constant elasticity of substitution. Goods trade is subject to iceberg costs (trade costs proportionate to the volume traded) which include transportation costs, tariffs etc. The production of goods uses domestic and foreign inputs and labour as factors of production. This model's results depend on two key parameters: (i) trade elasticity, which determines the response of international trade to changes in trade costs;[4] and (ii) supply elasticity, which measures the response of the supply of goods produced by a country to increases in their export price.[5] The simulations reduce to zero all trade with the United States, China and the EU, for each country at a time.

The model predicts that trade losses would be lower than those implied by a simple calculation that sets total trade with each bloc to zero and assumes that the structure of world trade remains unchanged. For example, were Mexico to cease trading with the United States – which accounts for 73% of Mexican exports – total exports would decrease by a lower figure (approximately 60%) because its exports to third countries would increase. This is because the disappearance of demand from the United States causes the equilibrium price of the goods Mexico exports to fall, resulting in higher third country demand. Similarly, Mexico ceasing to import from the United States makes third countries more competitive and Mexico's imports from those countries increase. According to the findings, the relative importance of the United States, China and the EU to each country tallies with the strength of the trade relations mentioned above. Mexico and

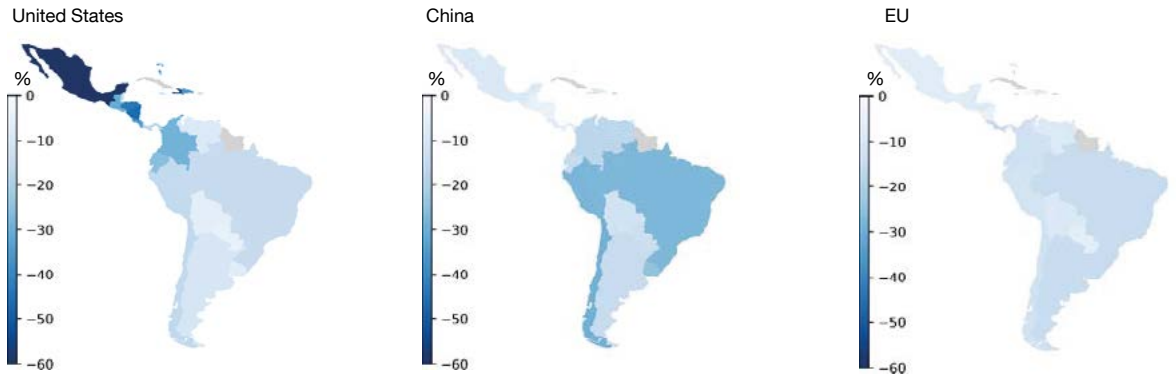
4 In this model this elasticity is determined by the elasticity of substitution between the different goods in the consumer utility function and between the intermediate goods included in the aggregate of inputs used in production.

5 The simulations use a constant elasticity of trade and a constant elasticity of supply of 3.8 and 1.24, respectively. For more details on the methodology used, see Campos, Estefanía-Flores, Furceri and Timini (2023).

