Reply to the Referee 1 Report

I am very pleased that referee 1 found this paper interesting and well conducted and I am also very thankful for all the valuable comments. I will try to thoroughly and in a comprehensive way revise the paper in line with all the comments and suggestions. The responses to the comments raised by the referee are outlined below.

Comments from Referee 1;

The aim of the paper is to analyze how firm size and foreign sourcing affect the export surviving probabilities using data from Danish manufacturing firms for the 1995-2006 period. Specifically, the author investigates whether firms' intra-industry imports of intermediate inputs from different regions (high- or low-wage countries) affect the export survival rates of small, medium and large firms. In the paper, export exit is defined as total withdrawal of all markets, not only exit from one specific market; this means that the company ceases its export activity. The author measures global sourcing using a dummy variable that equals to 1 for firms that source intra-industry inputs from abroad (narrow sourcing) and 0 otherwise. The impact of firm size and foreign sourcing on export exit has been studied in several previous papers which main results are summarized by the author in the Introduction section. The novelty of this research is that not only it focuses on the relationship between foreign sourcing and export survival at firm level data but also distinguishes the effect from different sourcing location and different size of firms simultaneously. This is the main contribution of the paper. Overall, this is a very interesting and well conducted study. I only have some suggestions with the aim of improving the author's work.

In Section 2 (Theoretical framework), the author discusses the channels through which foreign sourcing affects the decision to stay or leave the export activity. Some of them affect that decision positively and therefore they contribute to increase the chance of export survival while others affect it negatively. The channels and factors related to foreign sourcing that may lead to higher export survival rates are widely accepted because they are supported by a substantial body of research. From my point of view, the arguments used to suggest that foreign sourcing might lead to higher exit likelihood are more closely related not to ceasing export activity but to exit from a specific market. Moreover, the negative impact on export survival of some of those factors would be more evident when several foreign suppliers are involved in the sourcing activities, that is, when sourcing activities are more global. Anyway, those factors could reduce or even cancel out the positive impact of global sourcing on export survival. As mentioned above, a firm is considered to be engaged in foreign sourcing if it purchases intra-industry inputs from abroad. Since no minimum threshold is included, it is understood that how much the firm is involved is not relevant for the size of its impact on export survival. It would be very interesting to offer information on the mean quantity of purchased foreign inputs and the dispersion around the mean as well as the differences in the foreign sourcing intensity across firms by age. Based on that information, it may be appropriate to introduce a minimum threshold of foreign sourcing and see if the econometric results are robust when such threshold is required.

Response:

I agree with the referee that it is important to consider the level of involvement of the global sourcing firms in purchasing foreign inputs. Therefore, I provide in Table 1.2 below, as suggested by the referee, the mean and standard deviation of purchased foreign inputs as well as the share of foreign inputs over total sales across small, medium and large firms. Moreover, related to this information, I re-estimate Table 6 excluding the lowest 10 percent of the global firms according to their share of foreign inputs over total sales. As outlined in Table 6.2 below, the main results remain unchanged.

Moreover, since information on the country-of-origin of the imported inputs are available, it would be interesting to describe the mean number of sourcing countries and the dispersion around the mean and do that for the three types of firms by size. It is important to have such information to know how global the foreign sourcing is. It is also interesting to explore the distribution between high- and low-wage countries in order to infer how sensitive the results might be to the particular threshold chosen (50 percent) to consider sourcing from high-wage or from low-wage countries.

Response:

Below in Table 1.2, I report the mean and standard deviation of the number of high- and low-wage sourcing countries for small, medium and large firms.

I suggest introducing in table 3 the characteristics of those exporting and global sourcing firms that mainly source from low-wage countries and those that source mainly from high-wage countries in order to explore if there are differences between them.

Response:

Below I reproduce Table 3 to also include firm characteristics of exporting firms and of those firms that source mainly from high- or low-wage countries.

