



Taiwan's Service Industry Development Strategy

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1. Differences between Service and Manufacturing Industries

- Services are intangible and cannot be stored; hence the provision and consumption of services must occur simultaneously, as prerequisite for establishing trade.
- If services can be stored, they become commodities (e.g., books, CDs or movies), and lose the essential character of services.
- Service industries rely on people for the final delivery of services.

1. Differences between Service and Manufacturing Industries (*continued*)

- Services are difficult to standardize and duplicate, but can be duplicated once they are commoditized.
- Service quality must be open to variability in order to be able to satisfy differing consumer demand.

2. Service Industry Development, Exports and Innovation

(1) Service Industry Development

- Service industries are generally germinated indigenously, and their development stimulated by indigenous demand. Service industries can also be imported from abroad, but very few will be purely export-oriented in the absence of domestic demand.
- Since service industries spring up in response to domestic demand, their content will reflect the indigenous culture, and their extent of development will be limited by the size of the domestic market.

2. Service Industry Development, Exports and Innovation

(1) Service Industry Development (*continued*)

- Service models possess the characteristic of economy of scale, but the provision of services themselves does not (e.g., the convenience store model possesses economy of scale, but supermarkets do not have this characteristic.)
- The scale of an individual enterprise will be determined by its ability to duplicate the services it provides: e.g., Starbucks vs. DinTaiFung; Google vs. PChome.

2. Service Industry Development, Exports and Innovation

(1) Service Industry Development (*continued*)

- In a service industry, economy of scale can be used to create market entry barriers.
- To achieve a monopoly in a service industry, an enterprise must utilize unique know-how as a threshold to product duplication.
- A service industry can also benefit from a cluster effect, but only under the condition that its products can be exported or that it serves a consumer cluster: e.g., Hollywood and Las Vegas.

2. Service Industry Development, Exports and Innovation

(2) Service Industry Exports

- There are four modes of service industry trade :
 - Mode 1: Cross-border trade
 - Mode 2: Overseas consumption
 - Mode 3: Commercial presence
 - Mode 4: Movement of natural persons
- Service industry exports are not impeded by tariffs, but rather by problems of market access and national treatment.

2. Service Industry Development, Exports and Innovation

(2) Service Industry Exports (*continued*)

- Apart from mode 1, the other modes of service trade all involve duplication. The ability to duplicate a service is key to whether or not it can be exported.
- In service industries, duplicability can be established by use of mechanical carrying techniques, by using information technology for process management, or through staff training.

2. Service Industry Development, Exports and Innovation

(2) Service Industry Exports (*continued*)

- Service duplication must rely on branding as a guarantee of homogeneity; otherwise, even if duplication is possible, it will not achieve the desired effect: e.g., Chinese restaurants vs. DinTaiFung. The export promotion of Thai cuisine is one of the few examples of successful joint branding.
- Since services have conspicuous cultural content, whether or not they are exportable will also be subject to the constraints of cultural distance.

2. Service Industry Development, Exports and Innovation

(3) Service Industry Innovation

- Service industry innovation includes business model innovation, process innovation, and product innovation.
- Business model innovation: Using new methods to organize different elements or producers for the provision of services: e.g., McDonald's (fast-food eatery), 7-Eleven (convenience stores), Starbucks, 85°C, and hypermarkets.

2. Service Industry Development, Exports and Innovation

(3) Service Industry Innovation (*continued*)

- Process innovation: Using new modes for providing services: e.g., e-commerce replacing traditional sales methods.
- Product innovation: Providing services that did not exist before: e.g., Google search services, new financial products, express delivery (home delivery service), and KTV.

2. Service Industry Development, Exports and Innovation

(3) Service Industry Innovation (*continued*)

- Successful new service industries usually include two or more innovations: e.g., radio broadcasting, which incorporates product innovation (wireless broadcasting) and innovation in method of revenue creation (advertising-supported broadcasting).

2. Service Industry Development, Exports and Innovation

(3) Service Industry Innovation (*continued*)

- Process innovation is generally induced by technological advances (such as IT); product innovation is generally induced by change in demand (e.g., demand for risk dispersion); but business model innovation has no conspicuous drivers. Innovation may first bring disruption prior to the establishment of new industries: e.g., the impact currently experienced by newspapers.

