

Ching-Cheng Chang
Research Fellow
Institute of Economics, Academia Sinica

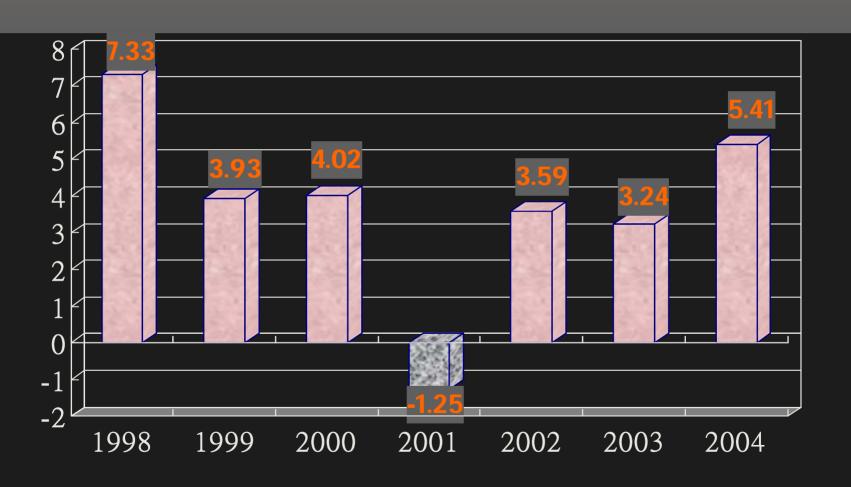
Macroeconomic Situation

- ⇒2003 3.24% growth (lower than 2002)
 - SARS in the 1st half of year
 - -Previous estimates: Before +3.4% v.s. After 2.9%~1.9%
 - Consumption: -1.81% in 2nd quarter.
 - Emergent relief → Government fiscal budget deficit
 - -I: 3.53% growth; II: -0.08% growth
 - Stronger in 2nd half
 - —III: 4.18% growth; IV: 5.17% growth
 - Led by strong export expansion

Macroeconomic Situation

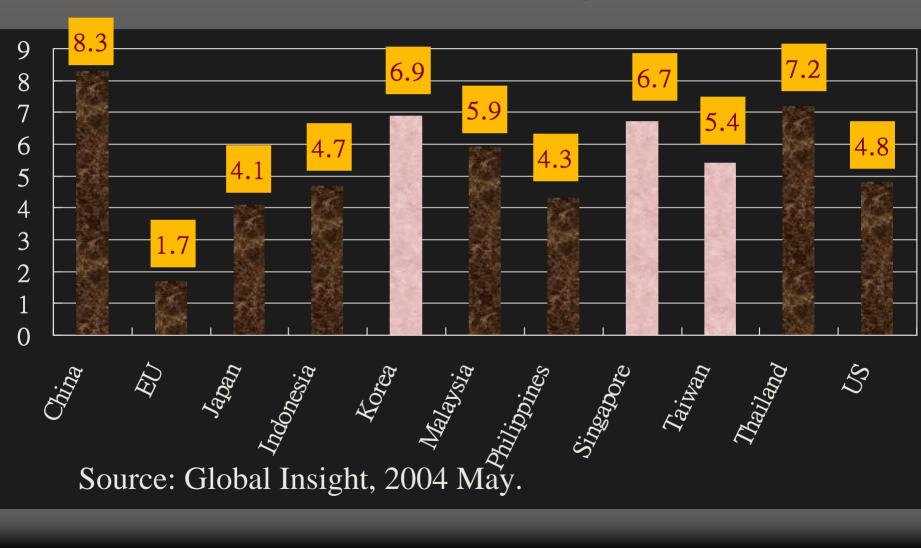
- ⇒2004 5.42% growth
 - Recovery of world economy
 - Export expansion & domestic demand
 - Private investment 23% increase
 - High-speed railway
 - Sixth naphtha cracking plant
 - Photonics & telecom industry
 - Export —17% increase
 - Import 23% increase (rising oil & material prices)

