

AN EXAMINATION OF FOREIGN SUBSIDIES AND TRADE POLICIES FOR SUGAR

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EXECUTIVE SUMMARY

The International Center for Agricultural Competitiveness (ICAC) at Texas Tech hosts and maintains a database of subsidies and trade policy information for public use. The report summarizes the information obtained and housed in the database relating to sugar in key producing, consuming, exporting, and importing countries. Data on tariff rates were gathered from the World Trade Organization tariff database. Production, export, and import data are from the U.S. Department of Agriculture. Other country policies are summarized from the U.S. Department of Agriculture's (USDA) Global Agricultural Information Network (GAIN) reports obtained online from the Foreign Agricultural Service (FAS)-USDA website. Additional information was obtained from other sources where noted.

The report covers 22 countries, which, according to USDA data for 2017/18, account for 80% of global sugar production, 65% of global consumption, and 83% of global exports.

The key findings of this review are:

- Government intervention in the world sugar market remains extreme and widespread with a wide variety of measures to support domestic sugar producers.
- Import tariffs and quotas are the most widely used intervention around the world in order to support sugar prices.
- Domestic price supports and input subsidies are also common intervention tools and export subsidies by some countries further distort and depress the world market.
- The proliferation of ethanol mandates has greatly increased the indirect price support of sugar worldwide where, unlike the United States, sugar is the primary feedstock for ethanol production.
- Average applied Most Favored Nations (MFN) import tariff rates vary widely around the world, with a high of over 100% in Turkey. Bound tariffs are over 100% in a number of countries.

Applied Tariffs

Table 1 shows the average applied tariffs for MFN countries as well as the World Trade Organization (WTO) bound tariffs, and Figure 1 shows the average applied tariffs across countries.

Table 1. Consolidated Tariff Schedules - World Trade Organization
 HS17 - Sugars and Sugar Confectionary
 Latest Year Reported to WTO for each country

Country	Average Applied MFN Rate (%)	Average Bound Rate (%)
Turkey	102.4	107.3
India	51.5	124.7
Mexico	31.3	45.0
China	28.7	27.4
Thailand	22.6	48.9
Argentina	17.6	33.3
Egypt	17.3	37.5
Brazil	16.5	34.4
Pakistan	15.0	114.7
Cote d'Ivoire	13.5	15.0
Benin	12.6	60.0
Burkina Faso	12.6	100.0
Mali	12.6	60.0
Nigeria	12.5	150.0
Japan	10.3	17.4
Indonesia	7.4	58.3
EU	6.8	11.4
Russia	5.6	5.6
South Africa	5.2	73.4
Swaziland	5.2	73.4
Canada	4.0	7.1
Australia	1.8	7.3

Average Applied MFN Import Tariffs

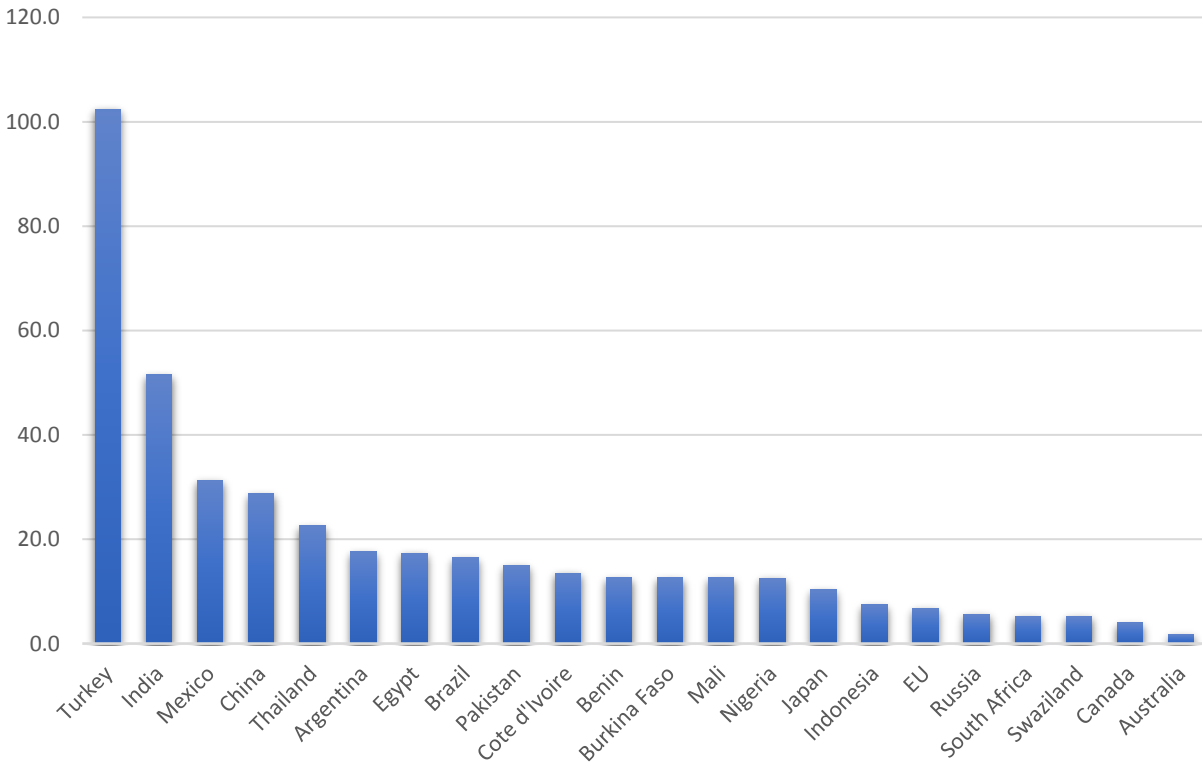


Figure 1. Average Applied Most-Favored Nation (MFN) Import Tariffs for HS17 (Sugars and Sugar Confectionary), Last Reported Year for Each Country.

Source: World Trade Organization

These applied tariffs can vary substantially within the HS17 code across products, but the overall results show a clear picture of the countries that have the highest forms of price-based border protection.

Overall Policy Mechanisms for Sugar

Figure 2 shows the breadth of policy mechanisms that are used for major sugar producing/exporting and importing countries.

Country	Export Tariff/Quota	Import Tariff/Quota	Production Quota	Direct Price Support	Input Subsidies	Ethanol Mandates	Other Non-Price Support
Argentina	X	X		X		X	
Australia		X				X	
Benin		X					
Brazil		X			X	X	
Burkina Faso		X					
Canada		X				X	
China		X		X	X	X	
Cote d'Ivoire		X					
Egypt		X		X	X		
EU		X				X	X
India		X		X	X	X	X
Indonesia		X		X	X	X	
Japan		X		X			
Mali		X					
Mexico	X	X		X	X		
Nigeria		X			X		X
Pakistan	X	X		X			
Russia		X					X
South Africa		X					
Swaziland		X	X				X
Thailand		X		X		X	
Turkey		X	X			X	

Figure 2. Policy Mechanisms Used by Various Sugar Countries

Source: USDA GAIN Database and ICAC Foreign Subsidies Database

As can be seen in the figure, import tariffs and quotas are the most widely used forms of policy intervention. Import tariffs and quota protect domestic industries by preventing the free importation of sugar. Many countries couple import tariffs with direct income or price support to sugar producers. These policies, when used, serve to further enhance the price/income support of domestic producers. Some countries also use input subsidies such as fertilizer price subsidies, equipment subsidies, low-interest loans and debt forgiveness, while some countries also use other non-price support such as research and development funding, government ownership of sugar mills, and state-trading enterprises. Finally, there is a growing group of countries that utilize ethanol mandates to increase the demand for ethanol and, hence, for sugar. In most of these countries, the largest source of ethanol is sugarcane. A few countries, like India, Indonesia, and China, for example, use many layers of domestic support/protection.

The Value of Transfers to Sugar Producers

Table 2 shows the value of single commodity transfers² to sugar producers as measured by the OECD.

Table 2. Producer Single Commodity Transfers for Sugar in \$MIL, 2016.

Year	Producer Single Commodity Transfers--\$MIL									
	Australia	China	EU	Indonesia	Japan	Mexico	Russia	S. Africa	Turkey	Average
1986	45.06		2691.94		517.66	126.02			47.50	685.64
1987	49.04		3071.24		569.76	20.49			56.15	753.34
1988	47.97		2762.30		569.21	-61.22			10.11	665.67
1989	39.11		1798.15		479.67	9.63			19.10	469.13
1990	53.62		2796.91		463.60	211.15			132.85	731.63
1991	30.06		3325.91		502.17	530.28			290.94	935.87
1992	28.00		4346.76		487.00	538.94			316.22	1143.38
1993	24.89		3275.48		523.71	985.68			275.10	1016.97
1994	33.93		2857.85		593.30	361.58			11.68	771.67
1995	33.31	299.27	3325.82	-296.85	635.45	-37.08	151.33	188.17	205.25	500.52
1996	35.74	314.34	3614.15	-207.04	454.33	333.06	158.91	111.28	268.91	564.85
1997	0.00	561.29	3408.78	24.06	443.49	371.41	197.58	128.07	761.40	655.12
1998	0.00	152.33	3375.30	-444.99	513.24	492.95	212.71	142.42	805.43	583.27
1999	0.00	376.72	3657.09	-27.79	559.81	695.48	-107.72	167.37	682.24	667.02
2000	7.90	712.74	2890.06	285.54	509.65	749.90	-82.22	87.51	554.84	635.10
2001	4.64	35.24	2335.86	319.64	474.85	628.61	-10.23	63.41	137.69	443.30
2002	1.74	390.79	2701.07	208.68	462.47	706.30	47.79	95.23	391.07	556.13
2003	4.21	-36.02	3483.39	352.11	546.72	659.63	59.63	175.41	479.60	636.08
2004	22.16	386.31	5061.41	383.34	578.35	564.97	81.88	202.57	633.88	879.43
2005	15.13	938.64	4633.25	272.27	471.72	661.90	310.71	165.17	622.83	899.07
2006	3.60	-404.22	1859.35	249.70	427.72	246.40	275.05	100.58	230.54	332.08
2007	3.99	929.19	2508.09	389.33	416.40	604.48	426.88	242.21	481.48	666.89
2008	3.37	-8.27	2181.40	519.83	512.32	463.89	677.44	170.40	655.72	575.12
2009	0.00	2662.54	864.83	357.12	454.12	2.44	442.35	33.81	309.01	569.58
2010	0.00	1960.53	99.77	400.34	471.15	271.63	59.14	79.83	31.00	374.82
2011	0.00	1020.13	55.90	-35.82	511.75	77.38	0.01	68.00	10.47	189.76
2012	0.00	1900.90	61.44	635.68	531.75	455.17	0.00	176.96	85.02	427.44
2013	0.00	3845.31	931.42	1023.93	436.85	0.00	215.55	199.33	193.72	760.68
2014	0.00	3761.57	568.15	849.62	397.82	187.55	634.68	160.65	302.61	762.52
Average	16.81	989.97	2570.45	262.94	500.55	374.44	187.57	137.92	310.43	650.07

Source: OECD. The OECD does not perform these calculations for all countries, so not all countries in this analysis are presented.

