

Peru's commercial opening: the story of two sectors¹

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Abstract

Trade liberalisation, at first unilaterally and later through free trade agreements, has been fundamental to the structural reform of the Peruvian economy. The negotiated nature of free trade agreements reduced conflicts with local producers in exchange for access to higher-technology imports. The opening of external markets at lower tariff levels has boosted exports in sectors such as agriculture and mining. Therefore, the experience of trade opening is reviewed from the perspective of these two sectors.

Keywords: International trade, liberalisation, gains from trade, trade agreements, economic integration.

JEL classification: F11, F13, F15.

This article presents the experience of Peru's trade opening, which started with the removal of the protectionist structure in the 1990s and the signing of free trade agreements from 2000. Trade opening, accompanied by the removal of structural obstacles to investment, has allowed Peru to develop external markets and to develop export-oriented sectors such as agriculture and mining. Therefore, the experience of trade opening is reviewed from the perspective of these two sectors.

In 1990, the Peruvian authorities adopted a broad scheme of trade liberalisation, dismantling numerous instruments that selectively blocked imports in favour of local production. In this way, import prohibitions and licenses were eliminated and import tariffs were reduced (Graph 1).⁶ This dramatic shift in trade policy was part of a set of structural reforms that sought to reverse an economic decline. It is worth mentioning that per capita GDP in 1990 was similar to that of 1960 and 27% lower than that of five years ago. And between 1988 and 1990, the cumulative increase in the CPI was 4 million in percentage terms.

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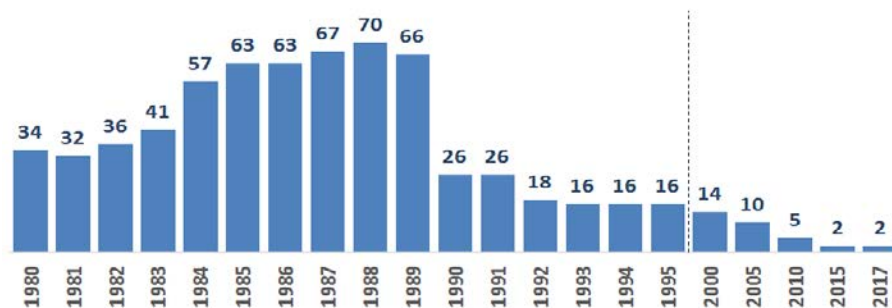
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⁶ Abusada et al (2001).

Average import tariff

Percentages

Graph 1



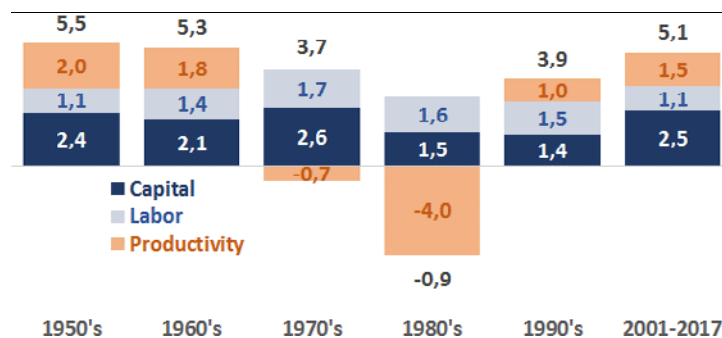
Source: Sunat.

In terms of GDP, the 1970s and 1980s saw a collapse in the contributions of investment and productivity to economic growth (Graph 2).⁷ Potential growth was derailed by the misallocation of productive resources and by the uncertainty created by unstable policies. Sectors such as mining, oil, energy, cement, steel, banking and telecommunications were nationalised, while agricultural companies were expropriated. In conclusion, trade liberalisation was an important component of structural reform, with the ultimate aim of privatising and opening the the agricultural sector to private capital.

Sources of growth

Percentage points

Graph 2



Source: Central Reserve Bank of Peru.

