

REGIONAL TENNESSEE CORN AND SOYBEAN BASIS

W. Henc Duncan, Graduate Student, Department of Agricultural and Resource Economics

Becky Bowling, Extension Specialist, Department of Agricultural and Resource Economics

S. Aaron Smith, Associate Professor and Extension Economist, Department of Agricultural and Resource Economics

For Tennessee crop producers, it is important to understand what basis is and how to use it to manage risk and improve cash prices received for corn and soybeans. The cash price reflects local supply and demand, quality, storage capacity, storage costs, and shipping charges. Basis is calculated by taking the cash price and subtracting the futures price for the commodity. For example, if the cash price of corn is \$5.00/bu and the futures price is \$4.85/bu the basis is +\$0.15/bu (\$5.00 minus \$4.85= +\$0.15 or 15 over) or if the cash price of corn is \$4.65/bu and the futures price is \$4.85/bu the basis is -\$0.20/bu (\$4.65 minus \$4.85= -\$0.20 or 20 under).

Basis often follows seasonal patterns with weaker (more negative or less positive) basis typically at harvest and stronger (more positive or less negative) basis outside of the harvest interval (Figures 1 to 8). Seasonal patterns in basis occur due to larger local supplies during, or immediately following harvest, followed by declining supplies through the remainder of the marketing year. Producers can use typical seasonal basis movements to obtain higher cash prices and manage their price risk. Typically, historical trends in basis are more predictable than historical trends in futures markets.

This publication provides examples of calculating basis and presents historical and 2023 basis for regions in Tennessee reported by USDA- Agricultural Marketing Service (AMS) for elevators and barge points. It is important to note that prices and basis in this publication do not include cash or basis offerings by poultry companies, ethanol facilities, or distilleries, which are important markets for corn and soybean producers in Tennessee (where substantial price premiums may be available for on demand sales and delivery throughout the marketing year).

Definitions:

Basis - the cash price (local market price) minus the futures price (Chicago Mercantile Exchange or CME board price).

Cash Price - a price determined in a market in which corn and soybeans are bought and sold (spot price).

Futures Price - a price determined by a centralized market where traders buy and sell futures contracts. Numerous futures contracts for the same commodity are simultaneously traded. For example, corn futures contracts include March, May, July, September, and December for multiple years.

Weakening Basis - when the difference between the cash price of a commodity and the futures price of the commodity becomes more negative or less positive.

Strengthening Basis - when the difference between the cash price of a commodity and the futures price of the commodity becomes more positive or less negative.

Above-the-Board - when the local cash price is greater than the futures price (positive basis).

Below-the-Board - when the local cash price is lower than the futures price (negative basis).

Basis Contract - a marketing contract that allows a producer to establish a basis price based on the spread between the cash and the futures market.

Hedge-to-Arrive - a marketing contract that allows the producer to establish a futures price and leave basis open until a later date.

