Online Appendix to "Trade, Migration, and Productivity: A Quantit

Table 12: Summary Data for China's Provinces, 2000

vince	Employment (millions)	Inter-Provincial Migrant Share of Employment	Intra-Provincial Migrant Share of Employment	Agriculture's Share of Employment	Relative Real Ag. Income	Relative Real Nonag. Income	Home Bias in Total Trade	International Export S Production
Anhui	33.73	0.004	0.113	0.60	0.31	1.09	0.619	0.024
Beijing	6.22	0.231	0.147	0.12	0.63	1.89	0.661	0.065
Chongqing	16.37	0.014	0.112	0.57	0.30	1.25		

where $\Phi_n^j = \left(\sum_k \sum_i \left(V_{i'}^{k'} \delta_{ni'}^{jk'} / \tilde{\gamma}\mu^{\prime}\right.\right.$

$= \Phi_n^j$. Given that the distribution of idiosyncratic preferences across regions and sectors has mean zero, real income and welfare are synonymous and therefore $\bar{V}_n^j \equiv E\left[U_n^j\right]$. From Proposition 1, $m_{ni}^{jk} = \frac{\left(V_i^k \delta_{ni}^{jk} / \mu_{ni}^{jk}\right)^{\kappa}}{\sum_{k'} \sum_{i'} \left(V_{i'}^{k'} \delta_{ni'}^{jk'} / \mu_{ni'}^{jk'}\right)^{\kappa}}$ and therefore $\bar{V}$

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$_i\pi_{ni}^j$, equations 2, 6 and 7 solve counterfactual expenditures $X_{ni}^{j'}$, revenues $R_{ni}^{j'}$, and incomes $\sum_j v_n^{j'} L_n^{j'}$. We therefore know $\hat{w}_n^j = \hat{R}_n^j / \hat{L}_n^j$ and $\hat{r}_n^j = \hat{R}_n^j$. All together, these expressions give changes in prices $\hat{P}_n^j$ tra e

changes.

Estimating Trade Costs

We begin with a standard Head

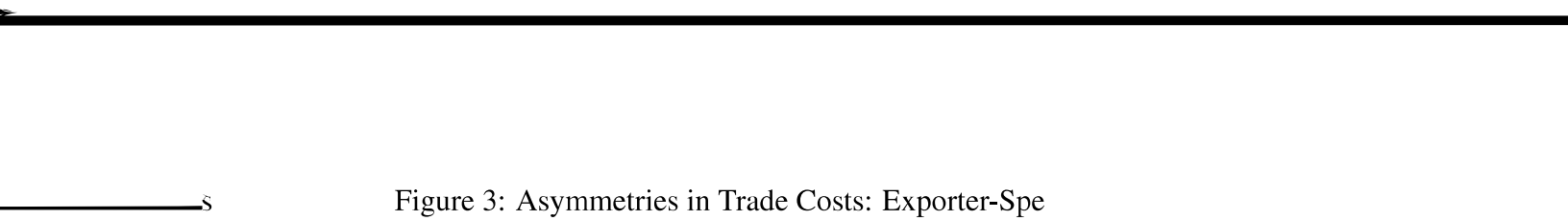

Figure 3: Asymmetries in Trade Costs: Exporter-Spe

Table 14: Relative Changes of Bilateral Trade Costs

Importer	Exporter								
	North-east	Beijing Tianjin	North Coast	Central Coast	South Coast	Central Region	North-west	South-west	Abroad
Change in Trade Costs in Agriculture, $\hat{\tau}_{ni}^{ag}$									
		1.34	0.88	1.17	1.66	1.24	1.31	0.90	0.96
	0.92		0.63	0.79	1.16	0.91	0.92	0.64	0.72
	0.80	0.83		0.82	1.11	0.77	0.72	0.61	0.72
	0.78	0.77	0.60		1.41	0.83	0.65	0.77	0.76
	0.78	0.79	0.57	0.99		0.87	0.72	0.70	0.73
		1.08	0.68	1.01	1.50		0.86	0.87	0.77
		1.35	0.79	0.98	1.54	1.07		0.81	0.61
Southwest		0.89	0.64	1.10	1.41	1.02	0.76		0.73
Abroad		1.03	0.78	1.12	1.53	0.93	0.60	0.76	
Change in Trade Costs in									

Table 16: Effects of Various Cost and Productivity Parameter Changes

$\frac{j}{n}$	-0.1	0.0	3.6%	28.0%	42.5%	35.9%
All Changes *	7.9	2.7	22.2%	131.3%	77.2%	74.7%
Marginal Effects (changes relative to what productivity delivers)						
Internal Trade	9.1	-0.7	0.8%	-3.7%	11.1%	11.5%
External Trade	-0.6	3.5	4.8%	5.6%	5.4%	1.8%
All Trade	8.2	2.5	5.5%	1.9%	16.5%	13.2%
Migration	0.0	0.2	12.4%	77.9%		

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Table 19: Migration Costs and Distance Regressions

Migration Costs μ_{ni}^{jk}

Table 22: Results with Province-Level Tra e Imbalances