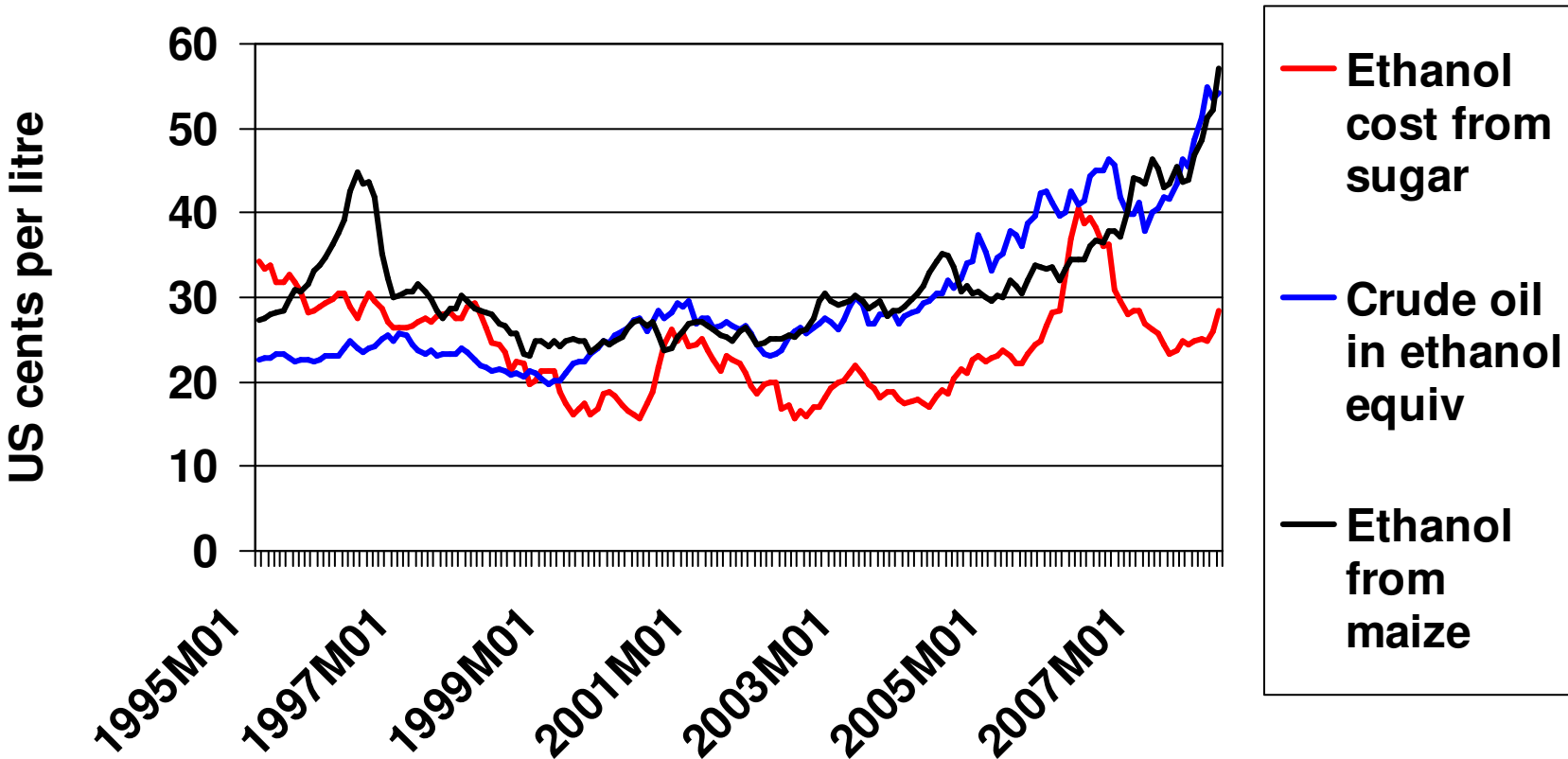

Impact of biofuel policies on markets and trade



Trade and Markets Division

World oil prices and estimated ethanol costs of production from maize and sugar



Key questions

- How important are key bio-fuel policies in affecting global biofuel and commodity markets?
 - tariffs, tax exemptions, subsidies, mandates
- Is the potential sum effect of key bio-fuel policies large?



Cosimo-Aglink Model

- OECD – FAO Agriculture Outlook
 - 2007 baseline for initial implementation and testing
 - collaborative work with large credit to OECD for the important modules of USA, EU and Brazil
- Aglink-Cosimo Model
 - about 20 commodities
 - 58 countries and regions
 - ethanol and biodiesel markets – 17 countries
- results presented are **preliminary**, we are still testing and refining key parameters and specifications



