

ONLINE APPENDIX

The Few Leading The Many: Foreign Affiliates and Business Cycle Comovement

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In our paper, we find a positive and economically significant impact of foreign affiliates' presence on the comovement of business cycles between their region of location and their country of origin. This Online Appendix presents several checks that allow us evaluating the robustness of our findings. It includes: an alternative exercise to assess the importance of multinational firms for international comovement, a discussion of the effect of compositional changes on our results, and different tests of the sensitivity of our results to the sample and the main variables used in the baseline specification. All the tests confirm the main finding of our paper. Before presenting the tests, we provide a detailed description of the data sets used in our empirical analysis.

I. Data Appendix

We have built a database that describes value added, employment, and sales in the manufacturing, extractive, and agricultural sectors of French regions, as well as their bilateral exports to and imports from 162 partner countries and the value of intra-firm trade.¹ Within regions, we disentangle activities based on the ownership of firms. Namely, we distinguish activities generated by independent firms, French affiliates, and foreign affiliates (depending on their parent country). The data are matched to a vector of bilateral correlations of business cycles between 21 Metropolitan French regions and these 162 countries.² This data set is built from the aggregation of several sets of micro data that are provided by different French administrations.

Firms in France need to report their tax statements (through one of three alternative regimes) to the tax administration. The *Bénéfice Réel Normal* (BRN) needs to be filed by all firms that have an annual turnover of more than 763,000 euros in manufacturing and more than 230,000 euros in services. Firms with a lower turnover might still opt for the BRN regime, but they are automatically

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¹We do not have information on services.

²We exclude the comovement between French regions and France as a whole.

registered under the *Regime Simplifié d'Impositions* (RSI) instead of the BRN. Firms file for an RSI account for an annual turnover of less than 4% and a total employment of less than 11% (see di Giovanni, Levchenko, and Méjean 2011). Entrepreneurs (owner-manager-single-employee firms) with an annual turnover of less than 80,300 euros are subject to the MicroBIC regime, *Micro Bénéfice Industriel et Commerciaux*. These firms have a negligible weight in the distribution of annual turnover, value added and employment. Of all those regimes, the BRN is the most comprehensive regarding the information available, including balance sheet information on total employment and total value added.

The BRN is merged with the "LIFI élargi", a data set that has information on the ownership and nationality of the parent company of firms located in France. The data set combines two sources of information. First, a survey on "large" firms that gives detailed information on the ownership of groups, the link between affiliates (at home and abroad), and information on shareholders. Only firms with more than 500 employees, or having a yearly turnover greater than 30 million euros, or having more than 1.2 million euros of shares in other firms are subject to this survey. The survey is completed with DIANE, a data set that reports financial linkages between firms. Firms with an annual turnover above one million euros are surveyed. Notice that relatively large firms are surveyed, but they indicate their financial links with all their affiliates (if any) irrespective of their size. Furthermore, the sample of firms that are surveyed (the ones with more than 500 employees or more than 1 million euros of turnover) represents half of the firms, but these firms account for 94% of total value added.

We classify firms according to their nationality and ownership. French domestic firms, which are located in France and not owned by a group, are denoted by IND (for independent). A French affiliate, MNE, is located in France and owned by a French group. Foreign affiliates, which are located in France and owned by a foreign group, are denoted by FME. Later on, we will distinguish the foreign affiliates based on their nationality. At this stage, our data consists of an exhaustive panel of 184,929 firms, for the 1999-2004 period.

We merge the data with a data set provided by French Customs that gives information on bilateral exports and imports of firms located in France. For each firm, this database reports the bilateral free-on-board value, the quantity of exports, the cost-insurance-freight value and the quantity of imports. Extra-European shipments of a value which is less than 1,000 euros are subject to a simplified declaration procedure and do not appear in our data. Within the Single European Market, the reporting threshold is based on the cumulated yearly export value of each firm (all destinations within the EU). This threshold has increased over time, up to 100,000 euros in 2002 and 150,000 euros in 2003.

