

The Collapse of the Funding Escalator

**HOW IT HAPPENED
AND WHAT TO DO ABOUT IT**

IfM Manufacturing Thursday
24th June 2010

**David Gill
St John's Innovation Centre**

Agenda

1. Funding escalator – theory & reality
2. The regional picture
3. Government intervention
4. What have the banks ever done for us?
5. A modest proposal

Some Caveats

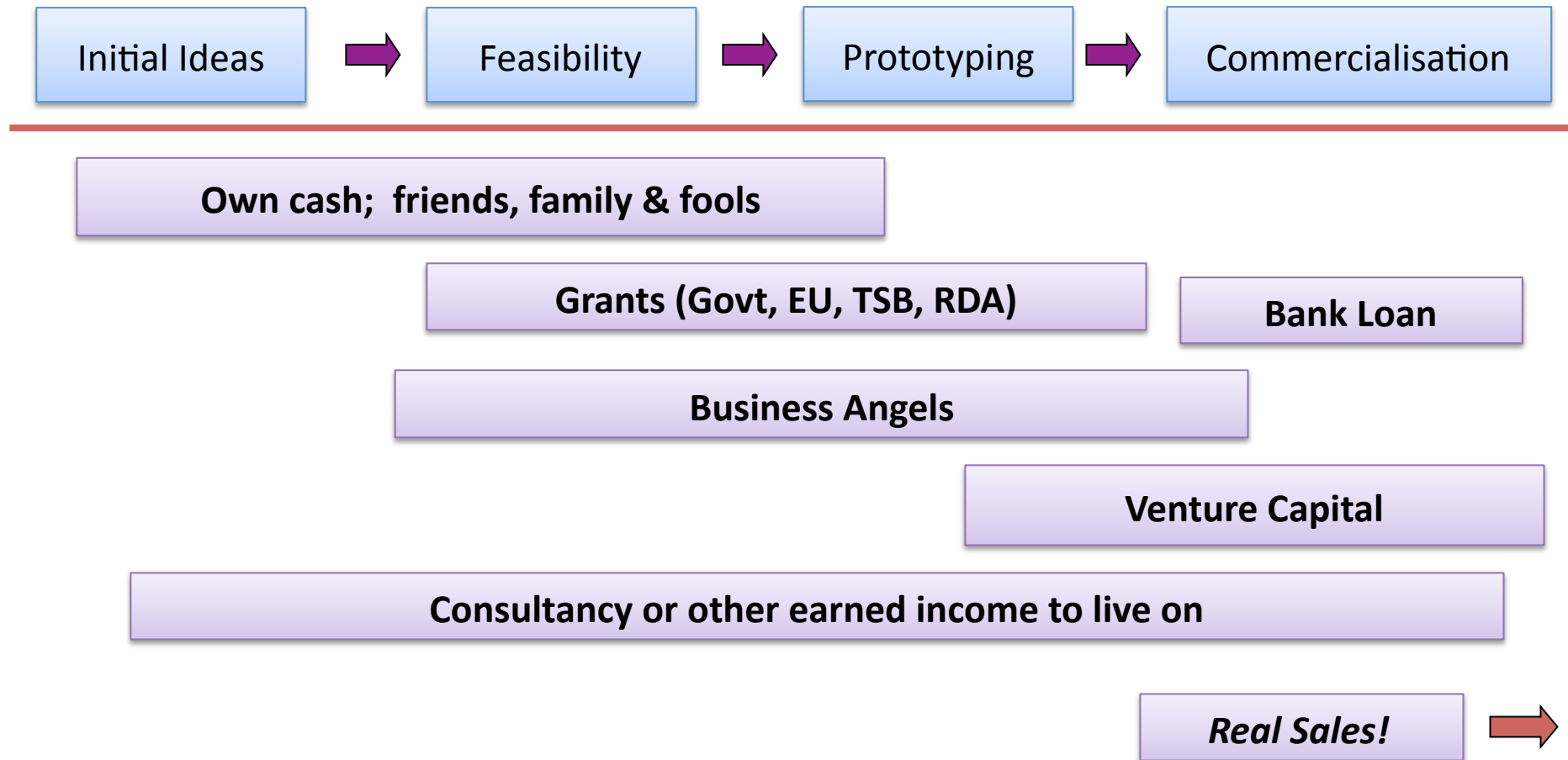
- Not comprehensive, but polemical
- No detailed review of bank regulation
- Sweet-spot is SME/innovation sector
- Cambridge/East of England bias (UffB, GCP)
- Supply side/demand side debate sterile
- Assumes some tin-openers:
 - Why innovation matters
 - Why risk capital is important
 - Other solutions possible (eg, SBIR)
- Data vs anecdote (and PR!) – long-term problem

