

International Trade and Economic Resilience in the Andean Community: A Post-Pandemic Review

- (esp) Comercio internacional y resiliencia económica en la Comunidad Andina: una revisión postpandémica
(port) Comércio internacional e resiliência econômica na Comunidade Andina: uma revisão pós-pandemia

Omar Aguilera-Salazar

Universidad de Guayaquil

omar.aguileras@ug.edu.ec

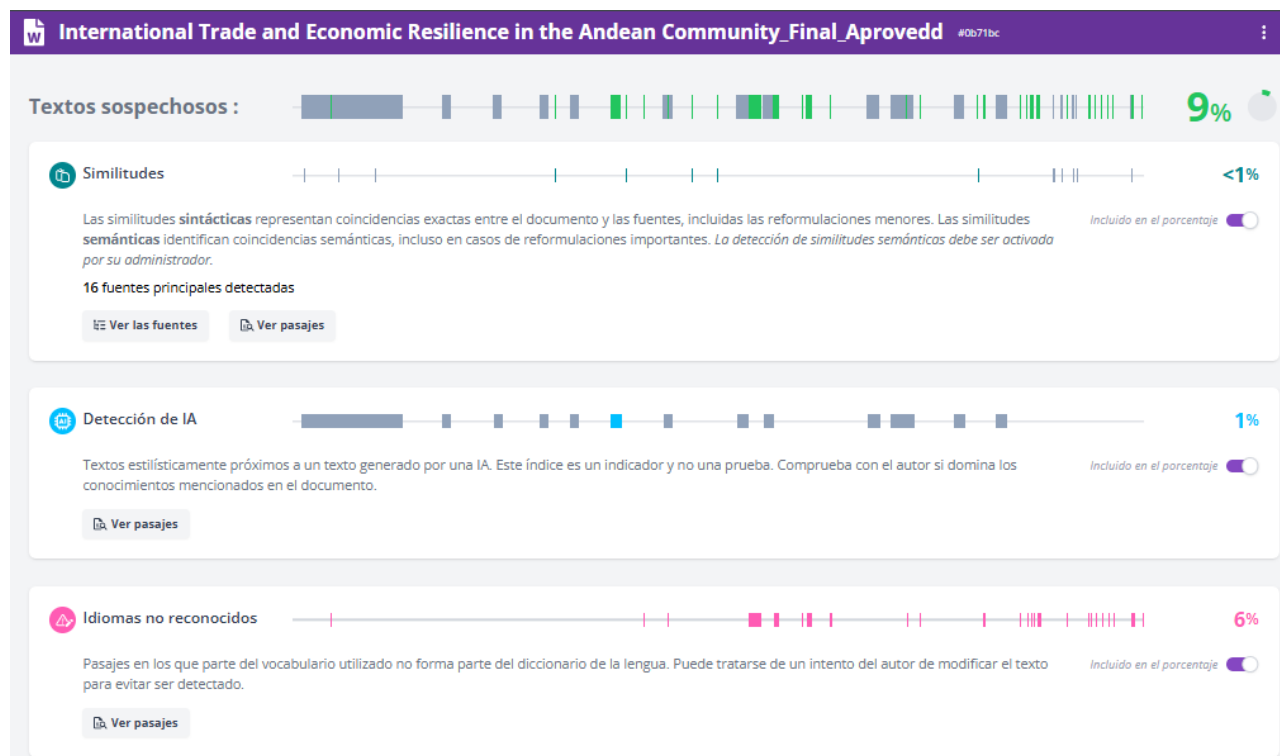
 <https://orcid.org/0009-0004-2916-8306>

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Abstract

This article presents a critical review of the evolution of trade openness within the Andean Community of Nations (CAN) during the post-COVID-19 period (2021–2023). It synthesizes data and literature from official sources such as the International Trade Centre (ITC), the Economic Commission for Latin America and the Caribbean (ECLAC), and the World Bank, in order to identify common trends, asymmetries, and structural challenges among Bolivia, Colombia, Ecuador, and Peru. The review reveals that, although international trade in the region recovered quantitatively after the pandemic, it did not translate into substantial qualitative transformations in terms of diversification, industrialization, or technological innovation. Countries such as Peru and Ecuador exhibited more consistent recovery trajectories, supported by the performance of the mining and oil sectors and by stable macroeconomic frameworks. In contrast, Bolivia and Colombia showed weaker resilience, largely due to their dependence on imported goods and the volatility of raw-material markets. The findings suggest that the Andean region continues to rely heavily on a primary-export model, with limited intra-regional trade and scarce productive integration. The study emphasizes that openness alone does not guarantee sustainable growth: the real challenge lies in linking external liberalization with domestic capabilities for innovation, infrastructure, and regional cooperation. Strengthening trade complementarities within the CAN, promoting value-added exports, and adopting green and digital trade strategies are essential to transform post-pandemic recovery into a sustainable development path.