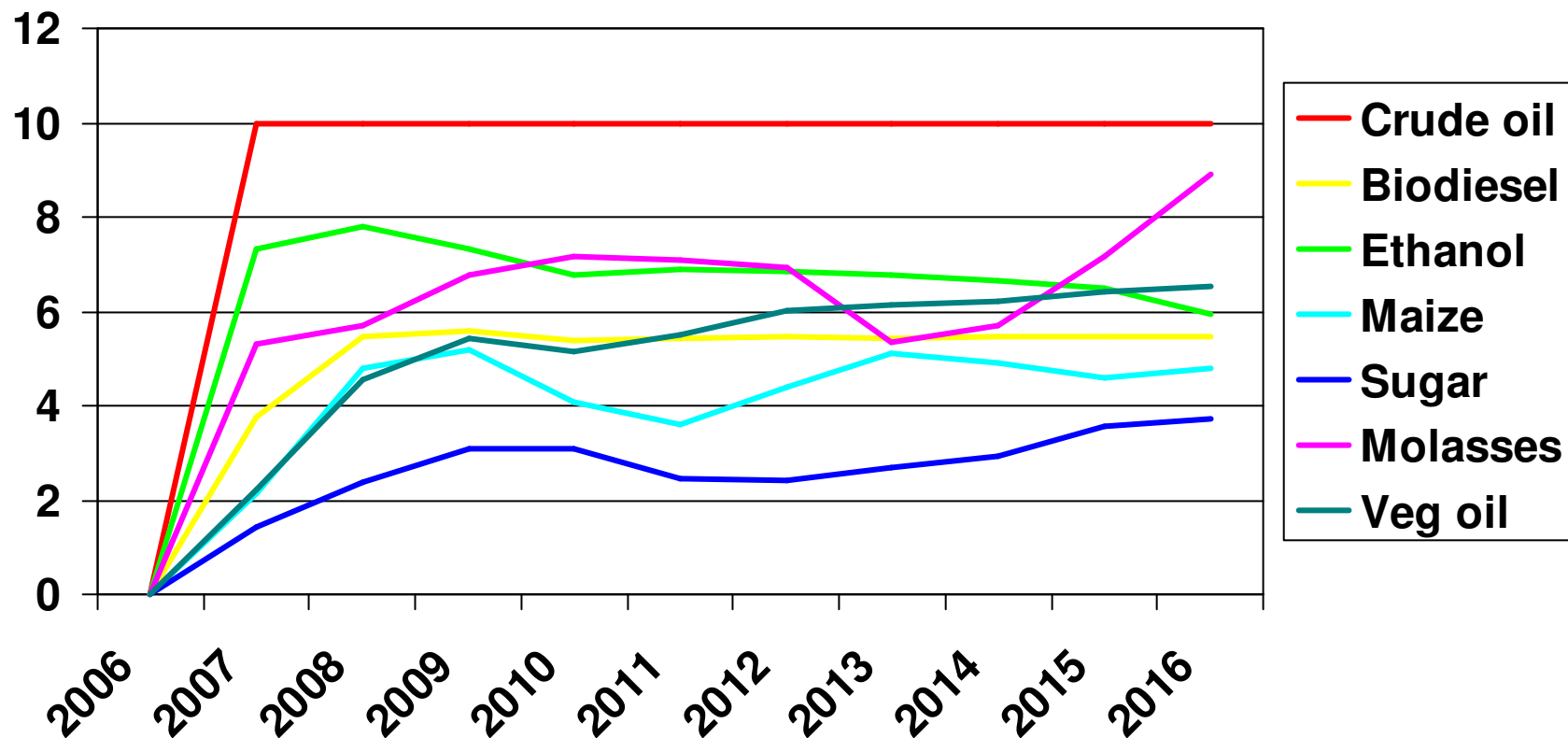
Trade and Markets Division

Biofuel Policies

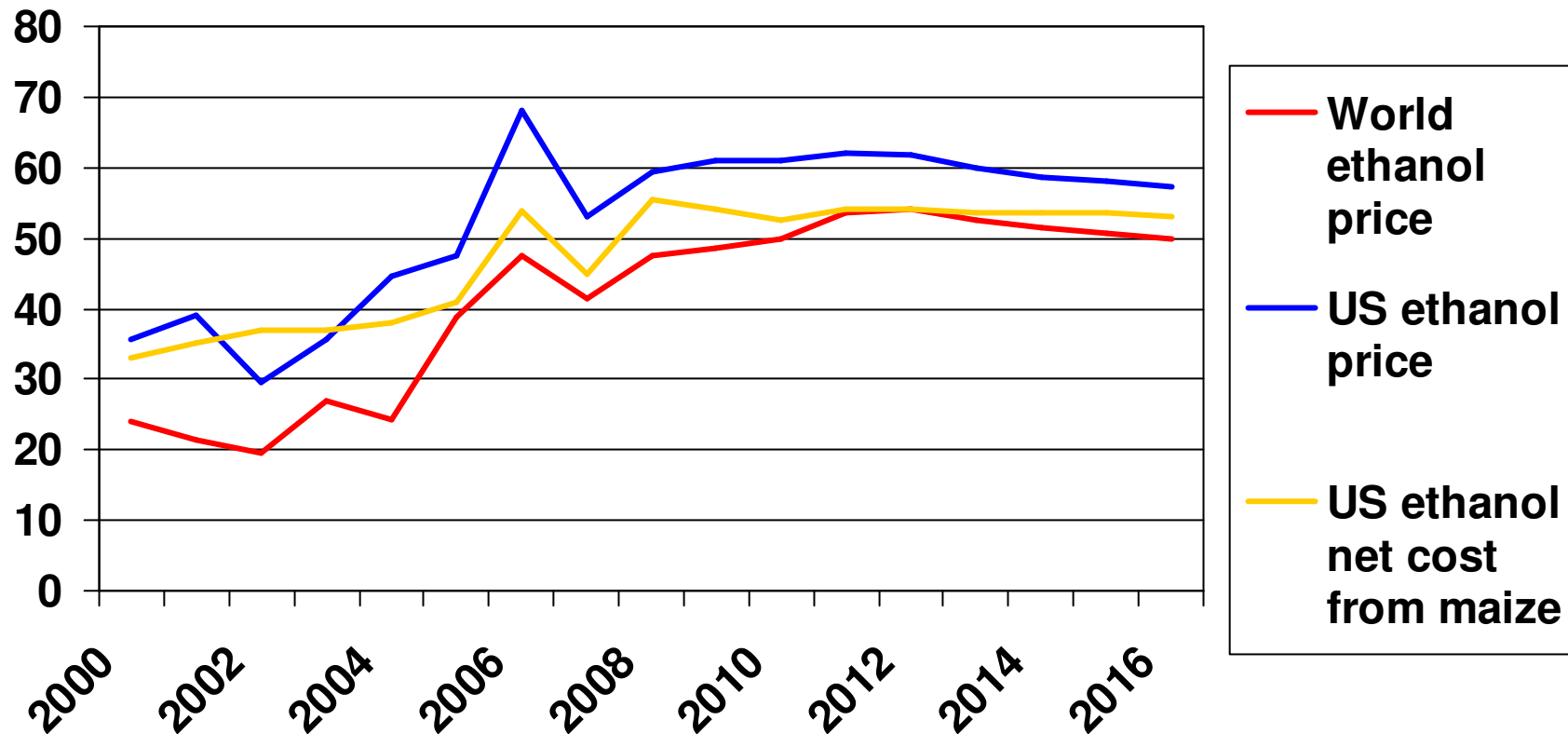
- USA, EU, Brazil, Canada
 - highly detailed policy structure
- Other developing countries
 - Tariffs
 - Taxes
 - Subsidies
 - Blending mandates