Part 1

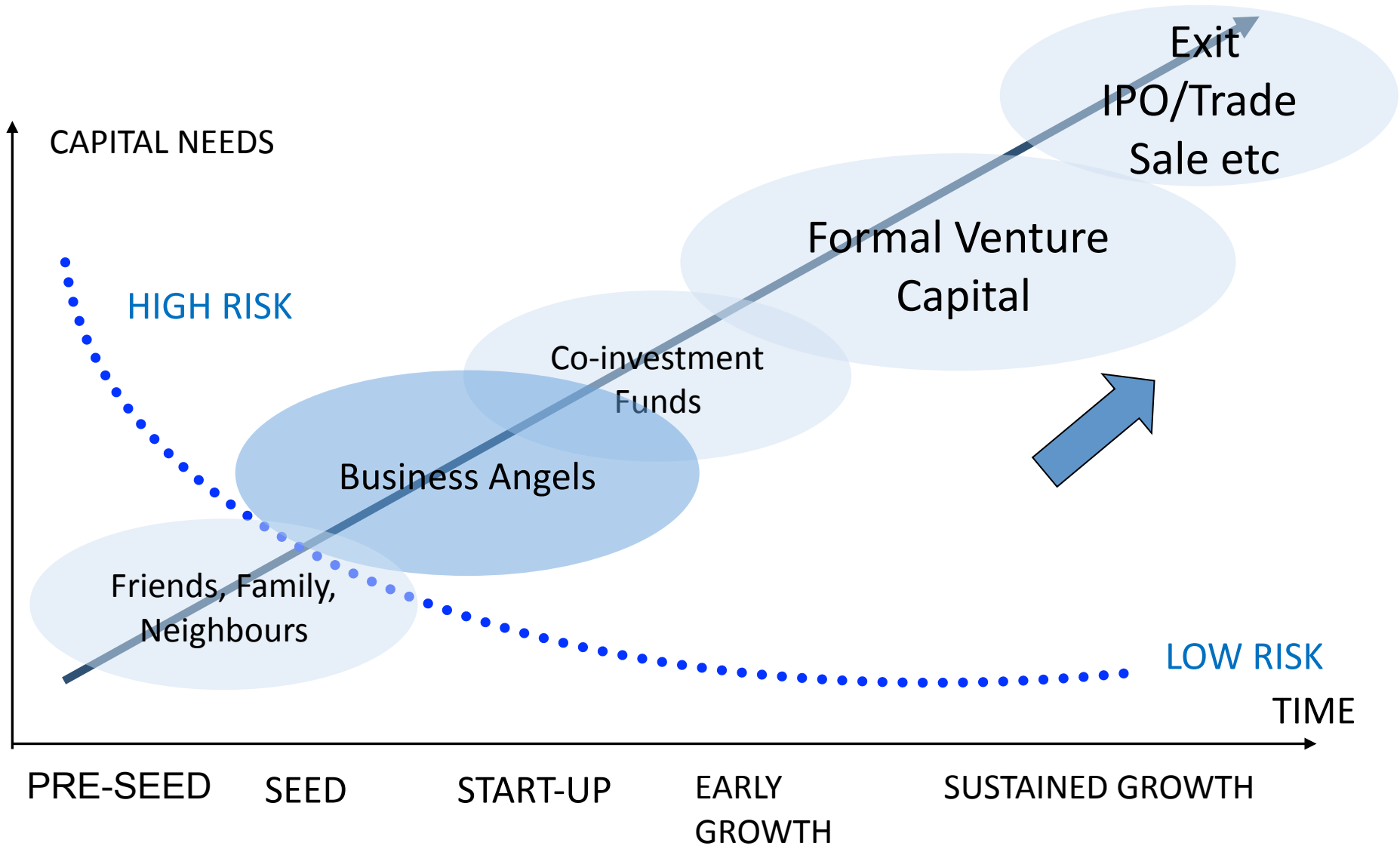
The Funding Escalator

Theory vs Reality

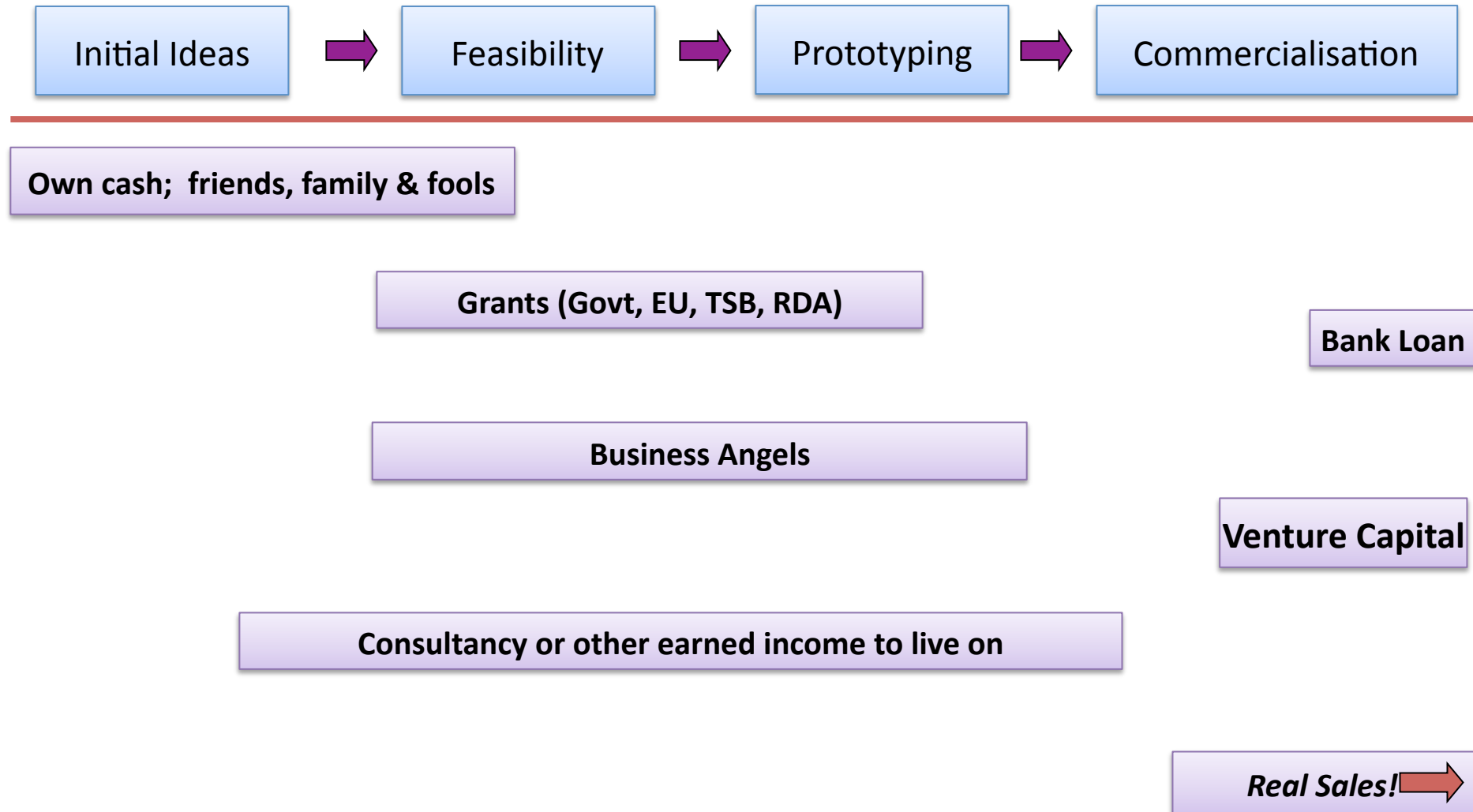
