

Biofuels and Food Prices: An Opening on the Demand Side

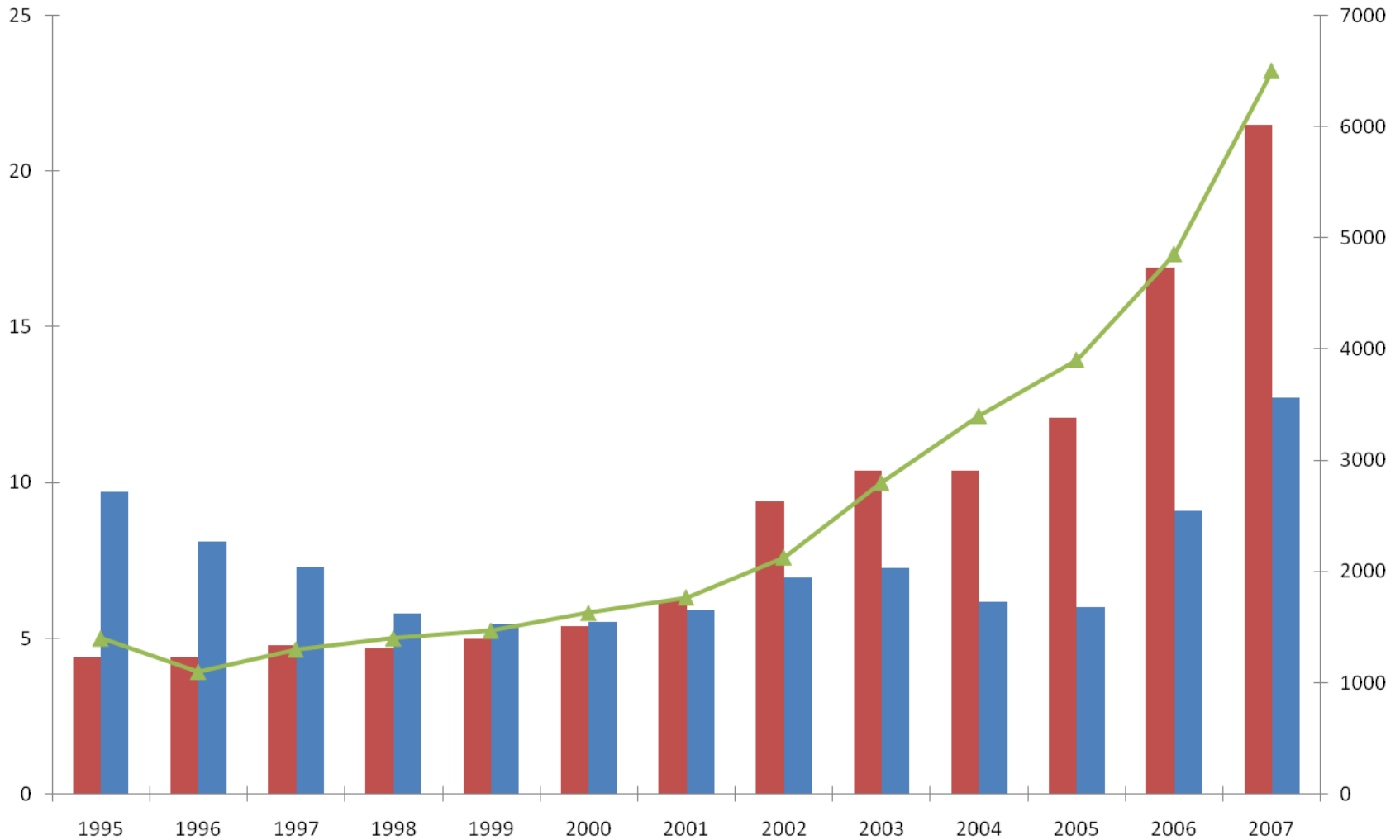
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Corn markets and ethanol production

