Investigating Effects of Plausible Scenarios in Global Cotton Markets on US Cotton Producers

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Abstract

Although the United States remains the world's largest cotton producer and exporter, Brazil's rapid expansion of cotton sector in the past decade poses a challenge to U.S. cotton exports. Other challenges to U.S. cotton competitiveness include U.S. heavy dependence on China's cotton import demand and capturing new emerging markets. Thus, understanding how changes of these factors contributing to global cotton supply and demand affect the U.S. cotton sector will have important implications for U.S. cotton producers. This report estimates impacts of Brazil's rising production and the changing import demand of U.S. cotton from China and emerging markets such as Vietnam. A partial equilibrium model of world fiber markets is employed to quantify the above-mentioned impacts on cotton trade markets as well as to evaluate prospects for U.S. cotton competitiveness in the future. Our findings suggest that a relatively small increase in Brazil's cotton production is far more important to U.S. cotton producers than relatively large decrease in Chinese imports of U.S. cotton. Additionally, modest increases in Vietnam's mill use would more than offset losses in U.S. cotton exports resulting from declining Chinese imports.

Introduction

The United States has been the world's largest cotton exporter over the last two decades, accounting for about 33 percent of the market, with exports averaging 13.4 million bales[2] (USDA, FAS, 2024). However, driven by its favorable climatic characteristics and rapid conversion of forestland into arable land (Lapola, et al. 2014),

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[2] Cotton bale unit is measured in 480-pound bales.

Brazil's cotton production has grown rapidly to become one of the leading cotton producers in the world. Cotton production in Brazil increased at 15 percent annually between 2016/17 and 2023/24 from 5.9 million bales in 2016/17 to 14.6 million bales in 2023/24, while cotton acreage doubled during the same period increasing from 2.1 million acres in 2016/17 to 4.1 million acres in 2023/24 (Figure 1). Cotton remains as an export-oriented commodity in Brazil, and the country exports more than 70 percent of the cotton it grows. As the size of Brazil's cotton sector has continued to grow steadily, Brazil has become the largest competitor of U.S. cotton in the global market, with exports increasing dramatically from 2.8 million bales in 2016/2017 to a record high of 12.1 million bales in 2023/2024 following closely behind the United States (Figure 2).
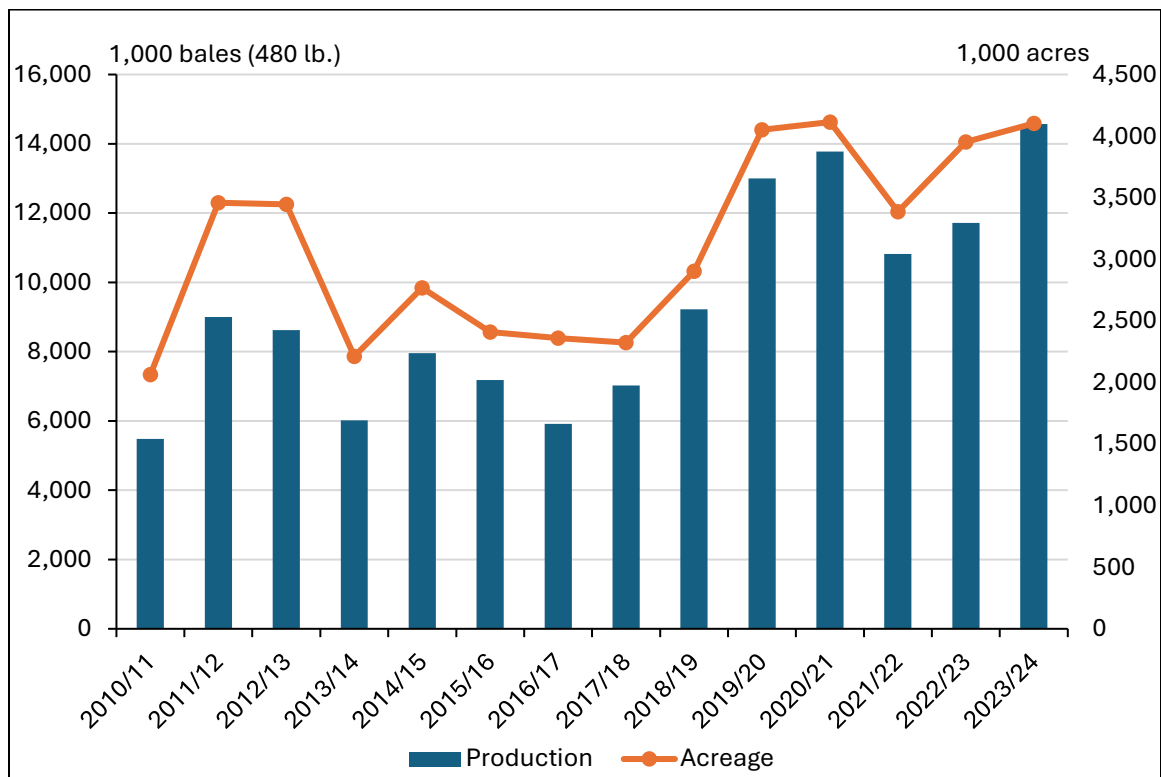
Figure 1 Brazil cotton acreage and production, marketing years (MYs) 2010/11 – 2023/24