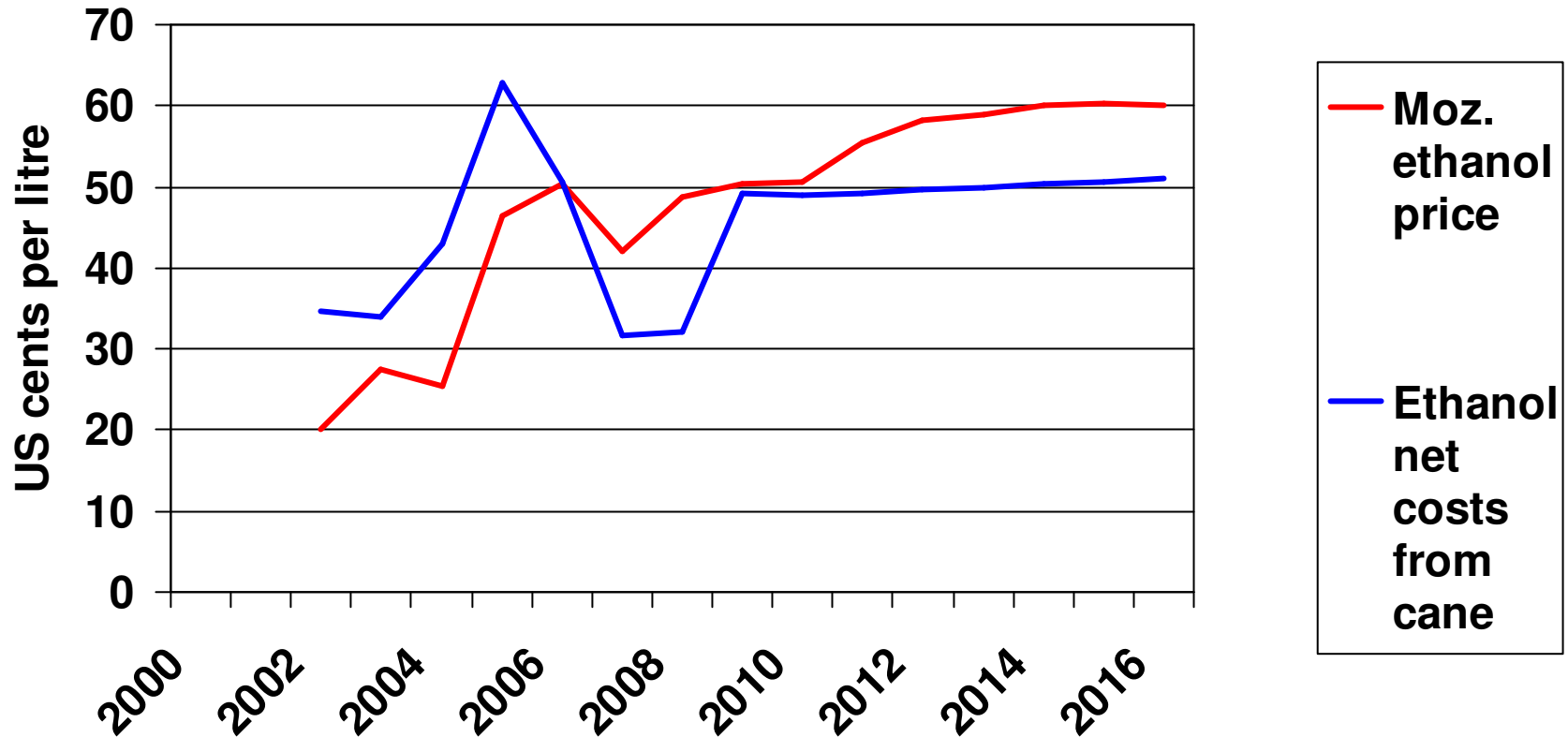
Impact of a 10% increase in world oil price on world commodity prices



US tariff/tax credit make ethanol from maize economic in US, not elsewhere



Mozambique – will EBA limit expansion of ethanol production?

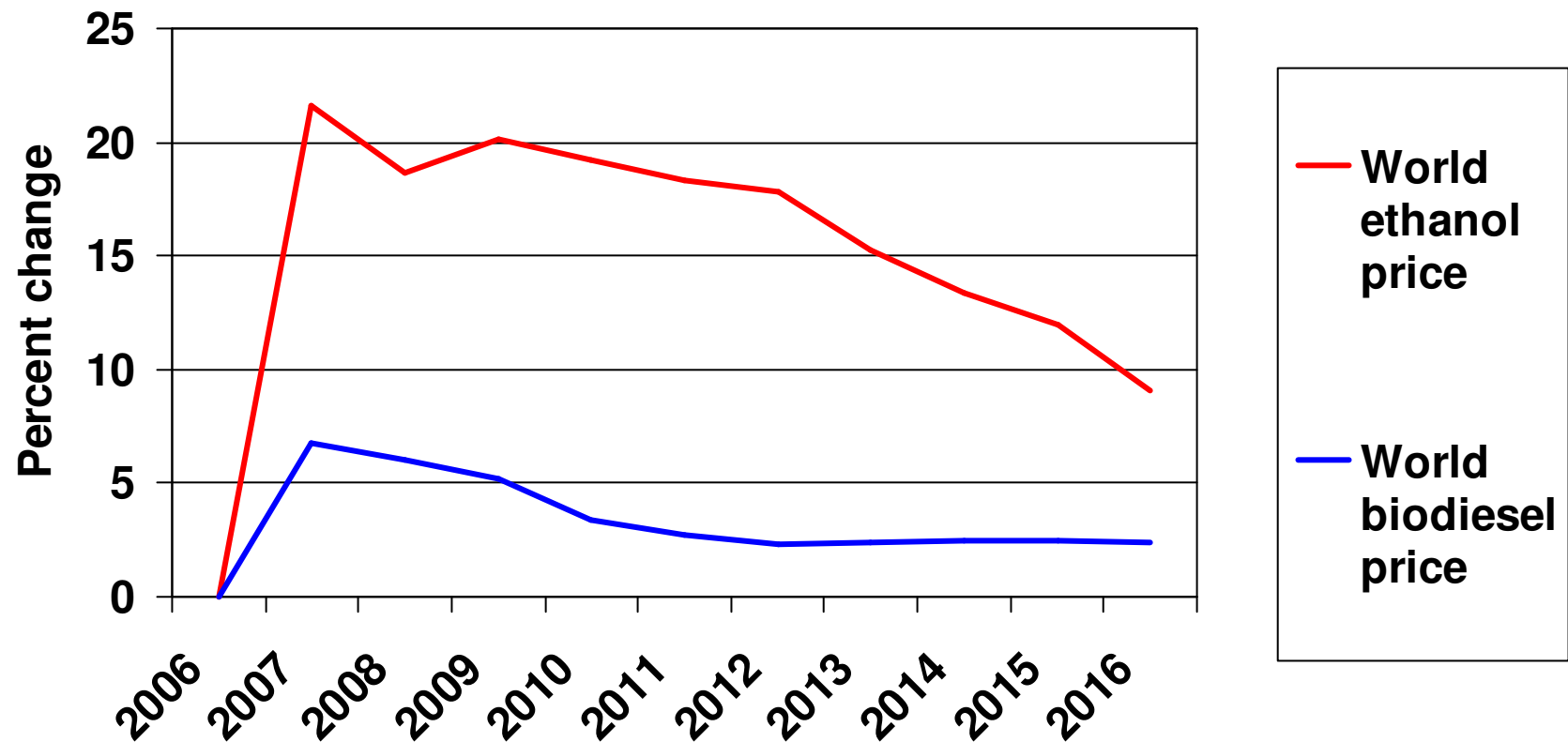


Lessons from simple scenarios:

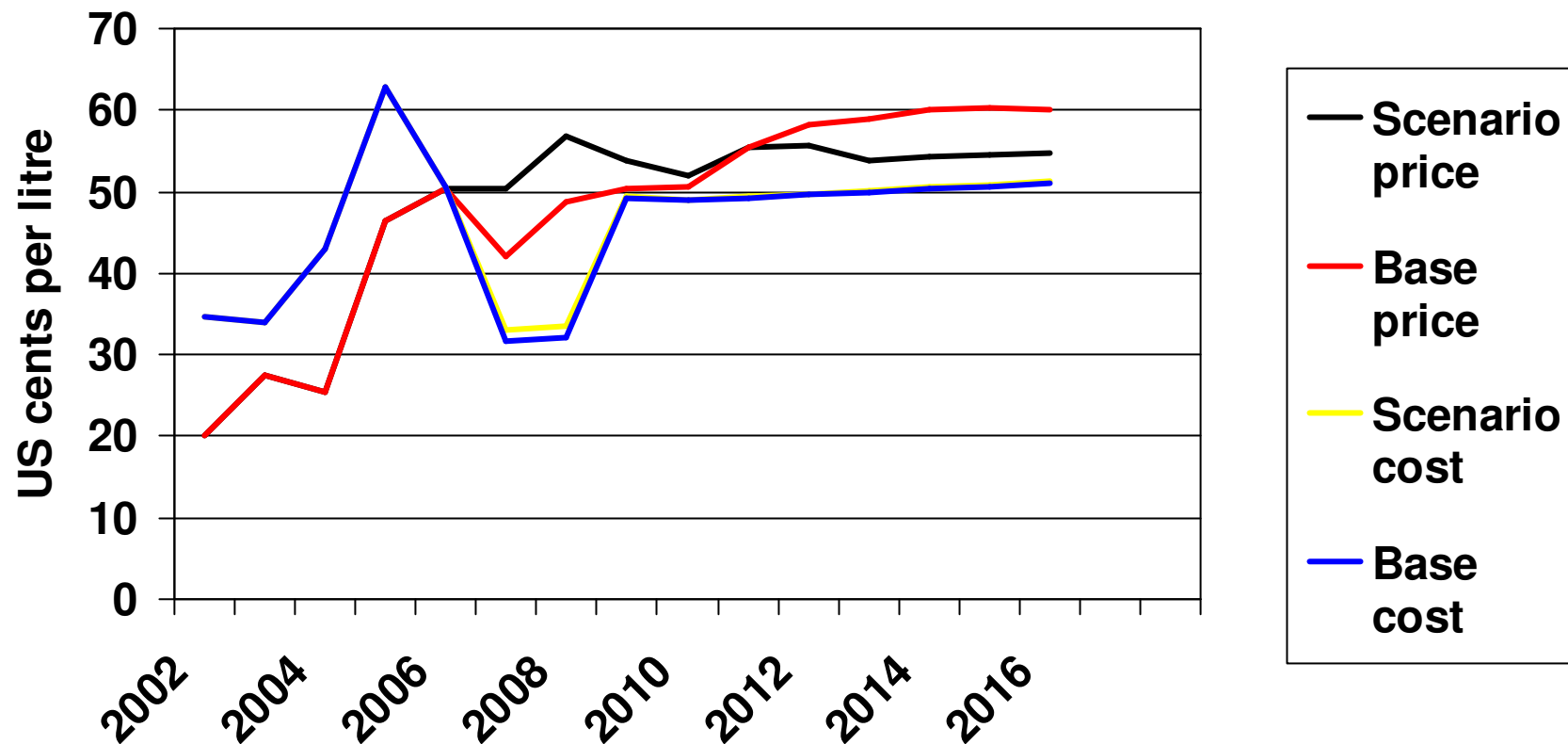
- Tariff liberalization
- US tax exemption for ethanol and biodiesel
- US tariff/tax exemption
- Global mandates – sum effect



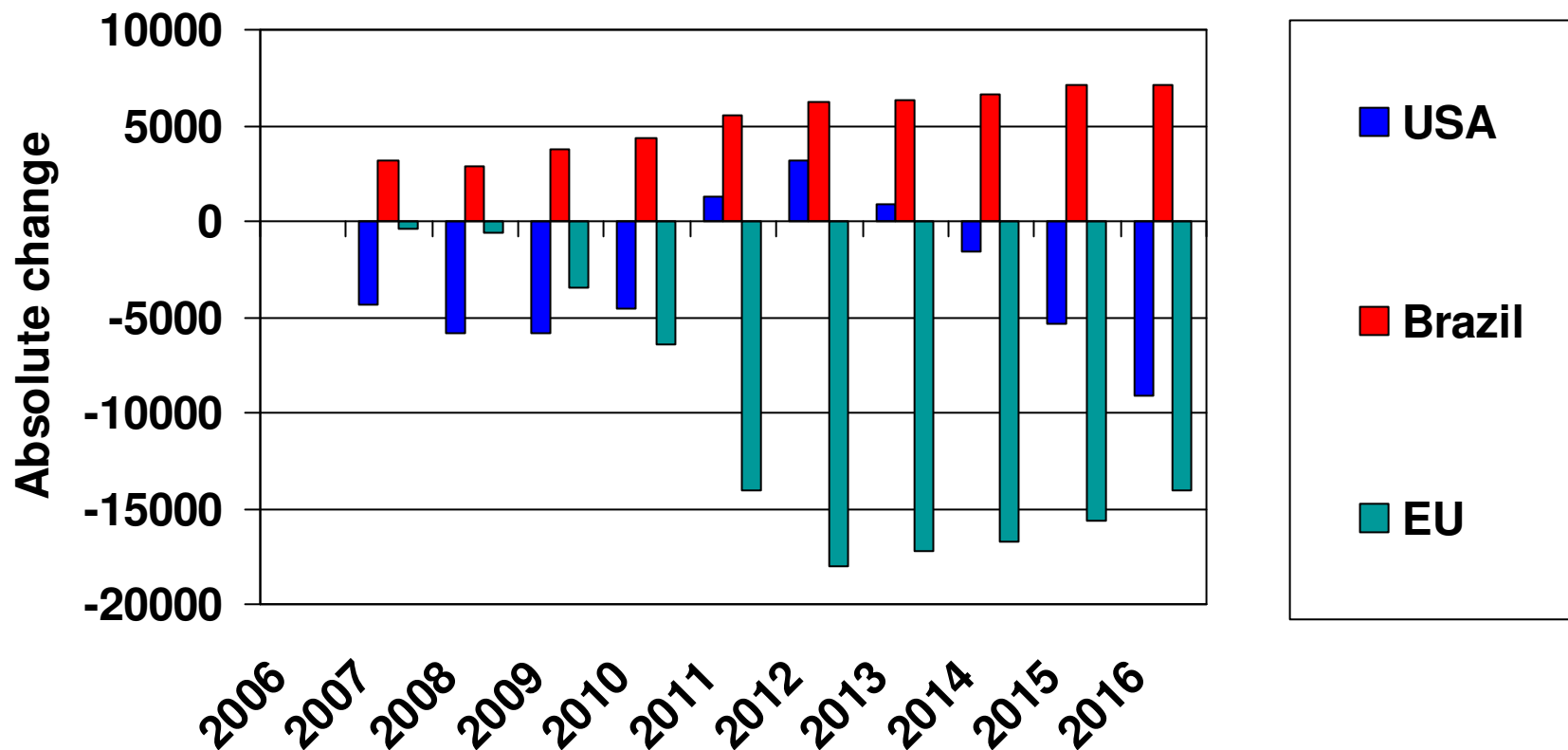
Impact of limited tariff liberalization on biofuel prices



