

Annex E: Analysis of the random sample of the B2B portfolio

Introduction and methodology

A key element of the empirical basis for the Evaluation has been the analysis of a random sample of pilots and projects from the full portfolio. Twenty per cent of the portfolio i.e. 87 collaborations were randomly selected for further analysis. Of the 87, four turned out to have received most of their funding under the PSD Programme and were excluded from the sample.

There have been several steps in the methodology for the analysis:

- A document analysis establishing the basic characteristics of the companies participating, their motives for engagement and to the extent possible the results of each partnership as reflected in progress reports and project completion reports prepared by the embassies. The results analysis has not always been possible as for several of the collaborations the Evaluation Team did not have access to progress reports, and final reports were not available or these were of poor quality.
- Interviews by phone, Skype or in person with the Danish and local project partners in order to establish outcomes and possible impacts of the partnership on the companies, the local community, the business environment etc. The team was able to establish contact with most Danish partners of which most were willing to do an interview. It proved more difficult to reach the local partners and after agreement with EVAL, the team gave up after minimum three unsuccessful attempts (email and phone calls). A total of 55 Danish project partners and 33 local partners were interviewed..
- Interviews by phone or Skype with the B2B coordinators (or the current DBP coordinators) at the embassies. These interviews constituted an important element of triangulation of information and have also been an important element in the analysis of the management of the programme. In the case of Nicaragua an interview was not possible as the embassy has closed and the persons in charge of the B2B could not be located. For Bhutan, the relevant contact person could not be reached.

Besides the four collaborations that were excluded from the sample as they were not mainly B2B funded, another three were eliminated from the analysis at the end as the documentation base for the collaborations were too thin to even be able to establish the basics of the partnerships and it was not possible to reach neither the Danish nor the local partner. Hence, the analysis base for the random sample is a total of 80 partnerships. The low response rate among the local companies is unfortunate as particularly the case study in Uganda showed that the Danish and the local firms often have different perceptions and judgement of the B2B Programme in terms of, for example, results. The table below shows the distribution of the pilots and projects in the random sample among the B2B countries:

Table 1: No of pilots and projects per country in the random sample

Country	Pilot	Project	Total
Bangladesh	3	4	7
Bhutan		2	2
Bolivia	1	5	6
China	1	2	3
Egypt	7	4	11
Ghana	3	1	4
Kenya	2	5	7
Mozambique	1	3	4
Nicaragua	1	1	2
South Africa	4	4	8
Tanzania	2	3	5
Uganda	1	6	7
Vietnam	6	7	13
Zambia		1	1
Grand Total	32	48	80

The methodology of the random sample analysis is further discussed in Annex B.

Characteristics of the sample (contextual parameters)

The random sample (as well as the case country studies) has been assessed for a series of company contextual parameters identified in the Inception report and subsequently refined in the Methodology. Those applied in this analysis are:

- Size of the Danish and the local partners (at the time of entering the B2B Programme)
- Age of the Danish and the local partners (at the time of entering the B2B Programme)
- International experience of the Danish and the local partners (at the time of entering the B2B Programme)
- Financial robustness of the Danish and the local partners (at the time of entering the B2B Programme)

The random sample has also been assessed for a number of selected collaboration-related contextual parameters identified in the Inception report and subsequently refined in the Methodology. Those applied in this analysis are:

- The business motive of the Danish company to engage in the B2B Programme
- The type of partnership established
- The business sector in which the partnership took place (based on Danish partner)
- The number of years the B2B partnership was under implementation

The distribution of the random sample in these categories is given below.

For details of definition and categorisation, please see Annex B and particularly Annex B2.

Company size

As shown in Table 2 below almost half of the companies in the sample (local and Danish companies) were small as defined by the Evaluation (5-49 employees) and one fifth of the Danish companies in B2B were micro companies (with less than five employees as defined by the Evaluation). The latter would not be eligible for support under the DBP programme due to the criteria for eligibility of a minimum of five full-time employees. It is noteworthy that almost one of ten of the Danish companies was large. The size distribution among the local companies corresponds to that of the Danish with a slightly overall larger size in employment.

Table 2: Distribution of companies in the random sample – company size

Company size	Danish companies	Company size	Local companies
Micro (1-4 empl.)	19%	Micro (1-4 empl.)	8%
Small (5-49 empl.)	46%	Small (5-49 empl.)	49%
Medium (50-249 empl.)	26%	Medium (50-249 empl.)	29%
Large (250+ empl.)	8%	Large (250+ empl.)	14%
Data missing	1%	Data missing	1%
Grand Total	100%	Grand Total	100%

Company age

As Table 3 shows, most of the Danish companies were established more than 10 years prior to their engagement in the B2B programme, and only 4% were start-ups (established less than three years before engaging in B2B.) The local companies were on the average younger, with almost one out of four a start-up company. In the analysis below, start-up’s and emerging Danish companies are merged into one category, as the start-ups are too few (only three companies) to draw any conclusions on correlation with results.

Table 3: Distribution of companies in the random sample – company age

Company age	Danish companies	Company age	Local companies
Start-up (less than 3 years)	4%	Start-up (less than 3)	23%
Emerging (3-9 years)	26%	Emerging (3-9 years)	33%
Established (10+ years)	69%	Established (10+ years)	41%
Data missing	1%	Data missing	3%
Grand Total	100%	Grand Total	100%

International experience

The level of previous international experience of both Danish and local partners have been established through interviews or documentation. The table below shows that the Danish partners had far more international experience than the local partners before joining B2B. Still 14% of the Danish partners used the B2B Programme to get their first international experience.

Table 4: Previous international experience of partners

Level of international experience	Danish Partner	Level of international	Local partners
Considerable	43%	Considerable	10%
Some	44%	Some	43%
None	14%	None	48%
Grand Total	100%	Grand Total	100%

Financial robustness

In terms of financial robustness, Table 5 shows that one fifth of the Danish companies were financially weak as defined by the Evaluation when they engaged in the B2B programme. Among the local companies, this ratio was almost half of the companies. Whereas 35% of the Danish partners were financially strong, this only applied to 19% of the local companies.

Table 5: Distribution of companies in the random sample – financial robustness

Financial robustness	Danish Companies	Financial robustness	Local companies
Weak	19%	Weak	49%
Medium	44%	Medium	25%
Strong	35%	Strong	19%
Data missing	3%	Data missing	8%
Grand Total	100%	Grand Total	100%

Business motive of the Danish company

The motive from a business perspective to engage in the B2B varies between the Danish partners. In the analysis the Evaluation has used the following three types: market extension (Danish companies seeking new markets for their products and services), outsourcing, including off-shoring (when Danish companies are placing their production partly or totally abroad generally to reduce costs) and in-sourcing of raw materials. The distribution of the random sample between these categories is shown in Table 6 below which shows that market extension by far has been the most important motivation for Danish companies to engage in B2B.