As can be seen, the European Union provided the most single commodity transfers to sugar producers in the sample, being about 90% larger than the next largest country, China. However, it is important to keep in mind that these values should not necessarily be viewed in isolation and

² According to the OECD, the definition of a single commodity transfer is: “the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policies linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the transfer.” OECD’S PRODUCER SUPPORT ESTIMATE AND RELATED INDICATORS OF AGRICULTURAL SUPPORT: Concepts, Calculations, Interpretation and Use (The PSE Manual), <http://www.oecd.org/agriculture/topics/agricultural-policy-monitoring-and-evaluation/documents/producer-support-estimates-manual.pdf>

should be compared to total production. In this case, the EU transfers amount to \$21/ton produced where China is \$14/ton produced, on average, meaning that the EU is only 50% higher. Turkey, by contrast, has a much smaller total outlay, but is subsidizing at a rate of \$27/ton of sugar produced, indicating a much higher subsidy rate than the EU. Japan shows, by far, the highest subsidy rate at \$98/ton. This result is consistent with other crops such as rice for Japan, with very high rates of per unit protection for domestic producers. However, we should note that these are direct transfers and do not contain the value of indirect (for example, interest rate or general equipment) subsidies.

Individual Country Reports

Argentina

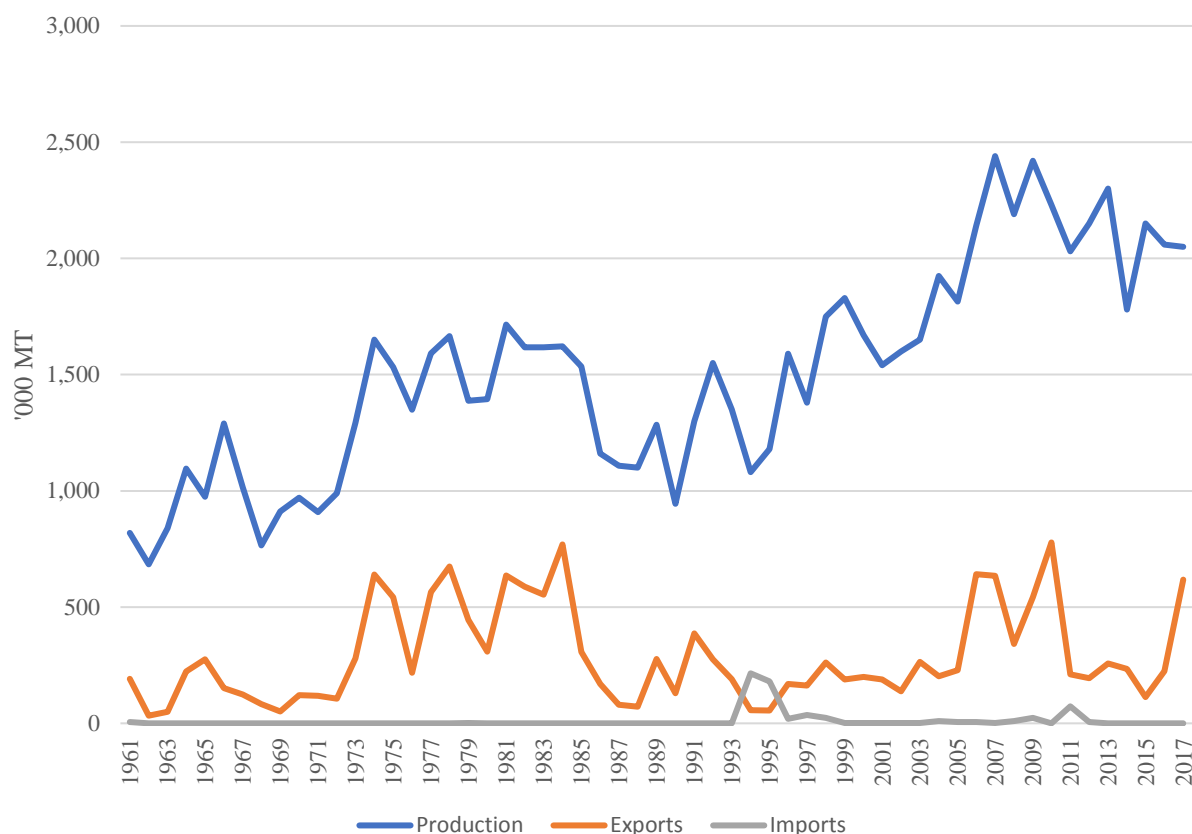


Figure 3. Argentinian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies

- Argentina mainly relies on an import tariff to support domestic sugar prices. Argentina maintains a 35% tariff on imported refined sugar,³ a 20% tariff on raw sugar, and an average applied tariff for MFN of 17.6% for the HS17 (Sugar and Sugar Confectionary) category. As noted in Figure 1, Argentina is in the top ¼ of applied tariffs in the sample.
- Argentina maintains an aggressive ethanol program which requires that domestic gasoline contain at least 12% ethanol. This mandate indirectly supports domestic sugar prices.

³ OECD-FAO, Agricultural Outlook: 2018-2027, Chapter 5: Sugar. OECD, Paris, France and FAO, Rome, Italy.

Australia

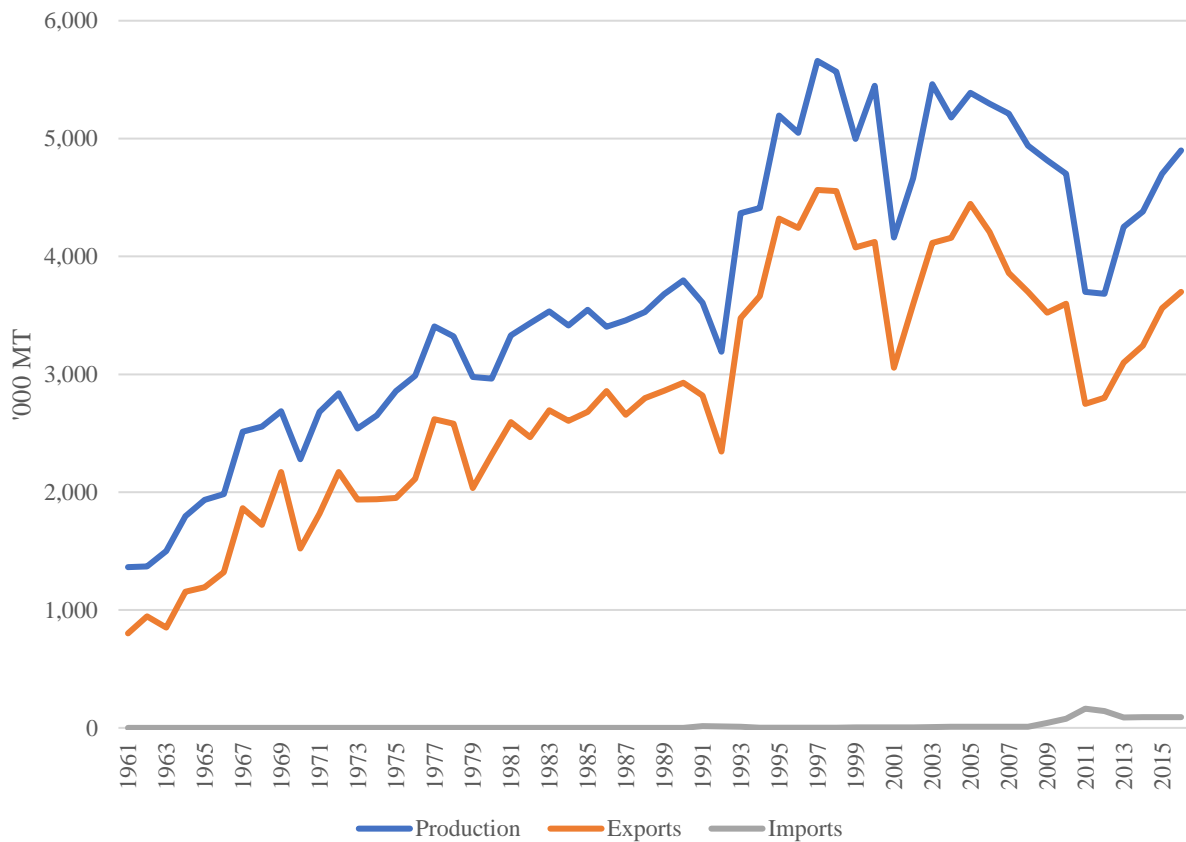


Figure 4. Australian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Australian exports follow production very closely (proportionately), indicating that sugar production is heavily reliant on exports.

Key Policies:

- Australia maintains a small (1.8% average) import tariff on the HS17 product category, but a 0% duty on raw cane or beet sugar.
- There are ethanol mandates in parts of Australia which provide indirect support for sugar prices.
- Despite its touted exposure to low world dump market sugar prices, retail refined sugar prices in Australia are 15% higher than the world average and 39% higher than consumer prices in the United States.⁴

⁴ SIS International Research, "Global Retail Sugar Prices," July 2015. <https://sugaralliance.org/project/global-retail-sugar-prices>

Benin

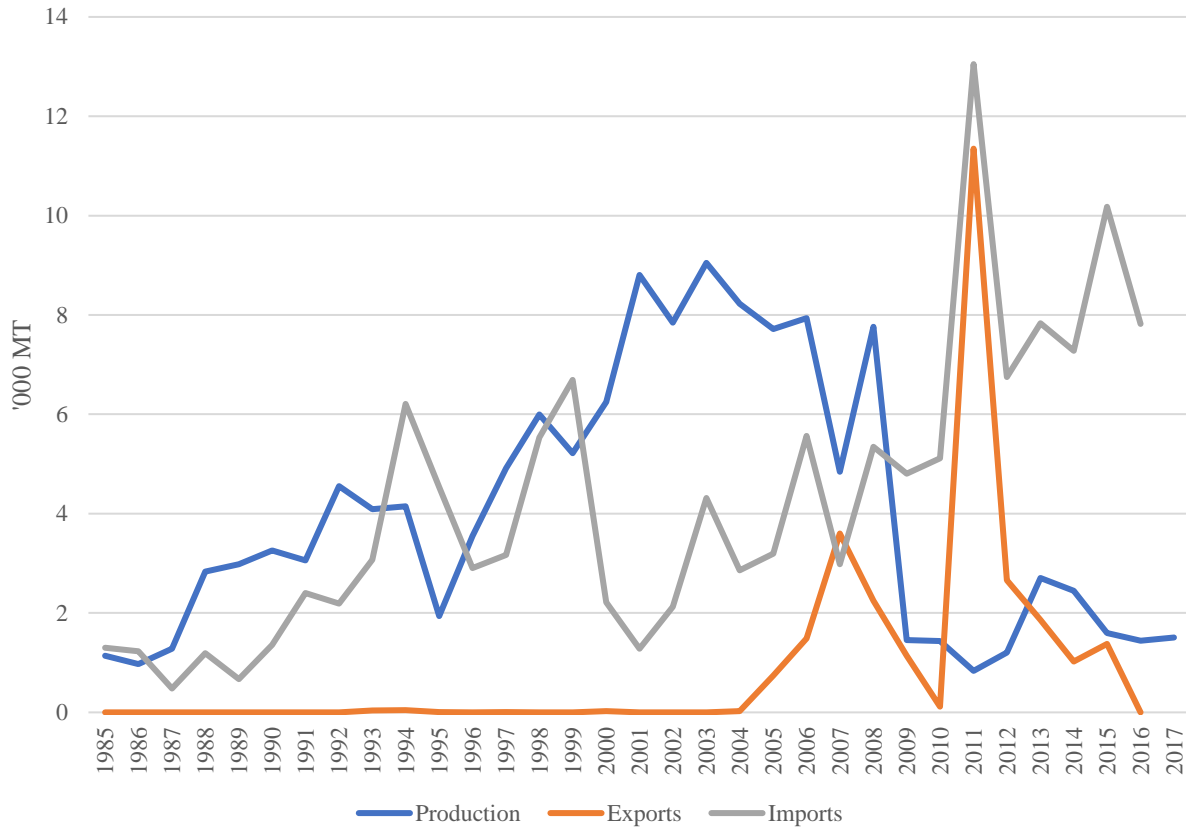


Figure 5. Benin Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1985-2017. Source: USDA. (USDA data begin in 1985).