Keywords: *Trade openness; Andean Community; post-COVID-19 economy; regional integration; sustainable development.*

Resumen

El artículo presenta una revisión crítica sobre la evolución de la apertura comercial en la Comunidad Andina de Naciones (CAN) durante el período pos-COVID-19 (2021–2023). A partir del análisis de fuentes oficiales —entre ellas el Centro Internacional de Comercio (ITC), la Comisión Económica para América Latina y el Caribe (CEPAL) y el Banco Mundial (BM)—, se examinan las tendencias comunes, las asimetrías estructurales y los retos compartidos entre Bolivia, Colombia, Ecuador y Perú. La revisión evidencia que, aunque el comercio internacional del bloque experimentó una recuperación cuantitativa tras la pandemia, esta no se tradujo en transformaciones cualitativas significativas en términos de diversificación productiva, industrialización o innovación tecnológica. Perú y Ecuador mostraron trayectorias de recuperación más consistentes, impulsadas por la minería, los hidrocarburos y la estabilidad macroeconómica. En contraste, Bolivia y Colombia reflejaron una resiliencia más limitada debido a la dependencia de bienes importados y a la volatilidad de los precios internacionales. Los hallazgos confirman que la región andina mantiene un patrón primario-exportador, con bajo nivel de comercio intraandino y escasa integración productiva. El estudio sostiene que la apertura comercial, por sí sola, no garantiza desarrollo sostenible. El verdadero desafío consiste en articular la liberalización externa con políticas de innovación, infraestructura y cooperación regional que fortalezcan las capacidades internas. Promover la complementariedad comercial, agregar valor a las exportaciones y transitar hacia estrategias de comercio verde y digital son pasos esenciales para convertir la recuperación pospandemia en una transformación sostenible.

Palabras clave: *Apertura comercial; Comunidad Andina; Economía pos-COVID-19; integración regional; desarrollo sostenible.*

Resumo:

O artigo apresenta uma revisão crítica sobre a evolução da abertura comercial na Comunidade Andina de Nações (CAN) durante o período pós-COVID-19 (2021–2023). A partir da análise de fontes oficiais —como o Centro Internacional de Comércio (ITC), a Comissão Econômica para a América Latina e o Caribe (CEPAL) e o Banco Mundial (BM)—, são examinadas as tendências comuns, as assimetrias estruturais e os desafios compartilhados entre Bolívia, Colômbia, Equador e Peru. A revisão mostra que, embora o comércio internacional do bloco tenha se recuperado quantitativamente após a pandemia, essa melhora não se traduziu em transformações qualitativas significativas em termos de diversificação produtiva, industrialização ou inovação tecnológica. O Peru e o Equador apresentaram trajetórias de recuperação mais consistentes, impulsionadas pela mineração, pelos hidrocarbonetos e pela estabilidade macroeconômica. Em contraste, a Bolívia e a Colômbia revelaram resiliência limitada devido à dependência de bens importados e à volatilidade dos preços internacionais. Os resultados confirmam que a região andina mantém um padrão primário-exportador, com baixo nível de comércio intra-andino e pouca integração produtiva. O estudo argumenta que a abertura comercial, por si só, não garante o desenvolvimento sustentável. O verdadeiro desafio é articular a liberalização externa com políticas de inovação, infraestrutura e cooperação regional que fortaleçam as capacidades internas. Promover a complementaridade comercial, agregar valor às exportações e adotar estratégias de comércio verde e digital são passos essenciais para transformar a recuperação pós-pandemia em uma transformação sustentável.

Palavras-chave: *Abertura comercial; Comunidade Andina; Economia pós-COVID-19; integração regional; desenvolvimento sustentável.*

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El autor declara no tener conflictos de intereses.

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O consentimento livre e esclarecido por escrito foi obtido de todos os participantes, sem qualquer compensação financeira.

Uma ferramenta de Inteligência Artificial (IA) de 10% foi utilizada para formatar os dados para a publicação no periódico.

Introduction

Contemporary economic history is traversed by the expansive force of international trade, a phenomenon that has transformed not only the forms of production and distribution of goods, but also the way in which countries relate to each other and build their development horizons. From the middle of the twentieth century, globalization was consolidated as the structuring framework of an interdependence that seemed irreversible: markets began to articulate themselves in a complex network that transcended national borders, value chains extended to multiple continents, the mobility of capital acquired an unprecedented speed and technological advances broke barriers that for centuries had limited communication. transport and logistics. In this scenario, trade liberalization became a dominant paradigm, defended by multilateral organizations such as the World Trade Organization, the World Bank, and the International Monetary Fund, which argued that openness was an unavoidable path to economic growth, productive innovation, and social prosperity. Latin America, a region historically marked by inequality and dependence on natural resources, joined this process in the midst of great expectations, but also with multiple tensions, contradictions and vulnerabilities that even today condition its possibilities of full integration into the global economy.