Source: USDA, Foreign Agricultural Service (FAS)

The international market remains crucial to the U.S. cotton, with exports accounting for more than 80 percent of its production in recent years (USDA, FAS, 2024). Figure 2 shows Brazilian and U.S. cotton export volumes and export shares of global cotton trade between 2010/11 and 2023/24. The United States and Brazil together accounted for most cotton exports, capturing about 55 percent of global cotton trade in 2023/24. More specifically, the U.S. share of global cotton exports has trended downward since 2016/17, declining from 39 percent in 2016/17 to 28 percent in 2023/24. On the other hand, Brazil has experienced substantial increase in its cotton exports, growing from 2.8 million bales in 2016/17 to 12.1 million bales in 2023/24, representing a 334 percent increase in terms of export volume.
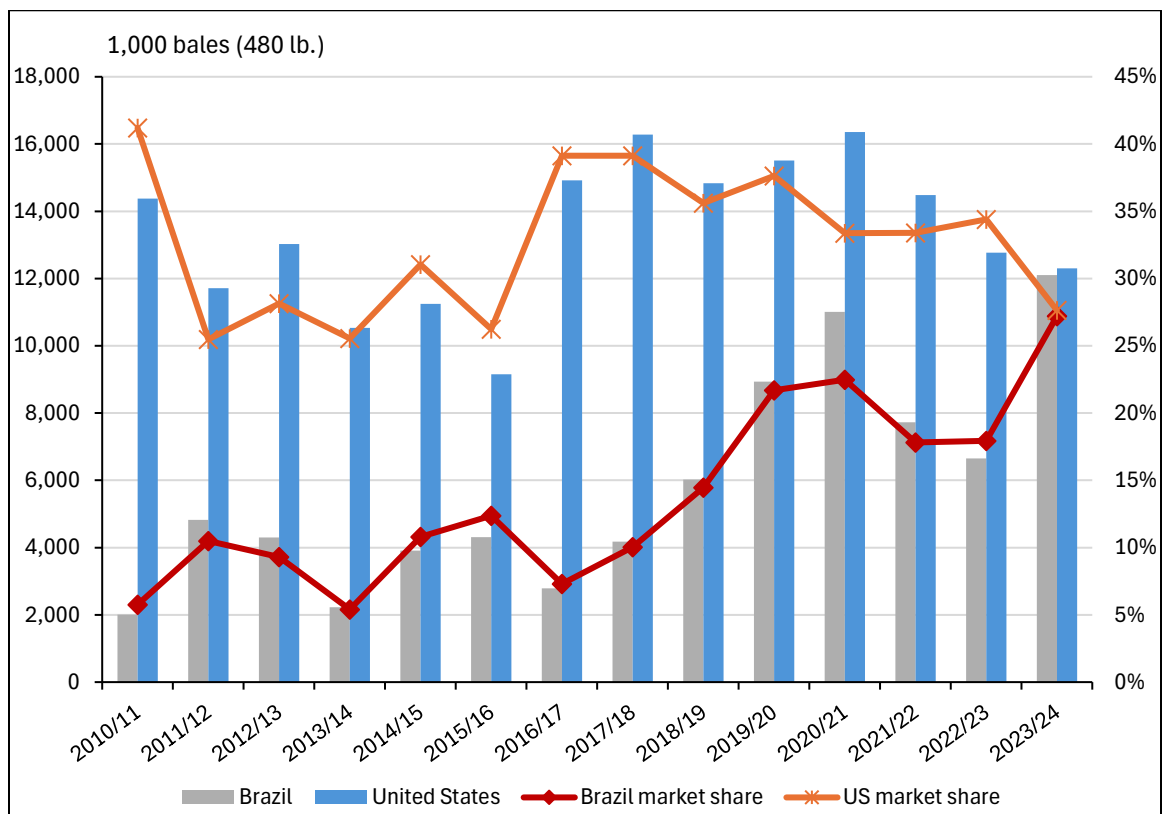
Figure 2 Brazilian and U.S. cotton exports and export shares (by volume), MYs 2010/11 – 2023/24

