

# Management skills and practices in small firms from emerging economies: gaps and policies

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# Overview

- Research goal: to explore the potential for increasing productivity in small enterprises by upgrading their management skills and practices
- Research method:
  - Statistical analysis to explore the potential of improving management practices/skills in productivity growth in small firms from emerging countries
  - Case studies to explore policy options to upgrade management skills/practices in small firms
- Main findings:
  - Management practices/skills are significantly related with labour productivity
  - There are important gaps between small and large firms across specific management skills/practices → justifying policy action
  - Through a review of a variety of recent international experiences, we show that there are many different possible approaches for policy action

# Data and methods

- Gaps in managerial practices/skills
  - Econometric analysis relating managerial practices/skills and productivity in small firms
  - Identification of gaps between micro and large firms across management skills/practices
  - Micro-data from almost 30.000 firms across 15 different emerging countries and 33 industries (World Bank Enterprise Surveys)
- Policy options
  - Discussion of international policy experiences on “business management programmes” (i.e. non-financial services that help firms develop their business)

# Low productivity in small firms

Country	Employment (%)		Value added (%)	
	<i>Micro-Small</i>	<i>Med-Large</i>	<i>Micro-Small</i>	<i>Med-Large</i>
Mexico	44.9	55.1	13.0	87.0
Brazil	45.2	54.8	31.0	69.0
OECD	50.1	49.0	39.6	60.4

Source: Entrepreneurship at a Glance (OECD, 2015)

- Small firms account for 50.1% of employment, but only for 39.6% of value added across OECD countries, suggesting lower-than-average labour productivity in these enterprises (OECD, 2015)
- Productivity gaps between small and large firms are even wider across some emerging economies (e.g. Mexico and Brazil)
- Evidence from emerging countries suggests that productivity gaps between large and small firms have increased (Bolio et al., 2014)

# Policy implications

- “Inclusive” productivity policies with specific instruments tailored to micro and small firms
- Growth perspective: increase the contribution of laggard firms to aggregate productivity growth
- Social inclusion perspective: reduce income inequalities by narrowing wage differentials between leading and laggard firms

# Management quality and labour productivity

- Recent studies confirm the role of management skills and practices in explaining factor productivity gaps (Bartz et al., 2016; Bloom and Van Reenen, 2010)
- Small firms fall short of implementing many of the management practices that are standard for medium-sized and large firms (Bruhn et al., 2010)

# The sample

Micro-data from almost 30,000 firms across 15 different emerging countries and 33 industries (World Bank Enterprise Surveys)

Countries	All sample	Micro	Small	Medium	Large
<i>BRIC</i>	16890	15.7	44.4	29.9	10.0
Brazil	1699	15.1	46.4	27.5	10.9
China	2612	6.7	31.8	46.4	15.2
India	8541	12.4	46.4	30.6	10.5
Russia	4038	28.9	47.4	18.7	5.0
<i>Other Latin America</i>	5756	16.3	37.5	31.2	15.0
Argentina	961	14.6	37.9	30.2	17.4
Chile	955	9.8	41.6	32.8	15.8
Colombia	937	20.6	41.3	26.5	11.6
Mexico	1390	18.6	31.2	34.0	16.1
Peru	927	16.0	35.8	31.1	17.2
Uruguay	586	17.9	42.2	31.1	8.9
<i>Other South Asia</i>	5631	13.0	38.2	33.8	15.1
Indonesia	1295	25.3	31.4	30.9	12.5
Malaysia	1078	3.9	38.9	38.5	18.7
Philippines	1254	15.0	44.2	30.2	10.6
Thailand	1028	1.5	34.5	41.5	22.5
Vietnam	976	16.2	42.8	28.7	12.3
All countries	28277	15.3	41.8	30.9	12.0

Industry	Num. of firms	%
Food	2611	9.2
Tobacco	108	0.4
Textiles	1521	5.4
Garments	1867	6.6
Tanning & leather	273	1.0
Wood	402	1.4
Paper & paper products	190	0.7
Recorded media	284	1.0
Coke & refined petroleum	38	0.1
Chemicals	1951	6.9
Plastics & rubber	2102	7.4
Non metallic mineral products	1246	4.4
Basic metals	829	2.9
Fabricated metal products	1620	5.7
Machinery and equipment	1690	6.0
Office machinery	5	0.0
Electronics	1229	4.3
Communication equipment	8	0.0
Precision instruments	148	0.5
Motor vehicles	975	3.4
Other transport equipment	21	0.1
Furniture	519	1.8
Recycling	31	0.1
Construction: Section F	934	3.3
Services of motor vehicles	788	2.8
Wholesale	1847	6.5
Retail	1865	6.6
Hotel and restaurants: Section H	745	2.6
Transport (60-62)	623	2.2
Supporting transport activities	114	0.4
Post and telecommunications	106	0.4
IT	786	2.8
Other	801	2.8
<i>Total</i>	28277	100.0

