

Public Initiatives to Support Entrepreneurs: Credit Guarantees versus Co-Funding

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At Issue

- when and why do state–sponsored credit guarantees raise welfare?
- is there a danger that credit guarantees damage incentives and induce lenders to reduce their lending standards (e.g., private collateral requirements)?
- is a credit guarantee scheme the most effective way to support entrepreneurs?
→ direct loan subsidy schemes (co–funding) are commonplace too
- what are the relative costs and benefits of guarantees versus co–funding?
- what shapes the optimal design of guarantee *cum* co–funding packages?

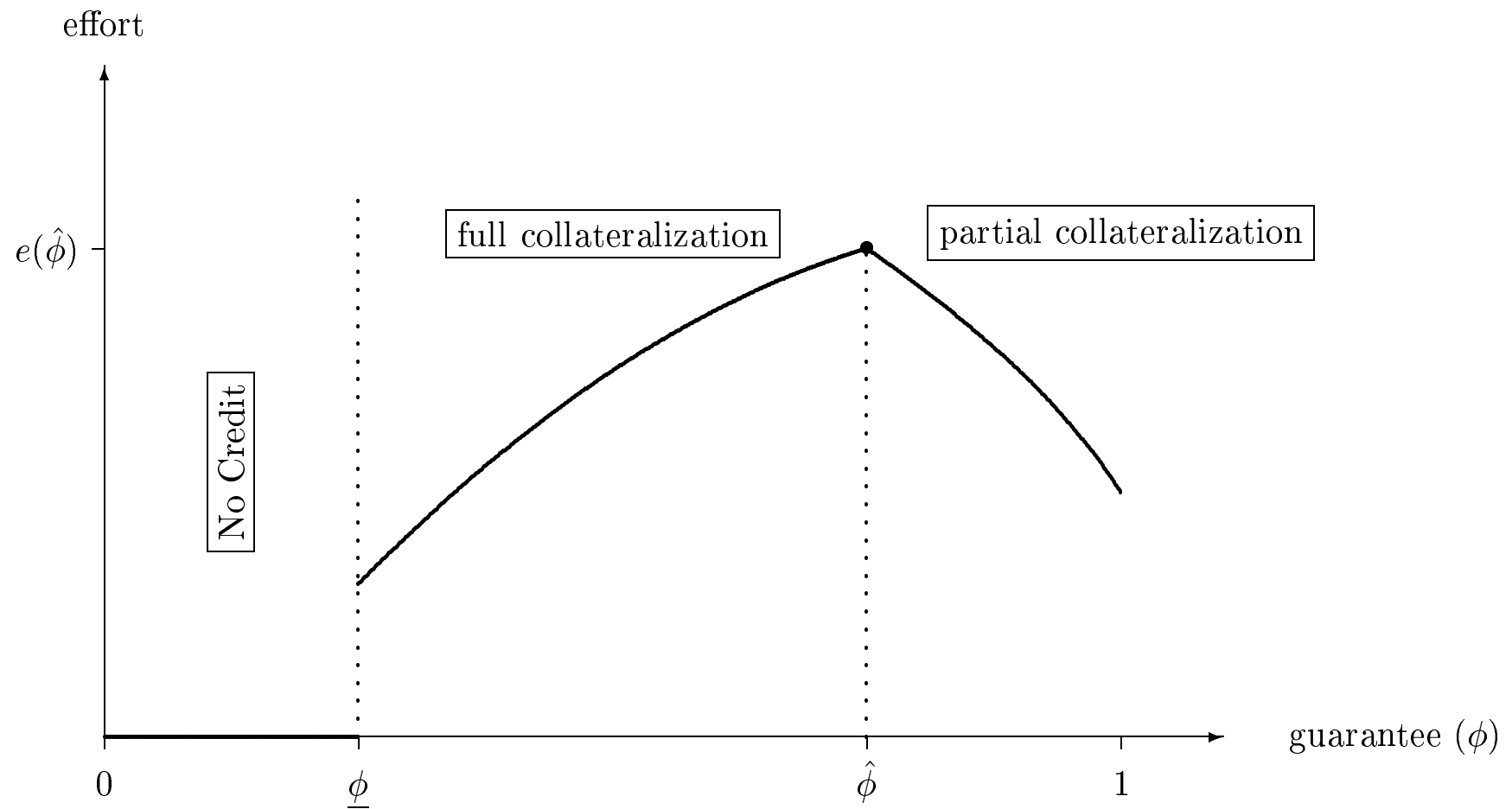
Framework

- simple model of entrepreneurial financing:
 - entrepreneur needs external funding for a project
 - project success depends on the entrepreneur's decision-making (“effort”)
 - moral hazard: effort is non-contractible and privately costly
- due to lack of commitment to exert efficient effort, access to credit may be denied and the value of the project may be lost to society
- collateral is available, but potentially insufficient to resolve credit rationing