Key Policies:

- Benin relies almost exclusively on import tariffs of around 13% on the HS17 coded products, but has an applied tariff of 20% on beet sugar and 10% on cane sugar imports.
- The government occasionally uses input subsidies, but the government budget is severely restricted in this regard.

Brazil

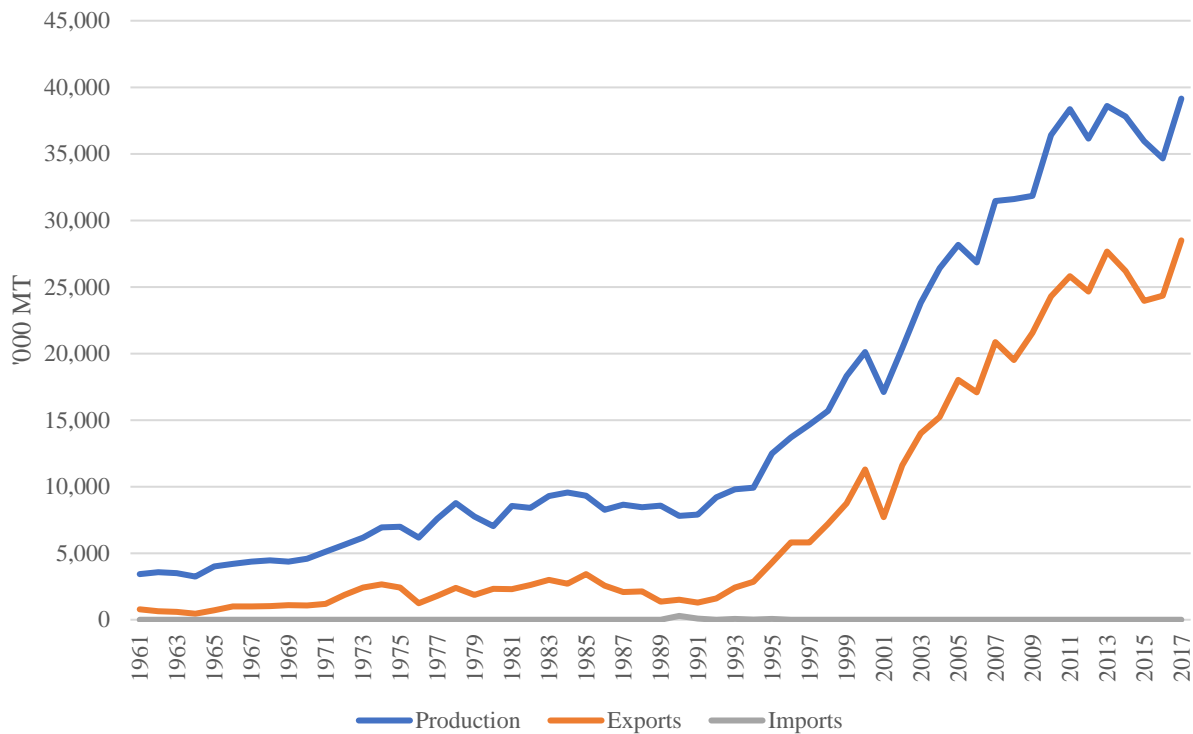


Figure 6. Brazilian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Brazilian sugar exports mirror production (in proportion), indicating that domestic policies favoring sugar production are enhancing sugar exports.

Key Policies:

- Brazil is the world's leading sugar exporter, by far, having benefitted from decades of government cane ethanol subsidies and consumption incentives. One study put the value to the Brazilian cane industry from ethanol cross subsidies and other programs at \$2.5 billion per year.⁵
- Brazil's expansive ethanol policy is by far the largest driver of domestic sugar prices. As of 2018, the maximum blend rate was 27% by volume of gasoline.
- Brazil maintains an average 16.5% import tariff on the HS17 coded products (16% on raw cane and beet sugar).
- Brazil uses a myriad of other input subsidies such as the guaranteed low interest loans and debt forgiveness, along with other more generic subsidies on inputs such as fertilizers and equipment.

⁵ Patrick Chatenay, ProSunergy Ltd, "Government Support and the Brazilian Sugar Industry," Canterbury, England, April 2013. <https://sugaralliance.org/project/government-support-and-the-brazilian-sugar-industry>

Burkina Faso

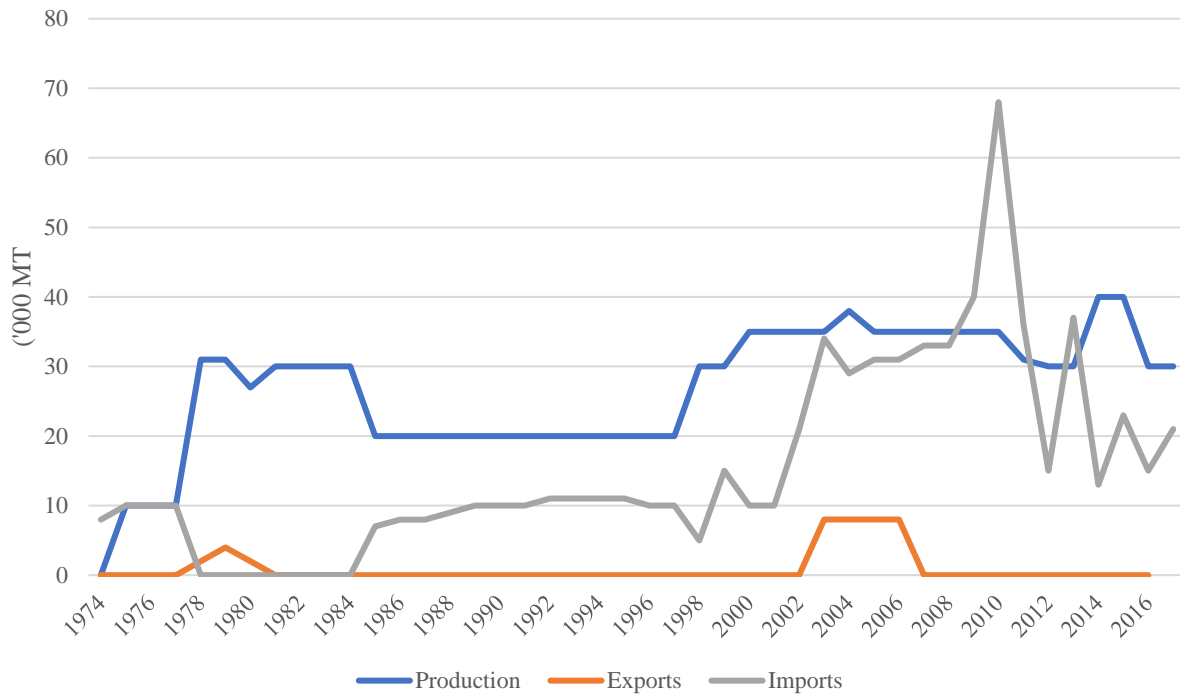


Figure 7. Burkina Faso Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1974-2017. Source: USDA. (USDA data begin in 1974)

Key Policies:

- Burkina Faso relies almost exclusively on import tariffs of around 13% on the HS17 coded products, but has an applied tariff of 20% on beet sugar and 10% on cane sugar imports.
- The government occasionally uses input subsidies, but the government budget is severely restricted in this regard.

Canada

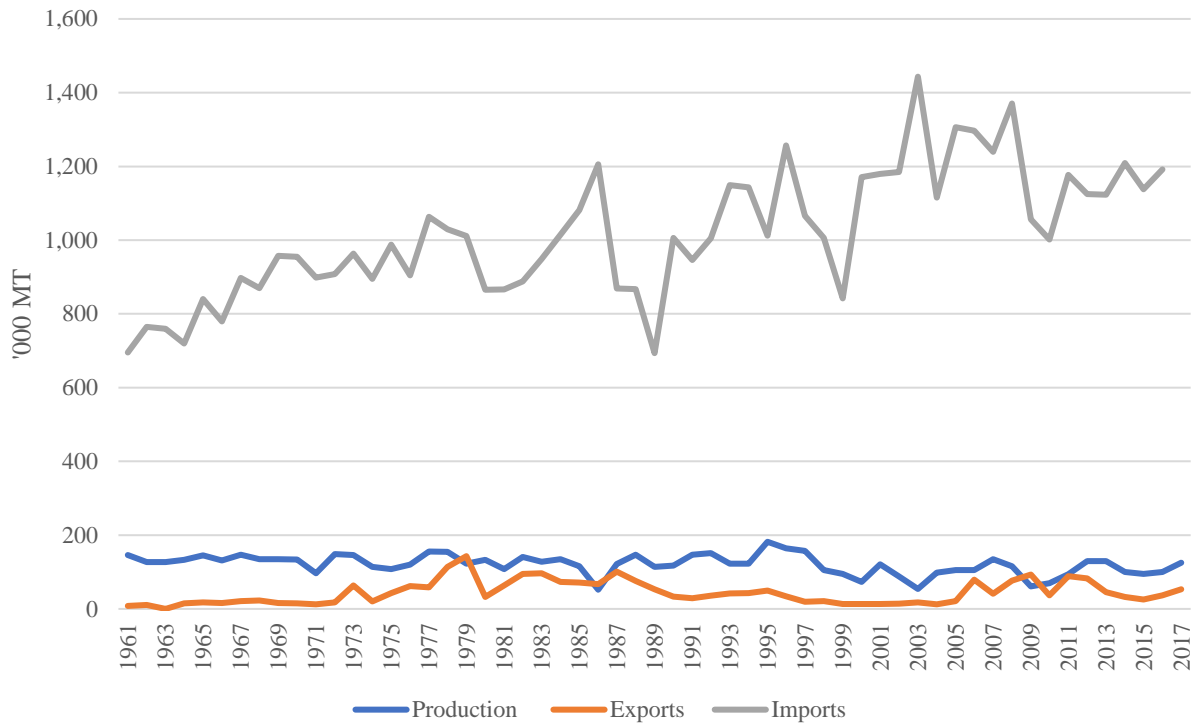


Figure 8. Canadian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Canada primarily relies on sugar imports and their primary sugar production is beet sugar.

Key Policies:

- Canada maintains an average 4.0% import tariff on the HS17 coded products, but 0% applied tariff on raw cane and beet sugar.
- Canada has maintained prohibitive (\$278/MT) antidumping duties on imports of U.S. sugar since 1995.
- The Canadian government has a number of decoupled assistance programs such as crop insurance and transportation subsidies that benefit Canadian sugarbeet growers.
- Canada maintains an ethanol mandate which indirectly supports sugar prices.
- Despite its touted exposure to the world market for sugar, Canada's retail sugar prices are 10% higher than U.S. consumer prices for sugar.⁶

⁶ SIS International Research, op. cit.

