

The Role of Coffee Futures in Discovering Prices for Latin American Producers

Johanna Gather 20.09.2018

Structure

- 1. Introduction
- 2. Futures Markets and Price Discovery
- 3. Data
- 4. Methodology
- 5. Results
- 6. Discussion
- 7. Summary and Conclusion





Introduction

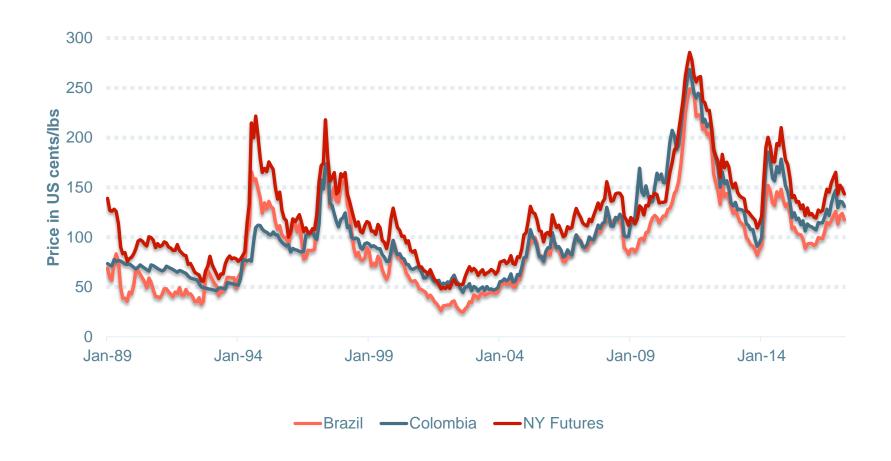
- Coffee = important exporting crop for many Latin
 American countries
- Prices volatile → Futures markets = opportunity to hedge price risk and provide price dicovery vehicle
- Research divided on direction of relationship between spot and futures prices
 - → investigating the relationship between the two markets



Futures markets and price discovery

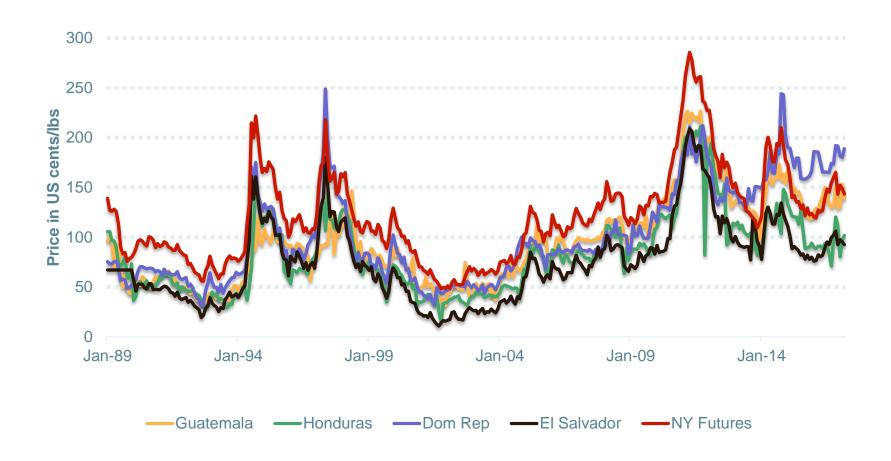
- Coffee futures markets → trading of standardized contracts regarding quality and quantity
- Spot market → trading of (green) coffee differing in quantity and quality
- Prices discovered by information gathered and interpreted in these markets → prices in both markets react to same set of information
 - → Which market incorporates new information faster?

Data





Data





Methodology

- 1. Identify appropriate time frame
- 2. Test for stable relationship between futures and producer prices
- 3. Identify role of spot and futures prices in price discovery process



Results – Time Frame

	Time Frame	No of Observation
Brazil	1992-2017	299
Colombia	1989-2017	336
Guatemala	1998-2017	231
Honduras	2001-2017	187
Dominican Republic	1990-2017	320
El Salvador	1994-2017	272



Results - Cointegration

Statistical Analysis confirms:

	Cointegrated
Brazil	✓
Colombia	✓
Guatemala	✓
Honduras	✓
Dominican Republic	✓
El Slavador	✓



Results

Price Discovery Results – 1

Country	Market	Dominating price discovery	
		PT	IS
Brazil	Futures Price		
	Producer Price	✓	✓
Colombia	Futures Price		
	Producer Price	✓	✓
Dominican Republic	Futures Price		
	Producer Price	✓	✓

Results

Price Discovery Results – 2

Country	Equation	Dominating price discovery	
		PT	IS
Honduras	Futures Price	✓	✓
	Producer Price		
Guatemala	Futures Price	✓	✓
	Producer Price		
El Salvador	Futures Price		-
	Producer Price	-	-

Discussion

- Market size (Brazil, Colombia)
- Strong domestic consumption (Brazil, Dominican Republic)
- Existence of futures exchange at country level (Brazil)



Conclusion

- Analysis provided mixed results
 - In Brazil, Colombia, and the Dominican Republic, producer prices incorporate information faster
 - In Guatemala and Honduras, the New York futures market dominates price discovery → provides useful basis for production and marketing decisions
 - For El Salvador, results inconclusive → limitations of the estimation method
- Further research → Robusta, additional countries





INTERNATIONAL COFFEE ORGANIZATION

Thank you