ALCOA

Price Discrimination and Vertical Integration

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Adapted from a presentation by Kyle Emerick & Tatyana Deryugina

What Is ALCOA?

Aluminum Company of America

- ALCOA is the world’s leading producer and manager of primary aluminum, fabricated aluminum, and alumina facilities, and it is active in all major aspects of the industry

Source: ALCOA website

History of ALCOA

- **Aluminum Company of America** (Alcoa) dominated the market for aluminum during the first half of the 20th century
- **1912**: Alcoa found guilty of using contracts to eliminate competition and entering into non-aggressiveness pact with foreign competitors.
- **1940:** A case against Alcoa is dismissed
- **1945**: Appellate court rules Alcoa guilty of antitrust violations.
- Alcoa controlled 91% of the primary market. In the 1940 case, including the secondary market and excluding the aluminum used by Alcoa **gave Alcoa 33% market share, not enough to be a monopoly**. Judge Hand reversed that decision in 1945.

Uses of Aluminum

-Iron and Steel Industry

-Aircraft Industry *Airplane parts

-Electric Cable

-Cooking Utensils

-Automobile Parts

"Our global network of primary aluminum facilities produces a full line of commodity-grade aluminum ingot, high-purity ingot, extrusion log and billet, casting alloys, cast rod and rolling ingot. Our leadership in technology, capacity and strategic location offers you the best possible choice of price, quality and availability"

Source: alcoa website

Price Discrimination

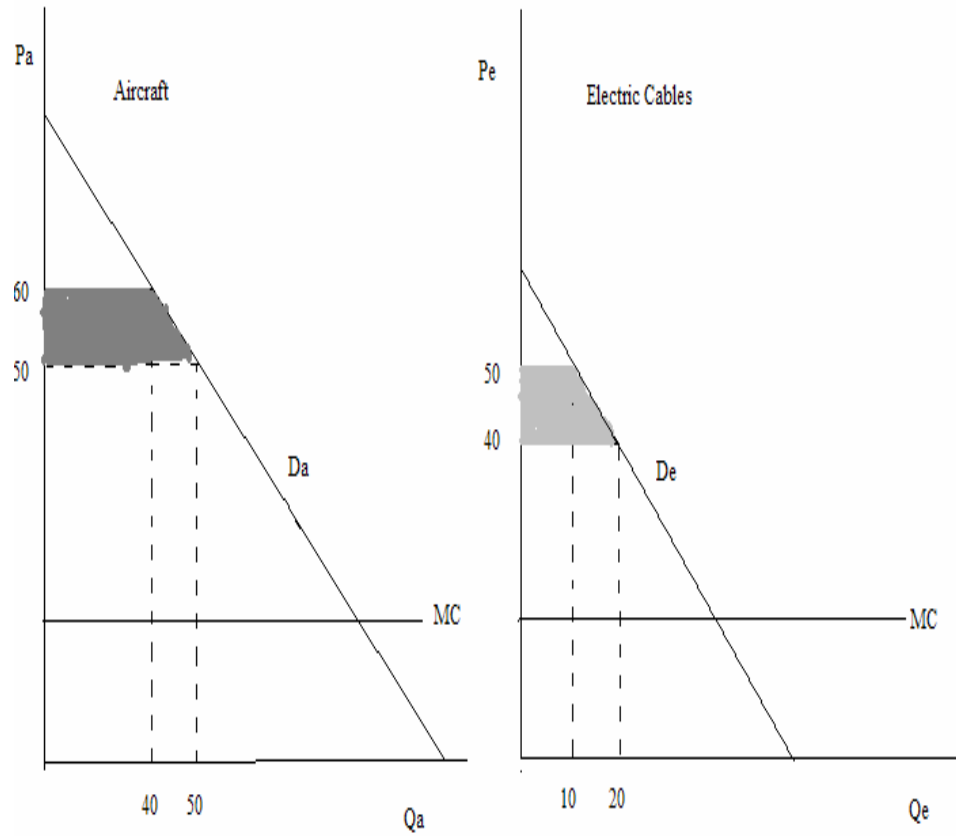
*Price Discrimination: Setting different prices for the same good

– ALCOA is a 3rd Degree Price Discrimination:

They sorted consumers into Aircraft and Electric cable groups, each with their own price per unit

The Problem

- ALCOA, as a leading manufacturer of aluminum was in danger of being ‘undersold’ in the secondary market and could therefore not apply price discrimination techniques



NOTE: Figure Not Drawn to Scale (SAT Disclaimer)

ARBITRAGE

*When a consumer purchases a good with the intent to immediately resell in another market at a higher price and enjoy the profit

Price Discrimination to MAX profit

ALCOA wanted to Sell at a HIGHER price to the Aircraft industry because their demand is INELASTIC with few substitutes

In the Electric Cable market they wanted to sell at a LOWER price, because the industry had many substitutes, namely copper.

PROBLEM: Arbitrage & Recycling

Buy from ALCOA at a cheaper price, sell back to Aircraft industry at a higher price, this takes ALCOA potential customers b/c aluminum is durable

Integration

- Who should ALCOA integrate with?
  - Aircraft company or Electrical Cable company?