2. Service Industry Development, Exports and Innovation

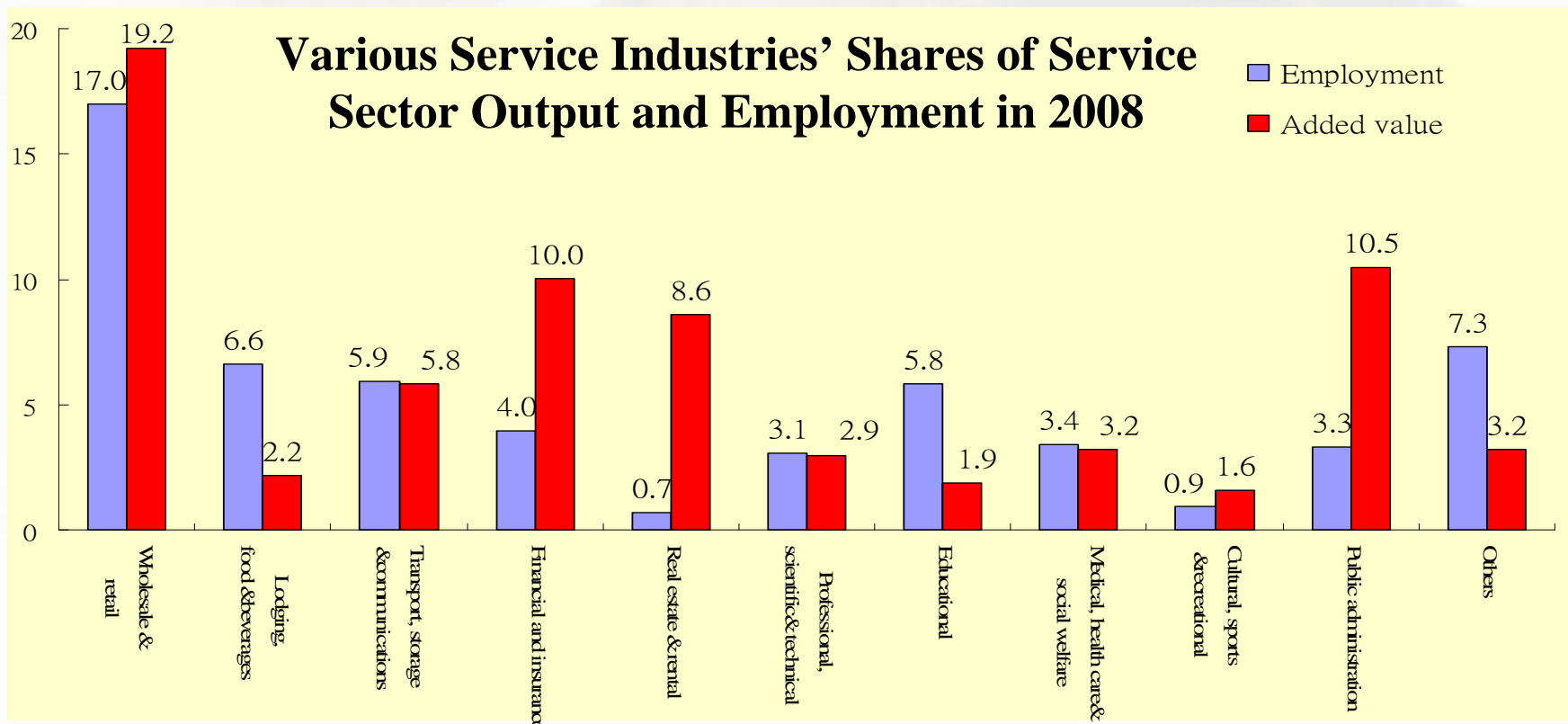
(3) Service Industry Innovation (*continued*)

- If service industry innovation lacks the protection of patent rights, it can easily be copied; hence the need to use exclusive know-how to prevent imitation by competitors.
- Service industry innovation is different from manufacturing industry innovation, having no evident cumulativeness. Service industry innovation is mostly disruptive.

