The Distribution System

Distribution System

- Wholesale and retail establishment are more numerous and smaller in Japan than US
  - Large number of small stores
  - Twice the per capita number of stores as US

Number of establishments / 1000 people

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>US</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale</td>
<td>3.3</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Retail</td>
<td>14.5</td>
<td>8.3</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Distribution System

- Smaller establishments – workers per establishment

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>US</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale</td>
<td>9.4</td>
<td>12.6</td>
<td>10.1</td>
</tr>
<tr>
<td>Retail</td>
<td>3.7</td>
<td>8.1</td>
<td>5.9</td>
</tr>
</tbody>
</table>

- Large number of wholesalers
  - 42% of wholesale sales are to other wholesalers
  - 25% in US, 16% in Germany

Distribution System

- Legal Structure
  - Extensive use of resale price maintenance
  - Lax anti-trust enforcement allows retail cartels
  - Most important policy was the Large Scale Retail Law (1974)
    - Covered stores that had over a certain minimum floor space
    - Law required that before a large store could be built, the store plan had to be approved
    - Significantly relaxed during 1990s
  - The Law Concerning Measures by Large-Scale Retail Stores for Preservation of the Living Environment was enacted in 1998 and went into effect in 2000
    - Focus on protecting the local environment
**Large Scale Retail Law**

- Construction plans must be brought before a prefectural governor
- Plan then goes to a committee for review
- Often builders must convince local store owners that the store will not hurt their business
- Adjustments are then made to floor space, days open, and hours
- In 1980 MITI issued guidance that suggested that this process should take 2 years
- Process leads to delays in opening large stores and additional costs as entrepreneurs have to buy off their opponents

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**Distribution System**

- Land costs – high land cost means it is difficult to store goods in houses
- Is the system inefficient?
  - Restrictions of competition should lead to excess profits and inefficiencies on the part of the distribution system

---

**Distribution System**

<table>
<thead>
<tr>
<th></th>
<th>Maruyama (1989)</th>
<th>Japan</th>
<th>US</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>wholesale sales/worker</td>
<td>390</td>
<td>272</td>
<td>173</td>
<td></td>
</tr>
<tr>
<td>gross profit margin</td>
<td>11.2</td>
<td>19.4</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>retail sales/worker</td>
<td>62</td>
<td>69</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>gross profit margin</td>
<td>27.1</td>
<td>31</td>
<td>34.2</td>
<td></td>
</tr>
<tr>
<td>value added/worker</td>
<td>.76</td>
<td>.70</td>
<td>.68</td>
<td></td>
</tr>
</tbody>
</table>

- People have argued that the system is inefficient, difficult to penetrate, results in high mark-ups, and constitutes a trade barrier
- Is this situation changing?
  - Yes
  - Gradual increase in size of retail establishments
  - Workers per establishment rose from 2.7 (1960) to 4.2 (1988)
Distribution System

- Large Scale Retail Law was significantly relaxed in three revisions during the 1990s
- The number of applications for opening large-scale stores jumped from 794 in 1989, to 1,667 in 1990, and to 2,269 in 1996.
- From 1991 to 1997 the number of retail establishments fell by 185,000 (11.6 %)
- The number of wholesalers fell by 70,000 (15.2 %)
- The number of large general superstores increased by 390 (33.9 %)
- Convenience stores rose by 12,755 (53.5 %), grocery supermarkets by 3,000 (19.5 %) and household superstores by 6,200 (162 %)

Top Retailers

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daiei</td>
<td>17</td>
<td>1</td>
<td>Wal-Mart Stores</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ito-Yokado</td>
<td>2</td>
<td>3</td>
<td>Sears Roebuck</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Jusco</td>
<td>12</td>
<td>12</td>
<td>Dayton Hudson</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Mycal</td>
<td>3</td>
<td>4</td>
<td>J.C. Penny</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Takashimaya</td>
<td>5</td>
<td>5</td>
<td>Home Depot</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Seiyu</td>
<td>4</td>
<td>4</td>
<td>Kroger</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Seibu</td>
<td>3</td>
<td>3</td>
<td>Safeway</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>Marui</td>
<td>9</td>
<td>10</td>
<td>Costco</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>

