

Data Appendix

Our sample combines the data sets from Anderson and Yotov (2010), Anderson, Milot, and Yotov (2013), and Anderson, Vesselovsky and Yotov (2012). In order to estimate the Constructed Trade Bias indexes and internal trade costs in Canada, we use data on Canadian trade flows (including inter-provincial, intra-provincial and international trade with the U.S. and with the rest of the world, defined as an aggregate region that includes all countries other than Canada and the U.S.), and data on production and expenditure for each Canadian province and territory, for the U.S., and for the rest of the world (ROW), all measured in current ('00,000) Canadian dollars.¹ A notable feature of our data set is that it covers most of Canada's economy at the sectoral level for a total of 28 industries including agriculture, 17 manufacturing sectors, and 9 service categories for the period 1997-2007.² Finally, we also construct variables that measure bilateral distance and whether two regions share a common border.

All Canadian data (including intra-provincial, inter-provincial and international trade data, i.e. imports and exports from and to the U.S. and ROW, for each Canadian province and territory, provincial output, and provincial expenditure) are carefully collected and maintained by Statistics Canada and by Industry Canada. In contrast, the main potential drawback of our data set is the sectoral production data for the rest of the world. These data come from various sources and are not available for the whole period of investigation.³ Drawing on structural gravity theory, we modify our econometric specification to address the potential problems due to this data limitation, as developed below.

Trade flows data. Goods trade data are from Anderson, Vesselovsky and Yotov (2012) and were constructed and provided by the Department of Foreign Affairs and International

¹We aggregate the Northwest Territories and Nunavut in one unit, even though they are separate since April 1st, 1999. Thus, our sample consists of a total of 14 regions including 12 Canadian provinces and territories, US, and the rest of the world.

²The sector selection was based on (but is not completely identical to) the S-level of aggregation as classified in the Statistics Canada's Hierarchical Structure of the I-O Commodity Classification (Revised: November 3, 2010). The 28 sector categories include (Abbreviated labeling in parentheses): Agriculture (AGRIC); Food (FOOD); Leather, Rubber and Plastic Products (LETHR); Textile Products (TXTLE); Hosiery, Clothing and Accessories (APPRL); Lumber and Wood Products (WOOD); Furniture, Mattresses and Lamps (FRNTR); Wood Pulp, Paper and Paper Products (PAPER); Printing and Publishing (PRNTG); Primary Metal Products (METL1); Fabricated Metal Products (METL2); Machinery (MCHNS); Motor Vehicles, Transportation Equipment and Parts (VHCLS); Electrical, Electronic, and Communications Products (ELCTR); Non-metallic Mineral Products (MNRLS); Petroleum and Coal Products (PETRL); Chemicals, Pharmaceutical, and Chemical Products (CHMCL); Miscellaneous Manufactured Products (MISCL); Transportation and Storage Services, including transportation margins (TRNSP); Communication Services (CMNCN); Wholesale Services, including Wholesale Margins (WHLSL); Finance, Insurance and Real Estate services (FNNCE); Professional, Scientific, Technical, Computer, Administrative, Support, and Related Services (BUSNS); Education Services (EDCTN); Health Care and Social Assistance Services (HELTH); Accommodation Services and Meals (ACMDN); and, Miscellaneous Services (OTHER). Finally, we sometimes aggregate all goods (GOODS) and all services (SRVCS). The few commodities missing from the complete S-level I-O Commodity Classification spectrum are Forestry Products, Fish, Metal Ores, and Tobacco and Beverages. Reliable bilateral trade data were not available for those products.

³For example, world production data for Agriculture cover the period 1997-2003. Services production data for ROW are for the period 2003-2007. Finally, manufacturing production data are most complete and cover the whole period 1997-2007.

Trade (DFAIT), Canada. Services trade data are from Anderson, Milot, and Yotov (2013) and were constructed and provided by Statistics Canada.⁴ Statistics Canada’s Table 386-0002 is the original data source for intra-provincial and interprovincial trade flows for both goods and services. Data on shipments between Canadian provinces and the United States and the rest of the world are from the Trade Data Online web interface of Industry Canada, which provides access to Canadian and U.S. trade data by product classified according to NAICS; the NAICS sectors were then matched or aggregated to the S-level. Data on U.S.-World bilateral trade flows are from the U.S. Bureau of Economic Analysis (BEA). We construct trade between ROW and U.S. as the difference between U.S.-World trade and U.S.-Canada trade and trade between ROW and Canada as the difference between Canada-World trade and Canada-U.S. trade. Internal trade for each of the two aggregate regions (U.S. and ROW) are obtained as the difference between output and total exports for the corresponding region. Similarly, expenditures for each region in our sample are calculated as the sum of production and imports less exports for each sector in a given year. We confirm the validity of this procedure by successfully comparing provincial expenditures obtained this way with those provided by Statistics Canada’s Table 386-0002.