Table 6: Distribution of motive of Danish partners for engagement

Motive of Danish partner	Percentage
Market extension	68%
Outsourcing	25%
Sourcing of raw materials	8%
Grand Total	100%

Type of partnerships

Table 7 shows that there was a clear tendency of establishing Joint Ventures in the B2B programme as expressed in the intended form of partnership in the applications for projects and pilots. The picture is however skewed as the Joint Venture form was a prerequisite in Vietnam for getting support and since Vietnam has a rather large portfolio of collaborations in the random sample as showed in Table 1. Also in some of the other countries, Joint Ventures – if not a requirement – was the desired form of collaboration by the embassies. The interviews carried out, however, showed that many Joint Ventures were in fact never established, even if the collaboration did reach the project stage. Buy/sell indicates a partnership which is based on a trade collaboration. Technical assistance is a form of collaboration in which the Danish partner has no other commercial motive than providing services under the programme. In the analysis below, Agent, Management Contract and Franchise which each have only one or a few cases are grouped into one category “other”.

Table 7: Distribution of types of partnerships in the random sample (entry strategy)

Entry strategy	Percentage
Joint Venture	60%
Buy/sell	15%
Technical Assistance	13%
Agent	9%
Management Contract	3%
Franchise	1%
Grand Total	100%

Business sectors

As shown in the Synthesis report, there is a wide distribution on sectors in the portfolio, and for reason of analysis, only the top three sectors in number of collaborations have been subject for analysis: Agro-industries and food, ICT, Environmental technologies. Table 8 below gives the distribution of the sectors in the random sample.

Table 8: Distribution of sector in the random sample (based on Danish partner)

Sector (Danish partner)	Percentage
Agroindustries and food	25%
ICT	21%
Environmental technology	9%
Other sectors	45%
Grand Total	100%

Outcome and impact of the sample of projects

The random sample analysis has, in line with the established methodology used the following parameters for determining outcome and impact of the programme:

- Current sustainability of the partnership
- Likely future partnership post B2B
- Transfer of technology
- Commercial performance of the local company
- Commercial performance of the Danish partner
- Development impact

See further Annex B2 concerning criteria and ratings of these results parameters.

Current sustainability of partnerships

Table 9 below shows that in total where the partnership has ended, there is an equal share of pilots and projects, whereas for the partnerships that are still working today, either struggling or working well, there is a clear overweight of projects. This is as expected but it is interesting that there still are a few pilots that are working today, three years after the programme is closed and without project grants. A deeper analysis shows that the pilot projects that is struggling is still under implementation, whereas the two pilot projects that are working well have been without B2B support since 2008 and 2011 respectively.

Table 9: Sustainability of partnerships - pilot and project split

Partnership today?	No.
Pilot	32
No	28
Yes but struggling	2
Yes and working well	2
Project	48
No	27
Yes but struggling	6
Yes and working well	15
Grand Total	80

Likely future partnerships

Some of the collaborations are still under implementation at the time of the Evaluation. Table 10 shows the Evaluation Team's best judgement in relation to the sustainability of all collaborations once the support is over. Of the Pilots that ended after the B2B programme, 88% have ceased to cooperate, while the four pilots that are still cooperating are judged to have the likelihood of a future partnership. Of the partnerships that went through the Project phase, 63% have already ended the partnerships or are likely to do so when the B2B has ended. Of the total number of companies which engaged in the B2B about three of four have not continued the partnership or are likely end the collaboration once the B2B support ends.

Table 10: Likely future partnerships

Likely future partnership?	Number of collaborations
Pilot	32
No	28
Yes	4
Project	48
No	30
Yes	18
Grand Total	80

Technology transfer

Transfer of knowhow and technology was one of the key strategies in the B2B programme to reach the objectives of the programme. In the Evaluation the technology transfer from the Danish partner to the local has been assessed from interviews with the partners and as evident from written documentation. As reliable quantitative measures cannot be established, the Evaluation has made a judgement and classified the projects in three categories, no apparent transfer, some transfer and considerable transfer. The results are given below. As indicated in Table 11, in nearly half of the collaborations the Evaluation Team concluded that no apparent transfer took place, and only in 16% considerable transfer appears to have taken place.

Table 11: Level of technology transfer

Outcome	Percentage
0 - No such transfers	46%
1 - Some transfer	38%
2 - Considerable transfers	16%
Grand Total	100%

Company performance

One of the key objectives for the Danish as well as the local partners to enter into the B2B programme was to enhance their commercial performance. Table 12 shows that for 58% of the local companies and even 65% of the Danish companies, there were no apparent change in their performance (as judged by the Evaluation Team). 9% of the local companies and 7% of the Danish companies performed worse after engagement in B2B (but not necessarily solely due to the B2B engagement). 23% of both Danish and local companies performed better and 11% of the local companies even performed much better, whereas the corresponding figure for Danish companies is 6%. It might be that B2B's impact on the large companies engaged in the programme is too small to have made any change.

Table 12: Partnership effect on performance of companies

Outcome	Local companies	Danish companies
-2 Much worse	5%	3%
-1 Worse	4%	4%
0 More or less the same	58%	65%
1 Better	23%	23%
2 Much better	11%	6%
Grand Total	100%	100%

Development impact

As discussed in Section 8.8 and shown in figure 17 in the main report, the level of development impact of each partnership has been measured on a three point scale. Table 14 shows that 68% of the partnerships in the random sample have had no impact beyond the company and 20% has only had marginal impact. Only 12% of the partnerships can be said to have made a difference development wise.

Table 13: Level of development impact

Outcome	Percentage
No impact	68%
Some impact	25%
Significant impact	8%
Grand Total	100%

Correlations between contextual factors and outcome/impact

The Evaluation has correlated 11 selected company and project related contextual factors described above with five of the outcome/impact indicators. The result of this is that the correlation overall is not strong. There are however some interesting tendencies between some of the factors and outcomes. The results of the analysis illustrated as distributions in graph form, are given in this section in 55 figures. The table below gives an overview of the analyses that have been made and figure numbers are indicated. They are organised based on outcome/impact so that first the 11 contextual factors are correlated with partnership sustainability, then with technology transfer, then performance of local and Danish company and lastly with development

impact. In each subsection of the analysis, the trends of the results indicator are summed up. Following this, a brief conclusion for each contextual factor is given.

		Partnership sustainability (A)	Technology transfer (B)	Performance local comp. (C)	Performance Danish comp. (D)	Development impact (E)
Company related	Size of Danish comp.	1	12	23	34	45
	Size of local comp	2	13	24	35	46
	Age of Danish comp.	3	14	25	36	47
	Age of local comp.	4	15	26	37	48
	Int. experience Danish	5	16	27	38	49
	Int. experience local	6	17	28	39	50
	Robustness Danish	7	18	29	40	51
	Robustness local	8	19	30	41	52
	Motive of Danish comp	9	20	31	42	53
Partnership related	Type of partnership	10	21	32	43	54
	Sector	11	22	33	44	55

Relationship with likely future partnerships (partnership sustainability) (A)

