



Implications of non-compliance with technical NTMs: The case of Chilean food related export refusals at the US border

Sofía Boza
University of Chile

6TO ENCUENTRO REGIONAL

ANÁLISIS DE POLÍTICAS PÚBLICAS CON MODELOS DE EGC

LIMA, NOVEMBER 7TH 2017

NON TARIFF MEASURES

Technical

Non technical

Export related

**Sanitary and
Phytosanitary
Measures (SPS) and
Technical Barriers to
Trade (TBT)**

Contingent measures,
quotas, price control,
subsidies, distribution,
intellectual property,
rules of origin...

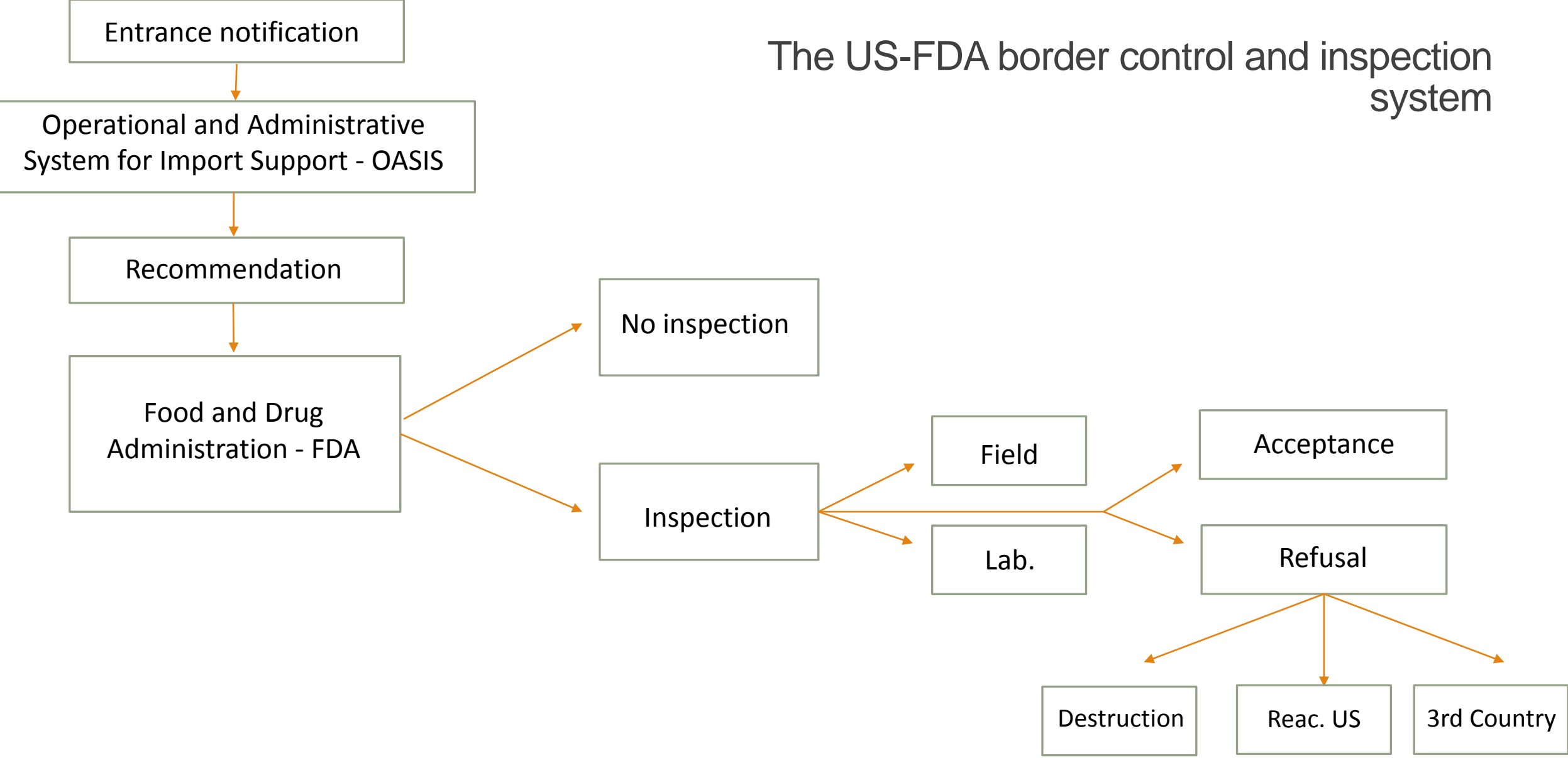
Export taxes, export
quotas and export
prohibitions

