Multinational Retailers and
Firm-Level Exports

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(FIRST DRAFT. COMMENTS WELCOMED. PLEASE DO NOT QUOTE)

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Abstract

We explore the link between globalization of the retail sector and the export activity of firms from their origin country. In a previous paper (Cheptea, Emlinger and Latouche, 2012), we show that the overseas expansion of a country's retailers fosters its exports to these foreign markets. This can be due to a reduction of trade costs for supplying firms of retail companies in the domestic markets, via a network effect, or to a change in consumer preferences in the host country that benefits all origin country firms. We expect export costs to differ for the two types of firms and employ firm-level data to evaluate the relative importance of the two channels. We identify retailers' suppliers using data on the certification of French agri-food firms with the private IFS standard, granting them the right to sell their products under a retailer's brand. We find that certified French firms export more than non-certified firms to markets where IFS retailers established outlets (mainly outside Europe). The difference is statistically significant and robust to the use of firm- and country-specific fixed effects or controls. Our finding suggests that suppliers of multinational retailers benefit from a network effect which enables them to export at lower costs and to take advantage of the expansion of the IFS standard.

JEL codes: F12, F14, F23.

Keywords: Multinational retailers, Firm-level exports, Private standards.

1. Introduction

All the worlds' largest retailers have established and multiplied their outlets in foreign countries. This trend has accelerated over the last decade and the struggle for new markets remains on the top of these firms' agenda. The large size, many of these firms being included in the Forbes Global 2000 list of world's biggest companies, and the wide transnational network of outlets and business connections make these firms major regional and global players. Therefore, the overseas expansion of multinational retailers is likely to shape not only domestic and local economies, as suggested by the traditional literature on foreign direct investment (CITE REF), but also the foreign trade of origin and host countries.

In this paper we explore the link between globalization of the retail sector and the export activity of firms from their origin country. The literature on this subject is new and covers only a limited number of issues. Our analysis relates the most to the work of Head, Jing and Swenson (2010) on the impact of multinational retailers established in China on host country exports, and to Nordås, Grosso and Pinali (2008)'s case study analysis of the impact of the arrival of multinational retailers on host country export patterns. In a previous paper (Cheptea, Emlinger and Latouche, 2012), we show that the overseas expansion of a country's retailers fosters its exports to these foreign markets. This can be due to a reduction of trade costs for supplying firms of retail companies in the domestic markets, via a network effect, or to a change in consumer preferences in the host country that benefits all origin country firms. In the current paper we use French firm-level data to evaluate the relative importance of these two channels. We argue that fixed and/or variables exporting costs are lower for the domestic suppliers of multinational retail companies than for the rest of domestic firms, and build on this an equation that permits to disentangle the impact of the foreign activity of multinational retailers on the export capacity of firms from its origin country coming from a drop in trade cost and the impact due to an increase in consumers' preference for origin country goods. We use data on French firms to address this question empirically. We find that being a supplier for a multinational retail company on the domestic market increases the firms' export capacity to a foreign market where the retailer operates, both in terms of the probability to export and the volume of exports.

2.   Descriptive statistics and data

Although information on retailers' suppliers is highly confidential, data on the certification of agri-food firms with *private standards* required by retailers is a good way to overcome this difficulty. French firms willing to sell their products in retailers' outlets have two options: sell them under own brand, or sell products under retailers' brand. Actually, most firms selling under their own brands also sell similar products under retailers' brand. This can be explained, for example, by the attempt of firms to optimize their production capacities which often exceed their sales. To sell its products under the retailer's label, firms need to comply with some private standards imposed by the latter, through a certification obtained from a private independent organism. Consequently, certification establishes preferential relations between retailers and their suppliers, regardless of their country of origin, and is a good proxy for identifying firms that belong to retailer networks.

Our paper focuses on the exports of French agri-food firms from 2003 to 2010 to all destinations, using information collected from different databases. We restrict the analysis to French firms from the *food and beverage industry*, i.e. agri-food firms. This choice is motivated by the fact that goods from this industry are sold in all retailer outlets and, therefore, the investigated effects should be the strongest on the international trade in this type of products. Considering a specific industry has also the advantage of limiting the importance of unobserved factors expressed at the industry level on the firm's export behavior.

