

Handbook on the Knowledge Economy

Edited by

David Rooney

*Senior Lecturer, UQ Business School,
University of Queensland, Australia*

Greg Hearn

*Professor, Creative Industries Faculty,
Queensland University of Technology, Australia*

Abraham Ninan

*Senior Research Associate, Creative Industries Faculty,
Queensland University of Technology, Australia*

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

© David Rooney, Greg Hearn and Abraham Ninan 2005

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or photocopying, recording, or otherwise without the prior permission of the publisher.

Published by
Edward Elgar Publishing Limited
Glensanda House
Montpellier Parade
Cheltenham
Glos GL50 1UA
UK

Edward Elgar Publishing, Inc.
136 West Street
Suite 202
Northampton
Massachusetts 01060
USA



A catalogue record for this book
is available from the British Library

Library of Congress Cataloguing in Publication Data

Rooney, David, 1959–
Handbook on the knowledge economy / David Rooney, Greg Hearn, Abraham
Ninan.
p. cm.
Includes index.
I. Knowledge management. 2. Information technology. I. Hearn, Greg, 1957–
II. Ninan, Abraham, 1965– III. Title. IV. Series

HD30.2.R656 2005
658.4'038—dc22

2005044218

ISBN 1 84376 795 3 (cased)

Typeset by Cambrian Typesetters, Camberley, Surrey
Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall

Contents

<i>List of tables</i>	vii
<i>List of figures</i>	viii
<i>List of contributors</i>	ix
<i>Preface</i>	xv
1 Knowledge: concepts, policy, implementation <i>David Rooney, Greg Hearn and Abraham Ninan</i>	1
PART I CONCEPTS	
2 The material, mental, historical and social character of knowledge <i>David Rooney and Ursula Schneider</i>	19
3 Wisdom, ethics and the postmodern organization <i>Bernard McKenna</i>	37
4 Risk and knowledge <i>Joost van Loon</i>	54
5 Social epistemology: preserving the integrity of knowledge about knowledge <i>Steve Fuller</i>	67
6 Knowledge and social capital <i>Hitendra Pillay</i>	80
PART II POLICY	
7 Knowledge and cultural capital <i>Stuart Cunningham</i>	93
8 The organization of creativity in knowledge economies: exploring strategic issues <i>Paul Jeffcutt</i>	102
9 Analysing policy values in a knowledge economy <i>Phil Graham</i>	118
10 Knowledge issues and policy in the operation of industrial clusters <i>Abraham Ninan</i>	128
11 Intellectual property rights in the knowledge economy <i>Peter Drahos</i>	139

PART III IMPLEMENTATION

12	Information sharing <i>Donald M. Lamberton</i>	155
13	Collaboration and the network form of organization in the new knowledge-based economy <i>Thomas Mandeville</i>	165
14	Exploring the information space: a strategic perspective on information systems <i>Max Boisot</i>	178
15	'Tacit knowledge' versus 'explicit knowledge' approaches to knowledge management practice <i>Ron Sanchez</i>	191
16	Knowledge and social identity <i>Thomas Keenan</i>	204
17	Managing creativity in the knowledge economy <i>Mark Banks</i>	218
18	Inexperience and inefficiency in information transactions: making the most of management consultants <i>Stuart Macdonald</i>	229
19	The knowledge worker: a metaphor in search of a meaning? <i>Richard Joseph</i>	245
20	How to be productive in the knowledge economy: the case of ICTs <i>Greg Hearn and Thomas Mandeville</i>	255
21	Digital rights management (DRM): managing digital rights for open access <i>Brian Fitzgerald and Jason Reid</i>	268
	<i>Index</i>	279

Tables

5.1	'Modespeak': knowledge society Newspeak	70
14.1	Characteristics of institutional structures	185
15.1	Basic beliefs in tacit versus explicit knowledge management approaches	192
15.2	Advantages and disadvantages of tacit versus explicit knowledge management approach	197

