

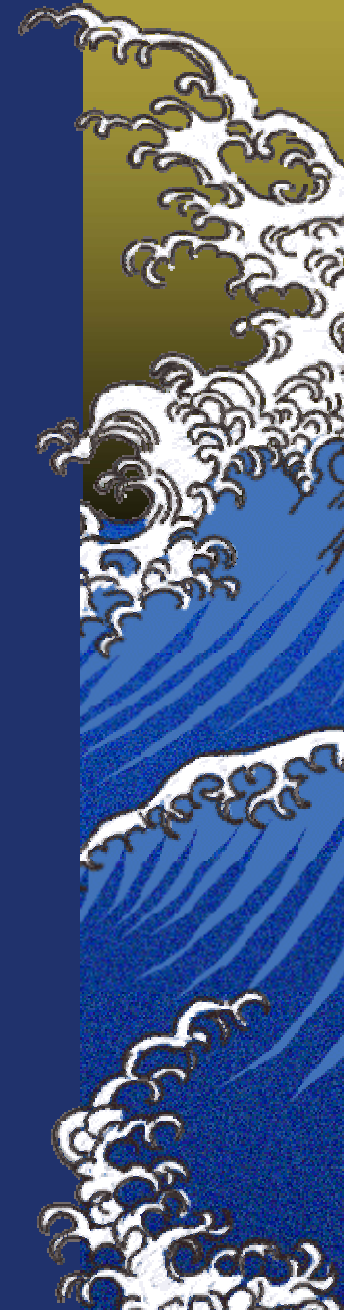
*Pathways to Innovation:  
Politics, Products, and Processes  
for Competitive Advantage in a Global Economy*

*Symposium, Tokyo 20-21 May 2005*

How Different Cultures and Business Systems  
Translate into Different Pathways to Innovation:  
A Comparative Analysis of the USA and Japan

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# *Innovation creates competitive advantage*

*Invention* is the creation of new products and processes through the development of new *knowledge* or from new combinations of existing knowledge.

*Innovation* is the initial commercialization of invention by producing and marketing a new good or service or by using a new method of production. Once the innovation has occurred, it *diffuses*.

Innovation is the basis of competition and *competitive advantage* throughout the early phases of industries' life cycles.



