

## **Finance driven transnational innovation systems and the regional dimension**

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The rise of the biotech industry took place over a period that saw major changes in the way capitalism works. Institutional investors, such as investment and pension funds, became important actors influencing industrial investments, including R&D expenditures. This is expressed in shareholder value-driven corporate governance. The increasing power of financial capital is accompanied by far-reaching institutional changes such as an extension of intellectual property rights, a changed role for publicly funded research institutions and new forms of financial market organization. In the same time, industrial organization changed considerably. It tends toward selective vertical disintegration, a strong spatial concentration of the pharmaceutical and biotech industries, and the emergence of an interconnected pharma-biotech-complex. Biotechnology R&D expenditures are increasingly aligned with the financial interests of institutional investors and the strategies of large pharmaceutical corporations.

The paper discusses several consequences of the new “innovation regime”: First, the funding mechanisms in a finance-dominated accumulation regime provoke and a higher volatility as well as a further spatial and organizational concentration process for innovative activities. At the same time, research and development activities increasingly depend on the “mood” of the financial markets. R&D funding is increasingly concentrated in a temporal dimension. Second, the institutional changes which led to a new regime of intellectual property rights promote the transformation of knowledge into a commodity. Research processes become the direct subject-matter of financial investment strategies. Third, these changes accompany a tendency of vertical disintegration and induce a shift in the governance mechanisms and power relations in innovation systems.