

**NORTH WESTERN WATERS REGIONAL ADVISORY COUNCIL**

**SOCIO-ECONOMIC ASPECTS OF FISHERIES MANAGEMENT**

28th October 2010, Dublin Castle

***Presenter:***

**Philip Rodgers**

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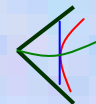
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**ERINSHORE ECONOMICS**

## WORK OF THE STECF

-  **Quota Advice**
-  **Effort Control Advice**
-  **Technical Conservation Measures**



## WORK OF THE STECF

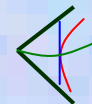
### Considerations

#### Long Term

- **Condition of Stocks**
- **Future of the Fishery**
- **Eco-System, Flora and Fauna**

#### Immediate

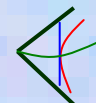
- **Impact on Fleet Earnings**
- **Impact on Employment**



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<b>Costs &amp; Earnings</b>	€	%
Total Earnings		
Commission		
Harbour Dues		
Subscriptions & Levies		
Shore labour		
Fuel & Oil		
Boxes		
Ice		
Crew Travel		
Food & Stores		
Other Expenses		
Crew Share		
Total Fishing Expenses		
Insurance		
Repairs		
Gear		
Hire & Maintenance		
Other Vessel Owner Expenses		
Total Vessel Owner Expenses		
Total Expenses		
Net Profit		

## MEASURING THE SOCIO-ECONOMIC IMPACT

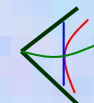


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## MEASURING THE SOCIO-ECONOMIC IMPACT

		Purchaser					
		Agriculture	Industry	Services		Final Use	Total Use
Producer	Agriculture	11	19	1		10	41
	Industry	5	89	40		106	240
	Services	5	37	37		106	185
	Primary Inputs	20	95	107		21	243
	Total Outputs	41	240	185		243	709

## INPUT-OUTPUT ANALYSIS



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## MEASURING THE SOCIO-ECONOMIC IMPACT

### Multiplier Effects

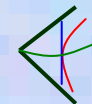
➤ Direct Effects

➤ Indirect Effects

Demand Driven – Upstream

Supply Driven - Downstream

➤ Induced Effects



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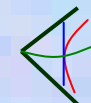
## MEASURING THE SOCIO-ECONOMIC IMPACT

### University of Lincoln Consolidated Transactions Matrix

		Purchaser						
£m	2007	University	Other	House-holds	Total Intermediate Demand	Misc Final Demand	Exports	Total Output
Producer	University	0	50	10	60	0	2	61
	Other	26	1,050,611	732,521	1,783,158	1,211,502	298,644	3,293,304
	Labour	36	648,964	0	649,000	549,562	0	1,198,562
	Total Primary Inputs	61	1,699,625	732,531	2,432,218	1,761,064	298,646	4,491,928
	Imports	0	1,198,231	0	1,198,231			
	Indirect Taxes & Profits	0	395,448	466,031	861,479			
	Total Inputs	61	3,293,304	1,198,562	4,491,928			

£	Average Salary	34,008	22,844		
nos	No Employed	1,044	28,407,956		28,409,000

## INPUT-OUTPUT ANALYSIS



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## MEASURING THE SOCIO-ECONOMIC IMPACT

University of Lincoln

		Total	Demand-Driven	Supply-Driven
<b>TYPE I</b>	Output	2.81	1.62	2.19
	Income	1.62	1.21	1.41
	Employment	1.92	1.32	1.60
<b>TYPE II</b>	Output	3.98	2.38	2.60
	Income	2.02	1.47	1.55
	Employment	2.51	1.70	1.81

INPUT-OUTPUT ANALYSIS



## MEASURING THE SOCIO-ECONOMIC IMPACT

### Denmark (*Truncated Matrix*)

1999 mDKr	HC Fishing	HC Processing	Reduction Fishing	Reduction Processing	Other	Households	Total Intermediate Demand
HC Fishing	0	2,382	0	61	0	0	2,443
HC Processing	0	0	0	0	2,505	0	2,505
Reduction Fishing	0	0	0	658	0	0	658
Reduction Processing	0	0	0	225	100	0	325
Other	1,235	4,079	445	553	560,435	560,435	1,127,182
Households	890	1,242	121	146	507,542	0	509,941
Total Primary Inputs	2,125	7,703	566	1,643	1,070,582	560,435	1,643,054
Imports	0	9,430	0	895	293,700	0	304,025
Indirect Taxes & Profits	554	177	200	28	158,000	0	158,959
Total Inputs	2,679	17,310	766	2,566	1,522,282	560,435	2,106,038
Average Salary €	312,830	222,860	267,699	337,182	245,829	0	
No Employed	2,845	5,573	452	433	2,064,617	2,073,920	

INPUT-OUTPUT ANALYSIS

## MEASURING THE SOCIO-ECONOMIC IMPACT

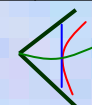
### Denmark

Type II Downstream Supply-Driven	Fishing for Human Consumption	Processing for Human Consumption	Fishing for Reduction	Reduction Processing	Other
Output	2.35	1.49	2.07	1.24	3.38
Income	1.63	3.26	1.60	1.94	3.37
Employment	1.83	3.05	1.55	2.25	3.37