Information on intra-firm trade is taken from the EIIG firm-level survey (Échanges Internationaux Intra-Groupe). The data are provided by INSEE (Institut National de la Statistique et de Etudes Economiques) and are only available for 1999. The survey was addressed to all French firms whose value of trade was over

1 million euros, owned by groups that controlled at least 50% of the equity capital of a foreign affiliate. It provides a detailed geographical breakdown of the import and export value of French firms at product level (HS4) and their sourcing modes – outsourcing and/or intra-firm trade.

We aggregate the firm-level data at the regional level. A firm located in France might have several plants in different regions. When it comes to filing the BRN or the Customs forms, the value added, sales or trade values are always allocated to the region of the headquarters of the multi-plant firm. In order to compute the regional GDP, INSEE reallocates the value added of multi-plant firms based on the share of employment generated by plants in each region. Each plant is recorded in a data set called STOJAN that has limited plant-level information, mostly on its employment and its identifier. The identifier of the plant is such that it can be easily merged with the identifier of the firm. We use STOJAN to reallocate the value added, sales and trade of multi-plant firms. In our sample, only 1.8% of firms are multi-plant and multi-region. Yet these firms account for 9.8% of total employment.³ We are now able to aggregate the statistics at the level of each of the 21 Metropolitan regions.

This database at the regional level is then combined with a data set that contains the correlation of the business cycles between a French region i and a partner country c . We consider 162 partner countries over the 1990-2006 period. The correlation of the cycles between region i and country c is computed as the correlation in the annual growth rates or the correlation of HP-filtered GDPs.

As a measure of regional GDP, we use the publicly available GDP computed by INSEE over the 1990-2006 period. We combine it with World Bank data for the GDP of countries, in current US dollars. While the GDP of the countries is in dollars, the French regional GDPs are in euros. We convert the GDP of the countries into euros using the EUR-USD exchange rate given by Eurostat. The database is completed with the total exports and imports of the partner countries that we take from the Direction Of Trade Statistics (DOTS).

II. Magnitude of the effect on the economic activity

We investigate the magnitude of the effect by regressing the cyclical fluctuations in regional output or employment in France on cyclical fluctuations on aggregate employment or output in abroad and an interaction term for the importance of foreign affiliates in the region. The regression equation is as follows:

$$(1) \quad \Delta \log(act_{rt}) = \alpha \Delta \log(act_{ct}) + \beta FME_{cr} \times \Delta \log(act_{ct}) + \gamma BT_{cr} \times \Delta \log(act_{ct}) + FE_{cr} + \epsilon_{rt}$$

where act_{rt} is a measure of economic activity in region r , and act_{ct} a measure of economic activity in country c . We consider two measures of economic activity:

³We have access to this data for the 1999-2004 period.

employment and GDP.⁴ FME_{cr} measures the presence of foreign affiliates from country c in region r , and BT_{cr} measures the level of trade linkages between region r and country c . The results are presented in Table 1. In column (1), we focus on the correlation between the GDP fluctuation in Germany and the GDP fluctuation in French regions. We find that the presence of German affiliates magnifies the impact of the change in the German GDP on the cyclical movement in the regional level of output. To interpret the results, we use the 25th and the 75th percentile of the distribution of the German affiliates' presence. Around the 25th percentile a region receives around 3% of German shocks (15.4×0.002), while a region around the 75th percentile receives almost 11% of the shocks (15.4×0.007). In column 2, we reproduce the same exercise but broadening the sample to the whole sample of countries. We find the same magnification effect due to the presence of foreign affiliates. The results are qualitatively the same in columns 3 and 4 when using employment instead of GDP as a measure of economic activity. In order to illustrate our results, we quantify the impact based on the estimates of column 3.

If the GDP growth of a country doubles, this increases employment growth in the median French region by 2% (the median French region does not host affiliates from the median foreign country and has a negligible level of trade with this country). Increasing the presence of multinationals by one standard deviation (0.0013) increases the level of transmission by 50%: employment growth increases by 3%. For region-country pairs with a high presence of multinationals (accounting for 1% of regional employment), doubling foreign GDP growth increases regional employment growth by 9.3%.

III. Composition of the origin of foreign affiliates

Changes in the composition of foreign affiliates presence in French regions over time might influence our results. We propose three complementary checks to evaluate the sensitivity of our results to these checks. They all suggest that changes in composition have been limited over the period and do not change our main results.

