Processing jobs analysis for Just Sablefish vs Dover & Sablefish as bycatch

Budgeted Numbers from a Pacific Plant for 2019:

<table>
<thead>
<tr>
<th></th>
<th>With Fringe**</th>
<th>No fringe</th>
<th>With Fringe</th>
<th>No fringe</th>
</tr>
</thead>
<tbody>
<tr>
<td>fin. Lbs***</td>
<td>fin. Lbs</td>
<td>WR Lbs</td>
<td>WR Lbs</td>
<td></td>
</tr>
<tr>
<td>Trawl****</td>
<td>$0.2539</td>
<td>$0.1904</td>
<td>$0.1587</td>
<td>$0.1190</td>
</tr>
<tr>
<td>Fixed Gear*</td>
<td>$0.1892</td>
<td>$0.1419</td>
<td>$0.1183</td>
<td>$0.0887</td>
</tr>
<tr>
<td>Trawl</td>
<td>$0.8170</td>
<td>$0.6128</td>
<td>$0.2533</td>
<td>$0.1900</td>
</tr>
</tbody>
</table>

Avg wage with fringe $20.00
Avg wage no fringe $15.00

Whole Round lbs per labor hour per person.

<table>
<thead>
<tr>
<th></th>
<th>Sablefish</th>
<th>Dover</th>
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</thead>
<tbody>
<tr>
<td>Whole round lbs per hour per processing worker</td>
<td>169</td>
<td>79</td>
</tr>
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Ratio Sablefish to Dover whole round lbs/per labor hour 2.14

In this model it would take 2.14 times as many employee hours to do an equal amount of WR poundage to produce Dover fillets as it would H&G Sablefish.

Using the EDC report the ratio of Trawl Dover to Trawl Sablefish was 4.95:1. Multiplying the 2.14 ratio by the 4.65 ratio gives the additional work hours and jobs that are produced by utilizing the Trawl Sablefish as bycatch to harvest Dover. There is an additional job "lift" with other species, notably Thornyheads which I will address later. This is expected to be less than Dover but still significant.

Ratio of 2.14 jobs to 1 times 4.65 additional lbs of Dover

Final job output 100,000lb of whole round Sablefish only and 100,000lb of Sablefish as bycatch with 465,000lb of whole round Dover:

Sablefish Only: 100,000lbs whole round weight
100,000lb / 169lb per hour = 592 hours 100,000 pounds 169 lb/hr
8 hour day = 1 job day 74 job days 592 hours 8 hour day

Sablefish portion: 100,000lbs whole round weight
100,000lb / 169lb per hour = 592 hours 100,000 pounds 169 lb/hr
8 hour day = 1 job day 74 job days 592 hours 8 hour day

Dover Portion 465,000lb
465,000lb / 79lb per hour = 5889 hours 465,000 pounds 79 lb/hr
8 hour day = 1 job day 736.1 job days 5889 hours 8 hour day

Ratio 9.95 work and job hours ratio of Dover to Sablefish

810.1 Total Job Days 100,000lb Sablefish + 465,000lb Dover

Ratio in job days to process JUST Sablefish vs. the job days necessary to process the Dover with the same amount of Sablefish but used as trawl bycatch to target Dover:

10.95 times more job hours for "bycatch" Sablefish and Dover vs. only the Sablefish

100,000lb just Sablefish = $8,880 wages @$15.00/hr

100,000lb Sablefish + 465,000lb Dover = $97,208 Wages

*Different Budget numbers for Trawl and Fixed Gear are attributed to more J-cut deliveries for fixed gear vessels and the smaller Trawl fish which slows production: for this exercise we used the fixed gear Labor number

** Fringe is calculated at 25%

*** Sablefish Recovery calculated at 62.5%

**** For reference only

***** Dover recovery calculated at 31%