Source: USDA, Foreign Agricultural Service (FAS)

Despite being the top cotton-producing country, China is the largest importer of cotton in the world, accounting for nearly 30 percent of global cotton imports due to high domestic consumption to support its textile industry. The United States maintained a strong trading relationship with China historically, exporting an average of 28 percent of its total cotton exports between 2020 and 2023 (UN Comtrade, 2024), in terms of export value. Other top export destinations for U.S. cotton exports – in terms of value – include Vietnam (15 percent), Pakistan (13 percent), and Turkey (11 percent). Although China has remained the top destination for U.S. cotton exports, U.S. cotton has accounted for an increasingly large market share of cotton imported by Vietnam over the past decade, with the market share of U.S. cotton exports to Vietnam fluctuating between 9 and 23 percent (Figure 3).
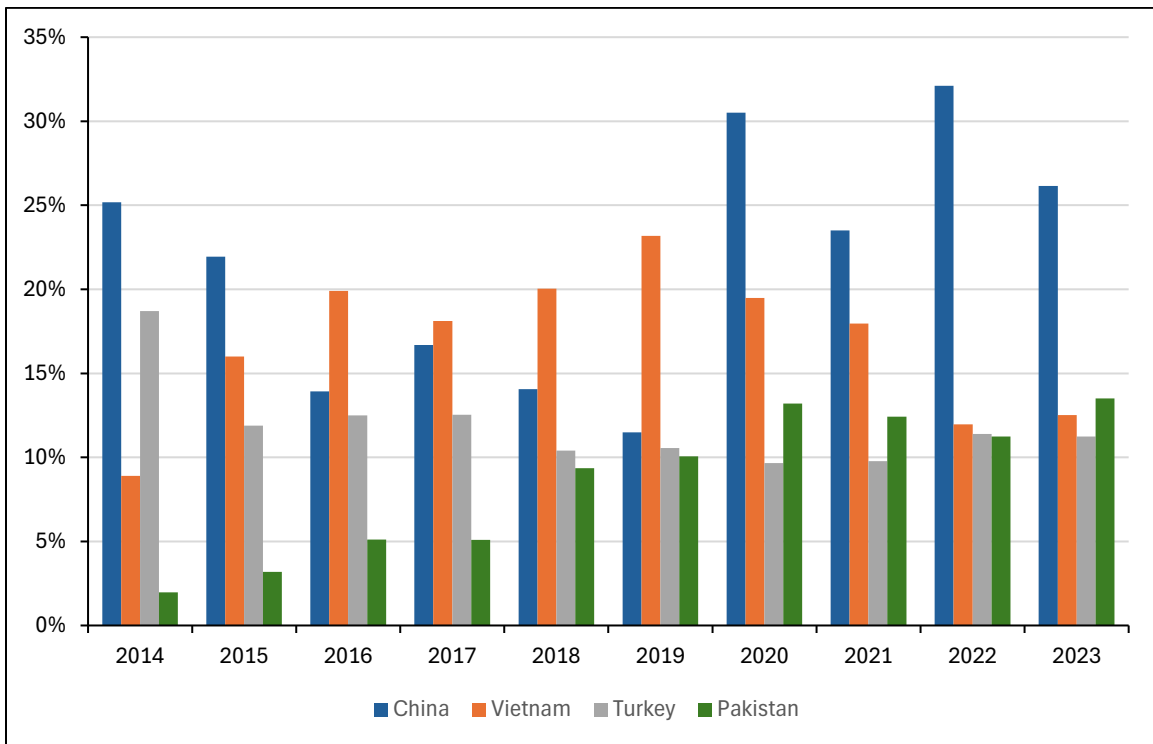
Figure 3 U.S. cotton market shares among major cotton import countries, calendar years 2014 – 2023

