

# Exports, Export Destinations, and Skills Online Appendix

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## Appendix A: Additional Results

**Table A1. Distribution of firms by industry.** Table A1 reports the number of firms by ISIC Revision 2 2-digit industry in 1998. This information gives a sense of the type of industries involved in our analysis. Among a total of 901 manufacturing firms, the largest number of units are in Food & Beverages (139), followed by Chemical Products (83), Machinery & Equipment n.e.c. (82), Textiles (68), Rubber & Plastic (67) and Metal Products (66). In contrast, there are very few firms in Coke & Refined Petroleum Products, Office, Accounting & Computing Machinery, or Radio, TV & Communication Equipment. The survey does not cover firms that produce primary products such as agricultural commodities.

Note that industries in the year-industry effects used in all regressions are defined on a more disaggregate level (3 digits instead of 2).

**Table A2. World Bank country classification.** Table A2 groups countries according to their income level. Following this classification we define two sets of High Income Countries. In the first definition we include High Income OECD countries, High Income non-OECD countries, and Upper-middle Income countries. In the second definition we include only the first two groups (High Income OECD and High Income non-OECD countries)

**Table A3. One plant firms.** Table A3 reproduces columns (3)-(5) in Table 5 (Log average wage) and Table 7 (Share of non-production workers) restricting the sample to firms with only one plant. Results are very close to those results obtained from the full sample of firms.

**Table A4. Reduced form regressions.** Table A4 shows results from regressions of the dependent variables (Log average wage and Share of non-production workers) on the instruments (Share of Brazil in exports in 1998 interacted with year effects, and Weighted average exchange rate). Regressions include firm fixed effects, industry-year effects, and initial conditions-year effects.

**Table A5. Number of Workers.** Table A5 reports IV and reduced form regressions

where the dependent variables are: Log total number of workers, Log number of skilled workers, and Log number of unskilled workers.

**Tables A6, A7, A8, A9. Alternative Definition of High Income Destinations.**

Tables A6-A9 reproduce Tables 9-12 in the paper using the alternative definition of High Income Exports (Upper-middle income is excluded from the high income group).

## Appendix B: Sensitivity to Instruments

In this appendix, we test the robustness of our results by using different sets of instruments.

The main instruments in our paper are the interaction of the initial share of Brazil in exports for firm  $i$  ( $\lambda_{i98}$ ) and year effects ( $\phi_t$ ); and the weighted average relative exchange rate where the weights are the share of each country  $c$  in firm's  $i$  sales (not exports) (denoted by  $\psi_{i98}^c$ ). These instruments are defined as

$$(1) \quad I_{it}^{HI_1} = \phi_t * \lambda_{i98}^{BRA},$$

$$(2) \quad I_{it}^{EXP} = \sum_c \text{erate}_t^c * \psi_{i98}^c,$$

We alternatively work with a more parametric approach in which the initial share of Brazil in exports is interacted with the Brazil–Argentina relative exchange rate (instead of year effects).

$$(3) \quad I_{it}^{HI_2} = \text{erate}_t^{BRA} * \lambda_{i98}^{BRA}.$$

Some results using  $I^{HI_2}$  together with  $I^{EXP}$  are presented in the paper (Table 6 and Panel B of Table 7). In this appendix we reproduce all tables in the paper using this alternative set of instruments.

Additionally, we also test robustness to different instruments for  $EXP$ . We replace the average exchange rate faced by each firm ( $I^{EXP}$ ) with similar instruments that only exploit

the exogenous variation caused by the Brazilian devaluation. We define

$$(4) \quad I_{it}^{EXP_1} = \phi_t * \psi_{i98}^{BRA},$$

and

$$(5) \quad I_{it}^{EXP_2} = \text{erate}_{it} * \psi_{i98}^{BRA}.$$

The instrument  $I_{it}^{EXP_1}$  is analogous to  $I^{HI_1}$ ; we interact the year effects  $\phi_t$  with the initial share of exports to Brazil on total sales,  $\psi_{98}^{BRA}$ . To construct  $I^{EXP_2}$ , we interact those shares with the Brazilian exchange rate so that this instrument works in the same way as  $I^{EXP}$  does (but only taking into account the Brazilian devaluation).<sup>1</sup>

Note that  $I^{EXP_1}$  and  $I^{EXP_2}$  are a measure of the “scope for retrenchment into local markets.” Firms with a larger pre-shock share of exports to Brazil on total *sales* had more possibilities to divert sales into the domestic markets (compared to other firms oriented towards non-Brazil markets). We expect a negative association between  $EXP$  and  $I^{EXP_1}$  or  $I^{EXP_2}$  in the first stage. In addition, we expect these instruments to be negatively correlated with  $HI$  because a higher scope for retrenchment into local markets limit the scope to divert exports to high income. In contrast, we expect  $I^{HI_1}$  and  $I^{HI_2}$  to be positively correlated with export intensity  $EXP$  because a higher scope for export switching to high-income countries allow firm exports to remain high relative to sales (conditional of the other controls and instruments).

We consider the following four combinations of instruments

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<sup>1</sup>Note the difference with  $\lambda_{i98}^{BRA}$  in (1) or (3), which is the share of exports to Brazil on total exports. That is,  $\lambda_{i98}$ =exports to Brazil/total exports but  $\psi_{i98}$ =exports to Brazil/sales.

| Instrument for <i>HI</i>                              | Instrument for <i>EXP</i>                        | Results reported in        |
|---|--|----------------------------|
| $I_{it}^{HI_1} = \phi_t * \lambda_{i98}^{BRA}$        | $I_{it}^{EXP} = \sum_c erate_t^c * \psi_{i98}^c$ | Paper                      |
| $I_{it}^{HI_2} = erate_t^{BRA} * \lambda_{i98}^{BRA}$ | $I_{it}^{EXP} = \sum_c erate_t^c * \psi_{i98}^c$ | Paper and on-line appendix |
| $I_{it}^{HI_1} = \phi_t * \lambda_{i98}^{BRA}$        | $I_{it}^{EXP_1} = \phi_t * \psi_{i98}^{BRA}$     | On-line appendix           |
| $I_{it}^{HI_2} = erate_t^{BRA} * \lambda_{i98}^{BRA}$ | $I_{it}^{EXP_2} = erate_{it} * \psi_{i98}^{BRA}$ | On-line appendix           |

**Tables B1-B12** report results using the different combinations of instruments. Our results are robust to the different specifications explored here.

**Table B8. Quality Ladders.** Table B8 splits industries in high or low scope for vertical differentiation according to the length of their "quality ladders" estimated by Khandelwal (2010). Industries with high scope for vertical differentiation are those with "long" quality ladders (i.e. where the variance in quality among different countries of origin is larger). Results from the four combinations of instruments are reported.