# *The development of technology*

Basic knowledge



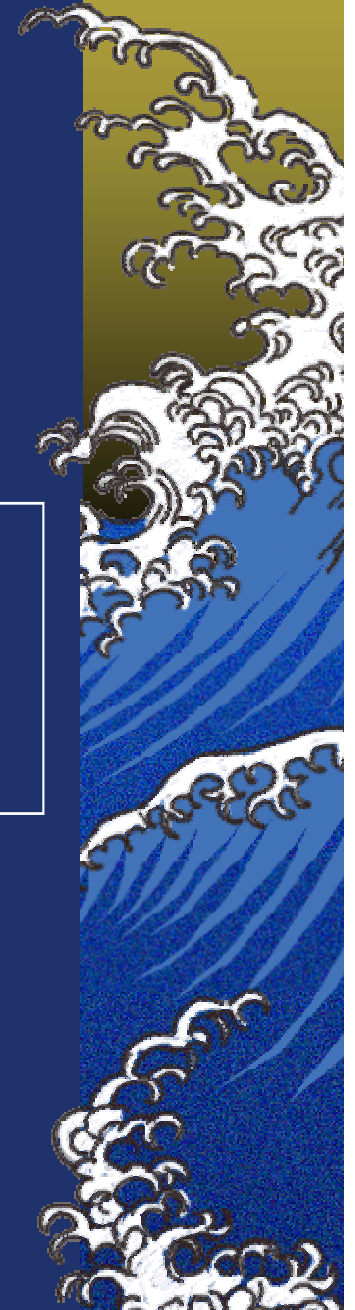
Invention



Innovation

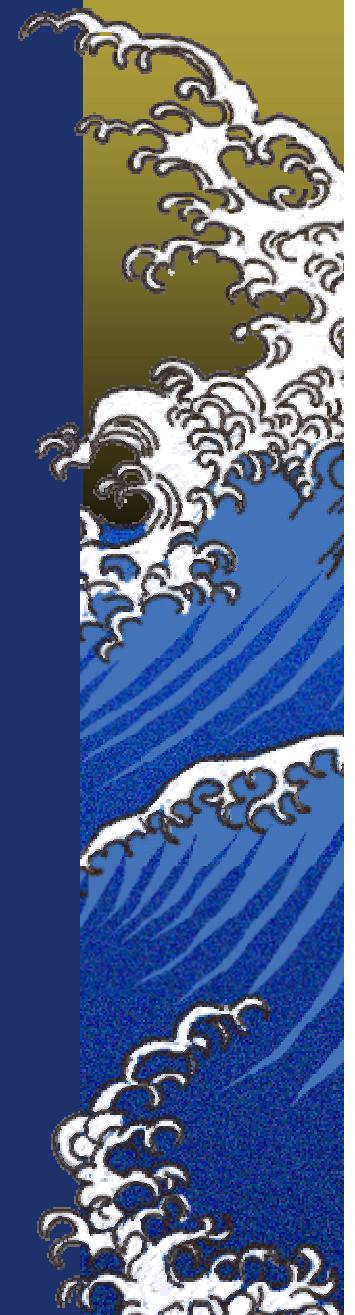


Diffusion

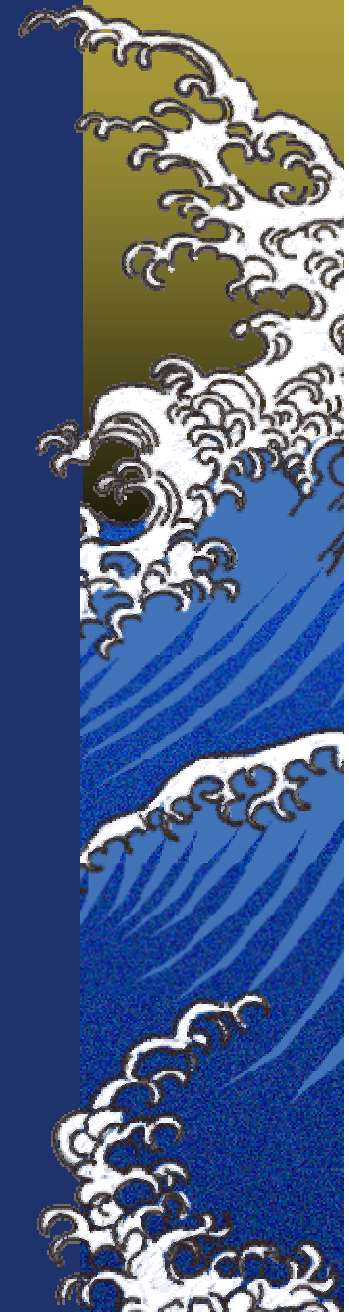
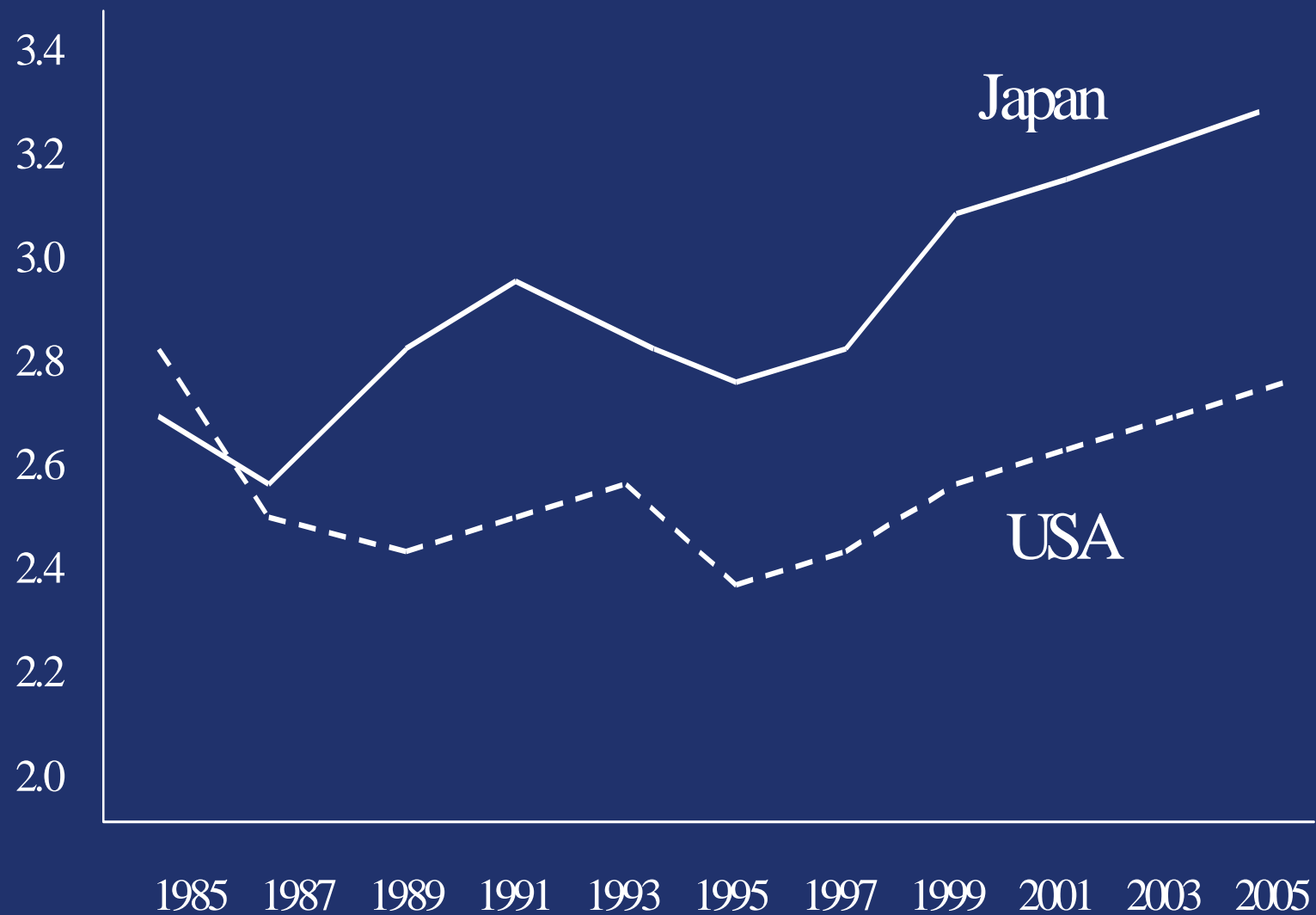


# *Perception of the innovative state of the USA and Japan*

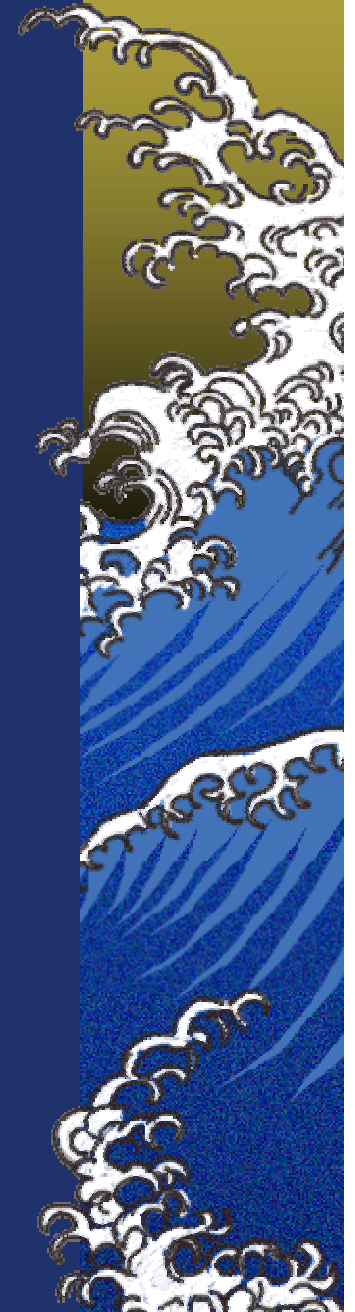
	<i>until the 1980s</i>	<i>1980s</i>	<i>from 1990 onwards</i>
<i>USA</i>	+	-	+
<i>Japan</i>	-	+	-