The Andean Community of Nations, currently made up of Bolivia, Colombia, Ecuador and Peru, is a privileged laboratory for observing these dynamics. Founded in 1969 under the name of the Andean Pact, the CAN emerged as an attempt to overcome the limitations of small and heterogeneous economies that, in isolation, lacked sufficient weight to negotiate on the international stage. The project sought to expand internal markets, stimulate regional industrialization and generate more equitable conditions of exchange in the face of the great centers of economic power. Throughout its history, the CAN has gone through phases of expansion and crisis, with the departure of Chile in 1976 and Venezuela in 2006, and with political tensions that have sometimes weakened the cohesion of the bloc. However, its persistence for more than five decades makes it one of the most enduring integration processes in Latin America and a key space for analyzing how trade policy, development strategies, and the challenges of globalization interact.

The impact of the COVID-19 pandemic represented a turning point in this trajectory. The rapid spread of the virus at the end of 2019, the declaration of a pandemic by the World Health Organization in March 2020, and the lockdown measures implemented in almost every country in the world triggered an unprecedented disruption in trade flows. The closure of borders, the paralysis of productive activities, the interruption of supply chains and the fall in international demand caused a collapse in global trade that resulted in the deepest contraction since World War II. For the Andean nations, whose export apparatus depends heavily on raw materials such as oil, gas, minerals and agricultural products, the blow was immediate: international prices fell, tax revenues fell sharply, foreign direct investment contracted and unemployment reached alarming levels. This economic crisis was compounded by a social deterioration that deepened historical inequalities, evidencing the fragility of social protection systems and the vulnerability of the most impoverished sectors.

The post-pandemic stage, between 2021 and 2023, opened a scenario of partial recovery and resilience, in which the economies of the CAN began to rebuild their levels of trade openness. However, this process was not uniform: while some countries managed to boost their exports and quickly regain access to international markets, others faced persistent deficits, logistical difficulties and a structural dependence on few products and

destinations. The analysis of this stage is key because it allows us to observe not only the conjunctural impact of the pandemic, but also the long-term trends that characterize Andean international trade and its limitations to insert itself competitively in the global economy.

Recent literature has addressed with increasing interest the link between trade openness and economic resilience in crisis contexts. Various studies highlight that countries with diversified production structures, with greater investment in technological innovation and with active trade policies were able to better withstand the onslaught of the pandemic and accelerate their recovery. On the other hand, economies dependent on few export sectors, with low industrial capacity and limited regional integration, experienced deeper declines and slower recovery processes. The CAN experience shows a mosaic of these realities: Peru, for example, showed a significant trade surplus thanks to the dynamism of its mining exports, while Colombia faced a persistent deficit due to the magnitude of its imports and the relative weakness of its export apparatus. Bolivia and Ecuador, although they achieved a more favorable performance, continue to depend on the volatility of international prices of raw materials such as gas, oil and certain agricultural products.

In this sense, a review of the literature and available statistics allows us to understand that trade liberalization cannot be reduced to the simple relationship between exports, imports and gross domestic product. It is a complex phenomenon, involving institutional, infrastructural and geopolitical factors. Trade policies, international agreements, the ability to attract foreign investment, the quality of logistics infrastructure, macroeconomic stability, and the strength of state institutions all play a decisive role in how trade liberalization translates into concrete benefits for society. In the case of the CAN, these elements reveal both strengths and weaknesses: on the one hand, the existence of an enlarged market of more than 110 million inhabitants and the reduction of tariff barriers are clear advantages; on the other, the asymmetry between economies and the lack of coordination in terms of innovation, industrialization and diversification limit the potential for full integration.

This article seeks, therefore, to offer a critical review of the Andean trade liberalization in the post-COVID-19 stage, integrating academic contributions, reports from international organizations and recent statistics. Unlike a purely empirical study, the proposal focuses on the systematization of findings, the comparison of trends and the discussion of the challenges and opportunities facing the region. The review will make it possible to identify patterns of resilience and vulnerability, as well as to outline possible ways to strengthen regional integration and the international insertion of the CAN in a global context characterized by uncertainty, technological transition and the need for environmental sustainability.