French retailers use the IFS (International Food Standard) certification and we focus our analysis on this particular private standard. Our objective is to see whether firms with IFS certification have better export performance on markets where French retail companies have established outlets. The IFS was launched in 2003 by the associated members of the German retail federation. Joined by its French and Italian counterparts in 2004 and, respectively, 2006, the standard drew up a quality and food safety standard for retailer branded food products, named the IFS Food, intended to allow the assessment of suppliers' food safety and quality systems, in accordance with a uniform approach. Indeed, under the EU food law, retailers and brand owners have a legal responsibility for their brands. Private standards are hence designed to assist retailers and brand owners to produce food products of consistent safety and quality. In particular, they facilitate the standardization of quality, safety and operational criteria, and the fulfilment of legal obligations by manufacturers. Accordingly, these standards are appropriate tools for the application of the due diligence principle, i.e. the obligation to perform an investigation before contracting.

We built an original dataset on French agri-food firms, including both firms certified with the IFS and non-certified firms, in three steps. First, we identified the agri-food French firms that were IFS certified since the launching of the certification in 2003, using the exhaustive list of certified firms supplied by the IFS organization. Second, we combined the information on firms' IFS certification with data on the economic and financial activity of French firms from the AMADEUS dataset, built by Bureau van Dijk. The AMADEUS dataset records comparable financial and business information for public and private firms across Europe. The data are collected from company reports and balance sheets, and are updated weekly.

Firms are distinguished by a unique identification number, corresponding to the fiscal identifier in their country of origin, which permits to match the AMADEUS data with firm-level data from national sources. The accounting data include among others firm-level variables, such as sales, value-added, stock of capital, investment, and employment. The database also provides information about financial links between firms. This permits us to identify domestic and foreign affiliates of all companies in the database, within and outside the agri-food sector. We employed the version of the AMADEUS database covering French firms operating in the agri-food sector in 2012. Due to the frequent updating of the database (weekly), AMADEUS does not keep tracks on exiting firms. It provides current and historical data only for active firms. This leads to some inconsistencies between the panel of firms covered by the AMADEUS and French data, and to a smaller number of firms in the merged dataset. Third, to supplement information on the export behavior of firms, we merged our dataset with the French customs data. The French Customs register reports the volume and the quantity of exports of all French exporting firms, by product (at the 8-digit level of the HS classification) and destination country. We focus on the exports of French agri-food firms of grocery products sold in supermarkets, corresponding to HS2 chapters 1 to 24. Finally, we combined our obtained dataset on the IFS certification, the economic, financial, and export activity of French agri-food firms with data on the volume of sales of individual French retailers in each country of the world from the Planet Retail database.[1] The latter provides a lower level of product detail than the French Customs data, grouping together all grocery products sold in retailers' outlets. Therefore, before merging the two data sources, we sum up the exports of French firms across products.

We end up with a dataset of about 25,000 firms for each year between 2004 and 2010. The introduction of the IFS certification in 2003 sets the lower limit of the investigated time period. The availability of grocery sales of multinational retailers restricts us from expanding our analysis beyond the year 2010. Only a small fraction (13%) of firms in our panel export at least once over the considered period, and even fewer (4%) requested and obtained the IFS certification to sell their products under a retailer's brand. These figures show that certification is a less common phenomenon that exporting among French agri-food firms. In 2004, the year following the creation/implementation of IFS, only 10 firms were certified; by 2010 their number increased to 933. If we focus on the subsample of firms certified with IFS the rate of exporting exceeds 40% for the entire period. This suggests that IFS certification may reduce firms' exporting costs and grant them an improved access to foreign markets.

In line with recent findings of the empirical trade literature, about half (1,580) of the exporting firms in our panel continued to export to at least one destination in each year, while one quarter (464) of these firms exported only once in the entire period. At the same time, only one firm of our sample had the IFS certification in all years from 2004 to 2010, most of the certified firms holding this status for three or four years. Therefore, certification seems to be less frequent and less lasting than exporting. Still, we need to keep in mind that this may change over the years to come, as firms become more familiar with the underlying

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[1] This database records the grocery sales by the world's top hundred individual retail companies in each country. The five French retail companies are in this top hundred.

procedures and the benefits of this endeavour (enterprise). This difference vanishes when we look at the impact of firm's status in the previous year on its current activity. As shown in Table 1, exporting at time *t-1* increases the export probability of the firm at time *t* by 90%. The impact of past IFS certification on the probability of certification in the next year is virtually identical.