Free-trade agreements

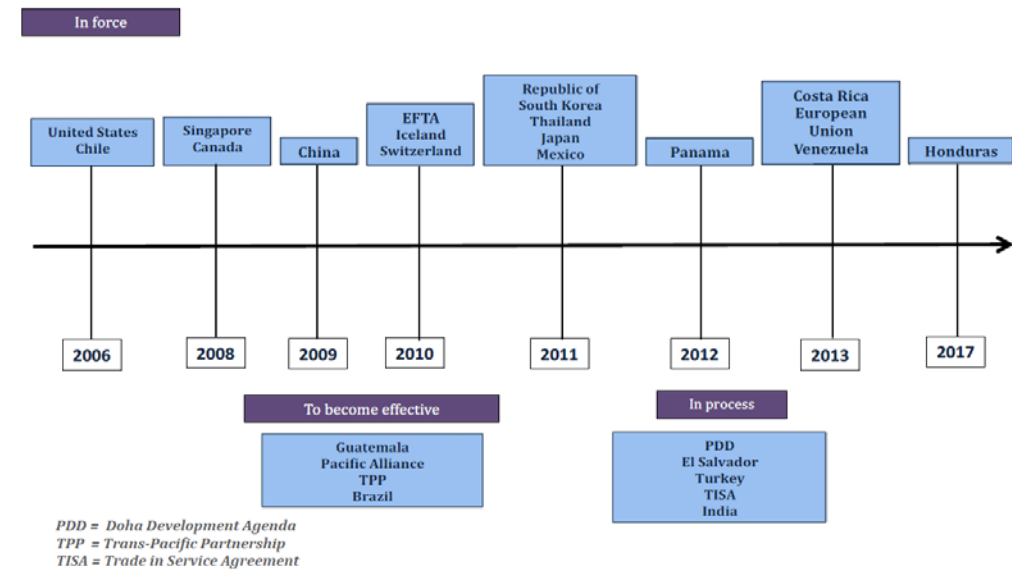
The free trade agreements (Graph 3) were part of a long-term strategy to build markets for Peruvian products. The need to promote trade integration as a

⁷ Ross and Peschiera (2015).

mechanism to expand markets is quite clear in the case of Peru, whose local markets, due to their small size, offer few business opportunities.⁸ Some 90% of Peru's international trade is subject to free trade agreements.

More than 90% of Peru's trade is carried out under free trade agreements

Graph 3



From December 1991 to 2001, through the Andean Tariff Preference Act (ATPA), Peru had unilateral tariff preferences granted by the United States for the entry of certain merchandise to promote alternatives to drug production. Since 2002, through the Andean Trade Promotion and Drug Eradication Act (ATPDEA), the United States again granted tariff preferences, which were periodically renewed until December 2010. In February 2009, the Trade Promotion Agreement (TPA) between the United States and Peru came into force. The main products exported to the United States are minerals, textiles, fishery products, crude oil, coffee, cocoa, handicrafts, paprika, artichokes, grapes, mangos, tangerines and asparagus.

These agreements substantially lifted the share of exports in GDP. Exports of copper, gold and zinc increased their share from 3.8% of GDP in 1990 to 13.7% in 2007, although this fell to 9.6% in 2016 in line with easing commodity prices. However, during the same period, the exports of the modern agricultural sector increased from 0.4% of GDP in 1990 to 1.5% in 2007 and 2.4% in 2016.

Empirical research based on the study of the relationship between free trade agreements and productivity at firm level suggests that free trade enhances productivity. The study uses a database from 2002 to 2011 with information on the productivity of firms operating in the formal sector, distinguishing their type of participation in international trade. The pseudo-experimental model estimates difference-in-difference parameters that measure the effect of free-trade agreements

⁸ Baier and Bergstrand (2007).

on firm productivity. Specific analysis for each free-trade agreement suggests that firms trading with the United States exhibit a higher productivity.⁹

Agribusiness

Macroeconomic stabilisation and structural reforms favoured the rapid mobilisation of capital to sectors that had been stagnant. In particular, agriculture embarked on a steep growth path (Graph 4 shows the aggregate index of the volume of modern agricultural exports of in Peru), thanks to the signing of free trade agreements. This paved the way for Peru to become one of the world’s leading exporters of asparagus, grapes, avocados, blueberries, mangoes etc (Table 1).

