

Olive Oil and Food Fraud

FDLI, Food Advertising, Labeling and Litigation Conference

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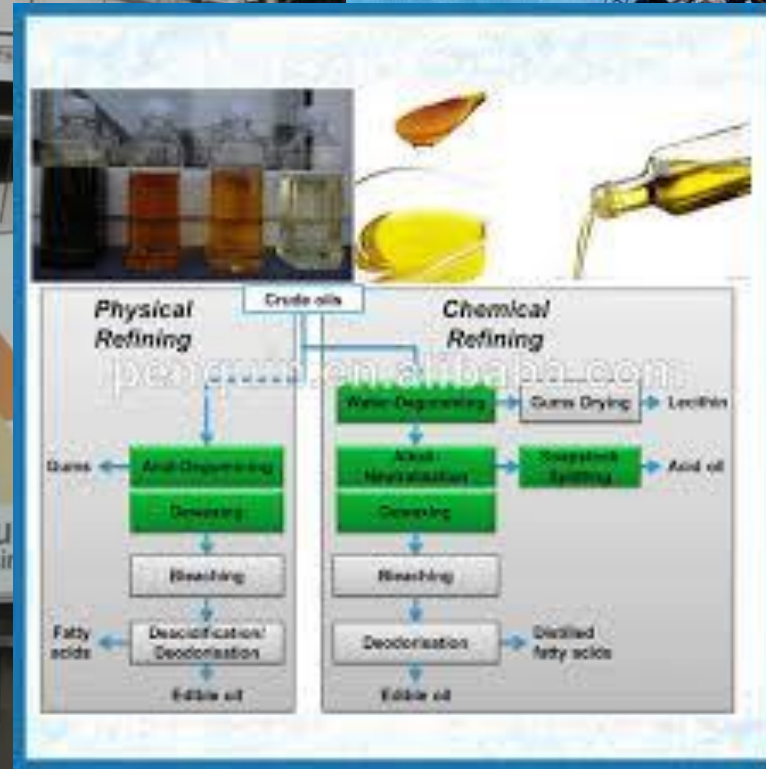
Olive Oil and Food Fraud - outline

- A brief history - leading to today's categories of olive oil
- A decade of disaster – 2004-2014
- The effects and costs of olive oil fraud
- Is there hope? Recent changes, business models, standards development
- The opportunities and benefits

In the beginning.....
there was
olive oil
& lamp oil



Then came industrial food-oil refining



SoftColu
Deodoris

Then improved mechanical extraction of virgin olive oils

- From traditional hydraulic press



- To mechanical crushers, malaxers, centrifugal decanters and separators





**Extra virgin for sure –
more than ever before, nearly 30%
of production**

Current categories for the supply chain – 2 (8?) Categories of olive oil

- 1. Extra Virgin
 - 2. Virgin
 - 3. Lampante (Crude)
- VIRGIN**
(natural, oil as it comes from olive)
-
-

- 4. Refined Olive Oil
 - 5. Olive Oil
 - 6. Crude Olive Pomace Oil
 - 7. Refined Olive Pomace Oil
 - 8. Olive Pomace Oil
- REFINED**
(manufactured industrial)