Source: UNCTAD, 2013



The objective of this chapter is to analyze the **implications of non-compliance** with technical non tariff measures by **assessing export refusals**. We will consider the case of **Chilean exports of fruit and vegetables** to the **United States**.

The US-FDA border control and inspection system



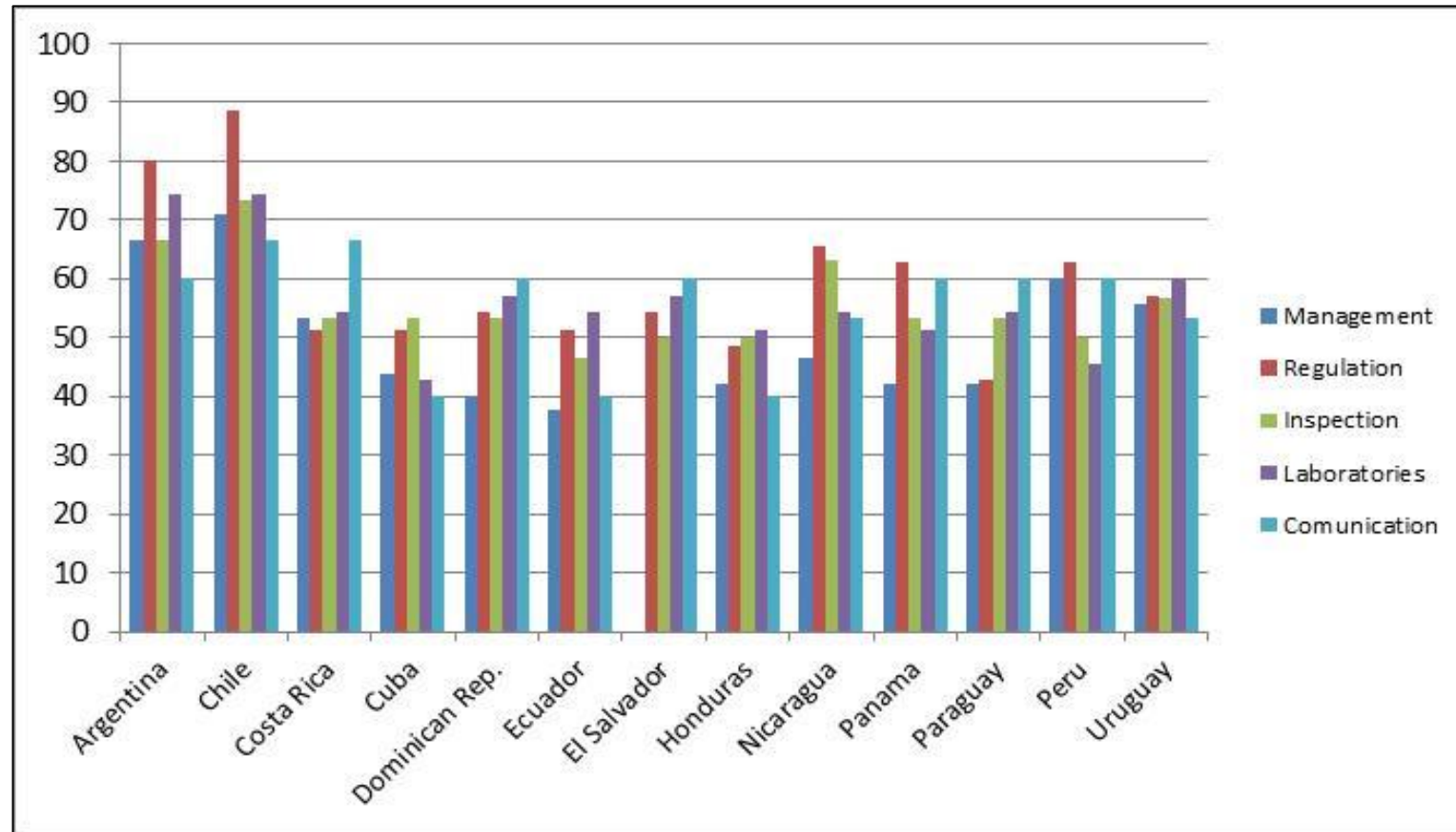
Number of fruit and vegetables Chilean shipments refused at the US border, by type of violation (2002-2015)