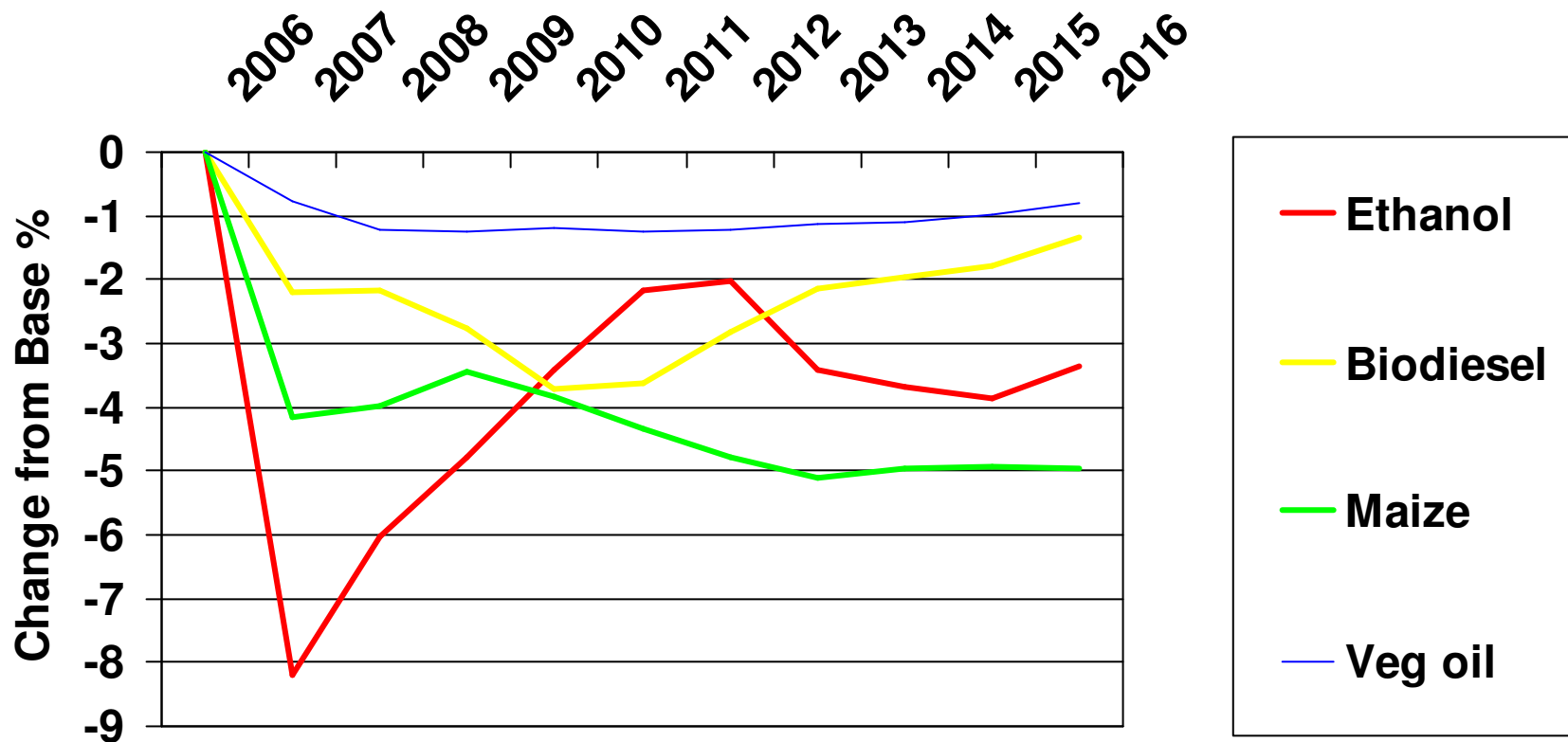
Mozambique – ethanol tariff liberalization lowers incentive for biofuel production?



