#### **KAABA Symposium**

The Transformation and Choice of Automobile Industry Post-Global Financial Crisis

June 23, 2010

# Challenge and Reorganization of Japanese Automobile Industry in the 21<sup>st</sup> Century

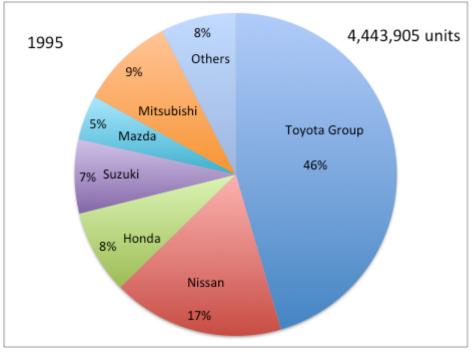
Dr. Professor, and Dean of the Faculty of Economics
Okayama University

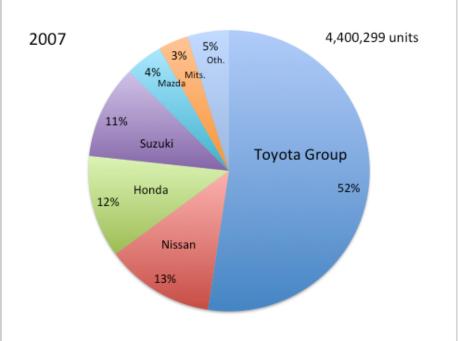
## Content

- 1. Status quo of Japanese Automobile Industry
- 2. Regrouping and Alliances of Japanese Carmakers
- 3. Divergent Strategies and Difficulties Faced

#### Market Shares in Japan, from 1995 to 2007

- Toyota group (extended), Honda, and Suzuki have increased their share, and Toyota group has overwhelming share now.
- Nissan and Mitsubishi are losers: Mitsubishi, with its degraded brand image after concealment of car defects resulting to fatal accidents; Nissan, with no obvious reason.



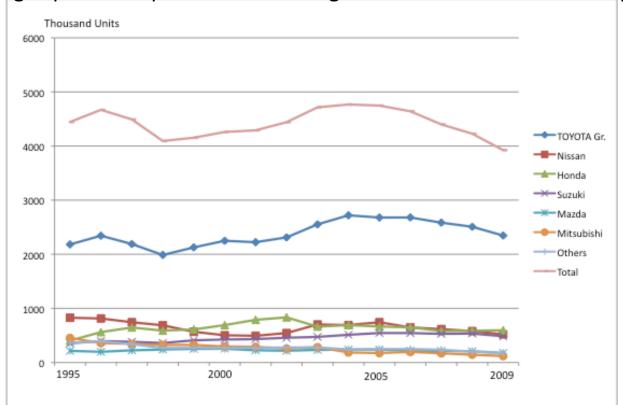


Sales Volume of Carmakers on Japanese Market

-The Japanese automobile market began to slow down around 2005 earlier than

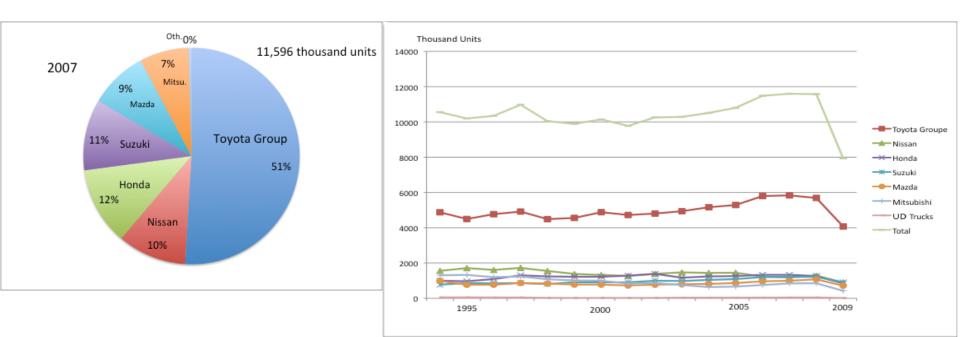
the world financial crisis.

- This is due to stagnant purchasing power of Japanese people, provoked by the leading exports companies' cost cutting measures to boost cost competiveness.