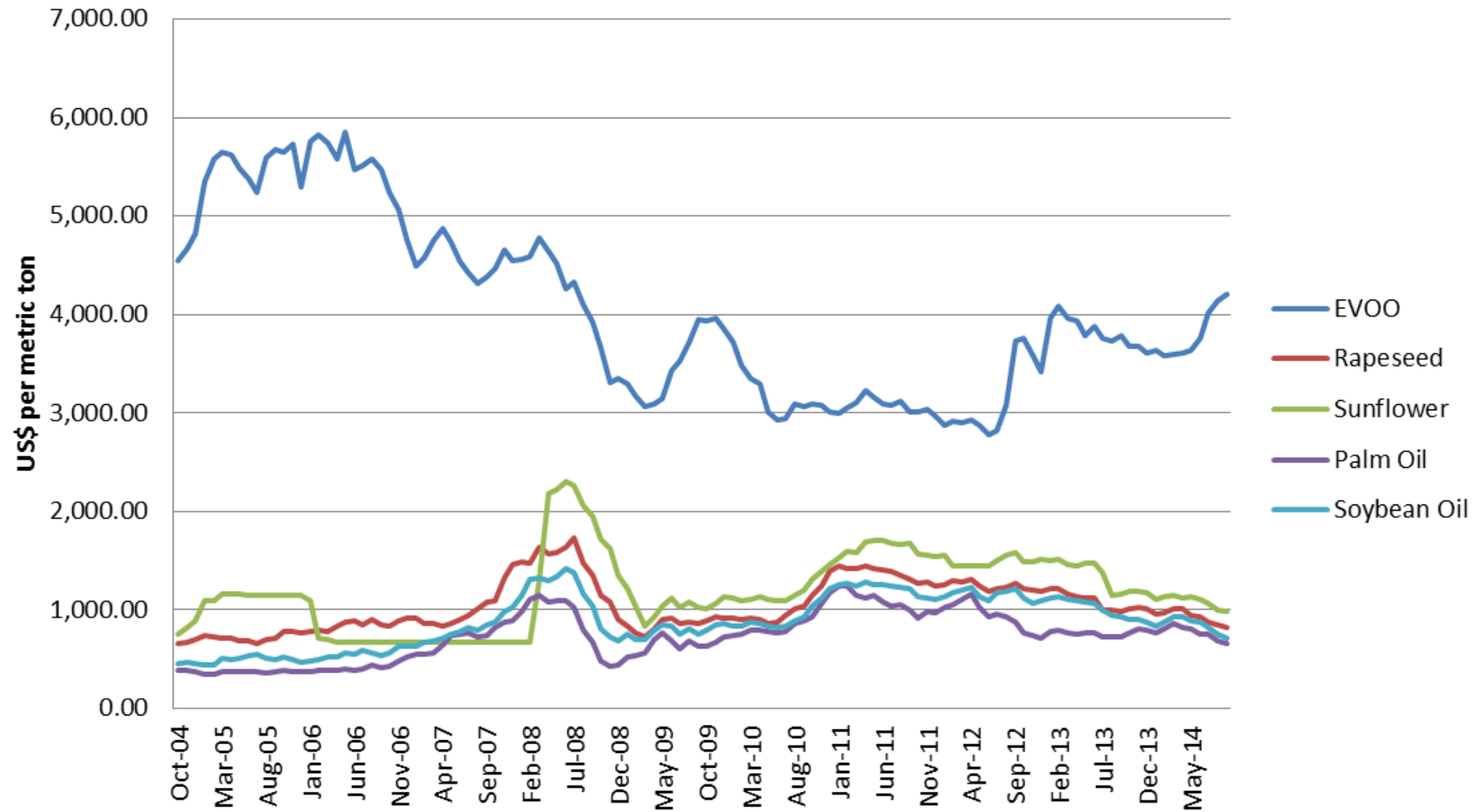
For The Consumer

- Extra Virgin Olive Oil
 - Virgin Olive Oil
 - Olive Oil
 - Light olive oil (and extra lite)
 - Pure olive oil
 - Pomace olive oil
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- Assuming that products are as labeled