Table A1  
Distribution of Firms by 2-digit Industry

|  | All Firms  | Exporters  | Non-Exporters |
|--|------------|------------|---------------|
| Food and beverages                         | 139        | 72         | 67            |
| Textiles                                   | 68         | 38         | 30            |
| Apparel                                    | 17         | 7          | 10            |
| Leather and leather products               | 22         | 10         | 12            |
| Wood, cork and straw products              | 20         | 5          | 15            |
| Paper and paper products                   | 31         | 20         | 11            |
| Publishing, printing, media                | 27         | 10         | 17            |
| Coke and refined petroleum products        | 4          | 4          | 0             |
| Chemicals and chemical products            | 83         | 73         | 10            |
| Rubber and plastics products               | 67         | 42         | 25            |
| Other non-metallic mineral products        | 61         | 29         | 32            |
| Basic metals                               | 34         | 20         | 14            |
| Metal products                             | 66         | 35         | 31            |
| Machinery and equipment n.e.c.             | 82         | 62         | 20            |
| Office, accounting and computing machinery | 1          | 1          | 0             |
| Electrical machinery                       | 56         | 37         | 19            |
| Radio, TV and communication equipment      | 5          | 3          | 2             |
| Medical, precision and optical instruments | 13         | 11         | 2             |
| Motor vehicles                             | 44         | 30         | 14            |
| Other transport equipment                  | 14         | 7          | 7             |
| Furniture; Other                           | 47         | 27         | 20            |
| <b>Total</b>                               | <b>901</b> | <b>543</b> | <b>358</b>    |

Isic Revision 2 Classification

Table A2  
World Bank Country Classification

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**High income OECD:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Japan, Korea, Luxembourg, Netherlands, Norway, New Zealand, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States

**High income non-OECD:** Bahrain, Bahamas, Barbados, Cyprus, Hong Kong, Israel, Kuwait, Malta, Puerto Rico, Qatar, Singapore, United Arab Emirates

**Upper-middle income:** Chile, Costa Rica, Croatia, Czech Republic, Dominica, Gabon, Grenada, Hungary, Lebanon, Lithuania, Mexico, Mauritius, Malaysia, Panama, Poland, Saudi Arabia, Seychelles, St. Lucia, Trinidad and Tobago, Uruguay, Venezuela

**Low-middle income:** Algeria, Bolivia, Brazil, Bulgaria, China, Colombia, Cuba, Dominican Republic, Ecuador, Egypt, El Salvador, Guatemala, Guyana, Honduras, Iran, Jamaica, Jordan, Morocco, Paraguay, Peru, Phillipines, Russia, Saint Vincent and the Grenadines, South Africa, Sri Lanka, Suriname, Syria, Thailand, Turkmenistan, Tunisia, Turkey, Ukraine

**Low income:** Angola, Benin, Bangladesh, Cote d'Ivoire, Comoros, Democratic People's Republic of Korea, Democratic Republic of Congo, Ethiopia, Haiti, India, Indonesia, Kenya, Myanmar, Mozambique, Nigeria, Nicaragua, Pakistan, Papua New Guinea, Tanzania, Uganda, Vietnam, Yemen, Zimbabwe

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Countries are grouped according to their income level

Table A3  
One-plant Firms

|   | (1)                 | (2)                 | (3)                 |
|---|---------------------|---------------------|---------------------|
| <b>Panel A: Log Average Wage</b>          |                     |                     |                     |
| High Income Exports ( <i>HI</i> )         | 0.253***<br>[0.095] | 0.276***<br>[0.102] | 0.256***<br>[0.099] |
| Exports/Sales ( <i>EXP</i> )              | 0.002<br>[0.441]    | 0.043<br>[0.420]    | 0.024<br>[0.437]    |
| Log Sales                                 | ---                 | ---                 | 0.038<br>[0.025]    |
| <b>Panel B: Share of non-prod Workers</b> |                     |                     |                     |
| High Income Exports ( <i>HI</i> )         | 0.090***<br>[0.034] | 0.090**<br>[0.036]  | 0.089**<br>[0.036]  |
| Exports/Sales ( <i>EXP</i> )              | -0.045<br>[0.122]   | -0.039<br>[0.130]   | -0.052<br>[0.120]   |
| Log Sales                                 | ---                 | ---                 | -0.012*<br>[0.007]  |
| Industry*Year Effects                     | Yes                 | Yes                 | Yes                 |
| Initial Conditions*Year Effects           | Yes                 | ---                 | Yes                 |
| Initial Conditions*Exchange Rate          | ---                 | Yes                 | ---                 |
| Number of Firms                           | 750                 | 750                 | 750                 |
| Observations                              | 2117                | 2117                | 2117                |

All regressions include firm fixed effects and use Dummy instruments.



Table A4  
Reduced Form Regressions

|   | All firms             |                      | Increased Exports    |                      | Did not increase Exports |                     |
|---|-----------------------|----------------------|----------------------|----------------------|--------------------------|---------------------|
|   | (1)                   | (2)                  | (3)                  | (4)                  | (5)                      | (6)                 |
| <b>Panel A: Log Average Wage</b>          |                       |                      |                      |                      |                          |                     |
| Share BRA in exports * 1999 ( $HI_1$ )    | 0.0794**<br>[0.0336]  | ---                  | 0.129***<br>[0.0433] | ---                  | 0.0835*<br>[0.0449]      | ---                 |
| Share BRA in exports * 2000 ( $HI_1$ )    | 0.0916***<br>[0.0345] | ---                  | 0.0828*<br>[0.0429]  | ---                  | 0.109**<br>[0.0475]      | ---                 |
| Share BRA in exports * erate ( $HI_2$ )   | ---                   | 0.142***<br>[0.0506] | ---                  | 0.193***<br>[0.0650] | ---                      | 0.154**<br>[0.0678] |
| R-squared                                 | 0.086                 | 0.085                | 0.164                | 0.164                | 0.096                    | 0.095               |
| <b>Panel B: Share of non-prod Workers</b> |                       |                      |                      |                      |                          |                     |
| Share BRA in exports * 1999 ( $HI_1$ )    | 0.0270**<br>[0.0129]  | ---                  | 0.0431**<br>[0.0184] | ---                  | 0.024<br>[0.0163]        | ---                 |
| Share BRA in exports * 2000 ( $HI_1$ )    | 0.0249*<br>[0.0132]   | ---                  | 0.0366**<br>[0.0182] | ---                  | 0.0298*<br>[0.0173]      | ---                 |
| Share BRA in exports * erate ( $HI_2$ )   | ---                   | 0.0448**<br>[0.0194] | ---                  | 0.0700**<br>[0.0276] | ---                      | 0.0436*<br>[0.0247] |
| R-squared                                 | 0.074                 | 0.074                | 0.101                | 0.101                | 0.085                    | 0.085               |
| Industry*Year Effects                     | Yes                   | Yes                  | Yes                  | Yes                  | Yes                      | Yes                 |
| Initial Conditions*Year Effects           | Yes                   | Yes                  | Yes                  | Yes                  | Yes                      | Yes                 |
| Observations                              | 2544                  | 2544                 | 1513                 | 1513                 | 1871                     | 1871                |
| Number of firmid                          | 901                   | 901                  | 508                  | 508                  | 673                      | 673                 |

All regressions include firm fixed effects. Columns (1) and (2): all firms are included in the sample. Columns (3) and (4): among exporters, only those that increased exports between 1998 and 2000 are included in the sample. Columns (5) and (6): among exporters, only those that did not increase exports between 1998 and 2000 are included in the sample.