Development Stages & Funding



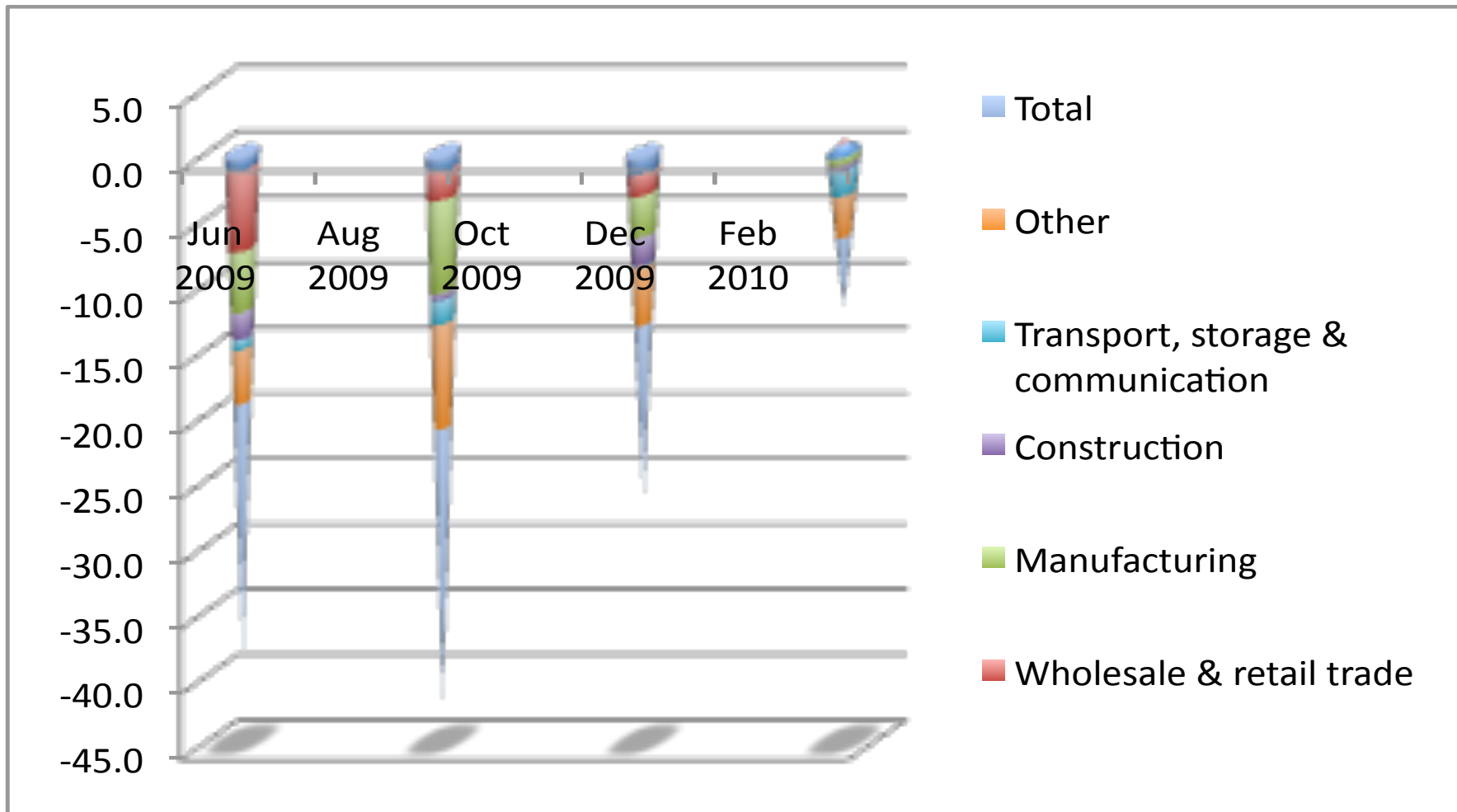
Finance Ladder....



