

### Input-Output Fundamentals

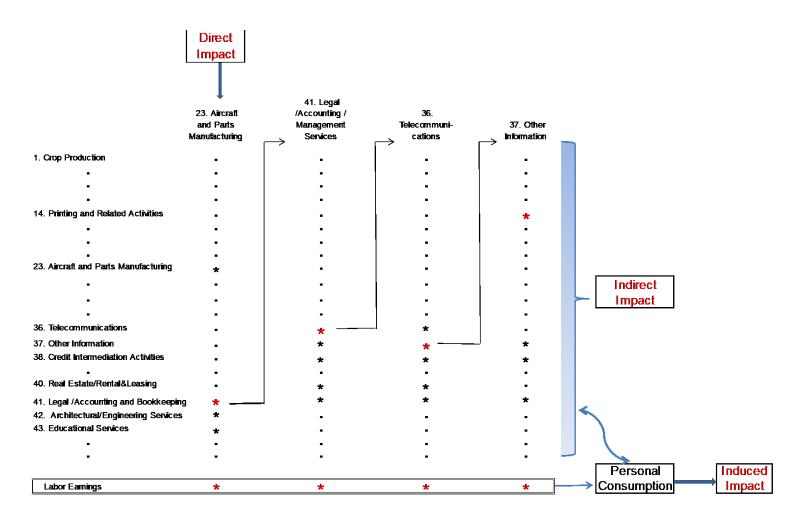
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# Inter-Industry Purchases Measure Indirect and Induced Links/Impact



## Input

#### Washington Input-Output Table

#### Sample Listing of Industry Inputs

2002 Washington Input-Output Table (millions of dollars)	9. Construction	23. Aircraft and Parts Manufacturing	48. Food Services and Drinking Places
9. Construction	110.4	140.1	141.5
10. Food, Beverage and Tobacco Manufacturing	0.0	0.2	872.2
12. Wood Product Manufacturing	350.0	2.9	19.2
15. Petroleum and Coal Products Manufacturing	575.4	0.0	34.3
17. Nonmetallic Mineral Products Manufacturing	785.5	0.0	16.0
19. Fabricated Metals Manufacturing	240.0	110.6	3.0
20. Machinery Manufacturing	117.8	11.4	2.0
21. Computer & Electronic Product Manufacturing	11.9	110.1	0.0
23. Aircraft and Parts Manufacturing	0.0	651.1	9.0
26. Furniture Product Manufacturing	252.2	1.8	224.2
28. Wholesale	770.3	193.0	50.3
29. Retail	2014.7	65.4	0.5
32. Truck Transportation	155.9	4.5	18.8
33. Other Transportation/Postal Offices	55.5	15.6	20.5
Storage/Transportation/Warehousing	2.6	1.0	4.0
Providers	11.5	64.3	6.1
36. Telecommunications	220.6	43.7	52.2
37. Other Information	0.5	1.0	47.4
38. Credit Intermediation and Related Activities	511.9	2.3	95.5
39. Other Finance and Insurance	82.6	160.1	79.0
40. Real Estate and Rental and Leasing	262.6	30.6	218.1
/Management Serv.	136.5	246.3	148.5
Services	354.4	167.3	7.0
43. Educational Services	0.1	188.0	0.0
49. Administrative/Employment Support Services	186.7	92.7	64.1
50. Waste Management/Other/Agr. Services	851.3	38.2	190.7
TOTAL INTERMEDIATE INPUT	8,069.1	2,341.8	-
VALUE ADDED (including labor)	10,290.5	8,483.1	4,459.7
IMPORTS	11,860.8	26,938.2	1,297.7
Total Purchases	30,696.3	38,012.6	8,516.9

### Job Impact Per \$10M Output Increase (2008)

	Construction	Aerospace	Food & Drinking
Resources	1.1	0.3	3.3
Construction	58.9	0.7	2.7
Manufacturing	3.7	16.2	5.6
Aerospace	0.0	15.3	0.0
Wholesale and Retail Trade	14.2	4.7	12.9
Transportation and Utilities	2.9	1.1	3.5
Information & Services	37.8	18.8	230.3
Food and Drinking Places	5.9	3.1	190.6
Total Jobs Impact	118.6	41.9	258.3
Direct	45.1	15.1	183.3
Indirect & Induced	73.5	26.8	75.0

# Issues with Input-Output and Impact Modeling

- Fixed coefficients same impact with each additional dollar of increased demand.
- Wages and prices don't adjust with increased demand.
- Can only do analysis for detailed industries in the table.
- Cannot account for fundamental changes, only increased sales.
- Localizing the national table creates errors.
- And yet...large macro models have IO assumptions in them and IO is an extremely useful tool.