Output data. Provincial output of goods and services, defined here as the value of production plus shipments out of the inventories of producers, wholesalers and retailers is from Statistics Canada’s Table 386-0002. All zero values and blank cells in the output data are treated as missing information and interpolated accordingly. Provincial output data cover the whole period 1997-2007. Output data for the United States and for the rest of the world aggregate come from several sources. Manufacturing data were compiled from the UNIDO Industrial Statistics (IndStat) database, which reports industry-level output data at the 3- and 4-digit level of ISIC code. The UNIDO IndStat data were purchased by DFAIT and cover the whole period 1997-2007. Output for Agriculture, 1997-2003, are from Anderson and Yotov (2010). The original sources of these data are the United Nations Food and Agriculture Organization (FAOSTAT) online database, which provides data on agricultural output.

Services output data are from Anderson, Milot, and Yotov (2013). Statistics Canada provided the provincial production data. The U.S. Bureau of Economic Analysis is the original source for U.S. service production data. Output for the rest of the world are from the GTAP database. These data have two limitations. First, the GTAP data are only available for 2003, 2004 and 2007. Second, the GTAP service classification is more aggregated as compared to the corresponding classification from Statistics Canada.⁵ The limitations of the production data for the rest of the world, especially in the case of Agriculture and Services, may influence our trade costs estimates. Below, we discuss the implications and we offer solutions.

Other variables. Combined with the specific regional composition of our sample, our econometric approach will enable us to obtain CTB indexes and internal trade costs estimates from a specification where all unobservable trade costs are absorbed by a rich system

⁴We are extremely grateful to Denis Caron at Statistics Canada who compiled the services data set.

⁵In particular, GTAP aggregates the categories of Wholesale and Accommodation as well as those of Health and Education. Given the nature and the importance of each of these subcategories, we split the GTAP data in order to study them separately. To do this, we use actual output levels for U.S. and Canada and we assume homogeneity, resulting in constant expenditure shares.

of fixed effects. In the second stage of our analysis, we study the determinants of inter-provincial trade costs in Canada by replacing the pair fixed effects with observable variables. Given our focus on internal trade costs in Canada, we are only able to include two of the standard gravity covariates in our estimations: bilateral distance and contiguity.⁶ We calculate bilateral distances as population-weighted distances: $d_{ij} = \sum_{k \in i} \frac{pop_k}{pop_i} \sum_{l \in j} \frac{pop_l}{pop_j} d_{kl}$, where pop_k is the population of agglomeration k in trading partner i , and pop_l is the population of agglomeration l in trading partner j .⁷ To calculate population weights, we take the biggest 30 agglomerations (in terms of population) in each province or territory.⁸ Finally, d_{kl} is the distance between agglomeration k and agglomeration l , measured in kilometers, and calculated by the Great Circle Distance Formula.⁹ All data on latitude, longitude, and population are from the World Gazetteer web page. Finally, to capture any differences in trade between contiguous provinces and territories, we construct $CONTIG_{ij}$, which takes a value of one when a province/territory and another province/territory share a common border, and it is equal to zero otherwise.

A data caveat must be noted at this point. The vast majority of the data used in this project are consistent by construction and come from the same sources. Specifically, all provincial data (including, intra-provincial, inter-provincial and international trade data for each Canadian province and territory, provincial output, and provincial expenditure) are carefully collected and handled by the Canadian government. However, in order to construct the dependent variable from Equation (17), we need Y_t , which requires data on U.S. output and, more importantly, on output for the rest of the world. While we are relatively confident in our data on U.S. production, the data on production in the rest of the world (ROW) might be questioned, especially in the case of Agriculture and Services, where our ROW data come from different sources and do not cover the whole period of investigation.¹⁰

The main issue with the measurement of Y_t is that it may affect the level of our estimates, especially given the large size of ROW relative to the Canadian regions in our sample. This will prevent direct comparisons of our indexes across sectors and over time. It should be emphasized, however, that the magnitude of Y_t does not have any implications for comparisons of trade costs across regions within a given sector and at a given point of time. The reason is that all regional trade costs in each year and sector in our sample can be interpreted as scaled by the same factor Y_t .