China

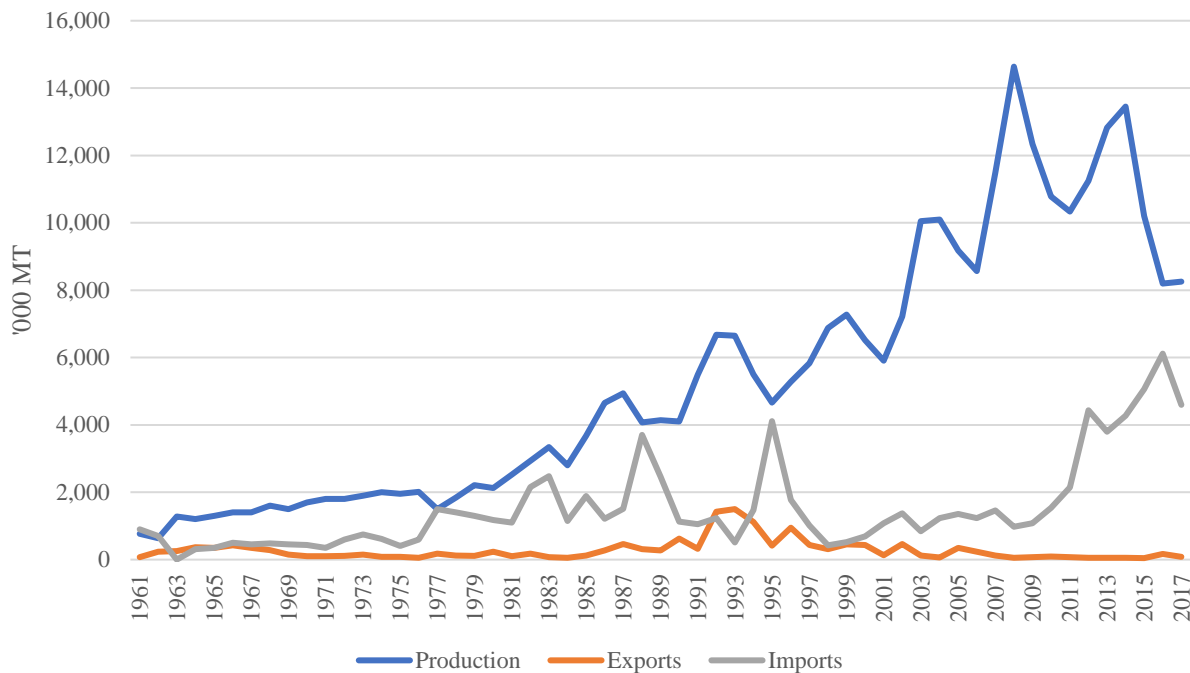


Figure 9. Chinese Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- China is the world's largest sugar importer, but also the fourth largest producer. The government tightly controls the Chinese sugar market.
- China relies on an average import tariff rate of 28.7% on the HS17 coded products (note: China's average applied rate exceeds its WTO average bound rate in this code).
 - The "out-of-quota" tariff for sugar in China was 95% in 2017, decreasing to 90% in 2018 and 85% in 2019. Previously the tariff had been 50%.
 - The in-quota (1.945 MMT) tariff is 15%.
- 70% of all Chinese quota imports are by state-trading enterprises (STEs).
- China imports about 400,000 MT of sugar from Cuba every year at preferential prices.
- The Chinese government operates a reserve stocks program to manage supply.
- Several of China's provincial governments set minimum cane prices and provide other assistance.
 - For example, Guanxi province provides an input subsidy (\$375/acre) to cover the cost of seeds, machinery, mulching film, and fertilizer for sugar production as part of its 5-year improvement plan (started in 2016).
- The Chinese government supports sugar consumption by restricting saccharine production.

Cote d'Ivoire

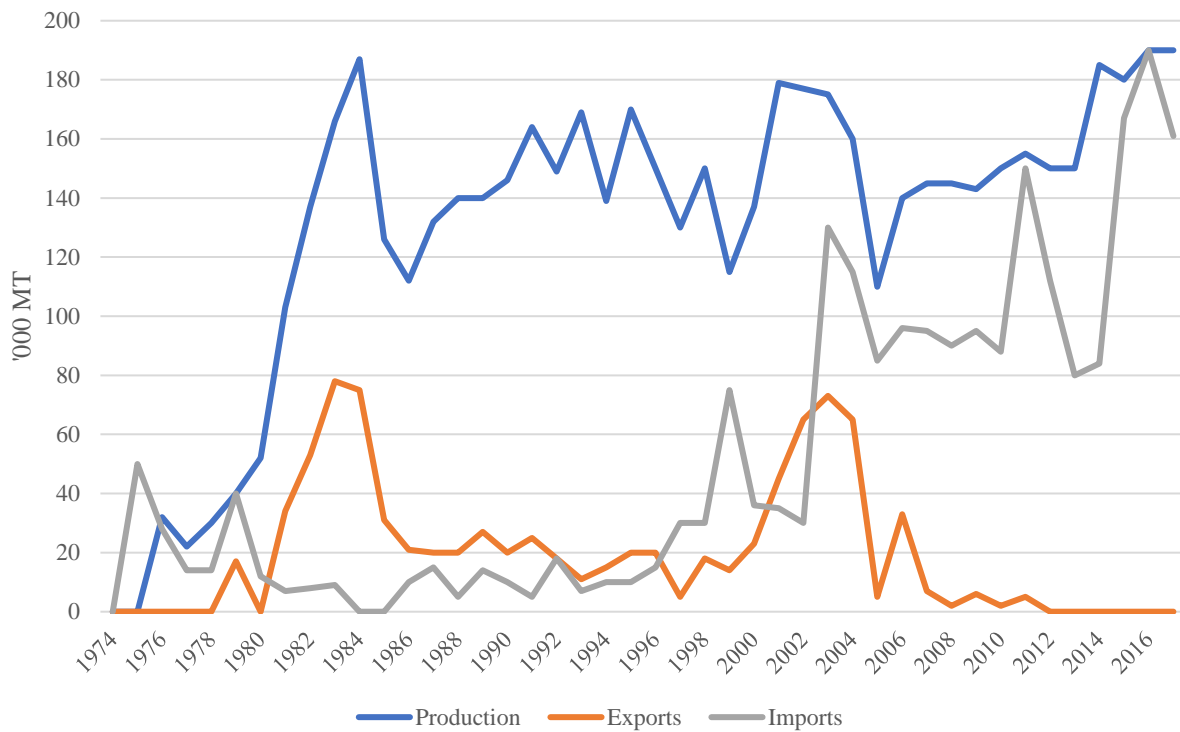


Figure 10. Cote d'Ivoire Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1974-2017. Source: USDA. (USDA data begin in 1974)

Key Policies:

- Cote d'Ivoire relies almost exclusively on an average 13.5% import tariff on the HS17 coded products, with a 20% tariff on raw cane and beet sugar.
- The government occasionally uses input subsidies, but government funding is severely restricted.

Egypt

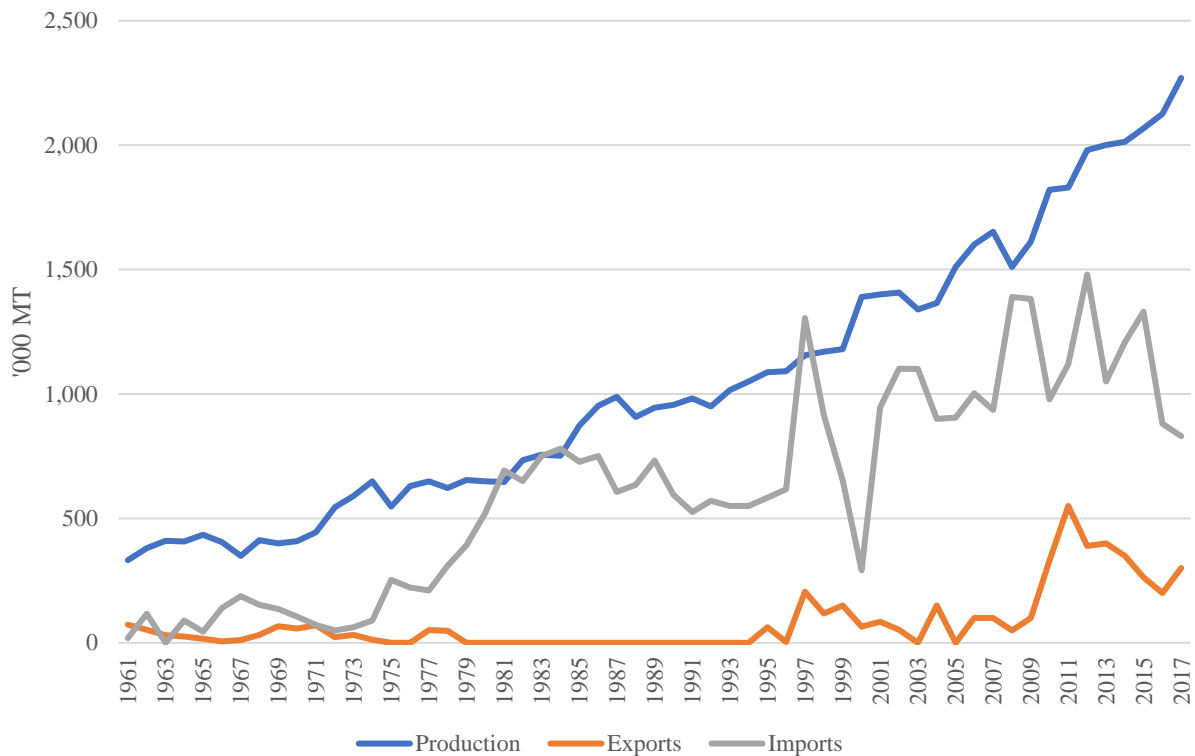


Figure 11. Egyptian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- The government closely regulates the sugar sector and sets beet, cane, and sugar prices. The government owns four of Egypt's six beet companies, all of its cane mills, and one of its two cane refineries.
- Egypt has traditionally maintained an average HS17 applied tariff of 17.3%, but recent events have led to temporary suspensions of raw and refined sugar import duties (most recently in 2017). In fact, in 2017, the government reinstated an export tax of \$166/MT and will likely maintain a tax of \$111/MT in order to preserve domestic production for domestic use. The government also maintains government-owned stockpiles to manipulate price.
- Egypt has implemented acreage controls of water intensive crops like sugarcane.
- Domestic price supports for beet and cane sugar production resulted in an estimated increase in producer profits of 143% for 2018.
- The government also supplies subsidies for financing and inputs.
- Since the 1990s, the United States has funded a research project valued at 200 million Egyptian pounds (\$12 million) to develop disease-resistant sugarcane varieties.