Figure 1: A - Size of Danish partner

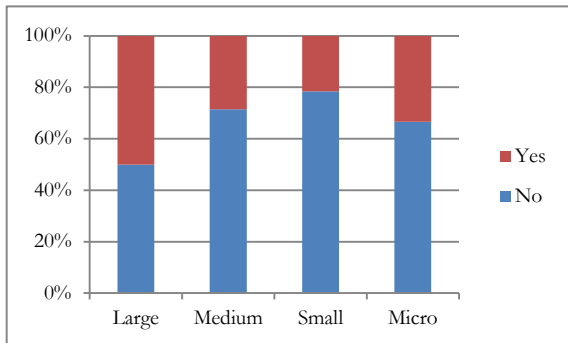


Figure 5: A - International exp. of Danish partner

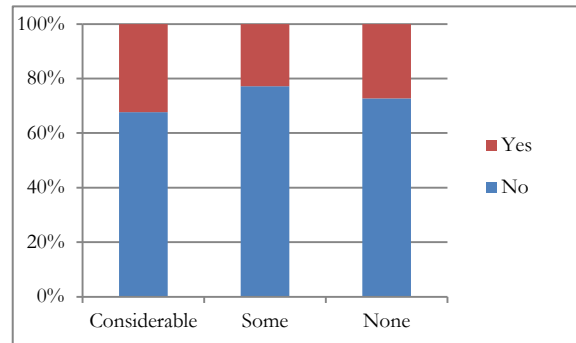


Figure 2: A - Size of local partner

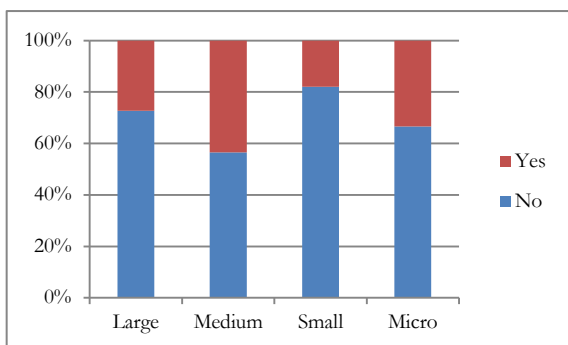


Figure 6: A - International exp. of local partner

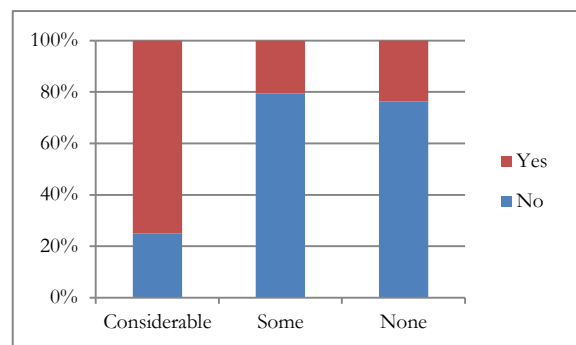


Figure 3: A - Age of Danish partner

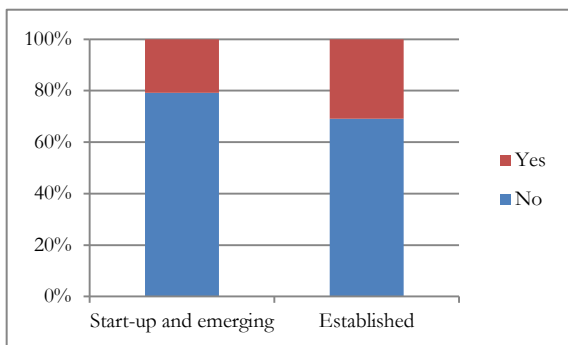


Figure 7: A - Financial robustness DK partner

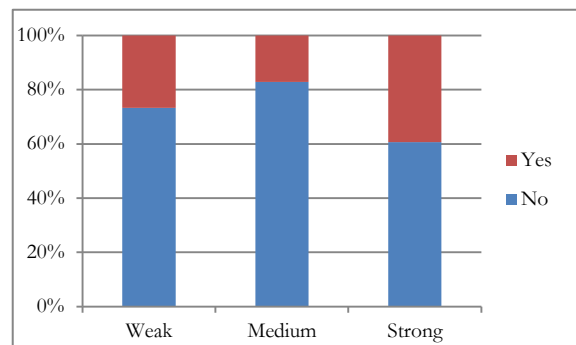


Figure 4: A - Age of local partner

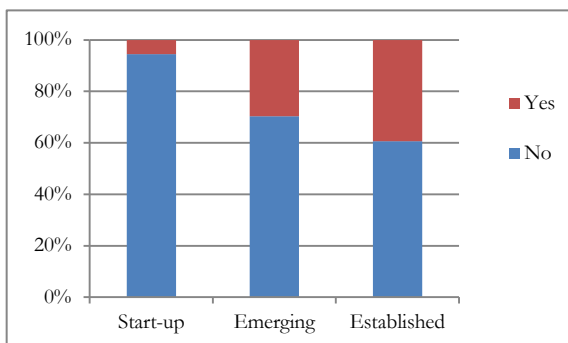


Figure 8: A - Financial robustness local partner

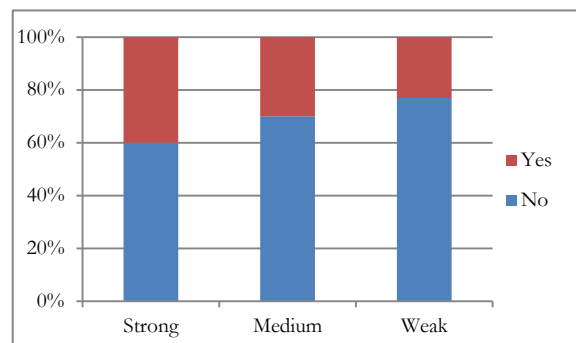


Figure 9: A - Business motive of Danish partner

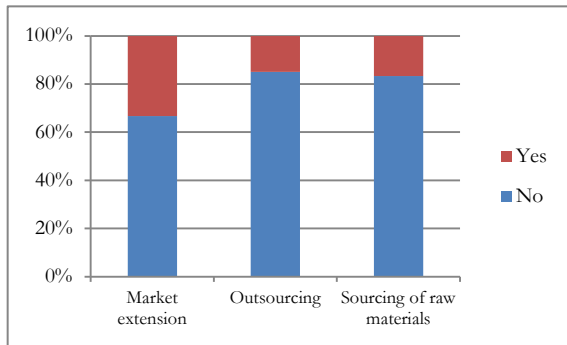


Figure 11: A – Sector

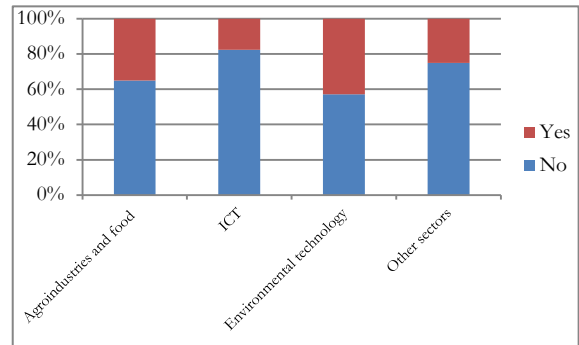
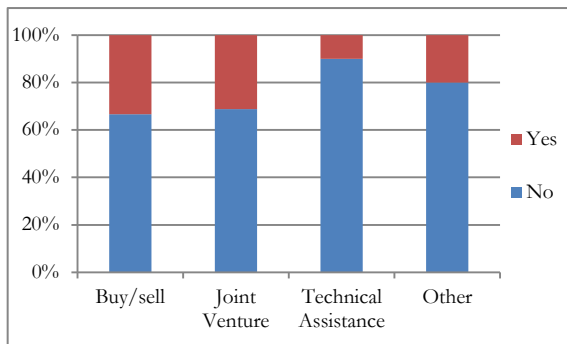


Figure 10: A - Type of partnership



Summing up on partnership sustainability

The relative importance of company size gives a mixed picture both for Danish and local companies, however with an overweight of large Danish companies being able to sustain the partnership. There are slightly more established Danish partners that are able to sustain partnerships than younger companies, whereas there is a rather clear correlation between the age of the local partner and sustainability – the more established the company, the better sustainability. Both Danish and local partners with considerable international experience have better sustainability, and the same goes for the financially robust companies, though none of them are strong factors. As regards business motive, market extension projects are more sustainable as are buy/sell and JV type of partnerships. Sectorwise, the ICT sector is the one that has the least chance of sustainability.