Table A5  
Number of Workers

|  | Log Total Workers   |                      | Log Skilled Workers |                      | Log Unskilled Workers |                      |
|--|---------------------|----------------------|---------------------|----------------------|-----------------------|----------------------|
|  | (1)                 | (2)                  | (3)                 | (4)                  | (5)                   | (6)                  |
| High Income Exports ( <i>HI</i> )                      | 0.061<br>[0.091]    | ---                  | 0.162<br>[0.143]    | ---                  | -0.036<br>[0.088]     | ---                  |
| Exports/Sales ( <i>EXP</i> )                           | 0.604<br>[0.642]    | ---                  | 1.208*<br>[0.619]   | ---                  | 0.728<br>[0.771]      | ---                  |
| Share BRA in exports * 1999 ( <i>HI</i> <sub>1</sub> ) | ---                 | -0.0233<br>[0.0354]  | ---                 | 0.0532<br>[0.0581]   | ---                   | -0.0520<br>[0.0387]  |
| Share BRA in exports * 2000 ( <i>HI</i> <sub>1</sub> ) | ---                 | 0.0419<br>[0.0363]   | ---                 | 0.0441<br>[0.0598]   | ---                   | 0.00591<br>[0.0398]  |
| Log Sales  | 0.386***<br>[0.043] | 0.389***<br>[0.0163] | 0.322***<br>[0.056] | 0.330***<br>[0.0274] | 0.404***<br>[0.040]   | 0.406***<br>[0.0179] |
| Industry*Year Effects                                  | Yes                 | Yes                  | Yes                 | Yes                  | Yes                   | Yes                  |
| Initial Conditions*Year Effects                        | Yes                 | Yes                  | Yes                 | Yes                  | Yes                   | Yes                  |
| Number of firmid                                       | 901                 | 901                  | 861                 | 861                  | 898                   | 898                  |
| Observations   | 2544                | 2544                 | 2376                | 2376                 | 2530                  | 2530                 |

All regressions include firm fixed effects. Columns (1), (3), (5): IV-FE regressions with dummy instruments. Columns (2), (4), (6): reduced form regressions (OLS-FE).

Table A6  
Additional Robustness Tests. Alternative Definition of High Income Countries

|   | High Income<br>(1)  | Increased<br>(2)    | Did not increase<br>(3) | Exporter<br>(4)    |
|---|---------------------|---------------------|-------------------------|--------------------|
| <b>Panel A: Log Average Wage</b>          |                     |                     |                         |                    |
| High Income Sales II                      | 11.071**<br>[4.409] | ---                 | ---                     | ---                |
| High Income Exports II ( <i>HI</i> )      | ---                 | 2.189***<br>[0.795] | 1.017***<br>[0.290]     | ---                |
| Exports/Sales ( <i>EXP</i> )              | -1.344<br>[1.589]   | -0.185<br>[0.761]   | 0.201<br>[0.422]        | ---                |
| Exporter Dummy                            | ---                 | ---                 | ---                     | -0.02<br>[0.392]   |
| High Income II Exporter Dummy             | ---                 | ---                 | ---                     | 0.691**<br>[0.347] |
| Log Sales                                 | 0.075**<br>[0.034]  | 0.069**<br>[0.028]  | 0.051**<br>[0.025]      | 0.055*<br>[0.032]  |
| <b>Panel B: Share of non-prod Workers</b> |                     |                     |                         |                    |
| High Income Sales II                      | 3.412*<br>[2.051]   | ---                 | ---                     | ---                |
| High Income Exports II ( <i>HI</i> )      | ---                 | 0.753**<br>[0.322]  | 0.280**<br>[0.115]      | ---                |
| Exports/Sales ( <i>EXP</i> )              | -0.274<br>[0.576]   | -0.084<br>[0.262]   | 0.306*<br>[0.173]       | ---                |
| Exporter Dummy                            | ---                 | ---                 | ---                     | -0.102<br>[0.124]  |
| High Income II Exporter Dummy             | ---                 | ---                 | ---                     | 0.212*<br>[0.112]  |
| Log Sales                                 | -0.001<br>[0.010]   | -0.008<br>[0.011]   | -0.005<br>[0.008]       | -0.001<br>[0.013]  |
| Industry*Year Effects                     | Yes                 | Yes                 | Yes                     | Yes                |
| Initial Conditions*Year Effects           | Yes                 | Yes                 | Yes                     | Yes                |
| Number of Firms                           | 901                 | 601                 | 769                     | 901                |
| Observations                              | 2544                | 1795                | 2156                    | 2544               |

Reproduces Table 9 excluding upper-middle-income countries from the High Income group (Definition II. See

Table A7  
Wage Regressions Controlling for Share of Non-Production Workers  
Alternative Definition of High Income Countries

|                                      | (1)                 | (2)                 | (3)                 |
|--------------------------------------|---------------------|---------------------|---------------------|
| High Income Exports II ( <i>HI</i> ) | 0.676***<br>[0.257] | 0.704***<br>[0.254] | 0.652***<br>[0.244] |
| Exports/Sales ( <i>EXP</i> )         | -0.163<br>[0.513]   | -0.112<br>[0.456]   | -0.105<br>[0.484]   |
| Share of non-prod Workers            | 0.531***<br>[0.077] | 0.531***<br>[0.082] | 0.536***<br>[0.078] |
| Log Sales                            | ---                 | ---                 | 0.063***<br>[0.018] |
| Industry*Year Effects                | Yes                 | Yes                 | Yes                 |
| Initial Conditions*Year Effects      | Yes                 | ---                 | Yes                 |
| Initial Conditions*Exchange Rate     | ---                 | Yes                 | ---                 |
| Number of Firms                      | 901                 | 901                 | 901                 |
| Observations                         | 2544                | 2544                | 2544                |

Reproduces Table 10 excluding upper-middle-income countries from the High Income group (Definition II. See Table 8)

