

Analysis of monitoring data on business development support to small and medium enterprises (2013-2014) - CBI

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Impact evaluation of private sector support is vital to ensure effectiveness and continuous learning.

All Dutch Private Sector Development (PSD) organisations are responsible for evaluating the effects of their work. While impact evaluations are most often executed for accountability purposes, it is also a tool to learn about the effects of interventions. Real-time monitoring data helps managers and stakeholders to understand how and why these effects are, or are not, realised and helps to refine intervention strategies.

PRIME has developed an approach to evaluate private sector support that is useful for accountability and learning.

The Centre for the Promotion of Imports from Developing Countries (CBI), the Foundation Netherlands Senior Experts (PUM), the Agricultural Economics Research Institute (LEI Wageningen UR) and the Erasmus School of Economics (ESE) have developed a joint programme to pioneer impact evaluation methods of support to small and medium enterprises in developing countries. PRIME's yearly monitoring of outcomes in all supported companies is complemented by quantitative and qualitative research in six countries.

PRIME collects time-series data through a CBI's monitoring and evaluation system.

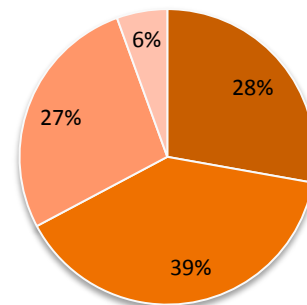
Time-series datasets are constructed with data on the key indicators of firm clients in order to verify the key assumptions in CBI's intervention logic. The selection of indicators is harmonised as much as possible with other studies and kept to a minimum. These time-series datasets enable us to estimate the development of the firm before and after the support. Of course, the observed differences in outcomes in each firm cannot be directly attributed to CBI support. Other external factors, such as economic and political dynamics, may influence issues such as the uptake of new firm practices or the realisation of profits. Only with several years of data collection in successive cohorts of supported firms we will have data that permits to compute attributable average effects of CBI support. Meanwhile, however, this yearly information on the changes in indicators in (groups of) firms can be used to understand differences and heterogeneity of effects and, doing so, enable "real-time monitoring" to improve the support interventions. As such PRIME generates data for both accountability and learning.

CBI's M&E-system is being updated to collect additional information. Nevertheless, the available data (2008-2014) already provide insight into the characteristics of supported firms.

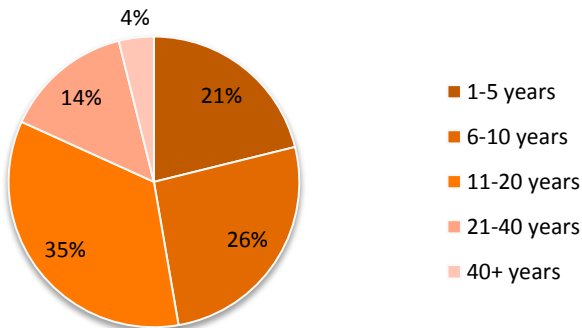
In this research brief, we make use of the M&E data that CBI had already collected on supported firms. The analyses are explorative: they provide an overview of the characteristics of firms that received support. We used the dataset with information on 789 firms that started receiving support between 2008 and 2014 in so-called "integrated programmes". Since 2012 CBI works with this type of programmes, which focus on a specific sector and supports the key actors of the export value chain, which are exporters, importers, Business Support Organisations (BSOs) and governmental authorities. Since 2011 CBI has a stronger focus on support to the focus and transition countries, defined as priorities in the Dutch development cooperation. One of PRIME's key questions is to identify what works, for whom, and under which conditions. Indicators that can be used in the analyses include **region**, **sector of operation**, gender of business owner, final goods produced, model of operation, legal status, **firm age**, access to finance and **number of employees**. Those marked in bold are already in CBI's M&E system; the other data will become available in a later stage because it is still being digitalised.

The majority of CBI-supported clients are small or even micro-sized firms.

The size of CBI-supported firms varies greatly: from one employee to 8,500, with 82 employees as an average. However, the majority of supported firms can be defined as small, having between 10 and 50 employees (39%). A significant portion is classified as medium-sized and only 7% is classified as large i.e. having more than 250 employees. However, what is surprising is that 28% of supported firms indicate they have less than 10 employees. The application criteria for most CBI programmes stipulates that firms should have more than 25 employees; the rationale being that larger firms are typically in a better position to meet the various organisational and financial capabilities required for entering the export market, and where CBI support is appropriate and likely more successful. CBI policy stipulates that there is a degree of flexibility; a company might still qualify when it has less than 25 employees but is considered to have sufficient capacity to export. Also, some sectors, e.g. services, tourism and IT, use a lower thresholds than 25 because of the sector characteristics. Nevertheless, the percentage of small and tiny firms that are supported seems fairly big.



