



The Outlook for the World Coffee Market 2010-2019

106th Session of the International Coffee Council
28 -31 March 2011

Trade

and

Markets

Division

OUTLINE



- Introduction
- Modeling framework
- Main results
- Major uncertainties and conclusion

2

Trade

and

Markets

Division

Modeling framework



➤ Vector autoregressive model (VAR)

- VAR is a time-series model used to forecast the values of two or more economic variables.
- The VAR model uses past regularities and patterns in historical data as a basis for forecasting.

3

Trade

and

Markets

Division

Model specification



- Prices:
 - $WP_t = \alpha + \beta_1 WP_{t-1} + \beta_2 WP_{t-2} + \beta_3 C_{t-1,j=1} + \dots + \beta_j C_{t-1,j=j} + \varepsilon_t$
- Production:
 - $Q^X_{t,c} = \alpha + \beta_1 WP_{t-1} + \beta_2 WP_{t-2} + \beta_3 Q^X_{t-1,c} + \beta_4 Q^X_{t-2,c} + \varepsilon_t$
- Consumption
 - $C_{t,c} = \alpha + \beta_1 WP_{t-1} + \beta_2 C_{t-1,c} + \beta_3 C_{t-2,c} + \beta_4 GDP_{t-1,c} + \beta_5 \Delta POP_{t-1,c} + \beta_6 CPI_{t-1,c} + \beta_7 XR_{t-1,c} + \varepsilon_t$
- Stock:
 - $\Delta S^X_{t,c} = \alpha + \beta_1 WP_{t-1} + \beta_2 \Delta S^X_{t-1,c} + \beta_3 Q^X_{t-1,c} + \beta_4 C^X_{t-1,c} + \varepsilon_t$
 - $\Delta S^M_{t,c} = \alpha + \beta_1 WP_{t-1} + \beta_2 \Delta S^M_{t-1,c} + \beta_4 C^M_{t-1,c} + \varepsilon_t$
- Trade:
 - $X^X_{t,c} = Q^X_{t,c} - C^X_{t,c} - \Delta S^X_{t,c}$
 - $M^M_{t,c} = C^M_{t,c} + \Delta S^X_{t,c} M$

4

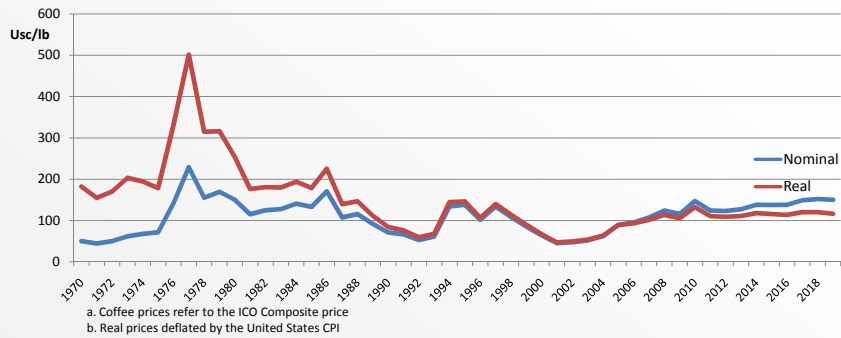
Trade

and

Markets

Division

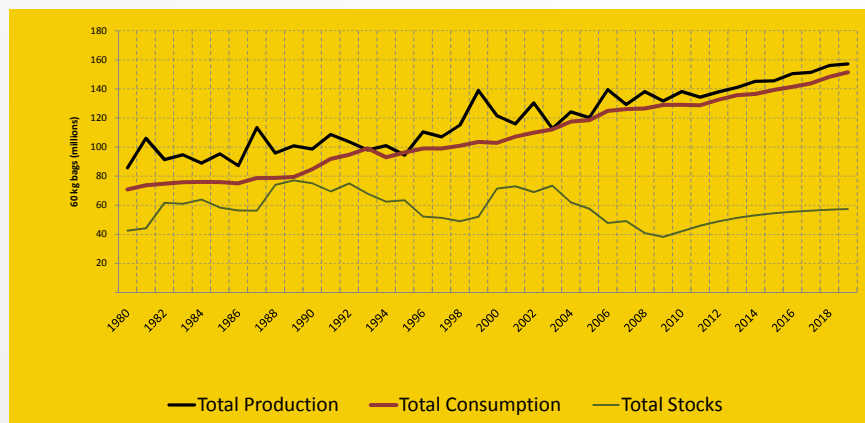
International Coffee prices



- International coffee prices in nominal terms to increase in the outlook to reach US\$1.50/lb in 2019, and expected to hit a low of US\$1.23/lb in 2012.
- International coffee prices in real terms to remain relatively flat, but they will fluctuate at a higher plateau than the previous decade (outlook average: US cents 117 per lb vs past 10 years: US cents 78.5 per lb)

5

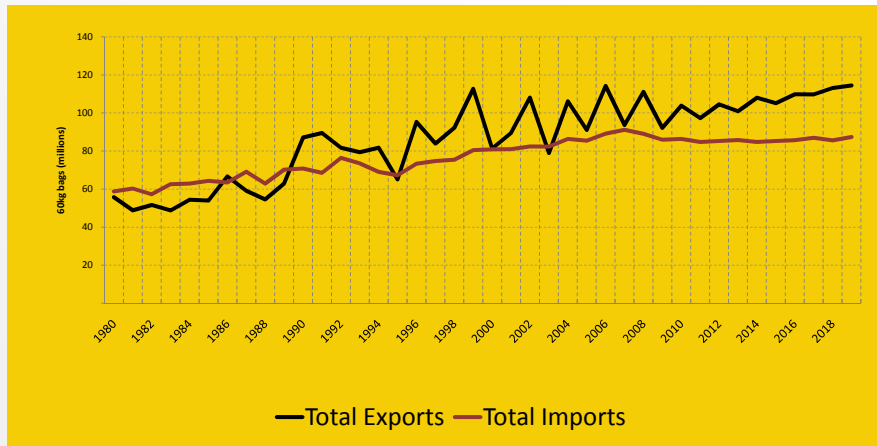
Outlook: production, consumption, and stocks



- Production is to grow by 1.73% per year, up from 1.5% per year recorded in the last decade.
- Consumption is expected to expand by 2% per year, a lower growth than the previous decade when it averaged more than 2.5 percent.

6

Outlook: Trade



- Export to expand by 1.4 % per year to reach 114.5 million bags in 2019, up from 104.5 million bags in 2010

Conclusion



- Coffee prices to stay high in real terms in comparison to the previous decade.
- Supply response enables production to surpass consumption, but market expected to remain tight.
- Consumption forecasted to grow lower than the previous decade – as high prices curve demand growth.
- Model specification can be developed to account for coffee varieties (Arabicas and Robustas)

8



Thank you

Visit our website: www.fao.org

World Sugar Research Organization
Beijing, China, 16 – 18 June 2010

Trade

and

Markets

Division