3. Taiwan's Service Industry Strengths

(1) The service industry has already become Taiwan's mainstream industrial sector

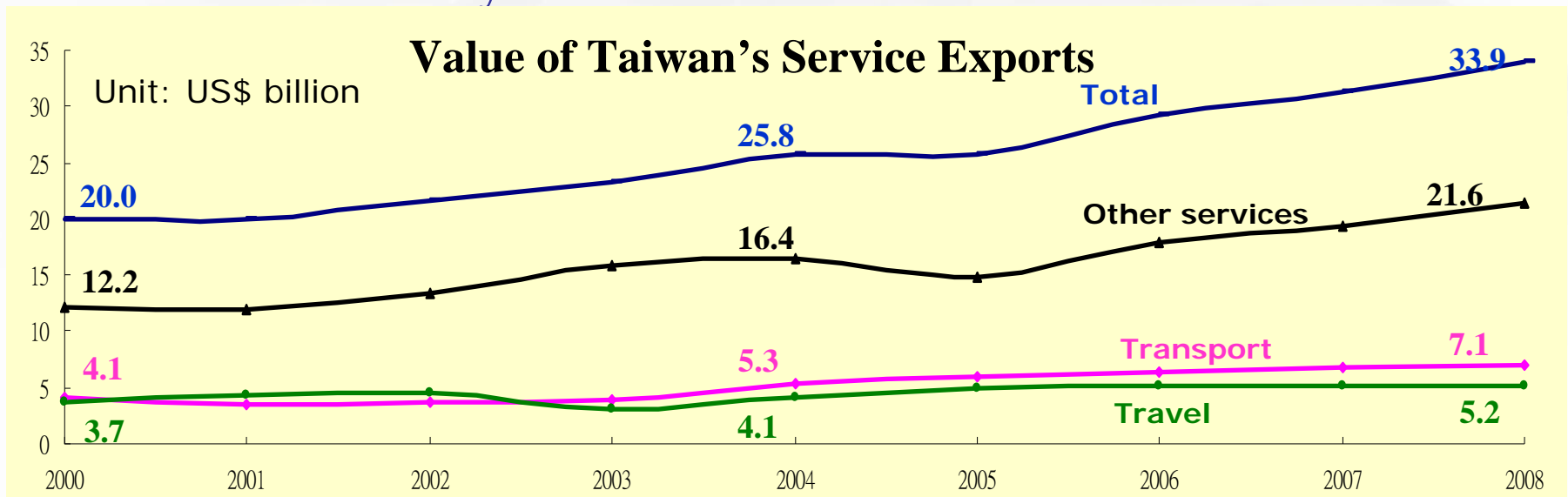
- In 2008, Taiwan's service industry recorded output value totaling NT\$9 trillion, accounting for 73.2% of nominal GDP. The service sector employed 6.04 million people, 58% of Taiwan's 10.4 million employed population. (see note)



3. Taiwan's Service Industry Strengths

(2) Taiwan's service exports still have room for growth

- In 2008, Taiwan's service exports were worth US\$33.9 billion versus imports of US\$34.6 billion, creating a deficit of US\$700 million. Transportation services constituted the largest component of service exports. Example: Singapore Airlines.
- The biggest component of international services trade is travel and tourism, followed by transportation services and financial services. A recently emerging and increasingly important component is technical services (royalties). Example: Taiwan's tourism industry.



3. Taiwan's Service Industry Strengths

- Advances in information technology have enabled many services to be traded without needing to be carried in physical products (e.g., music, books).
- With rising external investment, intra-firm trade is becoming an increasingly important component of services trade.
- In B2B services, Taiwan is more competitive upstream in the provision of services required by manufacturing, such as product design and logistics, and is weaker in such downstream areas as financial, marketing, and after-sales services.