- 1-10 employees
- 10-50 employees
- 50-250 employees
- 250+ employees



More than 50% of CBI-supported firms are firms established more 10 years ago.

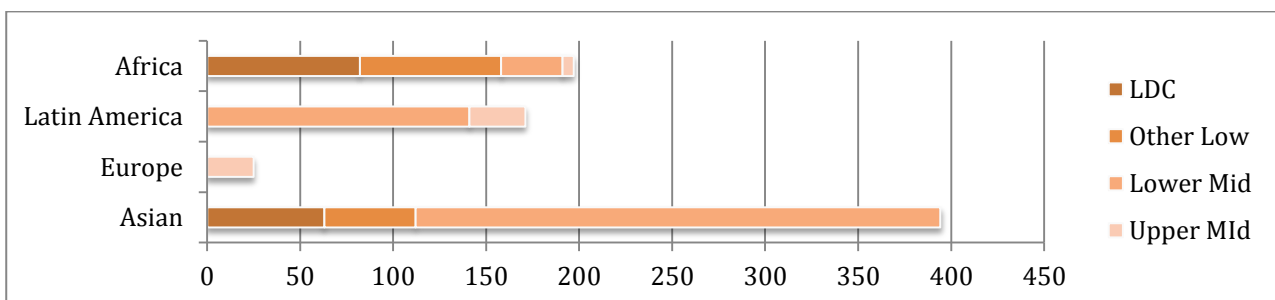
On average, CBI-supported firms were established 14 years ago. More than 50% of the firms supported can be considered mature, having been established more than 10 years ago (with 18% being more than 20 years old). Given CBI’s requirement in terms of firm size these findings are not surprising: it often takes several years for firms to grow up to a certain size. Another 47% of supported firms were established less than 10 years ago and 21% are even less than five years old.

Half of the firms supported between 2008 and 2014 are located in Asia.

Within the dataset of 2008-2014, most CBI-supported firms are based in Asia (50%), followed by Africa (25%) and Latin America (22%). Within these continents, in particular in Asia and Africa, CBI support is relatively less concentrated in Least Developed Countries (LDC) in favour of Lower Middle Income countries. In Africa, 42% of support is concentrated in LDC, whereas 64% of the countries are classified as such. In Asia the proportion is 16%, whereas 37% of countries are classified as being LDC. The absolute number of supported firms is concentrated in Low and Lower Middle Income countries. On the one hand, this may be explained as a result of their more favourable institutional environment, which might be needed to benefit from CBI sector support activities, especially in the long-term. On the other hand, in case of a less conducive institutional environment, the additionality of CBI support might be higher, at least in the short-term.

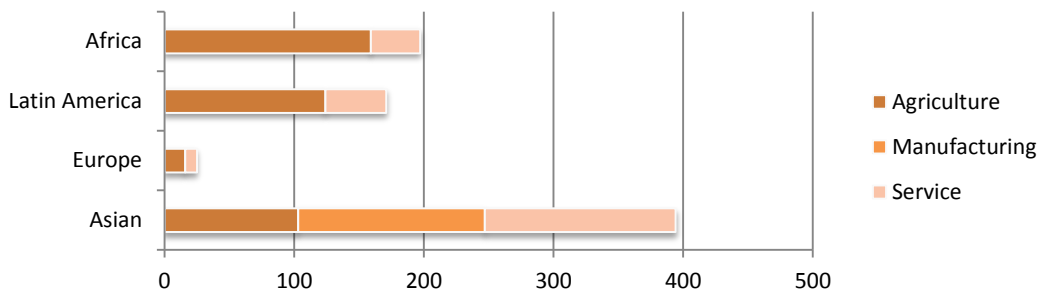
Effectiveness may change in response to CBI’s strategy and targeting policy

This regional distribution of CBI supported firms is likely to shift in response to the new focus on priority development and transition countries, and the new approach of working through sector specific integrated programmes. The PRIME research will further investigate if the effectiveness of CBI support differs between these various countries, sectors and income groups. Possible explanations for effectiveness will be explored through various statistical analyses at a later stage of the PRIME research.