Bulk extra virgin olive oil prices and food price indices - Oct 2004 - Sept 2014



Bulk extra virgin olive oil prices and bulk seed oils - Oct 2004 - Sept 2014

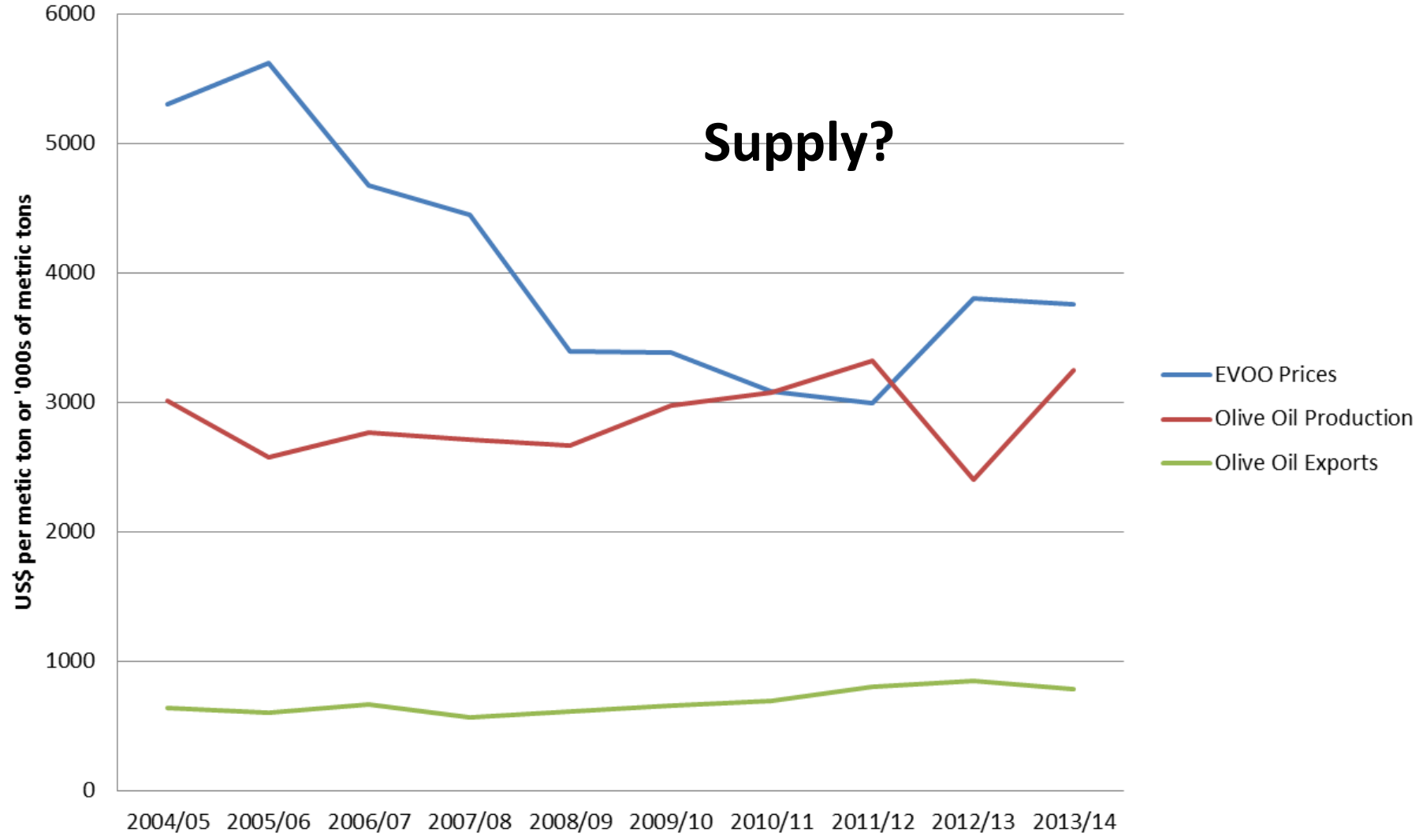


What caused this?