The historical and theoretical narrative that frames this analysis finds support in the theory of endogenous growth, which emphasizes the role of economic openness and the externalities derived from innovation and human capital as engines of development. According to this approach, countries do not grow only by the accumulation of physical capital, but also by their capacity to generate knowledge, absorb technology and integrate efficiently into global exchange networks. From this perspective, trade liberalization in the CAN is not an end in itself, but a mechanism that can enhance or limit growth depending on the way it is articulated with policies of innovation, education, infrastructure and productive diversification.

A review of the reports of the Economic Commission for Latin America and the Caribbean, the World Bank and the International Trade Centre shows that the Andean bloc has had a growing openness in recent years, although with significant variations between countries. While Bolivia and Ecuador showed high levels of

openness in relation to their GDP, Colombia maintained a lag that reflects the lack of export diversification and the strong dependence on imports. Peru, for its part, stood out as the country with the largest trade surplus, benefiting from the rise in mineral prices in international markets. However, these figures should be interpreted with caution, as they do not always translate into structural improvements in competitiveness, advances in industrialisation or a reduction in social inequalities.

The pandemic also highlighted the need to consider trade liberalization from a resilience approach. It is not enough to measure how much countries trade, but how that trade contributes to confronting external shocks, sustaining employment and ensuring the well-being of the population. Trade resilience implies the ability to adapt, diversify markets and products, and build regional integration mechanisms that allow us to collectively face global shocks. At this point, the CAN still has a long way to go, as cooperation between its countries has been limited by national interests, changes of government and political tensions that have hindered the construction of long-term joint policies.

The comparative analysis of the post-COVID-19 stage in the Andean Community offers, therefore, a privileged window to reflect on the future of international trade in Latin America. The review of literature and data reveals that, although countries have achieved a certain degree of recovery, structural challenges linked to productive diversification, technological innovation, environmental sustainability, and regional cohesion persist. Trade liberalization can become an engine of inclusive development, but also a factor of vulnerability if it is not accompanied by active policies to strengthen production, investment in human capital, and regional cooperation.

This article is part of this debate, proposing a critical reading of the Andean trade liberalization that is not limited to figures, but also incorporates the historical, theoretical, and political contexts that condition its evolution. The review seeks to offer an overview that serves both researchers and public policy makers, contributing to the discussion on how to insert the Andean Community in a more equitable and sustainable way on the global stage. Recent experience shows that global shocks, such as the pandemic, climate change or geopolitical tensions, will continue to set the course for international trade, and that resilience will depend on how countries build collective strategies for integration, innovation and sustainability.

Methodology

This work is framed in a documentary-type methodological design, based on the approach of bibliographic review and comparative analysis. The research does not pursue the empirical verification of hypotheses, but the critical systematization of theoretical and statistical evidence related to the opening of international trade in the Andean Community during the post-pandemic stage. Its essential purpose is to interpret trends, contrast results and build an integrative vision of regional economic processes from academic, institutional and official sources.

The review was developed by exploring scientific literature published between 2019 and 2024 in open access databases and indexed journals, as well as in reports from multilateral organizations such as the Economic Commission for Latin America and the Caribbean (ECLAC), the World Bank (WB), the World Trade Organization (WTO) and the International Trade Centre (ITC). Technical documents and statistical reports from

the Andean Community of Nations (CAN) were also included, providing data on trade balance, exports, imports and market opening in member countries.

The methodological procedure comprised three phases: the first corresponded to the search and selection of documents, where inclusion criteria related to topicality, thematic relevance and regional relevance were applied. Priority was given to studies that examined trade liberalization in contexts of crisis or economic recovery, as well as those that used ECLAC indicators or comparable methodologies. The second phase consisted of the organization and codification of the information, structuring the data and arguments according to analytical categories such as "trade policy", "post-COVID-19 resilience", "regional exchange" and "endogenous growth". Finally, the third phase corresponded to the interpretative and comparative analysis, in which empirical and conceptual findings were contrasted to identify common patterns, structural divergences and emerging trends within the Andean bloc.

The analytical-synthetic method made it possible to break down the phenomenon under study into its main dimensions – economic, institutional and social – and then integrate them into a systemic understanding of trade liberalization. From the point of view of design, the study is non-experimental and cross-sectional, as it analyzes already existing information on a specific period (2021–2023) without manipulating variables. The review strategy was based on content analysis techniques, comparison of statistical series and triangulation of sources, in order to guarantee internal validity and interpretative coherence.

Table 1

Operationalization of the variables of the indicators of trade openness.