# The model: Explaining productivity through managerial practices/skills in small firms

Dependent variable: Natural logarithm of sales

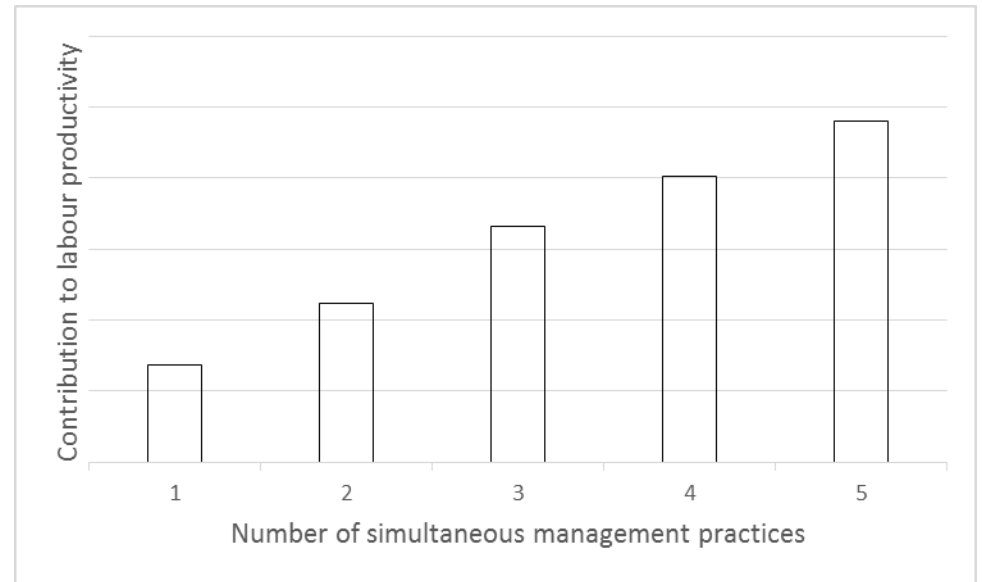
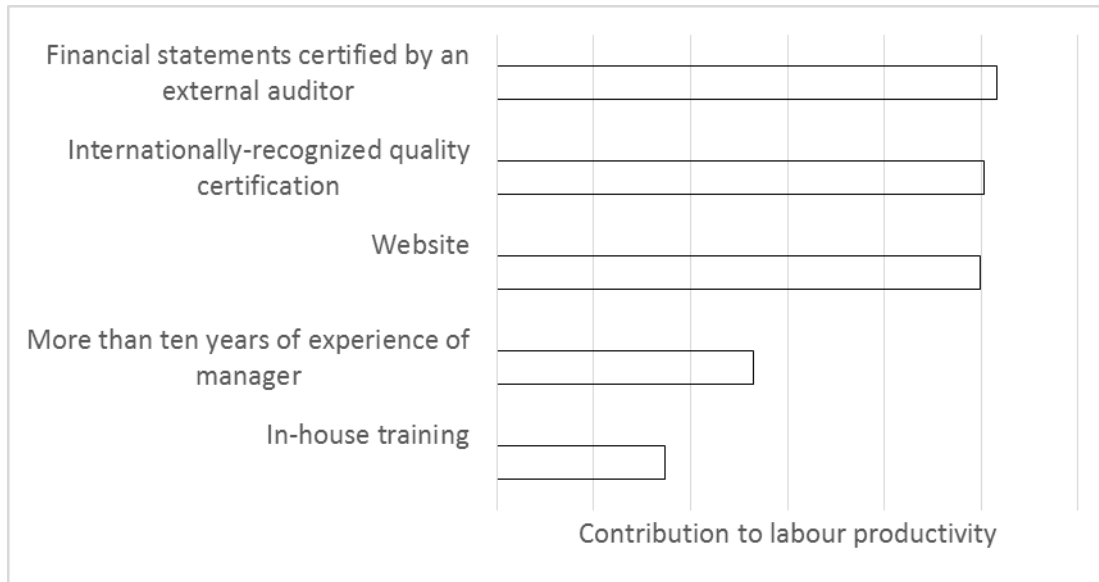
Sample: Micro and Small firms (Less than 50 employees)