Source: United Nations Comtrade data base

Although the United States remains the leading cotton exporter, the emergence of new competitors such as Brazil threatens the current U.S. cotton sector's position in global cotton markets. Meanwhile, U.S. dependence on China as a key cotton export market makes U.S. cotton exports vulnerable to changes in the Chinese market and policy. Consequently, emerging import markets, particularly in regions with growing cotton consumption and limited production capacity, represents new opportunities to enhance U.S. cotton exports. Thus, understanding how changes of factors contributing to global cotton supply and demand affect U.S. cotton export competitiveness will have important implications for U.S. cotton producers. To accomplish this goal, this analysis used a partial equilibrium world fiber model to establish a ten-year baseline (2024/25 – 2033/34) under a set of plausible assumptions regarding macroeconomic and other variables, which allows for understanding of short- and long-term effects regarding to changes in the global trade environment. Then the simulated results from assumed scenarios were compared to the current baseline projections to evaluate potential effects on the U.S. cotton competitiveness.

Methods

A partial equilibrium econometric simulation model of U.S. and other major cotton markets, known as the World Fiber Model (Pan and Hudson, 2011)[3], was used to estimate the effects of potential trade environment changes on the U.S. cotton sector. The world fiber model has been extensively used in the past for policy analysis, including most recently Liu and Hudson (2019); Capps, Williams and Hudson (2016); Williams et

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[3] See Technical Documentation of the World Fiber Model by Pan and Hudson (2011) for more information on parameter estimates and diagnostic statistics.

al. (2011); MacDonald et al. (2010); and Pan, Hudson and Ethridge (2010). This partial equilibrium model representing the world fibers markets incorporates supply and demand models for the United States and 23 other major producing and consuming countries and regions. It is used to perform analysis on the expected behavior of natural fiber markets to potential changes in trade, technology, economic and policy factors, and evaluate the impacts of these changes on the 24 country/regional cotton and textiles markets.

This report incorporates ICAC (2024) long-term cotton baseline projections from 2024/25 to 2033/34 to reflect baseline cotton supply and demand changes in future years. The baseline simulation is normally conducted with a set of assumptions about the current general economy as well as agricultural and trade policies in major exporting and importing countries. In addition, the model is driven by a set of macroeconomic variables, such as real GDP, consumer price index (CPI), exchange rates and population growth. Projections for these macroeconomic variables as well as those for acreage, yield, prices for competing crops (e.g., corn, rice, soybean and wheat) and crude oil prices were obtained from the World and U.S. Agricultural Outlook published by Food and Agricultural Policy Research Institute (FAPRI).

The model was first estimated under the current situation (or baseline); i.e., under the projected global conditions for the next 10 years assumed for the 2024 FAPRI baseline projections. After that, alternative scenarios were simulated with all other conditions remaining the same as in the baseline except for the scenario variable of interest. Finally, the projected outcomes of assumed scenarios were compared with the baseline scenario to determine the economic impacts on the international cotton market.

Data

The annual data sets used in the estimation process were obtained from several different sources. Cotton data on acreage, yield, production, mill use, ending stocks and trade were collected from the Production, Supply & Demand (PS&D) database of the Foreign Agricultural Service of the U.S. Department of Agriculture (USDA). U.S. cotton regional acreage, yield and production were obtained from the National Agricultural Statistic Service (NASS), USDA. Data concerning U.S. cotton farm and mill prices were obtained from various issues of Cotton and Wool Yearbook published by the Economic Research Service (ERS), USDA. Prices of competing crops were derived from various yearbooks for different crops published by the ERS as well. All prices and income were expressed in real terms before estimating the behavioral equations.

