



Economic structure analysis in the development of skipjack tuna (*Katsuwonus pelamis*) fisheries industry in Jayapura City, Papua, Indonesia

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Abstract. The skipjack tuna (*Katsuwonus pelamis*) fisheries sub-sector has both the potential and opportunities to support the economic growth and regional development in the City of Jayapura. It can also encourage and leverage economic sectors in this *K. pelamis* production city. The aim of the study was to calculate the structural strength and interaction between the *K. pelamis* fisheries sub-sector and the other marine fisheries, other marine products, the food and beverage industry sector, trade, transportation, hotels, and restaurants and other sectors. The Input-Output (I-O) analysis was used to analyze GDRP 2016 as secondary data. The results showed that the *K. pelamis* fisheries sub-sector has a contribution to encourage and leverage other sectors. *K. pelamis* sub-sector was not provided an optimal contribution to the economic growth which reached 1.94%; however, it had an impact on the backward and forward linkages of 1.3234% and 1.3779%, respectively. The strength of the structure and the interactions within the *K. pelamis* fisheries sub-sector still need to be further investigated and developed. The *K. pelamis* fisheries sub-sector has an impact on employment and community income.

Key Words: structural strength, economic sectors interaction, economic growth, production, leverage.

Introduction. Jayapura City is the center of economic growth and regional development in the Papua Province, Indonesia. The contribution of Port Numbay's economic growth to the Papua Province in 2017 reached 7.23%, with the capture fisheries sector contributing 4.67% (Jayapura City BPS 2017). The volume and value of production was 49,093.81 tons and 20,750,919.56 USD (DKP Jayapura City 2018).

One of the leading capture fisheries commodities in the City of Jayapura to date is skipjack tuna (*Katsuwonus pelamis*). The production volume of *K. pelamis* from Jayapura City reached 6,230.76 tons, with an economic value of 2,826,296.71 USD (BPS Jayapura City 2017).

The *K. pelamis* fisheries commodity performs a multiplier effect in the form of increased public income, employment, development of the trade sector and food and beverage industry. The *K. pelamis* fishery commodity is a type of fish that has competitiveness and is traded in national and international markets. The researches conducted by Hutajulu et al (2019) and Suhana et al (2016) showed that the commodity of *K. pelamis* in the City of Jayapura and in the territory of Indonesia are very competitive. This shows the growing contribution of *K. pelamis* fisheries to the capture fisheries sector in Jayapura City, so this sector is very suitable to be pushed to become the main sector in the context of improving the welfare of the fishing community in the city nicknamed as Port Numbay.

One form of excellence and competitiveness of *K. pelamis* fisheries is the value of sector output efficiency which reaches 62.71%. This value is much higher than the average value of the same variable in all other sectors (39.66%). Even so, the value of