6 Knowledge and social capital

Hitendra Pillay

Knowledge has always been at the core of economic development and social progress; however, in recent times there has been substantial interest and acknowledgement that the capacity to produce and use knowledge has much more explanatory value in understanding levels of economic (and social) welfare or rates of growth (Foray and Hargreaves 2002). However, much of the recent debate and thinking around knowledge has centred on knowledge management and has situated knowledge in the business and management disciplines with a focus on private sector enterprises. Enterprises whose practices are embedded in 'capitalist' values – maximizing monetary value of their investments which are usually achieved through exploitation of human, physical and/or social resources. The primary responsibility of management in these enterprises is to the owners of the business and shareholders rather than the 'public interest'. As a consequence the lexicon of knowledge discourse and thinking is, not surprisingly, skewed towards business and maximizing return for the financial investors.

However, a knowledge-based society should be about more than business efficiency and acquisition of wealth. It should have the capacity to regulate investment and growth for both economic and socio-cultural development, and private and public sector enterprises. Discourses such as those associated with the knowledge society and knowledge ecology imply more than the commercial enterprise – they are about a society in which commercial enterprise is but one aspect. The interrelatedness of economic performance and social and cultural conditions is well demonstrated in Knack and Keefer's (1977) study, which suggests that there is increasing evidence at a macro level that trust, civic norms and other social factors are key conditions for economic development. Further, comparative analysis by La Porta et al. (1997) confirmed that when there are two countries with similar GDP the one with higher regard for social factors tends to have more social infrastructure such as schools and hospitals, more sophisticated financial and management systems, and better fiscal policy. This interrelatedness of economic success and socio-cultural growth is increasingly being recognized and documented by development agencies such as the World Bank (2003) and the Asian Development Bank (1999).

The increasing appreciation of the link between socio-cultural and economic

conditions has led to diverse but potentially confusing use of concepts such as knowledge economy, knowledge society, social capital and a plethora of conceptual hybrids. Nevertheless, despite a lack of clarity, the current debate has encouraged deeper interrogation of relevant concepts and their applications. The challenge now is to navigate through this conceptual labyrinth and maximize the potential to bring competing yet legitimate imperatives found in contemporary knowledge discourse together into a holistic framework.

Against the above backdrop, this chapter attempts first to consider (different 'forms' of) knowledge as types of asset, which are often equated to 'capital', and how these may be maximized. Second, based on the different types of capital inherent in a knowledge society, the chapter will explore ways in which one can understand and operationalize *social capital* in both business and private sector growth, and development. Based on the above, the chapter argues that there is a need to understand the complexity of the notion of 'capital' within the increasing interest in knowledge and to cast our conceptual net wider than economic and commercial imperatives. Only then can we create a new perspective or philosophy driven by intellectual and other equitable values, such as moral and cultural, that bring more sustainable benefits.

Knowledge as capital

Knowledge may be conceptualized as an asset which 'contains' some form of understanding of the nature and relationships between the various elements of the things, concepts, beliefs or processes (the whole plus the elements of the whole – see William James (1909) for a detailed discussion). At its most basic level, therefore, knowledge is an individual's personal meanings derived from their understandings of those relationships. These relationships, however, are underpinned by political and cultural values and social norms. Thus, at a second level, despite relying on an individual's personal meanings, knowledge may be conceived as something that can be captured and transferred to others through training, social experiences, and cultural and technological artefacts, thereby creating a sharing of, and shared, understanding. Having knowledge (understandings) puts people, communities and organizations in a privileged position to use knowledge to leverage other assets. The aggregation of these tangible and intangible assets may be referred to as 'capital'. Bourdieu (1986), in his attempt to understand the structure and function of the social world, argued that to have a macro-level appreciation of how real economic and social growth manifests itself in real life we need to discuss capital in a way that moves beyond the economic perspective. Current knowledge commentators, building on Bourdieu's challenge, have been credited with advancing various types of capital and at different levels, such as economic, social and cultural capital at individual, organizational, national and global levels of practice (Soros 2000).