Percent and dollars

Million gallons



Share of corn supply

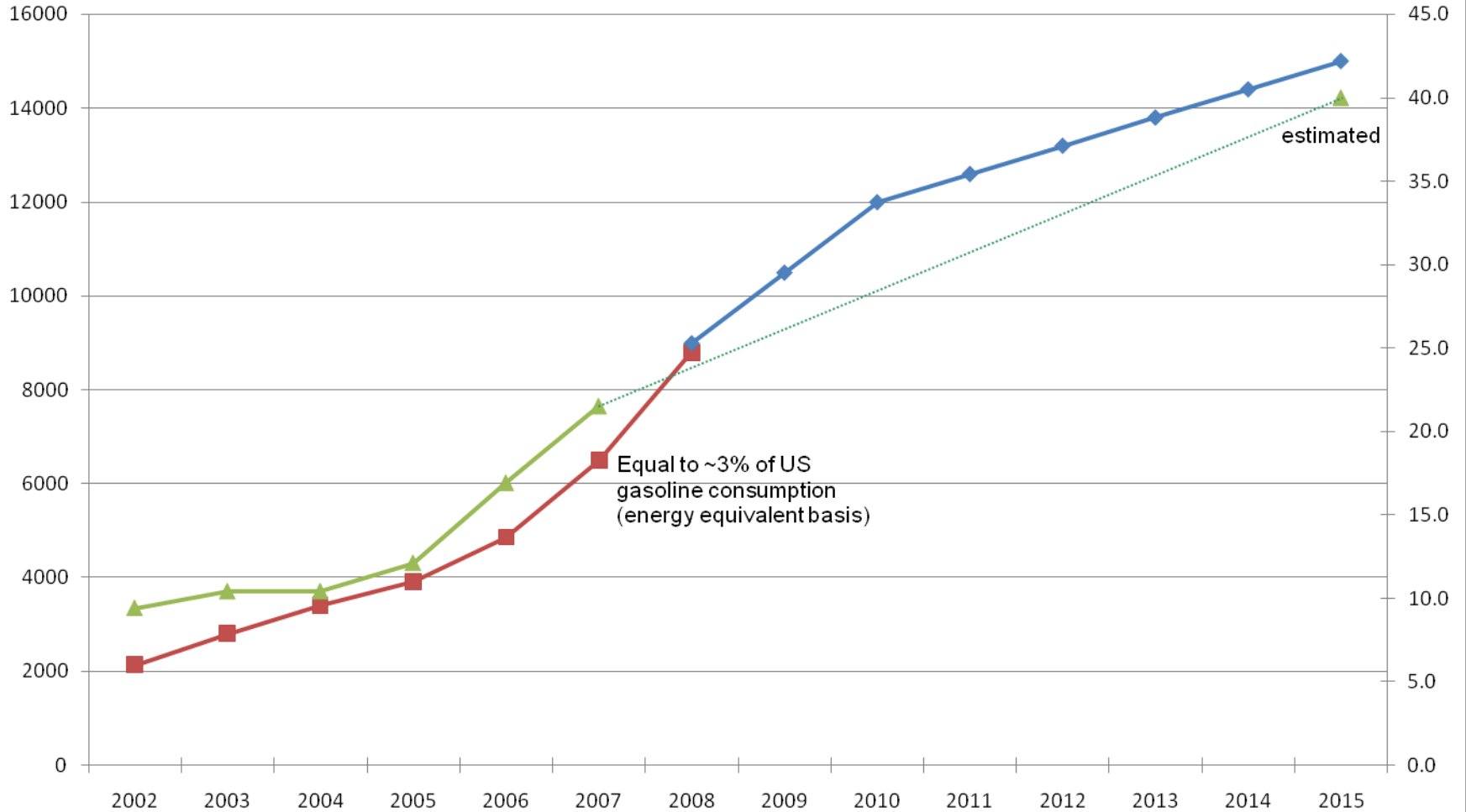
Corn price (3 bushels)