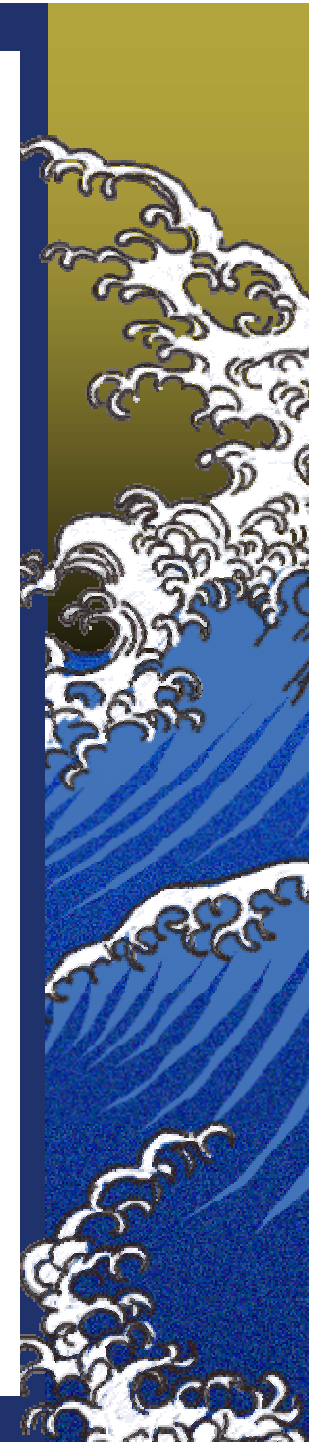
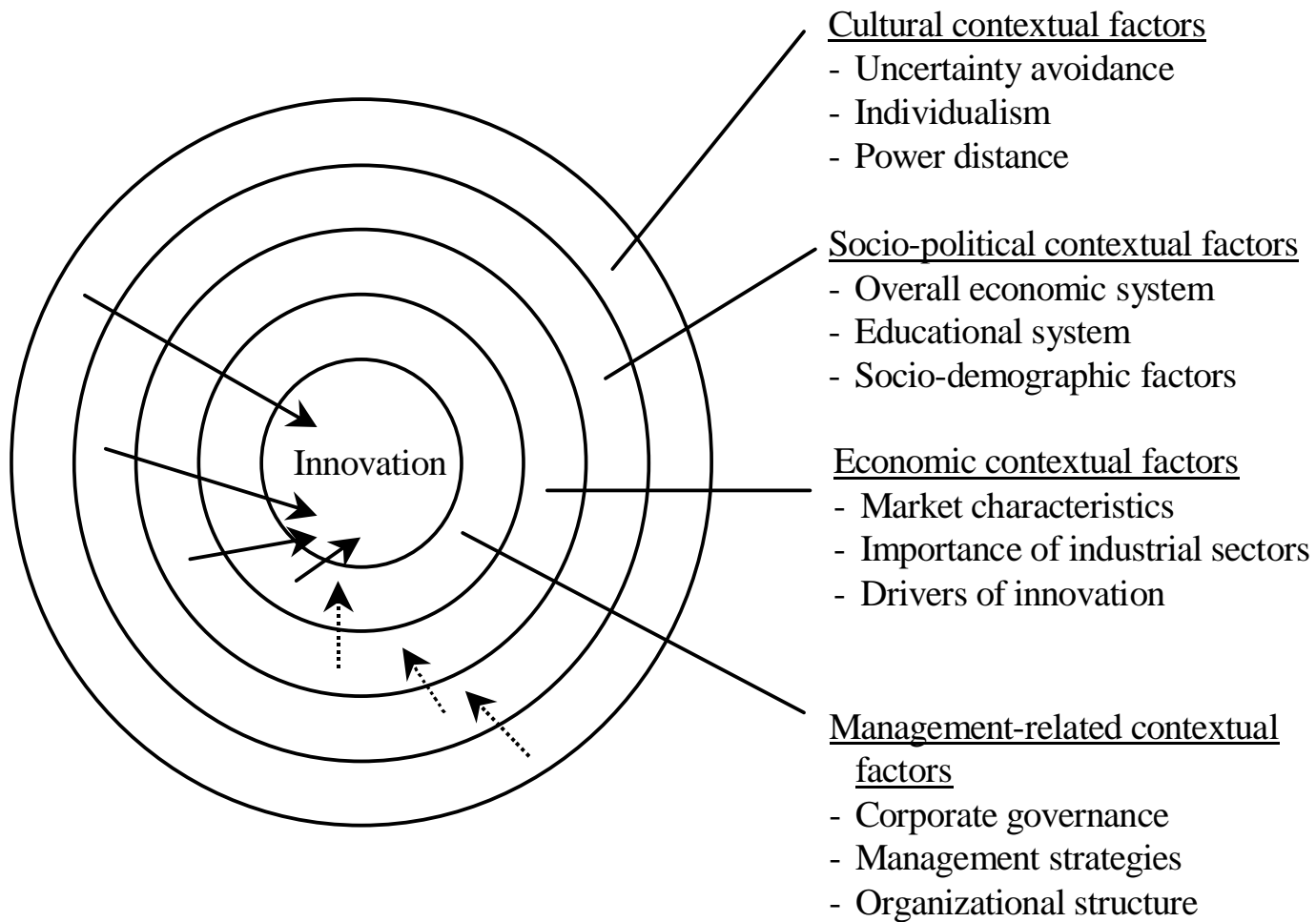


# R&D Spending



*Do different cultures and  
business systems translate into  
different kinds of innovation  
and different pathways to  
innovation?*