Almost 50% of CBI support is concentrated in the agricultural sector.

CBI supports firms in a wide range of sectors; yet half of those firms (52%) are in the agricultural sector. Another third is in the service sector, and 18% is in the manufacturing sector. It is surprising that all new integrated programmes in Latin America and Africa are either service or agriculture-oriented.



Data on output will be used to characterise support received

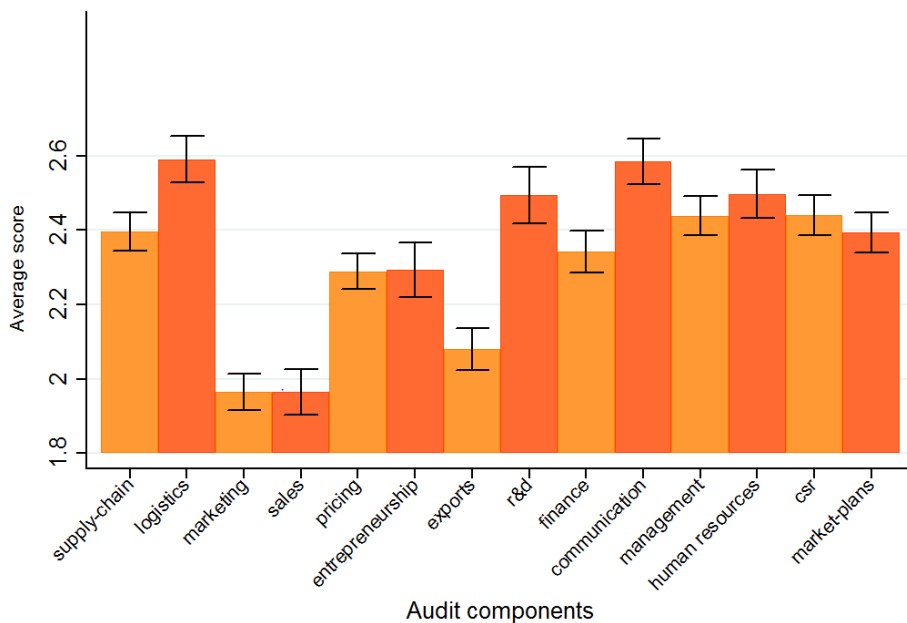
PRIME indicators used to characterise the type of support received by the SMEs include the type of training given, the training modules applied, and the direct and indirect use of CBI market intelligence. The support of CBI is module-based; depending on the specific programme, a selection of modules is made which are generally implemented for each firm that participates in the integrated programme. At this stage we do not have sufficient data yet that allows us to segregate the support between firms within the same programme, nor a good indicator of the intensity of the support (e.g. days of training received). In a later stage, we will have this data to refine the analysis.

PRIME measures immediate, intermediate and ultimate outcomes.

In line with the literature on firm support effectiveness, we distinguish between immediate and intermediate outcomes on the one hand and ultimate outcomes on the other. Immediate and intermediate outcomes refer to changes in knowledge and practices within the firm, whereas ultimate outcomes refer to the subsequent effect on firm performance, typically captured by sales, profit and/or employment. CBI already collects data on some of these ultimate outcomes through the application forms and export audits. These application forms are still being digitalised, so this data could not yet be used in this analysis. To open the black box at the level of immediate outcomes of CBI support, PRIME introduced tools to collect additional information on knowledge and business practices.

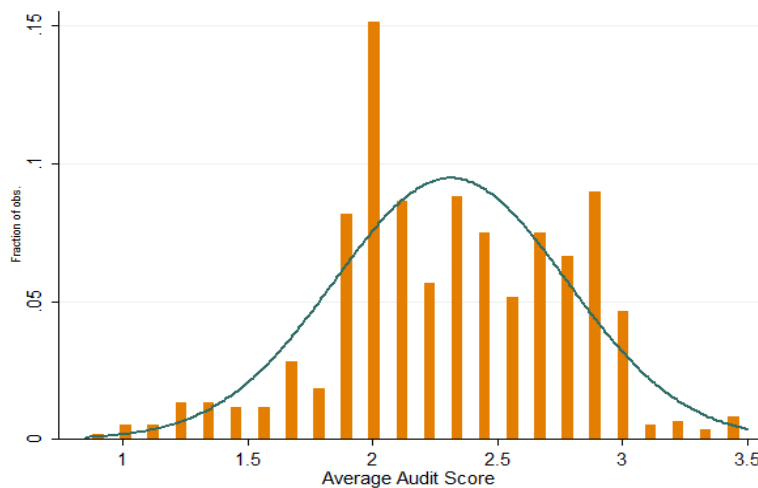
Using the audit tool for firm progress monitoring.