Funding Escalator 2010

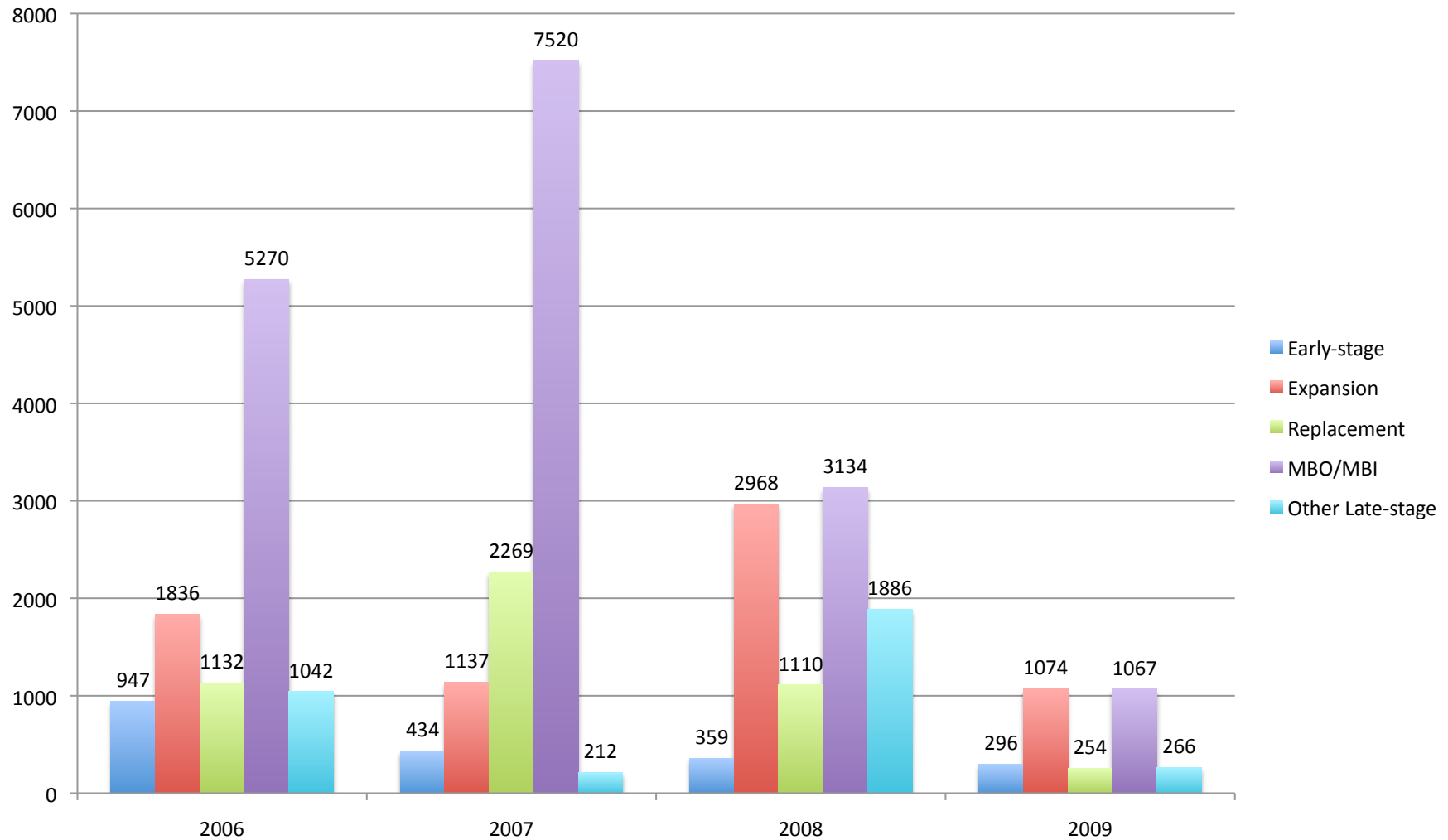


Bank Lending (£bn)