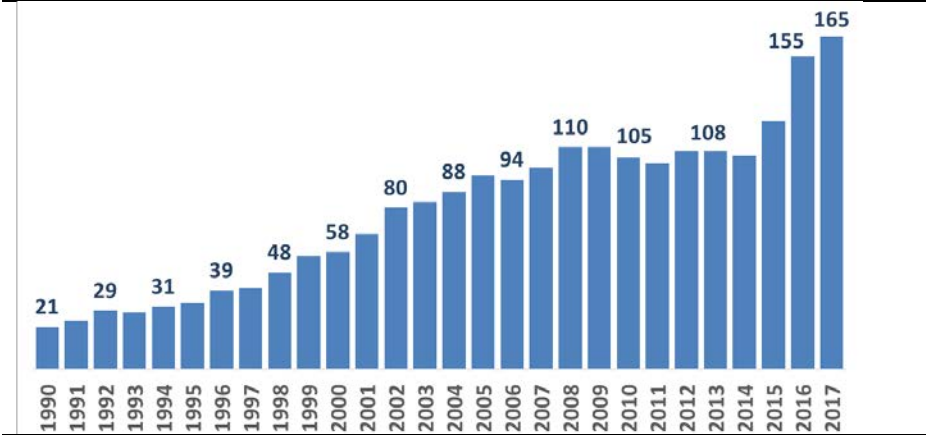
Incentives played a key role, starting in 1996, when the first regulations were enacted. These were consolidated in subsequent years and include a 15% income tax rate, a 20% depreciation rate for irrigation equipment, an early recovery of VAT during the pre-productive stage and up to five years, as well as a flexible labour framework adapted to agro-industrial production.

The modern agricultural sector employs 211,000 hectares, representing only 5% of the country’s arable area. Productivity is quite high compared with that of other important producers, which is explained by the temperate climate, advanced agricultural methods, and a focus on products with favourable demand trends. In future, the land used to grow such products could be expanded by 60% (Table 2).

Volume of exports of modern agriculture in Peru

(Index 2007=100)

Graph 4



Source: Central Reserve Bank of Peru

⁹ Cespedes et al (2014).

World ranking of modern agricultural exports

Table 1

	2011	2016	2017	Evolution
Quinoa	4	1	1	↑
Shelled Brazil nuts	2	1	1	↑
Fresh asparagus	1	1	2	↓
Fresh avocados	5	3	2	↑
Blueberries	39	3	2	↑
Fresh mangoes	5	4	3	↑
Fresh grapes	7	5	4	↑
Cocoa beans	12	6	6	↑
Fresh tangerines and tangelo	11	8	4	↑
Organic bananas	15	14	9	↑
Fresh pomegranates	29	11	9	↑

Source: UN Comtrade.

Peru's upward movement in the world ranking of modern agricultural exports is also explained by its higher productivity as compared with the main global exporters of modern agricultural products (see Graph 5).

Average agricultural yields of 2016

Table 2

	(Tons/Hectare)					
	Average		Higher yielding export areas			
	World ¹	Peru	World		Peru	
Quinoa	0.8	1.2	Ecuador	1.8	Arequipa	3.4
Cocoa beans ²	438.0	859.0	Guatemala	2 699.0	Pasco	1 291.0
Asparagus	5.7	11.8	Peru	11.8	La Libertad	13.4
Mangoes	8.6	16.9	Brazil	17.9	Piura	20.6
Avocados	9.9	12.0	Peru	12.0	Arequipa	15.4
Grapes	10.9	24.7	Peru	24.7	Piura	47.9
Blueberries ³	5.0	7.9	Mexico	9.9	La Libertad	9.5