3. Taiwan's Service Industry Strengths (continued)

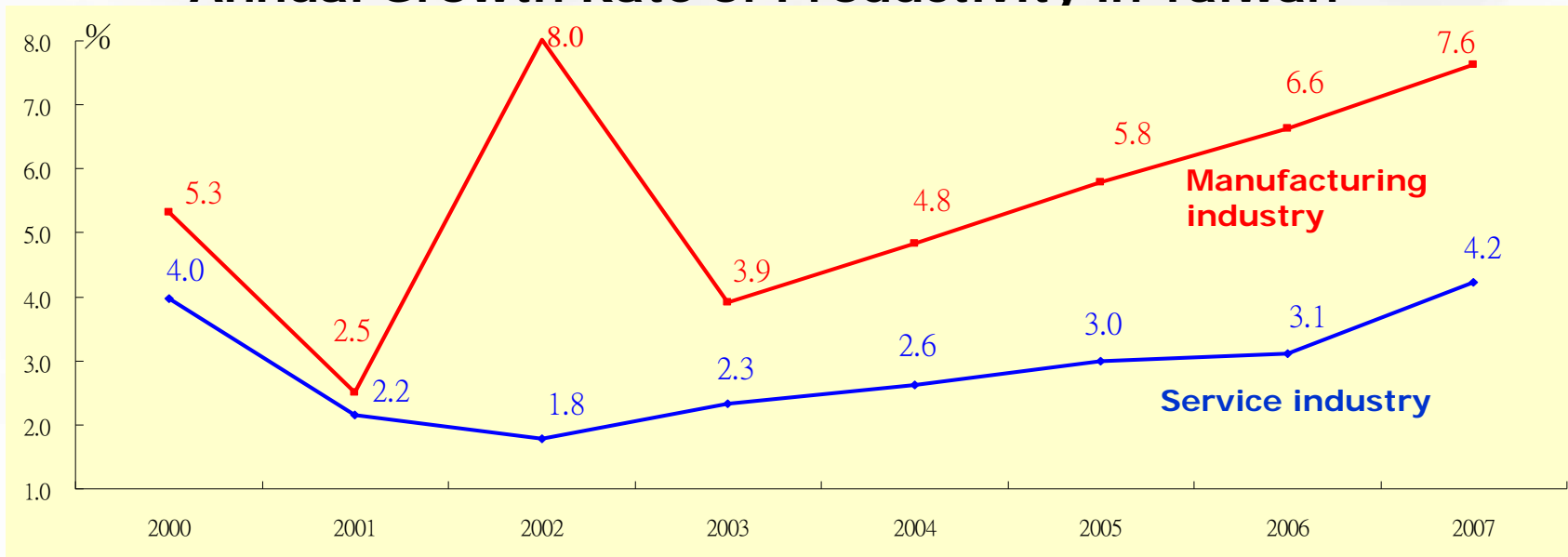
- In B2C services, Taiwan is more competitive in the food and beverages industry, while its competitiveness in medical services remains to be observed and in other services is still unclear.
- The markets with best potential for B2B service exports are those in which there is a high concentration of Taiwanese businesses; and for B2C service exports, those with a cultural background similar to Taiwan's.

4. Taiwan's Service Industry Weaknesses

(1) Low Productivity

- Taiwan's service sector productivity is on the low side, demonstrating that service industries lack the capacity to utilize new technologies, and especially lack economy of scale. Economy of scale is the main driver for raising the labor productivity of service industries.