Linear regression model

Explanatory variables	Model 1		Model 2	
	Coef.	p-value	Coef.	p-value
<i>Management skills/practices</i>				
◦More than ten years of experience of manager	0.132	0.000	-	-
◦Internationally-recognized quality certification	0.252	0.000	-	-
◦Website	0.250	0.000	-	-
◦In-house training	0.087	0.000	-	-
◦Financial statements certified by an external auditor	0.258	0.000	-	-
<i>Number of simultaneous management skills/practices</i>				
1	-	-	0.273	0.000
2	-	-	0.447	0.000
3	-	-	0.662	0.000
4	-	-	0.804	0.000
5	-	-	0.962	0.000
<i>Control variables</i>				
◦Size (num. of employees)	1.039	0.000	1.043	0.000
◦Exports	0.393	0.000	0.409	0.000
◦Major obstacles accessing finance	-0.110	0.000	-0.116	0.000
◦Country fixed effects (15 emerging economies)	Yes		Yes	
◦Industry fixed effects (33 industries; NACE-2 digit)	Yes		Yes	
◦Cons.	8.805	0.000	8.758	0.000
<i>Obs</i>	14582		14582	
<i>R-squared</i>	0.3807		0.3792	

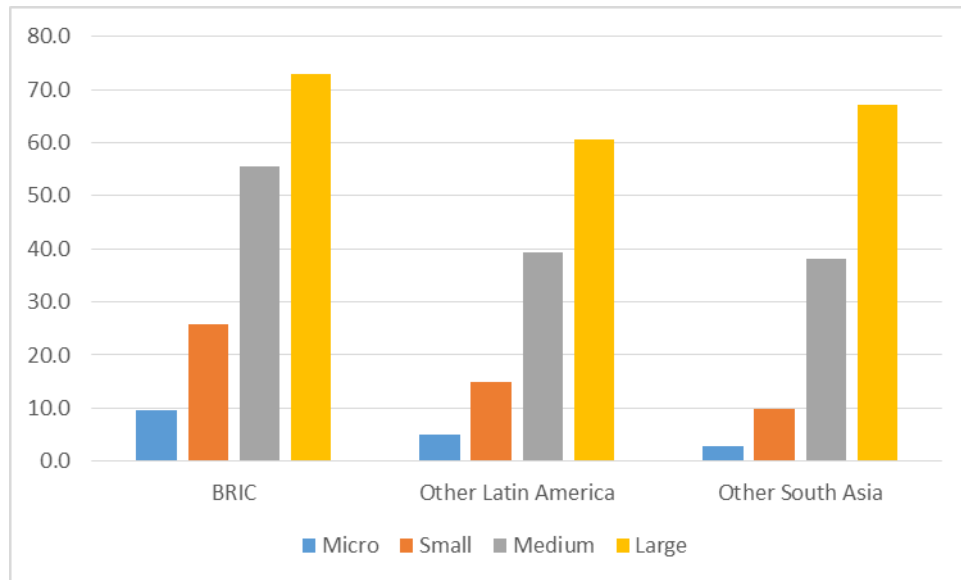


# The model: Explaining productivity through managerial practices/skills in small firms

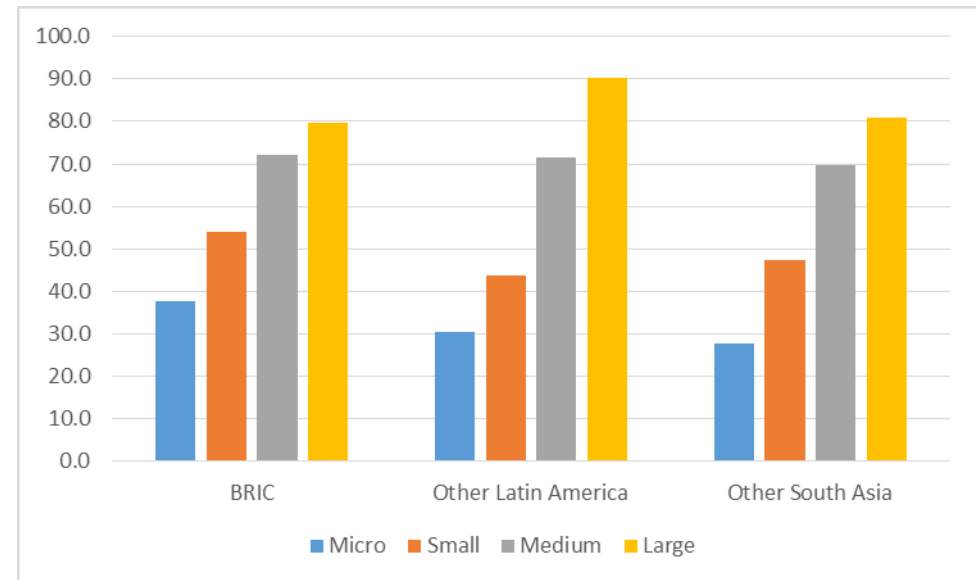


# The gaps

*Quality certification*

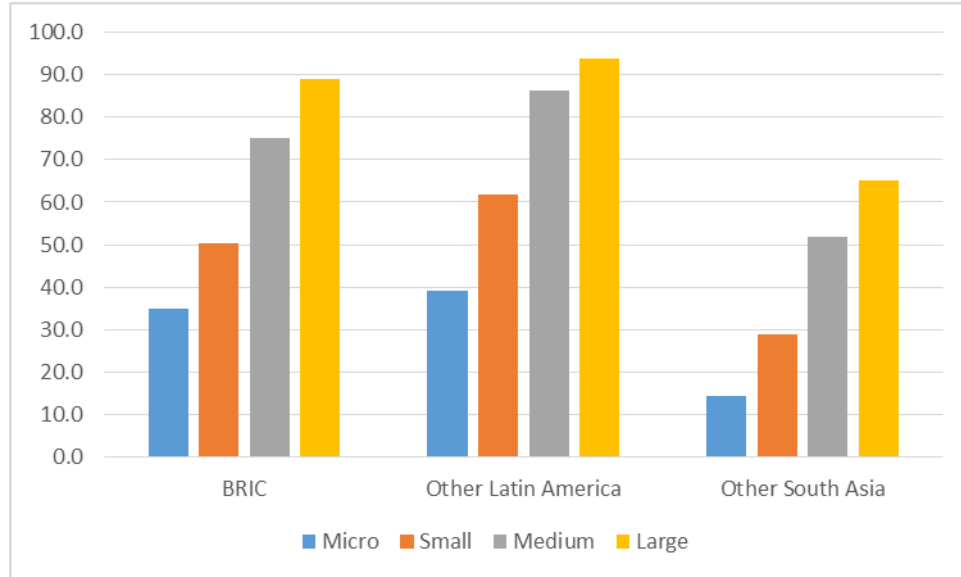


*Financial statements quality*

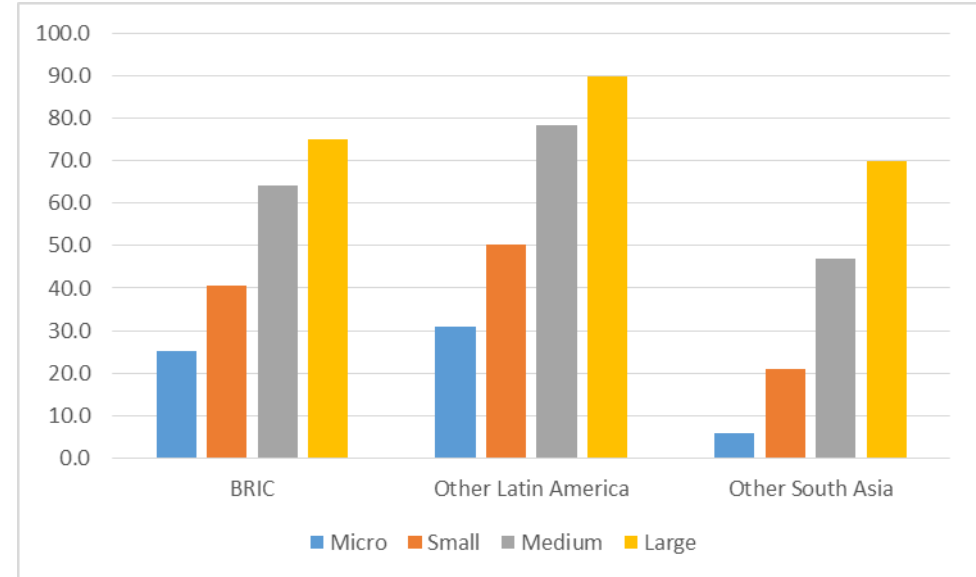


# The gaps

*Website*