Social capital

The social structures, mechanisms, relationships and norms that shape the quality and quantity of society's social interactions are collectively referred to as social capital (Putnam et al. 1993). Putnam's thinking on social capital was influenced by Coleman (1988, p. 98), who defines social capital as a 'function of social structure producing advantage ... like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not have been attainable in its absence'. Maintaining the focus on action, Putnam views social capital as the social organization of features such as trust, norms and networks that facilitate social cohesion to improve the efficiency of social institutions and relationships through collective actions. Social capital is based on human relationships and the underpinning beliefs and values held by groups of people. Putnam points out that one of the benchmarks of a successful society is when a community has shared values and morals. Social values and morals, as noted by Bergson (1956), can emanate from two sources: tribal belonging, and the universal human condition. His argument suggests that it is the latter that the advocates of social capital should strive for. Social capital transcends the local social units such as individuals and immediate social groups (friends and workmates), and focuses on macro conditions such as business and political ideologies, organizational/community health and wellbeing, and professional practices. As already noted, evidence suggests that social cohesion is critical for business and societies to achieve sustainable economic and social development (Fukuyama 1995; Osberg 2003). Social capital is not the sum of the institution and values that underpin a society; it is the glue that holds them together (Putnam et al. 1993).

Other-related capital

Social capital is significantly influenced by two other types of capital: human and cultural. Baron et al. (2000) make a distinction between human and social capital by arguing that social capital is underpinned by knowledge and intellectual understanding of the relationships concerned with issues such as distribution, equity and social cohesion. Human capital, on the other hand, is about self-development and the emotional and cognitive capabilities of individuals which, when placed in a context where certain social norms and institutional structures influence human behaviour, merge and enhance social capital. Thus investing in the development of human capital alone may not be sufficient to grow social capital.

Cultural capital is often used loosely to refer to both a historical heritage as well as contemporary practices. The underpinning knowledge needed for cultural capital is confined to certain groups drawn together by a common belief or practice, whereas social capital is more universal, transcending a number of cultural groups. Most people acknowledge that cultural capital is

valuable and that it must continually evolve to survive. In the historical context, maximizing cultural capital requires interpreting and recording events/practices within the life of a culture (ethnic cultures and professional practices) rather than blindly relying on values and practices used for thousands of years. For example, the value of ancient artefacts and practices of cultural groups is not only in their direct current relevance, but also in their contribution to the understanding of historical practices which may guide contemporary vocational and cultural practices and innovations. Professional practices form professional culture, which is gradually developed by building on past knowledge and experiences. Thus cultural capital involves both professional and ethnic culture, and constitutes past and present knowledge that allows us to explain and understand our social and work-related behaviours.

Whilst these different types of capital all contribute to the knowledge society, they have different theoretical and philosophical underpinning assumptions. These assumptions presumably require these types of capital to operate under different laws of maximization. A lack of clear understanding of the underpinning assumptions and laws of maximization has traditionally led us to perceive different types of capital as competing with one another. This perception arises because we view them separately as a means to an end, rather than collectively contributing towards the growth and development of better quality of life for all. The next section discusses common tensions between social capital and economic capital that lead to the view that they are in competition.

The tension between economic and social capital

Traditionally accepted economic thinking says that increasing economic returns for investors involves the pursuit of self-interest through exploitation of resources (human, natural and other resources) to supply the demands of the market. However, with the emergence of the knowledge society and the 'knowledge worker', human resources are no longer perceived as merely a passive asset that just performs routine tasks in the cycle of production and supply. Human labour is now reconceptualized as human capital with the capacity to be innovative and thus create new demands rather than just react to the market by supplying its needs. Similarly, the market is not a passive recipient of products and services; market forces actually contribute to shape the nature of the products and services that are developed and made available. Thus, as Granovetter (1985) argues, the economically rational, self-interested behaviour assumed in many economic models unwittingly downplayed the significance of human capital and social relations in generating trust, in shaping expectations, and establishing and enforcing social norms which can be potent agents of change and growth. These social dynamics are now gaining legitimacy in the 'development' literature and are

regarded as having significant influence on business success, economic reform, regional integration and security (Fukuyama 1995).

