Bank Financing for SMEs

Thorsten Beck
A quick overview

- Do SMEs matter and how?
- SME growth and finance
- Why are SMEs left out?
- Policies to foster SMEs’ access to finance
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Do SMEs matter?

Number of enterprises by segment and formality in emerging markets

Millions

Source: Stein, Goland and Schiff (2010)
Do SMEs matter?

Share of SMEs across Countries

Source: Ayyagari, Beck and Demirguc-Kunt (2007)
Importance of SMEs – in Europe

Figure 1. Employment (a) and value added (b) by country, 2011 (% of total)

Source: European Commission
SMEs are important across sectors...

Share of employees across industries for EU28; Source: European Commission
Do SMEs promote growth and alleviate poverty?

- Pro-SME view
  - SMEs enhance competition and entrepreneurship
  - SMEs are generally more productive but constrained by market failures
  - SME expansion boosts employment

- SME skeptics
  - Large firms may be more innovative and productive since they can afford R&D costs
  - Firm size is not necessarily exogenous; it may be optimal to remain small.
  - SMEs are neither more labor extensive, nor better at job creation. Large firms provide higher quality jobs.
  - Focus should be on business environment for all firms
SME and job creation

- Early work: small firms more labour-intensive and create more jobs (Birch, 1979)
- Higher gross job creation but same net job creation in SMEs (Davis et al., 1993)
  - Higher gross job creation off-set by higher failure probability for small enterprises
- Evidence for Africa: larger firms account for majority of job creation (Biggs and Shah, 1998)
- Variation over business cycles – more self-employed during recessions
- Gross vs. net creation of jobs
- Question is demanding for data – need panel data controlling for survivor bias and composition effects
- Do SME jobs really help the poor
  - Evidence from Bangladesh suggests otherwise (Bauchet and Morduch, 2011)
Do SMEs cause growth?

- Although there is a positive and strong association between SMEs and growth in GDP per capita, this is a correlation, not a causal relationship
- A large SME sector is a characteristic of fast-growing economies but not a cause of their rapid growth
- A larger SME sector does not necessarily indicate a dynamic SME sector, but rather may be reflection of poor business environment where firms cannot grow
- In some environments it may be optimal to remain small.
- We care about new entry and growth potential of SMEs!
SMEs, entry and exit of firms

Average value added

<table>
<thead>
<tr>
<th>Age of the firm (years)</th>
<th>Value added (USD)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Italy</td>
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<tr>
<td></td>
<td>United Kingdom</td>
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<tr>
<td>1</td>
<td>200,000</td>
</tr>
<tr>
<td>2</td>
<td>400,000</td>
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<tr>
<td>7</td>
<td>1,400,000</td>
</tr>
<tr>
<td>8</td>
<td>1,600,000</td>
</tr>
</tbody>
</table>

Source: Klapper, Laeven and Rajan (2006)
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Access to finance – the size gap

Source: Beck, Maimbo, Faye and Triki (2011)
Significant credit gap for SMEs in developing countries

Source: Stein, Goland and Schiff (2010)
Financing is an important obstacle

Source: Beck, Maimbo, Faye and Triki (2011)
...and these obstacles are more binding for SMEs

![Growth constraints across firms of different sizes](image)

Source: Beck, Demirguc-Kunt and Maksimovic (2005)
...which can result in a missing middle

A. first 5 years

B. first 10 years

Growth differential following initial size (average growth of Ivorian firms minus average growth of German firms).
Source: Sleuwenagen and Goedhuys (2002)
SME Finance and Growth – the link

- No growth effect from the size of the SME segment, but its dynamism

- Indirect effects through financial deepening:
  - Sound and effective financial systems benefit small firms more than large firms
  - Financial deepening allows more entrepreneurship, firm dynamism and innovation
  - Financial deepening allows better exploitation of growth and investment opportunities and achieving optimal size
  - Financial deepening allows better resource allocation, more efficient corporate organization and more formality

- Ultimately, sustainable financial deepening can contribute to job creation, through SME Finance
SME Finance and Growth – the main channels

Theory and evidence shows:

- Financial deepening allows more entrepreneurship, firm dynamism and innovation
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Finance, SMEs and the job market

- Pagano and Pica (2011): positive and significant relationship between financial development and job creation in developing countries
- Financing constraints among the most important growth constraints for SMEs
  - Ayyagari, Demirgüç-Kunt and Maksimovic, 2006
  - Beck et al. (2005, 2008)
  - Tentative evidence from Serbia (Beck, Morales and Penas, 2017)
- Quasi-randomized evidence for India, Pakistan and Sri Lanka confirms that
  - Important: partial equilibrium analysis
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Why are SMEs left out?