*In-house training*



# The gaps across countries

Countries	Manager's experience (at least ten years)		Internationally recognized quality certification		Website		In-house training		Financial statements certified by an external auditor	
	Micro-Small	Med.-Large	Micro-Small	Med.-Large	Micro-Small	Med.-Large	Micro-Small	Med.-Large	Micro-Small	Med.-Large
<i>BRIC</i>	53.3	64.0	21.5	59.8	46.2	78.6	36.5	66.8	49.6	74.0
Brazil	78.4	87.0	8.1	36.4	51.6	82.1	28.1	55.0	13.8	35.7
China	63.7	76.9	42.6	73.6	60.9	79.5	76.0	90.3	61.5	75.1
India	45.4	52.8	29.2	67.3	36.4	77.0	30.4	59.1	77.5	87.8
Russia	54.4	67.4	6.7	25.3	55.6	80.4	36.4	63.5	12.3	47.5
<i>Other Latin America</i>	85.9	83.5	11.8	46.3	54.9	88.6	44.4	82.1	39.8	77.6
Argentina	91.3	87.7	15.7	56.5	75.0	93.7	52.4	77.5	61.3	88.8
Chile	89.2	80.8	14.3	55.2	58.9	92.2	34.4	87.1	37.5	74.1
Colombia	86.6	82.6	15.0	53.8	58.6	88.0	54.5	81.8	50.7	81.2
Mexico	81.7	85.9	8.8	38.2	46.2	87.5	35.5	80.3	31.9	87.2
Peru	81.9	80.1	9.4	40.5	48.3	83.9	54.6	87.2	20.8	56.2
Uruguay	86.4	81.2	7.1	32.5	40.3	85.0	34.1	76.9	35.5	69.2
<i>Other South Asia</i>	53.5	52.3	8.2	47.1	25.2	55.8	17.1	54.1	42.4	73.1
Indonesia	69.6	61.9	1.8	43.8	10.0	68.1	2.5	25.8	6.7	50.5
Malaysia	28.6	44.2	10.6	55.1	15.2	31.0	23.4	69.9	18.4	72.6
Philippines	62.9	74.0	14.2	44.5	31.1	62.7	19.4	45.1	86.1	93.9