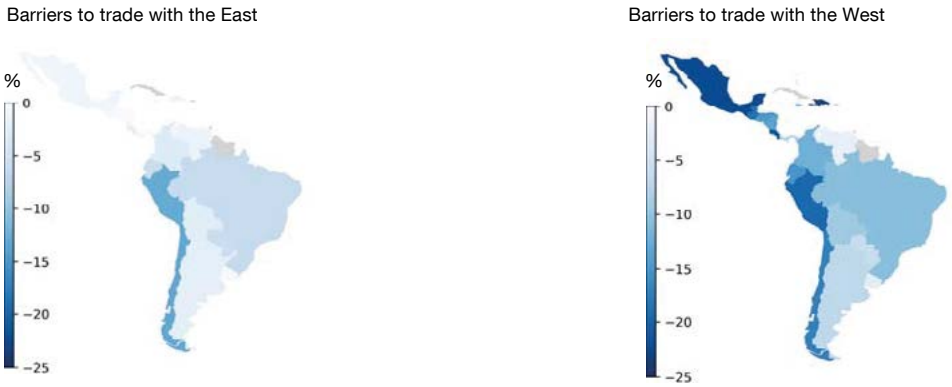
Chart 2

A fragmentation of world trade would have high costs

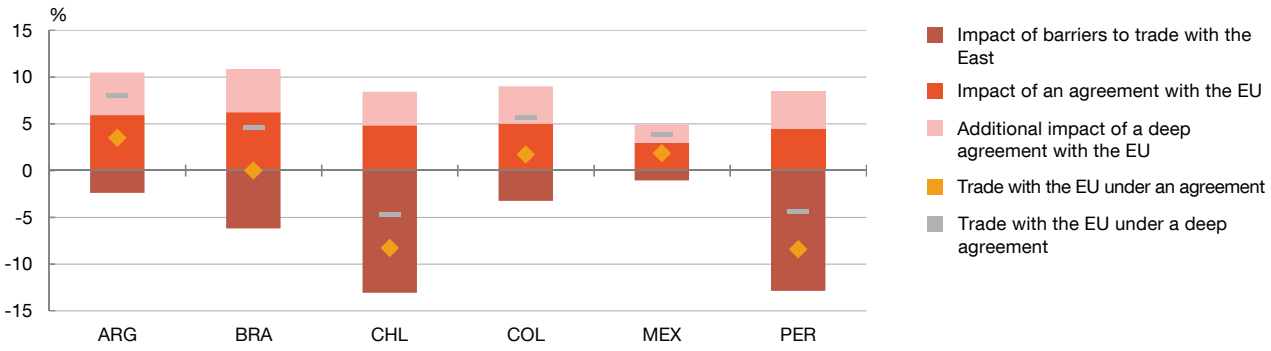
2.a Change in international trade (average of imports and exports) should trade with a specific trading partner completely disappear (a)



2.b Percentage change in international trade (average of imports and exports) should barriers to trade with a specific geopolitical bloc be imposed (b)



2.c Rate of change of international trade if barriers to trade with the East are imposed and trade ties with the EU are strengthened (c)



SOURCE: Banco de España.

a The change in imports and exports is obtained from simulations in which it is assumed that trade with a specific trading partner (the United States, China and the EU) disappears completely. These simulations are performed individually for each country and trading partner. A general equilibrium model is used. The change in trade therefore takes into account the possible effects of trade being diverted. Countries in grey are excluded from the exercise due to a lack of data.

b These simulations use the methodology developed in Campos, Estefanía-Flores, Furceri and Timini (2023). Countries in grey are excluded from the exercise due to a lack of data.

c These simulations modify the methodology developed in Campos, Estefanía-Flores, Furceri and Timini (2023) and incorporate the general equilibrium impact of an agreement between the EU and the countries of Latin America and the Caribbean based on the estimations in Timini and Viani (2020, 2021).

the countries of Central America and the Caribbean would lose more if trade with the United States was limited. By contrast, the countries in South America, except for Colombia and Ecuador, would lose more were they to cease trading with China.

Simulation of trade fragmentation scenarios

Geopolitical fragmentation could lead to countries realigning into different blocs, which could affect these initial calculations. For example, at the global level, two hypothetical blocs of countries can be defined using the country classification proposed by Campos, Estefanía-Flores, Furceri and Timini (2023), which assigns countries to blocs according to how they voted in the UN vote on 9 April 2022 on whether to exclude the Russian Federation from the Human Rights Council following its invasion of Ukraine. Specifically, this exercise identifies a bloc centred around the United States and the European Union (the West) and another around China and Russia (the East).

To tentatively quantify the potential costs of trade tensions, two hypothetical scenarios,[6] which assume the raising of barriers to trade with each of the blocs defined above, are considered. The first scenario simulates the impact of LAC belonging to the West and the second, the impact of this region forming part of the East. Neither scenario simulates the total absence of trade between blocs, as discussed earlier, but rather the raising of trade barriers to Cold War levels,[7] which would be a more realistic scenario. Chart 2.b illustrates the impact of each scenario on LAC's international trade. First, it shows that trade would decline in both cases, as would the economic activity and welfare of LAC countries. Second, as indicated by the lighter shading on the map, LAC would fare better aligning with the hypothetical West, which includes the United States, the EU, and other advanced economies, since the fall-off in trade would be 60% lower on average (80% for the median country). In this case, the largest decline in trade would be in Chile and Peru, given their aforementioned closer trade ties with China. By contrast, in the second scenario, which simulates alignment with the East, Mexico and a number of Central American and Caribbean economies would stand to lose the most, due to their relatively strong trade links with the United States.