GDP growth—1998 - 2004

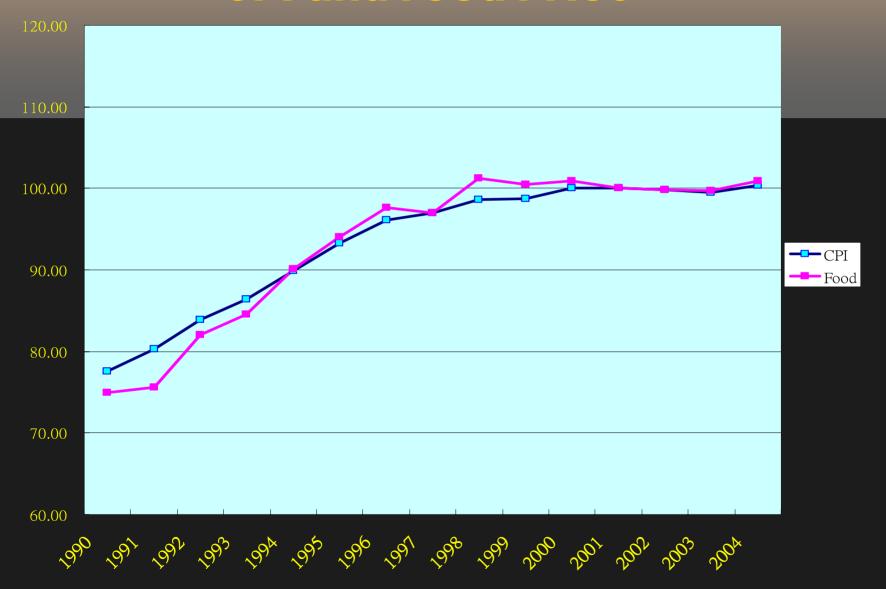


GDP growth in 2004-

International Comparisons



CPI and Food Price



Uncertainties

- Rising oil and raw material prices
 - ■WPI increase -- 4.1%
 - Import price increase -- 6.0%
- **⇒** Post-election dispute
- High unemployment rate
- Cross-strait relationship

Food System

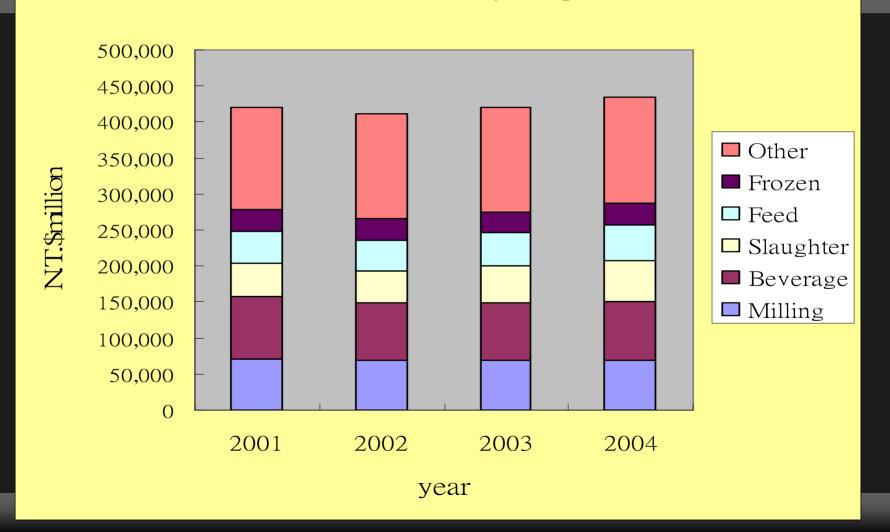
- **⇒**Price
- **⇒**Consumption
- **⇒**Production
- **⇒**Trade
- ⇒Processing
- **⇒**Marketing
- **⇒**Policies

Food Consumption & Prices

- ⇒ 2003—Weakened by
 - SARS outbreak
 - Pork & chicken drug residue
 - Seafood rejected by EU for antibiotics
- **⇒** 2004—Weakened by
 - Poultry Avian flu (H5N2 strain)
 - Rice, oranges, etc. Import competition