Dimension of Analysis	Bolivia	Colombia	Ecuador	Peru	General Interpretation
Export Structure	Dependence on natural gas and agricultural products.	High concentration in hydrocarbons.	Moderate diversification (bananas, oil, shrimp).	High specialization in mining and agro-industry.	Persistence of a primary-export model, with slight progress in Ecuador and Peru.
Post-pandemic Evolution	Moderate recovery with price volatility.	Trade deficit and slow reactivation.	Sustained recovery driven by oil prices.	Strong recovery due to mineral demand.	Uneven recovery; dependent on product type and global context.
Degree of Trade Openness (AME/AMI)	High and stable.	Low and unbalanced.	High and increasing.	High and steady.	Greater openness does not necessarily imply economic stability.
Trade Policy and Regional Integration	Limited diversification of trade partners.	Bilateral focus; low participation in CAN integration.	Active participation in regional and	Relative leadership within the CAN.	Lack of coherence in regional strategies limits full integration.

			extra-regional agreements.		
Resilience and Sustainability	Vulnerable to external fluctuations.	Dependence on imported manufactured goods.	Improved logistics and openness toward green markets.	Macroeconomic stability and relative sustainability.	Commercial resilience remains tied more to macroeconomic stability than to innovation.

Adapted Durán and Álvarez (2008), published by the Economic Commission for Latin America and the Caribbean (ECLAC).

For the treatment of economic indicators, the parameters established by Durán and Álvarez (2008) in the ECLAC publication "Indicators of Foreign Trade and Trade Policy: Measurements of Trade Position and Trade Dynamism" were used. These indicators—openness by exports, imports, trade, and average trade—were taken as conceptual references to assess the magnitude and structure of openness in Bolivia, Colombia, Ecuador, and Peru during the years analyzed. The figures were interpreted qualitatively, prioritizing discussion of their economic and political implications rather than detailed statistical treatment.

The comparative nature of the methodology made it possible to observe trade liberalization as a relational phenomenon, in which each country expresses its own dynamics, but also shares structural features derived from its belonging to the same regional bloc. The combination of the quantitative-descriptive approach with qualitative and interpretative reading made it possible to build a holistic vision of the process, in which the numbers are complemented by the discourses, policies and institutional decisions that guide the evolution of Andean trade.

Results

The analysis of data from the International Trade Centre (ITC), the Economic Commission for Latin America and the Caribbean (ECLAC) and the World Bank (WB) made it possible to reconstruct a comprehensive picture of the behavior of international trade in goods in the Andean Community of Nations during the period 2021–2023. In general terms, the review shows a progressive recovery in foreign trade after the pandemic, although with asymmetric performances among member countries.

An interpretation of the openness indicators defined by Durán and Álvarez (2008) – measured in relation to the Gross Domestic Product – allows us to infer that Andean international trade was reactivated at a sustained average rate, but without reaching levels of structural transformation that would indicate significant productive diversification. The Andean trade liberalization during the post-COVID-19 stage was mainly based on exports of primary goods and an increase in intra-regional exchange, although the latter still represents a smaller proportion of the bloc's total foreign trade.

The revised data show that Peru and Ecuador led the trade recovery, while Bolivia and Colombia showed greater vulnerability to external fluctuations. In the case of Peru, the dynamism of mining exports and macroeconomic stability drove a sustained trade surplus. Ecuador experienced a similar behavior, favored by the recovery of oil prices and the strengthening of its export policy. Bolivia maintained a stable performance but

was highly dependent on natural gas and agricultural products, while Colombia recorded a structural deficit due to its high dependence on manufacturing imports and intermediate goods.

Table 2
Comparison of Andean trade performance 2021–2023

Country	Export trend	Import trend	Trade balance (2021–2023)	Average Aperture Level	Predominant sectors
Bolivia	Moderate growth (↑)	Sustained increase (↑↑)	Slight and volatile surplus	High (≈27%)	Natural gas, minerals, soybeans
Colombia	Irregular growth (↓)	High growth (↑↑)	Persistent deficit	Medium-low (≈19%)	Hydrocarbons, manufactures, food
Ecuador	Progressive recovery (↑↑)	Controlled Increment (↑)	Moderate surplus	High (≈26%)	Oil, bananas, shrimp, cocoa
Peru	Sustained growth (↑↑↑)	Average Increment (↑)	High and constant surplus	High (≈27%)	Minerals, agro-exports, chemicals

Source: Authors' elaboration based on ITC (2024), ECLAC (2024) and World Bank (2024).

The behavior described is complemented by the indicators of trade openness that allow the participation of foreign trade in the economy of each country to be measured. At the bloc level, the average export indicator (AME) averaged 23.4 percent, while the average import openness (MAI) was slightly lower (23.5 percent), suggesting a relatively balanced external position. However, the internal differences are notable: Bolivia and Ecuador show the highest levels of openness, exceeding 26%, while Colombia remains lagging below 20%.

