## **Abstract**

The objectives of the 2022 Economic Survey of Construction Industry in Taiwan were to collect data on revenue and expenditures, value of completed construction work, value of materials used, tangible assets and inventory changes of the construction industry. The population of the survey included all R.O.C. Comprehensive Construction Companies, Specialty Construction Companies and Civil Engineering Contractors which registered with the supervisory organization and continued to do business at the end of 2022. The survey period covered from January 1, 2022 through December 31, 2022. Stratified random sampling was used to select samples and send by post or Online questionnaire were conducted. 2,057 samples were interviewed. The survey results are summarized as follows:

- 1. There were 16,502 construction companies at the end of 2022, an increased of 815 from the year 2020 (15,687).
- 2. The number of employees (excluding those hired by subcontractors) in the construction industry was around 146,209. Among the total employees, 70.3% were white collar (supervisors, technical professionals, and administrative support staff) and 28.1% were blue collar workers (skilled and unskilled workers) Most of employees are around 35-56 years old. In addition, most often, there were 24,822 dispatched laborers per month hired.
- 3. The 2022 annual expenditures on labor costs in the construction industry amounted to NT\$159,373,000,000, increased from the year 2020 (NT\$118,362,000,000). The average 2022 annual expenditures on labor costs per Grade A Comprehensive Construction Companies was the highest, NT\$40,101,000.
- 4. The 2022 total revenue of the construction industry was NT\$881,694,000,000, increased from the year 2020 (NT\$676,268,000,000). Among the total revenue, NT\$861,214,000,000 was the business revenue (excluding subcontracting cost), accounted for 97.7% of the total revenue. Grade A Comprehensive Construction Companies accounted for 63.9% of the total revenue of the industry.
- 5. The 2022 annual total expenditures of the construction industry were NT \$856,261,000,000, increased from the year 2020 (\$647,933,000,000). The business expenditures were NT \$845,970,000,000, accounted for 98.8% of the total expenditures. Grade A Comprehensive Construction Companies accounted for 65.6% of the total expenditures of the industry.
- 6. The net value of actual assets in operation in the construction industry at the end of 2022 was NT\$2,945,062,000,000, increased from the year 2020 (NT\$2,222,332,000,000). The current assets accounted for 78.7% of the net value of actual assets in operation. Grade A

- Comprehensive Construction Companies accounted for 75.8% of the net value of actual assets in operation of the industry.
- 7. The 2022 annual total amount of liabilities and net worth was NT\$2,784,365,000,000 with 77.0% liabilities and 23.0% net worth. The average amount of liabilities and net-worth per company was NT\$168,729,000.
- 8. The 2022 annual total value of production was NT\$938,752,000,000, increased from the year 2020 (NT\$688,050,000,000). Among the 2022 annual total value of production, NT818,986,000,000 was the revenue (excluding subcontracting cost) from construction contracts, accounted for 87.2% of the 2022 annual total value of production. Grade A Comprehensive Construction Companies accounted for 64.5% of the total value of production of the industry. Northern Areas accounted for 47.9% of the total value of production of the industry.)
- 9. The total area of the land used by the construction industry at the end of 2022 was 1,793,905 square meters. The average area of the land used by each company was 108.7 square meters and average area of land used by each employee was 12.3 square meters.
- 10. The total floor area of the buildings used by the construction industry was 2,088,605 square meters at the end of 2022. The average floor area of buildings used by each company was 126.6 square meters and used by each employee was 14.3 square meters.
- 11. The 2022 annual total value of construction work (including direct construction revenue, estimated value of materials provided by owners or other construction companies) was NT\$985,317,000,000, increased from the year 2020 (NT\$795,481,000,000). The Grade A Comprehensive Construction Companies accounted for the highest proportion (62.3%) of it.
- 12. The total revenue of all direct construction work was NT\$927,357,000,000. Among the total the revenue, 35.6% were from residential construction.
- 13. The 2022 annual actual value of materials used by the construction industry was NT\$504,564,000,000, increased from the year 2020 (NT\$370,235,000,000). The average annual actual value of materials used per company was NT\$30,576,000.
- 14. The total stock and unused materials of the construction industry at the end of 2022 was NT\$1,407,186,000,000. The stock turnover rate for the construction industry was 53.8% which decreased from the year 2020 (56.1%).

