

Changing Competition Models

**The effects of internationalisation, technological change and
academic expansion on dominant economic logics**

Richard Whitley

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Changing Competition Models: The effects of internationalisation, technological change and academic expansion on dominant economic logics

Summary of the argument

- Different ways of competing in markets came to dominate particular sectors, regions and national market economies in the postwar period as a result of variations in market conditions, technological regimes and institutional contexts**
- These competition models varied in terms of production volumes, basis of competition and rapidity of response to changes in demand and technologies**
- They were supported by nine features of product, labour and capital markets as well as by particular characteristics of technological regimes**
- Since the breakdown of the Bretton Woods system increased market internationalisation, the collapse of state socialism, radical technological change and the expansion of incomes, education and science have altered these features**
- Consequently, levels of support for many of the components of established competition models have changed, as has the dominance of these models in particular regions and countries**

Ideal Types of Competition Models

Dominant Basis of Competition					
		Reducing Costs and Prices	Improving Quality and Functions		
Volumes of Standardised Outputs	Low		Craft and Professional Production	Low to Medium	Flexibility and Speed of Response to Market and Technical Change
			Flexible Customised Production	High	
	Medium to High	Fordism	Diversified Quality Production	Low to medium	
		Opportunism	Flexible Mass Production of Differentiated Goods and Services	High	
		Discontinuous Innovation			

Conditions Supporting Different Competition Models

- **Product Market Size and Differentiation**
- **Numerical flexibility**
- **Functional flexibility**
- **Supply of unskilled workers**
- **Constraints on short term opportunism**
- **Availability of knowledgeable risk capital**
- **Supply of technical specialists**
- **Availability of new technical knowledge**
- **Modularisation of system components**

Conditions Supporting the Dominance of Competitive Models

Competition Models

Conditions	Fordism	Opportunistic	Craft Production	Flexible Customised Production	Diversified Quality Production	Flexible MPDG	Discontinuous Innovation
Product Markets	Mass, undifferentiated	Large, price/fashion focused	Niche, quality focused	Niche, quality focused	Large, differentiated and quality focused	Large, differentiated and quality focused	Large, price and/or quality focused
Numerical Flexibility	High	High	Limited	Medium	Limited	Medium	Considerable
Functional Flexibility	Low	Low	Medium	High	Considerable	High	High
Supply of unskilled workers	High	High	Low	Low	Low	Low, except in some assembly processes	Low
Constraints on short term opportunism	Low	Low	Considerable	Medium	Considerable	Medium	Low
Availability of knowledgeable risk capital	Low	Low	Low	Low	Low	Low	High
Supply of technical specialists	High	Low	Low	High	High	High	High
Availability of new technical knowledge	Low	Low	Low	Medium	Medium	High	High
Modularisation	Medium	High	Low	Medium	Low	High	High

Major Changes in the Business Environment

- **Product Market Internationalisation**
- **Capital Market Internationalisation**
- **Internationalisation of Organisational Integration**
- **Collapse of State Socialism**
- **ICT Innovations**
- **Increasing Consumer Incomes**
- **Expansion of Higher Education and Public Science Systems**

Effects of the Changing Business Environment on Conditions Affecting Competition Models

	Changing features of the business environment						
Conditions	Product Market Internationalisation	Capital Market Internationalisation	Internationalisation Organisational Integration	Collapse of State Socialism	ICT Innovations	Increasing Consumer Incomes	Expansion of Higher Education and Public Science Systems
Product Markets	Increased in size			Increased in size	Facilitate access	Encourage differentiation	
Numerical Flexibility		Encouraged by arms' length investors	Increased by investing in low commitment economies	Increased	Facilitated in modularised sectors		
Functional Flexibility		Reduced, except where the market for corporate control is restricted	Reduced, except where MNCs invest in strategic assets that depend on it		Facilitated in high commitment societies		
Supply of Unskilled Labour			Increased	Increased	Facilitated		Reduced
Constraints on Opportunism		Reduced by high levels of foreign portfolio investment	Reduced, except where strategic assets are dependent on commitment		Reduced when they facilitate access to foreign locations		
Availability of Risk Capital		Increased				Facilitated	
Supply of Technical Specialists			Increased	Increased in industrialised societies	Facilitated		Increased
Availability of New Technical Knowledge			Increased		Facilitated		Increased
Modularisation					Increased, except where product architectures are integrated		