Estimation Results

Results are reported as annual percentage changes over the period 2024/25 – 2033/34 in terms of changes from baseline estimates. Tables 1 – 3 summarize estimated results for the next 10 years of key variables related to U.S. cotton trade corresponding to respective scenarios.

Scenario 1 Brazil's cotton production

To evaluate the impact of the expansion of Brazil's cotton production on U.S. cotton markets, two alternative scenarios were estimated assuming different growth rates of Brazilian cotton production: a moderate 2 percent increase above the baseline projections in Scenario 1a (*S 1a*) and 5 percent increase above the baseline projections in Scenario 1b (*S 1b*).

Consistent to expectations, the steady expansion of Brazil's cotton production has the largest impact on its exports, increasing exports by an average of 2.4% and 6.1% above baseline projections (Table 1), respectively, corresponding to production increases of 2% and 5%. Although both U.S. cotton production and exports are adversely affected, the magnitudes are relatively small (-0.2% in *S 1a* and -0.5% in *S 1b*) compared to the resulting effects on both cotton prices. Furthermore, the increased cotton supply in the trade market puts downward pressure on both U.S. cotton farm prices and A-index, with more significant negative impact in the first year (2024/25). Specifically, with a 5 percent increase of Brazil's cotton production (*S 1b*) above baseline projections, A-index is projected to decline initially by -5.3% in 2024/25 with the A-Index below the baseline by 2.8%, on average, over the 10-year period. Clearly, rising Brazilian cotton production would lower world and U.S. prices over time, other things equal, indicating the relative importance of Brazilian production at the margin.

Table 1 Estimated Effects of Brazilian Cotton Production Changes on the Global Cotton Trade, 2024/25 – 2033/34

	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	Average
Brazil cotton exports (thousand bales)											
Baseline	10,956	11,147	11,409	11,356	11,318	11,334	11,403	11,462	11,586	11,750	11,372
S 1a	*11,242*	*11,428*	*11,686*	*11,629*	*11,588*	*11,601*	*11,671*	*11,735*	*11,870*	*12,048*	*11,650*
% change	2.6%	2.5%	2.4%	2.4%	2.4%	2.4%	2.3%	2.4%	2.5%	2.5%	2.4%
S 1b	*11,669*	*11,850*	*12,102*	*12,038*	*11,990*	*12,000*	*12,071*	*12,144*	*12,297*	*12,496*	*12,066*
% change	6.5%	6.3%	6.1%	6.0%	5.9%	5.9%	5.9%	6.0%	6.1%	6.3%	6.1%
U.S. cotton production (thousand bales)											
Baseline	16,305	16,345	16,187	16,103	16,203	16,346	16,213	16,196	16,224	16,211	16,233
S 1a	*16,305*	*16,293*	*16,133*	*16,060*	*16,164*	*16,309*	*16,180*	*16,168*	*16,195*	*16,180*	*16,199*
% change	0.0%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
S 1b	*16,305*	*16,237*	*16,054*	*15,993*	*16,106*	*16,256*	*16,131*	*16,124*	*16,151*	*16,132*	*16,149*
% change	0.0%	-0.7%	-0.8%	-0.7%	-0.6%	-0.5%	-0.5%	-0.4%	-0.4%	-0.5%	-0.5%
U.S. cotton exports (thousand bales)											
Baseline	14,346	14,586	14,436	14,358	14,438	14,531	14,562	14,510	14,494	14,460	14,472
S 1a	*14,307*	*14,539*	*14,387*	*14,316*	*14,401*	*14,497*	*14,532*	*14,482*	*14,465*	*14,428*	*14,436*
% change	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.3%
S 1b	*14,251*	*14,486*	*14,317*	*14,253*	*14,345*	*14,446*	*14,488*	*14,440*	*14,422*	*14,380*	*14,383*
% change	-0.7%	-0.7%	-0.8%	-0.7%	-0.6%	-0.6%	-0.5%	-0.5%	-0.5%	-0.5%	-0.6%
U.S. cotton farm price (U.S. cents per pound)											
Baseline	68.2	69.2	70.5	71.7	72.3	72.6	73.5	74.5	75.0	75.9	72.3
S 1a	*67.0*	*68.3*	*69.7*	*71.0*	*71.6*	*72.0*	*73.0*	*74.0*	*74.4*	*75.3*	*71.6*
% change	-1.9%	-1.4%	-1.1%	-1.0%	-0.9%	-0.8%	-0.7%	-0.7%	-0.8%	-0.8%	-1.0%
S 1b	*65.1*	*66.7*	*68.5*	*69.9*	*70.6*	*71.1*	*72.2*	*73.2*	*73.6*	*74.4*	*70.5*
% change	-4.7%	-3.6%	-2.8%	-2.5%	-2.2%	-2.0%	-1.7%	-1.8%	-1.9%	-2.0%	-2.5%
Cotton A-index (U.S. cents per pound)											
Baseline	87.7	89.1	90.6	91.7	92.6	93.1	93.7	94.5	94.9	95.9	92.4
S 1a	*85.8*	*87.8*	*89.4*	*90.7*	*91.6*	*92.2*	*93.0*	*93.7*	*94.1*	*95.1*	*91.3*
% change	-2.1%	-1.5%	-1.2%	-1.1%	-1.0%	-0.9%	-0.8%	-0.8%	-0.9%	-0.9%	-1.1%
S 1b	*83.0*	*85.6*	*87.8*	*89.1*	*90.2*	*91.0*	*91.9*	*92.6*	*92.8*	*93.8*	*89.8*
% change	-5.3%	-3.9%	-3.1%	-2.8%	-2.5%	-2.3%	-1.9%	-2.0%	-2.1%	-2.2%	-2.8%