Seven Eleven Japan

- Highest grossing retailer in Japan
- ¥2.3 trillion in sales in 2003
- 986 visits per store per day in 2004
- ¥639,000 average daily sales per store
- 50% productivity advantage over US counterparts
Seven Eleven Japan

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>York Seven Co., Ltd., established</td>
</tr>
<tr>
<td>1978</td>
<td>becomes Seven-Eleven Japan Co., Ltd.</td>
</tr>
<tr>
<td>1982</td>
<td>POS system introduced</td>
</tr>
<tr>
<td>1987</td>
<td>three-times-a-day delivery starts</td>
</tr>
<tr>
<td>1991</td>
<td>acquires Southland Corporation</td>
</tr>
<tr>
<td>2003</td>
<td>total stores reach 10,000</td>
</tr>
</tbody>
</table>

Seven Eleven Japan

- "Tanpin Kanri"
- Management by stock-keeping unit
- Slow moving merchandise is quickly phased out, fast moving merchandise volume is increased
- New merchandise is brought in to replace the items lost
- The total SKU count is maintained around 2,800

Seven Eleven Japan

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (¥ billion)</th>
<th>Stores</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seven Eleven</td>
<td>¥2,343</td>
<td>10,303</td>
</tr>
<tr>
<td>Lawson</td>
<td>¥1,285</td>
<td>7,821</td>
</tr>
<tr>
<td>Family Mart</td>
<td>¥954</td>
<td>6,199</td>
</tr>
<tr>
<td>C&amp;S</td>
<td>¥884</td>
<td>6,152</td>
</tr>
</tbody>
</table>

Beer Industry
Keiretsu and Beer

- Mitsubishi – Kirin
- Fuyo – Sapporo
- Sanwa – Suntory
- Sumitomo - Asahi

Types of Beer

- Lager beer
  - Traditional, richer tasting, heat pasteurized in the end, cold fermented, aged 20 - 70 days, Pilsner
- Draft beer
  - Lighter tasting, not heat pasteurized in end
- Dry beer
  - Draft beer fermented to a greater extent, less sugar, more alcohol, sharper taste

History

- Beer industry begins in late 1800s
  - Fragmented industry
- Before 1940s, beer is novel and expensive
- 1940s
  - Dai-Nippon has 75% market share
    - Group of companies, localized brands, common ownership
  - Kirin has 25% market share
  - Beer is supplied to soldiers during WWII
  - Masses of Japanese exposed to beer for the first time
  - Like richer, heavier and more bitter taste than today’s public

Post War History

- After WWII the occupation forces split up concentrated industries
- In 1949 Dai-Nippon is split into Nippon and Asahi, and Nippon becomes Sapporo
- Market shares
  - Sapporo 38.6%
  - Asahi 36.1%
  - Kirin 25.3%
Beer History

• 1963 Suntory, Japan’s oldest and largest distiller, enters beer market
• Over time Kirin builds formidable empire
  – 1949 market share 25.3%
  – 1976 market share 63.8%
• Kirin is the only national player after WWII
  – Dai-Nippon split geographically
    • Asahi – Western Japan, Osaka but not Tokyo
    • Sapporo – Eastern Japan, Tokyo but not Osaka
  – Businessmen who travel between Tokyo-Osaka want to drink the same beer

• Kirin focuses on home market (only 25% of market)
  – Develops extensive distribution market
  – Grows with home refrigerators
  – Sapporo and Asahi focus on commercial market
• Kirin develops image as top quality
  – “the beer of beer lovers”
  – Top 10% of beer drinkers consume 50%
  – To 20% consume 75%

Beer

• Late 1970s and early 1980s
  – Product differentiation – packaging and product image
  – Numerous sizes of beer cans and bottles
• 1977 “mini barrel” introduced by Asahi for home parties
• 1980s Suntory provides beer in unique packages like animal shapes