Ethanol production

US ethanol production: actual and mandated

Million gallons

Percent

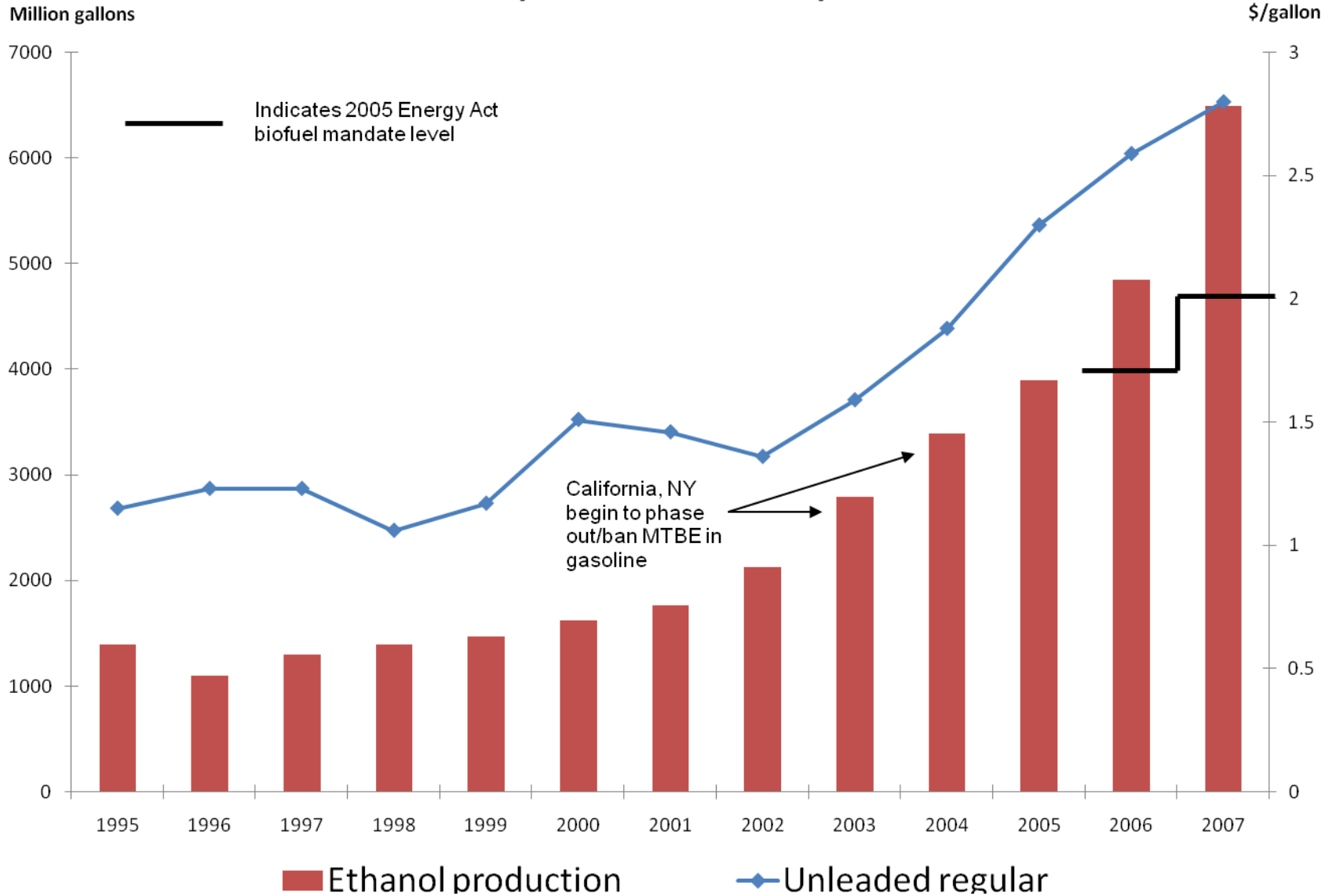


Actual

Mandated

% corn production used

Gasoline prices and ethanol production



Estimates of the Price Impact

- Bush administration: 3% of rise in IMF food price index
- Mitchell World Bank paper: up to 75% (assumes panic and hoarding in rice markets can also be attributed indirectly to biofuels)
- IFPRI (Rosegrant): 30% of grain price rise
- OECD: ~1/3 of increase in cereal and oilseed prices over next decade

Food-based Biofuels, energy security, and the environment

- Without technological breakthrough, the current mandate for using ethanol would displace ~7% of US gasoline consumption and absorb nearly half the US corn crop
- Not accounting for land use changes, corn ethanol only reduces greenhouse gas emissions by around 20%
- With land use changes, corn ethanol could increase emissions relative to gasoline