European Union

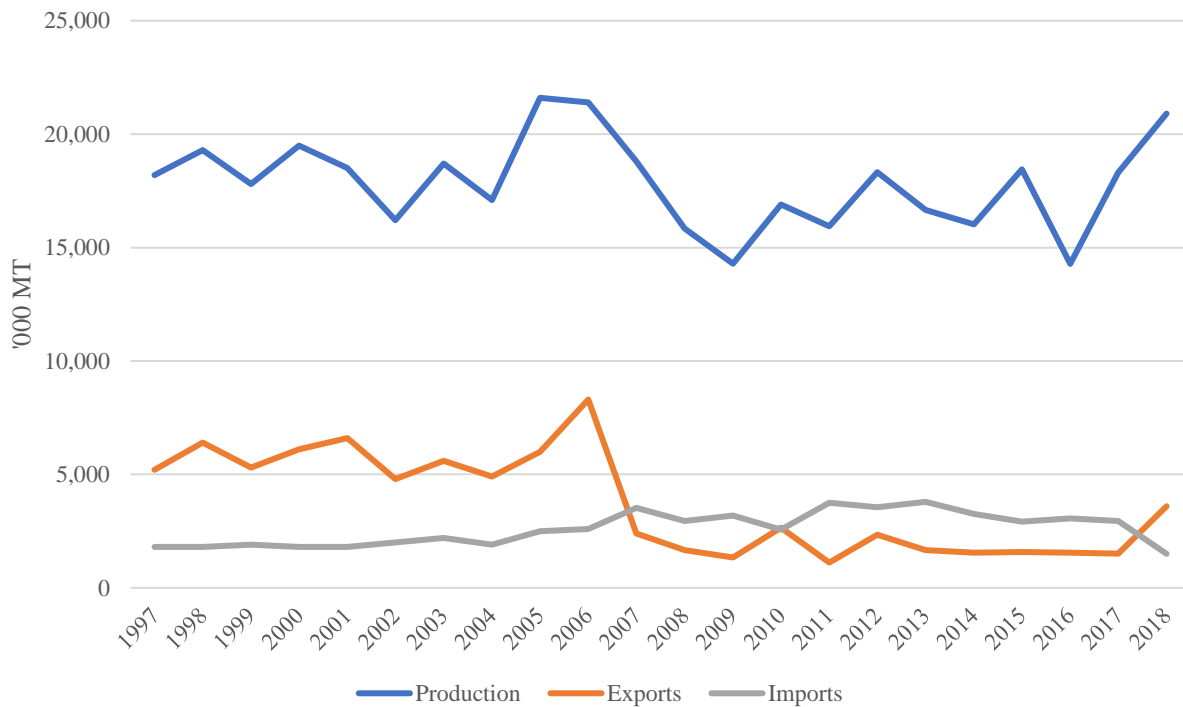


Figure 12. European Union (Starting with EU15 and adding new members as joined; EU28 figures since 2007) Production (Raw Sugar in ‘000 MT), Exports, and Imports (Raw and Refined), 2007-2018. Source: USDA. (USDA data began in 1997.)

Key Policies:

- The EU maintains strict quotas under licensing for exports of raw and refined sugar. It also maintains an average applied tariff of HS17 products of 6.8%
- Special arrangements limit duty-free EU imports to 3.5 MMT from a number of developing countries.
- The EU uses decoupled and coupled payments for sugar. Coupled payments remain at least through the 2020 Common Agriculture Policy expiration. One report estimated the value of EU coupled and decoupled supports to EU beet producers at \$665 million per year.⁷
- The EU maintains a biofuels policy that continues to expand its goals for renewable fuel production.
- Until production quotas were lifted in late 2017, “out of quota” production in EU member states had to either be exported or used for ethanol production (could not be used for food purposes).

⁷ Patrick Chatenay, ProSunergy Ltd, “*European Union Sugar Industry Support*,” Canterbury, England, August 2015.

India

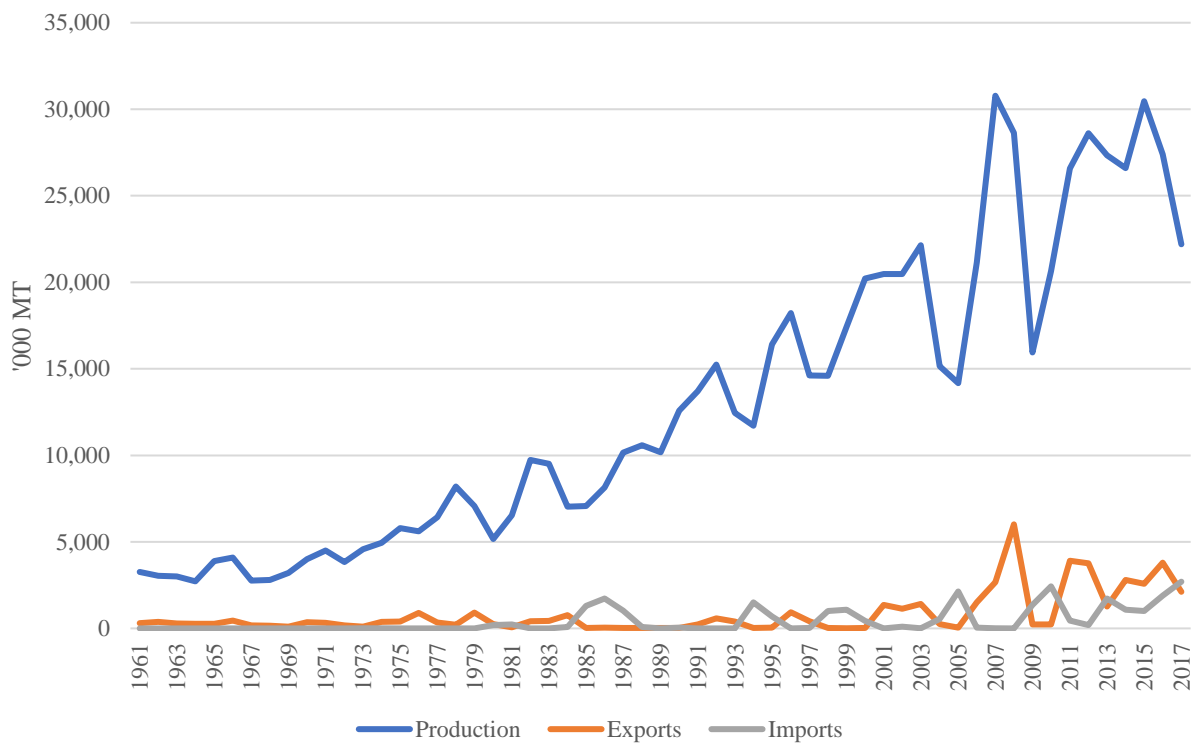


Figure 13. Indian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- India's federal and provincial governments tightly control the sugar market, a huge source of jobs throughout rural India, and have boosted Indian cane sugar production to the largest in the world in 2018/19. A recent report estimated the value to the Indian sugar industry from government interventions at \$1.7 billion per year.⁸
- Several countries, led by Brazil and Australia, have filed a complaint with the World Trade Organization against Indian sugar production and export subsidies.⁹
- India launched an export subsidy program for 5 MMT of sugar in 2018.¹⁰
- Indian provincial governments impose production controls.

⁸ Antoine Meriot, Sugar Expertise LLC, "Indian sugar policy: Government role in production expansion, and transition from importer to exporter," Bethesda, Maryland, August 2016. <https://sugaralliance.org/project/indian-sugar-policy-government-role-in-production-expansion-and-transition-from-importer-to-exporter>

⁹ From WTO website https://www.wto.org/english/news_e/news19_e/ds579_580rfc_07mar19_e.htm

¹⁰ On export subsidies: <https://www.spglobal.com/platts/en/market-insights/latest-news/agriculture/092718-india-approves-5-mil-mt-of-sugar-exports-with-subsidy-for-2018-2019-season>

- India maintains an average applied tariff for the HS17 category of 51.8%, but has a refined and raw sugar of 100%. India has traditionally maintained an export tax, but rescinded that tax in 2018.
- Sugar mills can import sugar duty free, but must export 1 MT of sugar for every 1.05 MT of sugar imported duty free.
- Federal and provincial governments also supply research and development support.
- Sugar producers receive a direct price support, which is funded, at least in part, by a tax on sugar processors (the Sugarcane Development Fund). Additionally, the GOI recently approved substantial soft loans to clear excess cane stocks.¹¹
- India does have an ethanol program, utilizing molasses, the cane by-product.

¹¹ <https://timesofindia.indiatimes.com/business/india-business/govt-okays-up-to-rs-10540-cr-soft-loan-to-help-sugar-mills-clear-cane-arrears/articleshow/68208612.cms>

Indonesia

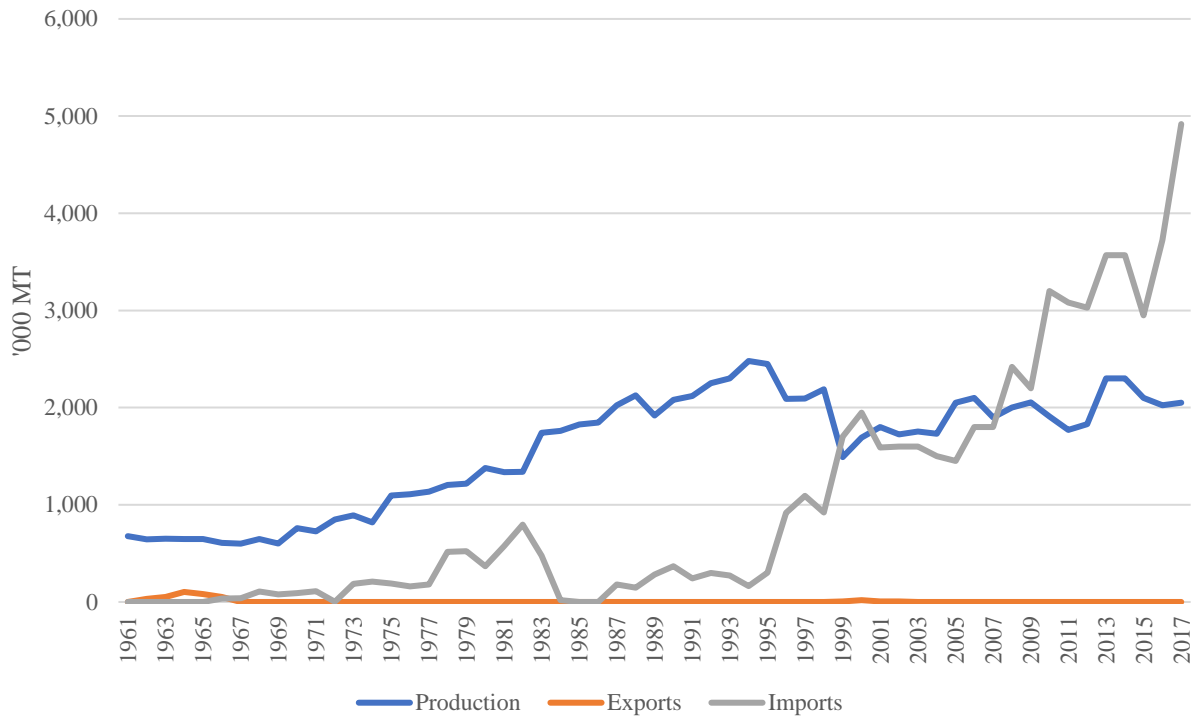


Figure 14. Indonesian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- Indonesia's sugar sector is highly regulated. The government controls imports, prices, and supply chains and owns a number of cane mills.
- The Ministry for State-Owned Companies is providing \$324 million to revitalize mills under Minsitry control.
- Indonesia is the world's second largest sugar importer. Imports are strictly controlled through the granting of import licenses only to state-owned companies.
- Indonesia maintains an average applied tariff for HS17 coded products of 7.4%. In 2018, the import duty for raw sugar was approximately \$0.02/lb. of sugar.
- The government sets minimum prices for sugar producers and maximum prices for consumers.
- Indonesia has an ethanol program, based on the molasses by-product.