Other minor comments:

- Page 5: "Moreover, as in the revenue function the time t is included to account for the learning process in which firms accumulate knowledge about their production process that help them to produce efficiently and to reduce their production costs over time". The word "as" should be removed.
- In the equations (7) and (8) as well as in the text explaining the variable global sourcing (page 11, 13, 17, 18), the word "sourcing" is misspelled. It appears as "sorucing".
- On several occasions Dias-Mora is misspelled. It is Diaz-Mora, as it appears in the references.

Response:

I am very thankful that the referee has found these misspellings and grammatical errors in which of course, I will correct in the revised version.

Table 1.2 Foreign sourcing intensity and the mean number of high- and low-wage sourcing countries for small, medium and large firms.

	Large firms	Medium firms	Small firms
Mean of purchased foreign inputs (Stand dev.)	806 (177)	122 (22)	9 (5)
Mean of purchased inputs from high-wage countries (Stand dev.)	930 (202)	142 (26)	11 (6)
Mean of purchased inputs from low-wage countries (Stand dev.)	124 (58)	20 (11)	2 (2)
Foreign inputs over total sales, percent (Stand dev.)	17.4 (0.85)	12.2 (0.16)	3.9 (0.71)
Inputs from high-wage countries over total sales, percent (Stand dev.)	19.4 (0.85)	13.8 (0.17)	4.8 (0.71)
Inputs from low-wage countries over total sales, percent (Stand dev.)	6.4 (0.06)	4.0 (0.06)	0.8 (0.10)
Mean number of sourcing countries (Stand dev.)	17.7 (6.4)	13.2 (7.4)	6.4 (5.4)
Mean number of high-wage sourcing destinations (Stand dev.)	20.1 (10.3)	14.7 (8.8)	7.6 (8.1)
Mean number of low-wage sourcing destinations (Stand dev.)	4.5 (3.3)	5.5 (6.5)	1.2 (2.5)

Table 3   Firm characteristics of exporting and global sourcing firms, 1995-2006

Firm variables	Firms that only export			Global sourcing and exporting firms			Sourcing form high-wage and exporting firms			Sourcing form low-wage and exporting firms		
	Large firms	Medium firms	Small firms	Large firms	Medium firms	Small firms	Large firms	Medium firms	Small firms	Large firms	Medium firms	Small firms
Age	9.7	9.3	7.4	10.2	10.0	8.7	10.3	10.0	8.5	10.1	9.8	8.7
Skill share	17.3	14.5	14.4	19.2	16.9	16.0	20.2	17.2	16.7	18.2	16.1	15.4
Labor productivity	834	285	110	829	293	139	912	308	140	803	281	132
Capital stock	297	25	5	285	25	10	314	27	11	264	24	8
Sales	538	80	17	603	90	25	605	100	26	555	81	19

Table 6.2   Global sourcing, size and export survival. Complementary log-log model; IV and Matching approach, Model (1), excluding global sourcing firms with less than xx percent of their foreign inputs over total sales.

Variables	IV			Matched sample		
	Small firms (1)	Medium firms (2)	Large firms (3)	Small firms (4)	Medium Firms (5)	Large firms (6)
Global sourcing						
_high-wage	0.733 (2.10)[b]	0.698 (4.51)[a]	0.782 (1.64)	0.713 (5.32)[a]	0.826 (3.46)[a]	0.781 (1.52)
_low-wage	0.914 (0.22)	0.981 (0.64)	0.872 (1.32)	0.974 (0.89)	0.975(1.02)	0.982 (0.96)
Industry control	Yes	Yes	Yes	Yes	Yes	Yes
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,316	7,489	4,147	8,155	4,935	1,877
Wald Chi Square	633[a]	513[a]	354[a]	471[a]	239[a]	169[a]
Hausman test (p-value)	0.018	0.011	0.019			
Linktest (hatsq)	0.009 (1.32)	0.005 (1.19)	0.028 (1.17)			