Food Processing

2001-2004 Food Industry Output Value



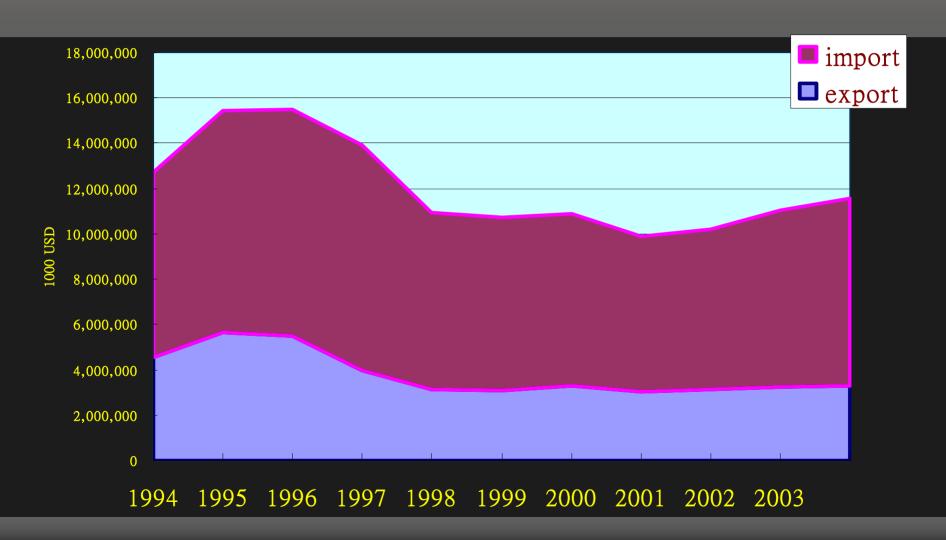
Food processing in 2003 - 2004

- **⇒** 2003 1.9% increase from 2002
 - ■Up: Cooking oil (20%), Feed, Meat
 - Down: Frozen, Dehydrated, Rice milling, Tea
- ⇒ 2004 3.5% increase from 2003
 - Better economy and domestic demand
 - Inward -looking Outward-looking
 - New joint venture and market expansion in China

Food Production

- ⇒ 2003 -- negative growth
 - Severe drought
 - Rice 8%, vegetable 11%
 - Hog and poultry 2%
 - Fishery 4.4% growth
- ⇒ 2004 -- negative
 - Drought continues
 - Shadow from Avian flu
 - Import competition

Food Imports & Exports



FOOD Policies

- ⇒ Financial Reform— agriculture credit unions
 - New agriculture finance law
 - New institution National farmer co-op bank
- Rice Policy Reform
- Marketing and Export Promotion
 - Lack of scale
 - Quarantine issues
- Strengthening SPS Measures for Food Safety



Infrastructure

- **⊃**Hardware— quantity
- **⇒**Software—deregulation, privatization

Domestic market

- Consumption (22 million population)
 - 43% in the North
 - 55% in Central & South
- ⇒ Production—
 - 75% farmland in Central & South
 - 75% farmers in Central & South
- North-South corridor

International Market

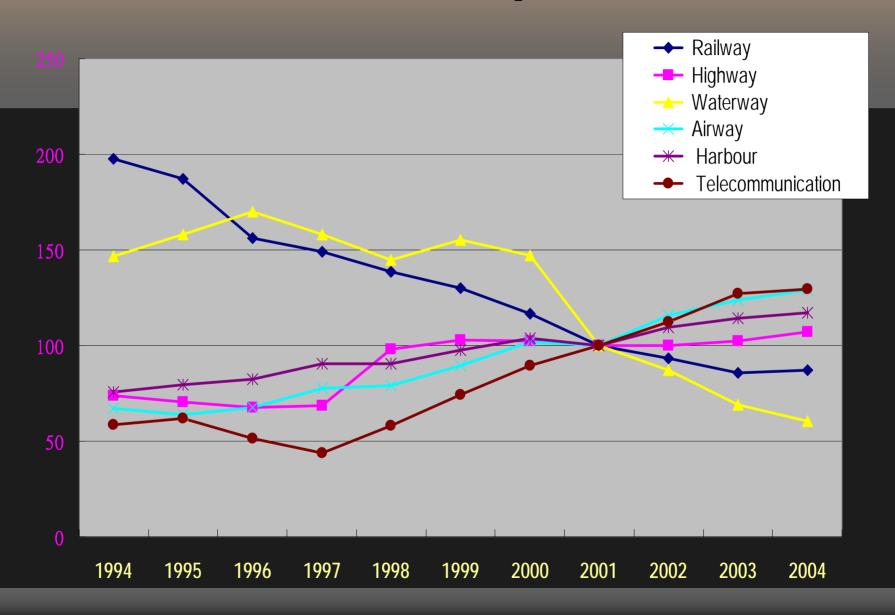
⇒Imports

- U.S. (33%)
- Australia, Japan, Thailand, China, Malaysia, New Zealand, Indonesia, Canada (3-5%)