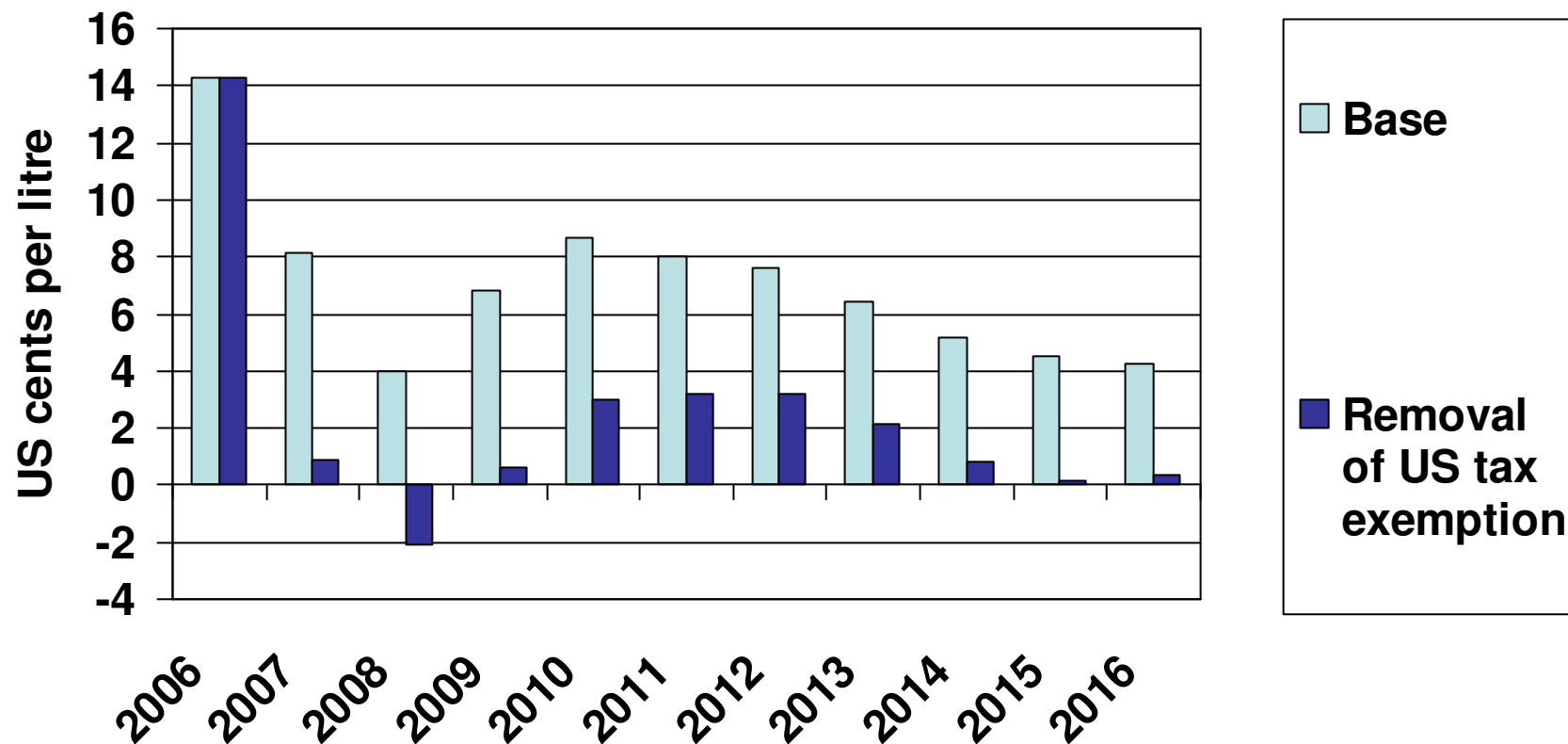
Estimated changes in net trade due to tariff reductions



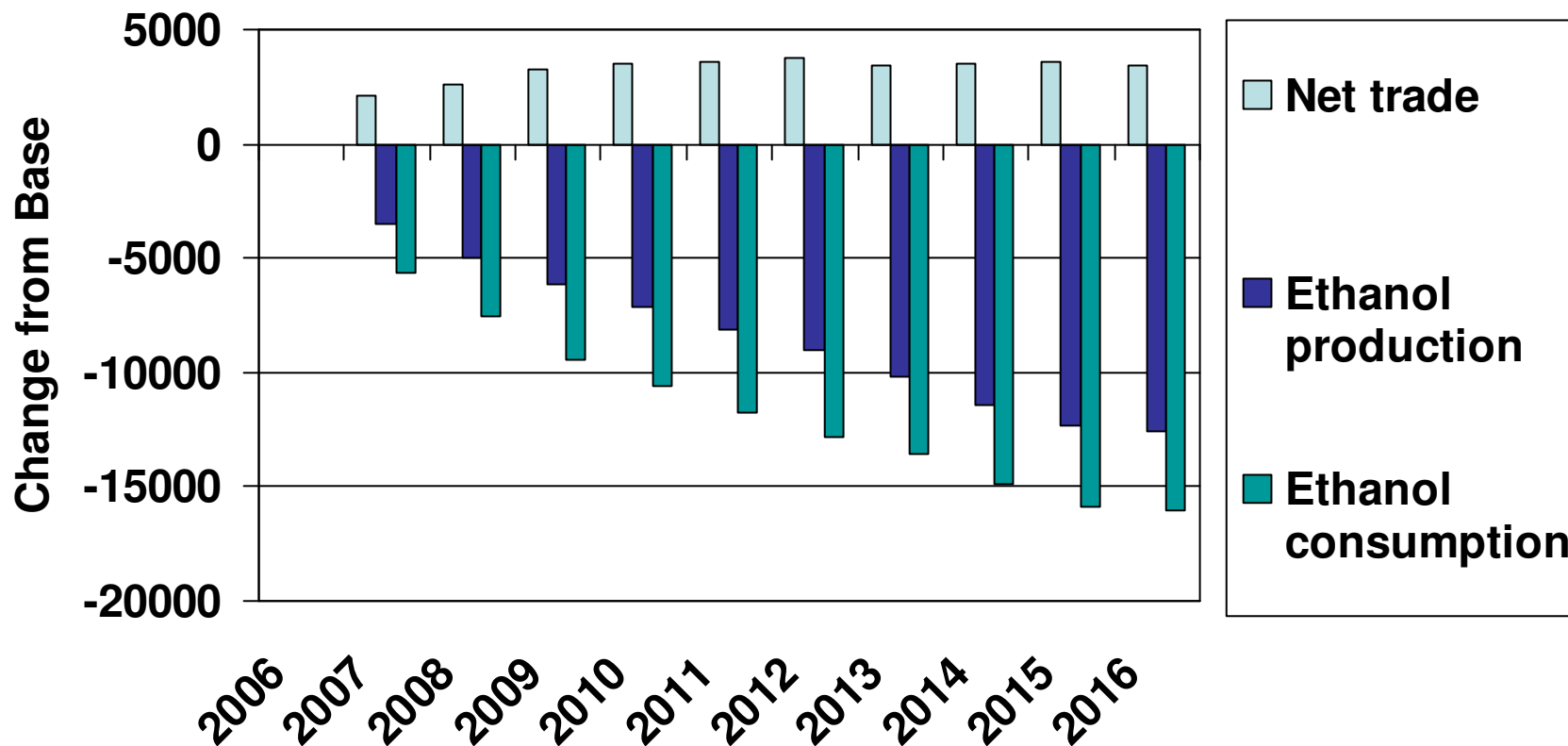
Removal of US tax exemption for ethanol: impact on world prices