⁶Other gravity variables that are standardly used in the gravity literature on international trade include common language, colonial ties, the presence of free trade agreements, the presence of monetary unions, tariffs, etc. These variables do not vary within Canada and, therefore, cannot be included in our empirical specifications.

⁷This is the procedure of Mayer and Zignago (2006), which is based on Head and Mayer (2000). The most appealing argument for the use of this particular approach in constructing bilateral distance is that the same procedure obtains consistent measures of internal distances and bilateral distances for any pair of regions. In our case, we construct consistent and comparable measures of interprovincial and intra-provincial distance. The population weights proxy for city service activity weights that, while theoretically more appropriate, are not available in the data and, in addition, would present very difficult simultaneity issues that are avoided by instrumenting with city populations.

⁸In the few instances when data were not available for 30 agglomerations within a single trading partner (NT, PE and YT, for example), we included all cities for which data were available.

⁹Following Mayer and Zignago (2006), we use 32.19 kilometers as inner-city distance.

¹⁰World production data for Agriculture cover the period 1997-2003. Our data for world production of services are for the period 2003-2007. See the Data section for further details.

As a check on the potential problems due to relying on the data for ROW, we employ an alternative econometric specification, which eliminates Y_t from the estimating equation. The alternative specification rescales all trade costs relative to Ontario's internal trade costs in each year.¹¹ Specification (17) becomes:

$$\left(\frac{x_{ij,t}}{Y_{i,t}E_{j,t}} \right) / \left(\frac{x_{ON,ON,t}}{Y_{ON,t}E_{ON,t}} \right) = \exp[\tilde{\gamma}_{ij} + \widetilde{INTERPR_T}_{ij,t} + \widetilde{INTRAPR_T}_{ij,t} + \tilde{\eta}_{i,t} + \tilde{\theta}_{j,t}] + \tilde{\epsilon}_{ij,t},$$

where the notation for the covariates and for the error term on the right-hand side of the above specification are adjusted to reflect the fact that Ontario's exporter-time, importer-time and internal fixed effects are no longer included in the set of covariates. Given the normalization that we impose, the above equation implies that the trade cost indexes that we will obtain from the fixed effects are:

$$\widetilde{CTB}_{ij,t} = \widehat{CTB}_{ij,t} / \widehat{CTB}_{ON,ON,t} = \left(\frac{\widehat{t}_{ij}}{\Pi_{i,t}P_{j,t}} \right)^{1-\sigma} / \left(\frac{\widehat{t}_{ON,ON}}{\Pi_{ON,t}P_{ON,t}} \right)^{1-\sigma},$$

and the trade costs estimates for each year and sector should be interpreted as relative to Ontario's internal trade costs in the corresponding year and sector. The main advantages of the above approach are that: (i) We will be able to obtain trade costs estimates over the whole period 1997-2007; (ii) We will use consistent and reliable data provided exclusively by Canadian government databases; and (iii) Our estimates will not be subject to biases due to issues with the aggregate data for the rest of the world. The main advantages of the direct approach of obtaining CTBs from specification (25) is that these indexes are in levels, which will allow for direct comparisons across sectors and over time. We use (25) to obtain our main results, and we experiment with the specification for $\widetilde{CTB}_{ij,t}$ in the robustness analysis. In addition, in the sensitivity analysis, we demonstrate that our estimates are robust to the removal of U.S. and the aggregate rest of the world region.

Goods. *Agricultural products:* unmilled wheat; corn, barley, oats and other grains, excluding imputed feed; live animals; other agricultural products (unprocessed milk, eggs, honey, vegetables, seeds, tobacco and wool). *Food products:* meat, fish and dairy products (including processed milk); fruit and vegetable products; feeds; flour; breakfast cereal; sugar; cocoa; coffee, tea etc. *Leather, rubber and plastic products:* tires; other rubber products; plastic pipes; other plastics; footwear; gloves; handbags; other leather products. *Textile products:* yarns and fibres; fabrics; ropes, tents and threads; other textile products. *Hosiery, clothing and accessories:* hosiery; knitted clothing; furs; custom tailoring; other clothing. *Lumber and wood products:* lumber and timber; plywood and veneer; wood chips; prefabricated buildings; wood containers; caskets and coffins; other wood products. *Furniture:* household furniture; office furniture; mattresses; lamps; furniture parts; other furniture. *Wood pulp, paper and paper products:* wood pulp; newsprint; tissue; wrapping paper; paperboard; coated paper and paper products; paper bags; stationery; other paper products. *Printing and publishing:* newspapers; magazines; books; business forms; advertising; miscellaneous printing