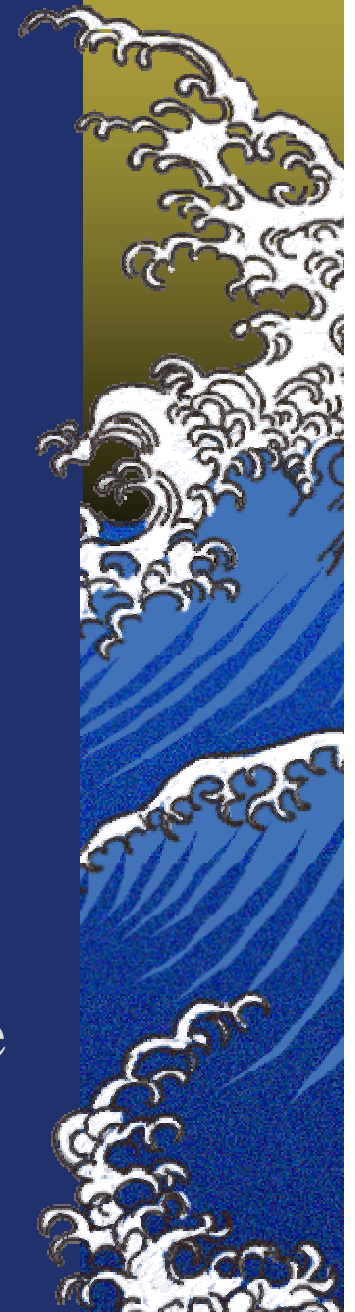


# *Cultural factors:*

## *Geert Hofstede*

Hofstede's analysis of cultural differences is based on a very large set of empirical data: 117.000 questionnaires from IBM employees from 53 different countries have been evaluated. The results were published in Hofstede's famous book: *Cultures' Consequences* (1980).

Hofstede has recently surpassed in the Social Science Citation Index (SSCI) Karl Marx as the most cited author in social sciences.

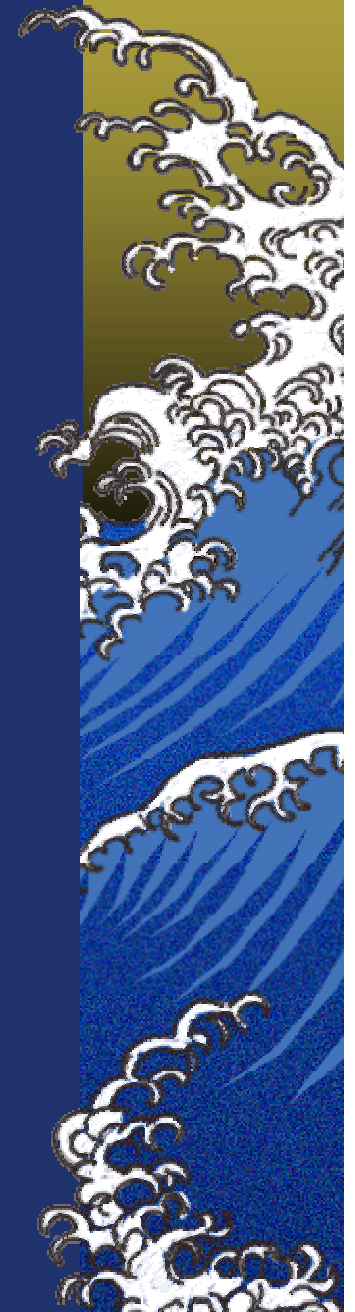




# *Hofstede's four dimensions*

Hofstede describes the cultural differences between countries through four dimensions:

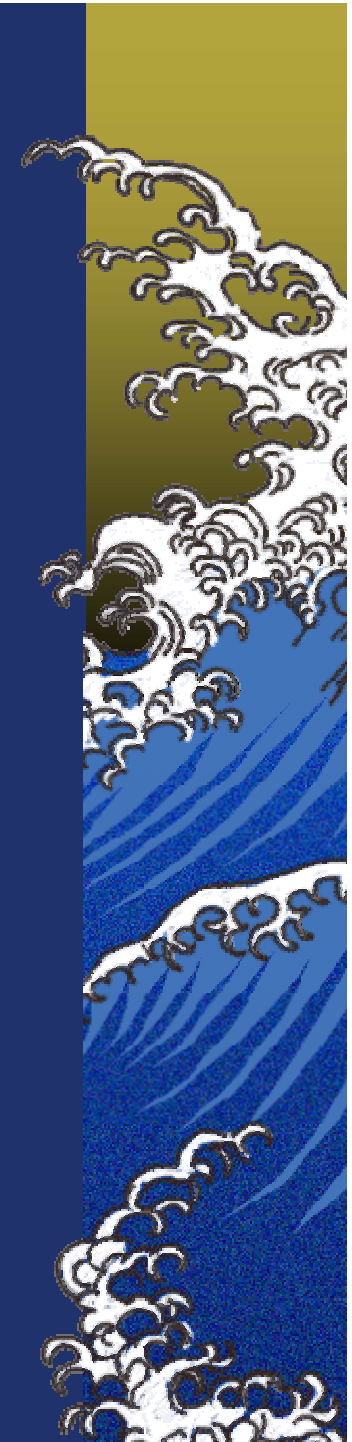
- Uncertainty Avoidance
- Individualism
- Power Distance
- (Masculinity)



# *Uncertainty avoidance*

Uncertainty avoidance can be defined as the extent to which the members of a culture feel threatened by uncertain or unknown situations. This feeling is, among other things, expressed through a need for predictability.