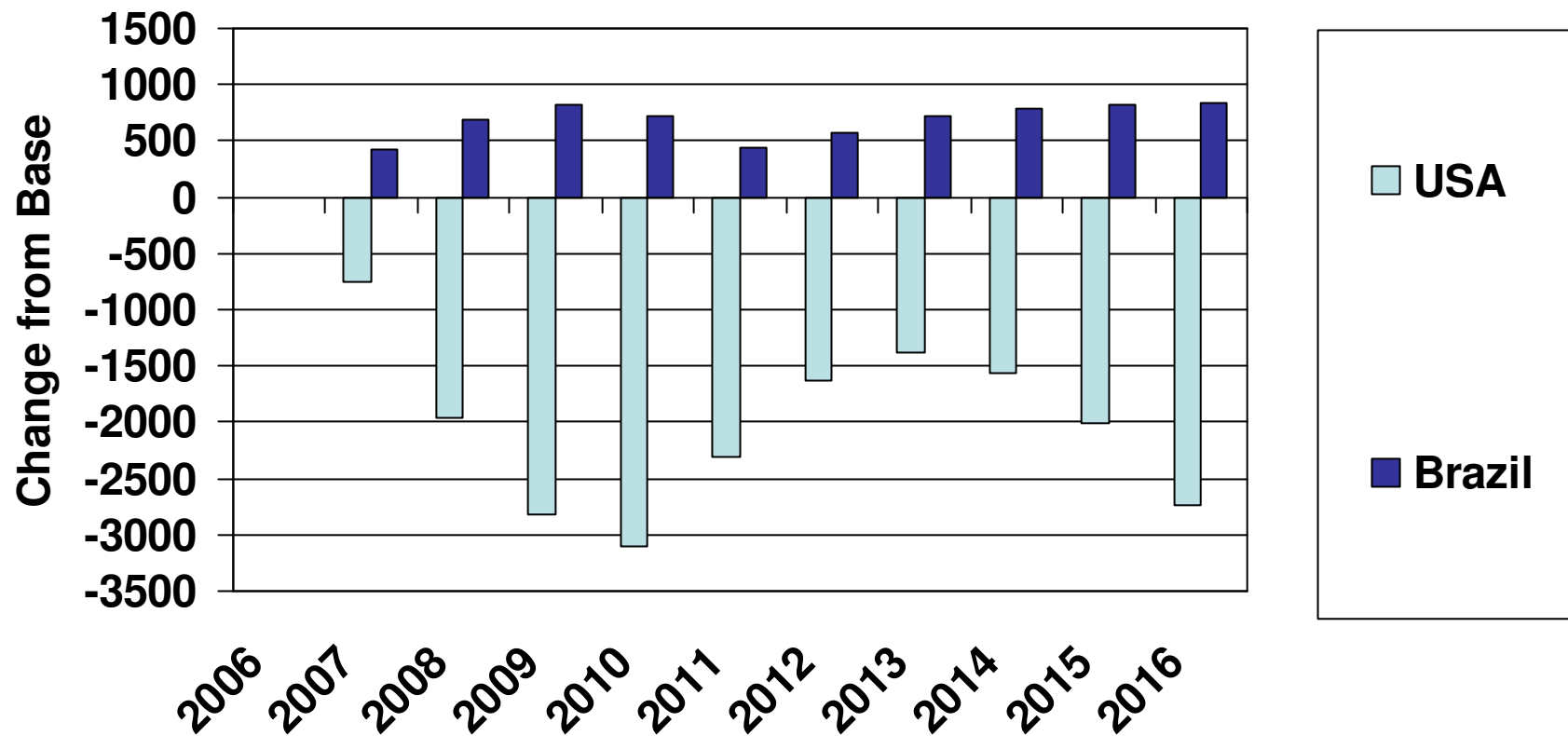
Removal of US tax exemption for ethanol: impact on ethanol margin



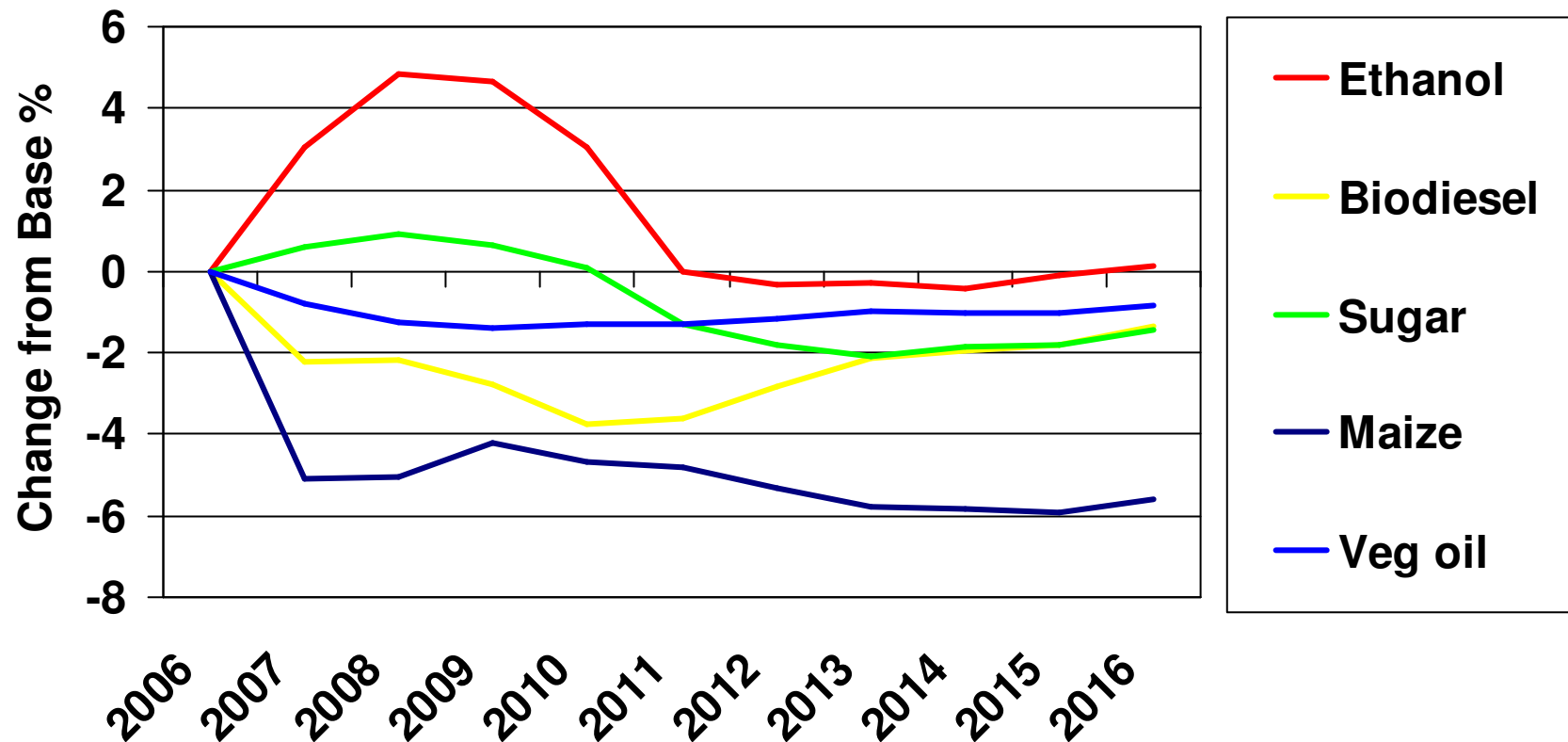
Removal of US tax exemption for ethanol: impact US balances