Table 3
Average trade openness indicators 2021–2023 (as % of GDP)

Country	AME (Exports/GDP)	AMI (Imports/GDP)	AMIC (Exchange/GDP)	AMPIC (Average Trade/GDP)
Bolivia	27,3	26,1	53,5	26,7
Colombia	14,3	19,6	33,9	17,0
Ecuador	27,0	26,1	52,9	26,5
Peru	24,5	23,4	47,9	23,9

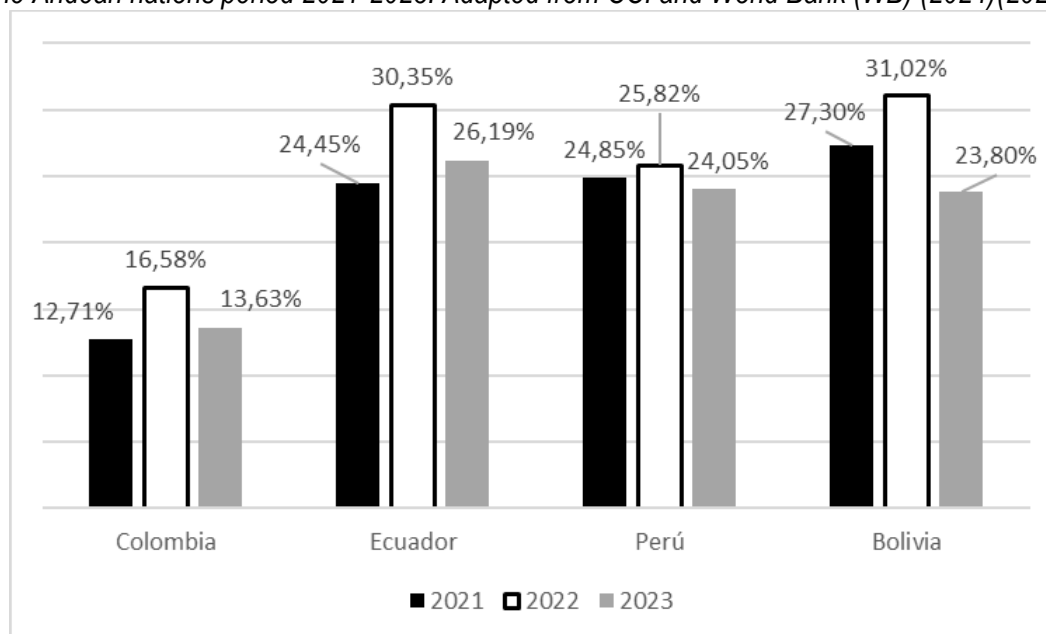
Source: Authors' elaboration based on ITC (2024) and ECLAC (2024). Adaptation of indicators from Durán and Álvarez (2008).

From the comparative reading of the indicators, a direct correlation can be seen between the level of trade openness and the export structure of each country. Those with economies oriented towards primary goods with high external demand are more open, although this does not necessarily imply diversification or sustainability. For example, the high degree of openness of Bolivia and Ecuador is explained by the strong incidence of the extractive sector, which generates vulnerability to the volatility of international prices. On the

other hand, Colombia's lower openness does not reflect a protectionist policy, but an economy dependent on imports and with low added value in its exports.

Figure 7

AME of the Andean nations period 2021-2023. Adapted from CCI and World Bank (WB) (2024)(2024)



The longitudinal analysis of the 2021–2023 period shows that 2022 was the point of greatest commercial expansion, driven by the global recovery, the stabilization of logistics chains and the increase in demand for raw materials. However, in 2023 there was a generalized slowdown, associated with the adjustment of energy prices, international inflation and the increase in logistics costs. This trend was observed in all four countries, although with different intensity.

Table 4

Year-on-year change in trade openness indicators (%)

Year	AME (Regional Average)	AMI (Regional Average)	AMIC (Regional Average)	AMPIC (Regional Average)
2021	+24,6	+18,3	+24,4	+22,0
2022	+17,1	+11,2	+17,2	+15,0
2023	-15,4	-8,7	-14,9	-13,1