Japan

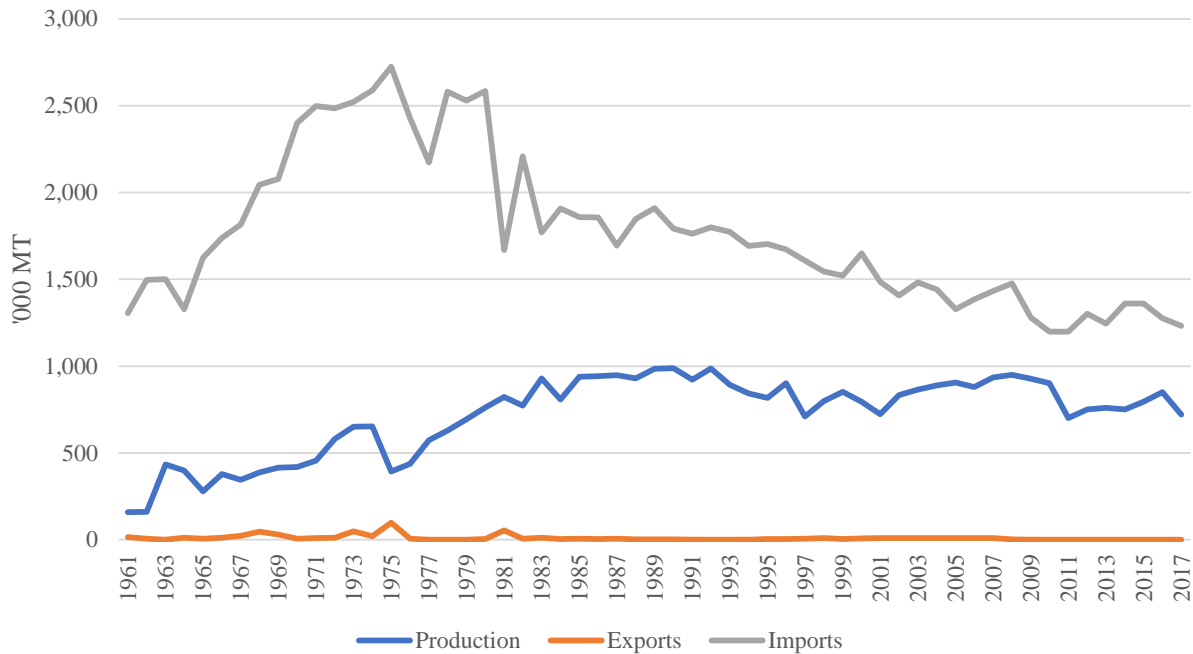


Figure 15. Japanese Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- As with most commodities in Japan, the government closely governs the sugar market.
- Direct payments are the most common form of producer support.
- The average applied HS17 tariff rate is 10.3% (12.4% bound rate), but there is a special tariff ranging from approximately \$0.09/lb of raw cane sugar and about \$0.16/lb of refined cane or beet sugar, depending on exact product form.
- Japan uses a profit insurance program (for all producers).
- Japan's retail refined sugar prices are among the highest in the world, about double consumer prices in the United States.¹²

¹² SIS International Research, op. cit.

Mali

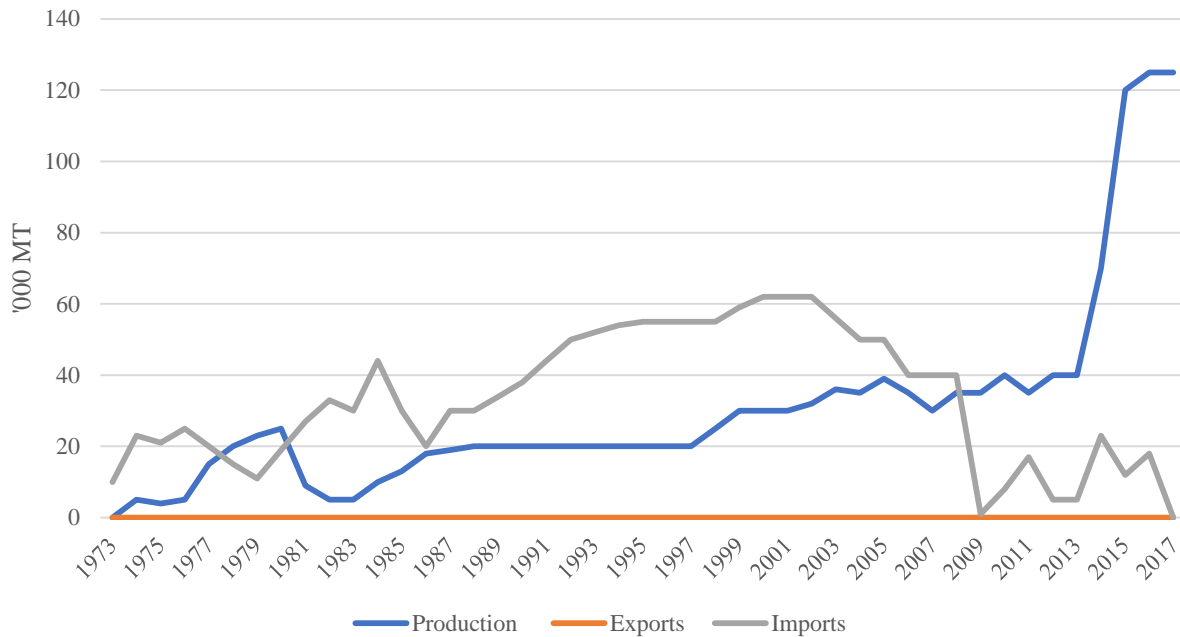


Figure 16. Mali Production (Raw Sugar in ‘000 MT), Exports, and Imports (Raw and Refined), 1973-2017. Source: USDA. (USDA data begin at 1973).

Key Policies:

- The government is closely involved with the operation of the Mali sugar industry, which is largely controlled by a Chinese national company.¹³
- Mali largely relies on import tariffs for price support. The average MFN HS17 tariff is 12.6%, but Mali maintains a raw sugar import tariff of 20% and a special tariff of 55% for non-West African countries.
- Input subsidies are occasionally used, but government funding is severely restricted.

¹³ Government ownership: <https://af.reuters.com/article/idAFL8N1B64LB>

Mexico

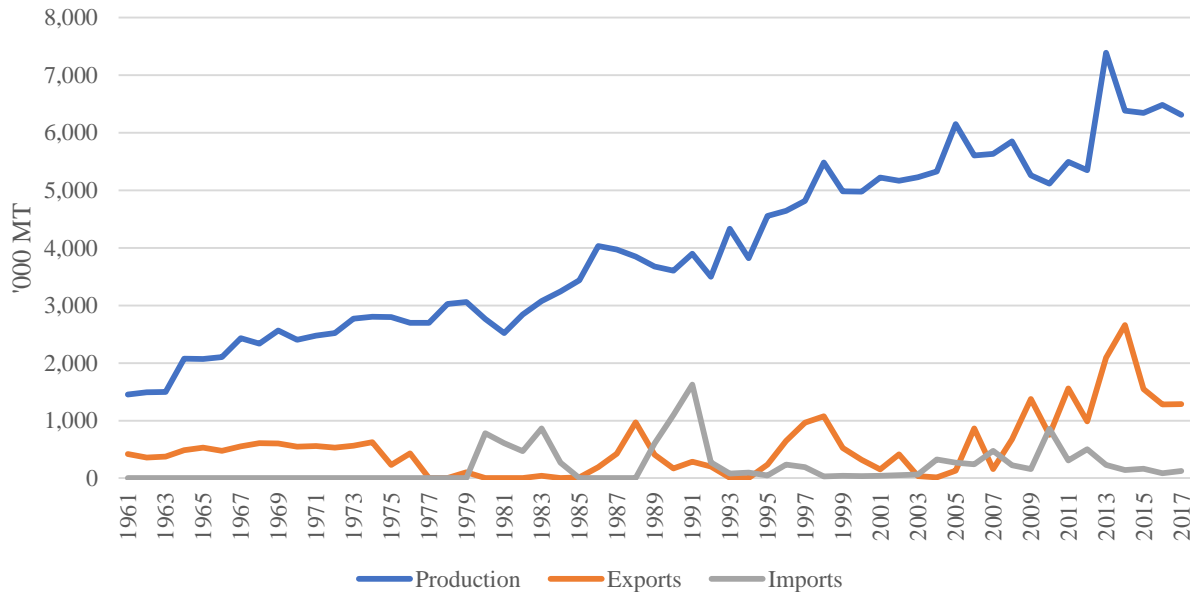


Figure 17. Mexican Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- The Mexican federal and state governments are closely involved with the Mexican sugar industry, a huge source of rural jobs. From 2001 until just a few years ago, the government owned more than half of all Mexican sugar mills.
- In 2014, the U.S. International Trade Commission and U.S. Department of Commerce found Mexico guilty of violating U.S. trade laws in dumping subsidized sugar on the U.S. market. The U.S. government calculated subsidy and dumping margins totaling more than 80%.¹⁴
- Mexico's Ministry of Agriculture and Rural Development has announced it will provide direct annual supports of 7,300 pesos (\$383) to each of the country's 170,000 sugarcane farmers, regardless of farm size. About 95% of these are small-scale cane farms. In total, the payments will amount to about \$65 million.¹⁵
- Mexico maintains import restraints with an average HS17 MFN applied tariff of 31.3%.
- Under NAFTA rules, Mexico maintains a common external tariff of 15-16 cents/lb.
- The government sets a minimum price that the mills must pay growers for their cane, using a formula based on sugar sale prices to domestic and foreign markets.
- Mexico uses numerous indirect subsidies through preferential financing arrangements, loan guarantees for domestic sugar supplies, and funding for research and development.
- Mexico has long promulgated programs for cane ethanol use to help support the sugar sector.

¹⁴ U.S. Department of Commerce <http://enforcement.trade.gov/download/factsheets/factsheet-mexico-sugar-ad-cvd-final-091715.pdf>

¹⁵ <https://www.jornada.com.mx/ultimas/2019/04/22/incorporan-a-cana-de-azucar-al-programa-de-produccion-para-el-bienestar-5925.html>

Nigeria

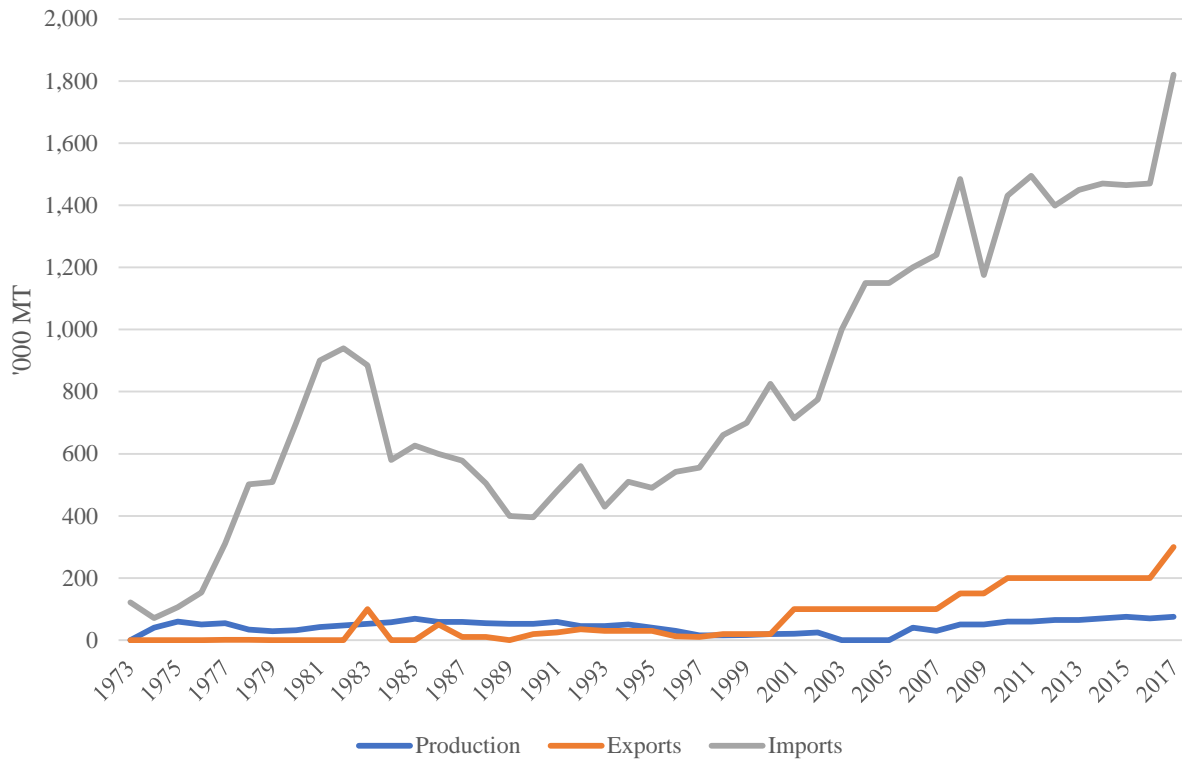


Figure 18. Nigerian Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1973-2017. Source: USDA. (USDA data begin at 1973).