TABLE 1: **The impact of firm's past status on its current activity**

|	Exporting in t	IFS certified in t
Exporting in t-1	0.90***	
	(0.00)	
IFS certified in t-1		0.89***
		(0.01)
Fixed effects	year	year
Nb observations	151994	151994
R²	0.72	0.62

Note: Marginal effects measuring the change of the explanatory dummy variable from 0 to 1. Standard errors in parentheses. * $p<0.10$, ** $p<0.05$, *** $p<0.01$.

The international trade literature on heterogeneous firms tells us that only large and most productive firms start exporting. This well-recognized feature is confirmed in our panel of French agri-food firms (Figure 1), implying that the loss of data on firms present only in the AMADEUS and French data is not subject to important sample selection problems and should not affect our main results. Average and median turnover and productivity levels of exporting French agri-food firms are larger than for their domestic competitors, overall and within each size group defined by the firm's number of employees.

French firms with IFS certification are on average larger and more productive than non-certified firms. 63% of the firms in our panel have 50 or less employees, while 34% have over 500 employees. This distribution across size groups is considerably skewed to the right for certified firms, 62% of which belong to the large size group. The difference between certified and non-certified firms is even more prominent in terms of the distribution of firms' turnover. Certified firms have an average turnover twenty times larger that of the rest of the firms in our panel (€ million 97.5 vs. € million 5). Average productivity is also higher among firms with IFS certification, although the difference is statistically significant only for small-size firms (Figure 1).

We observe that certification is more frequent among domestic firms. Only 44.7% of the 1,045 firms certified at least once in our panel exported to at least one destination in at least one year. When we take into account the time dimension, i.e. compare firms' contemporaneous certification and export status, this figure drops to 39%. The productivity gap between exporting and domestic firms found on the entire sample is confirmed on the sub-panel of certified French firms: Exporting firms with IFS certification are more productive than certified domestic firms. Still, the average productivity of IFS firms (€ 327 thousand per employee) is lower than the average productivity of exporting firms (€ 394 thousand per employee).

