

Beyond the 'Bull Market': Bio-capital and Regenerative Medicine in a Changing Financial World

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The Start of Our Story

- The commercial funding of biotechnology, including tissue engineering and cell therapy, partly arose because of a long run of 'Bull Markets' that leveraged buoyant corporate, equity and venture capital sectors at peak periods in the 1980s, 1990s and 2000s (see: Gompers 1994, Froud et al. 2001, Bottazzi and Da Rin 2002, Froud et al. 2004, Erturk et al. 2004, Froud and Williams 2007)
- After 1990, trends in capital markets became firmly committed to a new credo of 'financialisation' that encouraged corporations to act like Venture Capital firms (VCs)

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- This culture survived periodic downturns such as the 'dot. com bubble' and the Enron scandal of 1999-2001; but has since decisively faltered because of the 2008 banking collapse (Williams 2001, Feng et al. 2001, Froud et al. 2004).
- Froud et al. (2001) note the significant role played by affluent US and UK households – the top 40% - in the rise of private equity and venture capitalism during this time frame (see also Gompers 1994)
- The 'credit crunch' has nonetheless ended this era of financialisation with a note of painful irony as poor and wealthy households are brought together in a toxic mix

The Start of Our Story

- Cell Therapy and Regenerative Medicine are important sub-narratives of this story, within which the Bull became the Bear
- Martin et al. (2009) provide a primary reference point for interpreting such sub-narratives
- Their work describes an under-capitalised fledgling Cell Therapy / Regenerative Medicine industry that faced daunting supply-side obstacles and weak market demand before the 'credit crunch' gained momentum in the autumn of 2008

‘Narrative and Numbers’

- Further ‘bio-capital’ research is nevertheless hampered by the low levels of financial accountability required during the last Bull Market
- The traceability of private ‘bio-capital’ is limited and there are no clear figures to tell how much investment activity has been going on in, for example, the European Regen market and beyond
- The official statistical picture is only beginning to take shape at the present time via compulsory national statistics gathering / industrial censuses (see: OECD 2006)

‘Narrative and Numbers’

- Froud et al.’s work on the ‘Mayfair Village’ suggests that this picture is mirrored in other VC sectors, where in, the monies invested, won and lost by Equity and VC firms have not been properly accounted for, creating a sizeable gap between the reality of VC activity and its reputed successes (rhetoric)
- We can apply this approach, which they call ‘narrative and numbers’ to Cell Therapy / Regenerative Medicine sector as follows:

<http://www.google.com/finance?q=Regenerative+Medicine&restype=company>

Where Next?

- The counterfactual of a continuing Bull Market: where would the Regenerative Medicine / Cell Therapy industry be now if the crash hadn't happened? Would the rhetoric be continuing to escalate?
- Questions we can ask of the current Bear Market reality:
 - What risks are Cell Therapy / Regenerative Medicine firms running at this time?
 - How is this scenario accentuating legacy supply-side and demand related problems?

Where Next?

- Is the industry and the science it relies on in jeopardy?
- How will the Regen sector emerge from this period of shock adjustment?
- Ways of analysing the present:
 - REMEDIe survey and case study research (WP) involving interviews with Cell Therapy / Regenerative entrepreneurs and scientists
 - An analysis of the ‘golden 22’ as listed on Google Finance

How the Story Continues...

- 'News wire' evidence suggests that the business model is moving towards the consolidation of the existing science, manufacturing bases and the supply chain - a common characteristic of Bear Market retrenchment (see also: Martin et al.2009)

How the Story Continues...

- Business models = finance, we therefore need to begin researching the current experience from an accounting perspective, followed by an examination of the scientific, organisational and operational determinants of the contemporary regenerative 'biocell business' (nb:- this is likely to involve large injections of state aid)
- Reputation and risk will feature as key elements of this survival story

REMEDiE – TYMS Contribution

- **Survey and Case Study Research:**

- A survey that asks basic questions about the here and now with a view to generating baseline data:
- See: <http://www.york.ac.uk/res/remedie/regen09/>
- The survey data will be used to identify interview respondents
- Amongst other themes, the interview research will examine the social construction of past, present and future notions of the 'Regen firm' as a scientific, business and risk entity

REMEDiE – TYMS Contribution

- An examination of the changing nature of the Cell Therapy / Regenerative firm in the Bear Market, and the definitional antagonisms this poses, particularly for questions of quantitative and qualitative risk approximation
- This research will generate observations of the Regen sector at a time when it is being put under considerable pressure to evolve and within which concomitant narratives and reputation effects are being brought into being (e.g. a 'rescue narrative' of state + VC funding)

References

- Erturk, I., Froud, J., Johal, S. and K. Williams (2004) 'Corporate Governance and Disappointment'. *Review of Political Economy*, 11, 4, pp.677-713.
- Feng, H., Froud, J., Johal, S. Haslam, C. and K. Williams (2001) 'A New Business Model'. Berlin, June.
- Froud, J., Haslam, C., Johal, S. Williams, K. and R. Willis (1998) 'British Pharmaceuticals: A Cautionary Tale'. *Economy and Society*, 27, 4, pp.554-584.
- Froud, J., Haslam, C., Johal, S., and K. Williams (2001) 'Financialisation and the Coupon Pool'. *Gestao and Producao*, 8, 3, pp.271-288.
- Froud, J. and K. Williams (2007) 'Private Equity and the Culture of Value Extraction'. *New Political Economy*, 12, 3, pp.405-420.

References

- Bottazzi, L. and M. Da Rin (2002) 'European Venture Capital'. *Economic Policy*, April, pp.230-269.
- Froud, J., Johal, S., Papazian, V. and K. Williams (2004) 'The Temptation of Houston: A Case Study of Financialisation'. *Critical Perspectives on Accounting*, 15, pp.885-909.
- Gompers, P. (1994) 'The Rise and Fall of Venture Capital'. *Business and Economic History*, 23, 2,
- Martin, P., Hawksley, R, and A. Turner (2009) 'The Commercial Development of Cell Therapy- Lessons for the Future? Survey of the Cell Therapy Industry and the Main Products in Use and Development. Part 1: Summary of Findings'. www.nottingham.ac.uk/iss
- Williams, K. (2001) 'Business as Usual'. *Economy and Society*, 30, 4, pp.399-411.