• Sapporo, Asahi, and Suntory push draft beer
  – Quality control of draft beer is difficult
  – Only served fresh at beer halls in summer
  – No bottled or canned draft beer until 1960s
  – Kirin does not sell draft beer for home consumption until 1985
  – Draft beer is 41% of the market
**Beer History**

- Sapporo and Asahi experience slow decline in market share
  - Asahi allows Suntory to use its distribution channels
  - Suntory draws even with Asahi by 1985
  - Looks like Suntory will eventually take over Asahi

- 1986 Market Shares
  - Kirin 60%
  - Sapporo 21%
  - Asahi 10%
  - Suntory 9%
  - Imports 0.15%
  - Orion Brewery (Okinawa)

**Beer History**

- Japanese beer drinkers said to be loyal
- Asahi is in trouble
- New Asahi Draft is introduced in 1986
  - Extremely risky for Asahi to change taste of its core product
- Asahi “Super Dry” introduced in 1987

- 1988 Market share
  - Kirin 56.2% lager beer
  - Asahi 20.5% dry beer
  - Sapporo 18.2% “black label draft”
  - Suntory 4.7% 100% malt beer
  - Orion
Kirin and Asahi

Beer History

- Microbrew (regional beer) (ji-biru)
  - 1994 Government regulations liberalized
    - Anyone can open up their own small brewery
  - By 1996 about 50 small independent small brewers
  - 1997 Asahi Super Dry becomes #1 beer brand
  - 2002 Asahi overtakes Kirin, buys Orion
  - 2003 Market Shares
    - Asahi 39.3%
    - Kirin 33%

Traditional Views

- “Japan and its acolytes, such as Taiwan and Korea, have demonstrated that in head-on competition between free-trading societies and capitalist developmental states, the free traders will eventually lose.” James Fallows
Traditional Views

- “The US must either begin to compete with Japan or go the way of the USSR… Even if they must ignore or fire some academic economists, Americans can no longer ignore the view that ‘countries that try to promote higher value, higher-tech industries will eventually have more of them than countries that don’t.’” Chalmers Johnson

Traditional Views

- Institutional framework is key to Japan’s success
  - Government forms consensus and guides investment
  - Complex set of policies that work together to achieve national goals
  - Usually centers around administrative guidance, targeting, planning, and non-coercive suggestions
- Usually people focus on targeting
  - Implies that the government used a variety of policies to develop certain industries

Traditional View

- Definition:
  - The systematic selection of industries to be encouraged or discouraged by government action or deliberate inaction
  - Use of various government policy measures to deliberately restructure industry over time toward higher value added, higher productivity industries
  - Anticipate rather than react to international competitive or comparative advantage
    - → moving into particular sectors
    - → moving out of other sectors

GOALS

- Move economy into high growth sectors
  - Coordinate government policy
  - Remove anti-trust laws which hinder international competitiveness
- Move labor and capital from uncompetitive sectors with a minimum of social disruption
- Encourage productive investment of capital in high risk, large scale, or long projected payback projects
- Promote R&D where public returns > private returns
History of Industrial Policy

- 1949 – 1965
  - Policy to revive and expand basic manufacturing industries
  - Coal, steel, electric power, transport industries, automobile, petrochemicals, petroleum refining, and machinery industries
- 1965 – 1973 (Transition Period)
  - Japan joins GATT in 1963, and IMF and OECD in 1964
  - Liberalization of trade policies
  - MITI shifts from basic manufacturing to knowledge intensive industries
- 1973 – present
  - Continue trends of second period
  - MITI adopted additional measures to facilitate structural adjustment and capacity reduction in the declining industries after first oil crisis