¹¹In principle, we can use any region or trading-pair for our normalization. The motivation for our choice of Ontario is that (i) there were virtually no missing values in the data for this province; and (ii) that our estimates of Ontario's internal trade costs are usually the smallest in our sample.

components. *Primary metal products*: ferro-alloys; iron and steel ingots; steel castings; bars and rods; flat iron and steel; railway construction materials; oil and gas pipe; other pipes and tubes; primary forms of aluminum copper, nickel, carbon, lead zinc etc.; precious metals excluding gold; scrap and waste; other primary metal products. *Fabricated metal products*: boilers; tanks; plates; iron and steel structural materials; metal doors and windows; stampings; containers; wire and cable; chains; utensils; wire products; hardware; machine tools; furnaces; cooking equipment; iron and steel forgings; valves; plumbing fixtures; gas and water meters; firearms; other fabricated metal equipment. *Machinery*: agricultural machinery; bearings; pumps; conveyors; elevators; fans; furnaces; industry-specific machinery for construction, oil and gas, logging metal working and other industries; power hand tools; refrigeration and air-conditioning equipment; scales; vending machines; computers; miscellaneous machinery. *Motor vehicles and other transportation equipment*: automobiles; trucks; buses; mobile homes; trailers; specialized vehicles; motor vehicle engines and parts; motor vehicle electric equipment; aircraft and engines; locomotives and railway stock; ships and boats; snowmobiles. *Electrical, electronic and communication products*: appliances; household equipment; household furnaces; household refrigerators and freezers; household cooking equipment; TVs, VCRs etc.; telephone and related equipment; broadcasting equipment; electric motors; transformers; batteries; wiring materials; lighting fixtures; other electric equipment. *Non-metallic mineral products*: cement; concrete products; lime; brick; gypsum; stone; asbestos; glass; abrasive products. *Petroleum and coal products*: gasoline; diesel; fuel oils; tar and pitch; naphtha; asphalt; other petroleum products. Chemicals, pharmaceuticals and chemical products: industrial chemicals; hydrocarbons; organic acids; fertilizers; pharmaceuticals; soaps, detergents and other cleaning products; explosives; paints; ammunition; insecticides; inks; other chemical products. *Miscellaneous manufactured products*: scientific and lab equipment; measuring and other scientific instruments; clocks and watches; photographic equipment; pearls and precious stones; toys and games; shades and blinds; recordings; musical instruments; miscellaneous end-use consumer products.

Services. *Transportation and Storage Services*: Air, water and rail passenger and freight transportation; Bus (including school), ambulance and truck transportation; Urban transit and taxi transportation; Pipeline transportation of natural gas and oil; Grain and other storage; Warehousing. *Communication Services*: Radio, television broadcasting; Cable programming; Telephone and telecommunication; Postal and courier. *Finance, insurance and real estate services*: Paid charges to financial institutions; commissions and investment banking; Mutual funds, Other securities and royalties; Real estate commissions; Life and non-life insurance; Pension funds; Paid residential and non-residential rent and lodging. *Professional Services*: Architect, engineering, scientific, accounting, legal, advertising and other professional services; software, computer lease, data processing and other information services; Investigation and security services; Other administrative and personal services. *Education Services*: Elementary, Secondary, College and University fees and tuition. Other education fees. *Health care and Social assistance Services*: Private hospital, private residential care and other health and social services; Child care outside the home; Laboratory, physician and dental services; Other health practitioner services. *Accommodation Services and Meals*: Hotel, motel and other accommodation; Meals outside the home; Board paid. *Wholesale Services*: Wholesale trade and wholesaling margins. *Miscellaneous Services*: Beauty and other personal care services; Funeral services; Child care in the home; Private household services;

Photographic, laundry and dry cleaning, services to building and dwellings; Automotive and other repair and maintenance; Rental of office, machinery, equipment, automobile and truck; Trade union and other membership organization dues and political parties contribution; Motion picture production, exhibition and distribution; Lottery, gambling and other recreation services.