Table A8  
Channels. Alternative Definition of High Income Countries

|   | Scope for Differentiation |                    | Transport Costs   |                    | Transport Costs + Scope for Differentiation |                   |
|---|---------------------------|--------------------|-------------------|--------------------|---|-------------------|
|   | High<br>(1)               | Low<br>(2)         | High<br>(3)       | Low<br>(4)         | High<br>(5)                                 | Low<br>(6)        |
| <b>Panel A: Log Average Wage</b>          |                           |                    |                   |                    |   |                   |
| High Income Exports II ( <i>HI</i> )      | 1.018**<br>[0.465]        | 0.513<br>[0.359]   | 0.850*<br>[0.455] | 0.771<br>[0.485]   | 1.061<br>[0.701]                            | 1.294*<br>[0.720] |
| Exports/Sales ( <i>EXP</i> )              | 0.430<br>[0.999]          | -0.091<br>[0.401]  | 0.316<br>[1.324]  | -0.220<br>[0.531]  | 1.609<br>[5.152]                            | -0.021<br>[1.090] |
| Log Sales                                 | 0.047<br>[0.030]          | 0.070**<br>[0.031] | 0.069<br>[0.048]  | 0.056*<br>[0.030]  | 0.081<br>[0.071]                            | 0.026<br>[0.055]  |
| <b>Panel B: Share of non-prod Workers</b> |                           |                    |                   |                    |   |                   |
| High Income Exports II ( <i>HI</i> )      | 0.129<br>[0.182]          | 0.250*<br>[0.137]  | 0.067<br>[0.167]  | 0.462**<br>[0.217] | 0.042<br>[0.235]                            | 0.260<br>[0.257]  |
| Exports/Sales ( <i>EXP</i> )              | 0.466<br>[0.343]          | -0.066<br>[0.178]  | 0.079<br>[0.302]  | 0.219<br>[0.252]   | -0.006<br>[1.569]                           | 0.306<br>[0.458]  |
| Log Sales                                 | -0.003<br>[0.013]         | -0.003<br>[0.008]  | 0.001<br>[0.016]  | -0.006<br>[0.011]  | 0.008<br>[0.026]                            | -0.012<br>[0.014] |
| Industry*Year Effects                     | Yes                       | Yes                | Yes               | Yes                | Yes   | Yes               |
| Initial Conditions*Year Effects           | Yes                       | Yes                | Yes               | Yes                | Yes   | Yes               |
| Number of Firms                           | 344                       | 536                | 313               | 611                | 149   | 195               |
| Observations                              | 973                       | 1506               | 892               | 1717               | 430   | 543               |

Reproduces Table 11 excluding upper-middle-income countries from the High Income group (Definition II. See Table 8)

Table A9  
Channels: High-Income Exports and Linguistic and Cultural Distance

|   | Split Regression      |                    | Controlling for     |                     |
|---|-----------------------|--------------------|---------------------|---------------------|
|   | High-Income Countries |                    | Language            | Cultural            |
|   | High <i>LD</i>        | Low <i>LD</i>      | Distance            | Distance            |
|   | (1)                   | (2)                | (3)                 | (4)                 |
| <b>Panel A: Log Average Wage</b>          |                       |                    |                     |                     |
| High Income Exports II ( <i>HI</i> )      | 1.105***<br>[0.417]   | 1.113*<br>[0.653]  | 0.852***<br>[0.320] | 0.988***<br>[0.353] |
| Exports/Sales ( <i>EXP</i> )              | -0.149<br>[0.481]     | -0.021<br>[0.503]  | 0.103<br>[0.446]    | 0.218<br>[0.456]    |
| Log Sales                                 | 0.060**<br>[0.026]    | 0.042*<br>[0.023]  | 0.057**<br>[0.022]  | 0.052**<br>[0.024]  |
| Language/Cultural<br>Distance             |                       |                    | 0.084*<br>[0.044]   | 0.182***<br>[0.069] |
| <b>Panel B: Share of non-prod Workers</b> |                       |                    |                     |                     |
| High Income Exports II ( <i>HI</i> )      | 0.367*<br>[0.190]     | 0.567**<br>[0.272] | 0.264**<br>[0.112]  | 0.315**<br>[0.130]  |
| Exports/Sales ( <i>EXP</i> )              | 0.131<br>[0.218]      | 0.055<br>[0.160]   | 0.182<br>[0.186]    | 0.229<br>[0.188]    |
| Log Sales                                 | -0.001<br>[0.009]     | -0.005<br>[0.006]  | -0.007<br>[0.008]   | -0.009<br>[0.009]   |
| Language/Cultural<br>Distance             |                       |                    | 0.0310*<br>[0.017]  | 0.070**<br>[0.027]  |
| Industry*Year Effects                     | Yes                   | Yes                | Yes                 | Yes                 |
| Initial Conditions*Year Effects           | Yes                   | Yes                | Yes                 | Yes                 |
| Number of Firms                           | 867                   | 775                | 901                 | 901                 |
| Observations                              | 2381                  | 2027               | 2544                | 2544                |

Reproduces Table 12 excluding upper-middle-income countries from the High Income group (Definition II. See Table 8)

Table B1(a)  
Alternative Instruments: First Stage

|   | High Income Exports  |                      | Exports/Sales         |                      |
|---|----------------------|----------------------|-----------------------|----------------------|
|   | (1)                  | (2)                  | (3)                   | (4)                  |
| Share BRA in exports * 1999 ( $HI_1$ )  | 0.318***<br>[0.0504] | ---                  | 0.0122<br>[0.0118]    | ---                  |
| Share BRA in exports * 2000 ( $HI_1$ )  | 0.409***<br>[0.0546] | ---                  | 0.0369**<br>[0.0163]  | ---                  |
| Share BRA in sales * 1999 ( $EXP_1$ )   | -0.242*<br>[0.136]   | ---                  | -0.216***<br>[0.0836] | ---                  |
| Share BRA in sales * 2000 ( $EXP_1$ )   | -0.309**<br>[0.143]  | ---                  | -0.275***<br>[0.0961] | ---                  |
| Share BRA in exports * erate ( $HI_2$ ) | ---                  | 0.590***<br>[0.0787] | ---                   | 0.0342<br>[0.0216]   |
| Share BRA in sales * erate ( $EXP_2$ )  | ---                  | -0.446**<br>[0.210]  | ---                   | -0.402***<br>[0.145] |
| Log Sales                               | 0.0219<br>[0.0171]   | 0.0225<br>[0.0171]   | 0.00367<br>[0.00885]  | 0.00372<br>[0.00889] |
| Industry*Year Effects                   | Yes                  | Yes                  | Yes                   | Yes                  |
| Initial Conditions*Year Effects         | Yes                  | Yes                  | Yes                   | Yes                  |
| R-squared                               | 0.160                | 0.151                | 0.152                 | 0.148                |
| p-value                                 | 0                    | 0                    | 0.0127                | 0.0217               |
| Number of firmid                        | 901                  | 901                  | 901                   | 901                  |
| Observations                            | 2544                 | 2544                 | 2544                  | 2544                 |

Reproduces column 5 in Tables 5--6, with different instruments

Table B1(b)  
Alternative Instruments: Second Stage

|   | (1)  | (2)  |
|---|--|--|
| <b>Panel A: Log Average Wage</b>          |  |  |
| High Income Exports ( <i>HI</i> )         | 0.256***<br>[0.099]                              | 0.274***<br>[0.088]                              |
| Exports/Sales ( <i>EXP</i> )              | -0.120<br>[0.376]                                | 0.214<br>[0.463]                                 |
| Log Sales                                 | 0.057***<br>[0.018]                              | 0.056***<br>[0.020]                              |
| <b>Panel B: Share of non-prod Workers</b> |  |  |
| High Income Exports ( <i>HI</i> )         | 0.079***<br>[0.030]                              | 0.089***<br>[0.031]                              |
| Exports/Sales ( <i>EXP</i> )              | 0.159<br>[0.188]                                 | 0.144<br>[0.237]                                 |
| Log Sales                                 | -0.006<br>[0.007]                                | -0.007<br>[0.008]                                |
| Instruments                               | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> |
| Industry*Year Effects                     | Yes  | Yes  |
| Initial Conditions*Year Effects           | Yes  | Yes  |
| Number of Firms                           | 901  | 901  |
| Observations                              | 2544   | 2544   |