The audit is the main tool used by CBI to select firms for participation in the support programme. The tool contains a list of standard business clusters (e.g. marketing, sales, HRM, etc.). For each cluster various aspects are rated by an expert during a half-day or one-day visit to the firm. The audit leads to a plan of action. The audit becomes a living document used by CBI experts to monitor the progress during the programme. Audit scores range from one to four: where a score of one means the aspect or cluster is not up to international market standards and there is no potential to achieve this with Export Coaching Programme (ECP). A score of two means the aspect/cluster is not up to EU/EFTA market standards and may be upgraded through intensive coaching. A score of three means the aspect/cluster is at least in line with EU/EFTA market standards, and a score of four means the company is well above the minimum requirements in EU/EFTA markets for the aspect/cluster.



Audit scores range between “neither good/nor bad” and “good”.

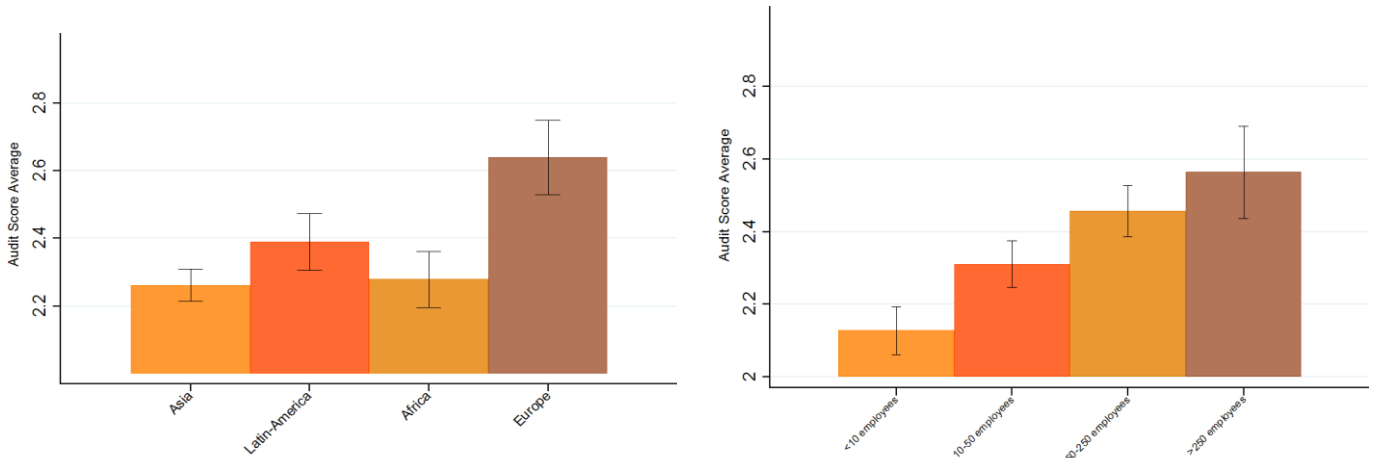
We find that most audit scores are in the range 2-3. This is not surprising because CBI’s selection process through the application forms filters out firms with very high or very low average scores. We explored the distribution of the scores and find that generally 50% of scores are between two and three, except for marketing, export knowledge and sales planning – for which 50% scores close to two. The fact that firms score lower on these themes might indicate that CBI targets those firms that already run quite smoothly – except in these areas where CBI-support would be most beneficial. The highest average audit scores of firms that are being supported by CBI are for logistics, information, communication, human resource management and research and development.



Audit score are higher for larger firms, and lower for Lower Middle Income countries (also when compared to LDCs).