	2002	2003	2004	2005	2006	2007	2008
Pesticides	6	7	11	5	5	9	3
Filth/Decomposition	7	6	7	4	1	1	8
Manufacturing failure	-	2	3	-	3	1	1
Needs FCE	-	2	2	-	4	1	1
Poisonous	1	-	-	1	-	-	-
Unsafe additives	-	-	-	-	-	-	-
Label	-	-	1	-	2	1	1
Total	14	17	24	10	15	13	14
	2009	2010	2011	2012	2013	2014	2015
Pesticides	2	2	12	12	17	37	5
Filth/Decomposition	35	5	34	1	2	8	-
Manufacturing failure	-	-	-	-	-	-	-
Needs FCE	-	-	-	-	-	-	-
Poisonous	-	1	-	-	-	-	-
Unsafe additives	-	-	1	1	-	-	-
Label	-	-	-	-	2	2	2
Total	37	8	47	14	21	47	7

Participation in fruit and vegetables exports to US and in shipments refused by the FDA per country (2002-2015)

Country	Refusals (%)	Exports (%)	T_i
Argentina	0.98	1.25	0.78
Brazil	1.73	1.75	0.99
Chile	2.25	14.34	0.16
Colombia	1.85	2.30	0.80
Costa Rica	1.73	8.21	0.21
Ecuador	1.93	4.59	0.42
Guatemala	5.55	7.27	0.76
Honduras	1.13	2.59	0.44
Mexico	78.49	53.44	1.47
Peru	4.35	4.25	1.02

Evaluation of Latin American Food Control Systems (Food Control Capacity, percent)



Source: Boza, Rivers y Rozas, 2015

Refusal's economic assessment

LIMITATIONS

FDA database does not specify:

- Physical characteristics of shipments
 - Volumen
 - Weight
 - Size
- Form of import and quality
- Product destination after refusal