<table>
<thead>
<tr>
<th>Phase In (R&amp;D funding)</th>
<th>Mature Phase (exporting)</th>
<th>Phase Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950s</td>
<td>unskilled labor intensive (textiles)</td>
<td></td>
</tr>
<tr>
<td>1960s</td>
<td>capital intensive, steel, motorcycles, ships, cameras</td>
<td></td>
</tr>
<tr>
<td>1970s</td>
<td>automobiles, color TVs, electronics</td>
<td>textiles, chemical fertilizers, aluminum, ship building, synthetic textiles</td>
</tr>
<tr>
<td>1980s</td>
<td>knowledge intensive, computers, telecommunications, medical instruments, information related industries</td>
<td></td>
</tr>
</tbody>
</table>

Economics of Targeting

- Markets may not be perfect
- If there are externalities or economies of scale, then it makes sense to go after certain markets
  - Under these conditions, restricting imports will enable domestic producers to develop economies of scale and dominate international markets
Economic of Targeting

- Need to remember there will be winners and losers
  - Helping one industry pulls resources from all others (including other industries with economies of scale)
  - Welfare does not equal profits
    - Foreign subsidies greatly benefit domestic consumers
- Intervention in certain markets (capital markets) may require compensating interventions in other markets

The Formal Policy Tools

- Capital Market Controls
- Trade Measures
- Tariff Policy
- Standards Protection
- Subsidies
- Tax Measures

The Policy Tools

- Capital Market Controls
  - Restrictions on capital flows (in & out) until 1980
  - Equity, bond, and interest rate restrictions
  - Window guidance (moral suasion)
    - Direct limits on discount window borrowing
    - Quantitative limits on bank lending
  - Overloan system
    - Banks make more loans than private market can fund
    - BOJ makes up the difference
  - Restrictions on opening of bank branches
  - FILP, postal savings, and government investment institutions

The Policy Tools

- Capital markets
  - Other capital controls
    - Restrictions of foreign inward direct investment until 1980
    - Closure of capital markets kept interest rates low until 1980
    - MITI controlled access to foreign currency until 1970s
The Policy Tools

- Trade measures
  - Many Japanese bureaucrats in postwar period were trained during WWII
    - Didn’t understand “gains from trade”
    - Didn’t trust in price mechanism
    - Believed in direct controls
  - Faced problem in 1955 when yen was overvalued ($1 = ¥360)
    - Led to enormous pressure to import
    - Without capital controls, it is not a problem
    - But Japan had capital controls, so Japan was running balance of payments deficits

The Policy Tools

- Trade measures
  - Three possible solutions to overvalued yen
    - Do nothing and allow for a large deflation
      - Can be very painful
    - Devalue the yen under Bretton Woods
      - Didn’t trust the price system
      - Had pride in “value of currency”
    - Take direct controls on imports and try to promote exports

MOF/MITI Approach

- MOF/MITI controlled access to foreign currency
- Allocated it mainly to support imports of raw materials and machinery
  - Discriminated against consumer goods
  - Japanese consumers were big losers
- Thus prices of raw materials in Japan were too low and prices of consumption goods were too high
- Led to large number of restrictions on imports
  - High tariffs
  - Around 2000 quotas
  - Other barriers were necessary

Problem

- MITI approach led other countries to discriminate against Japanese products
  - Many countries remembered the import surges of the prewar period
  - MITI had to bring down domestic barriers in order to bring down foreign barriers
  - Heavy use of quotas until 1963
    - Removed 1837 quotas between 1960 – 1963
    - Had 192 quotas in 1964, and only 69 by 1972
  - Many trade barriers came down in 1964 when Japan became a full member of GATT
    - Led to reduction of foreign barriers as well
Problem Solved

- Japanese exports rose more than imports (to MITI’s surprise)
  - Resolved Japan’s BOP problem
  - MITI policies may have hurt Japan
    • Perhaps they should have liberalized earlier
  - MITI learned it could do fine without barriers
    • Gradually MITI became more free trade oriented
    • Most residual barriers were lifted over the next decade

Tariff Policy

- High tariffs on products which competed with infant industries
  - Automobiles
    • Most protection lifted in late 1950s
    • Some 40% tariffs on certain types of autos until 1968
    • Import surges of Japanese cars didn’t start until much later (after much of the protection was removed)

