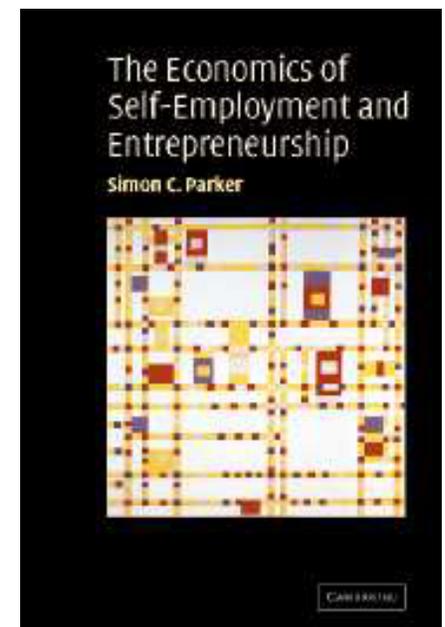


# Tax and Finance as Barriers to Entrepreneurship

Simon C Parker  
Durham University, UK  
[www.dur.ac.uk/s.c.parker](http://www.dur.ac.uk/s.c.parker)



# Plan of talk

1. Tax: theory
2. Tax: evidence
3. Finance: theory
4. Finance: evidence
5. Conclusion

# 1. Tax: theory

- All governments collect taxes
- So all governments create entrepreneurial incentives or disincentives
  - Entrepreneurs taxed differently to employees
    - Incorporated business owners pay CT; workers IT
    - Unincorporated pay IT but numerous deductions and tax avoidance opportunities
  - Risk plays a large role in entrepreneurship tax theory

- Taxation encourages entrepreneurship?
  - Under full loss-offsetting, government shares risk and progressive tax systems smooth risk even more → more € (Domar and Musgrave, 1944)
  - Choice of incorporation when  $CT < IT$  promotes €
  - Greater ease of evasion promotes €
  - Payroll taxes encourage contracting-out into self-employed business ownership (Parker, 2007)

All of these results based on free occupational choice models between entrepreneurship and wage work

- Taxation discourages entrepreneurship?
  - Under partial loss offsets, greater tax progression punishes risky upside, deterring € (Gentry and Hubbard, 2000)
  - Tax reduces savings and collateral, reducing lending and € (Henrekson, 2005)
  - CGT exacerbates double moral hazard in VC
    - Effort too low, hindering successful entrepreneurship (Keuschnigg and Nielsen, 2004)
    - VC portfolio sizes too small (Keuschnigg, 2004)
- Conclusion: theory gives ambiguous predictions

## 2. Tax: evidence

- Early studies (pre-2000):
  - significant positive effects of income and payroll tax on entrepreneurship
    - Cross-section, time series and cross-country
- Later studies:
  - Insignificant effects of income tax based on
    - Cross-section data (Parker, 2003)
      - Pecuniary factors scarcely affect occupational choice
    - Longitudinal data (Bruce, 2000, 2002)
  - Mixed evidence across studies r.e. payroll tax

- Conclusion:
  - Sceptical that tax plays much of a role
    - Pecuniary drivers in general surprisingly modest
  - Tax more important for VC? CGT and pension fund investment rules affect supply and demand for VC
    - But weak evidence here as well (Poterba, 1989)
  - Cross-country evidence that high tax countries have lower rates of entrepreneurship
    - Treat with caution: could be picking up all sorts of country-specific influences
  - Probably best to aim for tax neutrality and stability (especially in transition economies) to foster €

# 3. Finance: theory

- Under perfect information, all and only positive NPV projects will be undertaken
- Under asymmetric information that no longer holds:
  - Too little credit (Stiglitz and Weiss, 1981)
    - Under-investment, credit rationing, redlining: too few entrepreneurs
  - Too much credit (de Meza and Webb, 1987)
    - “Over-investment”: too many entrepreneurs
- These models typically assume well-developed finance markets

- **Transition economies:**
  - McMillan and Woodruff (2002): the success of a transition economy largely explained by performance of its entrepreneurs
    - E.g., they create most jobs!
  - Arguably, insecure property rights, corruption and rent-seeking are bigger problems than limited access to external finance:
    - Insecure property rights discourages re-investment of profits, the major source of finance for growth, while access to finance less problematic (Johnson *et al*, 2000, 2002)
    - Trade credit substitutes for bank credit (McMillan and Woodruff, 2002)
  - But eventually, formal bank credit is needed to scale up enterprises; trade credit and reinvestment only go so far
- **Minorities in developed economies**
  - Statistical discrimination possible, e.g., wealth-based
    - But see Blanchflower *et al* (2003) for disturbing US evidence

# 4. Finance: evidence

- Participation in entrepreneurship estimated to higher for wealthier people
  - Strong evidence of a positive relationship from binary choice models, using data on:
    - Wealth (Evans and Jovanovic, 1989)
    - Lottery wins (Lindh and Ohlsson, 1996)
    - Inheritance (Blanchflower and Oswald, 1998)
  - But endogeneity (reverse causality and unobserved heterogeneity) problems potentially vitiate these results
  - And plenty of alternative explanations which have nothing to do with borrowing constraints:
    - Collateral-based lending rules
    - Decreasing absolute risk aversion
    - High interest rates or “cushion” effects

- But more recent evidence casts doubt on this relationship:
  - The relationship vanishes when IV is used (Hurst and Lusardi, 2004)
  - Hochguertel (2005): panel data to deal with causality and “unobservables” issues:
    - Lagged self-employment status drives wealth (hence wealth is endogenous)
    - But lagged wealth does not affect self-employment
    - Correlated unobservables: innately acquisitive individuals have stronger preference for business ownership

# 5. Conclusion

- In developed economies there is little evidence of credit rationing:
  - Loan rejection rates after several attempts are only 2% anyhow (Levenson and Willard, 2000)
  - Multiple sources of funding available, both formal and informal
  - VC plentiful: supply not demand shortage!
  - There may even be too many entrepreneurs, especially if people are over-optimistic (de Meza and Southey, 1996)

- But some transition & developing economies still lack well-functioning credit and equity markets
  - And many developed countries lack thick VC markets
    - Encourage them by creating AIMS, relaxing pension fund investment rules, and *possibly* lowering CGT (Michelacci and Suarez, 2004; Da Rin *et al*, 2006)
    - But beware of public-sector tax-favoured VC schemes
      - Danger of crowding out (Cumming and MacIntosh, 2006)
    - Gompers and Lerner (1999): if public support has to happen
      - concentrate it on unfashionable but promising ventures rather than “hot” sectors with lots of private funding already
      - avoid governments getting into VC-like decision-making roles