Key Policies:

- Nigeria primarily uses import duties for price support. The average applied HS17 MFN tariff is 12.5%. However, import duty on refined sugar is about 20%, and when coupled with the development levy (10%) and the VAT (5%), the effective import duty on refined sugar is about 35%. Imports of raw sugar are exempted from the development levy and have a lower duty of 5%, thus favoring imports of raw sugar for further processing.
- The government also uses a suite of input subsidies such as low duties on machinery, chemical, interest rate subsidies, and equipment for sugar processing.
- The government allows 100% foreign ownership of sugar facilities to encourage foreign direct investment.

Pakistan

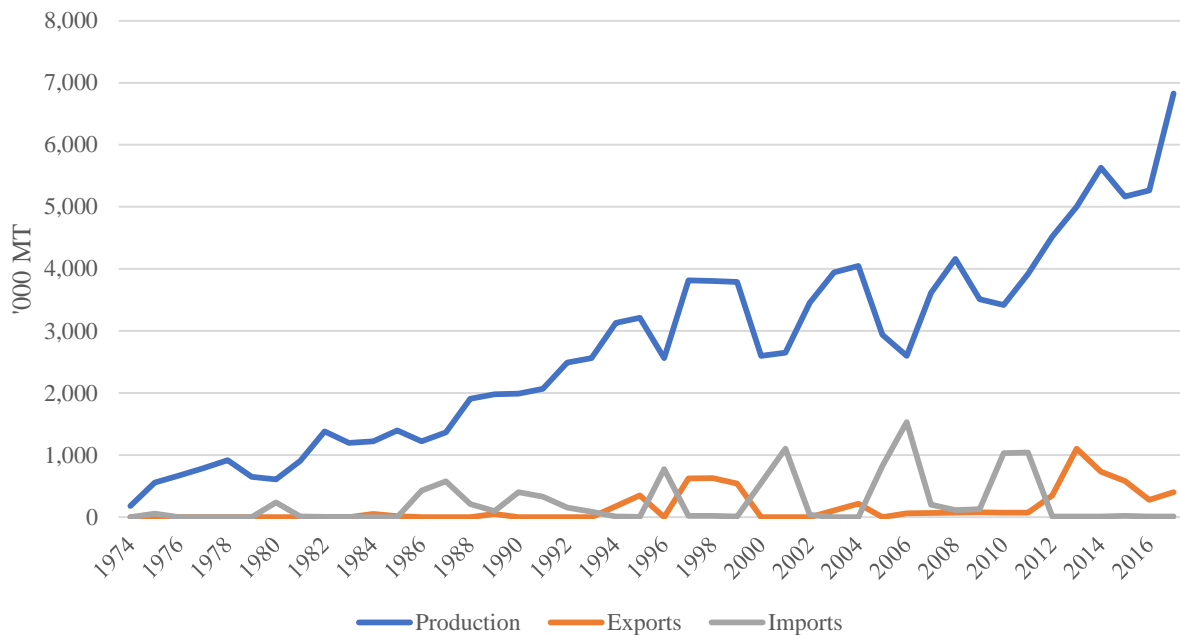


Figure 19. Pakistani Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1974-2017. Source: USDA. (USDA begin in 1974).

Key Policies:

- Pakistan has an average applied tariff for the HS17 category of 15% according to the WTO; but, the general duty on sugar imports was set at 40% in April 2018 along with a 15% regulatory duty, a 15% general sales tax, and a 1% excise duty on raw sugar imports.
- Pakistan subsidizes sugar exports. The government set a minimum export price of \$425/ton and operated an export quota which was expanded to 500,000 MT in 2017/18 and provides an inland freight subsidy of \$97/MT for sugar exports.
- Pakistan sets a minimum support price for cane producers, which was \$43-\$44/ton for 2017/18. Provincial governments set processor prices for sugar.
- Provincial governments also support sugar research and development, farmer training, and new technology transfer.

Russia (Russian Federation)

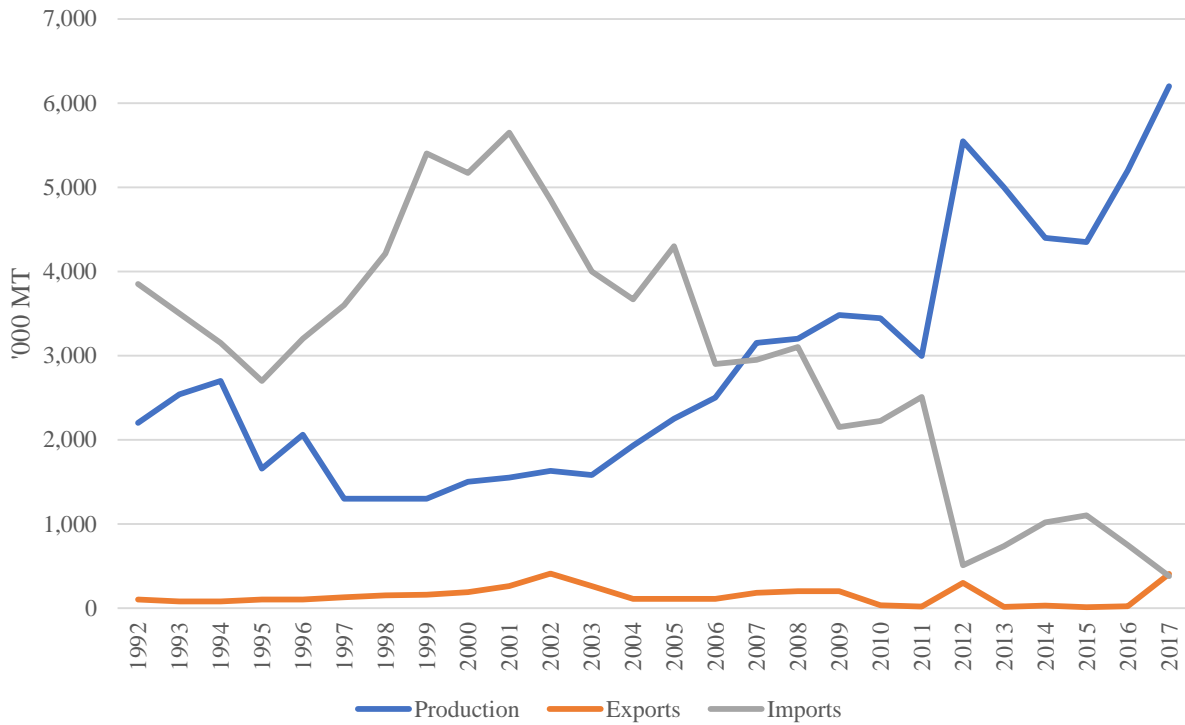


Figure 20. Russian Federation Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1992-2017. Source: USDA. (USDA data begin in 1992).

Key Policies:

- Russia had been a major sugar importer, but government programs to increase sugarbeet planting resulted in a sharp rise in Russian sugar production over the past decade.
- Russia's limited budget means that almost all sugar policy is based on import tariffs. As of 2017, Russia maintained a \$250/MT duty on sugar imports from inside the customs union.
- Russia maintains a system of subsidized interest rate loans to agricultural producers through commercial banks.
- Russia provides seed, fuel, fertilizer, and machinery subsidies.¹⁶

¹⁶ <https://www.agroinvestor.ru/technologies/news/31349-kuban-oplatit-70-zatrat-na-semena-sakharnoy-svekly/>

South Africa

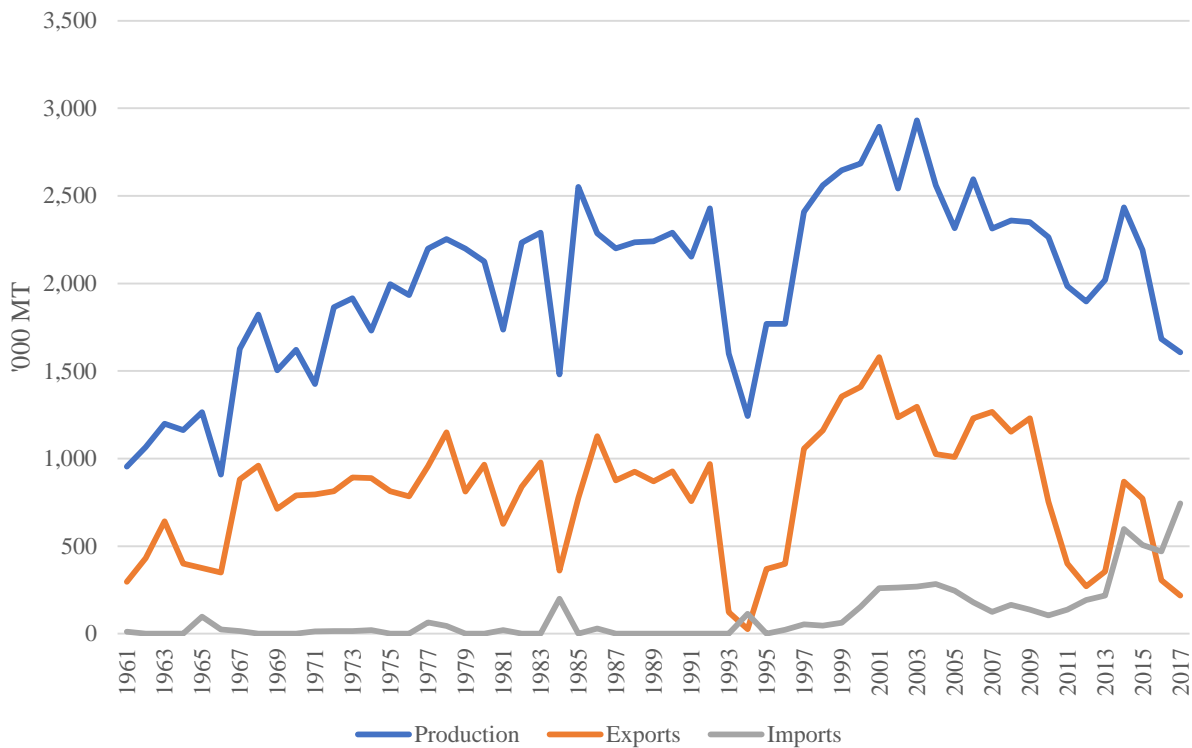


Figure 21. South African Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- South Africa uses a variable rate tariff based on world market prices rather than a fixed percentage tariff. For 2018, the declared import tariff rate was approximately \$0.07/lb. of imported sugar. The government uses a dollar-based reference price to formulate the duty, which is currently \$0.28/lb.
- The South African Sugar Association is a State Trading Enterprise (STE) and maintains complete control over exports. Producers are indirectly supported by the monopoly profits arising from the export STE.