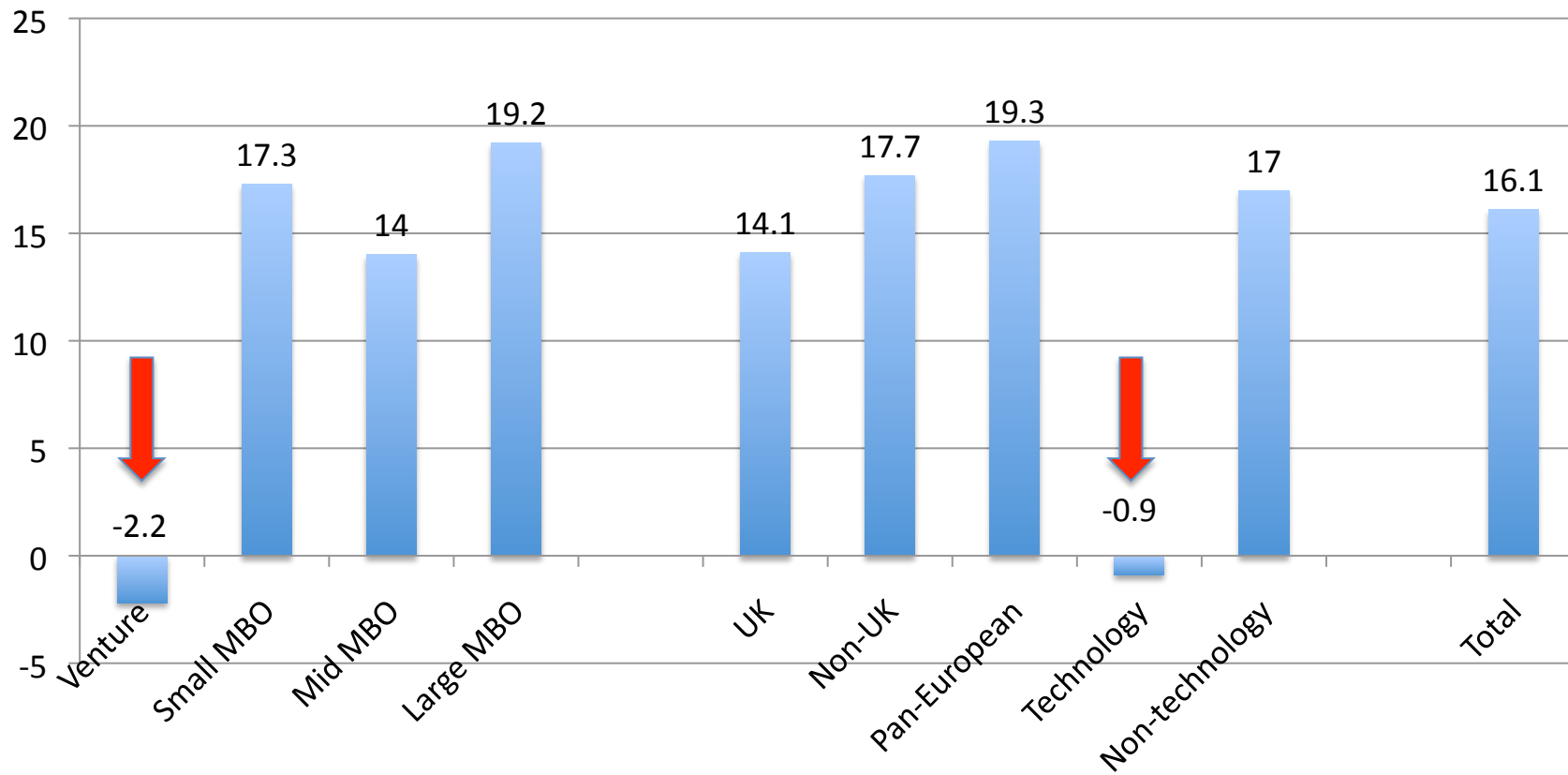
Quarterly net funding flows June 09 – Mar 10 *Bank of England May 2010*

BVCA UK Investment by Stage – 2006-09 (£M)



BVCA/PwC Performance Measurement Survey

Since Inception Performance to end 2009 (%)



Angel Market

- **UK** Business Angels invest £750m annually
 - **BBA**A – 24 networks – 6,000 angel members
 - Approx 18,000 Angels (UK EIS statistics)
 - 2008 – VCs invested £359m in start-up/early stage
 - 2009 – VCs invested £296m in start-up/early stage
 - Equals 50% of angel investment
-
- **EU**: £3bn – £3.5bn invested a year (EBAN 2008)
 - **EU**: 50,000-75,000 angels; UK = 25% Europe market
 - **US**: £18bn invested each year
 - **US**: 225,000 angels; 10,000 invest in angel groups

Recent Research on Angel Investing

NESTA-BBAA *Siding with the Angels* - May 2009

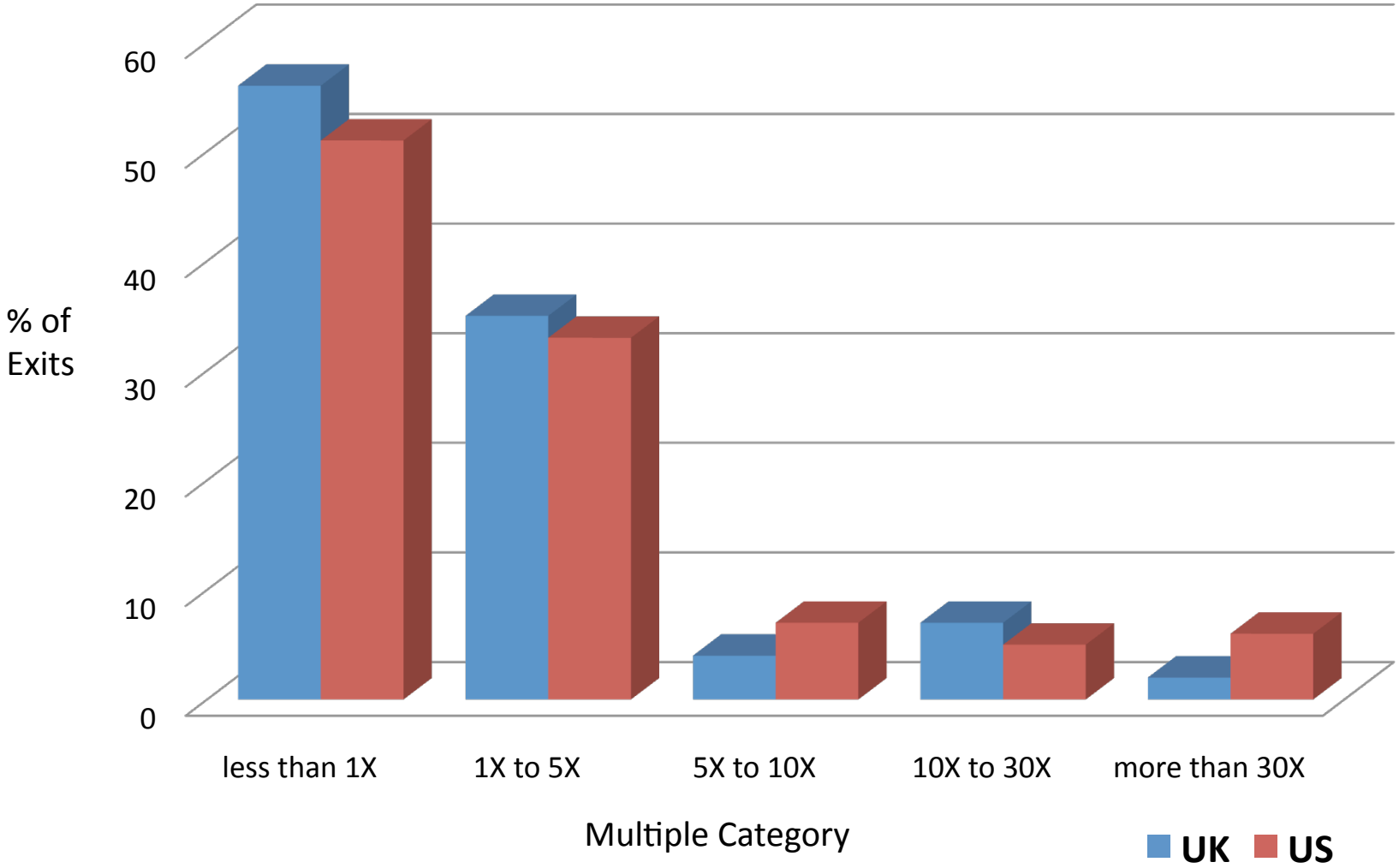
Angel Investing = *Most significant source of investment in early stage companies* - more than half (51%) of investments made were pre-revenue