Reproduces column 5 in Tables 5--7, with different instruments



Table B2  
Alternative Definition of High Income Exports

|   | (1)                 | (2)                 | (3)                 |
|---|---------------------|---------------------|---------------------|
| <b>Panel A: Log Average Wage</b>          |                     |                     |                     |
| High Income Exports II ( <i>HI</i> )      | 0.807***<br>[0.286] | 0.739***<br>[0.282] | 0.834***<br>[0.297] |
| Exports/Sales ( <i>EXP</i> )              | -0.012<br>[0.506]   | -0.127<br>[0.443]   | 0.246<br>[0.451]    |
| Log Sales                                 | 0.060***<br>[0.022] | 0.061***<br>[0.021] | 0.059***<br>[0.022] |
| <b>Panel B: Share of non-prod Workers</b> |                     |                     |                     |
| High Income Exports II ( <i>HI</i> )      | 0.272***<br>[0.102] | 0.244**<br>[0.108]  | 0.272**<br>[0.109]  |
| Exports/Sales ( <i>EXP</i> )              | 0.159<br>[0.187]    | 0.155<br>[0.192]    | 0.154<br>[0.262]    |
| Log Sales                                 | -0.005<br>[0.008]   | -0.005<br>[0.008]   | -0.005<br>[0.008]   |
| Instruments                               | $HI_{2, EXP}$       | $HI_{1, EXP_1}$     | $HI_{2, EXP_2}$     |
| Industry*Year Effects                     | Yes                 | Yes                 | Yes                 |
| Initial Conditions*Year Effects           | Yes                 | Yes                 | Yes                 |
| Number of Firms                           | 901                 | 901                 | 901                 |
| Observations                              | 2544                | 2544                | 2544                |

Reproduces Table 8, column 3, with different instruments

Table B3  
Robustness: Participation of High Income countries in Total Sales

|   | (1)                 | (2)                 | (3)                |
|---|---------------------|---------------------|--------------------|
| <b>Panel A: Log Average Wage</b>          |                     |                     |                    |
| High Income Sales                         | 6.507*<br>[3.663]   | 3.686*<br>[2.010]   | 8.548<br>[6.069]   |
| Exports/Sales ( <i>EXP</i> )              | -1.136<br>[1.182]   | 0.033<br>[0.724]    | 0.889<br>[2.433]   |
| Log Sales                                 | 0.110***<br>[0.039] | 0.088***<br>[0.031] | 0.117**<br>[0.055] |
| <b>Panel B: Share of non-prod Workers</b> |                     |                     |                    |
| High Income Sales                         | 2.197<br>[1.395]    | 1.310*<br>[0.754]   | 2.785<br>[2.137]   |
| Exports/Sales ( <i>EXP</i> )              | -0.220<br>[0.449]   | 0.208<br>[0.279]    | 0.363<br>[0.737]   |
| Log Sales                                 | 0.011<br>[0.010]    | 0.004<br>[0.009]    | 0.013<br>[0.020]   |
| Instruments                               | $HI_{2, EXP}$       | $HI_{1, EXP_1}$     | $HI_{2, EXP_2}$    |
| Industry*Year Effects                     | Yes                 | Yes                 | Yes                |
| Initial Conditions*Year Effects           | Yes                 | Yes                 | Yes                |
| Number of Firms                           | 901                 | 901                 | 901                |
| Observations                              | 2544                | 2544                | 2544               |

Reproduces Table 9, column 1, with different instruments

Table B4  
Robustness: Firms that Increased or Did not Increase the Value of Exports to High Income Countries

|   | Increased                           |  |  | Did not increase                    |  |  |
|---|-------------------------------------|--|--|-------------------------------------|--|--|
|   | (1)                                 | (2)  | (3)  | (4)                                 | (5)  | (6)  |
| <b>Panel A: Log Average Wage</b>          |                                     |  |  |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.500**<br>[0.219]                  | 0.406***<br>[0.154]                              | 0.449**<br>[0.186]                               | 0.323**<br>[0.144]                  | 0.269*<br>[0.146]                                | 0.352***<br>[0.129]                              |
| Exports/Sales ( <i>EXP</i> )              | 1.131<br>[2.918]                    | -1.709<br>[1.378]                                | -0.302<br>[2.303]                                | 0.079<br>[0.478]                    | -0.227<br>[0.538]                                | 0.509<br>[0.414]                                 |
| Log Sales                                 | 0.089***<br>[0.028]                 | 0.070***<br>[0.026]                              | 0.079***<br>[0.024]                              | 0.058**<br>[0.025]                  | 0.060**<br>[0.026]                               | 0.057**<br>[0.026]                               |
| <b>Panel B: Share of non-prod Workers</b> |                                     |  |  |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.170<br>[0.111]                    | 0.154**<br>[0.075]                               | 0.166*<br>[0.098]                                | 0.107**<br>[0.043]                  | 0.105***<br>[0.034]                              | 0.107**<br>[0.047]                               |
| Exports/Sales ( <i>EXP</i> )              | 0.111<br>[1.271]                    | -0.399<br>[0.464]                                | -0.025<br>[1.007]                                | 0.261<br>[0.160]                    | 0.291*<br>[0.159]                                | 0.250<br>[0.157]                                 |
| Log Sales                                 | -0.004<br>[0.018]                   | -0.007<br>[0.011]                                | -0.004<br>[0.017]                                | -0.004<br>[0.008]                   | -0.004<br>[0.008]                                | -0.004<br>[0.008]                                |
| Instruments                               | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> |
| Industry*Year Effects                     | Yes                                 | Yes  | Yes  | Yes                                 | Yes  | Yes  |
| Initial Conditions*Year Effects           | Yes                                 | Yes  | Yes  | Yes                                 | Yes  | Yes  |
| Number of Firms                           | 508                                 | 508  | 508  | 673                                 | 673  | 673  |
| Observations                              | 1513                                | 1513   | 1513   | 1871                                | 1871   | 1871   |