Thailand	14.3	16.6	8.9	52.4	33.8	59.3	31.4	82.7	90.5	91.3
Vietnam	66.1	82.0	6.1	34.0	39.2	62.3	18.4	33.8	19.8	48.8
<i>All countries</i>	59.6	65.6	17.3	54.0	44.1	75.6	34.6	67.2	46.4	74.6

# The size of the gap

Between countries

Countries	More than ten years of experience of manager	Internationally recognized quality certification	Website	In-house training	Financial statements certified by an external auditor
BRIC	↓	↓	↓		
Brazil	↓		↓		
China	↓				
India	↓	↓	↓		
Russia	↓				↓
Other Latin America			↓	↓	↓
Argentina		↓			
Chile				↓	↓
Colombia		↓			↓
Mexico			↓	↓	↓
Peru			↓		↓
Uruguay			↓	↓	↓
Other South Asia		↓		↓	↓
Indonesia		↓	↓		↓
Malaysia	↓	↓		↓	↓
Philippines	↓		↓		
Thailand		↓		↓	
Vietnam	↓				

Within countries

Countries	More than ten years of experience of manager	Internationally recognized quality certification	Website	In-house training	Financial statements certified by an external auditor
BRIC	5	1	2	3	4
Brazil	5	2	1	3	4
China	5	1	2	4	3
India	4	2	1	3	5
Russia	5	4	3	2	1
Other Latin America	5	3	4	2	1
Argentina	5	1	4	2	3
Chile	5	2	4	1	3
Colombia	5	1	4	3	2
Mexico	5	4	3	2	1
Peru	5	3	2	4	1
Uruguay	5	4	1	2	3
Other South Asia	5	1	4	2	3
Indonesia	5	3	1	4	2
Malaysia	4	2	5	3	1
Philippines	4	2	1	3	5
Thailand	5	2	3	1	4
Vietnam	5	1	2	4	3
All countries	5	1	3	2	4