Calculating Basis - Corn Examples

Cash Price	\$4.48/Bu
Sept Future Prices	\$5.24/Bu
Basis	-\$0.76/Bu

Cash Price	\$6.97/ Bu
May Future Prices	\$6.72/Bu
Basis	\$0.25/Bu

Calculating Basis - Soybean Examples

Cash Price	\$13.45/Bu
Sept Future Prices	\$13.90/Bu
Basis	-\$0.45/Bu

Cash Price	\$14.80/Bu
May Future Prices	\$14.50/Bu
Basis	\$0.30/Bu

Tennessee Corn Basis

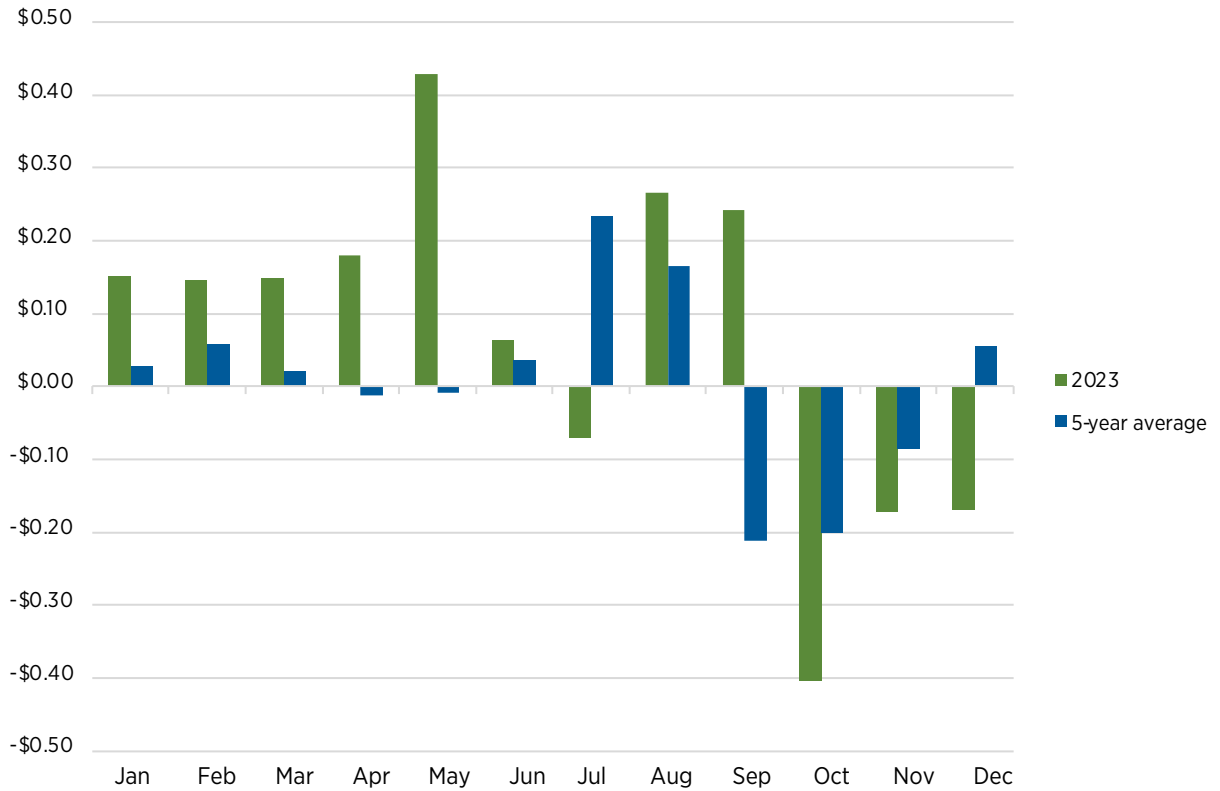


Figure 1. Northwest Tennessee Corn Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.04	\$0.06	\$0.02	\$0.04	\$0.00	\$0.01	\$0.02	-\$0.03	-\$0.32	-\$0.40	-\$0.30	-\$0.17
2015	-\$0.07	-\$0.05	-\$0.07	\$0.01	\$0.04	\$0.08	-\$0.09	-\$0.20	-\$0.26	-\$0.19	\$0.02	\$0.05
2016	\$0.00	-\$0.01	\$0.00	\$0.00	-\$0.03	-\$0.02	-\$0.01	-\$0.04	-\$0.18	-\$0.16	-\$0.08	-\$0.03
2017	\$0.03	-\$0.04	-\$0.06	-\$0.04	-\$0.06	-\$0.08	-\$0.20	-\$0.20	-\$0.30	-\$0.27	-\$0.20	-\$0.17
2018	-\$0.09	-\$0.05	-\$0.09	-\$0.10	-\$0.13	-\$0.11	-\$0.19	-\$0.17	-\$0.27	-\$0.19	-\$0.10	-\$0.07
2019	-\$0.07	\$0.01	\$0.00	\$0.00	-\$0.02	\$0.02	\$0.11	\$0.12	-\$0.21	-\$0.27	-\$0.03	\$0.11
2020	\$0.16	\$0.11	\$0.09	-\$0.07	-\$0.06	\$0.03	\$0.09	\$0.05	-\$0.12	-\$0.01	\$0.10	\$0.09
2021	\$0.13	\$0.20	\$0.26	\$0.24	\$0.22	\$0.22	\$0.54	\$0.44	-\$0.36	-\$0.37	-\$0.25	\$0.01
2022	\$0.01	\$0.01	-\$0.14	-\$0.13	-\$0.05	\$0.01	\$0.61	\$0.39	-\$0.10	-\$0.16	-\$0.14	\$0.14
2023	\$0.15	\$0.14	\$0.15	\$0.18	\$0.43	\$0.06	-\$0.07	\$0.27	\$0.24	-\$0.40	-\$0.17	-\$0.17
5-Yr Avg.	\$0.03	\$0.06	\$0.02	-\$0.01	-\$0.01	\$0.03	\$0.23	\$0.17	-\$0.21	-\$0.20	-\$0.09	\$0.06