Table 1: Summary Statistics - Total Manufacturing

Variable	Mean	Std. Dev.	Min.	Max.	N
TRADE	1184419.694	11682211.128	0	199317485.125	2116
DISTANCE	7.541	1.224	3.459	9.186	2156
DIST_INTER	5.074	3.594	0	8.519	2156
DIST_INTRA	0.253	0.995	0	4.856	2156
CONTIG_PR_PR	0.143	0.35	0	1	2156
Y_i	16274234.233	44639135.111	295.653	214967242.823	2156
E_j	16274234.233	43665822.118	547.988	207962707.915	2156
Y	227839279.256	31924026.018	178718918.065	277046501.951	2156

Table 2: Summary Statistics - All Sectors

Variable	Mean	Std. Dev.	Min.	Max.	N
Agriculture					
trade	95888.601	1407682.117	0	27686164	1815
Y_i	1130115.674	4754553.981	3.642	27885920	2156
E_j	1130115.645	4801973.419	37.017	28130260	2156
Y	15821619.028	11405903.199	1041267.688	29559330	2156
Food					
trade	139734.087	1456763.752	0	22546360	2076
Y_i	1883688.084	5138170.384	4.186	22858348	2156
E_j	1883688.092	5154093.624	48.936	22882266	2156
Y	26371632.909	2828320.297	21283464	29676758	2156
Leather, Rubber, Plastic					
trade	63779.735	620940.708	0	9939977	1924
Y_i	796832.550	2229129.09	10.522	10587389	2156
E_j	796832.53	2162610.275	43.914	10148147	2156
Y	11155655.545	1369350.629	8842422	13288992	2156
Textile Products					
trade	31702.095	312560.537	0	5072775.5	1775
Y_i	365397.518	1070364.778	0.513	5329073	2156
E_j	365397.516	1043521.52	3.869	5177109.5	2156
Y	5115565.318	638019.724	4218357.5	6166619.5	2156
Hosiery, Clothing					
trade	27847.653	225023.8	0	3465034.5	1629
Y_i	294570.309	888898.882	0.966	4394155.5	2156
E_j	294570.309	750453.41	0.987	3508407.75	2156
Y	4123984.318	428373.565	3562109.75	4813956.5	2156
Lumber, Wood					
trade	23792.248	218501.271	0	3308752.5	2021
Y_i	312234.638	765310.381	7.996	3417051.5	2156
E_j	312234.636	779478.989	2.967	3366292.5	2156
Y	4371284.886	479556.983	3540345.5	5012619.5	2156
Furniture					
trade	23602.776	199704.123	0	2572774.25	1763
Y_i	270205.81	684076.325	1.938	2865104.5	2156
E_j	270205.805	665715.796	11.708	2594359	2156
Y	3782881.273	287192.423	3160850.5	4146345	2156

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Table 2 – *Continued from previous page*

Variable	Mean	Std. Dev.	Min.	Max.	N
Wood, Pulp, Paper					
trade	41722.986	375068.951	0	5240972	1881
Y_i	509616.478	1267918.182	1.931	5368380.5	2156
E_j	509616.471	1302590.828	4.141	5447384	2156
Y	7134630.727	533422.484	5945768.5	7915453.5	2156
Printing, Publishing					
trade	24055.035	224511.533	0	2960472	1976
Y_i	308654.21	766370.535	46.199	3012020.5	2156
E_j	308654.212	765762.463	46.753	2998071.75	2156
Y	4321159.023	191572.663	3956946	4522927.5	2156
Primary Metal					
trade	100361.505	1102313.542	0	22176862	1814
Y_i	1182180.328	3778904.082	1.041	22966368	2156
E_j	1182180.328	3723427.861	25.708	22703142	2156
Y	16550524.545	5708058.653	11029222	26618212	2156
Fabricated Metal					
trade	73615.112	744663.148	0	12408385	2044
Y_i	977073.301	2681241.18	10.373	12941514	2156
E_j	977073.296	2640219.894	12.589	12662438	2156
Y	13679026.091	1668696.541	11146155	16641273	2156
Machinery					
trade	101107.267	968283.925	0	16643530	1962
Y_i	1288132.844	3612517.87	7.564	17999438	2156
E_j	1288132.852	3570243.358	35.676	17844794	2156
Y	18033859.727	2584339.113	15014319	22697272	2156
Transportation					
trade	178850.529	1587662.126	0	24501240	1947
Y_i	2261181.693	5973724.536	2.674	26972708	2156
E_j	2261181.702	5833501.916	37.243	26054862	2156
Y	31656543.818	3470966.023	24668170	35609696	2156
Electrical					
trade	175118.148	1520111.326	0	23577520	1896
Y_i	2156000.071	6042393.451	6.825	27834282	2156
E_j	2156000.041	5736915.733	27.057	25807550	2156
Y	30184000.727	2580690.517	25753470	34122676	2156
Minerals					
trade	46124.177	473556.022	0	7966334.5	1838
Y_i	550495.04	1606927.093	0.942	8189820.5	2156
E_j	550495.04	1580869.696	11.144	8031403	2156
Y	7706930.455	1403544.339	5808017	9995728	2156