*S 1a – 2% increase in Brazil's cotton production above the baseline projections.

S 1b – 5% increase in Brazil's cotton production above the baseline projections.

Scenario 2 U.S. share of Chinese cotton imports

In scenario 2, U.S. cotton market outcomes in response to changing cotton import demand from China is explored. To this end, it is assumed that China decreases cotton imports from the United States by 5 percent in Scenario 2a (*S 2a*) and 10 percent in Scenario 2b (*S 2b*) below baseline projections, respectively.

As China limits cotton imports from the United States, lower U.S. cotton farm prices and A-index are expected. However, even with a more aggressive assumption of 10 percent reduction of Chinese imports of U.S. cotton, the magnitudes are modest in

comparison with price fluctuations in other two scenarios. In comparison to the projected baseline, simulation results (Table 2) show that reducing U.S. cotton share by 10 percent from China (*S 2b*) leads to a lower price of U.S. cotton farm price and A-index by -2% and -2.2%, respectively, in the first year (2024/25), but the average 10-year impact is about -1% for both prices. Trade-displacement means that U.S. cotton finds other homes and China buys displaced excess supplies from other locations (likely Brazil).

Table 2 Estimated Effects of U.S. Cotton Demand Changes by China on the Global Cotton Trade, 2024/25 – 2033/34

	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	Average
U.S. cotton production (thousand bales)											
Baseline	16,305	16,345	16,187	16,103	16,203	16,346	16,213	16,196	16,224	16,211	16,233
S 2a	16,305	16,317	16,161	16,082	16,184	16,329	16,198	16,183	16,211	16,198	16,217
% change	0.0%	-0.2%	-0.2%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
S 2b	16,305	16,290	16,134	16,062	16,166	16,313	16,183	16,170	16,199	16,185	16,201
% change	0.0%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
U.S. cotton exports (thousand bales)											
Baseline	14,346	14,586	14,436	14,358	14,438	14,531	14,562	14,510	14,494	14,460	14,472
S 2a	14,326	14,562	14,412	14,339	14,421	14,515	14,548	14,498	14,482	14,447	14,455
% change	-0.1%	-0.2%	-0.2%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
S 2b	14,306	14,539	14,388	14,319	14,404	14,500	14,535	14,486	14,470	14,434	14,438
% change	-0.3%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
U.S. cotton farm price (U.S. cents per pound)											
Baseline	68.2	69.2	70.5	71.7	72.3	72.6	73.5	74.5	75.0	75.9	72.3
S 2a	67.6	68.8	70.1	71.4	72.0	72.3	73.3	74.3	74.7	75.7	72.0
% change	-1.0%	-0.6%	-0.5%	-0.5%	-0.4%	-0.4%	-0.3%	-0.3%	-0.3%	-0.3%	-0.5%
S 2b	66.9	68.3	69.7	71.0	71.7	72.1	73.0	74.0	74.5	75.5	71.7
% change	-2.0%	-1.3%	-1.0%	-0.9%	-0.8%	-0.7%	-0.6%	-0.6%	-0.6%	-0.6%	-0.9%
Cotton A-index (U.S. cents per pound)											
Baseline	87.7	89.1	90.6	91.7	92.6	93.1	93.7	94.5	94.9	95.9	92.4
S 2a	86.7	88.5	90.0	91.2	92.1	92.7	93.4	94.1	94.5	95.6	91.9
% change	-1.1%	-0.7%	-0.6%	-0.5%	-0.5%	-0.4%	-0.3%	-0.3%	-0.3%	-0.4%	-0.5%
S 2b	85.7	87.8	89.5	90.7	91.7	92.3	93.1	93.8	94.2	95.2	91.4
% change	-2.2%	-1.4%	-1.2%	-1.1%	-0.9%	-0.9%	-0.7%	-0.7%	-0.7%	-0.7%	-1.0%