Correlation with technology transfer (B)

Figure 12: B - Size of Danish partner

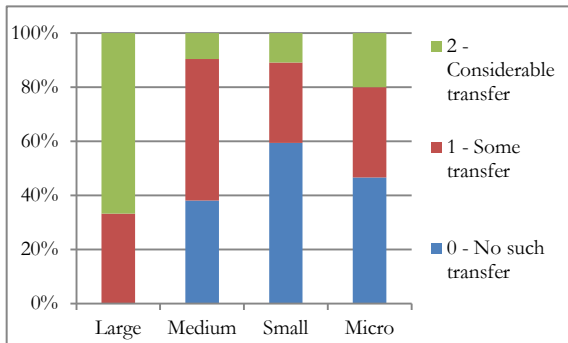


Figure 16: B - International exp. Danish partner

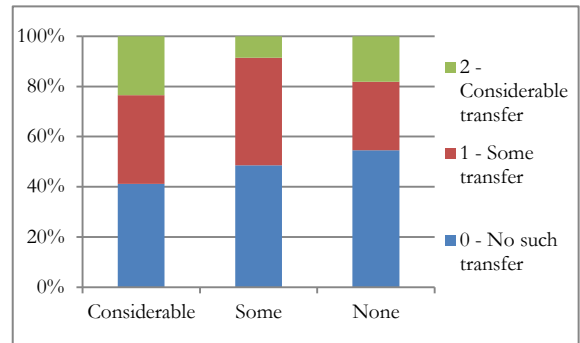


Figure 13: B - Size of local partner

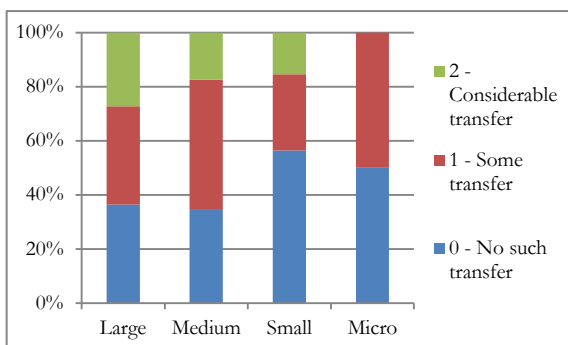


Figure 17: B - International exp. of local partner

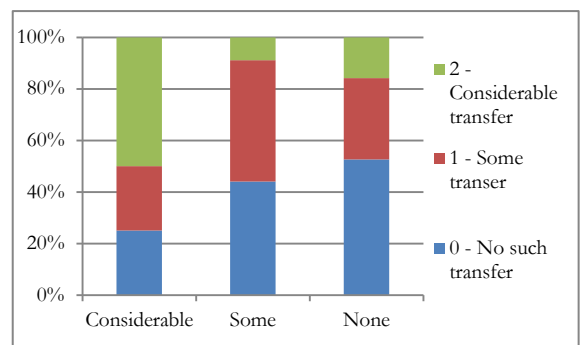


Figure 14: B - Age of Danish partner

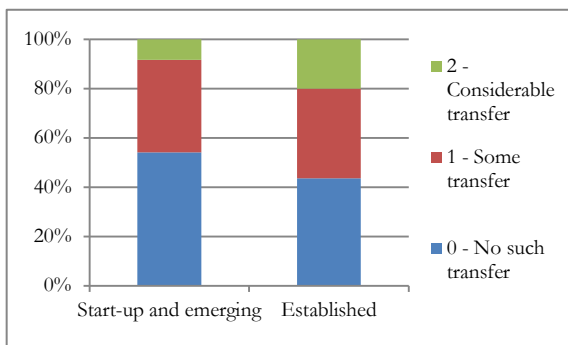


Figure 18: B - Financial robustness DK partner

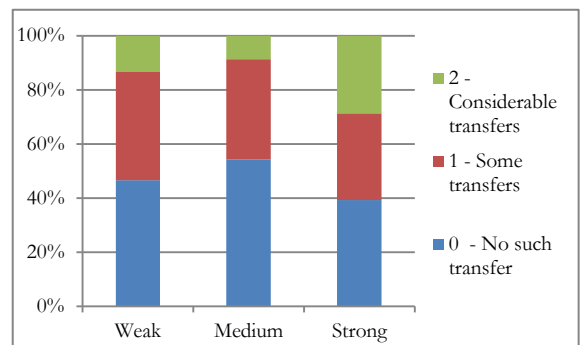


Figure 15: B - Age of Local partner

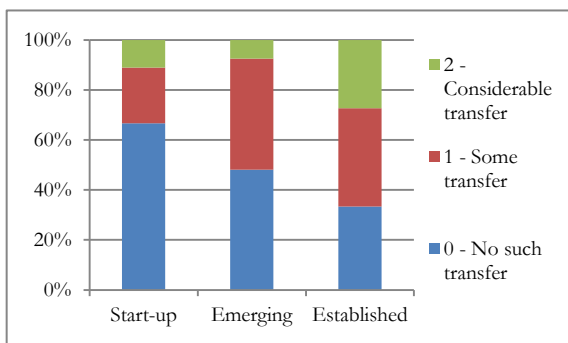


Figure 19: B - Financial robustness local partner

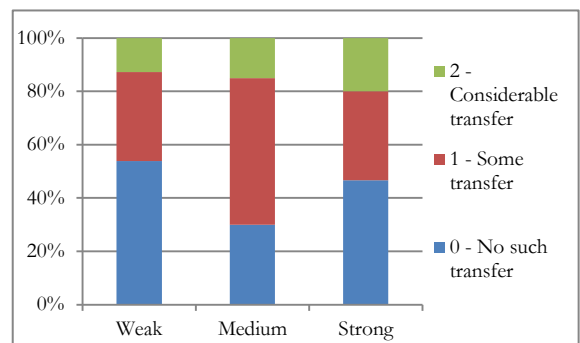


Figure 20: B - Business motive of Danish partner

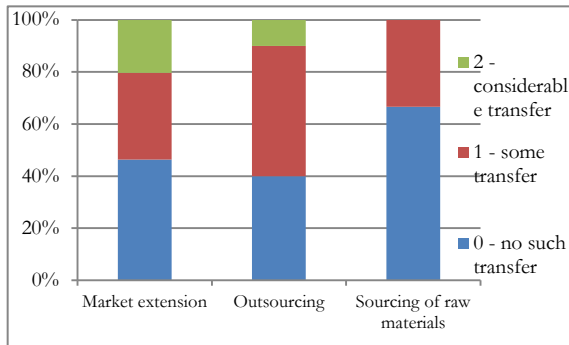


Figure 22: B - Sector

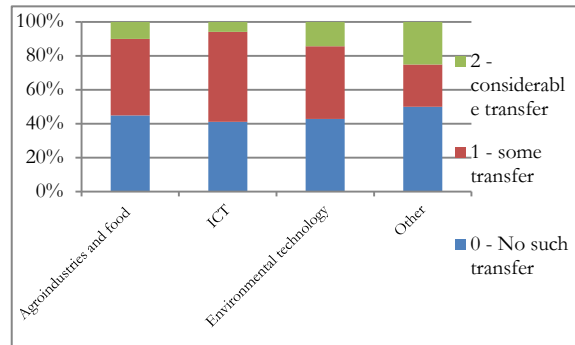
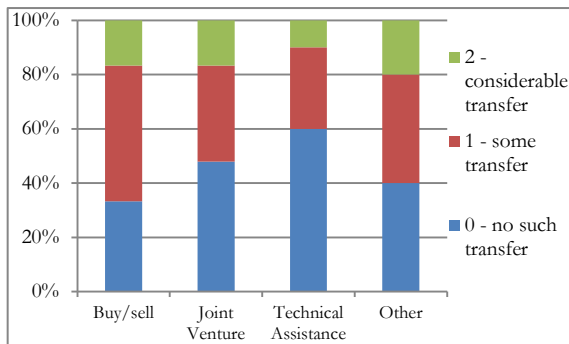


Figure 21: B - Type of partnership



Summing up on technology transfer

Large and medium-sized Danish companies show better results in transferring technology and know-how than small and micro companies. For local companies the same picture emerges though not as strong as for the Danish. As regards age, the more established companies, both Danish and local, have better results than the younger, and the same goes for international experience; slightly better results for more international Danish companies and considerable better results for more international local companies. Financial robustness of Danish and local companies does not have any clear impact on technology transfer, though the stronger Danish and local companies have better results in the top-category (considerable transfer). Interestingly enough, both as regards business motive and type of partnership, technical assistance projects do not perform well in this category, though ‘sourcing of raw materials’ is the business motive category that performs worse. There is not much difference in technology transfer between the different sectors.

Correlation with commercial performance of local company (C)