Annual Growth Rate of Productivity in Taiwan

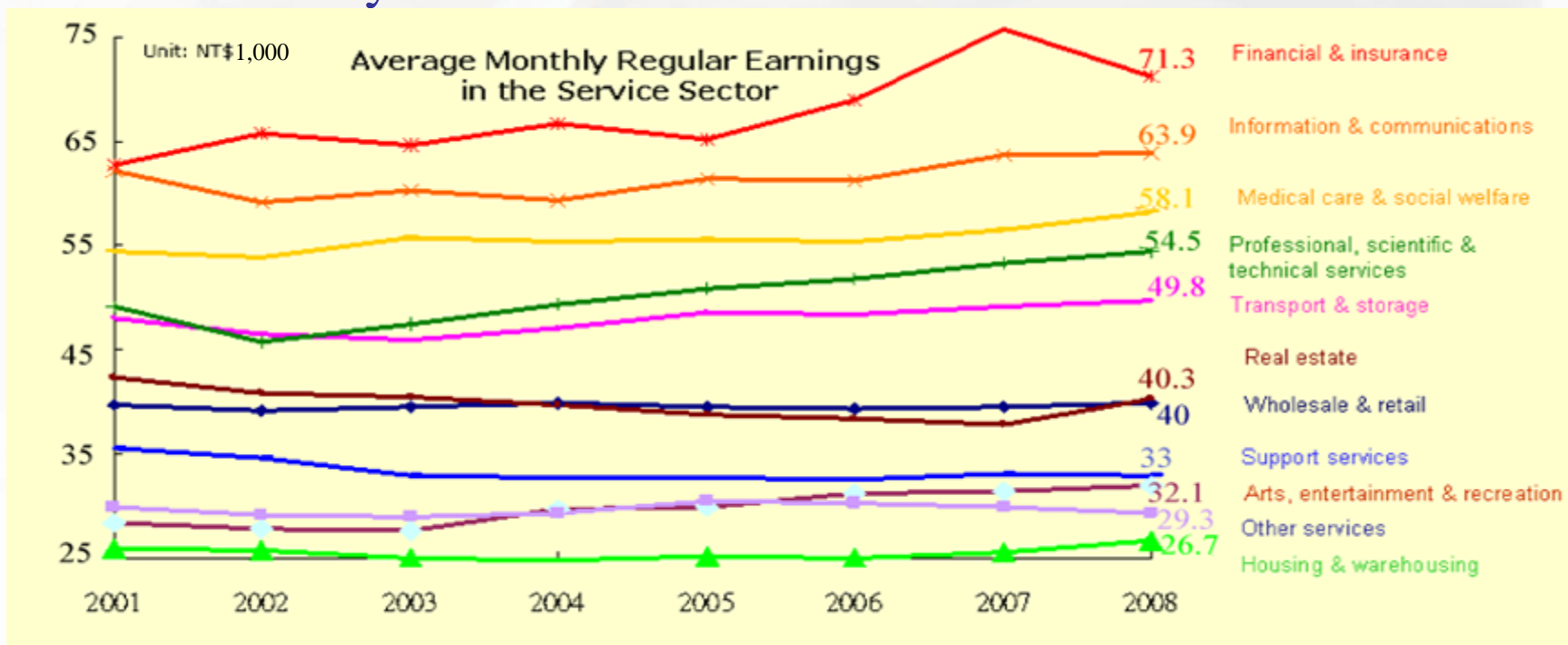


Note: Productivity is measured as output per hour at 2001 prices (NT\$ per hour).

Source: DGBAS.

4. Taiwan's Service Industry Weaknesses

- In 2008, the average monthly regular earnings in the service sector stood at NT\$45,000, higher than the industrial average of NT\$43,000. But in the service industries with the most employees, earnings were a lot lower, at NT\$27,000 in the lodging and food & beverage industries, and NT\$40,000 in the wholesale and retail industry.



