

Free Trade Agreement, 15th Anniversary

November 2024



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1. Key



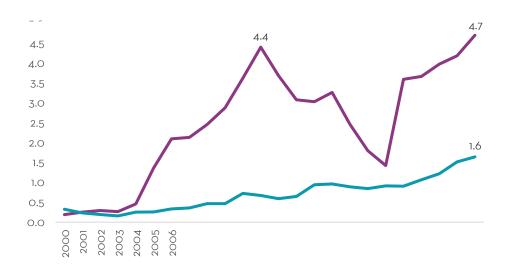
remarkable growth since the agreement came into force. In 2023, the stock of CDI reached \$15.6 billion, more than seven times its value of \$2.2 billion in 2007. In terms of environmental protection, trade in environmental goods has experienced robust growth since the implementation of the agreement. Canada's exports of environmental goods to Peru grew at a compound annual rate of 4.5% from 2007 to 2023, while Canada's imports of environmental goods grew at a compound annual rate of 8.5% over the same period. With total trade of environmental goods between Canada and Peru reaching \$98.3 million in 2023, the CPFTA has been effective in fostering trade in these goods.

3. Bilateral merchandise trade under the CPFTA

Two-

Data: Government of Peru, Statistics Canada and Global Trade Atlas

Figure 3 depicts the evolution of Canada-Peru bilateral trade from 2000 to 2023. Following the implementation of the CPFTA in 2009, Canadian exports to Peru showed a marked increase. In 2007, two years before the agreement was put into force, exports were valued at approximately \$356 million. By 2023, they had reached a record high of approximately \$1.6 billion. This represents an increase of almost \$1.3 billion in export



Data: Government of Peru and Statistics Canada

However, the trajectory of Canadian imports from Peru has not followed a consistently upward trend and has shown considerable variability. After experiencing significant growth from 2000 to 2011, where imports rose from approximately \$189 million to over \$4.4 billion, a marked downturn occurred. From 2011 to 2018, imports fell from their peak to a low of \$1.4 billion. Starting in 2019, a recovery began, with import values increasing steadily to \$4.7 billion by 2023.

### 3.1. Sectoral performance

To better understand the substantial shifts in trade between Canada and Peru from 2011 to 2023, this section examines trade performance at the sector level.

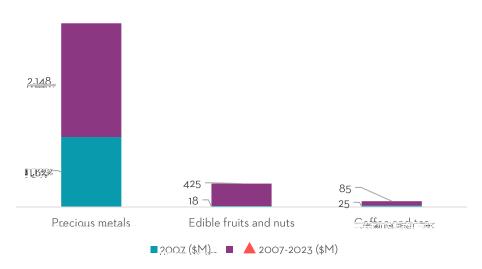
In the early 2000s, Peru rapidly expanded its global trade, primarily driven by exports of precious metals (mostly gold), raw ores, and refined copper. As a significant producer of high-purity gold, Peru's gold exports accounted for up to a quarter of its total exports during this period. Although both the value and quantity of gold exported by Peru have increased over time, gold's share of total exports has diminished as Peru diversified its export portfolio to include products such as edible fruits and nuts, fish and crustaceans, and coffee. By 2023, gold constituted less than 15% of Peru's exports, despite its value being significantly higher than in the early 2000s.

Initially, Canada's imports from Peru consisted of products other than gold. However, starting in 2004, Canada began importing gold from Peru, and by 2005, gold imports accounted for two-thirds of Canada's total imports from Peru. By 2011, gold represented over 70% of Canada's imports from Peru.

The growth in Peru's gold exports was partly due to increased world prices during the 2008-09 financial crisis. As stock markets fell, investors turned to gold as a stable asset, leading to record high prices. Gold prices remained elevated until 2011, after which they declined significantly. This decline in world gold prices led to a decrease in Peru's gold export quantities over the next several years, before beginning to rise again around 2016.

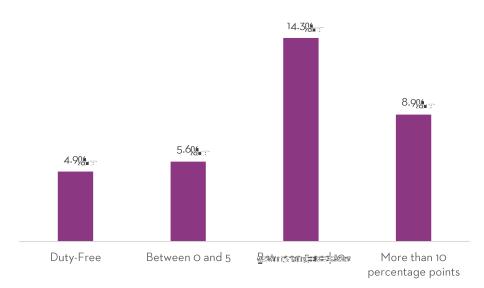
Conversely, Canada maintained and even increased its gold imports in the years following 2011. While imports of gold from Peru declined during this period, Canada sourced gold from other South American countries such as Argentina and Chile. However, between 2017 and 2018, Canada's gold imports from Chile and Argentina experienced significant declines. These two years marked a low point in Canada's overall gold imports, which began to recover in 2019, largely due to increased imports from Peru.