- 15. As for the 2022 annual financial structure of the construction industry, liquidity ratio was 120.0%; the liability ratio was 77.0%; the fixed assets adequacy ratio was 42.1%; the self-capital ratio was 23.0%; Total Equity/Capital was 134.5%. Comparing with 2020, the fixed assets adequacy ratio or the self-capital ratio or Total Equity/Capital were decreased from the year 2019. (The more the liquid asset higher than the liquid liability is the better ability for a company to pay off short term liability. Liability ratio is used to measure the ratio of total liabilities to the total assets; the higher the liability ratio is the more the risks of a company. The higher the self-capital ratio is the larger portion of the capital provided by stockholders, hence, the stronger capital structure.)
- 16. The 2022 annual net profit margin of the construction industry was 6.3%, increased from the year 2020 (5.1%).
- 17. The 2022 annual total asset turnover rate for the construction industry was 30.9% which decreased slightly from the year 2020 (32.2%). And the total asset turnover rate decreased when the net value of actual assets in operation amount increased.
- 18. The 2022 annual labor facility rate for the construction industry was NT\$ 20,143,000 which was more than that of the year 2020 (NT\$ 16,006,000). The labor facility rate of Grade A Comprehensive Construction Companies was NT\$29,935,000 which was much more than other grades of construction companies.
- 19. The 2022 annual labor productivity for the construction industry was NT\$6,421,000. The Grade A Comprehensive Construction Companies had the top labor productivity in the whole construction industry.
- 20. The 2022 annual total value of production on every dollar spent in labor cost for the construction industry was NT\$5.9, and for the Civil Engineering Contractors was NT\$7.8, the highest among of the construction industry.
- 21. The 2022 annual self-owned assets accounted for 94.5% of the actual assets in operation in the construction industry, increased from that of the year 2020(92.2%).
- 22. The 2022 annual capital productivity for the construction industry was 31.9%. It also showed that the higher net value of actual assets in operation the lower the capital productivity.

- 23. The 2022 annual profit rate of actual assets in operation for the construction industry was 1.9%, increased from that of 2020 (1.5%). The Civil Engineering Contractors with 17.7% profit rate of actual assets in operation was the highest among all grades of construction companies.
- 24. The main difficulty of Construction Industry in 2022 was price fluctuations, cost control is not easy. The top priority the industry needed from the government assistance was price control in construction materials and solve the labor shortage problem.
- 25. The total number of labor vacancies in the construction industry is 48,668. The number of vacancies for grassroots labor is 35,251, of which 10,918 are laborers and 24,333 are skilled laborers, followed by 7,868 technicians (including 6,615 technicians and 1,253 people from other construction and civil engineering groups), 2,440 site directors, 1,649 internal management personnel of the company, and 1,460 full-time engineering personnel. (The number of job shortages listed in this report is estimated based on sample surveys. Because the actual number of job shortages in the construction industry is dynamic, it should still be based on the fact that manufacturers log on to the official employment matchmaking website to register the actual number of job shortages.)
- 26. 47.5% of the construction industry's views on the prosperity of the construction industry this year (2023) were considered to be flat and 12.1% were not optimistic.
- 27. The man source of construction industry's labor was "self-recruited", which is 74.7 in every hundred companies.
- 28. The net profit rate was the highest at 6.9% in 2018, followed by 6.3% in 2022. "Environmental protection projects" accounted for 26.3% in 2022, followed by "underground pipeline projects" (12.7%). In terms of professional engineering projects, 84.6% of professional construction companies engaged in "steel construction" are medium and large professional construction companies with more than 50 employees, and 76.9% have a total income of more than NT\$30,000,000,000,000, 76.9% of the total production amounted to more than NT\$30,000,000,000.