Figure 23: C - Size of Danish partner

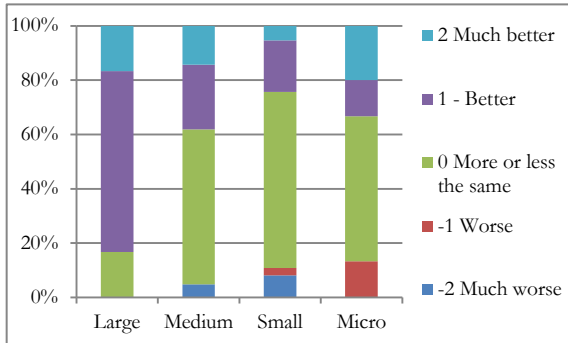


Figure 27: C - International exp. Danish partner

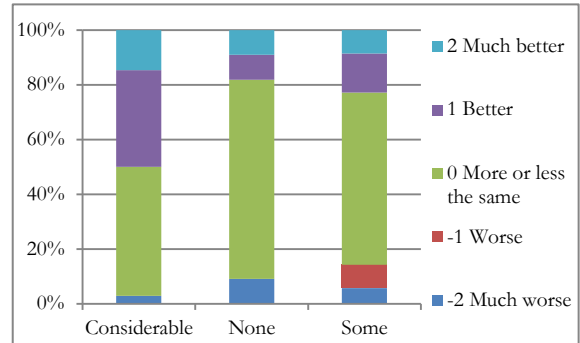


Figure 24: C - Size of local partner

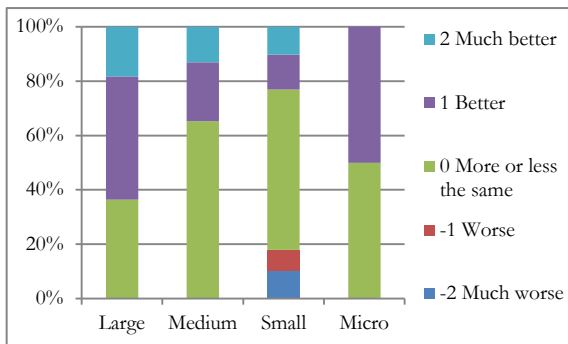


Figure 28: C - International exp. local partner

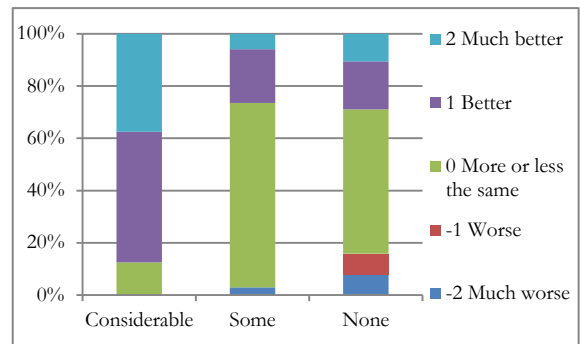


Figure 25: C - Age of Danish partner

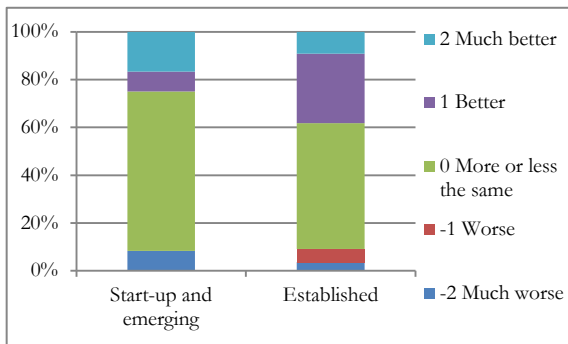


Figure 29: C - Financial robustness DK partner

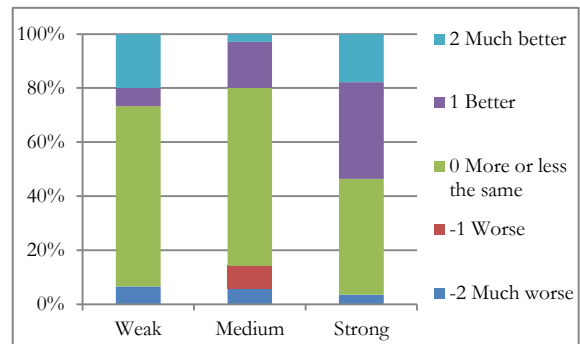


Figure 26: C - Age of local partner

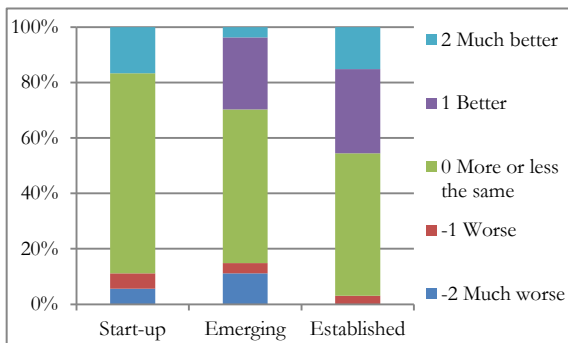


Figure 30: C - Financial robustness local partner

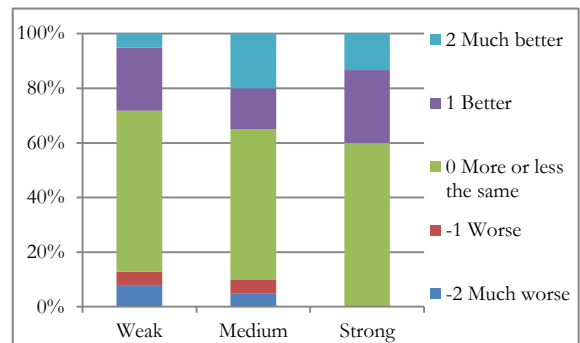


Figure 31: C - Business motive of Danish partner

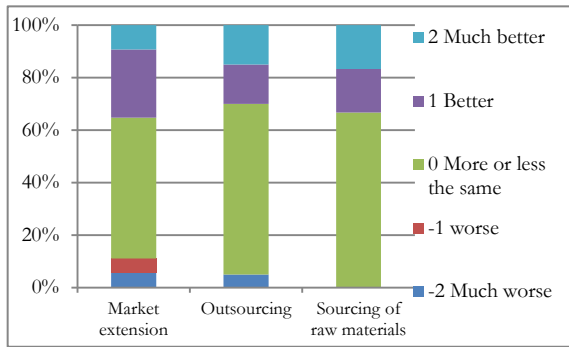


Figure 33: C - Sector

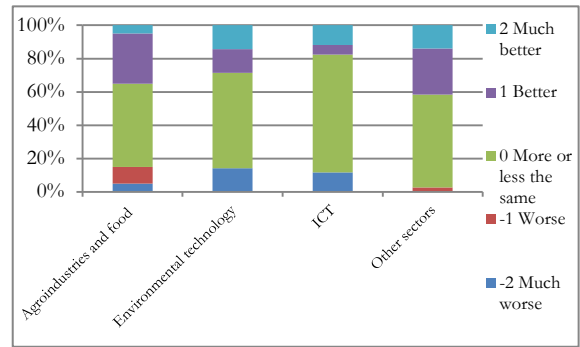
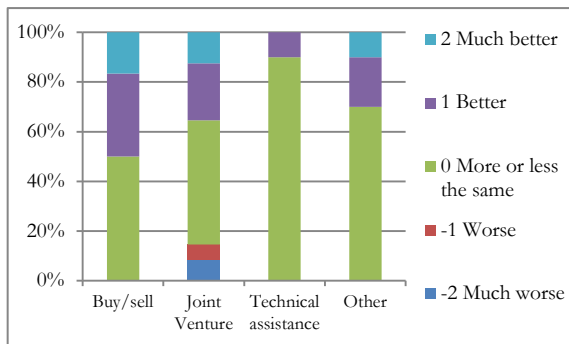


Figure 32: C - Type of partnership



Summing up on commercial performance of local company

Partnerships involving large Danish companies clearly have a better impact on the performance of the local company post B2B, whereas both large and micro-sized local companies perform well. For both Danish and local companies it goes that the more established the better the results for the local company, which is even a very clear tendency for the local companies' age. The same picture emerges for previous international experience – the more international experience for both Danish and local, the better the performance of the local company. As regards financial robustness, the picture is more blurred. Strong Danish partners show better results but for local companies there is not much difference between the categories. Difference in business motive of Danish partner shows no impact, whereas the buy/sell relationships have better results in this category. Also in this category, ICT projects have the poorest results.

Correlation with commercial performance of Danish company (D)