Beyond nonmonetary gold, which accounted for nearly 84% of Canada's total import growth from Peru between 2007 and 2023, significant growth was also observed in the sectors of edible fruits and nuts, which rose from \$18 million to \$443 million, and the coffee and tea sector, which increased from \$25 million to \$110 million.



Data: Statistics Canada.

Regarding Canadian exports to Peru, three HS chapters accounted for 84% of the total increase in export value between 2007 and 2023 (Figure 5). The largest growth was observed in the cereals sector (HS 10), which saw an increase from \$124 million in 2007 to \$725 million in 2023, a surge of \$601 million. Similarly, the mineral fuels and oils sector (HS 27) experienced dramatic growth, rising from just \$1.9 million to \$405 million, an increase of \$403 million. The edible vegetables sector (HS 7) also saw



Data: Statistics Canada and Canada Border Services Agency

Given the structure of the Peruvian tariff schedule in 2007, which consisted only of MFN duty-free items or tariffs greater than 10%, Figure 7 depicts the compound annual growth rates of Canadian exports only across these two categories. Products that retained their duty-free status post-agreement recorded a robust annual growth rate of 10.8%. In contrast, products that benefited from significant tariff reductions, those reduced by more than 10 percentage points, also showed substantial growth, with exports in this category expanding at an annual rate of 9.9%. Although this rate is slightly lower than that for duty-free products, it remains impressively high, effectively highlighting the positive impact of major tariff reductions on export growth.

101 companies in 2005 to its lowest at 75 in 2020, before slightly recovering to 84 companies in 2022.

In the early years prior to and immediately after the signing of the CPFTA, SMEs accounted for the majority of the value of Canadian exports to Peru (left panel of Figure 8) C a n a 6 3 ( d ) - 3 ( i a n ) - 5 ( f ) 8 S & off I s to fh e a e d e o r F

The observed patterns indicate that although the overwhelming majority of Canadian exporters r6P3ad3 1lhame Eee6[( )] TJETQq0.00000912 0 612 792 reW\* nBT/F3 12 Tf1 0 0 12546.54

Value of exports in millions

Number of exporters

Note: Only companies reporting the gender of their owners are included. Data: Special tabulations provided by Statistics Canada

Between 2017 and 2020, women-

collaborative environmental programs, a clause to prevent lowering environmental standards for economic gains, and a mechanism for resolving disputes (Canada-Peru Agreement on the Environment, 2009).

Data on the bilateral trade of environmental goods between Canada and Peru indicate that the environmental agreement has been effective in fostering trade in these goods.<sup>2</sup> Between 2007 and 2023, the total trade of environmental goods between the two nations grew by \$49 million, achieving an annualized growth rate of 4.4%. Canadian exports of these goods to Peru increased from \$47 million in 2007 to \$90 million in 2023, marking an increase of \$43 million at an annual growth rate of 4.2% (Figure 10). However, Canadian exports of environmental goods fluctuated over the years, including a large spike in 2010 and 2011 concentrated in energy-efficient machinery.

Data: Government of Peru

In terms of exports of environmental goods by category, Canadian exports of energy-efficient machinery to Peru reached \$57 million in 2023, up from \$30 million in 2007 (Figure 11) but below peak levels between 2008 and 2015. This represents an increase of \$27 million, or an annualized growth rate of 4.1%. Exports of measurement equipment for pollution levels rose from \$5.1 million in 2007 to almost \$15 million in 2023, an increase of \$9.7 million at an annual rate of 6.9%. Additionally, from 2007 to 2023, Canadian exports of prefabricated building structures to Peru increased by \$1.6 million, achieving an annual growth rate of 7.2%. Conversely, exports of pipes and tubes for recycling purposes decreased by \$3 million.



Much like the case for exports, the growth in Canadian environmental goods imports from Peru is concentrated entirely in energy-efficient machinery, which increased from \$558 thousand in 2007 to a record high of \$7.8 million in 2023 (Figure 13). This growth represents an increase of \$7.3 million, which corresponds to a compound annual growth rate of 18%. Canadian imports of other types of environmental goods from Peru did not experience significant changes or experienced moderate declines.