- **Transaction costs**
  - Fixed cost component of credit provision effectively impedes outreach to “smaller” and costlier clients
  - Inability of financial institutions to exploit scale economies

- **Risk**
  - Related to information asymmetries between borrower and lender
  - Ex-ante: High risk borrowers are the ones most likely to look for external finance
    - Increases in the risk premium raise the risk of the pool of interested borrowers
    - Lenders will use non-price criteria to screen debtors/projects
  - Ex-post: The agent (borrower) has incentives that are inconsistent with the principal’s (lender) interests
    - Agents may divert resources to riskier activities, loot assets, etc.
  - Heavier reliance on collateral

- These challenges arise both on the country- and bank-level
- SMEs therefore often squeezed between retail (large number!) and large enterprise finance (more manageable risk, scale)
Unpacking the universe of SMEs

Different segments to be distinguished

- Microenterprises: informal, household- or family based
- Small enterprises – formal; often “missing middle”
- Medium-size enterprises: aspiring, export-oriented etc.

Differentiation between subsistence and transformational enterprises is critical for

- Discussion on job creation
- Interventions and policies for easing financing constraints

We need different policies and approaches for these different groups!
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Policies and institutions to ease small firms’ financing constraints

- Institutional framework
  - Creditor rights, contract enforcement
  - Collateral registries
- Transparency
  - Credit information sharing (e.g.: Central and Eastern Europe)
    - Reputation collateral
    - Reduction in informality
  - Accounting and auditing standards
- Banking market structure and competition
  - No clear mapping from ownership structure into successful SME outreach
  - But lack of competition can undermine SME lending
    - Easier to lend to corporates, consumers and governments
    - No need to innovate
Market-developing policies

- **Institutional Framework**
  - Introduction of *credit registries or bureaus* → positive impact on lending to SMEs (Brown, Jappelli and Pagano (2009) with smaller and more opaque enterprises benefiting more (Love and Mylenko, 2003).
  - Positive effect of introducing *movable collateral registries* on firms' access to finance, an effect stronger among smaller firms (Love, Martínez Pería, and Singh (2012)); Campello and Larrain (2014)
Competition and market structure

- Market efficiency view vs. dynamic relationship view
  - More competition, lower interest rates, expansion of lending to smaller enterprises
  - Need monopolistic power to justify investment in relationship with small enterprises
- Mixed empirical evidence
  - Cetorelli and Gambera, 2001; Bonacorsi di Patti and Dell’Ariccia, 2004
  - Beck et al., 2004; Black and Strahan, 2002
- Challenge: competition vs. market structure
  - How do we measure competition?
  - Market structure measures vs. behavioural gauges vs. contestability
- Related to this: bank size and bank hierarchical structures
  - Lending techniques, see further below
Bank ownership and SME finance

- Foreign banks: contradictory theoretical work
  - Innovation, efficiency and competition
  - Cherry-picking and cream-skimming
- Mixed empirical evidence
  - Clarke et al. (2006)
  - Mian (2006)
  - …
- Differential effect according to institutional framework
  - Bruno and Hauswald (2013)
  - Claessens and van Horen (2014)
- Do foreign banks foster entrepreneurship?
  - Evidence in favour for CEE: Giannetti and Ongena (2012)
  - Tentative evidence in favour cross-country: Alfaro, Beck and Calomiris (2017)
Access to credit: the role of government

• Beyond building institutions
• Rather negative evidence on government ownership of banks, especially on credit side (limited effectiveness at cost of fragility and resource mis-allocation)
• Focusing on contestability of financial markets
  • Low entry barriers
  • Infrastructure open to all financial institutions
  • No regulatory barriers to innovation
• Pro-market activism
  • Do not replace markets, but help overcome market failures
  • Well-designed, limited (time, resources etc.) interventions might help
  • Demonstration effect for private sector
  • Trial and error, no one size fits all
  • Providing infrastructure, overcoming scale problems
    • Post offices as platform for financial service provision
    • Reverse factoring platforms
  • Subsidizing transaction costs of financial institutions (but not interest)
  • Partial credit guarantee schemes
Partial credit guarantee schemes

- Idea: overcome agency problems between lender and borrowers
- Sustainability vs. additionality
- Devil is in the detail
- Few rigorous assessments: Chile, France, US
Guarantees can be one (!!!) solution

Figure 4.10  The Effects of Guarantees on Loan Maturity

Source: Fall (2010).
Financial innovation to overcome barriers

- Increase information
  - UID program in India, link unique ID to credit information
  - FIP in Indonesia

- Reduce distance between bank and client
  - Mobile banking (e.g. Kenya)
  - Agency model (e.g. India)

- Look beyond traditional banks for financial service provision

- Look beyond banking and debt
  - OTC equity exchange for India – for mid-sized companies
  - Private equity, venture capital, angel financing (diaspora resources, remittances?)
Why alternative finance?