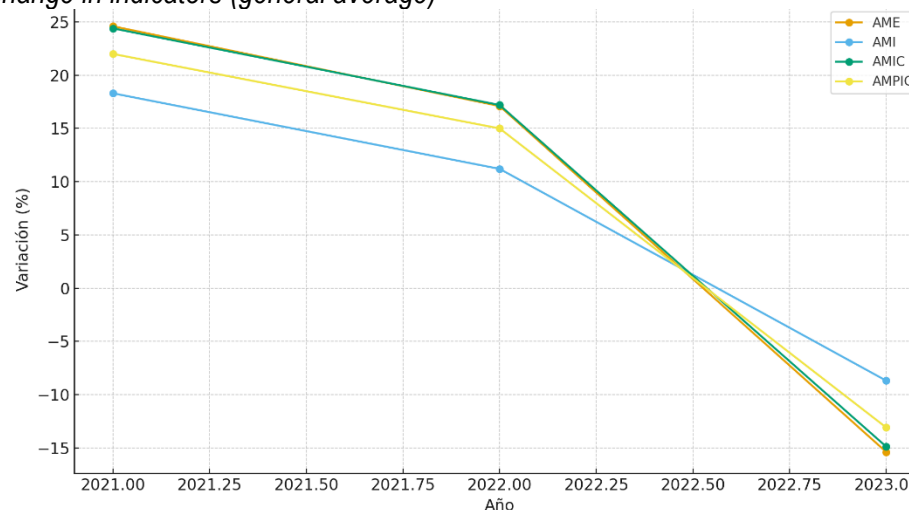
Source: Authors' elaboration based on ITC (2024) and World Bank (2024).

These results confirm that the Andean trade revival was intense but short-lived, peaking between 2021 and 2022, before stabilizing in 2023. The initial rebound is explained by the reopening of economies, the relaxation of health measures and the rebound effect of global demand; however, the lack of export diversification and weak regional articulation prevented the consolidation of sustained growth.

The review also reveals that the share of intra-Andean trade – that is, trade between the CAN member countries themselves – remains limited, at around 9% of the bloc's total exports. Despite integration policies, most foreign trade remains concentrated in extra-regional destinations, mainly China, the United States and the European Union. This shows that the economic integration of the CAN has not yet managed to consolidate itself as the main engine of intra-bloc growth.

Figure 2

Year-on-year change in indicators (general average)



In structural terms, the most relevant export sectors continue to be the traditional ones: metal mining, hydrocarbons, agricultural products and fisheries. Only Peru and Ecuador show incipient progress in the incorporation of value-added products, particularly in the agro-industrial and chemical sectors. On the other hand, Bolivia and Colombia maintain a more concentrated export matrix, which limits their margin of resilience in the face of changes in the world market.

Across the board, the data confirm that the trade openness of the CAN is closely linked to external factors and less to the internal dynamics of the bloc. Dependence on raw materials and low technological innovation act as structural barriers that prevent trade liberalization from being transformed into sustainable development. However, the Andean countries have shown signs of adaptation: the digitization of customs processes, the signing of logistics cooperation agreements and the incorporation of green economy strategies in export plans are examples of recent efforts aimed at modernizing foreign trade.

Discussion and Conclusions

A review of the indicators and trends of trade openness in the Andean Community allows us to argue that the post-pandemic recovery process has been more quantitative than structural. Although the data show a progressive growth in exports and a reactivation of international trade, the fundamentals of this openness remain largely anchored in a primary productive matrix dependent on external demand. This structural characteristic, widely pointed out by Latin American literature, continues to limit the capacity of Andean countries to turn trade liberalization into sustainable and inclusive development.

During the post-COVID-19 era, trade openness was a reflection of the resilience of each economy in the face of global shocks. Countries with greater export diversification, macroeconomic stability, and more active trade policies—such as Peru and Ecuador—showed a more consistent recovery. On the other hand, those with less productive integration and greater dependence on imports – such as Colombia and, to a lesser extent, Bolivia – faced greater imbalances in their trade balance. The comparative review also suggests that the degree of openness does not always translate into greater well-being, since economies that are highly exposed to the international market, but without consolidated industrialization or innovation structures, tend to experience greater vulnerability to global crises.

The theoretical analysis of trade openness from the perspective of endogenous growth reaffirms that liberalization alone does not guarantee progress. The factors that enhance a nation's competitiveness – education, innovation, human capital and infrastructure – are what make it possible to transform external openness into internal productivity. In the Andean context, the lack of articulation between foreign trade, investment in science and technology, and diversification policies is one of the main challenges to move towards a more autonomous development model.

In terms of regional integration, the CAN continues to be a space with strategic potential, but still underutilized. Intra-Andean trade accounts for only a small fraction of the bloc's total transactions, indicating that

economies remain oriented towards extra-regional markets. This trend reveals the need to strengthen regional value chains, promote productive complementarity and harmonize trade regulations that facilitate cooperation. Effective integration would not only expand domestic markets, but also reduce vulnerability to external shocks and improve the bloc's negotiating position vis-à-vis global economic powers. The pandemic made it clear that trade resilience does not depend exclusively on export levels, but on the institutional capacity to adapt to changes in the environment. In this sense, the digitalization of trade, the adoption of logistics technologies, the transition to sustainable economies, and regional coordination are essential elements to redefine Andean trade liberalization in the coming years. The review suggests that progress in these fields is still incipient, but they represent opportunities for transformation that could reshape the bloc's economy in the medium term.