Tariff Policy

- Steel
  • Much of the protection of steel was lifted in early 1960s
- Telecommunications
  • Heavy protection
  • But everyone was protected until 1980s
- Computers
  • Tariffs of 22% in 1972
  • Also had tariffs on Integrated Circuits (ICs)

Tariff Policy

- Current situation
  - Non-agricultural tariffs are lower than US and EU
  - Special tariffs on computers and ICs have been eliminated
  - Virtually no quotas
    • Only on charcoal briquettes, a few types of leather goods, and a few agricultural items
Standards Protection

- Still exists in pharmaceuticals
  - Government does not accept test data on non-Japanese
- Some argue it is present in cars
  - But poor performance of US car makers in their markets suggests this is probably not so important

FDA Public Health Advisory on Crestor (rosuvastatin)

Astra-Zeneca Pharmaceuticals today released a revised package insert for Crestor (rosuvastatin) (link to FDA approved labeling). The changes to the label include results from a Phase 4 pharmacokinetic study in Asian-Americans and highlight important information on the safe use of Crestor to reduce the risk for serious muscle toxicity (myopathy/rhabdomyolysis), especially at the highest approved dose of 40 mg. At this time, the FDA is also making statements about the muscle and kidney safety of Crestor based on extensive review of available information.

March 2005

Subsidies

- Very little subsidization of Japanese manufacturing
- Government subsidies are usually less than 0.1% of value added
- Big exception is in agriculture
  - Agricultural subsidies account for 50% of total subsidies
  - Orders of magnitude less than US and Europe

Subsidies

- Especially true in high tech industries
  - US supports 30% industrial R&D
  - Japan supports only 1 - 2%
- Japanese government R&D expenditures highly concentrated in primary sector and transportation
  - Supports 16% of agricultural R&D
  - Supports 19% of mining R&D
  - Supports 28% of railway, aircraft and shipping R&D
  - In most high tech sectors, subsidies < 1% of R&D
Subsidies

- **Example**
  - Semiconductors in 1970s
    - Japanese government spent $48 million on semiconductor research
    - Germany spent $230 million
    - US spent $90 million on non-DOD and $310 million on DOD
  - Big difference between Japan and rest of the world
    - France subsidizes 72% aircraft R&D
    - US subsidizes 50% of machinery R&D

Tax Measures

- **Tax breaks are major method of industrial policy in US and most OECD countries**
- Japan does not seem to be different from most countries
  - In 1950s and 1960s Japan used a lot of tax measures to stimulate industries
    - Accelerated depreciation allowances
      - In 1950s 50% of cost of a new auto plant could be written off in first year
    - Low tax on profits
    - But used so heavily that they probably canceled each other out
  - In 1950s 50% of cost of a new auto plant could be written off in first year

Tax Measures

- **Today Japanese taxes seem more harmonized than those in other countries**
  - US has lots more special tax credit programs
  - Effective tax rates vary considerably
    - 20% in petroleum products
    - 130% in electrical machines
    - 145% in rubber
  - Japanese effective tax rates range 35% - 44%
  - US taxes provide $2 billion incentive to R&D
  - Japanese taxes only provided $140 million (1981)
  - Objective of Japanese tax system seems to be to remove distortions

Does Targeting Work?

- **Problem with case studies**
  - Researcher bias, source bias, survivor bias
- **Some industries succeeded with support**
  - Steel, shipbuilding, semiconductors
- **Some industries failed with support**
  - Aluminum, commercial aircraft, coal, chemicals, pharmaceuticals, computer software
- **Some industries were successful without government help**
  - Sewing machines, cameras, bicycles, motorcycles
  - Pianos, radios (1950s, 1960s)
  - Color TVs, tape recorders, magnetic tapes
  - Textile machines, ceramics, robotics
Does Targeting Work?

- Industrial policy was not implemented as MITI planned
  - MITI is not GOD
  - MITI tried to cartelize the auto industry in the 1950s and early 1960s into one or two firms
  - Sony and the transistor
  - Honda and cars