# Possible causes of the gaps

- Management of small firms is informal, often driven by survival and short-term operational needs
- Larger firms adopt more formal, bureaucratic management practices driven by longer-term growth and business development objectives
- Lack of basic business skills, access to adequate information, access to finance, infrastructure...
- **Rationale for policy intervention:** convergence might not appear in competitive equilibrium, since small firms might be minimizing transaction costs by stabilizing current management practices (market failure)

# Key design options in programmes supporting the upgrading of management skills and practices

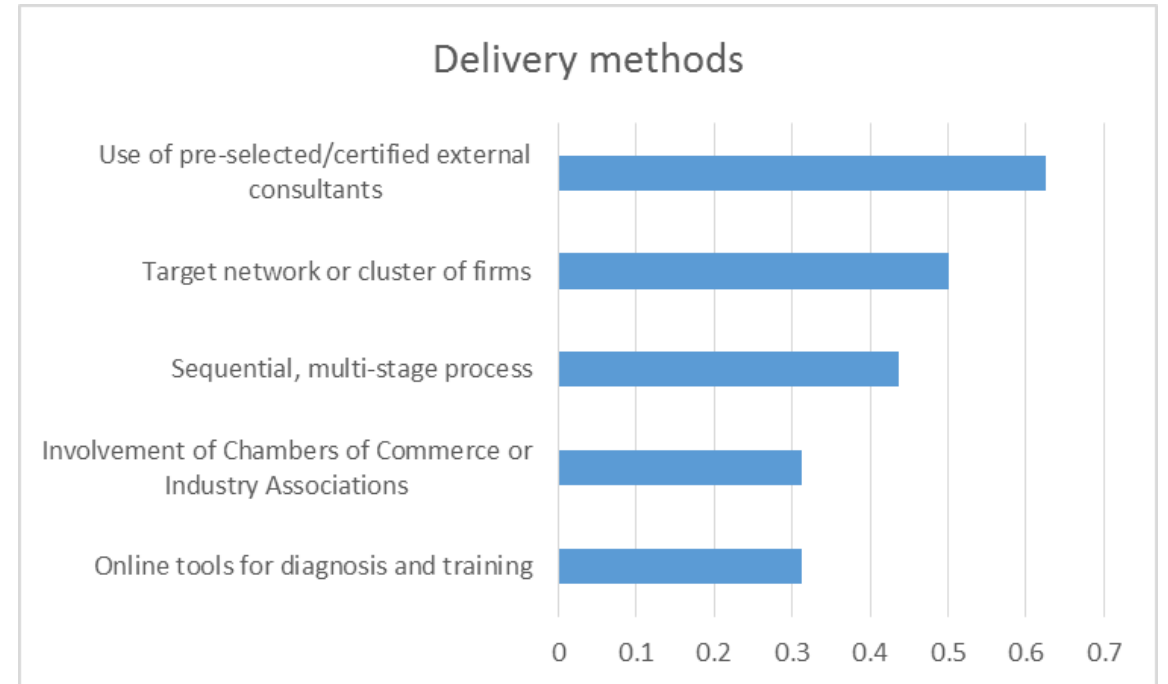
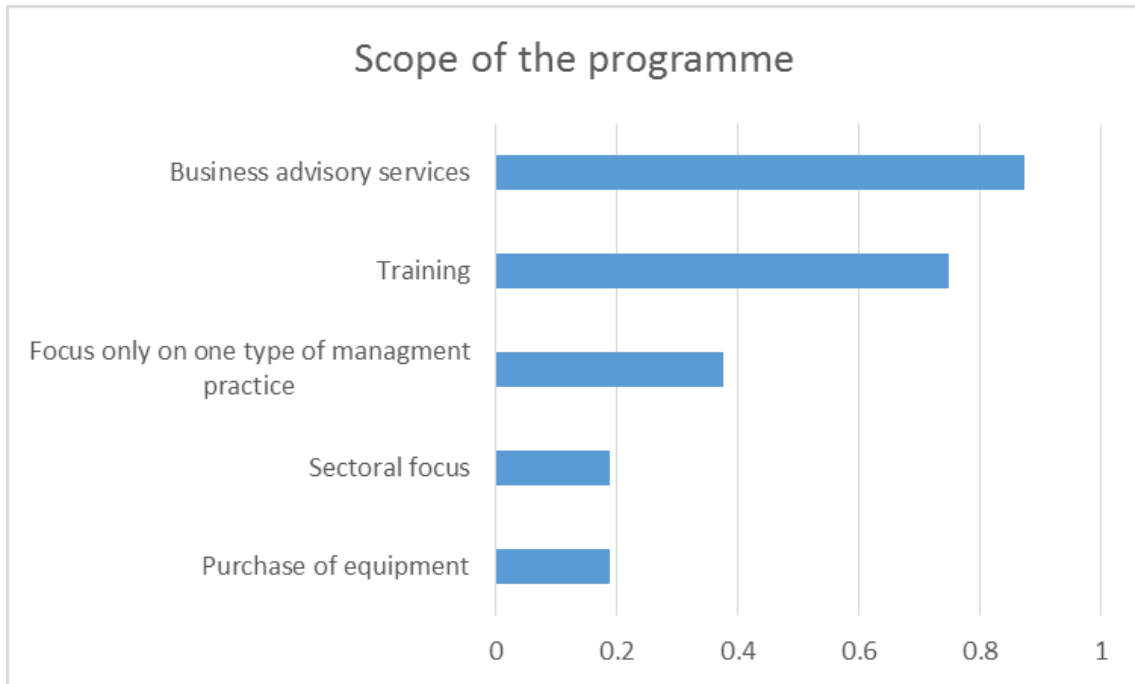
Dimension	Options
Targeted firms / Eligibility criteria	<ul style="list-style-type: none"> <li>- Firm size (definition of small firms)</li> <li>- Individual firms vs. networks/clusters</li> <li>- General vs. sector-specific</li> <li>- National vs. regional</li> </ul>
Selection of participants	<ul style="list-style-type: none"> <li>- Outreach (field visits, workshops, conferences)</li> <li>- Call for proposals</li> <li>- Sequential process for higher value services after first round of basic training</li> </ul>
Scope of support services	<ul style="list-style-type: none"> <li>- Information / training / consulting</li> <li>- Focus on one vs. several management skills and practices</li> </ul>
Method of delivery	<ul style="list-style-type: none"> <li>- Online / classroom-based / additional one-on-one follow-up</li> <li>- Free services / matching grants / vouchers</li> <li>- Use of external trainers/consultants</li> <li>- Integration and brokerage</li> </ul>
Governance and funding	<ul style="list-style-type: none"> <li>- Administrative structure and program management office</li> <li>- Alliances with supporting institutions</li> <li>- Funding structure</li> </ul>