FIGURE 1: **IFS certification and exporting across French agri-food firms**

Firm-level productivity

Firm turnover

| non-certified firms | IFS certified firms |
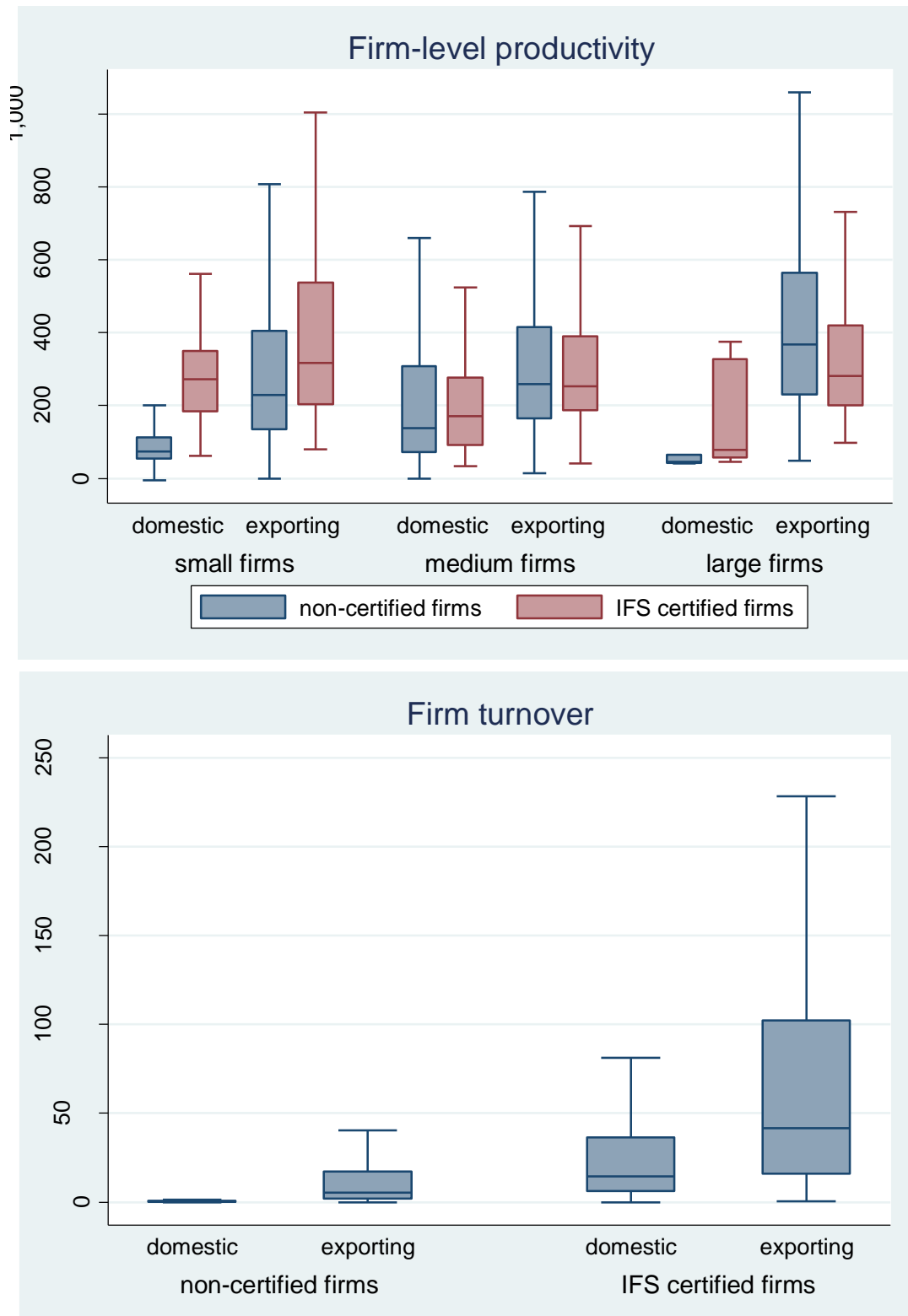
Notes: Authors' computation based on Amadeus and IFS certification data. Firm size is defined by the number of full-time employees: small (less than 50 employees), medium (50 to 499 employees), and large (500 or more employees). Outside values (below the lower adjacent value and above the upper adjacent value) are not displayed.

3. The model

The literature on firm-level exports shows that more productive firms are more likely to export and in larger amounts (Roberts and Tybout, 1997; Melitz, 2003; Bernard and Jensen, 2004; Melitz and Ottaviano, 2008). This result is due to the fact that exporting implies fixed sunk costs which can be supported only by most productive firms. Although theoretical models assume equal export sunk costs for all firms (within a given sector of the same origin country), recent empirical studies show that export sunk costs vary across destination markets (Helpman, Rubinstein and Yeaple, 2008; Chaney, 2008; Bernard, Redding and Schott, 2011). In the current paper we argue that export costs differ as well between firms exporting to the same foreign country. The domestic suppliers of a retailer with a transnational network of outlets face lower export costs than other domestic producers. Firms that sell their products under a retailer's brand on the domestic market may continue to do so on foreign markets where this retailer operates. In this case, firms do not need to support market prospection and partner search costs. Grouping the shipments with other suppliers of the same retailer permits them also to cut on transport, packaging and distribution costs. Exploiting the benefits of the foreign presence of a retailer does not necessarily imply selling one's products in the retailer's outlets in that country. Firms that supply exclusively the retailer's domestic network have also access to insider information on retailer's activity on foreign markets through their long and repeated interaction with the retailer. This enables these firms not only to identify most demanded products on specific foreign markets, less costly transportation networks, most efficient delivery procedures, and most reliable partners, but also to learn from retailer's success and failure stories.