Business angel investment does carry risks - 56% of all deals not returning their stake money

- But 22% IRR return overall

Shows importance of promoting Business Angel finance as an important Asset Class to wealthy and sophisticated individuals

2009 NESTA Research: Angel Returns



Part 2

The Regional Picture

Worm's Eye View & UffB

- **Equity: decline of formal venture funds**
 - 2006 £947M; 2007 £434M; 2008 £359M; 2009 £296M
 - National picture reflected locally? Limited data!
- **But rise of angel activity**
 - Angels lack recent exits, require more follow-on rounds
 - New groups and awareness activity
- **Grants: especially important for innovation**
 - Often require match funding
 - Current moratorium on distribution (not application)
- **Bank lending: limited application for start-ups**
 - Data vs anecdote! And who knows how high the bar is?

Bank Funding - Cambridge

- Difficulty of deriving statistics from anecdote
 - But step change since 2008
 - Unlikely (ever) to revert to *status quo ante* of easy debt
- No increase in net lending
 - Banks prefer established firms, tangible security
 - Basel II and successors likely to worsen problem
 - Old debt repaid as new debt taken on?
- Margins doubled from 3% to 6%
 - Commitment and renewal fees enforced
 - Self-censorship by (non-) applicants
- Need for increased sophistication by borrowers
 - Use of 'alternative' products: leasing, factoring...

Ouch!

“Of all European provincial centres of high-technology, the Cambridge cluster is perhaps the best served in terms of financial services, with a high number of Business Angels, Enterprise Capital Funds, and Venture Capital Investors to take advantage of.”

Library House

Cambridge Cluster Report 2008

East of England vs UK Average

<i>Investment by Region 2009</i>	Number of companies	% companies	£m invested	Average £m invested	% total invested	Cos invested per 1000 VAT registrations
South East	199	24	1,162	5.84	39	0.59
London	190	22	647	3.41	23	0.56
SE + London	389	46	1,809	4.65	62	0.58
South West	66	8	115	1.74	4	0.33
East England	36	4	66	1.83	2	0.17
West Midlands	45	5	74	1.64	3	0.25
East Midlands	36	4	132	3.67	4	0.24
Yorks + Humber	56	7	70	1.25	2	0.37
North West	55	7	124	2.25	4	0.26
Noth East	47	6	188	4.00	6	0.82
Scotland	39	5	315	8.08	11	0.27
Wales	52	6	63	1.21	2	0.57
Northern Ireland	13	2	1	0.08	-	0.18
TOTAL/ AVERAGE	834	100	2,957	2.76	100	0.37

Source: BVCA 2010

Regional Publicly-backed Equity Funds

Region	# funds	# different fund managers	Fund size (£M)	% of English total	Average fund size (£M)	Average funds per manager (£M)	Funds still open?
North East	16	9	325.5	25.19	20.34	36.17	Y
North West	12	9	391	30.26	32.58	43.44	Y
Yorks + Humber	6	4	182	14.09	30.33	45.50	Y
West Midlands	12	8	136.2	10.54	11.35	17.03	Y
East Midlands	3	3	45	3.48	15.00	15.00	Y
London	4	3	66	5.11	16.50	22.00	Y
South East	3	1	45	3.48	15.00	45.00	N
South West	3	2	63.4	4.91	21.13	31.70	N
East of England	2	1	38	2.94	19.00	38.00	Y
TOTAL	61	40	1,292.10	100.00	20.14	32.65	

Source: BIS & SQW

Some Government Initiatives

- **Enterprise Finance Guarantee**
 - Central government-backed loan scheme
 - Through third-party institutions, mainly banks
 - Loans of up to £1million are available for up to 10 years
 - Banks receive a guarantee of 75% of any losses
- **Foundation East**
 - Regional loan facility
 - Only available to businesses which have been turned down by a bank
 - £50,000 available for up to 10 years
 - No track record required, robust assessment process so a good plan is needed
- **Finance East Loan Management**
 - Loans of £50,000 to £200,000
 - For businesses with a minimum turnover of £500,000 per annum
- **EEDA Co-investment Loan**
 - To support business angel investment, £1.25 million from Regional Loan scheme
 - Funding is available as a co-investment loan for high growth SMEs
 - £50,000 to £125,000 over 2 to 7 years and at an interest rate 8-12% above base rate