Data: Statistics Canada

Note: After the base year 2007, the year ranges represent average yearly values.

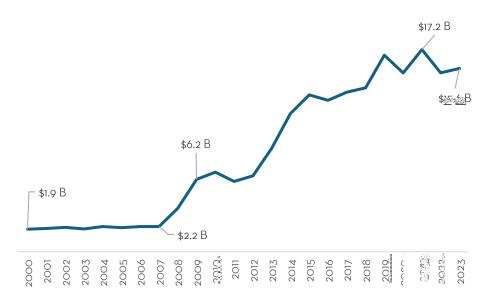
### 4. Investment

On November 14th, 2006, Canada and Peru signed a Foreign Investment Protection Agreement (FIPA), which came into force on June 20th, 2007. This bilateral agreement was designed to create a predictable environment for Canadian investors and to enhance Canada's competitiveness in the South American region (Foreign Affairs and International Trade Canada, 2006). Building on this foundation, the CPFTA, put into force in 2009, also included several complementary investment provisions. These provisions not only deepened the bilateral relationship between the two nations but also significantly enhanced Peru's investment regime.<sup>3</sup>

Data on Canadian foreign direct investment<sup>4</sup> (FDI) in Peru clearly illustrates a strong and steady upward trend beginning when the FIPA was implemented in 2007 (Figure

<sup>&</sup>lt;sup>3</sup> For a detailed discussion of the effect of the FIPA and the CPFTA on invest@######@Qgf###e

14). The stock of FDI in Peru grew substantially, increasing from \$2.2 billion in 2007 to a peak of \$17 billion in 2021. Despite a slight decline in the following years, by 2023, the FDI stock stood at nearly \$16 billion. This represents a more than sevenfold increase from its 2007 level, corresponding to an annualized growth rate of 13% over this period. By 2023, Peru had become the 19th largest destination for Canadian outward investment globally and the third most significant in South America.



Data: Statistics Canada, table 36-10-0008-01

## 5. Services trade

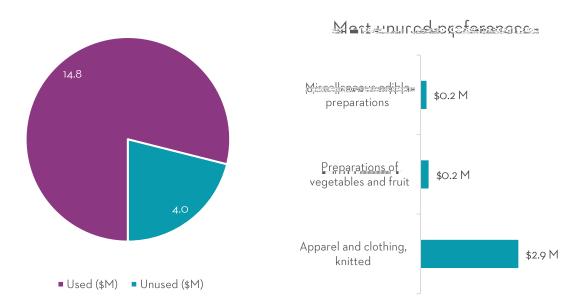
Both Canada and Peru have experienced growth in services trade since the CPFTA came into force (Figure 15). Canadian imports of commercial services from Peru increased from \$9 million in 2010<sup>5</sup> to \$28 million in 2022, reflecting an average annual growth rate of 10% over this period. Meanwhile, Canadian exports of commercial services to Peru increased to \$144 million in 2022, up from \$40 million in 2010, though there were peaks in 2012 and 2015. The total increase in services exports of \$104 million from 2010 to 2022 represents an annualized growth rate of 11%.

<sup>&</sup>lt;sup>5</sup> 2010 is the earliest year for which bilateral services trade data is available.

From 2010 to 2022, Canadian exports of commercial services to Peru saw significant increases in specific categories (Figure 17). Architectural, engineering, and scientific services led with a rise of \$35 million, followed by computer and information services, which increased by \$30 million. Additionally, maintenance and repair services contributed with an increase of \$19 million.

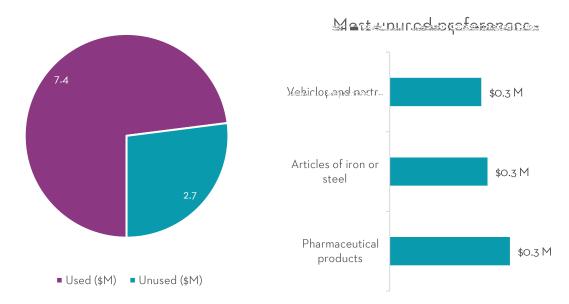
Data: Government of Peru

Tariff reductions under the CPFTA can lead to cost savings that may be passed on to Canadian consumers, resulting in lower prices for imported products from Peru. In 2023, the total value of Canadian imports from Peru eligible to receive CPFTA preferences reached \$128 million. This resulted in Canadian importers saving approximately \$15 million in duties. However, there was potential to avoid an additional \$4 million in duties if CPFTA tariff preferences were fully utilized (Figure 21). Among the sectors with the highest amounts of unused tariff savings were articles of apparel and