Expected Effects of the Changing Business Environment on Components of Competition Models

	Components of Competition Models				
Changing Business Environment	Reduce costs and prices	Improve quality and functions	Differentiate product ranges and customise	Respond rapidly to changing conditions	Innovate radically
Internationalisation of: Product Markets	Supported by growth of markets for standardised goods	Supported by growth of market for high quality goods	Supported by growth of market for customised goods	Supported by competition from low commitment economies	
Capital Markets	Supported by increase in portfolio investors			Supported by internationalisation of venture capital and related business services	
Organisational Integration	Supported by access to low cost inputs and weakening of constraints on price-based competition	Supported by integrating a domestic focus on quality with access to low cost inputs from abroad			
Collapse of State Socialism	Supported by growth of markets for standardised goods and access to cheap labour			Supported by competition from low commitment economies	
ICT Innovations	Supported by facilitating access to cost labour and switching suppliers	Supported by enhancing skills and facilitating integration of new knowledge	Supported by reducing minimum efficient batch sizes	Supported by facilitating modularisation Supported	
Income Growth		Supported by increases in wealthier, educated consumers			
Expansion of Higher Education					Supported by growth of scientists and engineers
Expansion of Public Science System					Supported by expansion of new formal knowledge

Expected Effects of the Changing Business Environment on Established Competition Models

	Established Competition Models						
Changing Business Environment	Fordism	Opportunism	Craft Production	Flexible Customised Production	DQP	Flexible MPDG	Discontinuous Innovation
Internationalisation	Supported by the expansion of markets for standardised goods and supply of cheap labour	Supported by opening of product markets to low cost producers	Threatened by intensification of price competition, supported by access to low cost inputs, especially in collaborative institutional regimes	Supported by growth of nice markets and access to skilled labour, where training is available	Supported by growth of niche markets and access to reduced cost inputs in modularised sectors, but threatened by weakened constraints on opportunism, price competition from low cost economies and demands for faster responsiveness		Supported by growth of markets for new products, internationalisation of venture capital and access to strategic markets
Collapse of State Socialism							
ICT Innovations	Supported by facilitating international integration		Supported by enabling outsourcing	Supported by modularisation and cross national integration of activities	Supported by increasing production flexibility but threatened by ease of outsourcing	Supported by facilitation of organisational flexibility, internationalisation and modularisation	Supported by modularisation and ease of cross-national coordination
Income Growth, Expansion of Higher Education and Public Sciences	Decline in wealthier markets	Limited to fashion goods	Supported by market growth for high quality, customised goods but threatened by new technologies	Supported by growth of highly skilled labour and new technologies where labour markets are fluid	Supported by market growth for quality goods but threatened by new technologies	Supported by increase in technologists and market growth	Supported by market growth, production of new formal knowledge and technologists, especially where labour markets are fluid

Concluding Remarks

- Most of the changes considered here vary in their expected impact on firms' priorities depending on their current competition models and institutional contexts
- The identification of national institutional regimes with a single dominant economic logic such as Fordism or DQP is weakening with greater internationalisation, and many competition models now involve cross-border coordination of economic activities
- The combination of internationalisation, increasingly differentiated patterns of demand and increased rate of product innovation is encouraging many firms to respond faster to changing circumstances and threatening less responsive competition models
- How firms respond to such pressures and opportunities still seems to be strongly affected by their domestic environment and its conditioning of their priorities and capabilities