

Reporting on the Impacts of Response Measures: Data Challenges

Ghana Workshop 2, 16/02/2021

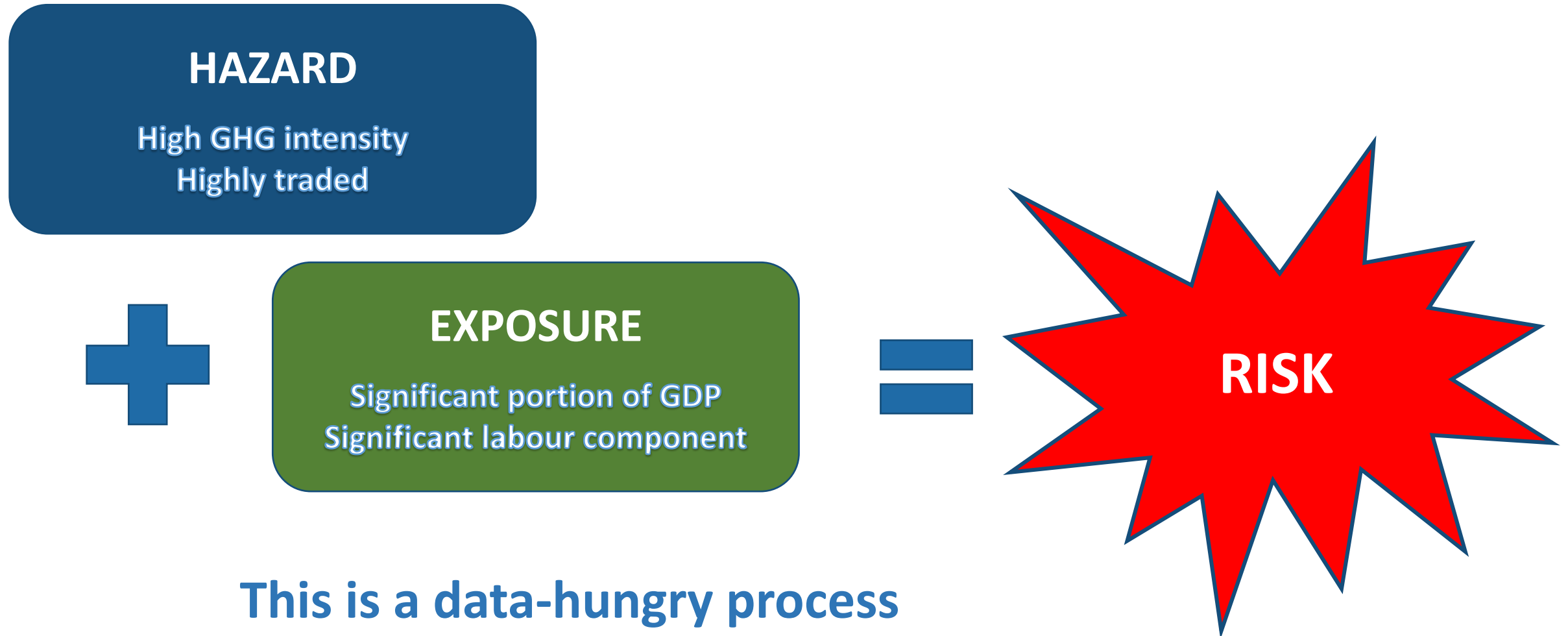
Aaron Cosbey
Senior Associate, ERCST



ERCST

Roundtable on
Climate Change and
Sustainable Transition

ERCST Methodology: Vulnerable goods/sectors



Two types of challenges

- Data availability
- Data challenges: Labour-intensive processes

Data availability

- Gross value added is the preferred measure: indicates how much economic activity actually takes place in country. Not always available, and certainly not at disaggregated levels.
- GDP figures available, but not always well disaggregated
- Usually available at the 1- or 2-digit level (public data)

Grouping	Classification	Description
Section	A	Agriculture, forestry and fishing
Division	01	Crop and animal production, hunting and related service activities
Group	012	Growing of perennial crops
Class	0127	Growing of beverage crops (includes cocoa)

Data availability

- GHG emissions data conforms to IPCC categories, not ISIC.