Eswatini (formerly Swaziland)

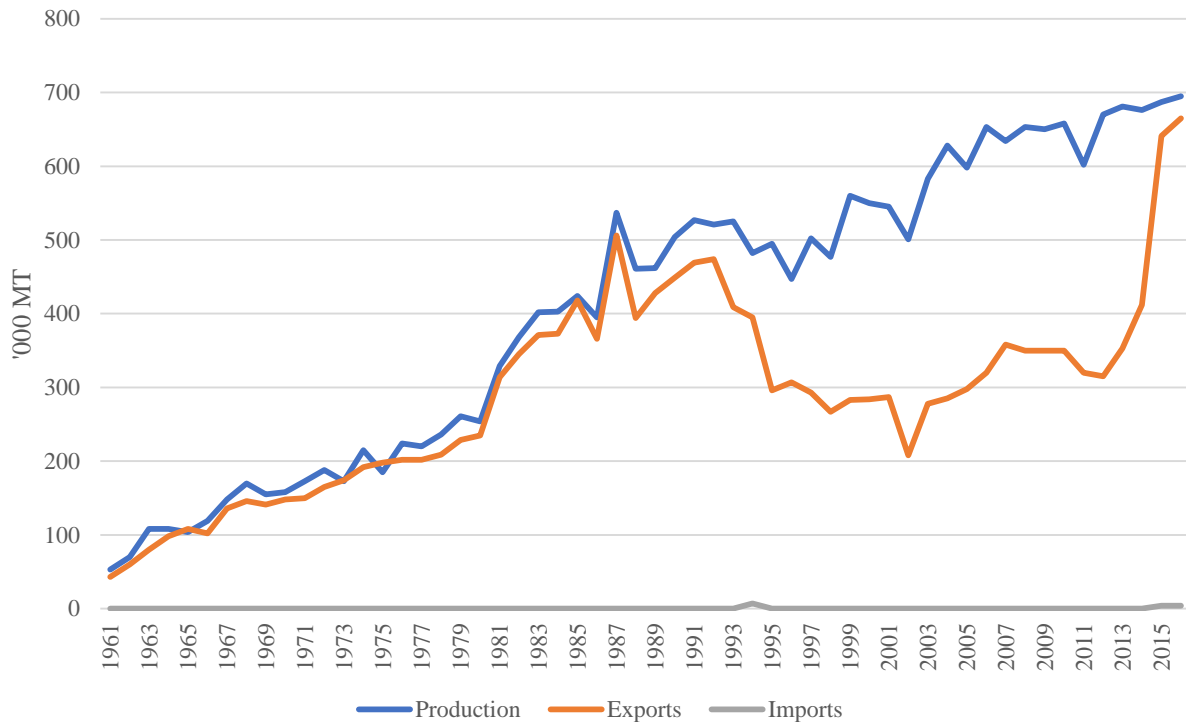


Figure 22. Eswatini (formerly Swaziland) Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2016. Source: USDA. Note: Last reported data in 2016.

Key Policies:

- Currently, the applied MFN rate for the HS17 code is 5.2%, but their bound rate is 73.4%.
- Trade is controlled by the Swaziland Sugar Association, which is responsible for the sale and marketing of all sugar produced.
- Exports to EU markets grew in part due to duty free, TRQ-free access to the EU sugar market for qualifying Least Developed Countries. Member states of the African, Caribbean and Pacific (ACP) trade group get preferential terms, but are limited by a safeguard ceiling of 3.5 million tons.
- South African Customs Union (SACU) market is the primary destination for their sugar. This includes South Africa, Botswana, Lesotho, Namibia and Swaziland.
- Sugarcane growing in Swaziland is only permissible through a quota issued by the Sugar Industry Quota Board.

Thailand

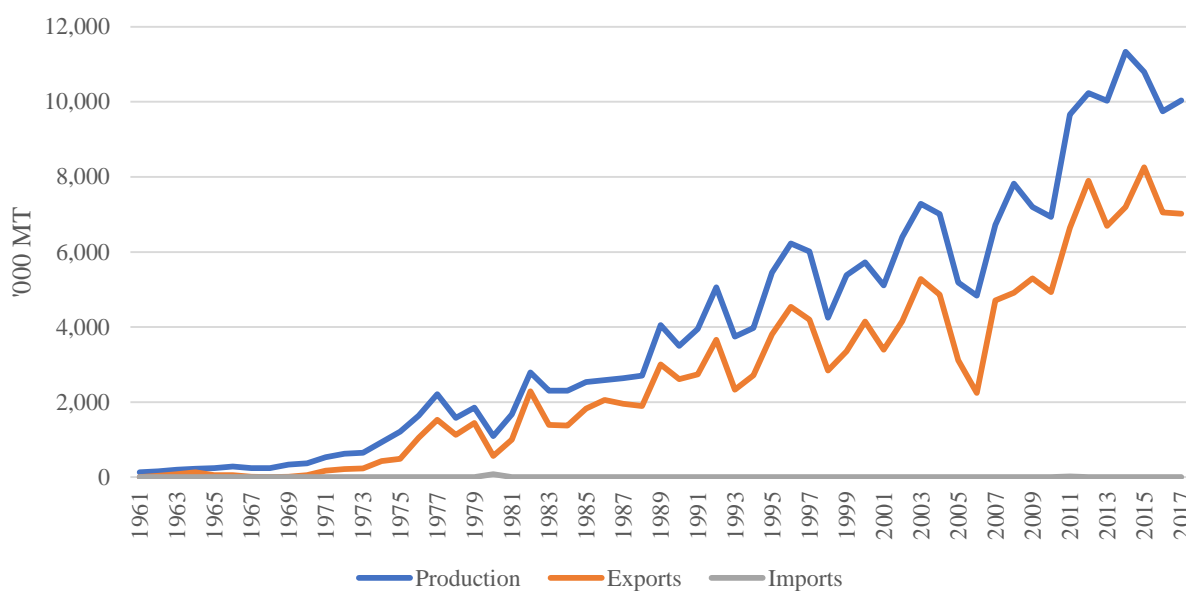


Figure 23. Thai Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- Government programs boosted Thai sugar production and exports enormously over the past decade, and Thailand is now second only to Brazil in sugar exports. One study placed the value of Thai government support for its sugar industry at \$1.3 billion per year.¹⁷
- Brazil has recently threatened to bring a WTO case against Thai sugar subsidies.¹⁸
- Thailand has set a sugar-import duty of \$0.05/lb. of sugar, but imports from other ASEAN countries are exempt.
- Thailand traditionally maintained price controls over sugar, but in 2018, all prices were liberalized.
- Domestic sugar wholesale prices are approximately 5 baht per kilogram (7 cents/lb) higher than the world sugar price, but the Thai government is providing a production cost subsidy of 50 baht per metric ton (\$1.6/MT; a maximum of 5,000 metric tons per farmer), as well as direct payments of 53 baht per metric ton (\$1.7/MT) from the state-run Cane and Sugar Fund.¹⁹

¹⁷ Antoine Meriot, Sugar Expertise LLC, "Thailand sugar policy: Government drives production and export expansion," Bethesda, Maryland, June 2015. <https://sugaralliance.org/project/thailands-sugar-policy-government-drives-production-and-export-expansion>

¹⁸ From WTO website: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds507_e.htm

¹⁹ 2019 GAIN Report: <https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Sugar%20Annual%20Bangkok%20Thailand%204-11-2019.pdf>

- The government imposes a \$0.07/lb. tax on domestic sugar at the mill level to fund the Cane Sugar Fund, which provides income support to domestic cane sugar producers. Although Thailand has repeatedly said they would eliminate domestic support, this program has remained in place.

Turkey

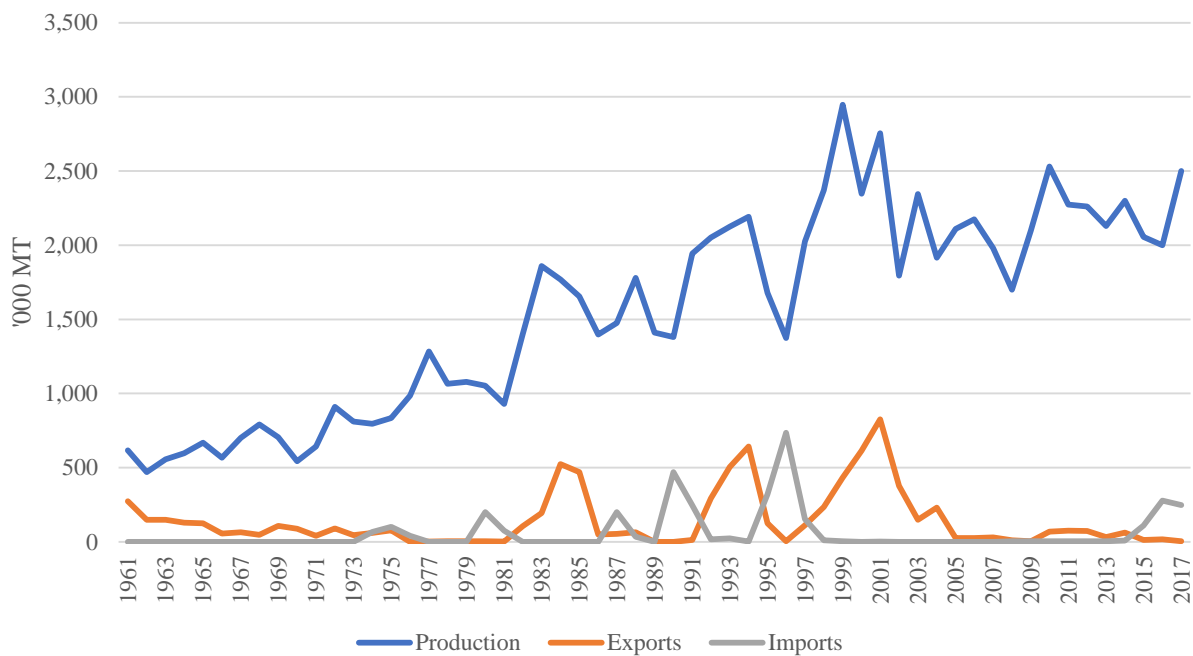


Figure 24. Turkish Production (Raw Sugar in '000 MT), Exports, and Imports (Raw and Refined), 1961-2017. Source: USDA.

Key Policies:

- As previously noted, Turkey is one of the highest subsidizing countries in the world on sugar based on direct transfers and border policies. Their average MFN applied tariff for the HS17 code is 102%, but their applied rate for raw sugar imports is 135% as of 2016.
- A Turkish government entity, (TURKSEKER) is the country's biggest sugar producer, owning 15 factories accounting for 30% of Turkish production.
- The government provides a myriad of input subsidies, such as fertilizer and fuel, and also provides direct income/price support and insurance programs.
- Turkey uses production quotas to manage internal supplies.
- Although Turkey has been phasing out/privatizing the government-owned sugar mills, those mills received subsidies estimated at as much as \$250 million per year.²⁰
- Turkey requires 3% bioethanol in its gas fuel and sugarbeet molasses is one of the feedstocks used to meet that requirement.

²⁰ Burell, A. and M. Kurzweil. "Distortions to Agricultural Incentives in Turkey." World Bank and Wagenigen University Working Paper 10, 2007.
http://siteresources.worldbank.org/INTTRADERESEARHC/Resources/544824-1146153362267/Turkey_0208.pdf