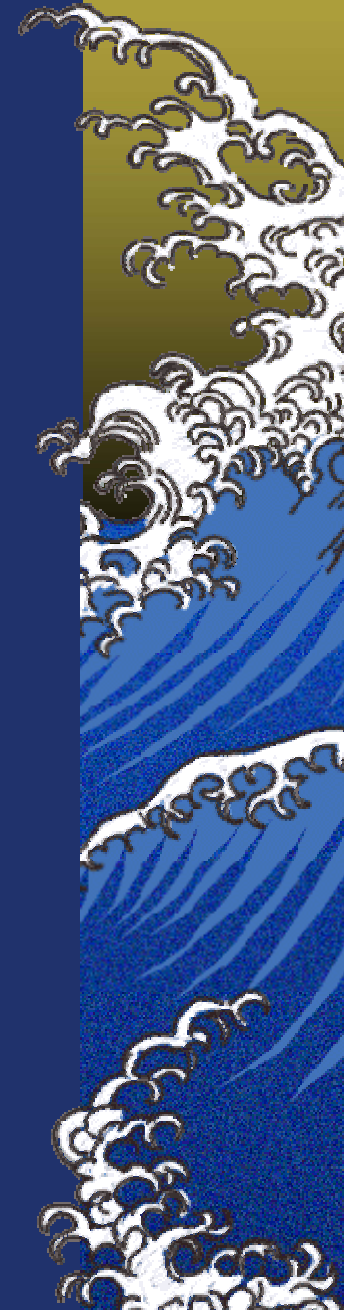
<i>USA</i>	46	Risk taking
<i>Japan</i>	92	Conservative



# *Individualism*

Individualism pertains to societies in which everyone is expected to look after himself and his immediate family.

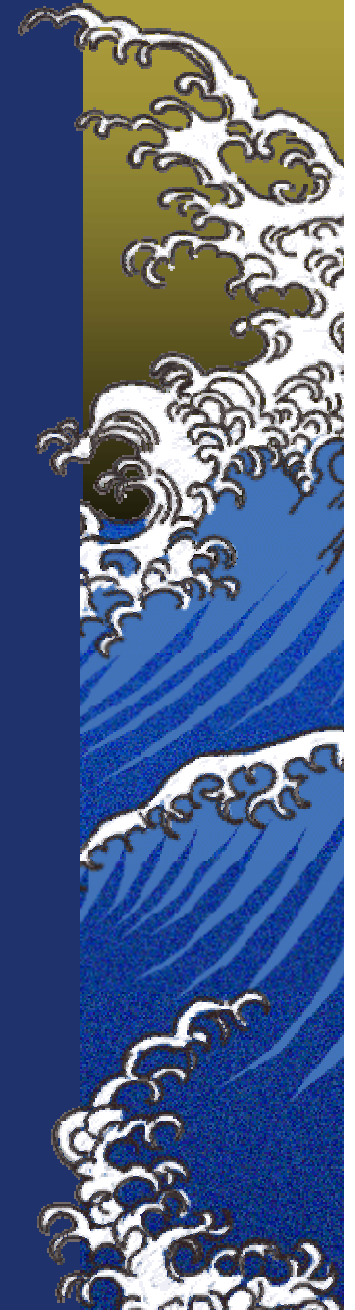
<i>USA</i>	91	Individualistic, against the grain
<i>Japan</i>	46	Collectivistic, don't rock the boat



# *Power distance*

Power distance can be defined as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally.

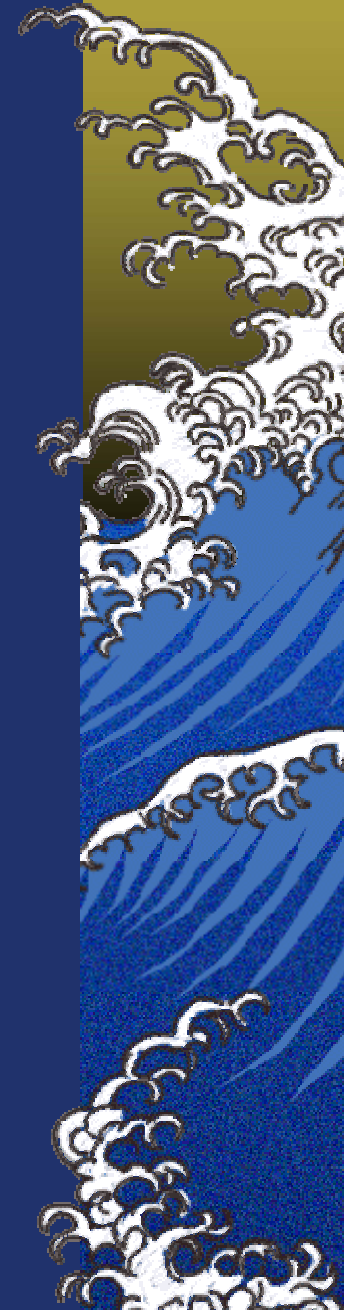
<i>USA</i>	40	Challenge your superior
<i>Japan</i>	54	Don't challenge your superior