The decade to 2014

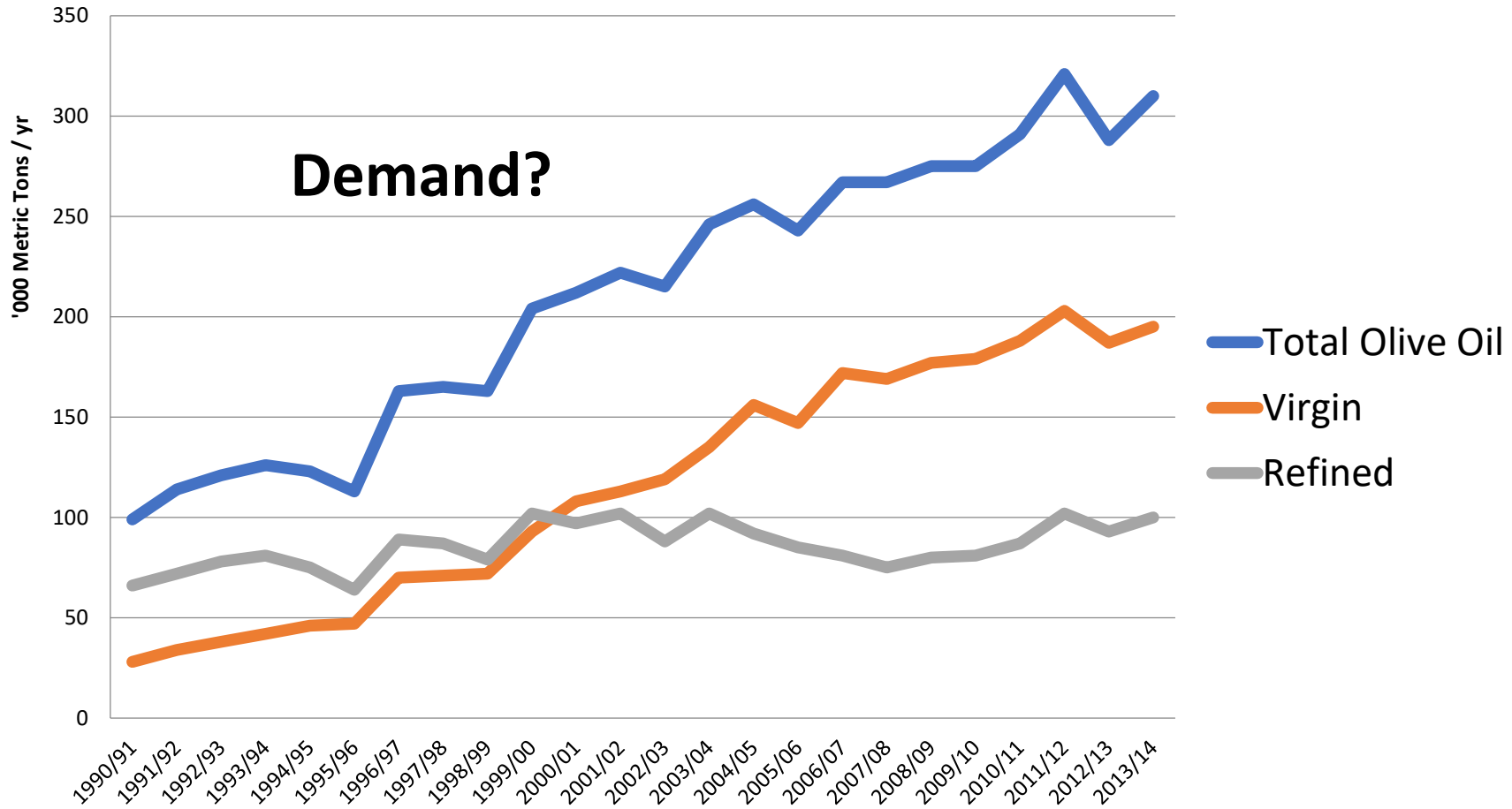
- Questions – was this reduction in olive oil prices simply an effect of supply and demand?
- What about refined olive oil?
- Sources - Index Mundi www.indexmundi.com, IOC and USDA

Extra virgin olive oil bulk prices, world olive oil production and world olive oil exports