Table 1. Northwest Tennessee Corn Basis at Elevators and Barge Points

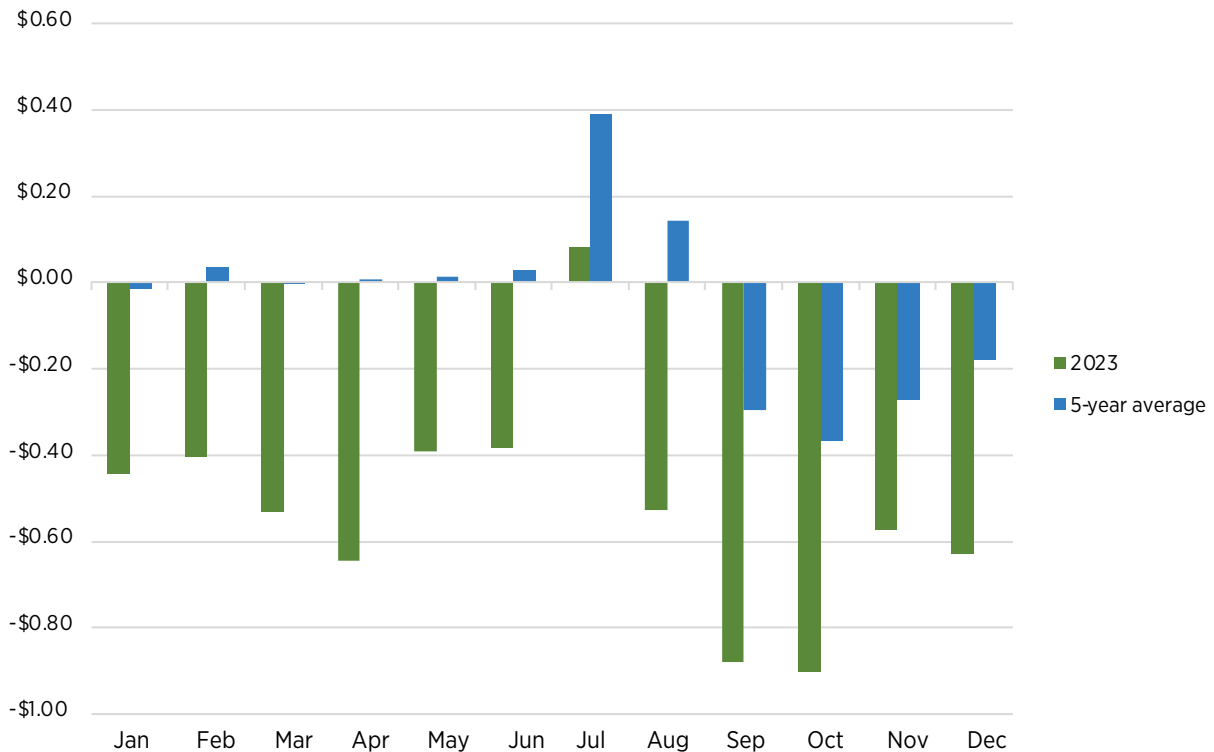


Figure 2. North Central Tennessee Corn Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.02	\$0.05	\$0.00	\$0.02	\$0.09	\$0.11	\$0.07	\$0.05	-\$0.21	-\$0.36	-\$0.28	-\$0.16
2015	-\$0.07	-\$0.01	\$0.01	\$0.05	\$0.05	\$0.07	-\$0.11	-\$0.14	-\$0.33	-\$0.30	-\$0.10	-\$0.14
2016	\$0.04	-\$0.01	\$0.03	\$0.02	-\$0.01	\$0.01	\$0.00	-\$0.08	-\$0.20	-\$0.19	-\$0.16	-\$0.07
2017	\$0.01	\$0.01	-\$0.01	\$0.00	-\$0.02	-\$0.03	-\$0.11	-\$0.13	-\$0.30	-\$0.39	-\$0.16	-\$0.21
2018	\$0.00	\$0.02	-\$0.06	-\$0.02	-\$0.07	-\$0.03	-\$0.06	-\$0.12	-\$0.31	-\$0.27	-\$0.12	-\$0.10
2019	-\$0.03	\$0.02	\$0.03	\$0.04	\$0.02	\$0.14	\$0.15	\$0.22	-\$0.32	-\$0.29	-\$0.12	-\$0.04
2020	\$0.04	\$0.14	\$0.14	\$0.18	\$0.09	\$0.15	\$0.17	\$0.09	-\$0.19	-\$0.17	-\$0.21	-\$0.06
2021	\$0.05	\$0.05	\$0.13	\$0.18	\$0.38	\$0.17	\$0.90	\$0.46	-\$0.42	-\$0.44	-\$0.35	-\$0.20
2022	-\$0.15	-\$0.06	-\$0.26	-\$0.35	-\$0.35	-\$0.27	\$0.80	\$0.07	-\$0.24	-\$0.65	-\$0.56	-\$0.50
2023	-\$0.45	-\$0.40	-\$0.53	-\$0.64	-\$0.39	-\$0.38	\$0.08	-\$0.53	-\$0.88	-\$0.90	-\$0.57	-\$0.63
5-Yr Avg.	-\$0.02	\$0.04	\$0.00	\$0.01	\$0.01	\$0.03	\$0.39	\$0.14	-\$0.30	-\$0.37	-\$0.27	-\$0.18