For all above reasons we expect that firms that are able to sell their production under a retailer's brand, be it domestically or abroad, benefit from lower exporting costs and, consequently, from a higher probability of engaging into an export activity. We summarize this feature in a chart that plots firm export revenues against its productivity level, similar to Ahn, Khandelwal and Wei (2011). On the horizontal axis we show firm productivity at some positive power, $\varphi^{\sigma-1}$, where σ is the elasticity of substitution between traded varieties. The vertical axis corresponds to the export profits in foreign market j. Firms face a trade-off of whether to qualify for the IFS certification and obtain access to French retailers' domestic and foreign networks, or export their products at their own cost and risk.

Exporting to foreign countries where French retailers are absent requires all firms to pay the same fixed (f_j) and variable export costs (τ_j) specific to each destination market. The overseas presence of a French retailer lowers export costs for French firms, but the effect differs according to whether the firm is IFS certified or not. Non certified firms benefit from a slight drop in fixed export costs: $f_{X,j} < f_j$. Certification comes at an additional fixed cost f_{IFS}, but permits the firm to decrease not only its sunk bilateral export cost, but also variable costs incurred with transportation, handling, and distribution. Certified firms have access to virtually the entire domestic and foreign network of French retailers. Therefore, firms can recover the certification fixed cost by exporting to more than one market where the latter operate. We consider that the traditional sunk export cost are insignificant (approaching

zero) for certified firms, and that certification costs are lower than fixed costs faced by non-certified firms: $f_{IFS} < f_{X,j}$. The drop in variable export costs for certified firms implies a steeper slope for their export profits line in Figure 2. Our framework suggests that the threshold productivity of exporting firms is higher in the absence of French retailers on foreign markets. As for destination countries where operate French retailers, the productivity of the least productive exporting firm is lower among certified firms. Accordingly, the export probability and the volume of exports is larger for certified firms exporting to markets where operate French retailers.

FIGURE 2: **Firms' access to export markets in the presence and absence of retailers**
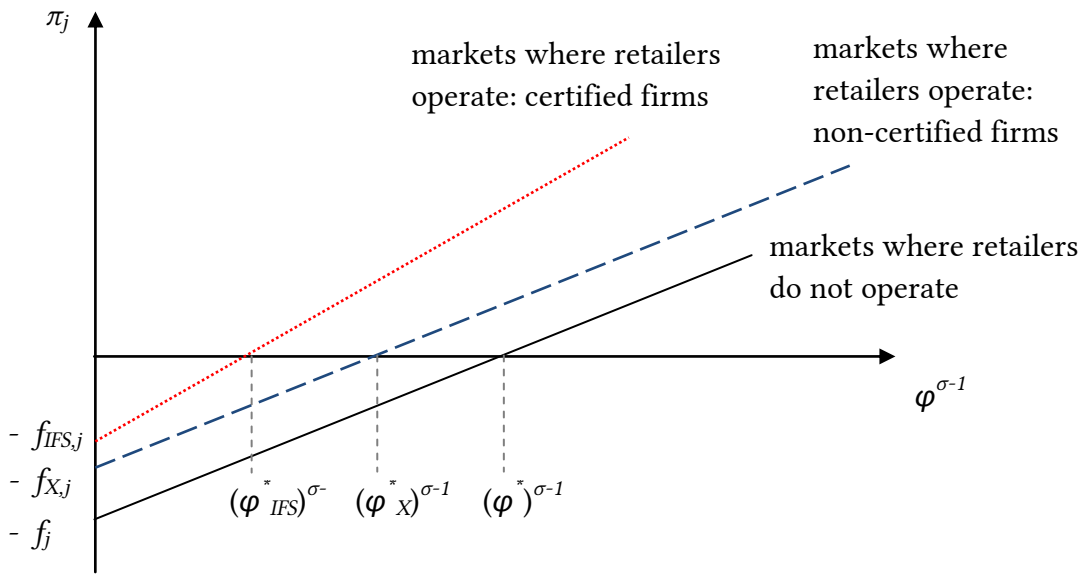
We test empirically these implications by looking at the impact of IFS certification and the overseas presence of French retailers on volume of exports of French firms to each foreign market. The amount of exports of firm f to destination country j is determined by a set of firm- and country-level control variables, including the certification status of the firm, the overseas activity of retailers, and an interaction term of the latter two variables:

$$\ln Exports_{fjt} = \alpha_0 + \alpha_1\ IFS_{ft} + \alpha_2\ Retailers_{jt} + \alpha_3\ Retailers_{jt} \times IFS_{ft} \qquad (1)$$
$$+ B\ X_{ft} + \Gamma\ Y_{jt} + \epsilon_{fjt}$$