We first investigate the rank of the ten first main investors in France across nationalities for the year 1999, 2003 and 2006. These countries of origin account for more than 85% of the total number of firms in the LIFI sample. The computation of the rank is based on the number of affiliates. From Table 2, we see that the composition of ownership in term of nationality is quite stable over the sample period.

In the baseline estimation of the paper, we use the 1990-2006 period to compute the correlation of the GDP growth rates and we construct the exogenous variables for the year 2004. The explanatory variables are however available for different cross-sections from 1999 to 2004. Each cross-section is composed of the same

⁴Because employment data have a different country coverage, the number of observations changes across specifications.

Table 1—: Transmission to economic activity (1990-2006)

Dep. var.:	<i>Growth in region GDP</i>		<i>Growth in region employment</i>	
	(1)	(2)	(3)	(4)
GDP growth (country)	0.03 (0.909)	0.00*** (3.607)	0.01*** (27.526)	
- $\times FME_{cr}(Empl.)$	15.43*** (7.138)	2.11** (2.426)	3.63*** (7.582)	
- $\times BT_{cr}$	-50.52*** (-3.294)	12.00*** (6.789)	4.89*** (4.356)	
Employment growth (country)				0.02*** (4.970)
- $\times FME_{cr}(Empl.)$				39.99*** (6.655)
- $\times BT_{cr}$				19.22** (2.236)
Country	DEU	All	All	All
Country-Region FE	Yes	Yes	Yes	Yes
Obs.	336	54,432	54,432	46,935
Adj. R^2	0.07	0.05	0.09	0.08

This table investigates the correlation between the fluctuations in French regions and in 162 countries (in the first column we only consider Germany). The explained variable is either the yearly growth rate of GDP or the yearly growth rate of employment in a region. Growth rates at the region level are explained by corresponding growth rates at the country level and interaction between country growth rates and the bilateral linkages between the country and the region. The linkage variables computed for year 2004 are: the share of employment (FME_{cr}) generated by foreign affiliates from country c in region r , and the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs. All regressions include region-country pairs fixed effects. Robust t-statistics are reported between parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.

Table 2—: Rank of Countries of Ownership Across Years

Country	Rank 1999	Rank 2003	Rank 2006
Belgium	5	5	5
France	1	1	1
Germany	2	2	3
Italy	6	6	6
Spain	7	8	8
Switzerland	9	9	9
The Netherlands	8	7	7
United Kingdom	4	4	4
United States of America	3	3	2

bilateral pairs of regions and countries. An alternative way to assess the stability of our results to the fluctuation of origin of foreign affiliates is to see whether measuring FMEs presence in 1999 or in subsequent year changes the results. In Table 3, we repeat the cross-sectional estimates of measuring trade and foreign affiliates presence at different points in time. In each cross-section, we evaluate the effect of the foreign affiliate employment intensity to be roughly the same as in the baseline our baseline specification. We find that a 10% percent increase in the employment intensity of foreign affiliates raises the business cycle correlation between their country of ownership and their region of location by about 0.6%.

Table 3—: Foreign Affiliates and Business Cycle Correlations (Yearly Estimates)

<i>Dependent variable: ρ_{cr} = Correlation of growth rate of GDPs</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
Year	1999	2000	2001	2002	2003	2004
$FME_{cr}(Empl.)$	13.12*** (4.256)	13.08*** (4.529)	11.32*** (3.976)	10.77*** (3.886)	11.27*** (3.668)	11.39*** (3.509)
BT_{cr}	-0.89 (-0.103)	0.58 (0.095)	5.69 (0.890)	6.46 (1.016)	12.00 (1.549)	11.45 (1.508)
IIT_{cr}	0.07 (1.593)	0.07 (1.553)	0.06 (1.380)	0.06 (1.380)	0.05 (1.264)	0.06 (1.345)
$DISIM_{cr}$	-0.06*** (-4.615)	-0.06*** (-4.591)	-0.06*** (-4.502)	-0.06*** (-4.472)	-0.06*** (-4.434)	-0.06*** (-4.460)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	3,329	3,329	3,329	3,329	3,329	3,329
R^2	0.695	0.695	0.695	0.695	0.695	0.695