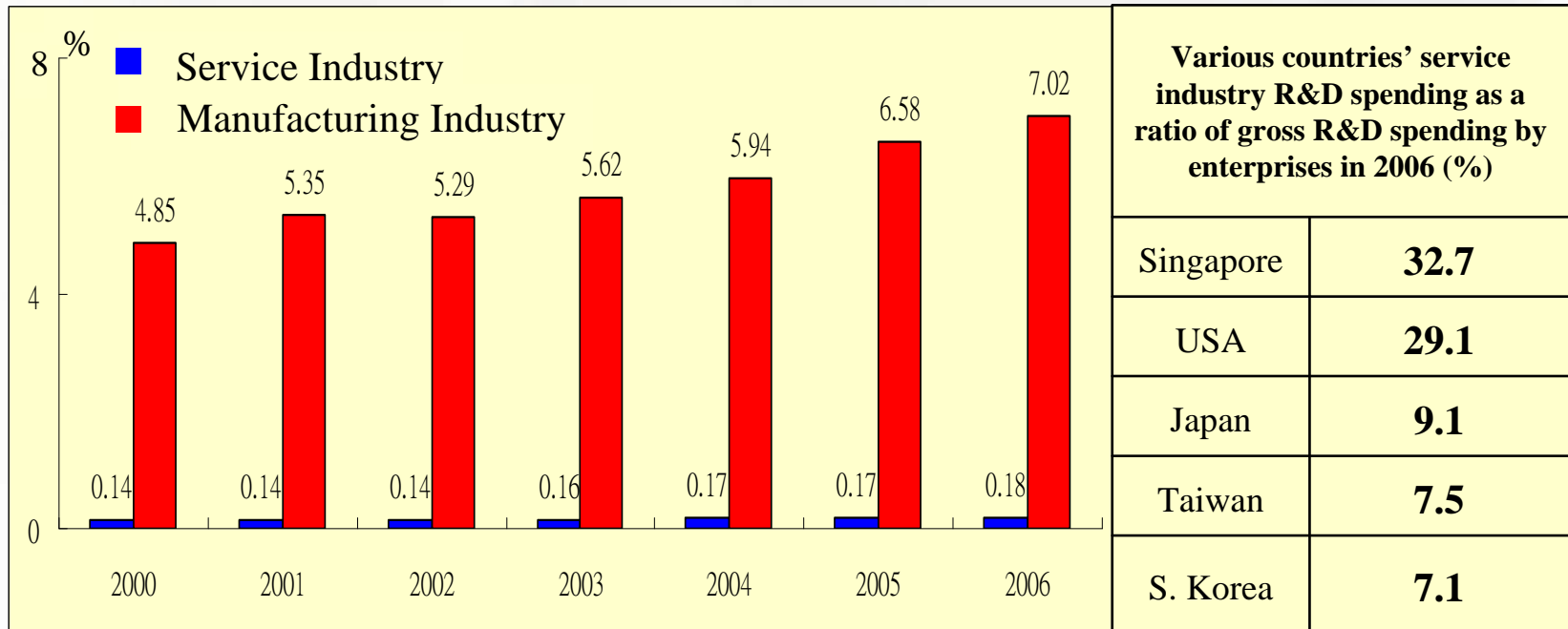
Source: DGBAS.

4. Taiwan's Service Industry Weaknesses

(2) Insufficient Innovation

- Whether compared with the US or Japan as a benchmark, Taiwan falls short in service innovation, and even lags behind South Korea in this respect (Korea's online gaming).

Taiwan's Service Industry and Manufacturing Industry R&D Spending as a Ratio of Their Nominal GDP