Reproduces Table 9, columns 2 and 3, with different instruments

Table B5  
Robustness: Export Intensity and Exporter Dummies

|   | (1)                     | (2)                     | (3)                     | (4)                     | (5)                                 | (6)  | (7)  |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------------------|--|--|
| <b>Panel A: Log Average Wage</b>          |                         |                         |                         |                         |                                     |  |  |
| Exports/Sales ( <i>EXP</i> )              | 0.018<br>[0.427]        | 0.191<br>[0.419]        | ---                     | ---                     | ---                                 | ---  | ---  |
| Exporter Dummy                            | ---                     | ---                     | 0.138<br>[0.288]        | 0.182<br>[0.247]        | 0.020<br>[0.335]                    | -0.103<br>[0.249]                                | 0.082<br>[0.299]                                 |
| High Income Exporter Dummy                | ---                     | ---                     | ---                     | ---                     | 0.667**<br>[0.323]                  | 0.470*<br>[0.266]                                | 0.667**<br>[0.333]                               |
| Log Sales                                 | 0.063***<br>[0.020]     | 0.063***<br>[0.020]     | 0.055**<br>[0.024]      | 0.053**<br>[0.024]      | 0.011<br>[0.033]                    | 0.033<br>[0.033]                                 | 0.008<br>[0.034]                                 |
| <b>Panel B: Share of non-prod Workers</b> |                         |                         |                         |                         |                                     |  |  |
| Exports/Sales ( <i>EXP</i> )              | 0.202<br>[0.174]        | 0.136<br>[0.177]        | ---                     | ---                     | ---                                 | ---  | ---  |
| Exporter Dummy                            | ---                     | ---                     | 0.029<br>[0.096]        | 0.021<br>[0.113]        | -0.087<br>[0.138]                   | -0.024<br>[0.109]                                | -0.011<br>[0.132]                                |
| High Income Exporter Dummy                | ---                     | ---                     | ---                     | ---                     | 0.211*<br>[0.116]                   | 0.187**<br>[0.083]                               | 0.211*<br>[0.113]                                |
| Log Sales                                 | -0.005<br>[0.007]       | -0.004<br>[0.007]       | -0.006<br>[0.010]       | -0.005<br>[0.010]       | -0.015<br>[0.012]                   | -0.017*<br>[0.010]                               | -0.019<br>[0.012]                                |
| Instruments                               | <i>EXP</i> <sub>1</sub> | <i>EXP</i> <sub>2</sub> | <i>EXP</i> <sub>1</sub> | <i>EXP</i> <sub>2</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> |
| Industry*Year Effects                     | Yes                     | Yes                     | Yes                     | Yes                     | Yes                                 | Yes  | Yes  |
| Initial Conditions*Year Effects           | Yes                     | Yes                     | Yes                     | Yes                     | Yes                                 | Yes  | Yes  |
| Number of Firms                           | 901                     | 901                     | 901                     | 901                     | 901                                 | 901  | 901  |
| Observations                              | 2544                    | 2544                    | 2544                    | 2544                    | 2544                                | 2544   | 2544   |

Reproduces Table 9, columns 4--6, with different instruments

Table B6  
Wage Regressions Controlling for Share of Non-production Workers

|                                   | (1)                 | (2)                 | (3)                 |
|-----------------------------------|---------------------|---------------------|---------------------|
| High Income Exports ( <i>HI</i> ) | 0.225**<br>[0.095]  | 0.216**<br>[0.086]  | 0.229***<br>[0.089] |
| Exports/Sales ( <i>EXP</i> )      | 0.030<br>[0.510]    | -0.203<br>[0.367]   | 0.141<br>[0.426]    |
| Share of non-prod Workers         | 0.510***<br>[0.098] | 0.507***<br>[0.097] | 0.511***<br>[0.098] |
| Log Sales                         | 0.059***<br>[0.018] | 0.060***<br>[0.018] | 0.059***<br>[0.018] |
| Instruments                       | $HI_2, EXP$         | $HI_1, EXP_1$       | $HI_2, EXP_2$       |
| Industry*Year Effects             | Yes                 | Yes                 | Yes                 |
| Initial Conditions*Year Effects   | Yes                 | Yes                 | Yes                 |
| Number of Firms                   | 901                 | 901                 | 901                 |
| Observations                      | 2544                | 2544                | 2544                |

Reproduces Table 10, column 3, with different instruments

Table B7  
Scope for Vertical Differentiation: Variance in Unit Values

|   | High Variance      |                    |                    | Low Variance       |                    |                    |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | (1)                | (2)                | (3)                | (4)                | (5)                | (6)                |
| <b>Panel A: Log Average Wage</b>          |                    |                    |                    |                    |                    |                    |
| High Income Exports ( <i>HI</i> )         | 0.337**<br>[0.145] | 0.356**<br>[0.159] | 0.339**<br>[0.151] | 0.212*<br>[0.125]  | 0.184<br>[0.137]   | 0.205*<br>[0.122]  |
| Exports/Sales ( <i>EXP</i> )              | 0.222<br>[1.029]   | -0.786<br>[1.238]  | 1.030<br>[1.669]   | 0.144<br>[0.323]   | 0.026<br>[0.317]   | 0.040<br>[0.320]   |
| Log Sales                                 | 0.043<br>[0.033]   | 0.038<br>[0.035]   | 0.046<br>[0.036]   | 0.063**<br>[0.030] | 0.064**<br>[0.028] | 0.064**<br>[0.031] |
| <b>Panel B: Share of non-prod Workers</b> |                    |                    |                    |                    |                    |                    |
| High Income Exports ( <i>HI</i> )         | 0.055<br>[0.070]   | 0.046<br>[0.049]   | 0.056<br>[0.081]   | 0.104**<br>[0.050] | 0.090*<br>[0.051]  | 0.096**<br>[0.048] |
| Exports/Sales ( <i>EXP</i> )              | 0.520<br>[0.552]   | 0.456<br>[0.354]   | 0.804<br>[0.909]   | 0.050<br>[0.142]   | -0.011<br>[0.181]  | -0.063<br>[0.161]  |
| Log Sales                                 | -0.004<br>[0.011]  | -0.004<br>[0.011]  | -0.003<br>[0.016]  | -0.006<br>[0.007]  | -0.005<br>[0.008]  | -0.005<br>[0.008]  |
| Instruments                               | $HI_2, EXP$        | $HI_1, EXP_1$      | $HI_2, EXP_2$      | $HI_2, EXP$        | $HI_1, EXP_1$      | $HI_2, EXP_2$      |
| Industry*Year Effects                     | Yes                | Yes                | Yes                | Yes                | Yes                | Yes                |
| Initial Conditions*Year Effects           | Yes                | Yes                | Yes                | Yes                | Yes                | Yes                |
| Number of Firms                           | 344                | 344                | 344                | 536                | 536                | 536                |
| Observations                              | 973                | 973                | 973                | 1506               | 1506               | 1506               |