ASSUMPTIONS

Shipments are transported by sea

Products travel on a 20 foot container when refrigerated and on a 40 foot if not

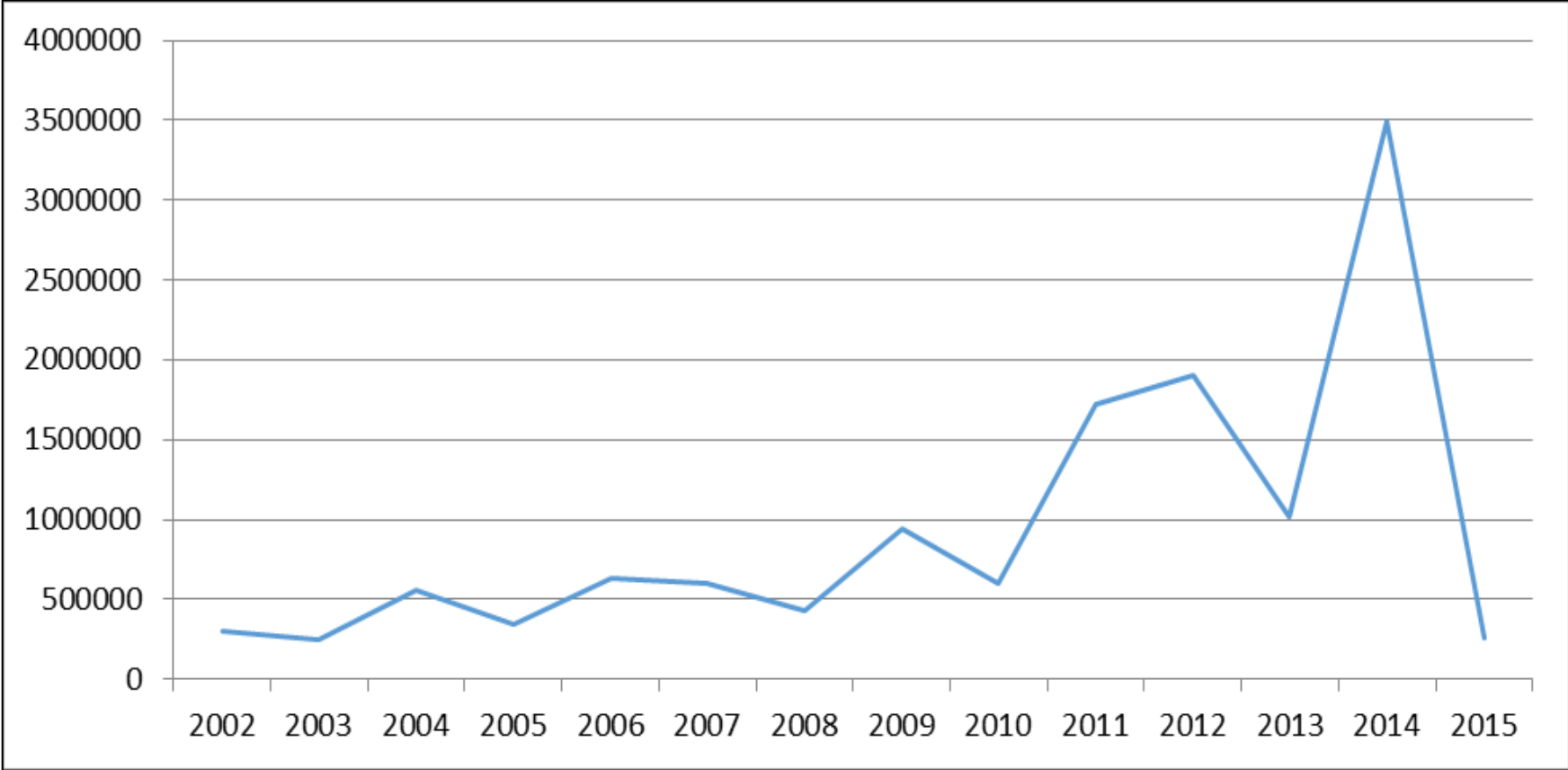
Fruit and vegetable boxes occupy the entire volume of the container except for pallets, loading, unloading and ventilation