Part 3

Government Intervention

£2.4bn Empirical Lessons

**Conceptual Frameworks for
Bridging the Finance Gap**

Venture Capital and Regional Policy

Mason & Pierrakis (2009):

- Northern Regions have more than expected VC share
- Public sector dominates market in Midlands/North
- ... but has NOT created entrepreneurial regions
- “importance of proximity in venture capital investing exaggerated”
- Addressing the demand side:
 - Build investable businesses; grant schemes to point of commercial viability (US Advanced Technology Program)
 - Presence of outstanding scientists more important than VC
- Supply side:
 - Angel groups much more significant for early risk capital
 - Scottish experience shows importance of co-investment funds
 - Angels and accreditation role
 - Need to develop funding pipelines (Universities, incubators, angels, local VCs, non-local investors) with quality filters and high mutual trust

Not Supply vs Demand but Thin Markets

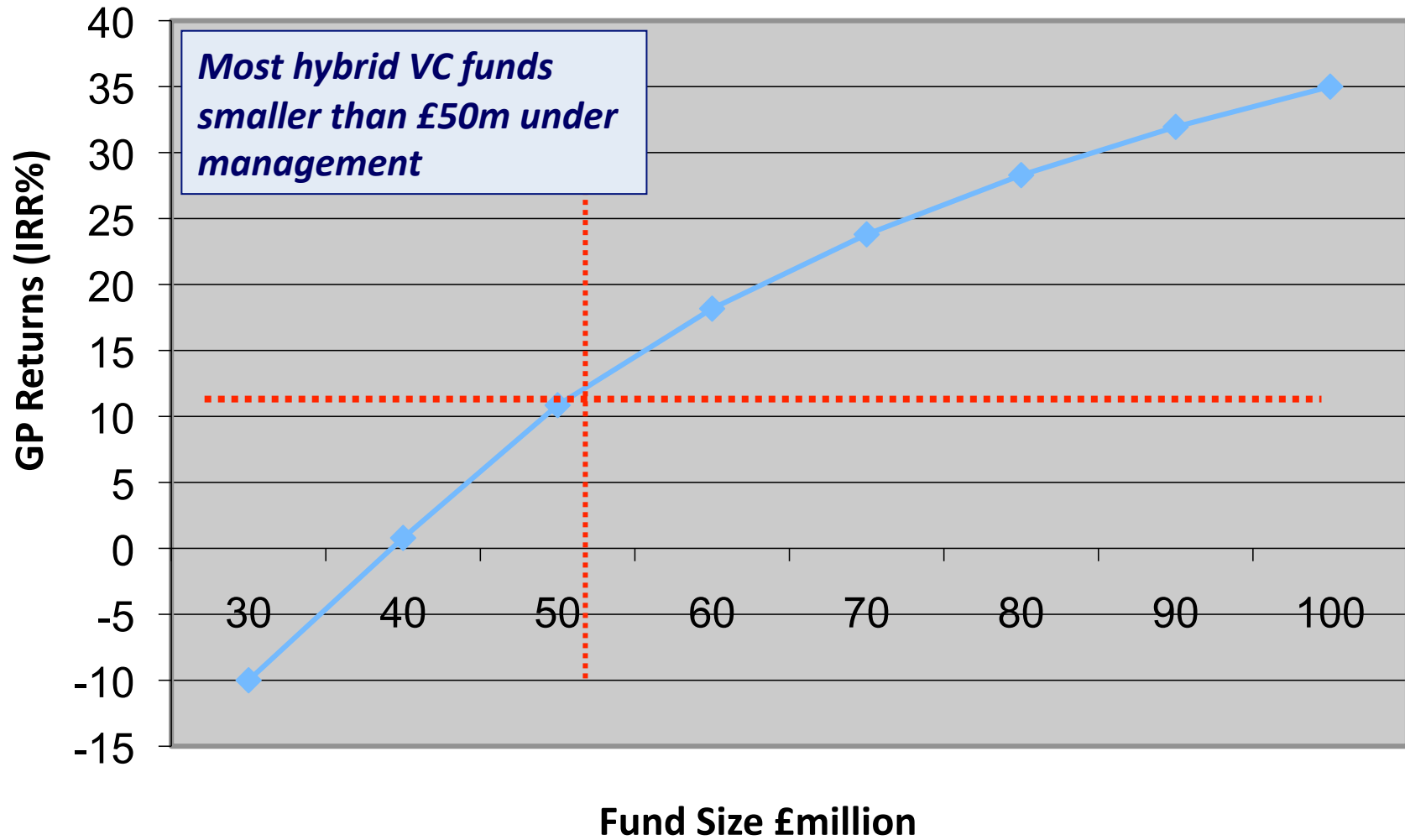


- Demand-side view: UK lacks enough high-potential firms
- Supply-side view: shortcomings in how funds are run (expertise matters as well as cash)
- BUT underlying cause of modest impact is thin markets: small numbers of investors, small numbers of firms have difficulty in finding each other and contracting at reasonable cost

Hybrid Schemes: Lessons

- Evidence of a clear selection effect:
 - Government backed firms perform materially better than firms that do not receive government support when we correct for the age of the firm, the sector, etc. at the moment of funding
 - Total performance effect is modest but significantly superior to unsupported firms (but later programmes have not yet run their full term)
 - No displacement effect from public programmes
- Clear evidence of positive government ‘learning’
- Small scale of (some) public supported VC funds likely to imperil long-run viability and performance

Fund Scale Effects to the GP



Part 4

What Have the Banks Ever Done for Us?