It should be noted that these estimations are subject to much uncertainty, since the exact definition of geopolitical blocs and the extent of the rise in trade barriers are unclear. Moreover, the simulations only take into account the aggregate trade channel, not the effects of there being multiple economic sectors and their interconnections, of the global value chains, financial interconnections, or of dynamics such as those arising from the fragmentation's potentially negative effects on investment (including foreign direct investment by the other countries in each bloc) or on productivity.

6 These simulations are based on the theoretical model described earlier. See Campos, Estefanía-Flores, Furceri and Timini (2023) for further details of the methodology used.

7 To calibrate the rise in trade barriers, the historical elasticity of international bilateral trade is estimated vis-à-vis changes in an index of trade restrictions (known as MATR) developed by Estefanía-Flores, Furceri, Hannan, Ostry and Rose (2022). In the context of the general equilibrium model used, this elasticity can be reinterpreted as the elasticity of trade costs with respect to this index. The simulation consists of raising trade costs to their value if the MATR index values reached their highest level during the Cold War for countries belonging to antagonistic blocs.

Trade integration with the European Union

The above scenarios show the adverse effects that fragmentation would have on the economic activity and welfare of the economies analysed, underlining the need to find multilateral solutions to geopolitical conflicts.[8] Trade diversification could protect against potential shocks of this type. In this respect, strengthening trade relations between LAC and the EU may become increasingly important. The potential for trade integration between LAC and the EU is not fully reached under the current agreements. For instance, 2013 saw the entry into force of a multilateral trade agreement between the EU, Colombia and Peru, which Ecuador subsequently joined. In addition, the preliminary agreement reached between the EU and Mercosur has not yet been ratified, partly owing to concern among European partners as to its potentially adverse environmental effects.[9] And the agreement between the EU and Mexico, the negotiation of which concluded in 2020, is also pending ratification by the parties thereto. Against this backdrop, the strengthening of trade relations between LAC and the EU could largely offset the fall-off in trade resulting from geopolitical fragmentation.

To approximate the possible effects of stronger trade relations, the above-mentioned model is again used to analyse a third and final scenario, which envisages raising trade barriers between LAC and the East (as in the scenario illustrated in Chart 2.b) while simulating the effects of a new trade agreement between the EU and LAC. For the latter, two situations are analysed. In the first, the agreement entered into is assumed to have a similar impact to that of traditional trade agreements between advanced and emerging economies. In the second, a larger impact is assumed, in line with what can be expected from "deep" trade agreements, such as that signed by the EU and Mercosur. Such agreements include clauses that go beyond those of a traditional trade agreement and, consequently, their impact on trade is greater.[10] The results of this simulation show that strengthening trade relations with the EU would fully offset the loss of trade in Argentina, Brazil, Colombia and Mexico, and reduce that in Chile and Peru by at least 5% in the medium term (see Chart 2.c).

Conclusion

The heterogeneous trade relations of LAC countries mean their exposure to the risk of geopolitically fragmented world trade is highly uneven, with the more open countries standing to lose the most should this risk materialise. Moreover, the losses suffered by each country in a hypothetical fragmentation scenario will depend on their trade links with each bloc (the West or the East) and their alignment with either of the two blocs in such a scenario. For most LAC countries, fuller integration with the EU could help to largely offset the losses stemming from trade fragmentation.

8 Georgieva (2023).

9 However, because of the agreement's environmental clauses, its expected impact on CO_2 emissions is close to zero. For further details, see Campos, Suárez-Varela and Timini (2022).

10 For further details on the distinction between trade agreements and their estimated effects, see Timini and Viani (2020, 2021). The estimations provided in these studies are used to simulate the effect of trade agreements.

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