HOW FIRMS FACE COMPETITIVENESS IN A GLOBAL FOOD MARKET:
THE GOOD, THE BAD AND THE UGLY

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INTRODUCTION

- FIRM COMPETITIVENESS
- TRADE
- POLICY
PRODUCTIVITY GROWTH AND R&D

PLANT-LEVEL PROD. GROWTH: 0.9% FROM 1973-95

<table>
<thead>
<tr>
<th>QUARTILE GROUPS</th>
<th>ANNUAL GROWTH RATE</th>
<th>WHAT’S DRIVING PRODUCTIVITY GROWTH?</th>
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<tbody>
<tr>
<td>LOWEST</td>
<td>-7.2%</td>
<td>EXPANDING EXISTING TECHNOLOGY</td>
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<tr>
<td>LOWER MIDDLE</td>
<td>0.4%</td>
<td>EXPANDING EXISTING TECHNOLOGY</td>
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<tr>
<td>UPPER MIDDLE</td>
<td>2.0%</td>
<td>EXPANDING EXISTING TECHNOLOGY</td>
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<tr>
<td>HIGHEST</td>
<td>8.6%</td>
<td>NEW TECHNOLOGY</td>
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Celikkol, Stefanou and Pompelli, 2005

R&D

● 0.7% OF SALES

● COMPARED TO EUROPEAN RIVALS, U.S. R&D (AS % OF VALUE ADDED) IS 48% OF THE ENTIRE GROUP
R&D EXPENDITURES (% OF VALUE ADDED)

OECD STAN
BEING GLOBAL

WHO IS GLOBAL? (AMONG ALL MFGs)
- Top 1% of firms engaged in trade
  - Account for 81% of all trade among US firms
  - 14% of employment in US manufacturing.

AG AND THE FOOD SYSTEM
- All countries manufacture food & beverages
- Growth limited by local consumer demand.
POLICIES FOCUS ON ....

US-BASED

- GOVERNMENT SUPPORT FOR
  - RAW MATERIAL PRODUCTION
  - EXPORT PROMOTION
  - R&D FOR FOOD SYSTEM INNOVATIONS
- REGULATIONS ADDRESSING QUALITY AND SAFETY OF THE FOOD SYSTEM

REST OF THE WORLD?
- SAME BUT WITH DIFFERENT OBJECTIVES AND TARGETS
WHERE ARE WE HEADED?
FOOD TRADE BALANCE

U.S. Processed food trade balance

U.S. Bureau of Census, ERS classification of processed food
WHERE ARE WE HEADED?
GLOBALIZATION & THE US FOOD MANUFACTURING INDUSTRY

LOOKING TO FDI TRENDS FOR US-BASED MULTINAT’LS

- FDI INTO HIGH WAGE COUNTRIES HAS INCREASED
- FDI FLUCTUATING INTO LOW-WAGE COUNTRIES

WHY?

CONSEQUENCE:
- EMPHASIZING SHORT- TO MEDIUM TERM COST SAVINGS FOR FUTURE COMPETITIVENESS?
EARLY LESSONS

WHAT DO WE KNOW?

- FIRMS TRADE WITH FIRMS
- AGGREGATE TRADE DATA MASK FIRM BEHAVIOR

WHAT DON’T WE KNOW?

- HOW DO FIRMS LOOK TO THE GLOBAL ARENA AS THEY LOOK FOR GROWTH?
- WHAT FORCES WEIGH HEAVILY AS THEY PLAN FOR TRADE?
- IS THERE A NEW ROLE FOR POLICY FOR US FOOD FIRMS FACING A GLOBAL MARKET?
WHAT IS COMPETITIVENESS?

“THE ABILITY OF AN ECONOMIC ENTITY TO CREATE VALUE TO ACHIEVE SUSTAINED GROWTH”

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<tr>
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<th>GROWTH IN GDP</th>
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<tr>
<td>COUNTRY</td>
<td></td>
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<tr>
<td>INDUSTRY</td>
<td>GROWTH IN RETURNS TO FACTORS EMPLOYED</td>
</tr>
<tr>
<td>FIRM</td>
<td>GROWTH IN PROFITS</td>
</tr>
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FACTORS INFLUENCING COMPETITIVENESS AT THE INDUSTRY & FIRM LEVELS