Reproduces Table 11, columns 1 and 2, with different instruments

Table B8  
Scope for Vertical Differentiation: Quality Ladders

|   | Long Ladders                        |                                     |  |  | Short Ladders                       |                                     |  |  |
|---|-------------------------------------|-------------------------------------|--|--|-------------------------------------|-------------------------------------|--|--|
|   | (1)                                 | (2)                                 | (3)  | (4)  | (5)                                 | (6)                                 | (7)  | (8)  |
| <b>Panel A: Log Average Wage</b>          |                                     |                                     |  |  |                                     |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.281*                              | 0.374***                            | 0.270*   | 0.368***   | 0.133                               | 0.082                               | 0.118  | 0.073  |
|   | [0.151]                             | [0.140]                             | [0.152]  | [0.128]  | [0.132]                             | [0.119]                             | [0.128]  | [0.163]  |
| Exports/Sales ( <i>EXP</i> )              | 0.637                               | 0.757                               | 0.446  | 0.621  | -0.756                              | -1.545                              | -1.647   | -1.849   |
|   | [0.492]                             | [0.501]                             | [0.424]  | [0.464]  | [1.477]                             | [2.065]                             | [2.041]  | [3.525]  |
| Log Sales                                 | 0.051                               | 0.050                               | 0.052  | 0.050  | 0.082**                             | 0.090**                             | 0.089***   | 0.092*   |
|   | [0.037]                             | [0.037]                             | [0.037]  | [0.038]  | [0.036]                             | [0.037]                             | [0.037]  | [0.050]  |
| <b>Panel B: Share of non-prod Workers</b> |                                     |                                     |  |  |                                     |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.079*                              | 0.099**                             | 0.083*   | 0.094**  | 0.062                               | 0.062                               | 0.057  | 0.052  |
|   | [0.045]                             | [0.047]                             | [0.044]  | [0.047]  | [0.059]                             | [0.063]                             | [0.061]  | [0.068]  |
| Exports/Sales ( <i>EXP</i> )              | 0.328**                             | 0.354**                             | 0.297**  | 0.251*   | -0.153                              | -0.153                              | -0.326   | -0.486   |
|   | [0.132]                             | [0.144]                             | [0.140]  | [0.136]  | [0.461]                             | [0.599]                             | [0.475]  | [1.242]  |
| Log Sales                                 | -0.017                              | -0.017                              | -0.017   | -0.017   | 0.014                               | 0.014                               | 0.015  | 0.016  |
|   | [0.012]                             | [0.011]                             | [0.011]  | [0.010]  | [0.015]                             | [0.015]                             | [0.015]  | [0.018]  |
| Instruments                               | <i>HI</i> <sub>1</sub> , <i>EXP</i> | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> | <i>HI</i> <sub>1</sub> , <i>EXP</i> | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> |
| Industry*Year Effects                     | Yes                                 | Yes                                 | Yes  | Yes  | Yes                                 | Yes                                 | Yes  | Yes  |
| Initial Conditions*Year Effects           | Yes                                 | Yes                                 | Yes  | Yes  | Yes                                 | Yes                                 | Yes  | Yes  |
| Number of Firms                           | 551                                 | 551                                 | 551  | 551  | 324                                 | 324                                 | 324  | 324  |
| Observations                              | 1562                                | 1562                                | 1562   | 1562   | 906                                 | 906                                 | 906  | 906  |

3-digit ISIC industries are split according to length of quality ladders of Khandelwal (2009). Long: above the 75th percentile.

Table B9  
Transport Costs

|   | High Transport Costs |                    |                    | Low Transport Costs |                    |                    |
|---|----------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
|   | (1)                  | (2)                | (3)                | (4)                 | (5)                | (6)                |
| <b>Panel A: Log Average Wage</b>          |                      |                    |                    |                     |                    |                    |
| High Income Exports ( <i>HI</i> )         | 0.363**<br>[0.163]   | 0.333**<br>[0.137] | 0.366**<br>[0.171] | 0.219*<br>[0.119]   | 0.198**<br>[0.091] | 0.225*<br>[0.117]  |
| Exports/Sales ( <i>EXP</i> )              | 1.141<br>[1.522]     | 0.729<br>[1.606]   | 1.390<br>[2.975]   | -0.198<br>[0.544]   | -0.282<br>[0.491]  | -0.055<br>[0.439]  |
| Log Sales                                 | 0.087*<br>[0.047]    | 0.083*<br>[0.049]  | 0.091<br>[0.067]   | 0.048<br>[0.031]    | 0.050*<br>[0.029]  | 0.047<br>[0.030]   |
| <b>Panel B: Share of non-prod Workers</b> |                      |                    |                    |                     |                    |                    |
| High Income Exports ( <i>HI</i> )         | 0.031<br>[0.076]     | 0.028<br>[0.065]   | 0.025<br>[0.075]   | 0.139**<br>[0.054]  | 0.118**<br>[0.051] | 0.138**<br>[0.055] |
| Exports/Sales ( <i>EXP</i> )              | 0.153<br>[0.331]     | -0.176<br>[0.448]  | -0.218<br>[0.562]  | 0.255<br>[0.221]    | 0.246<br>[0.211]   | 0.233<br>[0.234]   |
| Log Sales                                 | 0.002<br>[0.017]     | -0.002<br>[0.016]  | -0.003<br>[0.020]  | -0.010<br>[0.009]   | -0.010<br>[0.009]  | -0.010<br>[0.008]  |
| Instruments                               | $HI_{2, EXP}$        | $HI_{1, EXP_1}$    | $HI_{2, EXP_2}$    | $HI_{2, EXP}$       | $HI_{1, EXP_1}$    | $HI_{2, EXP_2}$    |
| Industry*Year Effects                     | Yes                  | Yes                | Yes                | Yes                 | Yes                | Yes                |
| Initial Conditions*Year Effects           | Yes                  | Yes                | Yes                | Yes                 | Yes                | Yes                |
| Number of Firms                           | 313                  | 313                | 313                | 611                 | 611                | 611                |
| Observations                              | 892                  | 892                | 892                | 1717                | 1717               | 1717               |

Reproduces Table 11, columns 3 and 4, with different instruments



Table B10  
Transport Costs and High Scope for Vertical Differentiation

|   | High Transport Costs |                     |                   | Low Transport Costs |                   |                   |
|---|----------------------|---------------------|-------------------|---------------------|-------------------|-------------------|
|   | (1)                  | (2)                 | (3)               | (4)                 | (5)               | (6)               |
| <b>Panel A: Log Average Wage</b>          |                      |                     |                   |                     |                   |                   |
| High Income Exports ( <i>HI</i> )         | 0.949***<br>[0.343]  | 0.395*<br>[0.216]   | 0.067<br>[0.197]  | 0.516<br>[0.391]    | 0.566*<br>[0.337] | 0.460<br>[0.344]  |
| Exports/Sales ( <i>EXP</i> )              | 17.481**<br>[8.164]  | 3.226<br>[2.681]    | -5.205<br>[4.151] | -0.507<br>[1.244]   | -0.675<br>[1.171] | 0.331<br>[1.178]  |
| Log Sales                                 | 0.225***<br>[0.069]  | 0.115***<br>[0.042] | 0.051<br>[0.053]  | -0.001<br>[0.048]   | -0.003<br>[0.050] | -0.003<br>[0.044] |
| <b>Panel B: Share of non-prod Workers</b> |                      |                     |                   |                     |                   |                   |
| High Income Exports ( <i>HI</i> )         | 0.245**<br>[0.115]   | -0.023<br>[0.074]   | -0.051<br>[0.086] | 0.113<br>[0.106]    | 0.090<br>[0.100]  | 0.097<br>[0.134]  |
| Exports/Sales ( <i>EXP</i> )              | 5.858***<br>[2.044]  | -0.955<br>[0.799]   | -1.746<br>[1.148] | 0.257<br>[0.503]    | 0.314<br>[0.445]  | 0.502<br>[0.750]  |
| Log Sales                                 | 0.054*<br>[0.030]    | 0.002<br>[0.023]    | -0.005<br>[0.021] | -0.018<br>[0.015]   | -0.017<br>[0.015] | -0.018<br>[0.018] |
| Instruments                               | $HI_{2, EXP}$        | $HI_{1, EXP_1}$     | $HI_{2, EXP_2}$   | $HI_{2, EXP}$       | $HI_{1, EXP_1}$   | $HI_{2, EXP_2}$   |
| Industry*Year Effects                     | Yes                  | Yes                 | Yes               | Yes                 | Yes               | Yes               |
| Initial Conditions*Year Effects           | Yes                  | Yes                 | Yes               | Yes                 | Yes               | Yes               |
| Number of Firms                           | 149                  | 149                 | 149               | 195                 | 195               | 195               |
| Observations                              | 430                  | 430                 | 430               | 543                 | 543               | 543               |