Exports

- Japan (34%)
- Hong Kong (23%)
- ■U.S. (10%)
- Vietnam, Korea, China

nothatrogenart to xebut emuloV



Waterway

- Ocean country by nature
- National flag vessels declined sharply
 - → 50% decrease over one decade
- Consequence → National security in war
- Causes (by Evergreen tycoon)
 - Govt negligence in shipping policy
 - Policy toward China

Railroad

- Decrease from 2 billion to 0.8 billion ton-km
- → Agro-food accounts for 12%
 - → Decline from 2.9 million tons to 1.4 million tons
- ⇒ High-speed railway (US\$14 billion)
 - Largest BOT project globally
 - Largest infrastructure project in Taiwan
 - Completion on Oct 2005

Roads

- □ Increase from 13 billion ton-km to 18 billion ton-km
- → Two main highways West coast
- Third one on the East coast
 - East-West Highway

Airway

- 2 main cargo carriers (China and EVA)
- Difficulty
 - Cross-strait direct flight
 - 2003/09/25—indirect cargo flight is approved
 - Cut shipping costs by US\$50,000~80,000 per trip
 - No benefit for agro-food sector

Ports and Docking

- ⇒ 5 international ports
 - North—Keelung, 2 million TEUs per year (16% of total)
 - South—Kaohsiung, 8.8 million TEUs per year (73%)
 - Fast growth in 2004---5000 TEUs in transshipments
- ⇒ On 2004/03/18, Free port approved
 - Attract investment
 - Integrate with neighboring industrial zones
- Competition with China's deep-water port

Kaohsiung Port

- ⇒ \$2.7 billion expansion to compete with regional rivals in transshipping
- Add 5 container berths capable of handling 15,000 20-foot TEUs, increasing the port's capacity 28% to 11.3 million TEUs

Keelung Port

- Second largest BOT project
- ⇒ Alliance w/ Evergreen, Yangming, Wan Hai -- investing US\$ 600 million in container terminal
- ⇒ Seven deepwater container wharf completed by 2014
 - 14.5 meters in depth
 - 2,355 meters in length
 - Cargo ship of 5000 TEU

Utilities

Electricity

- ■65% thermal-based, 17% nuclear
- Capacity grew 4.5% over past 5 years
- Taipower (SOE) provides 80%
- Liberalization in 1994; finalized in 2006
- Nuclear power dispute

⇒ Water & irrigation

- Private investment (irrigation association)
- Lag in investment (weakening ag sector)

IT & Telecom

- ⇒ WEF's Network Readiness Index
 - Taiwan ranks 9th among 82 countries
 - Internet population -- 9 million
 - Penetration -- 40%
- ⇒ Internet Infra (Digital Taiwan)
 - Speed: Broadband network
 - 6 million subscribers in 2007
 - Quality: IPv6 Info network
 - Three stage to complete in 2007

Privatization - Deregulation

- WHY? Global competition
- Started in 1989 -- 27 privatizations so far
- **⇒** In 2001: 31 SOE
- Lowest priority
 - Utilities: 2
 - Telecom & Transportation: 7
- Alignment with market liberalization
 - Chung-Hwa Telecom
 - China Petroleum Corp

Bottleneck in agro-food sector

⇒ Domestic

- Chemical residue control
- Avian flu—Shipping live animals
- Water issue

⇒ International

- Quarantine, SPS
- Competition w/ non-ag commodities
- Import cleaner grains
- Cross-strait direct shipping

Challenges

- How to sell shares or enterprise?
- Refocus the role of government
- Increase efficiency
- Global competition
- **⇒** Strategies--
 - Open market
 - Abolish unnecessary regulations
 - Lower entry barriers