- TECHNOLOGY
- PUBLIC INSTITUTIONS
- QUALITY OF INFRASTRUCTURE
- GOV’T AG & FOOD POLICIES
- FLEXIBILITY (FIRMS)
<table>
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<tr>
<th>REACTIONS</th>
<th>INDUSTRY</th>
<th>FIRMS</th>
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<tbody>
<tr>
<td>THE GOOD</td>
<td>COMPARATIVE ADVANTAGE BALANCES THE EFFORT</td>
<td>♦FIRM-SPECIFIC FACTORS MATTER</td>
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<td></td>
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<td>♦PROMOTES FAIRNESS</td>
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<tr>
<td>THE BAD</td>
<td>♦INNOVATE OR DIE</td>
<td>ZERO-SUM GAME</td>
</tr>
<tr>
<td></td>
<td>♦COMPETITIVE COST STRUCTURES CAN BECOME NON-COMPETITIVE</td>
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<tr>
<td>THE UGLY</td>
<td>TILTING THE PLAYING FIELD</td>
<td>REACTIONS TO GOV'T POLICIES AND DISCOURAGE INNOVATION</td>
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CASE STUDIES:
THREE ENTERPRISES LOOKING GLOBALLY

PARADOX
- AGGREGATE TRADE & FDI STATS
  VS. HOW FIRMS ARE PERFORMING

VIEWING COMPETITIVENESS FROM THE GROUND

- LEADERS IN HOME MARKETS
- BIG, SMALL, INTERNATIONAL
- PUBLIC, PRIVATE, COOPERATIVE

H.J. HEINZ

Snyder’s of Hanover

Fonterra
BIG COMPANY:
H.J. HEINZ & KETCHUP

BACKGROUND

- LEADING MFG & MARKETER OF BRANDED FOOD GLOBALLY
- COMPETITIVE PRESENCE IN CONDIMENTS, SAUCES, READY MEALS, SOUP, TUNA AND BABY FOOD.
- FOCUSING ON 15 POWER BRANDS
- WORLDWIDE: #1 WITH 3.5 TIMES SHARE OVER #2 BRAND (UNILEVER)
HJ HEINZ & KETCHUP: STRATEGY

TAKES GLOBAL PERSPECTIVE WHEN LOOKING FOR GROWTH & PROFITS

- INNOVATION AS KEY DRIVER OF GROWTH
- ELIMINATING INEFFICIENCIES
- GROWTH-ORIENTED GLOBAL ACTIVITIES
- ALLIANCES
- RETAILERS PULLING HEINZ ALONG
- FOOD SERVICE BIG AND GROWING
HJ HEINZ & KETCHUP: REACTIONS TO COMPETITIVENESS

THE GOOD
- MOST EFFICIENT MFG TECHNOLOGY IN THE WORLD
- PACKAGING INNOVATIONS
- PROMOTING HEALTH BENEFITS (LYCOPENE)
- FAST GROWING FOOD SERVICE MARKET

THE BAD
- COVERAGE IN W EUROPE & E EUROPE STILL POOR
- KETCHUP FACING PRIVATE LABEL COMP.

THE UGLY
- US SUGAR POLICIES + EU GMO POLICIES
SMALL COMPANY:
SNYDER’S OF HANOVER & PRETZELS

BACKGROUND

- $350 MIL CO. MFG & MARKETING SNACKS (PRETZELS) FROM PA & AZ PLANTS
- COMPETITIVE PRESENCE IN US
- 10% OF SALES FROM GLOBAL
  - GOAL: 15%
  - 40 DIFFERENT COUNTRIES
SNYDER’S OF HANOVER & PRETZELS: STRATEGY

LOOKING FOR GROWTH AT HOME FIRST, 
........THEN GO GLOBAL

- “MARCO POLO” APPROACH TO INNOVATION
- BUILD ON DOMESTIC DISTRIBUTION SYSTEM
- TAKE IT GLOBAL, SLOWLY
SNYDER’S OF HANOVER & PRETZELS: REACTIONS TO COMPETITIVENESS

THE GOOD:
- EFFICIENT MANUFACTURING
- PRIVATE LABEL COMPETITION NOT A THREAT (AT PRESENT)
- HIGH GLOBAL GROWTH POTENTIAL FOR PRETZELS
- POTENTIAL FOR HEALTH-ORIENTED PRODUCTS