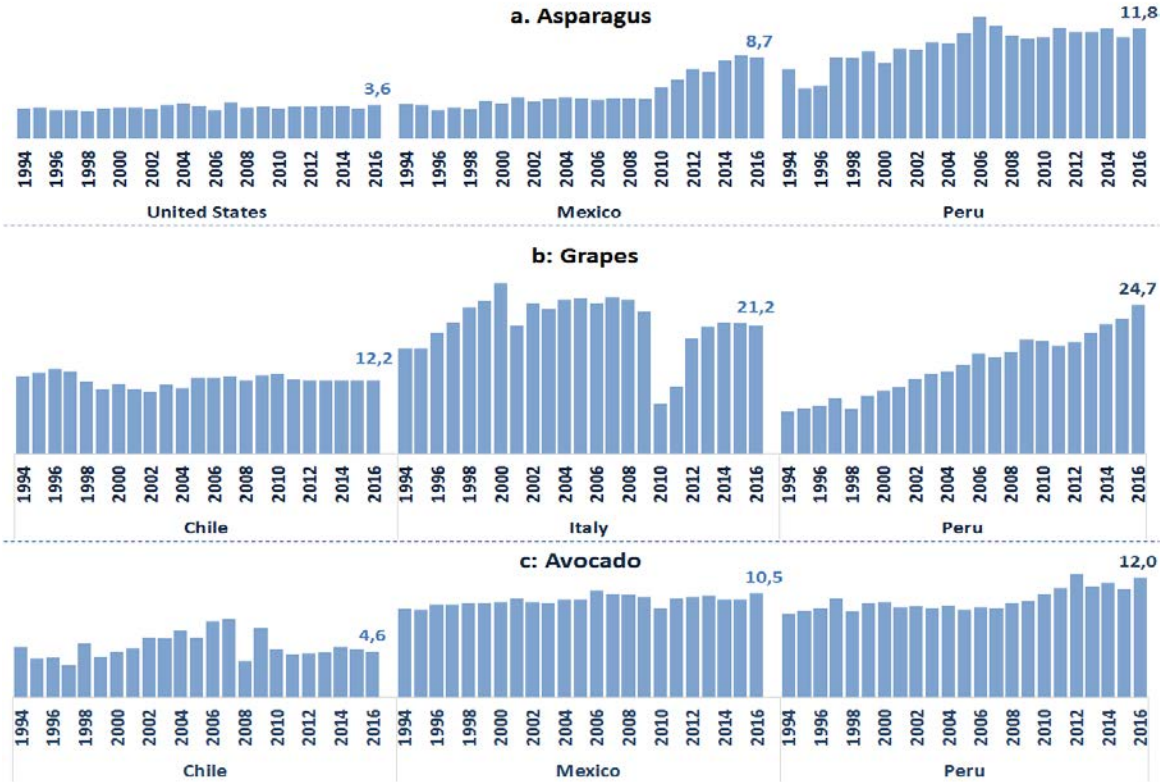
¹ Average of the five major exporting countries. ² Cocoa beans in kg/ha. ³ Data as of 2015 for Peru.

Sources: MINAGRI and FAO.

Evolution of agricultural yield of super-foods

(Tons/hectare)

Graph 5



Source: FAO.

The destination markets for agricultural exports are quite diversified. New free trade agreements can be signed when the destination market has no indigenous supply of the relevant products or has a seasonal shortage, thus allowing Peru to establish itself as a safe and reliable supplier (Table 3).

Agricultural exports by product and destination as of 2016

Table 3

	Total value exported (Millions of US\$)	European Union	China	United States	Japan	United Kingdom
		(Shares from product's total value exported, in percentages)				
Fresh grapes	661	13.1	8.1	37.8	0.0	5.4
Fresh asparagus	422	19.6	0.1	63.4	0.7	11.1
Fresh avocados	397	61.4	1.2	18.9	0.5	11.1
Blueberries	243	25.5	0.0	54.2	0.0	14.1
Fresh mangoes	201	52.5	0.2	28.0	0.3	9.2
Cocoa beans	184	72.0	0.0	5.5	0.0	0.4
Organic bananas	152	60.9	0.0	30.1	2.2	0.9
Fresh pomegranates	39	47.3	0.1	7.6	0.0	12.7
Quinoa	104	35.0	0.0	33.9	1.1	7.0
Tangelo	83	19.2	1.5	38.0	0.0	26.2
Fresh tangerines	52	12.1	0.9	42.3	0.0	24.1
Shelled Brazil nuts	40	11.4	0.0	62.6	0.3	1.3