Table 4

Comparative discussion of Andean trade liberalization (2021–2023)

Analysis dimension	Bolivia	Colombia	Ecuador	Peru	General interpretation
Export structure	Dependence on natural gas and agricultural products.	High concentration of hydrocarbons.	Moderate diversification (bananas, oil, shrimp).	High mining and agro-industrial specialization.	Persistence of the primary-export model, with slight advances in Ecuador and Peru.
Post-pandemic evolution	Moderate recovery with price volatility.	Trade deficit and slow recovery.	Sustained reactivation supported by oil prices.	Solid recovery due to demand for minerals.	The recovery is uneven; It depends on the type of product and the global context.
Degree of trade openness (AME/AMI)	High and stable.	Low and unbalanced.	High and growing.	High and sustained.	Greater openness does not always imply economic stability.
Trade policies and regional integration	Little diversification of trading partners.	Bilateral approach; low participation in CAN integration.	Active participation in regional and extra-regional agreements.	Relative leadership within the CAN.	Lack of coherence in regional strategies limits full integration.
Resilience and sustainability	Vulnerability to external variations.	Dependence on manufacturing imports.	Improved logistics and opening up to green markets.	Macroeconomic stability and relative sustainability.	Trade resilience remains linked to macroeconomic stability rather than innovation.

Source: Authors' elaboration based on documentary review (ECLAC, ITC, WB, CAN, 2024).

The review allows us to infer that the Andean trade opening in the post-pandemic stage was a recovery process without structural transformation, sustained by a favorable external context rather than by internal changes in productivity or innovation. The countries of the bloc share a significant dependence on primary goods and maintain low levels of intra-Andean trade, which shows that economic integration has not yet translated into effective complementarity. To strengthen its position in the international system, the Andean Community must reorient its trade policy towards a model that combines openness with sustainability. This implies promoting value addition in exports, promoting knowledge-based industrialization, strengthening technological cooperation and promoting social inclusion as a cross-cutting axis of competitiveness. Similarly, regional integration requires moving towards agreements that prioritize digitalization, shared infrastructure, and resilience to health and climate crises.

In conclusion, the post-COVID-19 stage left the CAN with a fundamental lesson: trade liberalization is not an end, but a tool whose effectiveness depends on institutional strength and the capacity of each country to transform external growth into internal well-being. The future of the Andean bloc will depend on its ability to turn the cyclical recovery into a sustained structural transformation, in which integration, innovation and sustainability are the pillars of the new regional trade paradigm.

Notes

1. The statistical information reviewed in this article comes from official open access sources, mainly from the **International Trade Centre (ITC)**, the **Economic Commission for Latin America and the Caribbean (ECLAC)** and the **World Bank (WB)**. The figures and proportions reported were interpreted in a comparative manner, prioritizing their analytical value rather than their point numerical precision.
2. The **indicators of trade openness** used (AME, AMI, AMIC and AMPIC) were adapted from Durán and Álvarez (2008), *Indicadores de Comercio Exterior y Política Comercial*, ECLAC. These indicators measure the share of exports, imports and total trade in GDP, and are used here as a methodological framework of reference for the analysis of regional trends.
3. The study adopts a **documentary review perspective**, which implies that the interpretations presented do not constitute original empirical results, but a critical synthesis of verified secondary sources. The conclusions are derived from the contrast between statistical data, academic literature and institutional reports for the years 2021–2023.
4. The **graphs and tables** included were prepared by the author from public and standardized data. The percentage values were rounded to facilitate reading and comparison, without altering the general trend observed.
5. Given the dynamic nature of international trade, the results reflect a **specific contextual situation of the post-pandemic period**, and should be interpreted as an analytical approach, not as a permanent diagnosis.
6. The review emphasizes the multidimensional approach **to trade liberalization**, integrating economic, institutional, and social variables. Comparisons between countries are not intended to establish hierarchies, but to illustrate the structural asymmetries and varying degrees of resilience within the Andean bloc.
7. Any subsequent use of the data or graphics must cite this article in full, respecting the **APA 7th edition standards**, and indicating the corresponding authorship and the primary source of the data.
8. This work is part of the research line **"World Economic Structure and Sustainable Regional Development"**, and is part of the academic agenda aimed at the analysis of economic integration processes in Latin America from a comparative perspective.

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