Table 2. North Central Tennessee Corn Basis at Elevators and Barge Points

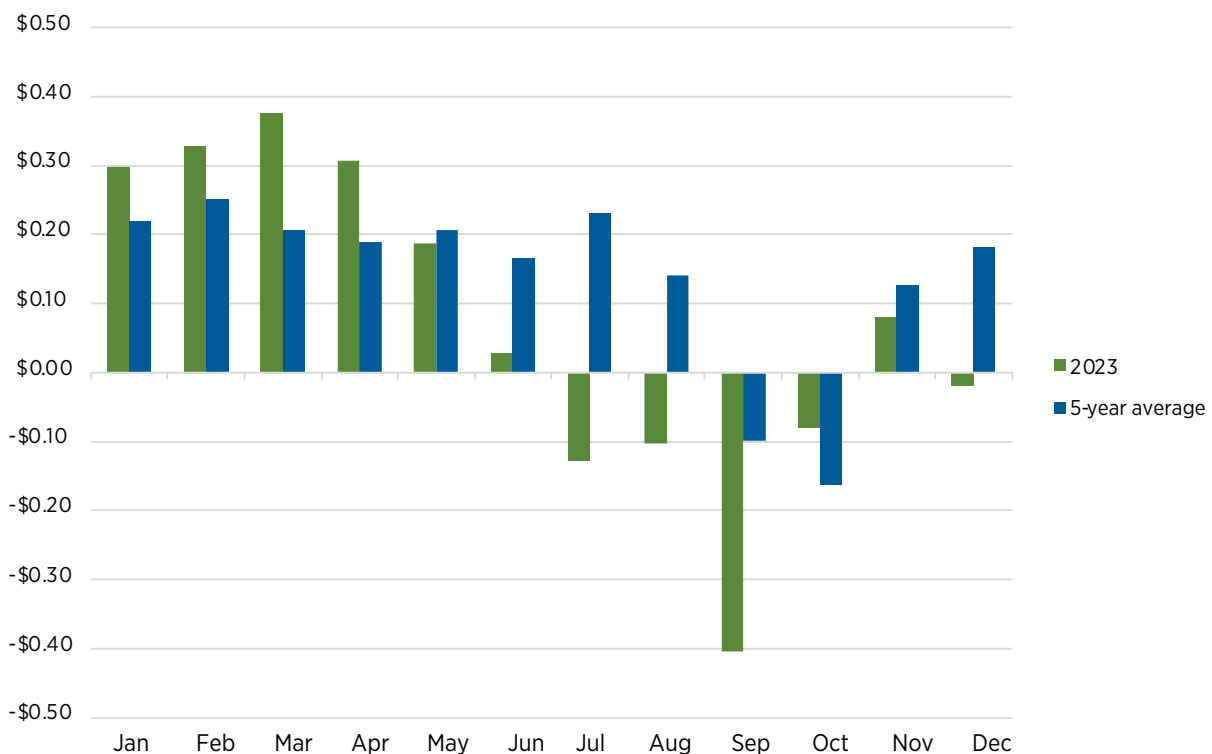


Figure 3. West Tennessee Corn Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.25	\$0.25	\$0.15	\$0.17	\$0.09	\$0.21	\$0.12	\$0.08	-\$0.21	-\$0.27	\$0.10	\$0.04
2015	\$0.13	\$0.17	\$0.15	\$0.15	\$0.05	\$0.11	\$0.00	-\$0.11	-\$0.22	-\$0.13	\$0.18	\$0.11
2016	\$0.13	\$0.10	\$0.07	\$0.11	-\$0.01	\$0.06	\$0.15	\$0.01	-\$0.07	-\$0.05	\$0.04	\$0.06
2017	\$0.20	\$0.16	\$0.04	\$0.07	-\$0.02	-\$0.01	-\$0.11	-\$0.09	-\$0.29	-\$0.23	-\$0.01	-\$0.02
2018	\$0.16	\$0.17	\$0.08	\$0.03	-\$0.07	\$0.09	\$0.05	-\$0.01	-\$0.23	-\$0.14	\$0.04	\$0.01
2019	\$0.01	\$0.12	\$0.12	\$0.07	\$0.02	\$0.18	\$0.10	-\$0.15	-\$0.23	-\$0.10	\$0.15	\$0.10
2020	\$0.18	\$0.21	\$0.16	\$0.18	\$0.09	\$0.19	\$0.24	\$0.12	\$0.14	\$0.23	\$0.14	\$0.28
2021	\$0.41	\$0.39	\$0.54	\$0.42	\$0.38	\$0.50	\$0.44	\$0.39	-\$0.34	-\$0.16	\$0.06	\$0.21
2022	\$0.35	\$0.35	\$0.14	\$0.24	-\$0.35	-\$0.13	\$0.32	\$0.35	\$0.17	-\$0.64	\$0.24	\$0.31
2023	\$0.30	\$0.33	\$0.19	\$0.31	-\$0.39	\$0.03	-\$0.13	-\$0.10	-\$0.41	-\$0.08	\$0.08	-\$0.02
5-Yr Avg.	-\$0.22	\$0.25	\$0.21	\$0.19	\$0.01	\$0.17	\$0.23	\$0.14	-\$0.10	-\$0.16	\$0.13	-\$0.18