Banks – Return on Equity

- Return on UK bank equity 1921-71: 7%
- Return on UK bank equity 1972-2007: 20.4%
- Finance sector share of corporate PAT 1982: 4%
- Finance sector share of corporate PAT Q3 2009: 36%
- Long-run return on equity all sectors: 6%

Banks as rent-gougers: how?

Source: Bank of England

Banks as Rent Gougers

- Uncompetitive nature of modern banking
 - Traditional banking was competitive
 - Commercial banks moved into market-making
 - Abnormal profits not a reward for skill
 - Weaker firms give up, remainder become larger
 - Unrealistic barriers to entry for new entrants

www.smithers.co.uk/news_article.php?id=91

Banks as Rent Gougers - 2

“... economies of scale in banking are exhausted at relatively modest levels of assets, perhaps between \$5-10 billion [...] Even once allowance is made for subsequent balance-sheet inflation, this evidence implies that economies of scale in banking may cease at double-digit dollar billions of assets.”

Andrew Haldane, Bank of England

The \$100 Billion Question 30th March 2010

www.bankofengland.co.uk/publications/speeches/2010/speech433.pdf

Banks as Rent Gougers - 3

- Extreme volatility leads to excess profits
 - Subsidy to banks with (implicit) public guarantee
 - Government desire to prevent systemic loss
- One-way bet for shareholders and managers
 - Gains accumulate to 'insiders'
 - Losses picked up by taxpayer
 - Huge bets on limited equity base

www.smithers.co.uk/news_article.php?id=91

Banks as Rent Gougers - 4

“For UK banks, the average annual subsidy for the top five banks over these years was over £50 billion - roughly equal to UK banks’ annual profits prior to the crisis [...]

“For the sample of global banks, the average annual subsidy for the top five banks was just less than \$60 billion per year. These are not small sums.”

Andrew Haldane, Bank of England

The \$100 Billion Question 30th March 2010

www.bankofengland.co.uk/publications/speeches/2010/speech433.pdf

Banks and the UK Economy

- No net creation of jobs
- Direct employment 1M
 - = ½ of Manufacturing
- 6.6% contribution to tax revenues 2002-08
 - ~ ½ of Manufacturing
- 1997-2009: 30% of lending to finance/property sectors
 - 3% of lending to Manufacturing

Source: CRESC, University of Manchester

Part 5

A Modest Proposal

With apologies to Jonathan Swift (1729)

The Story So Far...

- 12+ years of experience of hybrid funds
- Committed capital £2.4bn, 6 schemes
- Hybrid funds can be made to work
- Most are subscale
- Tension regional growth/financial return
- But government funding under stress
- How to implement lessons and raise funds?

Re-creating UK VC: Bank Tax

- Feb 2010: RBS £1.3bn bonuses, Barclays £2bn...
- Mar 2010 Budget: 50% tax on bonuses above £25,000 to yield £550m; estimated yield now £3.5bn
- **Annual payroll tax hypothecation ~10% of bonus pool**
 - Build up fund-of-funds over 10 years: minimum £5bn
 - Available for long term, disbursed over 20 years
 - Sub-funds to be designed and rolled out iteratively
 - Already benefit from 12 years of empirical data, research
 - Build on existing Capital for Enterprise Ltd infrastructure
- Strong board of trustees to prevent 3i mission creep
- 'Bridging the funding gap' enshrined in charter

Lerner *Boulevard of Broken Dreams* (2009)

Summary lessons of government intervention:

- Create entrepreneurial environment
- Work with academia, research base
- Need to listen to market's dictates
- “Field of dreams” danger; over-engineering programs
- Universal temptation to “share the wealth”
- Matching funds most appropriate way
- Deal extensively with agent-principal problem
- Avoid programs that are too small or too big
- **Institutionalize careful evaluations of programs**

Remember this? Origins of UK VC

- 20th July 1945: Industrial & Commercial Finance Corporation
 - 30 years using preference shares, term loans
 - But little role in development/strategy, only disposal
 - 1980s rebranding as 3i, dominant market share
 - 1988 zenith: 4,789 firms = £1.6bn = 38.5% share, 23 regional offices, 800 staff, 'staff college' of UK VC
 - Mainly employed generalists - graduates, chartered accountants
- UK VC history skewed to financial engineering
 - Current preponderance of Private Equity
 - Defence, pharmaceuticals, aerospace only: strong R&D
 - Fewer experienced middle managers as entrepreneurs

Other Possible Policy Outcomes

- Revive the annual Bank of England SME body
 - Quarterly statistical surveys
 - Annual omnibus overview
 - January meeting chaired by Governor
 - Specialist reports (eg, technology funding)
- High-growth firms in particular
 - Importance of angel funding
 - Recognise that funding escalator is broken
 - Maximize potential of (EEDA) co-investment funds
 - Impact of EIS and CGT on entrepreneurs and investors
 - Note other demand-side issues (eg, SBIR)

Closing Thoughts

‘There is no simple answer to the question: “How should capital gains be taxed?” [...] The people who express strong views are usually self-interested individuals who have not thought about the question for very long. The issue is quite properly a subject for political compromise.’

John Kay, Financial Times, 2 June 2010

‘Bankers have brought capitalism into disrepute. To their traditional enemies on the Left they have added those who favour free markets. Despite the remarkable achievement of uniting such a broad spectrum of political opponents, bankers clearly expect to avoid retribution for their misdeeds.’

Andrew Smithers, Motley Fool, 21 April 2010