Figure 34: D - Size of Danish company

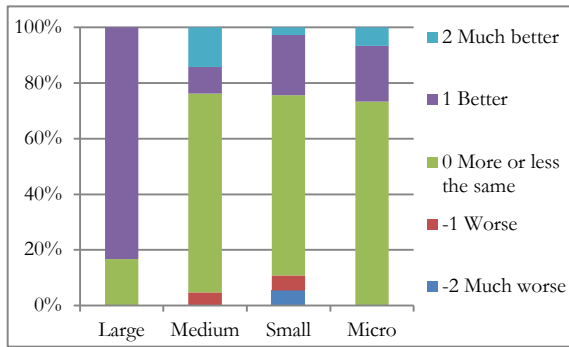


Figure 38: D - International exp. Danish partner

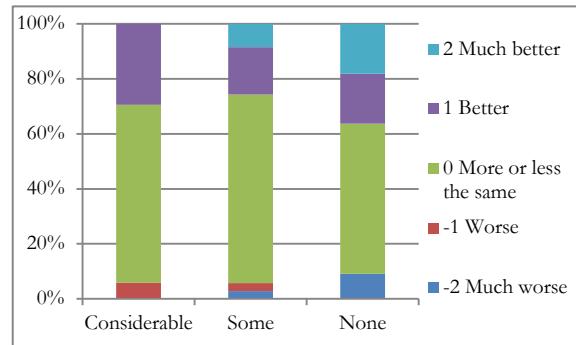


Figure 35: D - Size of local company

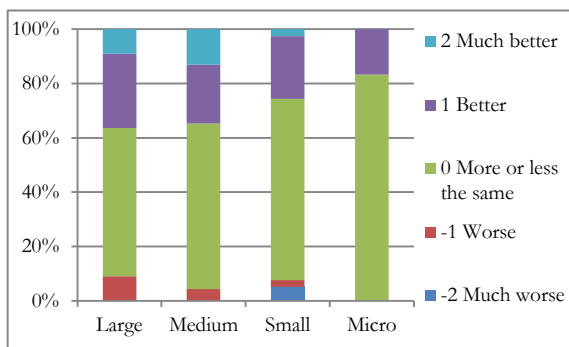


Figure 39: D - International exp. local partner

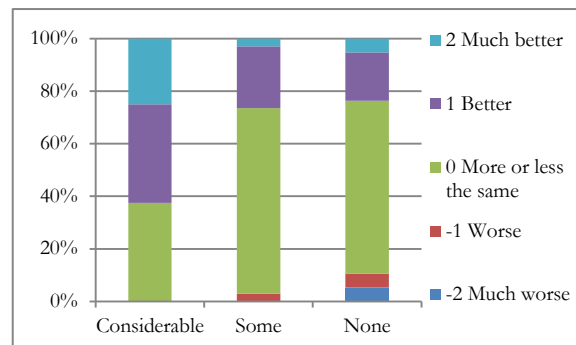


Figure 36: D - Age of Danish company

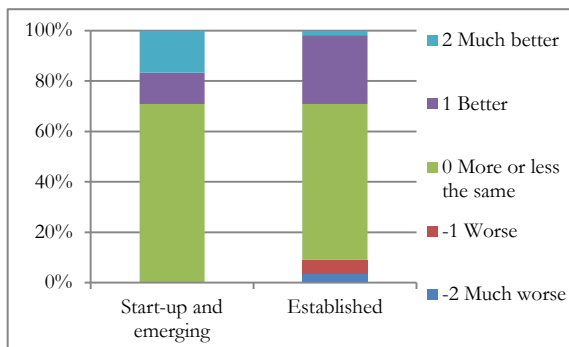


Figure 40: D - Financial robustness DK company

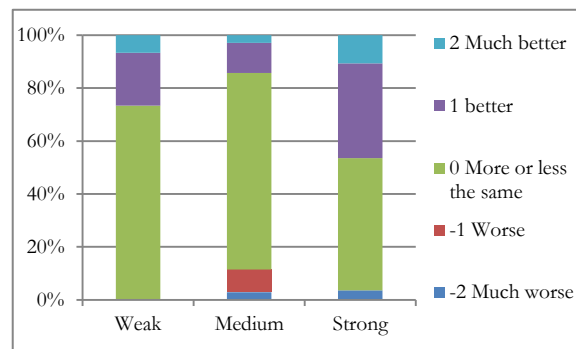


Figure 37: D - Age of local company

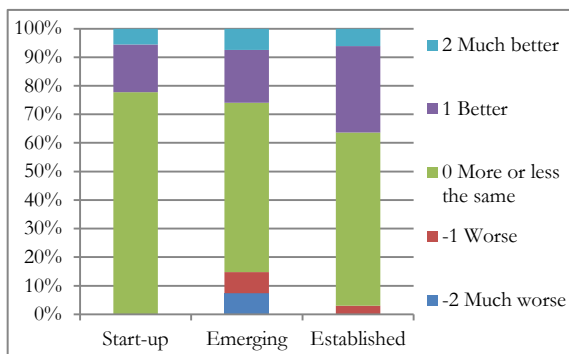


Figure 41: D - Financial robustness local partner

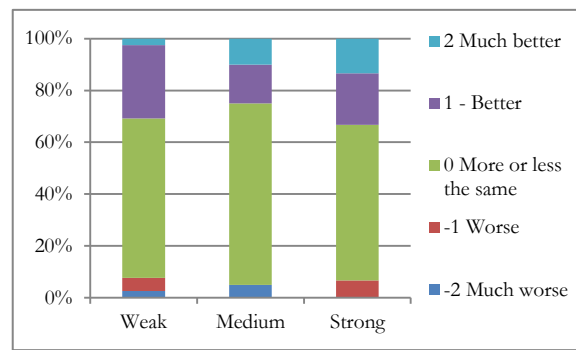


Figure 42: D - Business motive of Danish partner

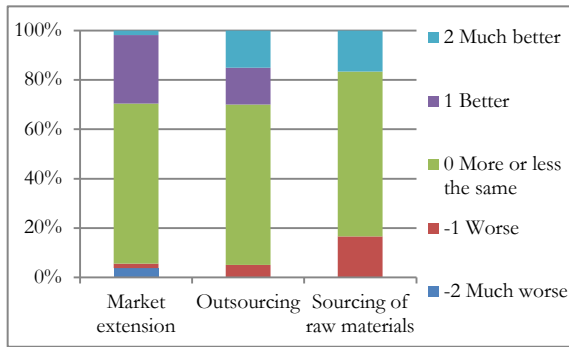


Figure 44: D - Sector

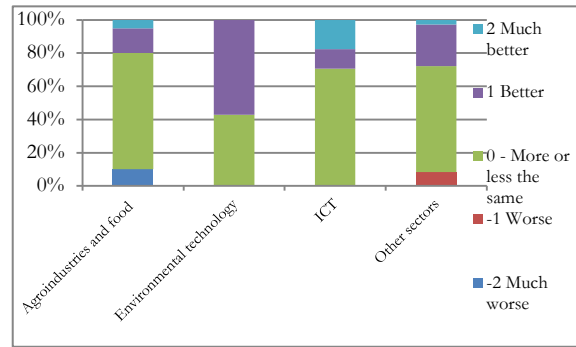
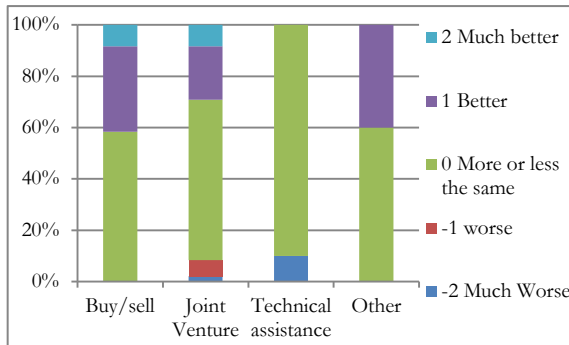


Figure 43: D - Type of partnership



Summing up – Commercial performance of Danish company

The large Danish companies perform the best in this category where there is almost no difference for micro- small and medium-sized companies. For the local companies there is a slight increase in results the larger the local company. As for age the start-up and emerging Danish companies are actually performing slightly better than the established ones, whereas the same picture as in the other results categories is clear as regards age of local company – the more established, the better results. The Danish companies with no previous international experience are actually the ones performing best but the difference between the other categories is not that big. For local companies the partnerships with the more internationally-oriented companies have had best results. As regards financial robustness, the strong Danish companies have clearly performed best whereas there is no clear trend for local companies. Outsourcing projects has yielded best results for the Danish partners as has the buy/sell relationships. Again here, technical assistance projects perform worse, but these might not be expected to have any influence on the Danish partner’s commercial situation. Sector-wise, the environmental technology companies perform best.

Correlation with Development impact (E)