Table 3. West Tennessee Corn Basis at Elevators and Barge Points

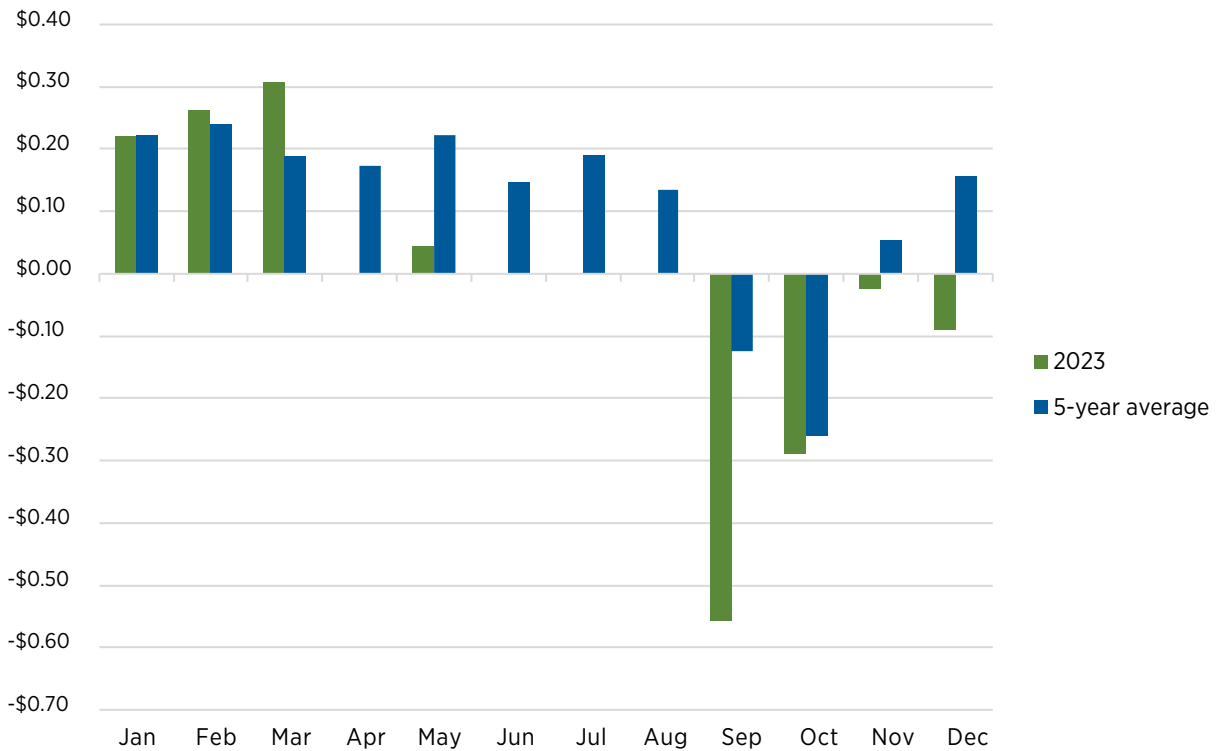


Figure 4. Memphis Tennessee Corn Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.28	\$0.32	\$0.25	\$0.24	\$0.21	\$0.31	\$0.17	\$0.16	-\$0.12	-\$0.19	\$0.15	\$0.11
2015	\$0.17	\$0.20	\$0.20	\$0.22	\$0.21	\$0.17	\$0.05	-\$0.09	-\$0.19	-\$0.11	\$0.17	\$0.10
2016	\$0.08	\$0.03	\$0.09	\$0.05	\$0.05	\$0.03	\$0.26	\$0.16	-\$0.02	-\$0.04	\$0.06	\$0.08
2017	\$0.19	\$0.19	\$0.11	\$0.08	\$0.04	\$0.01	-\$0.10	-\$0.06	-\$0.22	-\$0.19	\$0.00	-\$0.01
2018	\$0.18	\$0.18	\$0.08	\$0.08	\$0.16	\$0.13	\$0.08	\$0.05	-\$0.14	-\$0.07	\$0.05	\$0.04
2019	\$0.06	\$0.17	\$0.11	\$0.12	\$0.12	\$0.12	\$0.06	-\$0.13	-\$0.15	-\$0.05	\$0.18	\$0.10
2020	\$0.22	\$0.24	\$0.24	\$0.21	\$0.16	\$0.18	\$0.17	\$0.08	\$0.09	\$0.17	\$0.08	\$0.28
2021	\$0.38	\$0.35	\$0.36	\$0.35	\$0.53	\$0.29	\$0.33	\$0.28	-\$0.44	-\$0.32	-\$0.03	\$0.14
2022	\$0.27	\$0.26	\$0.15	\$0.12	\$0.14	\$0.02	\$0.32	\$0.39	\$0.02	-\$1.03	-\$0.01	\$0.23
2023	\$0.22	\$0.26	\$0.31		\$0.05				-\$0.56	-\$0.29	-\$0.02	-\$0.09
5-Yr Avg.	\$0.22	\$0.24	\$0.19	\$0.17	\$0.22	\$0.15	\$0.19	\$0.13	-\$0.13	-\$0.26	\$0.05	\$0.16