*S 2a – 5% decrease in U.S. cotton share of Chinese cotton imports below the baseline projections.

 S 2b – 10% decrease in U.S. cotton share of Chinese cotton imports below the baseline projections.

Scenario 3 Vietnam's mill use consumption

   With growing domestic cotton mill use consumption but limited production capacity, Vietnam's cotton market is of great importance to the U.S. cotton sector as it represents new opportunities to strengthen U.S. cotton demand among emerging importing countries. Thus, this analysis investigated two potential scenarios. Scenario 3a (*S 3a*) assumed a 2 percent increase in Vietnam's mill use consumption above baseline projections, and Scenario 3b (*S 3b*) assumed a 5 percent increase.

   In response to a 5 percent increase in its mill use above baseline projections (*S 3b*), Vietnam's increased demand for cotton imports stimulate U.S. cotton farm prices and A-index to be 2.2 percent and 2.5 percent higher than baseline prices in 2024/25, respectively (Table 3), with an average increase around 1.1-1.2% over the period.

Table 3 Estimated Effects of Vietnam's Cotton Mill Use Changes on the Global Cotton Trade, 2024/25 – 2033/34

	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	Average
Vietnam's cotton imports (thousand bales)											
Baseline	6,875	6,942	7,009	7,076	7,144	7,212	7,281	7,349	7,417	7,485	7,179
S 3a	*7,012*	*7,080*	*7,148*	*7,218*	*7,287*	*7,357*	*7,427*	*7,496*	*7,566*	*7,635*	*7,323*
% change	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
S 3b	*7,218*	*7,288*	*7,359*	*7,429*	*7,501*	*7,573*	*7,644*	*7,716*	*7,788*	*7,859*	*7,537*
% change	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
U.S. cotton production (thousand bales)											
Baseline	16,305	16,345	16,187	16,103	16,203	16,346	16,213	16,196	16,224	16,211	16,233
S 3a	*16,305*	*16,369*	*16,211*	*16,122*	*16,220*	*16,361*	*16,226*	*16,208*	*16,235*	*16,223*	*16,248*
% change	0.0%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
S 3b	*16,305*	*16,406*	*16,248*	*16,150*	*16,245*	*16,384*	*16,247*	*16,225*	*16,252*	*16,240*	*16,270*
% change	0.0%	0.4%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
U.S. cotton exports (thousand bales)											
Baseline	14,346	14,586	14,436	14,358	14,438	14,531	14,562	14,510	14,494	14,460	14,472
S 3a	*14,363*	*14,607*	*14,459*	*14,377*	*14,454*	*14,546*	*14,574*	*14,521*	*14,505*	*14,471*	*14,488*
% change	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
S 3b	*14,390*	*14,640*	*14,492*	*14,404*	*14,478*	*14,567*	*14,592*	*14,538*	*14,522*	*14,489*	*14,511*
% change	0.3%	0.4%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%
U.S. cotton farm price (U.S. cents per pound)											
Baseline	68.2	69.2	70.5	71.7	72.3	72.6	73.5	74.5	75.0	75.9	72.3
S 3a	*68.8*	*69.6*	*70.8*	*72.0*	*72.5*	*72.8*	*73.7*	*74.7*	*75.2*	*76.2*	*72.6*
% change	0.9%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%
S 3b	*69.8*	*70.3*	*71.3*	*72.5*	*72.9*	*73.2*	*74.0*	*75.0*	*75.5*	*76.5*	*73.1*
% change	2.2%	1.5%	1.2%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	1.1%
Cotton A-index (U.S. cents per pound)											
Baseline	87.7	89.1	90.6	91.7	92.6	93.1	93.7	94.5	94.9	95.9	92.4
S 3a	*88.6*	*89.7*	*91.1*	*92.2*	*93.0*	*93.5*	*94.0*	*94.7*	*95.2*	*96.2*	*92.8*
% change	1.0%	0.7%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.5%
S 3b	*89.9*	*90.6*	*91.8*	*92.8*	*93.6*	*94.0*	*94.4*	*95.2*	*95.6*	*96.7*	*93.5*
% change	2.5%	1.7%	1.4%	1.2%	1.1%	0.9%	0.8%	0.8%	0.8%	0.8%	1.2%