The average audit scores are higher for larger firms. We also found that the average audit scores are lower in SMEs located in Lower Middle Income countries. Audit scores are higher in Europe (Macedonia) and even more so in Latin America; Asia scores relatively low. In Africa scores are not significantly different across the board (compared to Asia), expect for HRM where they score significantly lower. If this difference in baseline situation for large firms influences the effectiveness of CBI support is an important question that the PRIME study will address with the cohort analysis estimating the effects of CBI support. However, averages may hide important differences. Therefore, in upcoming analyses, we will compare the average audit score according to various firm characteristics: (i) number of employees,

(ii) age, (iii) location, and (iv) sector. The average audit score is – all else being equal – higher among the larger firms; this indicates larger firms have a better starting position.



Some audit scores are systematically related.

We find that some audit scores are strongly correlated. Using principal component analysis to reduce the number of audit scores, we found two main factors. One component includes R&D, finance, communication, management and HRM (and supply chain though to a lesser degree) and which we have labelled as being related with “Internal organisation”. A second component includes marketing, sales planning and export knowledge – and pricing and international entrepreneurship to a lesser degree. We label this “Marketing strategies”. The factor analysis on the achievements reported by PUM experts as a result of their business coaching activities yields a similar result, with a differentiation in an achievement are more related with marketing strategies and another area more related with internal organisation.

CBI Audit scores	"Marketing strategies"	"Internal organisation"	PUM Achievement areas	"Marketing strategies"	"Internal organisation"
Supply chain	0.43	0.57	Development of new products	0.65	0.27
Logistics	0.47	0.56	Innovation on existing products	0.48	0.46
Marketing	0.73	0.10	Improving the quality of products	0.24	0.13
Sales	0.74	0.14	Reducing production costs	-0.19	0.51
Pricing	0.51	0.44	Reducing raw material costs	0.36	0.41
Entrepreneurship	0.57	0.48	Increasing the production	0.66	0.00
Exports	0.78	0.25	Entering into new investments	0.64	-0.07
R&D	0.18	0.76	Increase in sales volume	0.23	-0.07
Finance	0.19	0.75	Increase of number of customers	0.66	0.11
Communication	0.15	0.66	Improvement of the organisation	0.21	0.71
Management	0.18	0.82	Introducing quality systems (HACCP)	-0.02	0.81
Human resources	0.31	0.74			
CSR	0.43	0.42			

Cluster analysis is a method used to combine the different firm characteristics into meaningful groups.

To deepen this analysis, we used cluster analysis to identify groups of SMEs with similar characteristics. We used size of the firm (micro, small, medium or large), the sector the firm operates in (services, manufacturing, agriculture), and firm age (< 5 years, 5-10 years, 10-20 years, 11-20, 20-40, 40+). The cluster analysis results in four meaningful groups (out of eight groups generated by the software).

- Type A: the normal target group of firms
- Type B: tiny, young firms
- Type C: older and larger firms
- Type D: new start-up firms

Comparing the clusters on the two factors that group CBI audit scores and PUM achievement, we see an interesting pattern. In Cluster A and C, the self-assessed achievements of the PUM experts are highest in areas where the SMEs appear to be weaker, according to the CBI audit scores. This patterns is different for the group of young small start-ups (Cluster D) which are relatively strong on marketing strategy already, but still benefit from PUM support. The group that is weakest according to the CBI audit is the group of tiny young firms (group B) which benefit especially from organisational strengthening support but where the achievements in the area of marketing strategies are relatively weak.

Cluster	CBI supported firms		Mean firm age		Starting situation of the SME		Self-assessed effectiveness of business coaching	
					CBI audit scores on "Marketing strategies"	CBI audit scores on "Internal organisation"	PUM achievements "Marketing strategies"	PUM achievements "Internal organisation"
A	213	32%	16	25	+	--	+/-	+
B	176	26%	9	8	--	--	--	+
C	178	27%	18	108	--	++	++	--
D	49	7%	3	22	++	+/-	+	+
Others	13	2%						
Total	667	100%	14	55				

The regional distribution of these groups is similar, except for Europe, where only larger firms are involved in the support activities.

Cluster	Latin America			
	Asia	Europe	America	Africa
A	40%	39%	49%	45%
B	14%	4%	18%	13%
C	23%	33%	19%	27%
D	20%	21%	13%	12%
Others	3%	3%	2%	4%

Cluster	Latin America		
	Agriculture	Manufacturing	Services
A	24%	43%	33%
B	30%	25%	45%
C	22%	49%	29%
D	25%	37%	38%
Others	33%	43%	21%

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