INPUT-OUTPUT ANALYSIS

€m	Ireland 2009	Purchaser						
		Fishing	Other	Households	Total Intermediate Demand	Misc Final Demand	Exports	Total Output
Producer	Fishing	0	187	0	187	0	49	236
	Other	112	109,369	84,331	193,812	50,165	144,782	388,759
	Labour	71	58,595	0	58,666	25,701	0	84,367
	Total Primary Inputs	183	168,151	84,331	252,665	75,866	144,831	473,362
	Imports	29	120,333	18	120,380			
	Indirect Taxes & Profits	24	100,275	18	100,317			
	Total Inputs	236	388,759	84,367	473,362			

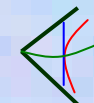
£	Average Salary	18,024	36,758		36,712
nos	No Employed	3,928	1,594,072		1,598,000



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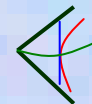
## Multipliers for the Irish Fishing Industry

		Fishing		
		Total	Demand-Driven	Supply-Driven
TYPE I	Output	2.76	1.66	2.10
	Income	1.89	1.33	1.55
	Employment	1.44	1.16	1.27
TYPE II	Output	3.76	2.36	2.40
	Income	2.39	1.69	1.70
	Employment	1.68	1.34	1.34



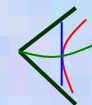
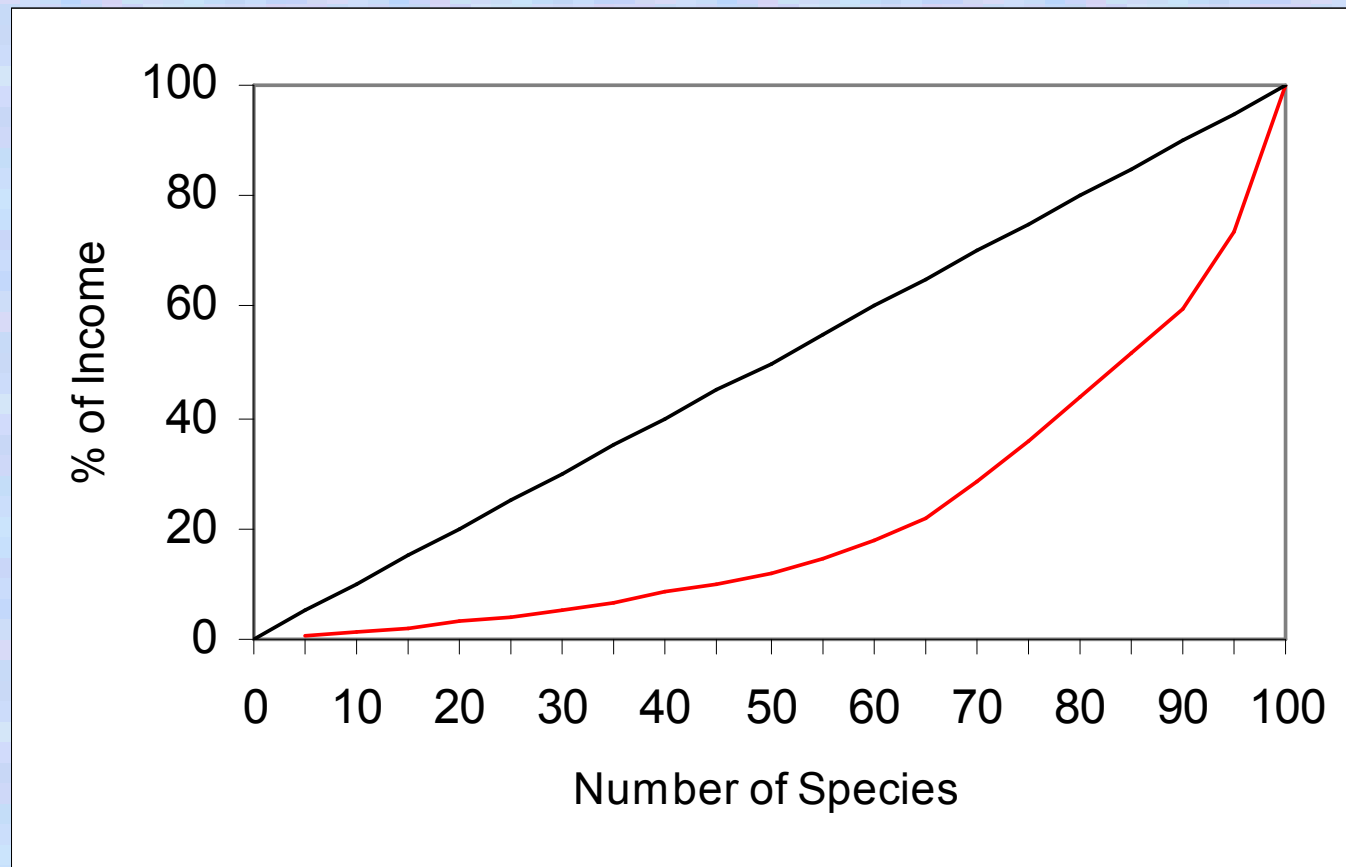
## THE RODGERS-BERTRAM COEFFICIENT

Species	£m
Nephrops	126.4
Mackerel	67.1
Haddock	39.9
Scallops	38.8
Crabs	37.9
Monkfish	34.1
Lobsters	31.3
Cod	21.7
etc	15.5



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## THE RODGERS-BERTRAM COEFFICIENT



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## RODGERS-BERTRAM COEFFICIENTS FOR NATIONAL FLEETS

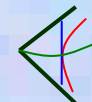
**RB20      (UK 2007)                      0.79**

**RB50      UK (1995)                      0.68**

**France (1994)                      0.63**

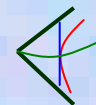
**Italy (1993)                      0.59**

**Netherlands (1994)                      0.88**



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**THE END**



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