Table 4. Memphis Tennessee Corn Basis at Elevators and Barge Points

Tennessee Soybean Basis

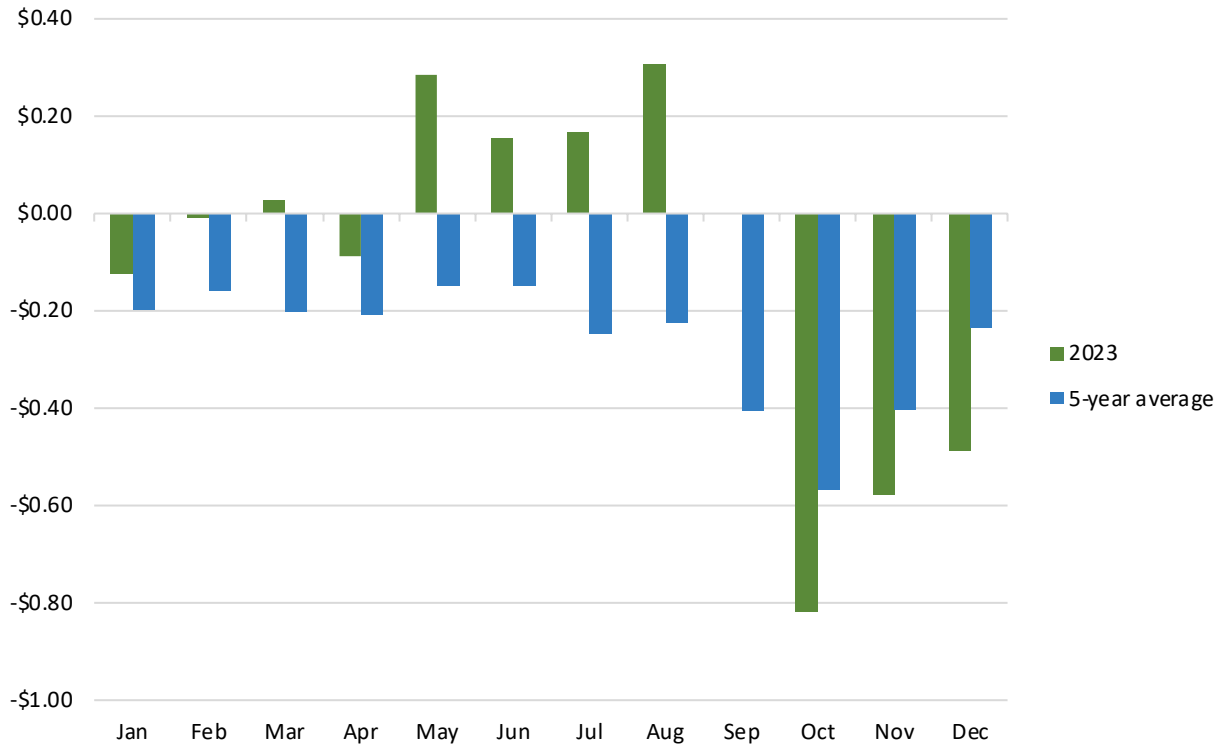


Figure 5. Northwest Tennessee Soybean Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.25	\$0.00	-\$0.06	-\$0.12	-\$0.07	-\$0.03	\$0.42	\$0.42		-\$0.32	-\$0.13	\$0.04
2015	\$0.00	\$0.01	\$0.02	-\$0.01	\$0.08	\$0.18	\$0.10	\$0.14	-\$0.07	-\$0.16	\$0.00	\$0.04
2016	\$0.04	-\$0.02	-\$0.16	-\$0.21	-\$0.39	-\$0.36	-\$0.29	-\$0.13	-\$0.10	-\$0.19	-\$0.27	-\$0.25
2017	-\$0.23	-\$0.28	-\$0.33	-\$0.34	-\$0.34	-\$0.33	-\$0.39	\$0.31	-\$0.38	-\$0.43	-\$0.35	-\$0.29
2018	-\$0.21	-\$0.22	-\$0.38	-\$0.39	-\$0.36	-\$0.30	-\$0.34	-\$0.29		-\$0.73	-\$0.62	-\$0.51
2019	-\$0.49	-\$0.44	-\$0.45	-\$0.47	-\$0.48	-\$0.42	-\$0.44	-\$0.42	-\$0.62	-\$0.51	-\$0.27	-\$0.23
2020	-\$0.13	-\$0.13	-\$0.11	-\$0.09	-\$0.08	-\$0.05	-\$0.01	\$0.04	-\$0.13	-\$0.08	-\$0.26	-\$0.09
2021	\$0.04	\$0.04	\$0.05	\$0.05	\$0.18	\$0.01	-\$0.09	\$0.01	-\$0.58	-\$0.60	-\$0.45	-\$0.19
2022	-\$0.20	-\$0.06	-\$0.14	-\$0.14	-\$0.01	\$0.02	-\$0.36	-\$0.47	-\$0.29	-\$0.91	-\$0.42	-\$0.16
2023	-\$0.12	-\$0.01	\$0.03	-\$0.09	\$0.29	\$0.15	\$0.17	\$0.31		-\$0.82	-\$0.58	-\$0.49
5-Yr Avg.	-\$0.20	-\$0.16	-\$0.20	-\$0.21	-\$0.15	-\$0.15	-\$0.25	-\$0.23	-\$0.41	-\$0.57	-\$0.40	-\$0.24

Table 5. Northwest Tennessee Soybean Basis at Elevators and Barge Points

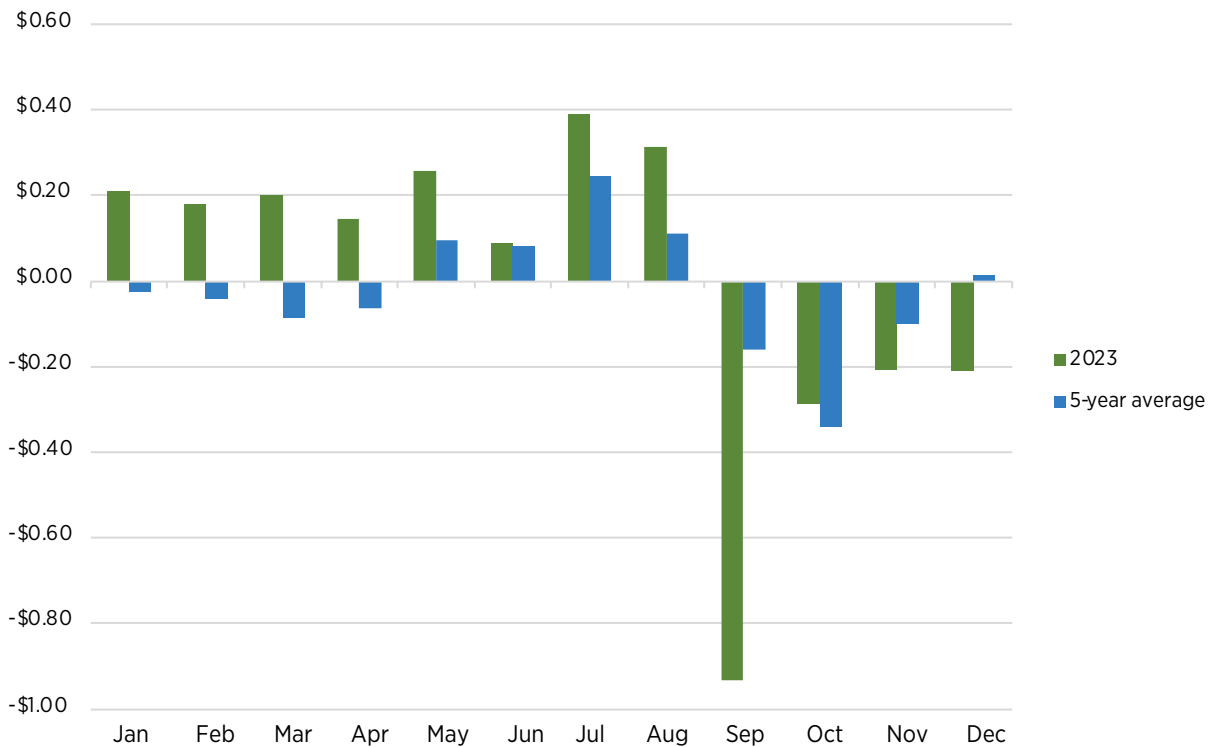


Figure 6. North Central Tennessee Soybean Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.42	\$0.14	\$0.00	-\$0.03	\$0.11	\$0.09	\$0.31	\$0.06	\$0.16	-\$0.06	-\$0.03	\$0.24
2015	\$0.17	\$0.17	\$0.19	\$0.15	\$0.19	\$0.19	\$0.19	-\$0.10	-\$0.06	-\$0.04	\$0.03	\$0.02
2016	\$0.13	\$0.06	-\$0.03	-\$0.09	-\$0.20	-\$0.23	-\$0.11	\$0.03	-\$0.02	-\$0.13	-\$0.26	-\$0.07
2017	-\$0.08	-\$0.13	-\$0.20	-\$0.19	-\$0.16	-\$0.12	-\$0.15	-\$0.12	-\$0.18	-\$0.37	-\$0.34	-\$0.23
2018	-\$0.07	-\$0.13	-\$0.27	-\$0.25	-\$0.18	-\$0.11	-\$0.03	-\$0.28	-\$0.67	-\$0.50	-\$0.36	-\$0.28
2019	-\$0.35	-\$0.26	-\$0.29	-\$0.28	-\$0.20	-\$0.02	\$0.00	-\$0.05	-\$0.43	-\$0.28	\$0.06	\$0.10
2020	\$0.10	\$0.09	\$0.14	\$0.20	\$0.18	\$0.21	\$0.23	\$0.27	\$0.05	\$0.19	-\$0.15	\$0.00
2021	\$0.18	\$0.10	\$0.08	\$0.04	\$0.32	\$0.17	\$0.23	\$0.38	-\$0.34	-\$0.27	-\$0.04	\$0.07
2022	\$0.01	-\$0.01	-\$0.09	-\$0.03	\$0.35	\$0.16	\$0.80	\$0.22	\$0.58	-\$0.84	-\$0.01	\$0.18
2023	\$0.21	\$0.18	\$0.20	\$0.14	\$0.26	\$0.09	\$0.39	\$0.31	-\$0.93	-\$0.29	-\$0.21	-\$0.21
5-Yr Avg.	-\$0.03	-\$0.04	-\$0.08	-\$0.06	\$0.10	\$0.08	\$0.25	\$0.11	-\$0.16	-\$0.34	-\$0.10	\$0.01