THE BAD:
- HIGH NEGOTIATION COST TO GO GLOBAL
- SHORT SHELF LIFE: LIMITS U.S. AS BASE FOR PRODUCTION
- HIGH CO-PACKING COSTS EXTERNALLY

THE UGLY
- PROCESSED WHEAT PRODUCTS FACING 30% TARIFFS IN EU
FONTERRA COOPERATIVE GROUP (NZ): INTERNATIONAL COOPERATIVE

BACKGROUND

- INGREDIENT COMPANY
- $7.5 BIL INTEGRATED GLOBAL DAIRY FIRM
- COMPETITIVE PRESENCE INTERNATIONALLY
- GLOBAL SALES: 140 COUNTRIES
FONterra Cooperative Group: Strategy

- Adding value to milk abroad

- Expertise in MFG & Marketing dairy ingredients
  - Fractionation technology
  - Willing to partner with competitors
  - Exploit opportunities where others are handicapped by domestic dairy policy

- Build global supply chain

- Tap other countries milk supply
FONTERRA COOPERATIVE GROUP: REACTIONS TO COMPETITIVENESS

THE GOOD
- SUPERIOR TECHNOLOGY
- EFFICIENT RESPONSE TO NEEDS OF FOOD & BEVERAGE INDUSTRY
- DO NOT NEED BRAND TO SELL INGREDIENTS
- HIGH GROWTH DEMAND & EXPANDING USES

THE BAD
- FUNDING INVESTMENT ABROAD
- LOW MARGINS ON NON-BRANDED INGREDIENTS

THE UGLY
- DAIRY POLICY LIMITING MARKET ACCESS
HOW DO FIRMS LOOK TO THE GLOBAL ARENA AS THEY LOOK FOR GROWTH?

NEW MARKETS FOR EXISTING PRODUCTS FOR GROWTH
- LEVERAGING EXPERTISE & CAPACITY TO SERVICE BEYOND DOMESTIC BORDERS
- MATURE DOMESTIC MARKET (Snyder’s)

NOT ON DEVELOPING NEW PRODUCT PLATFORMS

CHALLENGES
- ACCESS
- PRODUCING IN OTHER COUNTRIES NOT A (MAJOR) BARRIER
WHAT FORCES WEIGH HEAVILY AS THEY PLAN FOR TRADE?

POLICIES & REGULATIONS THAT LIMIT THEIR POTENTIAL

REGULATORY PROCESSES NEED TO BE MORE FLUID

- ENTREPRENEURS MOVE VERY QUICKLY
- GOVERNMENT ALWAYS LAGS BEHIND ENTREPRENEURS
WHAT FORCES WEIGH HEAVILY AS THEY PLAN FOR TRADE?

TECHNOLOGY MOVING FASTER THAN POLICY & TESTING ALLOWS

- REGULATIONS AS IMPEDIMENTS TO PROGRESS
- FDA & USDA BOTH HAVE TERRITORIAL CLAIM
  - STANDARDS OF IDENTITY
  - CALORIE SUBSTITUTE
GENERIC OBJECTIVES OF POLICY FOR FIRMS FACING A GLOBAL MARKET

- Promote movement of cross-border factor endowments
- Promote the movement of goods & services
- Rule enforcement
- Structure of markets (e.g., competition, M&A)
- Int’l trade & investment agreements
- Trade policy (tariffs & non-tariff barriers) & coherence of FDI and trade policies
A NEW ROLE FOR POLICY FOR US FOOD FIRMS FACING A GLOBAL MARKET?

POLICY & REGULATIONS

- BEING CAUTIOUS OR
  ........BEING DRAGGED KICKING & SCREAMING?
- NEED TO HARMONIZE ACROSS BORDERS

EMERGING POLICY CONCERNS

- SHIFTING FROM PRODUCT/COMMODITY ORIENTATION
  ......TOWARD PROCESS- & INGREDIENT-ORIENTATION
- FOCUS ON INGREDIENTS
POLICY FORUMS & FOOD FIRMS

- NUTRACEUTICALS
- CALORIE SUBSTITUTES
- HEALTH & WELFARE
- R&D
- GMOs
- TECHNOLOGIES
- FRACTIONATING COMPONENTS
- INGREDIENTS
- MARKETS & PROMOTION
- MILK /SOY COMPONENTS
THANK YOU

QUESTIONS?