#### Production of Japanese Carmakers in Japan, 1994-2009

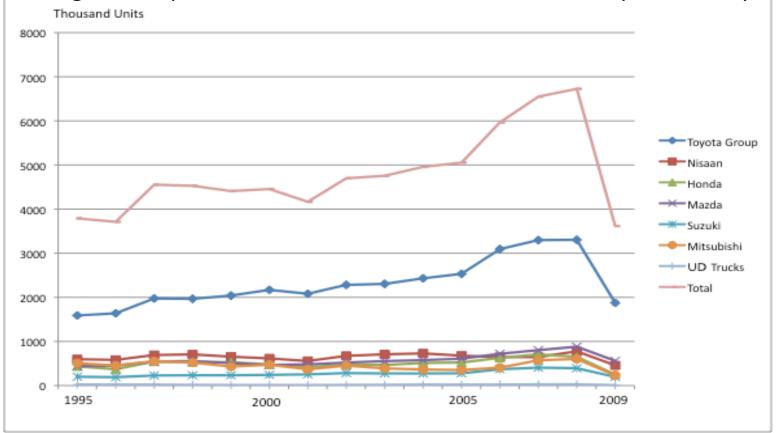
- Until 2007, only Toyota had tendency to increase production volume.
- Production volume of the others was stagnant or decreasing.
- Decline of Mitsubishi and Nissan is observed.



Exports of Japanese Carmakers, 1995-2009

- The movements in the export and the production areas exhibit a similar tendency.

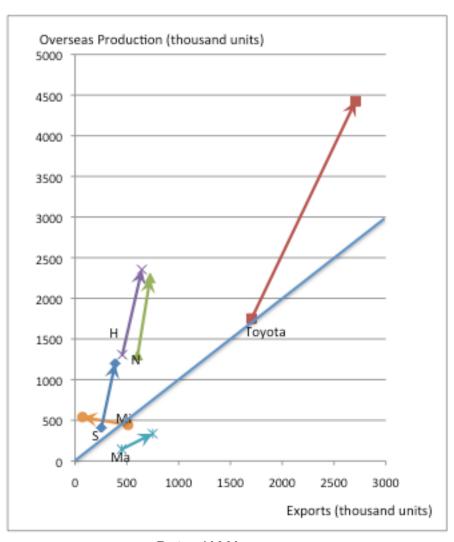
- The negative impact of the world financial crisis on the exports is very important.



Data: JAMA

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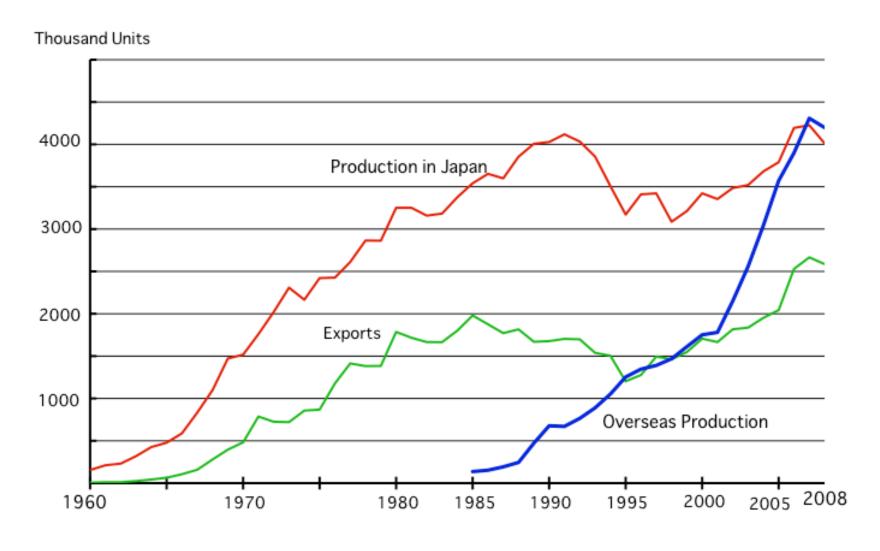
Shift from Exports to Overseas Production, from 2001 to 2007