Credit Guarantees

- embed state-sponsored credit guarantees $\phi \in [0, 1]$, two effects:
 - subsidy: lender's participation constraint relaxed, cost of capital \downarrow
 - put option feature: jointly efficient effort level \downarrow
- result: there are thresholds $\underline{\phi} < \hat{\phi} < 1$ such that
 - for $\phi < \underline{\phi}$: no access to credit (if collateral sufficiently tight)
 - for $\underline{\phi} \leq \phi \leq \hat{\phi}$: tough lending standards (max collateral), effort \uparrow in ϕ
 - for $\phi > \hat{\phi}$: soft lending standards (collateral substitution), effort \downarrow in ϕ
- implications:
 - to the extent that guarantee agencies face pressure to deploy all of their resources they should be subject to hard budget constraints
 - generous budget \Rightarrow access to credit \uparrow failure risk \uparrow (see Lelarge/Sraer/Thesmar 2008 for the case of French loan guarantee program Sofaris)

The Incentive Effects of Guarantees



Guarantees versus Co-Funding

- co-funding schemes do not suffer from the put option feature
- however: may encourage entry by unproductive entrepreneurs who have no projects and plan simply to consume subsidies, without investing
- transfer of wealth to “copy-cats” will constrain the fund’s ability to support productive entrepreneurs, in particular, if the fund has little technological expertise to screen out copy-cats
- budget constraint:

$$\underbrace{\rho Q}_{\text{copy-cats}} + \underbrace{Q + (1 - e)\phi(I - Q)}_{\text{productive sector}} \leq B$$

- implication: pecking order of support (first guarantees, then co-funding)

Pecking Order of Support

	tight budget ($B < \underline{B}$)	generous budget ($B > \underline{B}$)
support package	<ul style="list-style-type: none"> • no co-funding • guarantee > 0 	<ul style="list-style-type: none"> • co-funding > 0 • guarantee > 0
budget \uparrow	<ul style="list-style-type: none"> • guarantee \uparrow • incentives \uparrow 	<ul style="list-style-type: none"> • co-funding \uparrow • guarantee \downarrow • incentives \uparrow
fund's expertise \uparrow	<ul style="list-style-type: none"> • guarantee: no effect • incentives: no effect 	<ul style="list-style-type: none"> • co-funding \uparrow • guarantee \downarrow • incentives \uparrow
creditor rights protection \uparrow	<ul style="list-style-type: none"> • guarantee \uparrow • incentives \uparrow 	<ul style="list-style-type: none"> • co-funding \uparrow • guarantee \downarrow • incentives \uparrow
likely to be the case if	<ul style="list-style-type: none"> • B small • CRP poor 	<ul style="list-style-type: none"> • B large • CRP strong

Dynamic Efficiency

- how do public subsidies affect dynamic efficiency?
 - innovation (entrepreneurs' incentive to find productive projects)
 - X-efficiency (incentive to uncover cost savings for their projects)
- result:
 - public support programmes should foster entrepreneurial innovation
 - ...but have a negative impact upon X-efficiency
- credit-constrained entrepreneurs have a strong incentive to cut costs
- support schemes reduce the extent of credit rationing, and hence diminish entrepreneurs' incentive to reduce costs

Conclusion

- credit guarantees can facilitate access to credit
 - ... but they may induce lender to lower their lending standards
- co-funding schemes do not suffer from the put option feature
 - ... but they may encourage entry by unproductive entrepreneurs
- implications:
 - pecking order of support
 - guarantees and co-funding ought to be coordinated
- dynamic efficiency: public support packages foster entrepreneurial innovation but they may damage X-efficiency