Where IFS_{ft} is an indicator firm's IFS certification, $Retailers_{jt}$ denotes the presence of IFS retailers on destination market, and X_{ft} and Y_{jt} stand for time-varying firm and, respectively, country controls traditionally found in the international trade literature. A positive statistically significant estimate of coefficients α_2 and α_3 would confirm the

predictions of our trade model. The model does not imply a particular sign for certification coefficient α_1 in this context because we take into account the destination of exports. We need to include this variable on the right hand side of the equation in order to set exclude certified firms from out reference group.

We estimate a similar model for the extensive margin, i.e. the probability of firm *f* to export to foreign country *j*, where the dependent variable is binary:

$$I(Exports_{fjt} > 0) = \beta_0 + \beta_1\, IFS_{ft} + \beta_2\, Retailers_{jt} + \beta_3\, Retailers_{jt} \times IFS_{ft} \qquad (2)$$
$$+\Delta\, X_{ft} + \Theta\, Y_{jt} + \epsilon_{fjt}$$

To correctly estimate the coefficients of the extensive margin equation requires to consider the full matrix of all destination markets. Again, we expect to find positive estimates for coefficients β_2 and β_3.

4.   Estimation results

In this section we aim at separating the effect of retailers' foreign presence on the exports of their suppliers from the effect on other firms' exports. We employ data on the certification of French firms to identify retailers' domestic suppliers.

Before turning to our main estimations, we want to understand whether if IFS certification *per se* seems to affect positively the export capacity of French firms. For that, we disregard the destination market dimension of our data, and estimate the IFS impact on an indicator variable taking the value one for firms that export to at least one country and zero otherwise. Results are displayed in Table 2. To control for time shocks common for all firms in the panel (such as the financial crisis), we include year fixed effects in all our estimations. We find a positive and highly significant impact of contemporaneous and past IFS certification on firms' selection into exporters and non-exporters. While state dependence accounts for 89% of the observed outcome (domestic or exporting firm), certification increases the firm's probability to export by 5%. The effect does not vanish even when we control for firm size and productivity. Similar results are obtained using the number of employees as an indicator of firm size, or computing productivity on value added rather than on turnover. We conclude that the access to a retailers' network increases the overall firm export capacity. Our estimations with firm-level controls also confirm the standard result of the trade literature with heterogeneous firms. Bigger and more productive firms are more likely to export. The export probability is also larger for firms most successful in financing their activities on the stock market rather than on credits. The estimated marginal effect of certification and of other determinants of firm's probability to export are similar if we exclude from our panel firms that do not export to foreign countries where operate French retailers.

TABLE 2: **The impact of IFS certification on firm's overall export capacity**

	Dependent variable : Exporting in year t			
Exporting in t-1	0.89***	0.89***	0.88***	0.88***
	(0.00)	(0.00)	(0.00)	(0.00)
IFS certified in t	0.05***		0.07***	
	(0.01)		(0.02)	
IFS certified in t-1		0.04***		0.05**
		(0.01)		(0.02)
Turnover (bn €)			0.80***	0.83***
			(0.00)	(0.00)
Productivity (mn € per employee)			0.01*	0.01*
			(0.00)	(0.00)
Equity-to-total assets-ratio			0.02***	0.02***
			(0.00)	(0.00)
Fixed effects	year	year	year	year
Nb observations	151994	151994	59778	59778
R²	0.72	0.72	0.75	0.75

