Abstract

The objectives of the 2020 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 2020. The survey period covered from January 1, 2020 through December 31, 2020. Stratified random sampling was used to select samples and face to face interviews or send by post or Online questionnaire were conducted. 1,900 samples were interviewed. The survey results are summarized as follows:

- 1. There were 15,687 construction companies at the end of 2020, an increased of 38 from the year 2019 (15,649).
- 2. The number of employees (excluding those hired by subcontractors) in the construction industry was around 138,847.Among the total employees,58.0% were white collar (technical professionals, supervisors and assistances) and 39.6% were blue collar workers (skilled and unskilled workers) ° Most of employees are around 35-59 years old. In addition, most often, there were 24,564 dispatched laborers per month hired.
- 3. The 2020 annual expenditures on labor costs in the construction industry amounted to NT\$118,362,000,000, increased from the year 2019 (NT\$113,233,000,000). The average 2020 annual expenditures on labor costs per Grade A Comprehensive Construction Companies was the highest, NT\$29,612,000.
- 4. The 2020 total revenue of the construction industry was NT\$676,268,000,000, increased from the year 2019 (NT\$634,976,000,000). Among the total revenue, NT\$659,113,000,000 was the business revenue (excluding subcontracting cost), accounted for 97.5% of the total revenue. Grade A Comprehensive Construction Companies accounted for 61.1% of the total revenue of the industry.
- 5. The 2020 annual total expenditures of the construction industry were NT \$647,933,000,000, increased from the year 2019 (\$602,259,000,000). The business expenditures were NT \$638,975,000,000, accounted for 98.6% of the total expenditures. Grade A Comprehensive Construction Companies accounted for 60.8% of the total expenditures of the industry.
- 6. The net value of actual assets in operation in the construction industry at the end of 2020 was NT\$2,222,332,000,000, increased from the year 2019 (NT\$2,127,554,000,000). The

current assets accounted for 76.0% of the net value of actual assets in operation. Grade A Comprehensive Construction Companies accounted for 72.2% of the net value of actual assets in operation of the industry.

- The 2020 annual total amount of liabilities and net worth was NT\$2,048,553,000,000 with 75.6% liabilities and 24.4% net worth. The average amount of liabilities and net-worth per company was NT\$130,589,000.
- 8. The 2020 annual total value of production was NT\$688,050,000,000, increased from the year 2019 (NT\$645,269,000,000). Among the 2020 annual total value of production, NT626,491,000,000 was the revenue (excluding subcontracting cost) from construction contracts, accounted for 91.1% of the 2020 annual total value of production. Grade A Comprehensive Construction Companies accounted for 58.5% of the total value of production of the industry. Northern Areas accounted for 50.5% 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 2020 was 1,679,268 square meters. The average area of the land used by each company was 107.0 square meters and average area of land used by each employee was 12.1 square meters.
- 10. The total floor area of the buildings used by the construction industry was 1,976,920 square meters at the end of 2020. The average floor area of buildings used by each company was 126.0 square meters and used by each employee was 14.2 square meters.
- 11. The 2020 annual total value of construction work (including direct construction revenue, estimated value of materials provided by owners or other construction companies) was NT\$795,481,000,000, equivalent to the year 2019 (NT\$799,310,000,000). The Grade A Comprehensive Construction Companies accounted for the highest proportion (61.0%) of it.
- 12. The total revenue of all direct construction work was NT\$764,780,000,000. Among the total the revenue, 32.8% were from residential construction.
- 13. The 2020 annual actual value of materials used by the construction industry was NT\$370,235,000,000, increased from the year 2019 (NT\$341,191,000,000). The average annual actual value of materials used per company was NT\$23,601,000.
- 14. The total stock and unused materials of the construction industry at the end of 2020 was NT\$1,016,966,000,000. The stock turnover rate for the construction industry was 56.1% which increased from the year 2019 (52.4%).

- 15. As for the 2020 annual financial structure of the construction industry, liquidity ratio was 119.3%; the liability ratio was 75.6%; the fixed assets adequacy ratio was 42.8%; the self-capital ratio was 24.4%; Total Equity/Capital was 124.4%.Comparing with 2019, the fixed assets adequacy ratio or the self-capital ratio or Total Equity/Capital were increased from the year 2019, liquidity ratio or the liability ratio 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 2020 annual net profit margin of the construction industry was 5.1%, decreased from the year 2019 (6.2%).
- 17. The 2020 annual total asset turnover rate for the construction industry was 32.2% which decreased slightly from the year 2019 (31.6%). And the total asset turnover rate decreased when the net value of actual assets in operation amount increased.
- 18. The 2020 annual labor facility rate for the construction industry was NT\$ 16,010,000 which was more than that of the year 2019 (NT\$ 15,050,000). The labor facility rate of Grade A Comprehensive Construction Companies was NT\$24,942,000 which was much more than other grades of construction companies.
- 19. The 2020 annual labor productivity for the construction industry was NT\$4,990,000. The Grade A Comprehensive Construction Companies had the top labor productivity in the whole construction industry.
- 20. The 2020 annual total value of production on every dollar spent in labor cost for the construction industry was NT\$5.9, and for The Grade B Comprehensive Construction Companies was NT\$8.2, the highest among of the construction industry.
- 21. The 2020 annual self-owned assets accounted for 92.2% of the actual assets in operation in the construction industry, decreased from that of the year 2019(92.8%).
- 22. The 2020 annual capital productivity for the construction industry was 31.2%. It also showed that the higher net value of actual assets in operation the lower the capital productivity.

- 23. The 2020 annual profit rate of actual assets in operation for the construction industry was 1.5%, slightly decreased from that of 2019 (1.9%). The Civil Engineering Contractors with 7.4% profit rate of actual assets in operation was the highest among all grades of construction companies.
- 24. The main difficulty of Construction Industry in 2020 was price fluctuations, cost control is not easy and the persistently price increasing of construction materals. The top priority the industry needed from the government assistance was price control in construction materials.
- 25. The total number of labor vacancies in the construction industry is 118,102. The number of vacancies for grassroots labor is 88,897, of which 20,471 are laborers and 68,426 are skilled laborers (24,492 formwork workers, 18,658 plasterers, and 20,113 steel workers. 5,162 people and other 5,162 people), followed by 22,692 technicians, including 20,373 technicians (5,025 formwork technicians, 2,655 concrete technicians, 3,998 steel technicians, and other technologies). (8,694 people), 2,319 people from other construction and civil engineering groups, 2,964 site directors, 1,769 full-time engineering personnel, and 1,781 internal management personnel of the company. (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. 39.2% of the construction industry's views on the prosperity of the construction industry this year (2021) were considered to be flat and 39.2% were not optimistic.
- 27. The man source of construction industry's labor was "self-recruited", which is 72.4 in every hundred companies.
- 28. The net profit rate was the highest at 6.9% in 2018, followed by 6.2% in 2019. "Environmental protection projects" accounted for 29.3% in 2020, followed by "underground pipeline projects" (12.9%). In terms of professional engineering projects, 81.3% of professional construction companies engaged in "steel construction" are medium and large professional construction companies with more than 50 employees, and 75.1% have a total income of more than NT\$30,000,000,000,81.4% of the total production amounted to more than NT\$30,000,000,000.