Table 6. North Central Tennessee Soybean Basis at Elevators and Barge Points

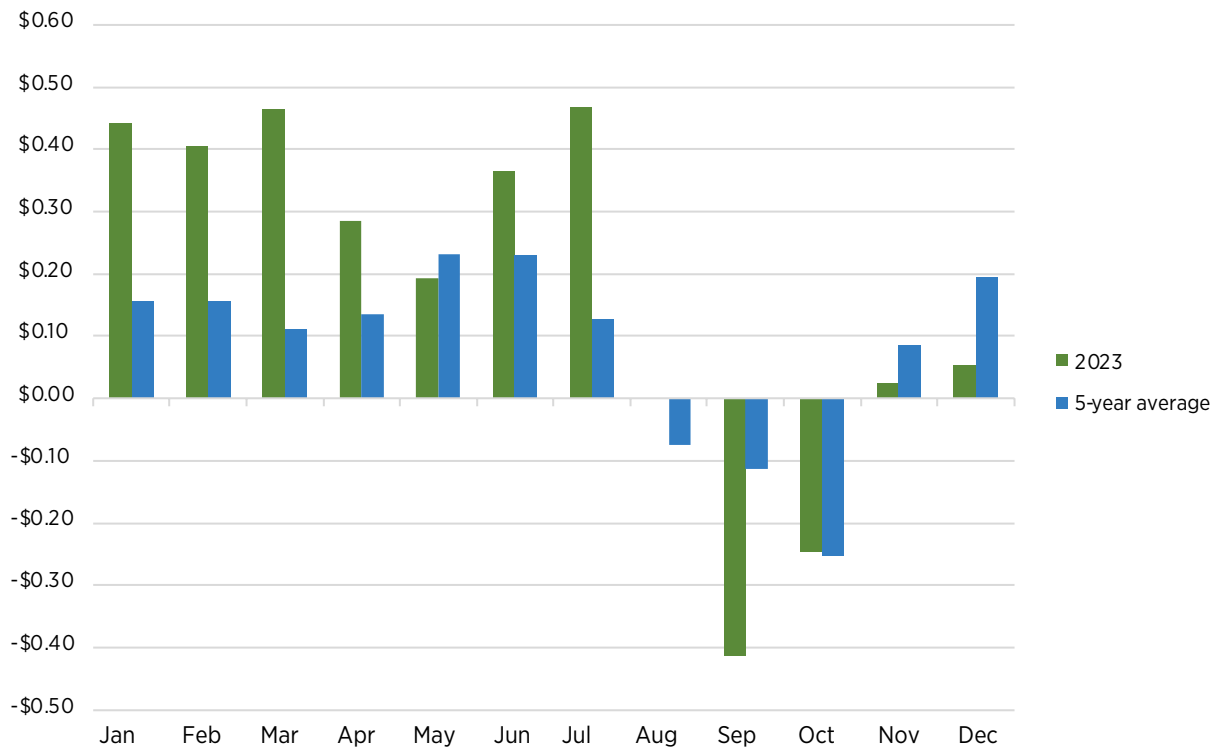


Figure 7. West Tennessee Soybean Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.59	\$0.35	\$0.10	\$0.05	\$0.13	\$0.13	\$0.39	-\$0.30	\$0.17	\$0.19	\$0.28	\$0.44
2015	\$0.32	\$0.30	\$0.22	\$0.15	\$0.18	\$0.18	\$0.12	\$0.00	\$0.17	\$0.13	\$0.25	\$0.29
2016	\$0.29	\$0.18	\$0.08	\$0.00	-\$0.12	\$0.02	\$0.19	\$0.13	\$0.20	\$0.01	-\$0.05	\$0.10
2017	\$0.08	\$0.06	-\$0.05	-\$0.03	\$0.08	\$0.05	\$0.07	\$0.16	-\$0.09	-\$0.27	-\$0.10	\$0.04
2018	\$0.10	\$0.02	-\$0.13	-\$0.03	\$0.06	\$0.06	\$0.05	-\$0.23	-\$0.59	-\$0.45	-\$0.23	\$0.22
2019	-\$0.27	-\$0.18	-\$0.19	-\$0.16	-\$0.04	\$0.11	\$0.10	-\$0.09	-\$0.38	-\$0.10	\$0.17	\$0.23
2020	\$0.20	\$0.23	\$0.22	\$0.25	\$0.23	\$0.29	\$0.29	\$0.30	\$0.28	\$0.26	\$0.09	\$0.26
2021	\$0.37	\$0.34	\$0.32	\$0.31	\$0.57	\$0.63	-\$0.08	\$0.24	-\$0.35	-\$0.20	\$0.12	\$0.25
2022	\$0.38	\$0.38	\$0.35	\$0.31	\$0.35	\$0.05	\$0.27	-\$0.59	\$0.48	-\$0.76	\$0.29	\$0.45
2023	\$0.44	\$0.40	\$0.47	\$0.29	\$0.19	\$0.37	\$0.47		-\$0.41	-\$0.25	\$0.02	\$0.05
5-Yr Avg.	\$0.16	\$0.16	\$0.11	\$0.14	\$0.23	\$0.23	\$0.13	-\$0.08	-\$0.11	-\$0.25	\$0.09	\$0.19