Note: All export destinations combined. Marginal effects measuring the change of the explanatory dummy variable from 0 to 1. Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Next, we estimate empirically the impact of retailers' presence in a foreign market j on the exports to this market of certified and non-certified firms. We evaluate the effects at both the intensive and extensive margin. We start by investigating how multinational retailers and certification affect firms' volume of exports to each market. We estimate the intensive export margin equation (1) and report results in Table 3. In all specifications, we account for IFS certification and the presence of French retailers on export markets using two dummy variables. The coefficient of their interaction corresponds to parameter α_3 from equation (1) and is our main interest in the paper. In the first column we use firm's turnover and productivity to control for firm heterogeneity. Differences in destination markets are captured by standard trade model variables: importer GDP, the distance separating the destination country from France, and the existence of a common land border, linguistic and past colonial ties between France and the importing country. We also include the share of purchases in modern retail outlets in the overall expenditure of importing country consumers to control for the development of the retail sector.[2] A more developed retail sector testifies of greater opportunities for exporting firms to reach foreign consumers and should increase exports (Reardon et al., 2003). We find positive but statistically non-significant effects of retailers' presence in export markets and IFS certified firms exporting to these countries. This is a week evidence of our models' predictions: lower export costs and larger export volumes for firms selling to countries where French retailers already operate, and among the latter for certified firms. The sign of firms and country specific controls correspond to the usual effects found in the literature.

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[2] By modern retail stores, we understand the outlets of large retail chains, in contrast traditional markets and one-outlet family-run small retailers.

	(1)	(2)	(3)	(4)
French retailers × IFS	0.0616	0.0907***	0.0627*	0.1110***
	(0.039)	(0.029)	(0.0371)	(0.027)
IFS	-0.2312***		-0.2470***	
	(-0.029)		(0.028)	
ln Turnover	0.6366***		0.6433***	
	(0.004)1		(0.004)	
ln Productivity	0.1812***		0.1743***	
	(0.010)		(0.009)	
French retailers	0.0192	-0.0061		
	(0.014)	(0.011)		
ln Importer GDP	0.3287***	0.3194***		
	(0.022)	(0.017)		
Contiguity	0.0393*	0.2796***		
	(0.024)	(0.018)		
Common language	0.1978***	0.1751***		
	(0.027)	(0.020)		
Colony	0.3458***	0.4053***		
	(0.005)	(0.004)		
ln Distance	-0.2733***	-0.3037***		
	(0.007)	(0.006)		
Share of modern retail at destination	-0.0625*	0.0853***		
	(0.038)	(0.029)		
fixed effects	time	firm*time	importer*time	firm*time importer*time
Nb observations	83540	132607	93198	147625
R²	0.30	0.49	0.35	0.51

Note: Standard errors in parentheses: * p<0.10, ** p<0.05, *** p<0.01

In column (2) we employ firm-specific effects to account for the impact of firm-level heterogeneity on exports. Firm-specific variables, including IFS certification, drop out due to collinearity, and lead to an increase in our estimation sample. Market-specific controls are the same as in column (1). We find a positive and highly significant coefficient for the interaction term $Retailers_{jt} \times IFS_{ft}$, confirming that certified firms benefit more from the overseas presence of French retailers, and, accordingly, export larger volumes to the concerned foreign markets than non-certified firms. The presence of French retailers on the targeted export markets does not affect firm-level exports. The coefficient of this variable is not statistically different from zero. Combining the two findings, we conclude that the overseas activity of French retailers increases the access to export markets only for retailers' potential suppliers from their origin country. Other French agri-food firms are equally competitive whether French retailers are present or absent from the markets to which they export.

In column (3) we keep the firm-level controls employed in column (1), but replace variables varying across destination markets with country-specific effects. Again, the estimated coefficient of the interaction term of retailers' presence on export markets and IFS certification is positive, although significant only at the 10% level. In the last column we use the full set of time-varying firm and country fixed effects in order to account for firm heterogeneity and differences in destination markets. Under this specification, the interaction term coefficient (α_3) is the only one that can be identified. The effect of certification and of retailers' overseas activity is entirely absorbed by the corresponding fixed effects. We prefer this specification to the previous ones because it controls for both observed and unobserved effects, and eliminates any possible omitted variable biases.

We turn now to the impacts of certification and retailers' foreign activity on the extensive export margin. Table 4 displays the effects on firms' probability to export to each destination market, estimated using equation (2) and a linear probability model. Our dependent binary variable takes the value one for all observations with positive exports, and the value zero otherwise. In order to correctly estimate the impact on the extensive margin, we need to include nil exports of each firm in our panel. Therefore, our estimation panel corresponds to the full matrix of French firms, years, and destination markets. This increases the size of the sample to 35 million observations. Country-specific control variables are unavailable for 25 destination countries, corresponding to 11.8% of the full sample. Dropping observations for which firm characteristics are not documented reduces our sample to 5.9 million observations.