# *Socio-political context:*

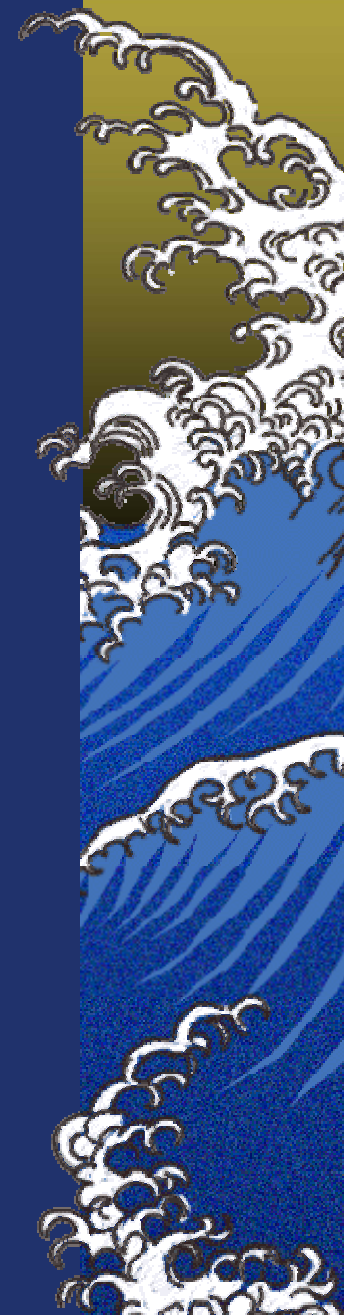
## *Economic system*

<i>USA</i>	<i>Japan</i>
Free-market economy	Government- induced market economy



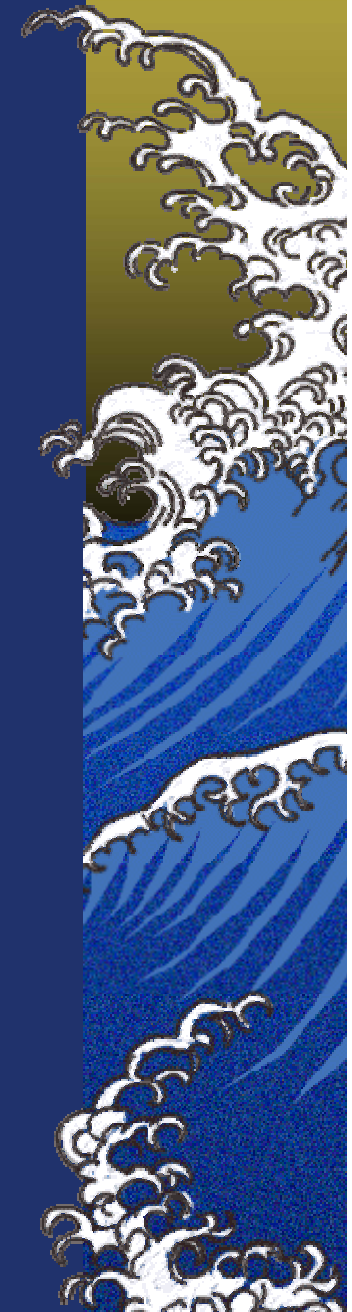
# *Socio-political context: Educational system*

<i>USA</i>	<i>Japan</i>
Considerable difference in quality among schools and universities: outstanding elite education to the neglect of mass education	Small differences in quality among schools and universities: no elite education but good mass education



# *Socio-political context: Socio-demographic factors*

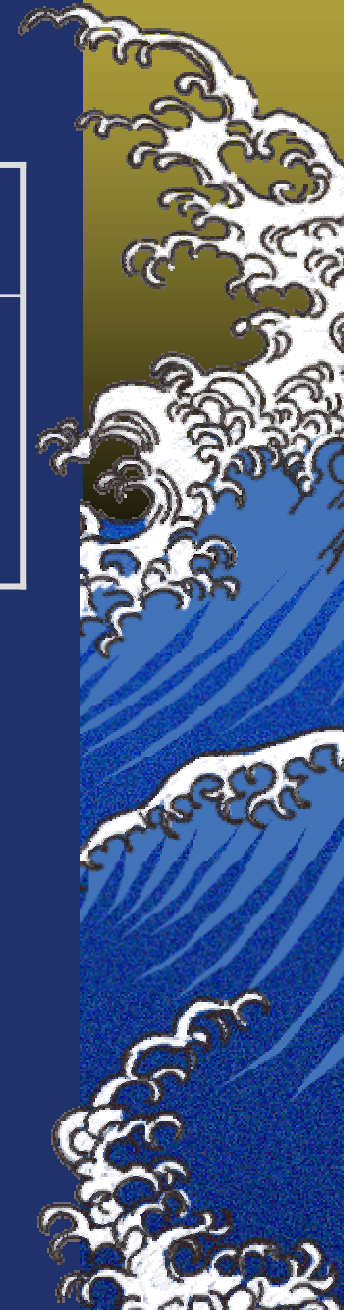
<i>USA</i>	<i>Japan</i>
Strong heterogeneity of employees with regard to age, sex, nationality, race, religion, educational standard and value attitudes	Relative homogeneity of employees with regard to age, sex, nationality, race, religion, educational standard and value attitudes