Reproduces Table 11, columns 5 and 6, with different instruments

Table B11  
Language Distance. Split regressions

|   | High Language Distance              |  |  | Low Language Distance               |  |  |
|---|-------------------------------------|--|--|-------------------------------------|--|--|
|   | (1)                                 | (2)  | (3)  | (4)                                 | (5)  | (6)  |
| <b>Panel A: Log Average Wage</b>          |                                     |  |  |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.341***<br>[0.108]                 | 0.321***<br>[0.101]                              | 0.342***<br>[0.111]                              | 0.107<br>[0.199]                    | 0.019<br>[0.196]                                 | 0.087<br>[0.213]                                 |
| Exports/Sales ( <i>EXP</i> )              | 0.059<br>[0.670]                    | -0.338<br>[0.420]                                | 0.076<br>[0.601]                                 | 0.706<br>[0.529]                    | 0.740*<br>[0.403]                                | 0.918<br>[0.597]                                 |
| Log Sales                                 | 0.053**<br>[0.024]                  | 0.056**<br>[0.024]                               | 0.053**<br>[0.022]                               | 0.063***<br>[0.024]                 | 0.063***<br>[0.023]                              | 0.064***<br>[0.025]                              |
| <b>Panel B: Share of non-prod Workers</b> |                                     |  |  |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.122**<br>[0.050]                  | 0.107**<br>[0.045]                               | 0.119**<br>[0.052]                               | 0.178<br>[0.143]                    | 0.202<br>[0.123]                                 | 0.182<br>[0.124]                                 |
| Exports/Sales ( <i>EXP</i> )              | 0.229<br>[0.270]                    | 0.148<br>[0.277]                                 | 0.190<br>[0.324]                                 | 0.387*<br>[0.208]                   | 0.156<br>[0.301]                                 | 0.348<br>[0.232]                                 |
| Log Sales                                 | -0.003<br>[0.009]                   | -0.002<br>[0.009]                                | -0.003<br>[0.009]                                | -0.001<br>[0.011]                   | -0.002<br>[0.011]                                | -0.001<br>[0.011]                                |
| Instruments                               | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> |
| Industry*Year Effects                     | Yes                                 | Yes  | Yes  | Yes                                 | Yes  | Yes  |
| Initial Conditions*Year Effects           | Yes                                 | Yes  | Yes  | Yes                                 | Yes  | Yes  |
| Number of Firms                           | 838                                 | 838  | 838  | 585                                 | 585  | 585  |
| Observations                              | 2341                                | 2341   | 2341   | 1440                                | 1440   | 1440   |

Reproduces Table 12, columns 1 and 2, with different instruments

Table B12  
Language and Cultural Distance

|   | Language Distance                   |  |  | Cultural Distance                   |  |  |
|---|-------------------------------------|--|--|-------------------------------------|--|--|
|   | (1)                                 | (2)  | (3)  | (4)                                 | (5)  | (6)  |
| <b>Panel A: Log Average Wage</b>          |                                     |  |  |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.245***<br>[0.087]                 | 0.239***<br>[0.091]                              | 0.247***<br>[0.083]                              | 0.247***<br>[0.087]                 | 0.239***<br>[0.089]                              | 0.249***<br>[0.084]                              |
| Exports/Sales ( <i>EXP</i> )              | -0.018<br>[0.527]                   | -0.239<br>[0.364]                                | 0.045<br>[0.402]                                 | 0.039<br>[0.523]                    | -0.186<br>[0.370]                                | 0.116<br>[0.429]                                 |
| Log Sales                                 | 0.060***<br>[0.020]                 | 0.061***<br>[0.019]                              | 0.060***<br>[0.021]                              | 0.059***<br>[0.020]                 | 0.060***<br>[0.019]                              | 0.059***<br>[0.020]                              |
| Language/Cultural Distance                | -0.082**<br>[0.034]                 | -0.077**<br>[0.030]                              | -0.083**<br>[0.037]                              | -0.057**<br>[0.029]                 | -0.053**<br>[0.025]                              | -0.058**<br>[0.028]                              |
| <b>Panel B: Share of non-prod Workers</b> |                                     |  |  |                                     |  |  |
| High Income Exports ( <i>HI</i> )         | 0.084***<br>[0.029]                 | 0.073***<br>[0.029]                              | 0.082***<br>[0.030]                              | 0.088***<br>[0.030]                 | 0.077***<br>[0.028]                              | 0.086***<br>[0.029]                              |
| Exports/Sales ( <i>EXP</i> )              | 0.165<br>[0.190]                    | 0.128<br>[0.182]                                 | 0.099<br>[0.228]                                 | 0.195<br>[0.187]                    | 0.152<br>[0.185]                                 | 0.131<br>[0.225]                                 |
| Log Sales                                 | -0.006<br>[0.008]                   | -0.005<br>[0.008]                                | -0.005<br>[0.008]                                | -0.006<br>[0.008]                   | -0.006<br>[0.008]                                | -0.006<br>[0.008]                                |
| Language/Cultural Distance                | -0.023*<br>[0.013]                  | -0.019*<br>[0.011]                               | -0.022*<br>[0.013]                               | -0.008<br>[0.011]                   | -0.006<br>[0.012]                                | -0.008<br>[0.011]                                |
| Instruments                               | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> | <i>HI</i> <sub>1</sub> , <i>EXP</i> <sub>1</sub> | <i>HI</i> <sub>2</sub> , <i>EXP</i> <sub>2</sub> |
| Industry*Year Effects                     | Yes                                 | Yes  | Yes  | Yes                                 | Yes  | Yes  |
| Initial Conditions*Year Effects           | Yes                                 | Yes  | Yes  | Yes                                 | Yes  | Yes  |
| Number of Firms                           | 901                                 | 901  | 901  | 901                                 | 901  | 901  |
| Observations                              | 2544                                | 2544   | 2544   | 2544                                | 2544   | 2544   |

Reproduces Table 12, columns 3 and 4, with different instruments