# An overview of recent experiences across emerging countries

Program name, country	Scope of the programme					Delivery methods				
	Training	Business advisory services	Purchase of equipment	Sectoral focus	Focus only on one type of management practice	Online tools for diagnosis and training	Sequential, multi-stage process	Target network or cluster of firms	Use of pre-selected/certified external consultants	Involvement of Chambers of Commerce or Industry Associations
Prymeros, Colombia	X	X			X	X	X	X	X	X
Bonopyme, Peru	X	X					X		X	
Programme for Credit Access and Comp., Argentina	X	X						X	X	
Quality Promotion Fund, FOCAL, Chile		X			X		X		X	
Local Entrepreneurship Programme, PEL, Chile	X	X					X	X	X	
Group Development Projects, PROFO, Chile	X	X					X	X	X	
Innovative Solutions for Food Retailers, Uruguay	X	X		X	X		X	X		X
Scheme+, Singapore	X	X				X				
iSPRINT Programme, Singapore		X	X		X					X
Lean Manufacturing MSMEs, India		X			X			X		
Credit Linked Capital Subsidy for Technology Upgrading, India			X		X	X				
SME Information and Advisory Centre, Malaysia	X	X				X			X	
SET-UP Programme, Philippines	X	X	X	X			X		X	
SME General Support Programme, Turkey	X	X				X			X	
SME In-Service Training Consortiums Programme, Korea	X							X	X	X
PIP Programme, Mexico	X	X		X				X		X



# An overview of recent experiences across emerging countries



# Concluding remarks

- This research has served to support the view that programmes to upgrade management skills and practices in small firms should be a critical component of inclusive productivity policies in emerging countries
- More specifically:
  - A clear relationship has been found between a set of management skills and practices and labour productivity in small firms
  - We identified large gaps in management skills and practices between small and large firms in emerging countries
  - We found that the relative importance of the gaps in specific practices are different across individual emerging countries, suggesting avenues for policy prioritization
  - We show that there are many different possible approaches for policy action in this field

Thank you!