# *Economic context:*

## *Market characteristics*

<i>USA</i>	<i>Japan</i>
Stand-alone companies	<i>Keiretsu</i> -structures

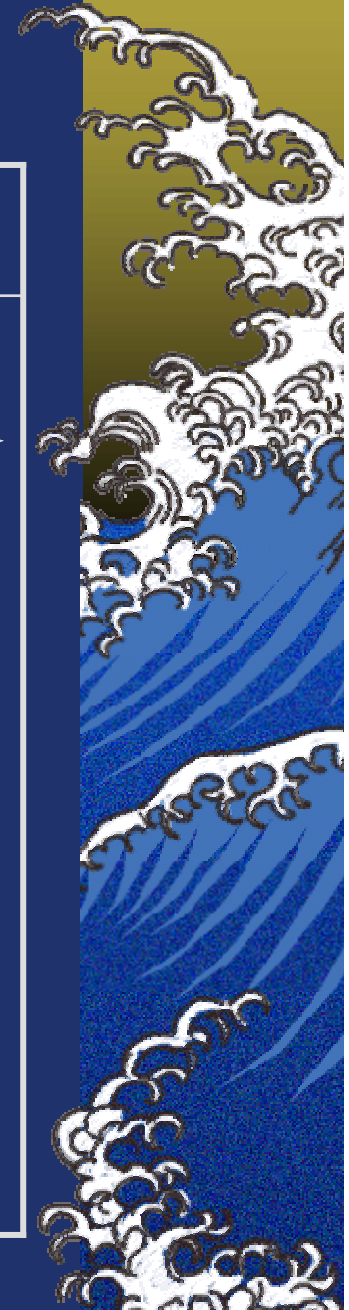




# *Economic context:*

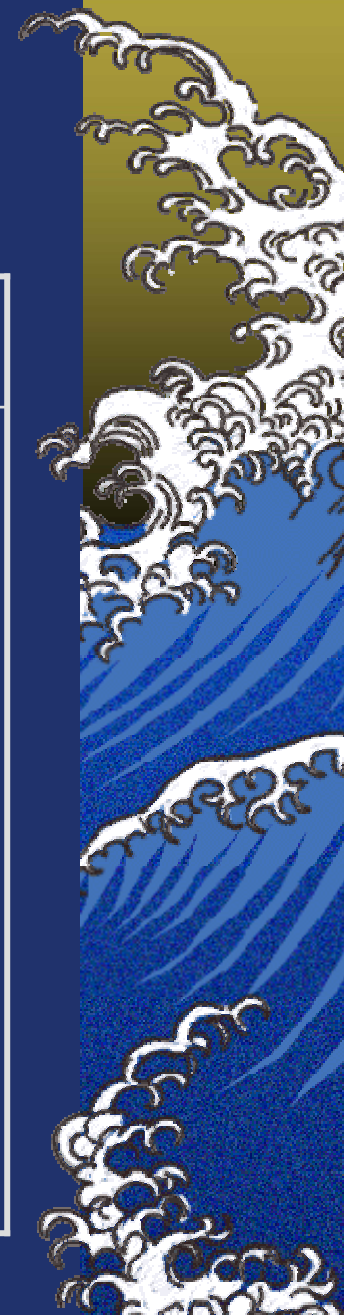
## *Importance of industrial sectors*

<i>USA</i>	<i>Japan</i>
Special strength in the service sector as well as in high tech and high value-added industries (characterised by few high performers); weaknesses in middle tech industries because of a comparatively low average standard in product and production technologies	Special strength in middle tech and middle value-added industries due to a high average standard of product and production technologies; weaknesses in the service sector and in high tech and high value-added industries because of the lack of high performers by which these industries are characterised



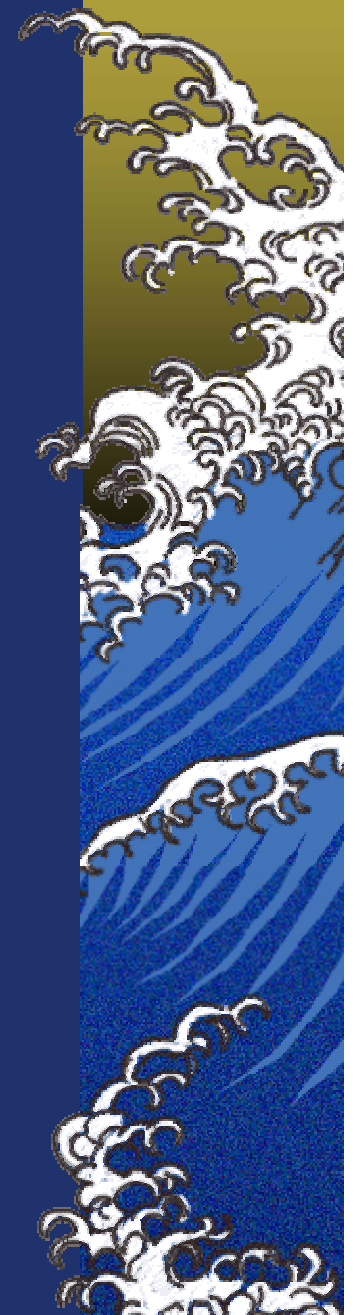
# *Economic context: Drivers of innovativeness*

<i>USA</i>	<i>Japan</i>
High significance of small, highly innovative and profitable start-up companies with regard to technological innovation, creation of new wealth, jobs and management techniques	Low significance of small, highly innovative and profitable start-up companies with regard to technological innovation, creation of new wealth, jobs and management techniques



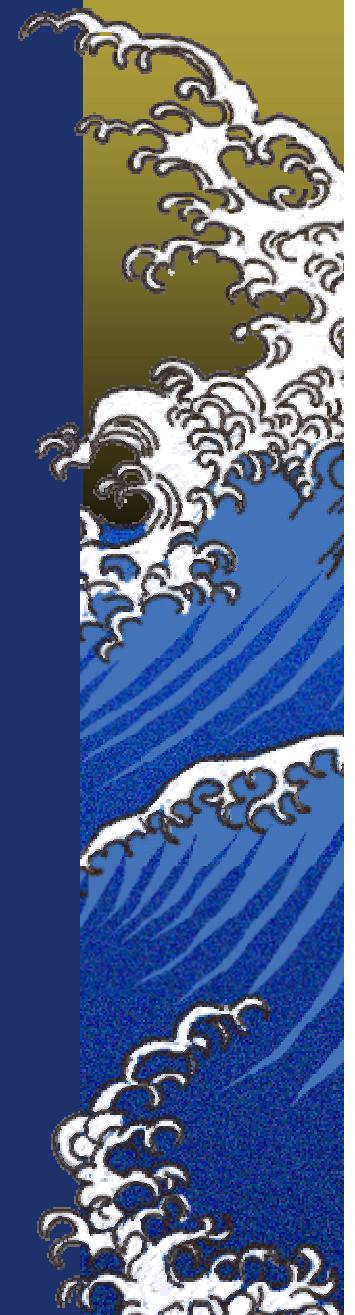
# *Management-related context: Corporate Governance*

<i>USA</i>	<i>Japan</i>
<i>Top-management from within and from outside the company</i>	<i>Top-management only from within the company</i>



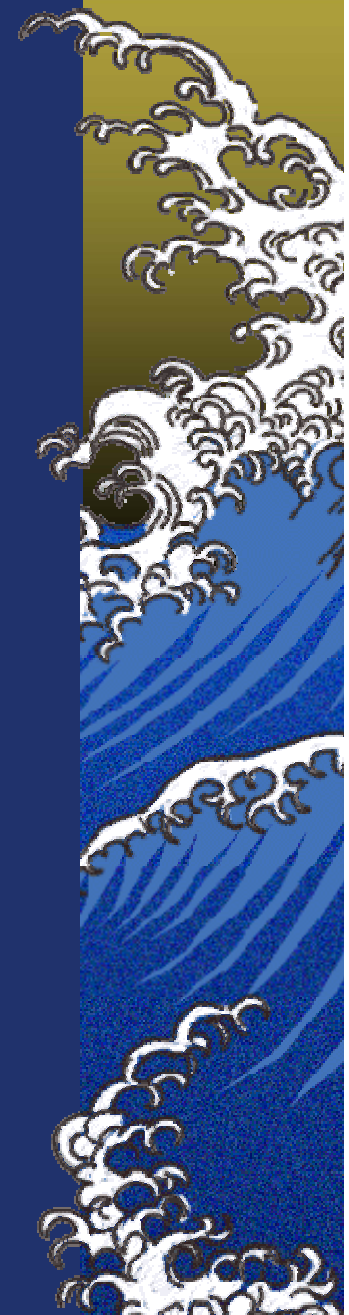
# *Management-related context: Management Strategies*