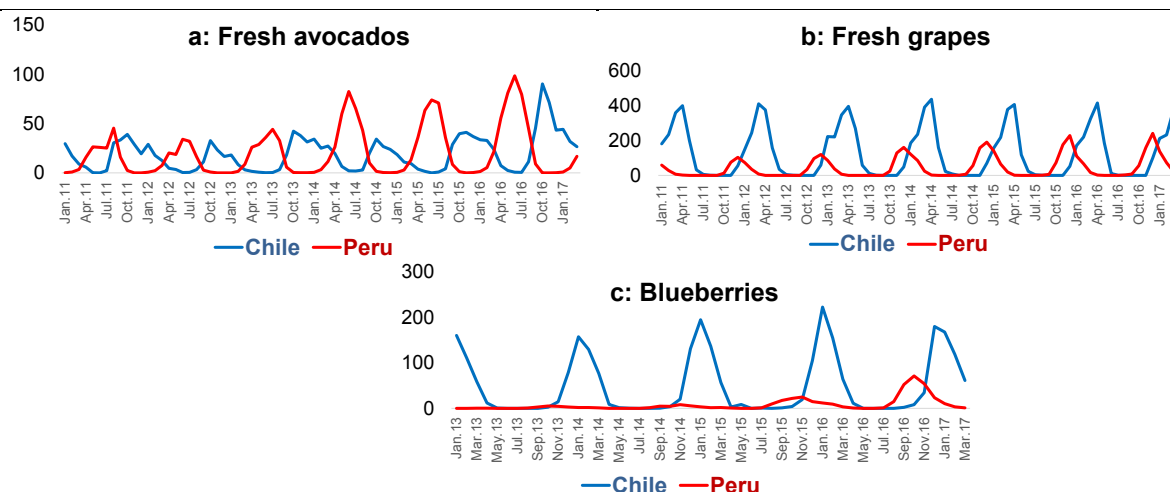
Sources: Sunat.

Peruvian food exporters match their supply to the harvesting calendar of their competitors according to the harvesting schedule “window” as determined by weather conditions, seasonality and global demand. Figure a of Graph 6 and Table 4 show that Peruvian avocado exporters use a different “window” than Chileans, so that their exporting schedules are complementary. In the case of grapes (figure b) and blueberries (figure c) Peru has an earlier exporting season than Chile, which opens up market opportunities.¹⁰

Agricultural exports window, Peru-Chile (2011–17)

(Percentages of total world exports)

Graph 6



Source: Sunat.

Peru is a significant secondary supplier of avocados to the US market. According to Table 5, between 2011 and 2016 the US Haas avocado market increased from 516,000 tons to 1 million tons with an annual average growth of 15%. During the same period, California, the main US producer of avocados, increased its delivery

¹⁰ Vasquez et al (2017).

from 120,000 tons to 166,000 tons, with an annual average growth of 7%; Mexico, the main external supplier, increased its delivery from 318,000 tons to 780,000 tons, with an annual average growth of 20%; and Peru, the second most important external supplier of avocados to the United States, increased its delivery from 8,000 tons to 33,000 tons with an annual average growth of 34%.

Main agricultural export windows

(Millions of US dollars)

Table 4

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Blueberries	12	9	4	1	0	0	1	15	52	71	54	23
Fresh avocados	1	5	22	55	81	99	80	45	9	0	0	0
Fresh grapes	110	67	16	2	0	0	1	3	8	56	158	240
Fresh asparagus	43	16	12	20	23	24	38	45	48	47	48	57
Fresh mangoes	62	38	22	5	0	0	0	0	0	2	15	55
Cocoa beans	8	6	7	9	15	14	28	30	23	16	15	14
Tangelo	0	0	0	0	1	7	36	28	10	0	0	0
Fresh tangerine	0	0	1	6	16	10	8	7	3	0	0	0

Source: Sunat.

Total Haas avocado deliveries to the US market

(In thousands of tons)

Table 5

	2011	2016	Average annual variation
From			
California	120	166	7%
Mexico	318	780	20%
Peru	8	33	34%
Chile	68	25	-18%
Dominican Republic	2	12	47%
Others	1	0	
Total	516	1016	15%

Source: Haas Avocado Board, under the supervision of the US Department of Agriculture.

The markets for avocados, asparagus and blueberries have experienced important shifts during the last decade. Peru increased its share of US demand for avocados between 2000 and 2016, taking market share from other participants (Table 6). Also, the share of Peruvian blueberries in total US imports of blueberries has expanded by more than 10 percentage points, thanks to an increase in cultivated area and productivity improvements.