This table investigates the determinants of the bilateral comovement of business cycles between French regions and 162 countries. The comovement is measured by the correlation of the yearly growth of region r and country c GDPs over the 1990-2006 period. The explanatory variables computed for years 1999 to 2004 are: the share of employment (FME_{crt}) generated by foreign affiliates from country c in region r at period t , the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs, the share of intra-industry trade (IIT_{cr}) between region r and country c , and the dissimilarity ($DISIM_{cr}$) of country c and region r in terms of specialization. All regressions include region and country fixed effects. Robust t-statistics are reported between parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.

Changes in the composition might arrive before 1999. It might be a serious concern if these changes happen in the mid-90s. Since we cannot control for the composition in terms of foreign affiliates in the beginning of the sample we choose to reduce the length of our sample in a robustness exercise. More specifically, instead of considering business cycle comovement between 1990 and 2006, we restrict the analysis to the period 1996-2006. We then estimate the effect of the

presence of foreign affiliates at different horizons (2000, 2001, 2002, 2003, 2004) on the comovement of GDP growth of country-region pairs. Results are presented in Table 4. Whatever the year used to measure foreign affiliates' presence, we find a positive and significant impact of the presence on BCC measured between 1996 and 2006. These different sensitivity checks suggest that our main finding is not affected by compositional changes in the ownership of foreign affiliates.

Table 4—: Foreign Affiliates and Business Cycle Correlations (Yearly Estimates)

<i>Dependent variable: ρ_{cr} = Correlation of growth rate of GDPs 1996-2006</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
Year	1999	2000	2001	2002	2003	2004
$FME_{cr}(Empl.)$	8.83*** (2.931)	9.90*** (3.788)	9.95*** (3.660)	8.39*** (2.911)	9.76*** (3.387)	8.81** (2.568)
BT_{cr}	4.32 (0.424)	4.06 (0.526)	6.74 (0.987)	7.57 (0.924)	13.08 (1.452)	10.45 (1.183)
IIT_{cr}	0.02 (0.306)	0.02 (0.284)	0.01 (0.191)	0.01 (0.214)	0.01 (0.116)	0.01 (0.233)
$DISIM_{cr}$	-0.08*** (-4.776)	-0.08*** (-4.768)	-0.08*** (-4.736)	-0.08*** (-4.705)	-0.08*** (-4.678)	-0.08*** (-4.706)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	3,329	3,329	3,329	3,329	3,329	3,329
R^2	0.546	0.547	0.547	0.547	0.547	0.547

This table investigates the determinants of the bilateral comovement of business cycles between French regions and 162 countries. The comovement is measured by the correlation of the yearly growth of region r and country c GDPs over the 1996-2006 period. The explanatory variables computed for years 1999 to 2004 are: the share of employment (FME_{crt}) generated by foreign affiliates from country c in region r at period t , the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs, the share of intra-industry trade (IIT_{cr}) between region r and country c , and the dissimilarity ($DISIM_{cr}$) of country c and region r in terms of specialization. All regressions include region and country fixed effects. Robust t-statistics are reported between parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.

IV. Influence of historical ties

Historically Alsace and Germany have been highly integrated. This may explain both the high level of comovement between Alsace and Germany and the tremendous presence of German multinationals in this region. In our sample, at least two other region-country pairs have a significant common history: Provence-

Alpes-Côtes d'Azur and Italy, and Languedoc-Roussillon and Spain.⁵

Neither our region and country fixed effects, nor the border dummy can account for the bias induced by the legacy today of a common bilateral history. Since this history can hardly be accounted for, we chose to check the sensitivity of our results to the exclusion of these region-country pairs. Namely, we run our baseline regressions again, dropping each of these pairs and the three pairs together. The results are presented in Table 5. The first column corresponds to the baseline regression presented in Table 3 of the paper. In the second column, we run the same regression on a sample excluding the Germany-Alsace pair. In column 2, we exclude the Italy-PACA pair. In column, 3 we exclude the Spain-Languedoc-Roussillon pair. In column 4, the three pairs are excluded. We see that the effect of the presence of multinationals on business cycle comovement remains positive and significant. The exclusion of the Germany-Alsace pair is the one which affects the magnitude of the coefficients most, but the changes is relatively modest.