Figure 45: E - Size of Danish partner

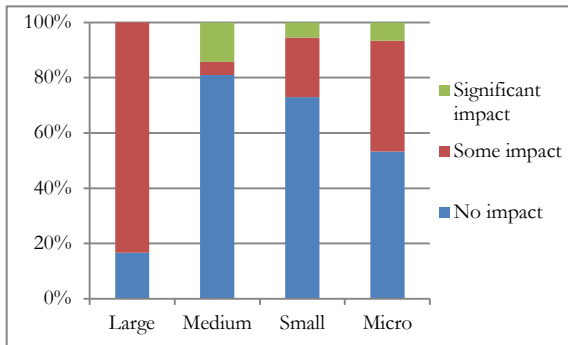


Figure 49: E - International exp. Danish partner

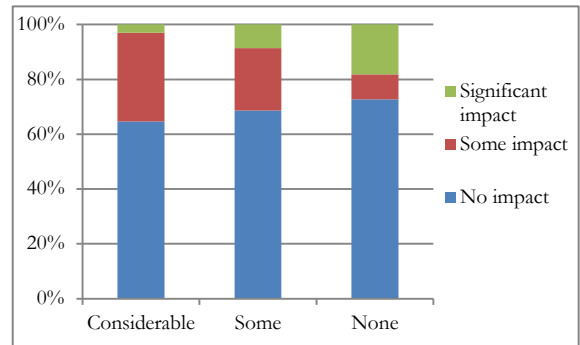


Figure 46: E - Size of local partner

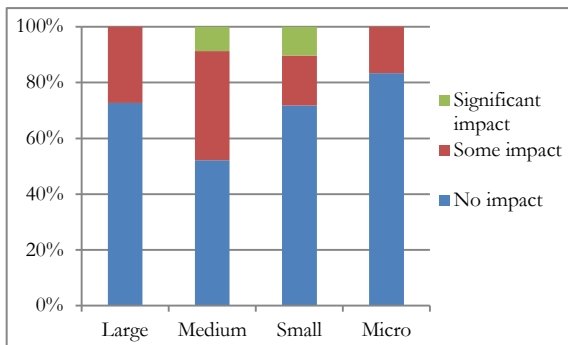


Figure 50: E - International exp. local partner

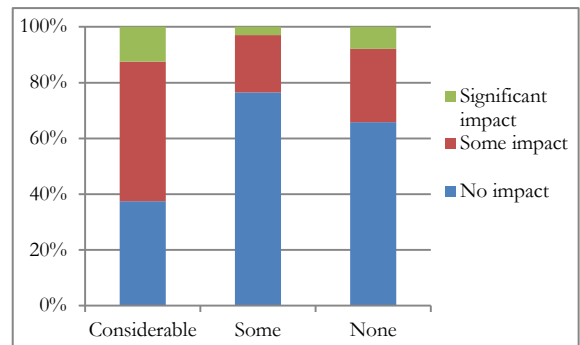


Figure 47: E - Age of Danish partner

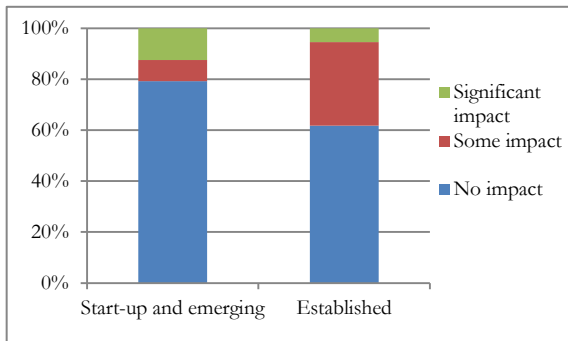


Figure 51: E - Financial robustness DK partner

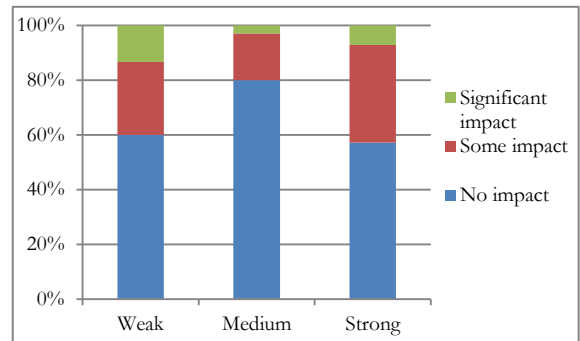


Figure 48: E - Age of Local partner

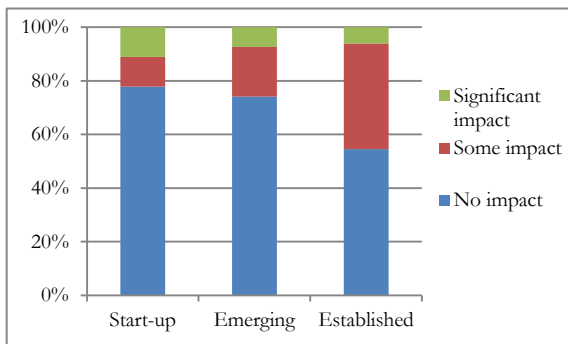


Figure 52: E - Financial robustness local partner

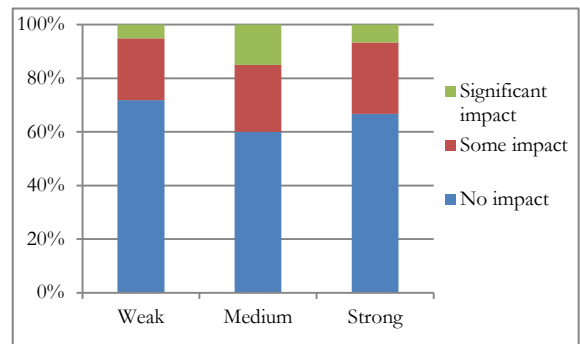


Figure 53: E - Business motive Danish partner

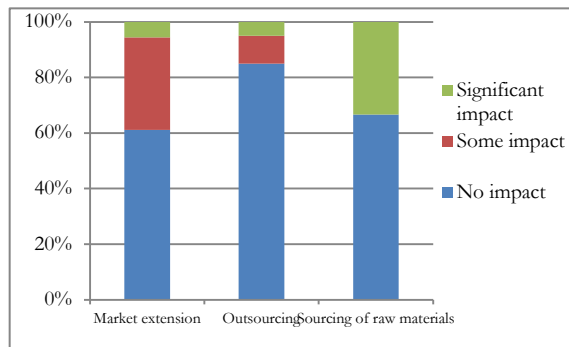


Figure 55: E - Sector

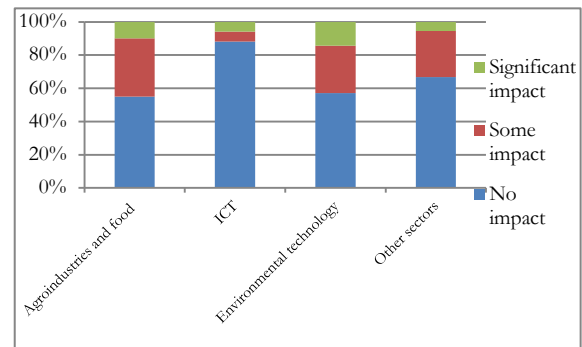
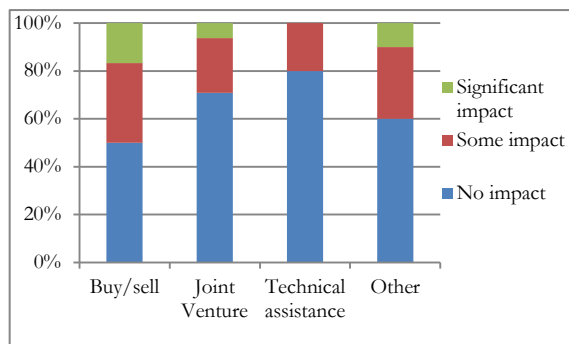


Figure 54: E - Type of partnership



Summing up on development impact

The size of both the local and Danish companies shows mixed results on development impact. Danish large and micro companies have the best results whereas partnerships involving medium-sized local companies have greatest impact. As regards age; the more established the better results – both for Danish and local companies. No clear picture emerges for international experience of Danish companies, where the local companies with considerable international experience clearly perform best. There is no clear picture as regards financial robustness of neither the Danish nor the local partner. Outsourcing projects have the lowest degree of development impact as have the technical assistance projects where buy/sell relationships again perform best. Sector-wise ICT projects again clearly perform worse where agro-projects and environmental projects perform only slightly better than ‘other sectors’.

Conclusions

Even though there is no very strong correlation between contextual factors and results, the figures in section 4 shows some clear trends, which are here summed up based on contextual factor:

- Large Danish companies perform better in all result categories where the other size categories have a mixed/even performance.
- Medium sized local partners perform slightly better in most categories but size of local company is not a determining factor.
- The established Danish companies shows slightly better results in most categories
- Age of the local company has a clear positive impact on results – the more established the local company the better results.
- Previous international experience is a more important factor for local companies than for Danish companies
- The more financial robust Danish and local companies perform slightly better
- Market extension projects and buy/sell relationships are slightly more successful in most categories
- ICT projects shows the poorest results in most categories