Removal of US tariff and tax exemption for ethanol: impact on net trade



Removal of US tariff and tax exemption for ethanol: impact on world prices

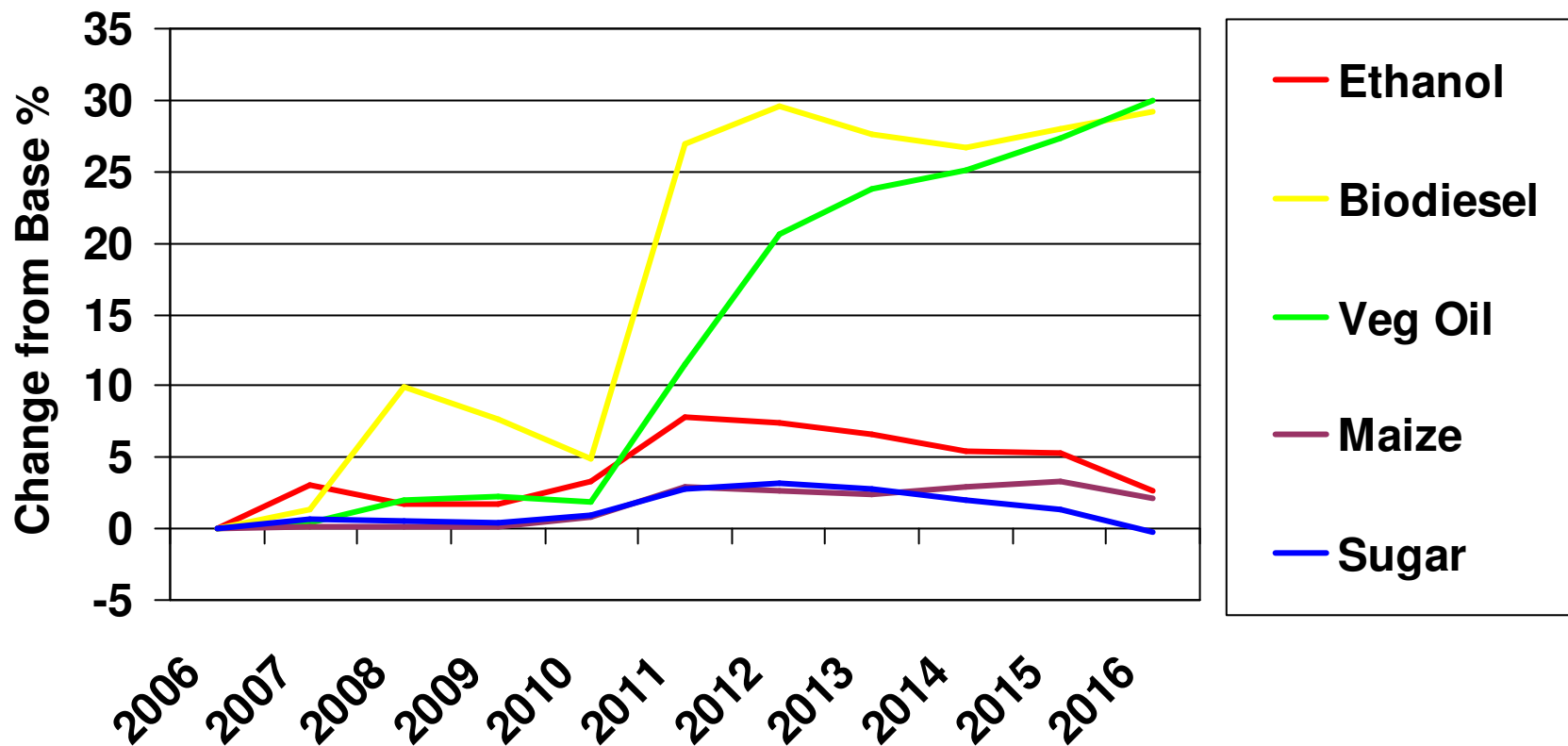


Blending targets mandates or obligations what is the cumulative impact?

	Ethanol		Biodiesel	
	Target	Year	Target	Year
Australia	350m litres		-	
Brazil	25%		5%	2013
Canada	5%	2010	2%	2012
Columbia	10%		-	
Ethiopia	-		-	
EU	10%	2020	10%	2020
India	-		-	
Indonesia	-		10%	
Malaysia	-		5%	2008
Mozambique	5%		5%	
Peru	7.80%		5%	
Philippines	5%		1%	
South Africa	2%	2013		
Tanzania	2%		2%	
Thailand	10%			
Turkey	-		-	
United States	60b litres/maize	2015	4b litres	2012
Viet Nam	5%		-	



Impact of Mandates/Obligations on markets: impact on world prices



Conclusions

- The biofuel industry is new and rapidly evolving, and only recently economic without policy intervention.
- Policies have serious implications for international markets and trade, and prices.
- Distorted biofuel/agriculture markets affect location and development of the global industry.
- International policy disciplines are needed to prevent a repeat of global policy failure.