#### Observed facts:

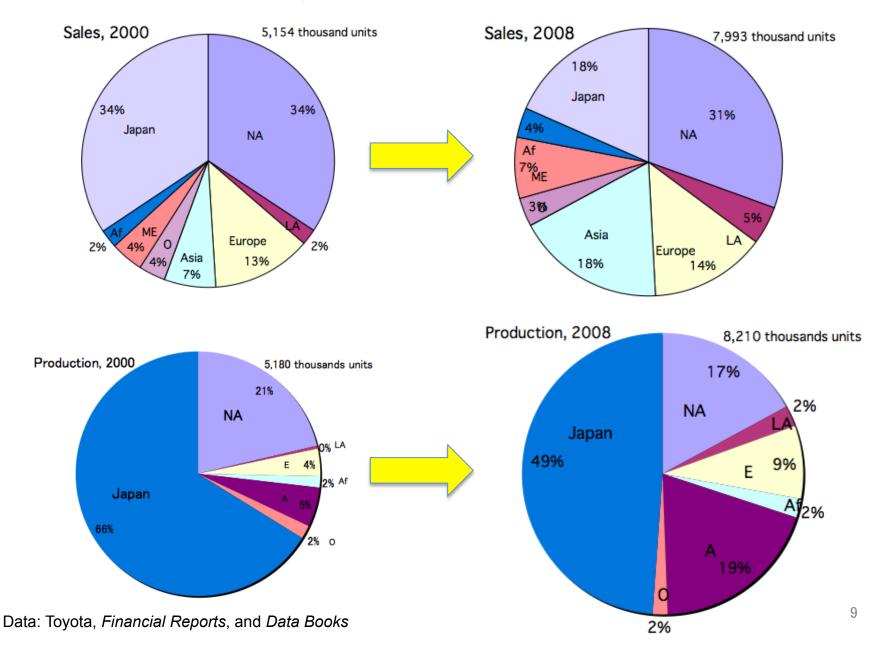
- -Toyota, Nissan, Honda, and Suzuki have increased their exports and overseas production.
- The growth of the overseas production of Nissan, Honda, and Suzuki was faster, though on a lesser scale, than Toyota.
- -Two atypical movements can be observed: at Mazda, its exports have grown faster than its overseas production; at Mitsubishi, its overseas production has almost replaced its exports.
- -So, the Japanese carmakers, except two, have rapidly globalized its production, and became dependent on their overseas business.

# Ad. to 1. Toyota's Evolution



Data: Toyota, Financial Reports, and Data Books

## Ad. to 1. Toyota's Sales and Production



#### 2. Regrouping and Alliances of Japanese Carmakers

Extension of Toyota Group, even though potential in 2010

#### **Toyota Group Carmakers**

(shareholding ratio of Toyota in 2009)

Affiliated carmakers

Daihatsu (51.2%)

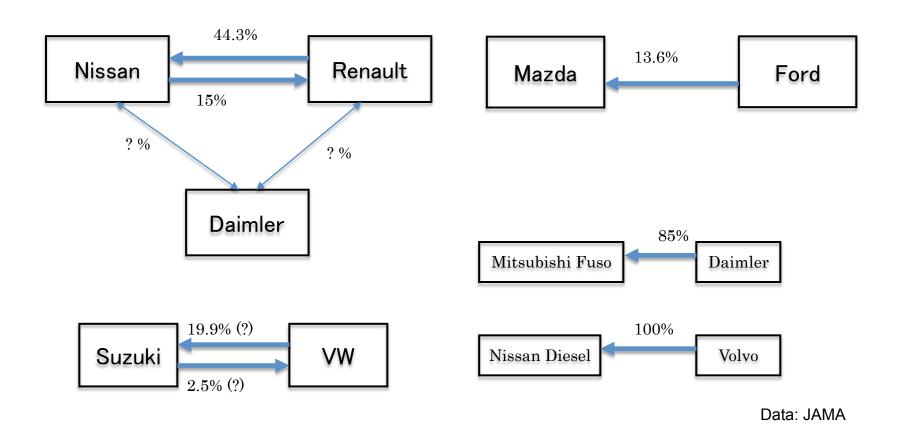
Hino (50.1%)

Carmakers having capital ties Subaru (16,61%) Isuzu (5.9%)

- ♦ Because of their managerial crisis
  - → Daihatsu have been in capital and business alliance with Toyota since 1968, and became its affiliated company in 1998.
  - → Hino have been in capital and business alliance with Toyota since 1967, and became its affiliated company in 2001.
- ♦ Because of the managerial crisis of GM
  - → Toyota started a business cooperation with Subaru and Isuzu after acquiring a part of their equity, possessed by GM.

#### 2. Regrouping and Alliances of Japanese Carmakers

Alliance with foreign carmakers



Mitsubishi failed to conclude a capital and business alliance with PSA group. Has Honda chosen "solo" as Toyota?