<i>USA</i>	<i>Japan</i>
Differentiation	Imitation



# *Management-related context: Organizational Structures*

<i>USA</i>	<i>Japan</i>
High degree of individual responsibility at the top management level; promotes quick and flexible decisions, however also increases the risk of wrong decisions	Smaller degree of individual responsibility at the top management level; promotes stability in the company, however also half-hearted compromises

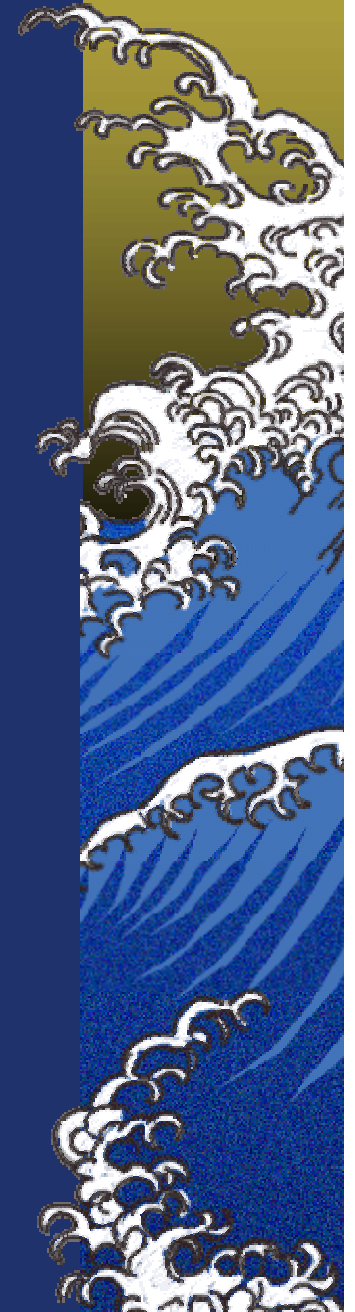


## *Result I*

The USA and Japan differ substantially in their approach towards innovativeness.

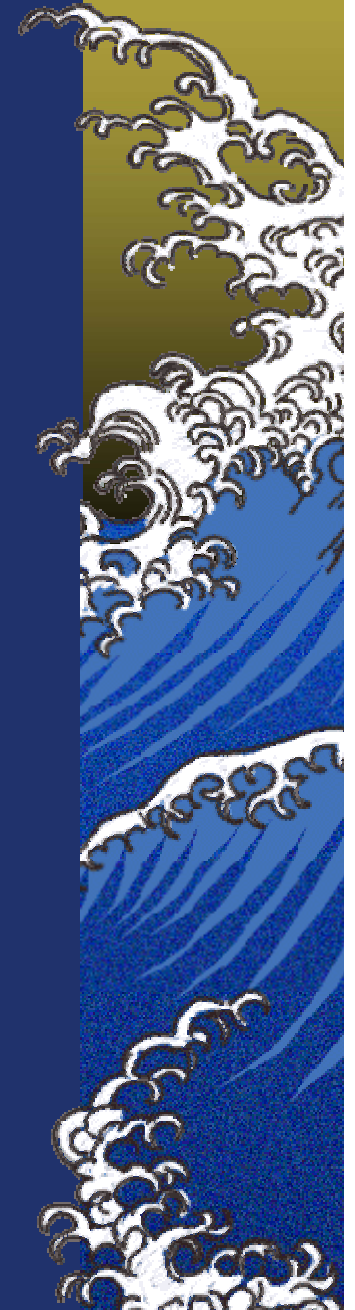
USA: Break-through innovations

Japan: Incremental innovations



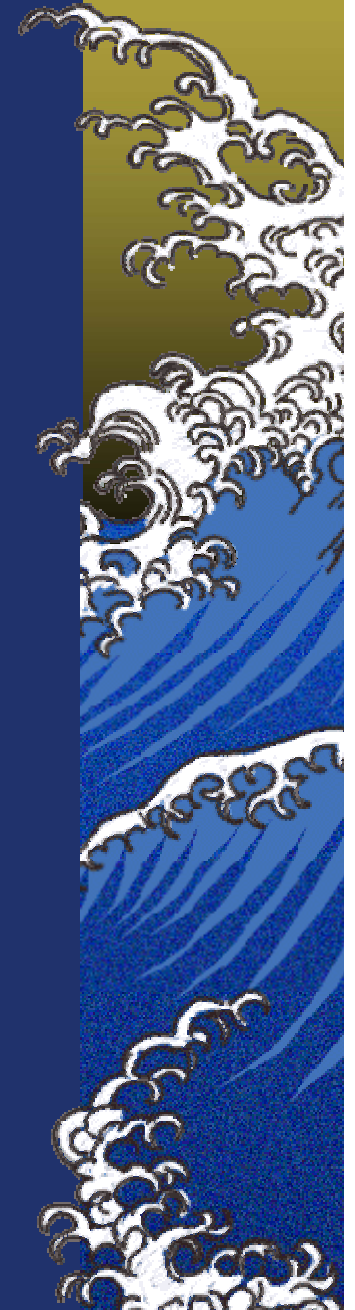
## *Result II*

It is not so much the actual (American or Japanese) approaches towards innovativeness themselves that have changed fundamentally over the last two decades, but the global business environment which ultimately determines if approaches towards innovativeness are successful or not.



# *Globalization's impact on innovation*

- Competitive environment
- New industries
- Organizational efficiency





## *Conclusion for Japanese innovativeness*

Learning from 'best practice' may need to be understood primarily as an inspiration process within the confines of what is possible. In contrast, how to put inspirations from foreign management models into practice can only be answered in close consideration of the specific context.