The four columns of Table 4 correspond to estimation results using the same four specifications as in Table 3 on the intensive margin. We use a linear probability model because of capacity constraints of estimating a Probit or Logit model with 179,000 fixed effects (in the last column). For that reason, the size of estimated coefficients is not directly interpretable as a change in firms' probability to export, but the sign of coefficients is a plausible indicator of a positive or negative change in export probability. Coefficients of firm and country-specific controls have the same signs as in Table 3 and in line with traditional findings in the trade literature.

We find a positive and statistically significant coefficient on our variable of interest, IFS certification interacted with retailers' presence on export markets. Certified firms that may sell their products via retailers' network of outlets are more likely to export to countries where are located these outlets, than non-certified firms from the same country of origin. This finding confirms the main prediction of our trade model, that the productivity threshold for exporting to countries where operate multinational retailers is lower for certified firms. Table 4 also illustrates a small negative effect of IFS certification and retailers' foreign activity on firms' probability to export to any country. This implies that certification reduces a firm's export costs only via access to a retailer's network, but does not lead to an increase in firm's productivity or to a quality upgrade of its products. Non-certified firms do not benefit from the presence of origin country retailers on their export markets. This suggests that the overseas expansion of a country's retailers leads to a drop in export costs only for retailers' potential suppliers from the origin country. The graphical

interpretation of this result is that the export profits line for non-certified firms in Figure 2 almost coincides with the export profits line on markets where multinational retailers are absent.

TABLE 4: Effects on the extensive margin, linear probability model

	(1)	(2)	(3)	(4)
French retailers × IFS	0.0482***	0.0282***	0.0583***	0.0332***
	(0.000)	(0.000)	(0.000)	(0.000)
IFS	-0.0050***		-0.0080***	
	(0.000)		(0.000)	
ln Turnover	0.0123***		0.0122***	
	(0.000)		(0.000)	
ln Productivity	0.0071***		0.0069***	
	(0.000)		(0.000)	
French retailers	-0.0050***	-0.0017***		
	(0.000)	(0.000)		
ln Importer GDP	0.0819***	0.0241***		
	(0.000)	(0.000)		
Contiguity	0.0034***	0.0010***		
	(0.000)	(0.000)		
Common language	0.0048***	0.0014***		
	(0.000)	(0.000)		
Colony	0.0036***	0.0010***		
	(0.000)	(0.000)		
ln Distance	-0.0064***	-0.0018***		
	(0.000)	(0.000)		
Share of modern retail at destination	0.0277***	0.0081***		
	(0.000)	(0.000)		
fixed effects	time	firm*time	importer*time	firm*time importer*time
Nb observations	5208715	30865315	5914534	35007193
R^2	0.08	0.16	0.09	0.16

Note: Standard errors in parentheses: * $p<0.10$, ** $p<0.05$, *** $p<0.01$

5. Conclusion

In a previous study we show that agri-food exports to a given country are impacted positively by the presence of domestic retailer in this country (Cheptea, Emlinger and Latouche, 2012). In this paper, we explore more deeply this link between the globalization of the retail sector and the export activity of origin country firms. We test whether this effect is due to a reduction in exports costs via the access to a retailer's foreign network for its domestic suppliers. Although information on retailers' suppliers is highly confidential, we use French agri-food firm data on certification as a proxy for the privileged relationship between the firm and a retail company. We use an original dataset of firm certified with the IFS private standard, granting them the right to sell their products under a French retailer's brand. We evaluate the effects both at the extensive and the intensive exports margin. We find that certified French firms are more likely to export and export larger volumes than non-certified firms to markets where French retailers established outlets. The result is statistically significant and robust to the use of firm and country-specific controls, as well as time-varying firm and country fixed effects, in order to account for firm heterogeneity and differences between destination markets. This outcome argues in favour of a network effect for French retail suppliers, which allows them to reach foreign markets at lower costs.

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