Data problems
in the Chile
study



What we have		What we need	
Category in National Energy Balance	ISIC Rev 4 level found	ISIC Rev 4 Category at 1 digit ISIC level	Data found in National Energy Balance
Copper mining	4 digit ISIC level: Section B, Group 072, Class 0891	Agriculture, livestock, forestry and fishing	covers sugar and fishing
Salt peter mining	4 digit ISIC level: Section B Group 081, 0891	Mining and quarrying	covers copper, salt peter and iron
Iron mining	3 digit ISIC level: Section B, Group 071	Manufacturing	petrochemicals, iron & steel, cement and other manufacturing
Pulp and paper	2 digit ISIC level: Section C, Division 17	Electricity, gas, steam and air conditioning	covers electricity & gas
Iron & steel manufacturi	3 digit ISIC level: Section C, Group 241	Water supply; sewerage, waste management and remediation activities	no coverage
Petrochemicals	2 digit ISIC level: Section C, Division 20	Construction	construction
Cement	4 digit ISIC level: Section C, Group 239, Class 1072	Wholesale and retail trade	no coverage
Sugar	4 digit ISIC level: Section C, Group 107, Class 1072	Transportation and storage	no coverage
Fishing	2 digit ISIC level: Section A, Division 3	Accommodation and food service activities	no coverage
Agribusiness	2 digit ISIC level: Section A Divisions 1 and 2	Information and communication	no coverage
Construction	1 digit ISIC level: Section F	Financial and insurance activities	no coverage

Data availability

- Labour data typically not available at disaggregated levels
- Tourism data never available along with sectoral data for goods – scattered across various sectors (accommodations, restaurants, transportation, guiding services, etc.)

World Tourism Organization (2018), Compendium of Tourism Statistics dataset [Electronic], UNWTO, Madrid, data updated on 07/11/2018. Conceptual references and technical notes are available in the Methodological Notes to the Tourism Statistics Database: http://statistics.unwto.org/news/2018.03.23/methodological_notes_tourism_statistics_database_2018_edition

CHILE

Cod. Basic data and indicators	Notes	Units	2013	2014	2015	2016	2017
1. INBOUND TOURISM							
<i>Data</i>							
Arrivals							
1.1 Total		(000)	4,457	4,601	5,487	6,712	7,621
1.2 * Overnight visitors (tourists)	(1)	(000)	3,576	3,674	4,478	5,641	6,450
1.3 * Same-day visitors (excursionists)	(2)	(000)	881	926	1,009	1,072	1,171
1.4 * of which, cruise passengers		(000)	..	..	..	..	..
Arrivals by region							
1.5 Total	(1)	(000)	3,576	3,674	4,478	5,641	6,450
1.6 * Africa		(000)	4	4	4	4	5
1.7 * Americas		(000)	2,901	2,952	3,735	4,845	5,615
1.8 * East Asia and the Pacific		(000)	100	104	111	124	140
1.9 * Europe		(000)	396	426	432	470	497
1.10 * Middle East		(000)	1	1	1	1	1
1.11 * South Asia		(000)	3	3	4	5	6
1.12 * Other not classified		(000)	172	185	191	192	187
1.13 * of which, nationals residing abroad		(000)	171	185	191	192	187
Arrivals by main purpose							
1.14 Total	(1)	(000)	3,576	3,674	4,478	5,641	6,450
1.15 * Personal		(000)	2,952	3,009	3,786	4,827	5,814
1.16 * holidays, leisure and recreation		(000)	1,883	1,910	2,409	3,022	4,035
1.17 * other personal purposes		(000)	1,089	1,099	1,377	1,805	1,779
1.18 * Business and professional		(000)	624	666	692	814	636
Arrivals by mode of transport							
1.19 Total		(000)	3,576	3,674	4,478	5,641	6,450
1.20 * Air		(000)	1,475	1,535	1,710	1,985	2,569
1.21 * Water		(000)	..	..	..	..	..
1.22 * Land		(000)	2,101	2,140	2,768	3,656	3,881
1.23 * railway		(000)	..	..	..	..	..
1.24 * road		(000)	2,101	2,140	2,768	3,656	3,881
1.25 * others		(000)	..	..	..	..	..
Accommodation							
Hotels and similar establishments							
1.31 * Guests	(3)	(000)	2,161	3,151	3,262	3,496	4,386
1.32 * Overnights	(3)	(000)	4,553	6,179	6,499	6,909	9,804
Expenditure							
1.33 Total		US\$ Mn	3,171	3,202	3,412	3,723	4,604
1.34 * Travel		US\$ Mn	2,181	2,259	2,481	2,665	3,634
1.35 * Passenger transport		US\$ Mn	990	943	931	1,058	970
Expenditure by main purpose of the trip							
1.36 Total		US\$ Mn	2,181	2,259	2,481	2,665	3,634
1.37 * Personal		US\$ Mn	1,766	1,859	2,055	2,242	3,222
1.38 * Business and professional		US\$ Mn	415	400	426	423	412
Indicators							
1.39 Average size of travel party		Persons	..	..	..	..	..
Average length of stay							
1.40 Total		Days	..	..	..	..	..
1.41 * For all commercial accommodation services		Nights	8.90	8.80	8.50	7.42	10.30
1.42 * of which, "hotels and similar establishments"		Nights	..	..	..	..	..
1.43 * For non commercial accommodation services		Days	..	..	..	..	..
1.44 Average expenditure per day		US\$	66.9	68.2	64.0	62.6	55.1
2. DOMESTIC TOURISM							
<i>Data</i>							
Trips							
2.1 Total		(000)	42,867	44,585	46,927	45,911	..
2.2 * Overnight visitors (tourists)	(4)	(000)	21,531	22,823	24,512	22,622	..
2.3 * Same-day visitors (excursionists)		(000)	21,335	21,762	22,415	23,289	..
Trips by main purpose							
2.4 Total		(000)	21,532	22,824	24,512	22,622	..
2.5 * Personal		(000)	21,016	22,277	23,925	22,291	..
2.6 * holidays, leisure and recreation		(000)	13,725	14,548	15,624	14,600	..
2.7 * other personal purposes		(000)	7,291	7,729	8,301	7,691	..
2.8 * Business and professional		(000)	516	547	587	331	..