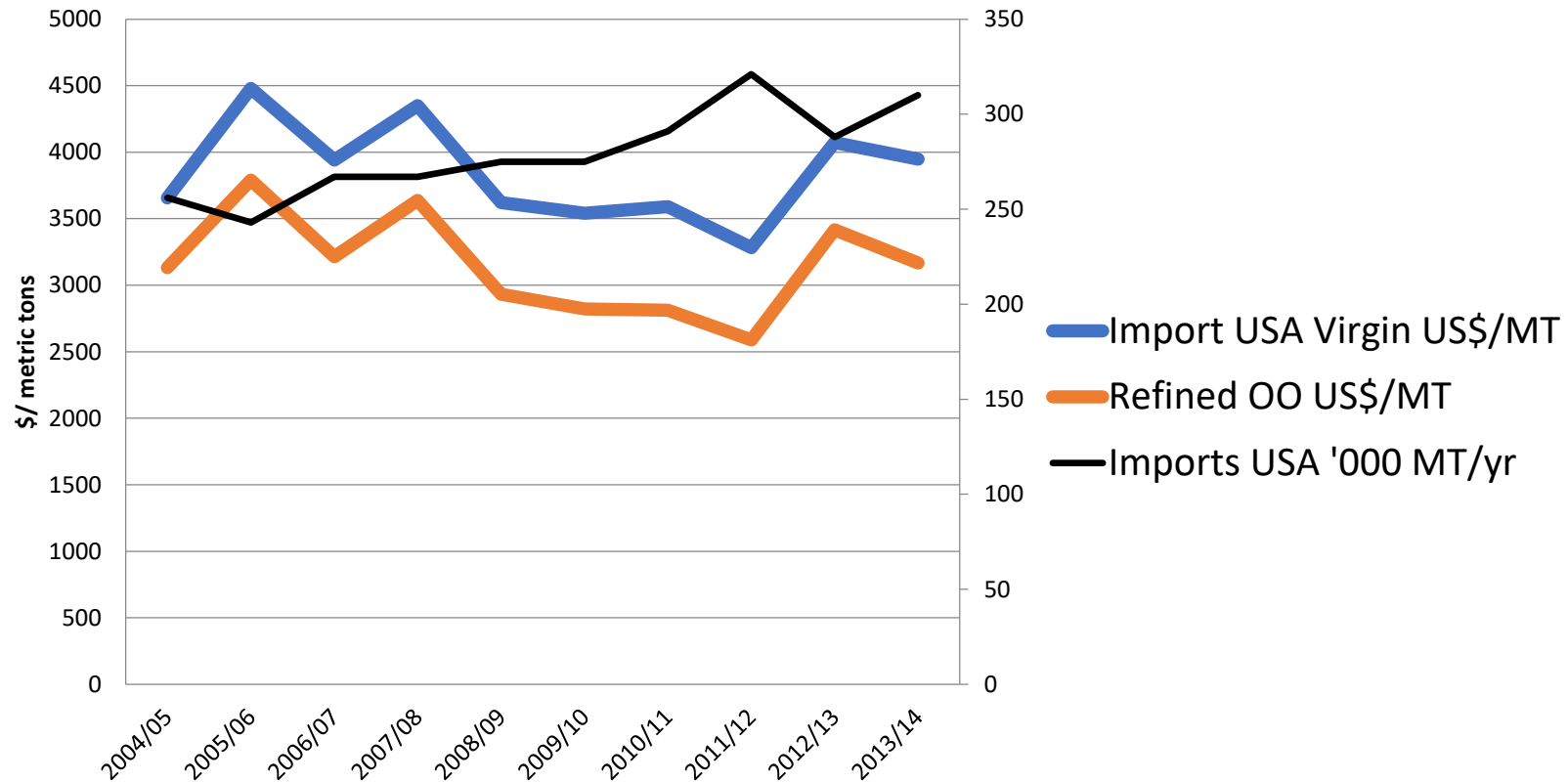


Trend to extra virgin in the USA - naturally

Olive Oil Imports as Labeled - USA
Total, Extra Virgin and Refined Olive Oil



Price comparison refined v virgin olive oil imports USA - 10 years to 2014



Note: US import data now separates Extra Virgin

In 2013/2014 95% of volume of Virgin category was reported as Extra Virgin

The causes, effects and costs of olive oil fraud

The decade to 2014

- Supply and demand factors were not the cause of the decline in prices
- During this period pricing indicates that refined olive oil was substitutable for extra virgin olive oil – despite clear differences in demand

The causes, effects and costs of olive oil fraud

The decade to 2014

My experience plus discussions with executives in many olive oil companies including the biggest traders:

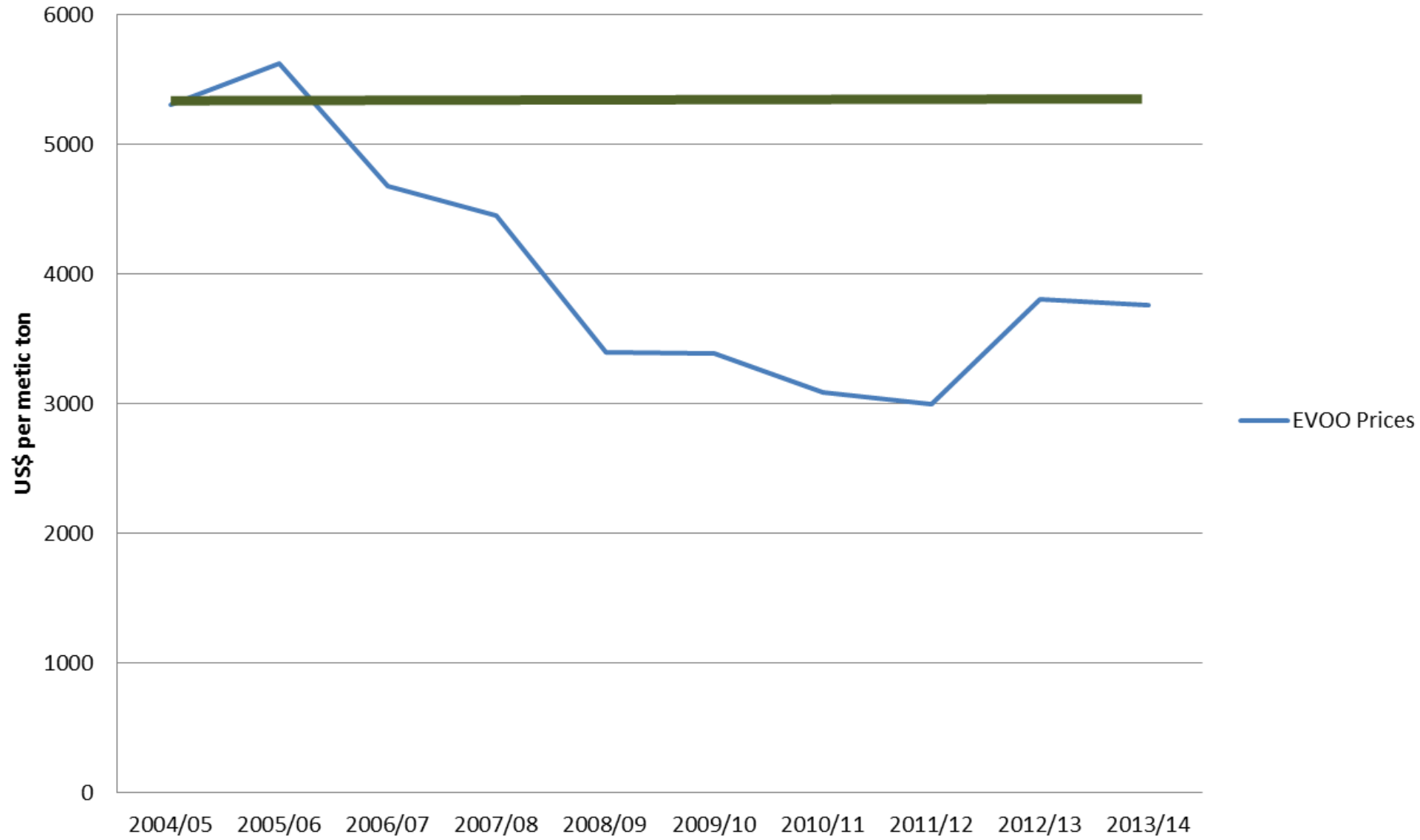
this price fall was mainly as a result of the “race to the bottom” caused by competition using falsely labeled products sold for lower and lower prices