*S 3a – 2% increase in Vietnam's cotton consumption above the baseline projections.

 S 3b – 5% increase in Vietnam's cotton consumption above the baseline projections.

Comparing the estimation results above across scenarios, it suggests that a 2 percent increase in Brazil's cotton production (*S 1a*) results in a long-term average reduction of U.S. cotton production by -0.2% per year with respect to the projected baseline, whereas an aggressive 10 percent decrease in Chinese imports of U.S. cotton (*S 2b*) has the same adverse impact on U.S. production. Similarly, an annual average -0.3% lower exports than the baseline is observed for a 2 percent increase in Brazilian production, comparing to -0.2% decline in U.S. cotton exports in Scenario 2b. Both

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scenarios above place downward pressures on U.S. cotton prices. However, Scenario 1a causes a slightly larger negative impact, -1% on average, on farm prices as compared to -0.9% in Scenario 2b. Thus, it is evident that a relatively small increase in Brazil's cotton production is far more important to U.S. cotton producers than relatively large decrease in Chinese imports of U.S. cotton.

Also noteworthy is the response of U.S. cotton exports to changing demand from major importing countries. As indicated by our estimation results, a 10 percent decrease in Chinese imports of U.S. cotton (*S 2b*) results in U.S. cotton exports being reduced by only -0.2% from the baseline level. However, a moderate increase in Vietnam's mill use consumption, 5% as assumed in our case (*S 3b*), suggests an increase in exports of 0.3 percent in the long run. That is to say, modest expansion of Vietnam's textile industry will more than offset U.S. cotton exports losses from declining Chinese imports. Thus, foreign market development in emerging markets is an effective means of "de-coupling" from the influence of Chinese imports.

Conclusions

Although the United States remains the world's largest cotton exporter, Brazil's rapid expansion of cotton sector in the past decade poses a challenge to U.S. cotton exports. Other challenges to U.S. cotton competitiveness include U.S. heavy dependence on China's cotton import demand and capturing new emerging markets. The report estimates impacts of Brazil's emergence as one of the world's top cotton exportera and the changing import demand of U.S. cotton from China and emerging markets such as Vietnam. A partial equilibrium model of world fiber markets is employed to quantify the

above-mentioned impacts on the cotton trade sector and to solve U.S. cotton farm prices and A-index endogenously. Plausible scenarios are further assumed to evaluate prospects for U.S. cotton exports in the future.

Our estimation results provide evidence that Brazil's emergence as a major competitor has caused the United States' current standing in global cotton trade markets to steadily erode over time. Specifically, a relatively small increase (2 percent) in Brazil's cotton production results in greater disturbances in the U.S. cotton sector, especially regarding production, exports, and domestic prices, than relatively large decrease (10 percent) in Chinese imports of U.S. cotton. Conversely, emerging import markets, such as Vietnam, represent new opportunities to improve the U.S. cotton position in the long run. Our results indicate that modest increases in Vietnam's mill use would more than offset losses in U.S. cotton exports resulting from declining Chinese imports. Broadly speaking, future growth in the U.S. cotton sector would depend on growth of new emerging import markets.

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