Table 7. West Tennessee Soybean Basis at Elevators and Barge Points

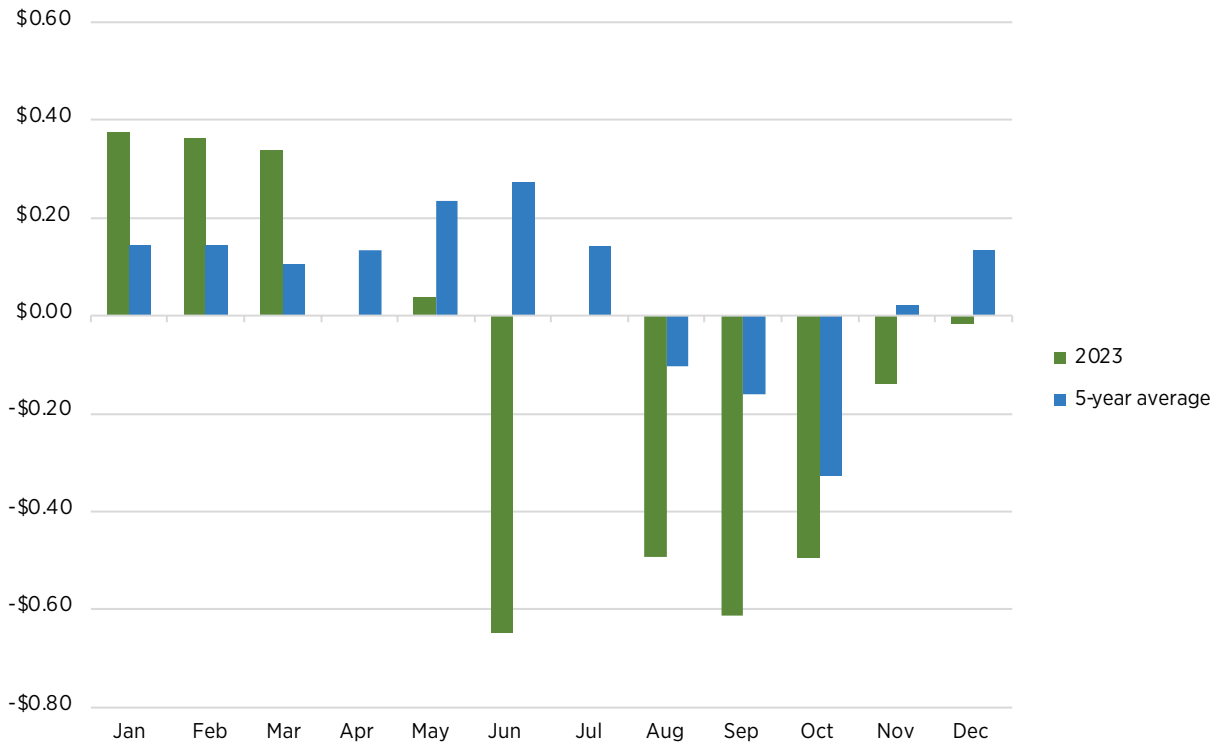


Figure 8. Memphis Tennessee Soybean Basis at Elevators and Barge Points

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2014	\$0.60	\$0.42	\$0.18	\$0.12	\$0.21	\$0.19	\$0.29	\$0.34	\$0.32	\$0.34	\$0.39	\$0.50
2015	\$0.38	\$0.36	\$0.27	\$0.23	\$0.31	\$0.26	\$0.19	\$0.13	\$0.25	\$0.14	\$0.26	\$0.26
2016	\$0.22	\$0.08	\$0.08	\$0.02	-\$0.06	\$0.07	\$0.32	\$0.33	\$0.35	\$0.02	-\$0.03	\$0.11
2017	\$0.05	\$0.08	-\$0.04	-\$0.02	\$0.07	\$0.07	\$0.08	\$0.19	-\$0.04	-\$0.20	-\$0.09	-\$0.03
2018	\$0.11	\$0.05	-\$0.07	\$0.03	\$0.09	\$0.10	\$0.03	-\$0.24	-\$0.55	-\$0.37	-\$0.30	-\$0.24
2019	-\$0.22	-\$0.14	-\$0.13	-\$0.16	-\$0.03	\$0.11	\$0.06	-\$0.09	-\$0.29	-\$0.09	\$0.21	\$0.09
2020	\$0.19	\$0.23	\$0.22	\$0.27	\$0.23	\$0.30	\$0.30	\$0.26	\$0.20	\$0.21	-\$0.02	\$0.25
2021	\$0.36	\$0.29	\$0.26	\$0.27	\$0.49	\$0.43	\$0.05	\$0.15	-\$0.47	-\$0.34	\$0.04	\$0.21
2022	\$0.29	\$0.30	\$0.25	\$0.27	\$0.39	\$0.43	\$0.27	-\$0.60	\$0.31	-\$1.06	\$0.18	\$0.35
2023	\$0.38	\$0.36	\$0.34		\$0.04	-\$0.65		-\$0.49	-\$0.61	-\$0.50	-\$0.14	-\$0.02
5-Yr Avg.	\$0.15	\$0.15	\$0.11	\$0.13	\$0.23	\$0.27	\$0.14	-\$0.10	-\$0.16	-\$0.33	\$0.02	\$0.13

Table 8. Memphis Tennessee Soybean Basis at Elevators and Barge Points

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