The effects and costs of olive oil fraud

The decade to 2014

- What is the scale of the losses in value for the olive oil trade?
- For extra virgin olive oil, for exports, for all olive oil?
- The assumption here - and the reality usually is - that prices follow each other globally

Extra virgin olive oil bulk prices - what if they stayed at the October 2004 level



The effects and costs of olive oil fraud

- The decade to 2014 – the calculated wholesale \$ value of lost prices
- If we consider evoo as 50% of exports the loss is **US\$ 4.5 billion**
- If we consider all evoo (25% of all olive oil) the loss is **US\$ 9.3 billion**
- If we consider all olive oil the loss is **US\$ 37.1 billion**

Adding insult to injury

- The decade to 2014 – the calculated \$ value of lost wholesale prices at least several US\$ billions, plus consumers unknowingly cheated
- During this time the EU paid over € 25 billion in subsidies to the EU olive sector
- (At least in part) the EU consumers paid for being defrauded - **twice**

The effects and costs of olive oil fraud

- Counter-factual modeling could be used to better understand the effects of this destruction of value in the whole supply chain
- During this time, for the first time, olive oil became a loss-leader in supermarkets (like Coca Cola and washing detergent)
- The olive industry in the Mediterranean has employed less and less qualified people – positive change is now difficult
- I have observed what I believed to be good companies cheating to survive and living off subsidies – many of them

The effects and costs of olive oil fraud

- The endemic olive oil fraud has permeated attitudes and activities throughout the sector – poor farming, corrupt and criminal trade, complacent regulators, bad sometimes fraudulent science, false advertising – at a large social and financial cost
- Consumers everywhere have missed out on the benefits of what they believed were healthy products when they purchased them – a health cost?

Is there hope for olive oil?

- Yes
- The downward race seems to be abating.
- There are new business models developing - \$ from quality!
- Supported by EU concerns about the social costs and reputational damage, perhaps the bottoming out of a long process, plus a weather events since 2015 causing a sharp fall in supply as a catalyst for action

Changes in business models

- The business focus of major olive oil companies has been on reducing costs and offering lower prices – meeting standards was often ignored, manipulated or corrupted
- A new focus on creating value through quality and authenticity is emerging – suddenly there are \$s in olive oil quality – and we are starting to see the results in food shops
- Other factors include – news about food frauds, young consumers, social media, consumer publicity, e-commerce..... and some legal action

EU labelling changes - 2012

(a) extra virgin olive oil:

'superior category olive oil obtained directly from olives and solely by mechanical means';

(b) virgin olive oil:

'olive oil obtained directly from olives and solely by mechanical means';

(c) olive oil composed of refined olive oils and virgin olive oils:

'oil comprising exclusively olive oils that have undergone refining and oils obtained directly from olives';

Is there hope for olive oil?

- The recent Australian experience, from one olive oil market to two markets, consumers beginning to get it and receive value for money
- But at what cost?

Is there hope for olive oil?

- A few regulations with standards are enforced – Canada, parts of the EU, China (but standards vary and have been corrupted)
- Parts of the trade are adopting advanced product specifications and monitoring - ahead of standards
- Consumers are being educated
- A few court cases exist
- FDA is taking interest
- USP is independently developing a standard of identity for olive oil as an ingredient that may have an impact on the trade

Why does olive oil quality matter?

- The health outcomes are better from extra virgin than refined olive oils – both from quality within the product and in interactions with food - Covas M-I, et al. 2006, Minor components of olive oil: evidence to date of health benefits in humans. Nutrition Reviews v64 pp20-30. Covas MI, Nyyssonen K, Poulsen HE, et al. 2006, The effect of polyphenols in olive oil on heart disease risk factors: a randomized trial. Ann Intern Med v 145 pp333-41;
- **See also the work of Dr Mary Flynn, Brown University Medical School, Providence, Rhode Island, USA.**
- The culinary outcomes are better from real extra virgin olive oil – sublime in some cases
- Note that 50% of extra virgin olive oil sold in China is used externally for skin care – the phenols in virgin oils are important for this use

The opportunity

A reflection - what I was advised in 2002 v the Australian market in 2017

Thank you