Data challenges: 2-step concordance

- HS codes to ISIC rev 3.1; then ISIC rev 3.1 to ISIC rev 4

HS 2007 Product Code	HS 2007 Product Description	ISIC Revision 3 Product Code	ISIC Revision 3 Product Description
30611	Rock lobster & other sea crawfish (Palinurus spp., Panulirus spp., Jasus spp.), whether/	1512	Processing and preserving of fish and fish products
30612	Lobsters (Homarus spp.), whether/not in shell, frozen	1512	Processing and preserving of fish and fish products
30613	Shrimps & prawns, whether/not in shell, frozen	1512	Processing and preserving of fish and fish products
30614	Crabs, whether/not in shell, frozen	1512	Processing and preserving of fish and fish products
30619	Frozen crustaceans (excl. of 0306.11-0306.14); frozen flours/meals/pellets of crustacea	1512	Processing and preserving of fish and fish products
30621	Rock lobster & other sea crawfish (Palinurus spp., Panulirus spp., Jasus spp.), whether/	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30622	Lobsters (Homarus spp.), whether/not in shell, other than frozen	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30623	Shrimps & prawns, whether/not in shell, other than frozen	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30624	Crabs, whether/not in shell, other than frozen	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30629	Crustaceans, other than frozen (excl. of 0306.21-0306.24); flours/meals/pellets of crusta	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30710	Oysters, whether/not in shell, live/fresh/chilled/frozen/dried/salted/in brine	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30721	Scallops, incl. queen scallops (genera Pecten/Chlamys/Placopecten), live/fresh/chilled	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30729	Scallops, incl. queen scallops (genera Pecten/Chlamys/Placopecten), other than live/fres	1512	Processing and preserving of fish and fish products
30731	Mussels (Mytilus spp., Perna spp.), live/fresh/chilled	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30739	Mussels (Mytilus spp., Perna spp.), other than live/fresh/chilled	1512	Processing and preserving of fish and fish products
30741	Cuttle fish (Sepia officinalis, Rossia macrosoma, Sepiola spp.) & squid (Ommastrephes sp	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30749	Cuttle fish (Sepia officinalis, Rossia macrosoma, Sepiola spp.) & squid (Ommastrephes sp	1512	Processing and preserving of fish and fish products
30751	Octopus (Octopus spp.), live/fresh/chilled	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30759	Octopus (Octopus spp.), other than live/fresh/chilled	1512	Processing and preserving of fish and fish products
30760	Snails (excl. sea snails)	122	Other animal farming; production of animal products n.e.c.
30791	Molluscs & invertebrates (excl. of 0307.10-0307.60), live/fresh/chilled	500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
30799	Molluscs & invertebrates (excl. of 0307.10-0307.60), frozen/dried/salted/in brine; incl. fl	1512	Processing and preserving of fish and fish products
40110	Milk & cream, not concentrated/sweetened, fat content by weight not >1%	1520	Manufacture of dairy products
40120	Milk & cream, not concentrated/sweetened, fat content by weight >1% but not >6%	1520	Manufacture of dairy products
40130	Milk & cream, not concentrated/sweetened, fat content by weight >6%	1520	Manufacture of dairy products
40210	Milk in powder/granules/other solid form, fat content by weight not >1.5%	1520	Manufacture of dairy products
40221	Milk in powder/granules/other solid form, unsweetened, fat content by weight >1.5%	1520	Manufacture of dairy products

The two types of challenges

- **Data availability:** means using proxies, best-effort assumptions, non-traditional data sources
- **Data challenges:** just means putting in the hours



Reporting on the Impacts of Response Measures: Data Challenges

Thank you!

ERCST

Roundtable on
Climate Change and
Sustainable Transition