Data: Statistics Canada and Canada Border Services Agency

In a similar vein, Canadian exporters also experience significant benefits from the tariff reductions provided by the CPFTA, which enhance the affordability and competitiveness of Canadian products in the Peruvian market. In 2023, nearly \$168 million worth of Canadian exports to Peru were eligible for CPFTA preferences. While Canadian exporters saved \$7.4 million in duties, as much as \$2.7 million in duties might have been avoided if CPFTA preferences were fully utilized (Figure 22). The three sectors with the highest amount of unused tariffs savings were pharmaceutical products (HS 30) with \$343 thousand; articles of iron or steel (HS 73) with \$279 thousand; and vehicles, other than railway or tramway rolling-stock, and parts and accessories thereof (HS 87) with \$262 thousand.



Data: Government of Peru

# 7. Assessing the effects of the CPFTA on trade

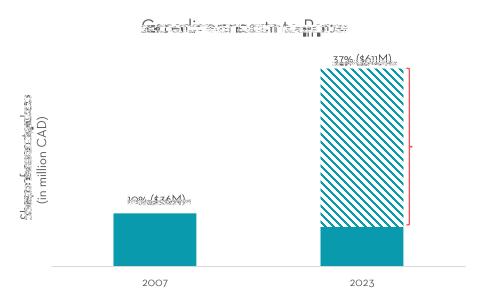
#### 7.1. Treatment effect estimation

From the previous results, it is evident that bilateral trade between Canada and Peru has increased significantly since the CPFTA entered into force in 2009. However, not all the expansion in trade can be solely attributed to the CPFTA, as international trade is influenced by a variety of other factors, including changes in the exchange rate, commodity prices, and the economic conditions in partner countries. Furthermore, similar to trends observed in stock markets, prices, and GDP, international trade generally tends to grow over time, complicating the task of isolating the impact of any specific policy. Consequently, a more thorough analysis is required to accurately estimate the effect of the CPFTA on bilateral trade between Canada and Peru.

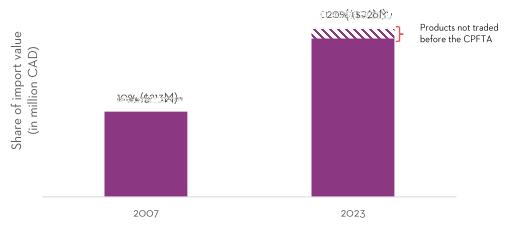
For this analysis, the treatment effect methodology is used. This approach is designed to measure the extent to which the CPFTA increased the trade flows between trading partners. It does so by comparing the growth in trade of products affected by the CPFTA (the treated products) to a group of similar products not influenced by the agreement (the untreated products). This comparison helps to estimate the effect of the agreement, providing insights into how trade might have evolved without the CPFTA intervention.

The main difficulty in this analysis lies in selecting the set of untreated products. In an ideal world, the best comparison would be the level of bilateral trade between Canada and Peru if the CPFTA had never been signed—a counterfactual scenario. Since this cannot happen simultaneously to having the CPFTA in place, the second-best option is

to identify for each traded product between Canada and Peru a similar product where



Canadian imports from Peru



Data: Statistics Canada and Government of Peru

In 2023, the least-traded products accounted for 37% of the total export value. Of this, 78% came from products that were already duty-free in 2007, while the remaining 22% were from dutiable products. Table 1 highlights the ten least-traded products with the highest export value in 2023, categorized into duty-free and dutiable products.

Among the duty-free products, Diesel and other gasoils (diesel oil) was the largest contributor, rising from 0% in 2007 to 24% (or \$393.8 million) in 2023.