As an additional check, we run 3,402 regressions in which we exclude each of the region-country pairs in our sample. This allows us to check whether our results are sensitive to a few observations. In each of the regressions, the effect of the presence of multinationals is positive and significant at the 1% or 2% levels. The magnitude of the coefficients is also very stable across the regressions. The minimum, the maximum and the median of the coefficients on the presence of multinationals estimated in these regressions are 9.9, 12.1, and 11.4 respectively. These robustness checks support the view that our results are not driven by a few outliers.

V. Alternative measures of foreign affiliates' presence

We now use alternative measures of the main variables of interest. We consider first the ratio of foreign affiliate value added to regional GDP. This ratio is less relevant than the employment intensity since it is likely to be manipulated for tax reasons (?). It also captures the importance of firms in terms of inputs usage. Table 6 reports the estimates, which are qualitatively similar to the ones of the baseline specification. This impact is however estimated with a lesser degree of precision than in the baseline estimations of the paper.

We also use an alternative measure of the business comovement. The alternative variable is computed as the correlation of the growth rate of HP-filtered GDPs. The results are presented in Table 7. We show that our findings are robust to this alternative definition while less precisely measured.⁶

⁵Until the end of the nineteenth century, the Provence-Alpes-Côtes d'Azur region was linked in part to the Kingdom of Sardinia - which was the predecessor state of today's Italy. The city of Nice (South-East of France) was one of the main cities in this kingdom. The language spoken there was Italian. In the South-West, the region of Languedoc-Roussillon shares close ties with Spain. Part of the region was within the Spanish Kingdom of Aragon. The final borders of the region were set after the Treaty of the Pyrenees in 1659.

⁶As an additional check not reported here, we have based the computation of the dissimilarity index on production data (using a 1-digit classification) rather than trade data. The main findings remain

Table 5—: Influence of historical ties

<i>Dependent variable: ρ_{cr} = Correlation of growth rate of GDPs</i>					
	(1)	(2)	(3)	(4)	(5)
$FME_{cr}(Empl.)$	11.42*** (3.517)	9.92** (2.505)	11.50*** (3.554)	11.45*** (3.532)	10.07** (2.550)
BT_{cr}	11.16 (1.482)	11.18 (1.511)	11.27 (1.491)	11.06 (1.468)	11.18 (1.507)
IIT_{cr}	0.06 (1.351)	0.06 (1.315)	0.06 (1.356)	0.06 (1.428)	0.06 (1.397)
$DISIM_{cr}$	-0.06*** (-4.461)	-0.06*** (-4.470)	-0.06*** (-4.479)	-0.06*** (-4.458)	-0.06*** (-4.485)
Region FE	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Country-Region	All pairs	- Deu.-Als.	- Ita.-Paca	- Spain-L.-R.	- the 3 pairs
Obs.	3,329	3,328	3,328	3,328	3,326
R^2	0.695	0.695	0.695	0.695	0.694

This table investigates the determinants of the bilateral comovement of business cycles between French regions and 162 countries. In Column 2, the pair Germany-Alsace is excluded from the sample. In column 3, the pair Italy-PACA is excluded. In column 4, the pair Spain-Languedoc-Roussillon is excluded. In column 4, the three pairs are excluded. The comovement is measured by the correlation of the yearly growth of region r and country c GDPs over the 1990-2006 period. The explanatory variables computed for year 2004 are: the share of employment (FME_{cr}) generated by foreign affiliates from country c in region r , the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs, the share of intra-industry trade (IIT_{cr}) between region r and country c , and the dissimilarity ($DISIM_{cr}$) of country c and region r in terms of specialization. All regressions include region and country fixed effects. Robust t-statistics are reported between parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.