Solution

- Electrical cable company!
- WHY?
  - Because ARBITRAGE is not prevented through Aircraft integration
  - With Electric Cable, they can charge a high price to the Aircraft industry, preventing arbitrage

Result: made sense for ALCOA to integrate into industries with Elastic derived demand curves

Solution: Vertical Integration

*When a single firm participates in more than one successive stage of the production process

To avoid ARBITRAGE, ALCOA used vertical integration to buy out the possibility of being undersold.

Examples of ALCOA's Vertical Integration

Automotive
Packaging
building and construction
commercial transportation
industrial markets
cookware

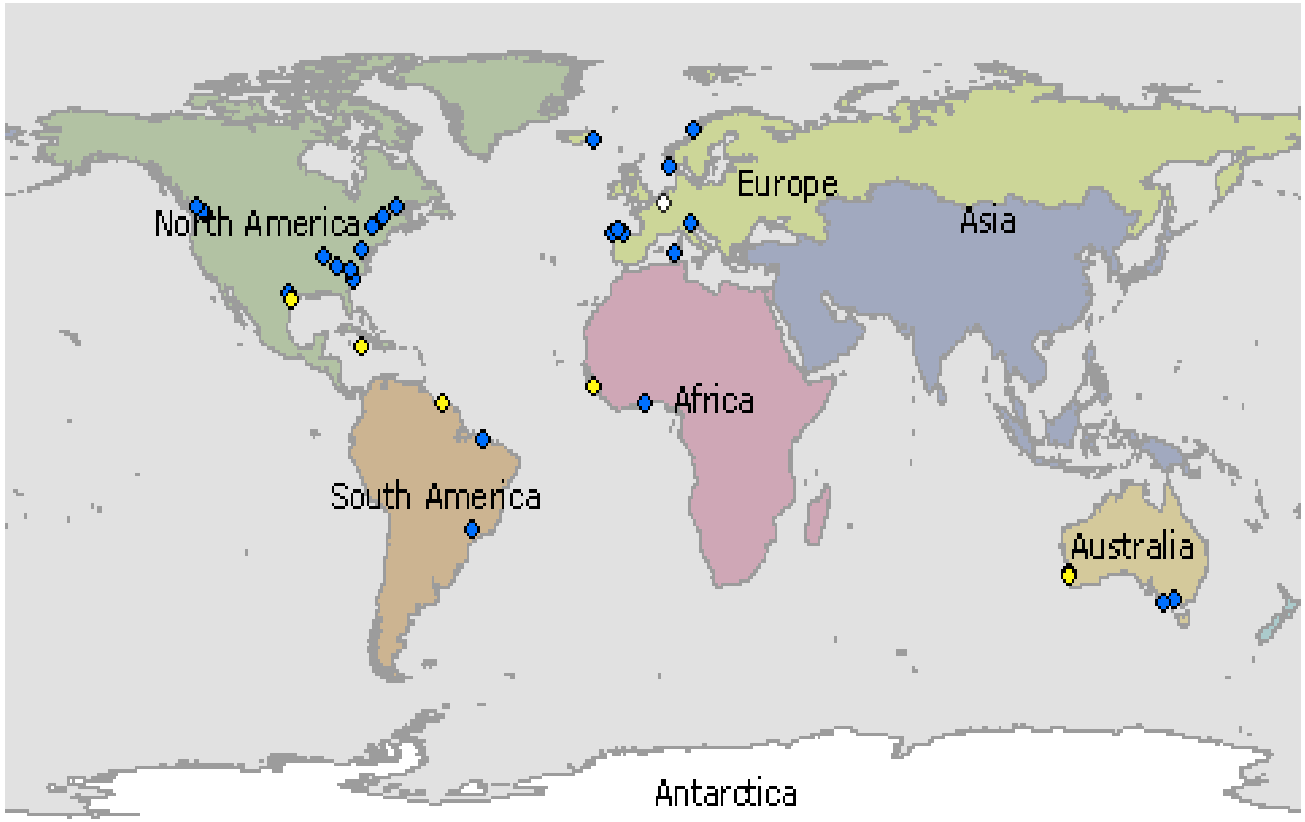
*ALL ELASTIC

"In addition to aluminum products and components, Alcoa also makes and markets consumer brands including Reynolds Wrap®, Alcoa® wheels, and Baco® household wraps. Among its other businesses are closures, fastening systems, precision castings, and electrical distribution systems for cars and trucks."

Source: alcoa website

Alcoa Today

Worldwide: 9 Refineries, 27 Smelters



ALCOA Tomorrow

Flat-Rolled Products

- Brownfield expansion of existing Alcoa facilities
- Deploy multi-stand Hot Mill
- Add acquisitions where attractive
- Focus on high value products
- Target import substitution and export markets

Extrusions

- Focus on domestic and export markets
- Target Industrial sectors
- Grow through acquisition

Castings

- Range of high-end automotive products
- Focus on both domestic and export markets
- Both acquisition and greenfield development

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Conclusions

- ALCOA case followed patters of 3rd degree price discrimination
- Vertical Integration into industry with ELASTIC demand
- Did not violate antitrust laws, considered more of a “highly Competitive firm”- Alan Greenspan

ALCOA Video

- http://www.alcoa.com/global/en/about_alcoa/overview.asp