# **Dutiable**

|          |   | 2007          |              | 2023          |              | MFN            |
|----------|---|---------------|--------------|---------------|--------------|----------------|
| HS code  | Description                             | Value<br>(\$) | Share<br>(%) | Value<br>(\$) | Share<br>(%) | tariff in 2007 |
| 72044900 | Other waste and scrap of iron and steel | 0             | 0.0%         | 36,779,544    | 2.2%         | 12%            |
| 10040090 | Other oats, except for sowing           | 0             | 0.0%         | 20,051,266    | 1.2%         | 25%            |
| 36030050 | Igniters                                | 0             | 0.0%         | 4,423,095     | •            | •              |

## 8. Conclusions

Trade between Canada and Peru has experienced significant growth since the CPFTA came into effect in 2009. Canadian imports of merchandise from Peru increased from \$2.1 billion in 2007 to \$4.7 billion in 2023. During the same period, Canadian merchandise exports to Peru rose from \$356 million to \$1.6 billion.

Estimates indicate that trade between Canada and Peru grew on average 8.6% faster per year due to the CPFTA, representing a substantial boost. Since 2009, the agreement has contributed to a cumulative increase in bilateral trade, adding up to \$5.5 billion by 2023. This growth represents additional trade that likely would not have occurred without the CPFTA.

Moreover, Canadian imports from Peru of products that saw the largest tariff reductions

# 9. Bibliography

Anderson, J. E. & Van Wincoop, E., 2003. Gravity with gravitas: A solution to the border puzzle. American Economic Review, 93(1), pp. 170-192.

Baier, S. L. & Bergstrand, J. H., 2004. Economic determinants of Free Trade Agreements.

# 10. Appendix

10.1. Technical discussion on the treatment effect estimation

Once the parameters of the probit model are obtained, the estimated probability of receiving treatment (or propensity score) is computed for each observation in the sample. The next step is to match each observation in the "treated" group with an equivalent observation in the "control" group that has the closest value of the propensity score. The purpose of this propensity score-based matching is to select two balanced groups of observations that are similar in many aspects, with the only apparent difference being that some received treatment (preferential tariffs under the CPFTA). In this context, an observation corresponds to a product imported by country from country in year. The treated group contains products traded between Canada and Peru after 2009, while the control group includes all other products traded between pairs of countries not part of the CPFTA, or products traded between Canada and Peru before 2009. Henceforth, the sample for subsequent analysis will include only observations from the treated group and the propensity-score-matched observations from the control group.

With the matched dataset constructed, the second stage involves estimating the treatment effect of the CPFTA using regression adjustment and the inverse-probability-weighted estimator. The estimating equation is:

score matching (PSM) method. The observation weights, , used in this analysis are constructed as follows:

methods are lower relative to the results with the unrestricted sample, with the IPWRA estimates experiencing the largest change. Turning to the preferred estimation method, the annualized effect of the CPFTA, obtained via propensity score matching and parametric weighting, is 6.8%, compared to 8.6% obtained using the unrestricted sample.

Table A2: Treatment effect estimations of the CPFTA, restricted sample

| •                              |           |           |           |
|--------------------------------|-----------|-----------|-----------|
|                                | (1)       | (2)       | (3)       |
|                                | /s.e.     | /s.e.     | /s.e.     |
|                                | 0.198***  | 0.139***  | 0.083***  |
|                                | (0.04)    | (0.04)    | (0.02)    |
|                                | -0.846*   | -2.365*** | -1.458*** |
|                                | (0.51)    | (0.32)    | (0.13)    |
|                                | 0.172***  | 0.216***  | 0.294***  |
|                                | (0.03)    | (0.03)    | (0.00)    |
|                                | 0.008     | 0.075***  | 0.154***  |
|                                | (0.02)    | (0.02)    | (0.01)    |
|                                | 0.635***  | 0.529***  | 0.536***  |
|                                | (0.01)    | (0.01)    | (0.00)    |
|                                | 0.086***  | 0.127***  | 0.133***  |
|                                | (0.01)    | (0.01)    | (0.01)    |
|                                | -0.301*** | -0.102**  | -0.223*** |
|                                | (0.05)    | (0.05)    | (0.00)    |
| Observations                   | 22,580    | 22,580    | 1,002,013 |
| Method                         | PSM       | PSM       | IPWRA     |
| Weighting                      | Yes       | No        | Yes       |
| CPFTA Annualized<br>Effect (%) | 6.8       | 4.8       | 2.8       |

Robust standard errors included in parenthesis. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

In summary, the econometric analysis suggests that the CPFTA delivered on its promises by significantly expanding bilateral trade between Canada and Peru. The preferred point estimates indicate that the CPFTA increased bilateral trade growth between Canada and Peru by 8.6% annually, faster than what would have occurred in the absence of the agreement.