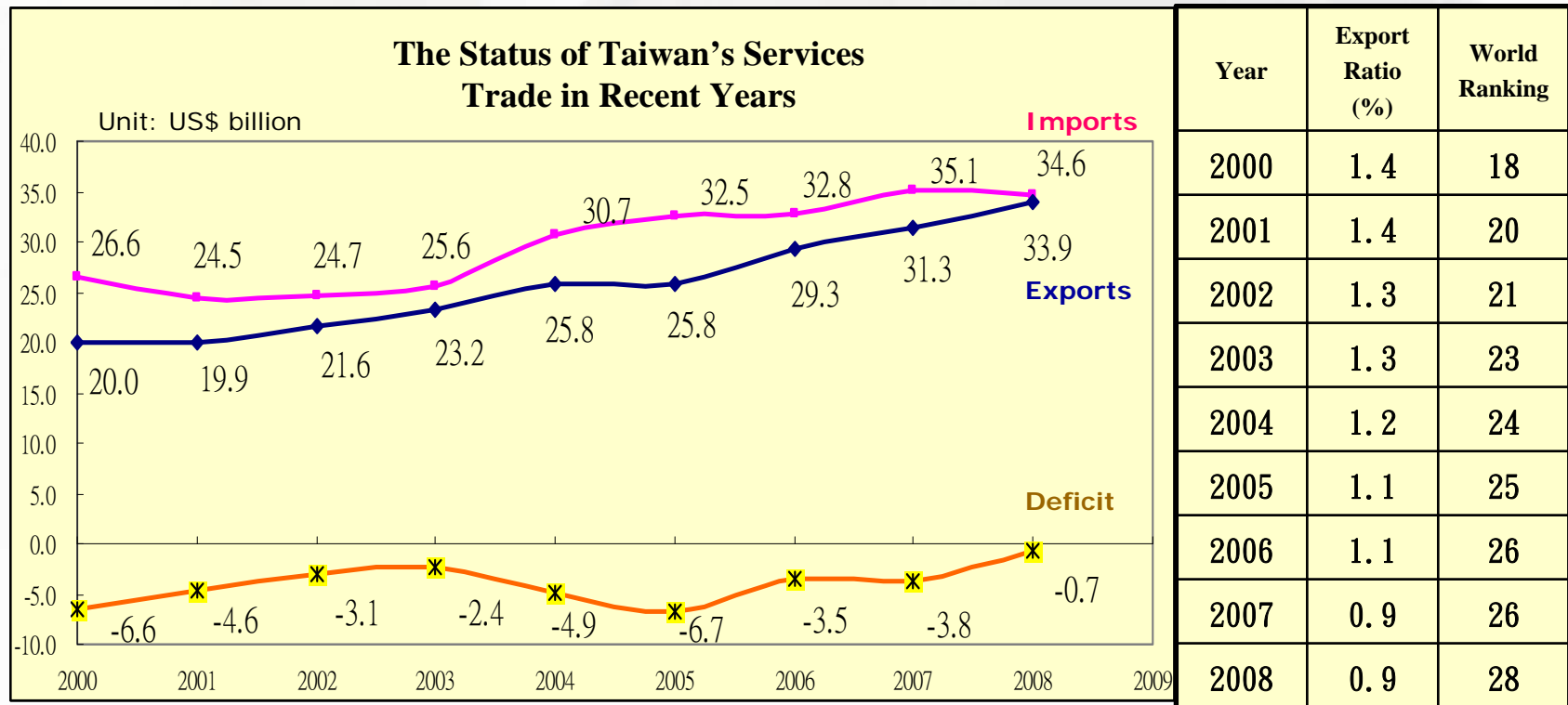


Sources: Compiled from OECD, NSC, DGBAS and MOEA data.

4. Taiwan's Service Industry Weaknesses

(3) Weak Export Capability

- Taiwan's service industries clearly lack duplication capacity, and hence have weak export potential.
- Taiwan's service industries are markedly oriented toward domestic sales, and make insufficient attempt to sell abroad.



Sources: Central bank, Taiwan, and WTO

5. What Can the Government Do?

- Strategic service industries should possess high value-added and have export potential. Hence, they should have a high knowledge content and innovativity.
- In professional and business services, Taiwan can select such items as technical, financial, medical and educational services for development. In the Service Industry Development Plan approved by the Executive Yuan on July 9, tourism, medical care, cultural and creative, recreational farm, logistics, telecommunications, and technical services industries are targeted as budding industries that will receive special developmental support from the government.

5. What Can the Government Do? (*continued*)

- In the sphere of food & beverage and entertainment services, gourmet cuisine and cultural & creative enterprises stand out for selection as focuses of development, and should be developed in integration with the tourism industry.
- Taiwan's service exports mainly belong to modes 2 and 3. Particular importance should be attached to the synergies of mode 2 services export.

5. What Can the Government Do? (*continued*)

- Creating demand (the demand driver) and applying technology (the technology driver) are the wellsprings of service industry innovation. The government can exert its efforts in these two spheres.
- Domestically, the government can assist the establishment of certification and grading systems for service products.

6. Conclusion

- The rapid expansion of service industries is a goal that cannot be achieved by means of capital accumulation.
- Service enterprises that wish to realize the benefits of economy of scale must have business model innovation.
- The hardware and software environments required for service industry development are different from those required for manufacturing industry development. Re-engineering of infrastructure (including physical facilities and the regulatory environment) is beneficial to service industry development.

6. Conclusion (*continued*)

- In the service industry, process innovation can be achieved from technological development, but product and business model innovation depend on “social experimentation.”
- The key to developing Taiwan’s service industry lies in upgrading product quality and expanding export markets. The former requires supplementation of services’ knowledge content, and the latter requires enhancement of their duplicability.