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Variable	Mean	Std. Dev.	Min.	Max.	N
Petroleum, Coal					
trade	90922.184	881894.476	0	15341304	1782
Y_i	1052099.566	2957764.761	0.966	16050512	2156
E_j	1052099.568	2919373.014	214.481	15604207	2156
Y	14729393.909	4878464.654	8614728	22728538	2156
Chemicals					
trade	137016.712	1297381.951	0	21521846	1971
Y_i	1753635.979	4745621.279	4.451	22987306	2156
E_j	1753635.979	4721733.442	9.43	22831538	2156
Y	24550903.636	4229018.458	18388620	31047764	2156
Miscellaneous					
trade	24901.256	174598.553	0	2109448.5	1931
Y_i	312235.875	769147.507	11.246	3189292	2156
E_j	312235.876	741201.124	11.385	2681641	2156
Y	4371302.25	479264.547	3392257.75	4994660.5	2156
Transport					
trade	146.711	2034.894	0	44774.7	2150
Y_i	2048.24	7551.037	0.663	45655.07	2156
E_j	2048.24	7519.809	0.930	45463.875	2156
Y	28675.362	20689.467	8294.02	55591.313	2156
Communication					
trade	100.333	1131.352	0	15008.511	2150
Y_i	1400.759	4027.626	0.374	15069.6	2156
E_j	1400.759	4030.103	0.454	15074.991	2156
Y	19610.632	7238.983	9749.648	28135.625	2156
Wholesale					
trade	145.039	1796.053	0	44556.56	2150
Y_i	2024.897	6711.724	0.528	46237.324	2156
E_j	2024.897	6745.54	0.736	46857.723	2156
Y	28348.564	17803.969	11053.621	59978.109	2156
Finance					
trade	327.231	3649.533	0	52843.628	2150
Y_i	4568.489	13270.804	1.351	53996.602	2156
E_j	4568.488	13183.6	1.508	53632.629	2156
Y	63958.838	19322.207	35576.105	87361.453	2156
Business					
trade	334.02	4416.725	0	89317.5	2150
Y_i	4663.263	16058.339	0.607	89927.273	2156
E_j	4663.263	16091.948	1.115	90388.922	2156
Y	65285.687	43826.054	18872.568	119276.734	2156

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Variable	Mean	Std. Dev.	Min.	Max.	N
Education					
trade	38.31	569.758	0	12511.721	2150
Y_i	534.841	2085.761	0.029	12564.238	2156
E_j	534.841	2099.586	0.049	12686.933	2156
Y	7487.773	5860.348	1663.023	14982.021	2156
Health					
trade	268.629	4026.293	0	86545.36	2150
Y_i	3750.345	14624.262	0.378	86638.125	2156
E_j	3750.345	14613.862	0.433	86565.328	2156
Y	52504.836	41348.894	11731.943	103812.359	2156
Accomodation					
trade	118.326	1679.909	0	39625.448	2150
Y_i	1651.961	6137.076	0.669	39902.156	2156
E_j	1651.961	6142.778	0.47	39826.543	2156
Y	23127.452	17100.504	6258.021	48350.91	2156
Other Services					
trade	108.979	1549.258	0	32596.572	2150
Y_i	1521.458	5628.799	0.761	32642.686	2156
E_j	1521.458	5649.039	0.779	32821.359	2156
Y	21300.405	15547.502	5749.984	39850.391	2156