We do not consider the secondary destination of the refused shipments

$$\$R_{kt} = \left[0.8 \left[(CV_f / BV_k) BW_k \right] \right] * FOB_{kt}$$

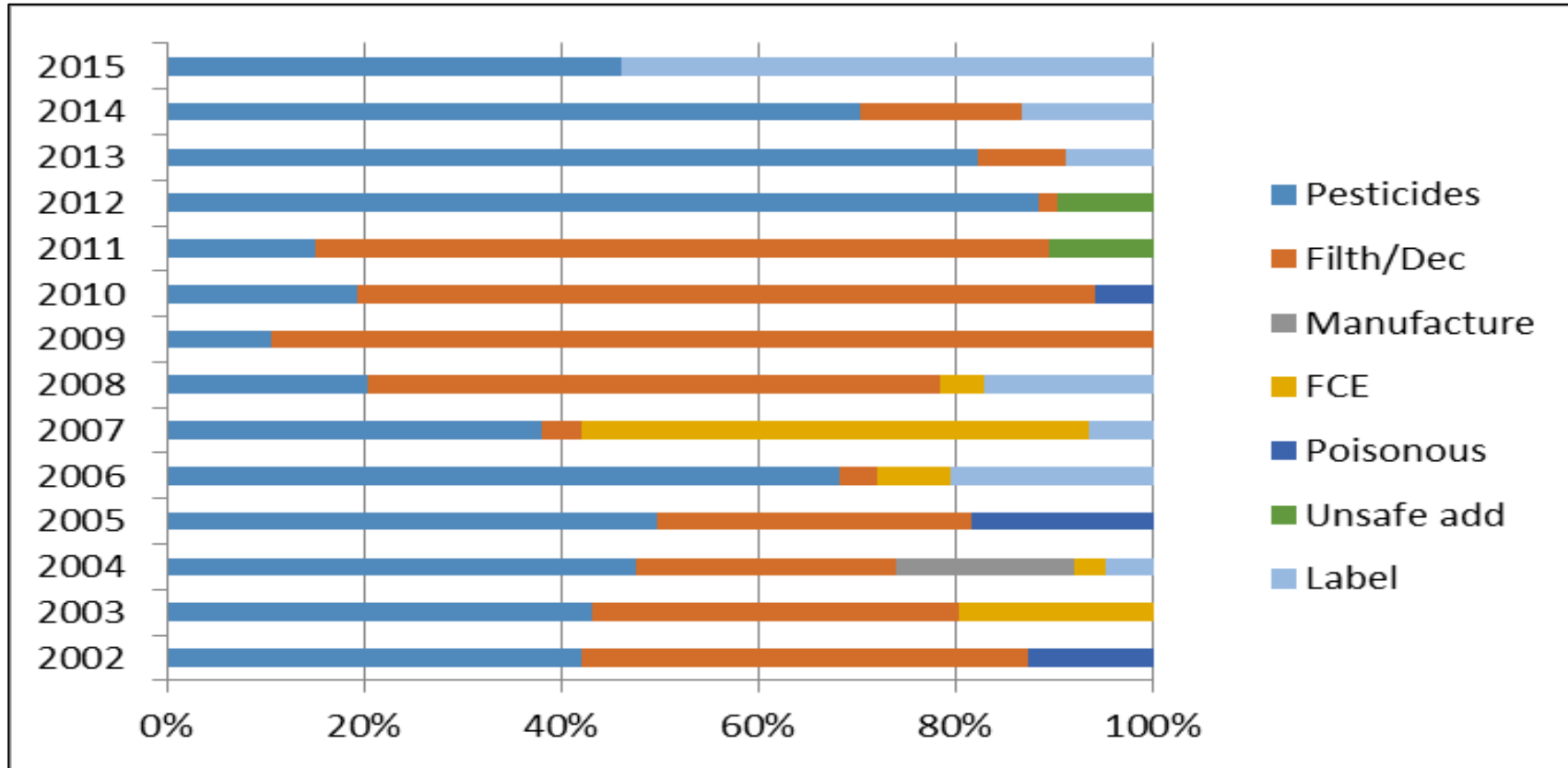
where CV_f is the volume of a regular container used for the transportation of product k (20 or 40 foot depending on refrigeration), BV_k is the volume of a regular box used for the transportation of product k, BW_k is the weight of a regular box used for the transportation of product k and FOB_{kt} is the average FOB value per kilogram of exports from Chile to the US of product k in the year t.

Evolution of the estimated value of shipments of Chilean fruit and vegetables refused at the US border (USD, 2002-2015)



2002-2015: 13,059,655 USD
0.064% value of f&v exports

Proportions of the estimated value of shipments of Chilean fruit and vegetables refused at the US border, by type of violation (percent, 2002-2015)



Concluding remarks

- Demand for quality and safety on imported foods is nowadays a common trend in international markets; with some countries more stringent than others in that sense.
- Research has focused on effects on the value of trade flows, and not so much in the dynamics of border refusals; and fewer still for the case of Latin America.
- The relative number of refused shipments at the US border differs significantly between Latin American countries.
- Chile is the country with the lowest level of refusals, which represent much less than the 0.1 percent of the value of exported fruit and vegetables.
- Between the reasons: Chile's especially efficient food control system; its "good reputation" (which is related with election for inspection) and the harmonization of its measures.



Sofía Boza Martínez
Universidad de Chile
sofiaboza@u.uchile.cl