- Back to basics in financial intermediation
  - Transaction costs
  - Risk management
- Digital finance allows overcoming both cost and risk barriers
  - E.g., transaction costs in payments (mobile money, blockchain)
  - E.g., risk management in lending with big data
- Part of larger phenomenon of financial innovation
  - New delivery channels
  - New products
  - New intermediaries and markets
Benefits of mobile money not just for households, but also enterprises: Example of Kenya

- Use of M-Pesa to pay suppliers allows entrepreneurs to avoid risk of theft, thus risk of non-payment, resulting in higher probability and amount of trade credit
- Availability of trade credit makes take-up of M-Pesa more attractive
- Beck, Pamuk, Ramrattan, and Uras (2016)
Look at demand-side constraints

- Financial literacy
  - Financial awareness of products and options
  - Financial capability
- Accounting and auditing standards
- Business development services – turn investment into bankable projects
- Don’t ignore non-financial constraints
- Still looking for the holy grail....
Who finances SMEs and how?

- Limited financing sources – mostly banks, limited if any access to capital market
  - Demand-side constraints: resistance again sharing control
- Supplier credit, internal finance
- Bank lending: relationship vs. transaction based lending
  - **Relationship**: bank repeatedly interacts with clients in order to obtain and exploit proprietary borrower information (“soft” information)
  - **Transaction**: typical one-off loans where bank bases its lending decisions on verifiable information and assets (“hard” information)
- Relationship lending traditionally seen as appropriate tool for lending to SMEs as they tend to be more opaque and less able to post collateral
- Recently transaction lending proposed as alternative lending technique, especially useful for larger and non-local banks
- Important question: who uses which type of lending technique: small vs. large; domestic vs. foreign
Relationship vs. transaction-based lending: the evidence

- Cross-country and country-specific evidence shows banks use both relationship and transaction-based lending techniques.
- Different banks use different techniques:
  - Large and foreign-owned banks use predominantly transaction-based lending.
  - Domestic and smaller banks use predominantly relationship lending.
- Country-level evidence for Bolivia shows that foreign banks use transaction-based and domestic banks relationship-based lending for the same client group.
- Evidence speaks for a diverse banking sector with different approaches to SMEs.
- Evidence on Central and East Europe: a higher share of relationship-based lender reduces access to credit for SMEs less during recession; no difference in boom periods (Beck et al., 2017); similar finding for country studies on Italy (Bolton et al., 2016; Presbitero et al., 2014).
- Important side note: not clear mapping of foreign/domestic with relationship and transaction-based lender in CEE.
Relationship vs. transaction-based lending – evidence from Bolivia
Relationship vs. transaction-based lending over the business cycle

Beck, Degryse, de Haas and van Horen (2017)

- During a credit boom, SMEs’ credit constraints do not depend on the local presence of relationship vs. transaction lenders
- But relationship lending alleviates firms’ credit constraints during a cyclical downturn
  - Consistent with learning-effect: banks use the information that they generate during interactions with clients in tranquil times to continue lending in crisis times
- This positive impact is especially strong for small and opaque firms, firms with no other sources of external finance or that lack tangible assets
- Firms in regions where the downturn is more severe benefited more from the presence of relationship banks
- Not an evergreening effect, but liquidity support mechanism (unlike evidence from Japan)
Looking beyond banks

Secondary or alternative tiers of capital markets
- Works best in financial systems, which already have deep capital markets

Private equity, venture capital, angel financing
- Seems a good idea for mid-sized firms that do not have scale or track record to tap public equity or debt
- Large literature on (mostly positive) effect of equity funds on firm-level outcomes for the U.S.
- Limited evidence for other countries
- Mezzanine financing forms
- Often regulatory restrictions; scale problems

New financing arrangements:
- Crowd funding
- Peer-to-peer lending
- Jury still out: enough scale, risk management?
- Regulatory implications (new forms of shadow banking?)
Looking forward

Need more evidence-based policy making

- Different methodologies for different questions
  - Policy and institutions: cross-country/reform implementation
  - Financial innovation: on financial institution level

- Understanding SMEs’ financing constraints and how to alleviate them
  - Co-ordinated Country Case Studies - Innovation and Growth, Raising Productivity in Developing Countries (DFID funded)
  - Research in Southeast Europe and Caucasus: role of collateral and maturity structure on small enterprises’ investment choices (funded by EFSE)

- Microcredit vs. small business lending
  - What can one learn from the other?

- More focus on demand-side constraints – looking beyond the firm to the entrepreneur
Conclusions

• SMEs are the private sector of developing countries
• Critical to differentiate between different segments of the SME population
  • Different financial service providers: banks, MFIs, capital markets
  • Different lending techniques and complementary services: technical training, business development
• Policy levers on different levels:
  • Long-term institution building
  • Competition and innovation
  • Providing the market a helping hand
Thank you

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