#### 2. Regrouping and Alliances of Japanese Carmakers

Alliances for the automobile production in China

#### 

- ♦ With FAW
- - **♦ GAC Toyota Motor**

#### ♦ Nissan

- ♦ with Dongfeng M.G.
  - ♦ Dongfeng Motor
- → Honda with Dongfeng M.G.
  - ♦ Dongfeng Honda Automobile
  - → Honda Automobile (China)

#### ♦ Suzuki

- ♦ With Changan Automobile
  - Chongqing Changan Suzuki Automobile
- ♦ With Changhe Group
- ♦ Mazda with Ford and Chongqing Changang Automobile
  - ♦ Changang Ford Mazda Automobile
- ♦ Mitsubishi with
  - ♦ Hunan Changfeng Automobile
  - ♦ South East (Fujian) Motor
- ♦ Isuzu with Qingling Motor
  - ♦ Nissan Diesel with Dongfeng Nissan Deasel Motor

> Bet for the future : Hybrid vs. electric

Hybrid car groups: Commercial success (Prius and Insight)

Toyota's system: Toyota group, including Subaru and Mazda

Honda's system: Honda

Electric vehicle group: experimental stage not profitable yet; crapshoot of Carlos Ghosn? 100km per charge!

Renault-Nissan, and Mitsubishi

- ❖ In the short and medium terms, the hybrid car segment is growing and becomes dominant, and EV remains only a topical issue due to the lack of the necessary infrastructure for recharge, as well as electric generating capacity (what happens if many people recharge their EV every day? Need to construct many nuclear power plants?).
- ❖ In the long term, the future of ecologically friendly cars may lie not in the EV, but in the hydrogen fuel cell vehicle: 2H + O=H₂O, unlike the bet of C. Ghosn.

- ➤ Not sure, but launching ecologically friendly cars seems 'causa sine qua non' for carmakers.
- ➤ This led the carmakers behind in R&D to new alliances, in order to share the huge investment into R&D of which the success isn't assured.
  - > VW and Suzuki alliance
  - Daimler and Renault-Nissan alliance
  - Mazda adopting Toyota's hybrid system
- ❖ It isn't clear which kind of technology VW-Suzuki and Daimler choose.
- ❖ VW Suzuki maybe go into the Hybrid group.
  - ❖ What is sure is that Toyota and Honda are developing also EV and hydrogen fuel cell vehicle technology, and the success of Hybrid car sales contributes financially to their R&D.

- > Response to the globalized competition
  - Entry into the emerging markets (BRICs)

Brazil: success of Toyota after long years efforts

Russia: difficulty for Toyota, Mitsubishi, and Suzuki to enter

India: market domination of Suzuki, but difficulty for Toyota to increase its share

China: all carmakers, but Toyota, facing difficulty to set in place TPS.

- ❖ Entering the new emerging markets remains difficult, and the success can only be assured by long term efforts: the cases of Suzuki in India, and Toyota in Brazil.
- ❖ Importance is in profitability, and not being present everywhere.
- ➤ Delocalizing production for cheaper small car business

  Nissan decided on the local production of the March in Thailand to import to Japan: the same strategy as Renault.
- This strategy may be profitable, but harmful to the home country economy. Does history repeat itself?

- ➤ About the difficulty Toyota actually faces
  - ➤ The fundamental problem resides in its too rapid globalization of production.
    - ➤ Its global production has increased from 4,000 thousand units in 1990 to 8,534 thousand in 2007, passing through 5,173 thousand in 2000.
    - It causes a management problem in expanded overseas sales and production operations. Toyota has been trying to set in place the regional headquarters by the region: North America, Europe, and Asia (except China), not to be achieved yet. And the management of worldly expanded production operations has not been invented yet.
    - ❖ Toyota could not apply its transactional conventions to foreign suppliers. How could an American supplier provide its transplants in North America, Europe and China? Here exists a management problem of supply chain outside of Japan.

- ➤ Product development and decision making at Toyota remain centralized, and the number of employees of Toyota Japan remains stable, if slightly reduced: 70,841 in 1990, 65,290 in 2000, and 69,478 in 2008, of which around 3,000 employees are dispatched to the transplants, etc. to help or manage them.
- ❖ Toyota will need more engineers. Considering the increase and diversification of the car models and their derivatives, the current number of engineers, around 20 thousand, seems insufficient for the big company such as Toyota, even if they receive cooperation from the engineering department of its body makers (Toyota Auto Body, Kanto Auto Works, Daihatsu, Hino). As a matter of course, there's a possibility that they cannot sufficiently check out their products.
- Anyway, Toyota has to revise and invent, maybe, a new and unprecedented way of managing its world-wide production and sales network which has become too big. This, of course, can be achieved as long as Toyota can survive the bitter affaires in North America.

Thank you for your kind attention.