VI. Random assignment

To verify that our results are not driven by spurious effects, we randomly assign the true foreign affiliate employment intensity of each region to another.⁷ We have replicated the exercise 100 times. The randomly assigned foreign affiliate employment intensity is significant in only 7% of all cases. Table 8 reports the results of the average coefficient and the standard deviation obtained in our 100 random assignments. The coefficient on foreign affiliates' presence is negative, close to zero, and not significant at the 10% level. These results suggests that our findings are not driven by spurious effect.

robust to the alternative definition of the dissimilarity index.

⁷For instance, we assign the German employment intensity in Alsace to a randomly chosen region and a randomly chosen employment intensity to Alsace.

Table 6—: Foreign Affiliates and BCC: Value Added instead of Employment Intensity

<i>Dep. variable: ρ_{cr} = Correlation of growth rate of GDPs</i>				
	(1)	(2)	(3)	(4)
$FME_{cr}(VA)$	5.33** (2.118)		4.39* (1.864)	4.52* (1.895)
BT_{cr}		20.42*** (2.680)	17.98** (2.335)	14.19* (1.916)
IIT_{cr}				0.06 (1.341)
$DISIM_{cr}$				-0.06*** (-4.419)
Region FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Observations	3,402	3,402	3,402	3,329
R^2	0.690	0.690	0.691	0.694

This table investigates the determinants of the bilateral comovement of business cycles between French regions and 162 countries. The comovement is measured by the correlation of the yearly growth of region r and country c GDPs over the 1990-2006 period. The explanatory variables are the share of value added (FME_{cr}) generated by foreign affiliates from country c in region r , the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs, the share of intra-industry trade (IIT_{cr}) between region r and country c , and the dissimilarity ($DISIM_{cr}$) of country c and region r in terms of specialization. All regressions include region and country fixed effects. Robust t-statistics are reported between parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.

Table 7—: Foreign Affiliates and Business Cycle Correlations (HP-filtered GDP)

<i>Dep. variable: ρ_{cr} = Correlation of HP-filtered GDPs</i>				
	(1)	(2)	(3)	(4)
FME_{cr} (Empl.)	6.97** (2.322)		5.61* (1.844)	5.80* (1.892)
BT_{cr}		14.83* (1.864)	12.25 (1.501)	7.52 (0.966)
IIT_{cr}				0.08 (1.629)
$DISIM_{cr}$				-0.06*** (-4.068)
Region FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Observations	3,402	3,402	3,402	3,329
R^2	0.663	0.663	0.663	0.667

This table investigates the determinants of the bilateral comovement of business cycles between French regions and 162 countries. It focuses on the sample of countries that invest in at least one region in France. The comovement is measured by the correlation of region r and country c HP-filtered yearly GDPs over the 1990-2006 period. The explanatory variables are the share of employment (FME_{cr}) generated by foreign affiliates from country c in region r , the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs, the share of intra-industry trade (IIT_{cr}) between region r and country c , and the dissimilarity ($DISIM_{cr}$) of country c and region r in terms of specialization. All regressions include region and country fixed effects. Robust t-statistics are reported between parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.

Table 8—: Random assignment of affiliate composition across regions

<i>Dep. variable: ρ_{cr}=Correlation of growth rate of GDPs</i>			
	(1)	(2)	(3)
$FME_{cr}(Empl.)$	-0.035 (-0.089)	-0.34 (-0.087)	-0.36 (-0.092)
BT_{cr}		20.43** (2.684)	16.57 (2.27)
IIT_{cr}			0.064 (1.49)
$DISIM_{cr}$			-0.056*** (-4.35)
Region FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Observations	3276	3276	3276

This table presents the results of a sensitivity check. Namely, we randomly assigned foreign affiliate composition across regions. We did the assignment 100 times. We then ran 100 regressions. The explanatory variables are the share of foreign affiliate employment (FME_{cr}) from country c in their host region r , the bilateral trade (BT_{cr}) between region r and country c , normalized by the two GDPs, the share of intra-industry trade (IIT_{cr}) between region r and country c , and the dissimilarity ($DISIM_{cr}$) of country c and region r in terms of specialization. The regression includes region and country fixed effects. Standard errors are computed as the average standard errors in our 100 trials. T-statistics are reported between parenthesis. *, **, and *** indicate significance at the 10, 5, and 1 percent levels respectively.