Data & Concise Explanation Document

Replicated Table 2: Relative Productivity Levels (Part 1)

countrycode	agr	bus	con	dwe	fin	man
AUS	1	1.3115	0.96721	1.6639	1.3115	1.2869
BEL	1	1.4516	0.33871	1.2097	1	2.0484
CZE	1	0.81891	0.13971	0.44922	0.65556	1.3901
DEU	1	1.08	0.52	0.84	0.86667	1.16
DNK	1	1.5289	0.42644	1.5419	1.2067	1.9516
ESP	1	1.2097	0.20968	0.8871	0.8871	1.629
FIN	1	1.0521	0.45833	1	0.6875	1.1979
FRA	1	0.93814	0.34021	0.7732	0.45361	0.97938
GBR	1	1.0122	0.2561	1.3902	0.86585	0.84146
GRC	1	0.66364	0.063636	0.3	0.7	0.94545
HUN	1	0.73746	0.10704	0.29304	0.47073	1.3786
IRL	1	0.97222	0.44444	0.99074	0.90741	0.99074
ITA	1	0.81188	0.11881	0.54455	0.63366	1.0792
JPN	1	0.22541	0.15439	0.15666	0.1134	0.17125
KOR	1	0.29603	0.037162	0.12954	0.21057	0.36788
NLD	1	1.1711	0.35526	1.2632	0.86842	1.5789
POL	1	0.70107	0.16014	0.16014	0.70819	1.2242
PRT	1	1	0.085714	0.55714	0.81429	1.8571
SVK	1	0.90278	0.15278	0.56944	0.77778	1.5833
SWE	1	1.2107	0.58249	0.82234	0.90355	1.3401
USA	1	1	1	1	1	1

Replicated Table 2: Relative Productivity Levels (Part 2)

countrycode	min	oth	pu	pub	tra	trd
AUS	2.459	1.1721	2.4016	0.92623	1.8852	0.97541
BEL	1.8065	1.1935	3.7742	1.0161	2.2258	0.98387
CZE	2.4046	0.58893	2.0446	0.28694	0.77109	0.53949
DEU	1.2267	1	4.1333	0.69333	2.4267	0.57333
DNK	0.94972	1.743	4.4302	0.94413	2.6406	1.0857
ESP	2.3387	1	3.4355	0.66129	1.6129	1.0484
FIN	1	1.0417	1.5208	0.63542	1.9063	0.53125
FRA	1.0206	0.81443	1.8144	0.53608	1.4639	0.82474
GBR	0.7439	0.82927	1.7195	0.62195	1.7927	0.65854
GRC	1.8909	0.44545	1.0636	0.3	0.82727	0.73636
HUN	2.5062	0.4634	1.0555	0.26222	1.1854	0.41575
IRL	1.1574	0.82407	1.3241	0.71296	1.1481	0.92593
ITA	0.61386	0.69307	1.8119	0.55446	0.81188	0.54455
JPN	0.45978	0.23111	0.37543	0.10855	0.49312	0.23347
KOR	0.84958	0.19003	0.19521	0.12798	0.18828	0.22479
NLD	1.0921	0.94737	2.0395	0.81579	2.5132	1.2368
POL	2.9039	0.52313	1.7616	0.27758	0.98932	0.78648
PRT	2.1143	0.74286	3.2857	0.5	1.5429	0.64286
SVK	1.9306	0.625	1.625	0.29167	0.84722	0.65278
SWE	1.8921	1.4315	1.7944	0.71574	2.0673	0.99873
USA	1	1	1	1	1	1

Replication of equation 18

Variable	log(corrected exports)	log(exports)	log(corrected exports)	log(exports)
Coefficient	1.5943	2.0687	4.1773	5.9833
StdErr	0.1591	0.1609	0.3695	0.3637
Method	OLS	OLS	IV	IV
FixedEffects	Exp×Imp,Ind×Imp FE	Exp×Imp,Ind×Imp FE	Exp×Imp,Ind×Imp FE	Exp×Imp,Ind×Imp FE

Explanation of judgment calls:

The replication task constrains us to using the most recent data overlap available (2017) while also only using the two datasets. This is, indeed, a significant constraint, for the reasons described shortly.

The newer version of the GGDC Productivity Level Database does not contain the same fine-grained industry sections that the older one does. It contains fewer and more broad industry categories, shown below:

agr: Agriculture,
min: Mining,
man: Manufacturing,
pu: Utilities,
con: Construction,
trd: Trade,
tra: Transport,
bus: Business,
fin: Finance,
dwe: Real estate,
pub: Government,
oth: Other services

Thus, we have performed the replication of table 2 with all of the above industries, and for the same 21 countries shown in the original table 2.

However, under these new industry classifications, only four of the industries actually overlap with the OECD STAN BTDIxE database. Those are agr, min, man, and pu. So, for the replication of table 3, only those four industries could be used given our constraint of only using the most recent overlap and no additional datasets.

Citations:

Costinot, Arnaud, Dave Donaldson, and Ivana Komunjer (2012), "What goods do countries trade? A quantitative exploration of Ricardo's ideas." Review of Economic Studies.

Shiguang Zhu, Norihiko Yamano, and Agnès Cimper (2017), "Bilateral Trade Database by Industry and End-use (BTDIxE)", OECD Publishing.

Robert Inklaar, Ryan Marapin, and Kaira Gräler (2023), "Tradability and sectoral productivity differences across countries", GGDC Research Memorandum 195.