 Shares of suppliers to the US market

Table 6

	Avocados		Asparagus		Blueberries			
	2000	2016	2000	2016	2000	2016		
Mexico	16.7	91.3	Mexico	52.8	59.4	Chile	63.7	52.2
Peru	0	3.7	Peru	41.3	39.7	Canada	22.4	16.1
Chile	65.1	3.1	Canada	0	0.7	Peru	0	11.4
Others	18.2	1.9	Others	0.1	0.1	Others	13.9	20.3

Sources: USDA, USITC, Sunat.

Mining

The nationalisation of mining companies in the 1970s undercut the exploration, production and exports of all Peru's main mineral products.¹¹ Between 1970 and 1990, export volumes per inhabitant (kilograms/population) fell in the case of silver from 40 to 23, copper from 16 to 13 and zinc from 25 to 24. The following decade brought a price recovery that encouraged the start-up of new projects. This recovery was driven by the enactment of the General Mining Law in 1992, which encouraged private sector investment in the mining sector and established tax-stability contracts.¹² The volume of mining exports has since grown steadily, except during the Great Financial Crisis (Graph 7). Based on the indicator of mining exports volumes per inhabitant, the improvement between 1990 and 2017 shows impressive results for gold (from 0.04 to 6), copper (from 13 to 83) and zinc (from 24 to 38). Peru also ranks highly in the world league tables of mineral producers (Table 7).

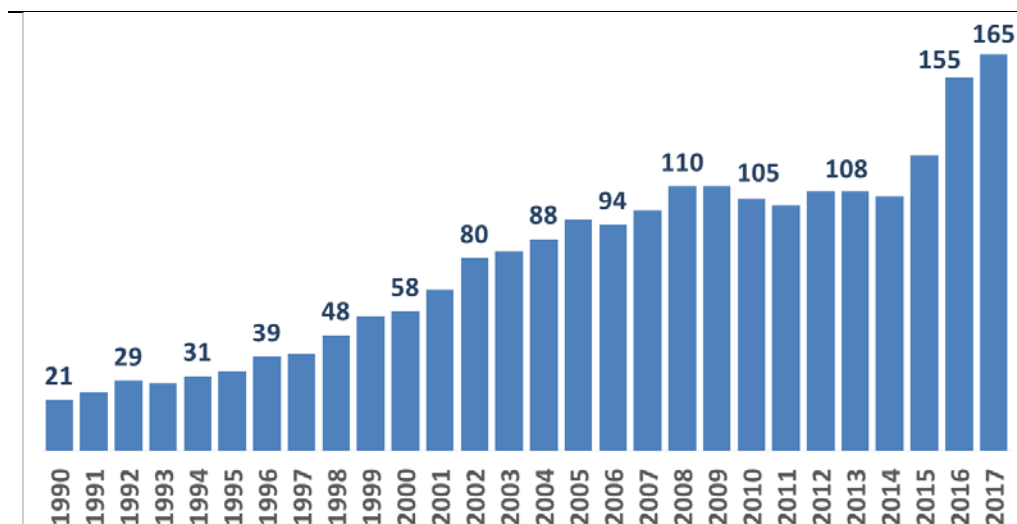
¹¹ Glave and Kanamoto (2002).

¹² By constitutional reform, two important elements were introduced to promote investment. On the one hand, foreign investment is eligible for the same treatment as local investment and a legally secure contractual framework was given to private contracts, including contracts for the development of mining projects.

Volume of mining exports in Peru

(Index 2007=100)

Graph 7



Source: Central Reserve Bank of Peru.

Mineral prices rose almost continuously between 2002 and 2011, interrupted only by the Great Financial Crisis. This price rise is linked to demand from China. Higher international prices promoted mining investment in Peru, supporting output. Graph 10 relates the changes in copper prices to China's annual GDP growth rate since 2002.

Mining products

Table 7

	2017 (Millions of US\$)	World ranking
Zinc	2,022	1
Silver	637	1
Copper	11,998	2
Lead	1,069	2
Molybdenum	367	4
Tin	370	5
Gold	7,096	6

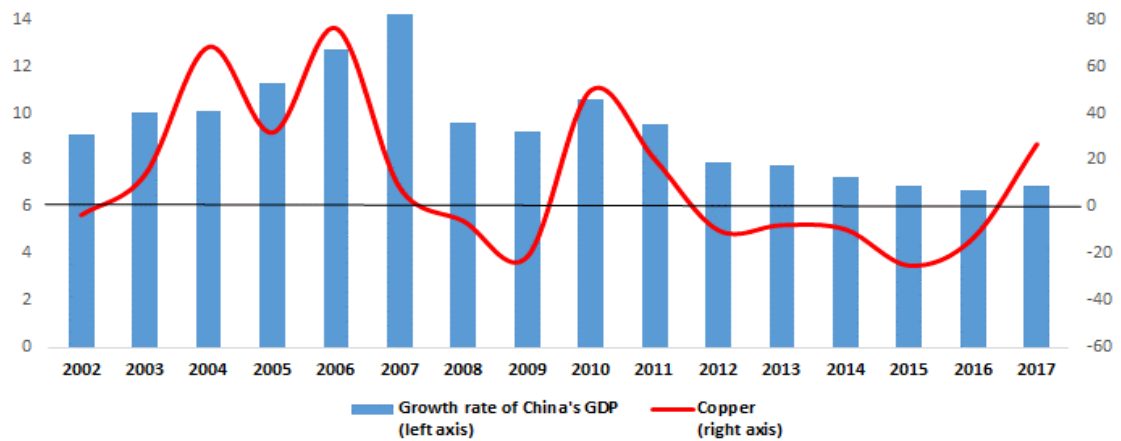
Sources: Comtrade, ITC.

The risks to exports of commodities are associated more with the state of the Chinese economy than any trend towards greater protectionism (Graph 8). Additionally, mining projects demand significant imports of machinery and equipment from developed economies. Table 8 shows the main imports of Peru from the United States and exports from Peru: risk levels are low due to the low percentage of manufactured exports from Peru.

China's GDP vs copper export prices

(Annual growth rates)

Graph 8



Sources: WEO and Sunat.

Other exports

As strong momentum of mining exports may obscure trends in other exports, it is worth noting that from 2000 to 2017 the number of export products rose from 3,454 to 4,227 and that the number of destination countries increased from 156 to 174. This trend can be explained by the consolidation of macroeconomic stability, structural reforms to boost efficiency and productivity and the free trade agreements.

Main exports and imports between Peru and United States

(Millions of US dollars)

Table 8

Exports to USA	2016	Imports from USA	2016
Gold	1759	Petroleum, diesel and gasoline	1737
Petroleum, diesel and gasoline	546	Yellow corn	486
Shirts and dresses	390	Other motor vehicles and their parts	307
Asparagus	303	Self-propelled dumpers	175
Silver and jewelry	254	Lubricant oils	144
Fresh grapes	250	Private vehicles	143
Tin and molybdenum	222	Polyethylene	131
Coffee	217	Rest of diverse machinery	122
Refined copper bars and cathodes	185	Soy meal	111
Zinc and its products	145	Medicines and laboratory accessories	92
Blueberries	131	Gas turbines	89
Calcium phosphates	108	Chemical inputs	86
Other prepared vegetables	102	Wheat	77
Other fish fillets and fishoil	102	PVC resins	76
Frozen prawn tails	85	Soy bean	58
Fresh and frozen mangoes	82	Natural fiber	56
Fresh avocados	75	Slots	53
Tempered glass and ceramic floors	61	Fuel alcohol	52
Fresh onions	48	Diammonium phosphate	50
Tangelo and tangerines	48	Soy oil	32
Organic banana	46	Tires	29
Quinoa	35	Hydraulic bombs	28
Shelled Brazil nuts	25	Linerboard paper	28
Laminating film	18	Skim milk powder	26
Caustic Soda	17	Ethyl alcohol	19
Others	979	Others	2482
Total	6233	Total	6689

Source: Sunat.

Conclusion

Trade liberalisation, at first unilaterally and later through free trade agreements, has been fundamental to the structural reform of the Peruvian economy. Trade opening at lower tariff levels has generated exports and increased the efficiency of producers. The negotiated nature of free trade agreements has reduced conflicts with local producers in exchange for access to higher-technology imports.

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