According to standard economic theory, economic growth is optimized by balancing supply and demand to achieve equilibrium. The law of maximization of economic capital entails increasing capital's value by manipulating supply and demand of goods and services – limited goods in the market means that people will pay a higher price, a price that may be more than the goods are really worth. However, to achieve and sustain equilibrium of these market factors is difficult in the face of economic agents seeking to manipulate supply and demand for their own benefit. Unlike economic capital, social capital increases its values by making itself widely available; it becomes depleted if restricted and not used. For growth in social capital, a state of equilibrium (stasis) can be seen as perpetuating redundancy and stagnation (see Burt 2000). Social capital grows from interaction within diversity and even creative conflict. For example, if everyone had the same knowledge, there would be limited need for anyone to interact with others to learn and share ideas; the social dynamic that unpins social capital becomes redundant. This social interaction is underpinned by trust, respect for individuals, social norms and so on that in turn are linked to individuals' growth and wellbeing. It includes both human and individual capital but is more about collective understanding and associated actions.

The second tension between social capital and economic capital stems from the different assumptions they seem to operate under in dealing with values. Dominant economic thinking takes into account only values associated with economic behaviour, which is directly connected to 'profiting', treats all other values as given and does not factor them into the analysis. These economic values assume that each participant is there to maximize profits to the exclusion of all other considerations. Such assumptions may not be appropriate to sustain the development of a knowledge society. Soros (2000) critiques the standard economic assumption and argues that standard economic theory may not be the best tool to deal with what must go beyond economic theory. He insists that non-economic values, instead of being taken as given, must be treated as 'reflexive'. He argues that either value can influence economic maximization or economic maximization can influence values, depending on operating conditions. Thus values have a two-way feedback mechanism that connects them to social and market reality in a holistic manner.

The third source of tension is found in the debate on the contingent nature of the various forms of capital. Putnam et al. (1993, p. 37) argue that social capital underpins good government and economic progress: 'the social capital embodied in norms and networks of civic engagement seems to be a precondition for economic development as well as for effective government'. This is contrary to current approaches to development work and government

planning models, which are over-reliant on economic and financial indicators such as gross domestic product (GDP) and balance of payments. Growth in social capital often does not register on traditional indicators of GDP. For instance, better work practices in 'informal economic sectors', such as increased efficiency and cost reduction, may lead to improved wellbeing for many and yet not be counted in GDP. Equally, redistribution of resources may lead to more equity and wellbeing without any positive implications for GDP. Such redistribution could make a significant difference to the overall development of the country.

Social capital and operational issues

Having acknowledged the tensions above, we are compelled to revisit Bourdieu (1986) in relation to the convertibility of capital – how different types of capital transform from one to another and how such processes may form the basis of strategies adopted by social groups to ensure reproduction of capital. As David Suzuki argues, the world is not an infinite system: growth in one area may mean a compromise in another. Thus maximization of the different types of capital often just transforms one into another. However, short-term tradeoffs thus made may have long-term potential for a much higher net benefit to society. It is the dynamics of tradeoffs and the resultant effects that need further consideration as a tool for development and growth for a knowledge society. The above suggestion of tradeoffs is not counter to market fundamentalism; it is recognition of the changing nature of markets' responsibilities. Unless we adopt a holistic approach and combine the different types of capital that constitute the knowledge society we will continue to hinder growth and the development of a balanced global society (Nelson and Winter 1982; Soros 2000).

It appears that with the development of a global transactional economy and the pursuit of self-interest driven by capitalist ideologies, our moral and social values have been gradually transformed to support an ethic of single-minded competitiveness. Moral values related to 'social good' are being eroded by the push for a market-driven society – a world where economic maximization seems to be the only focus. This single-minded adoption of the market principle is now being perceived as market 'fundamentalism', where it is believed that the common interest is best served by an unwavering pursuit of self-interest. This has fostered a new relationship between self- and common (social) interest and is now being mandated by 'the market' to the extent that it is unclear if responsibility for the 'public good' is best met by governments and other public regulators. Whilst we may argue that the single-minded market-driven approach to national development is unrealistic, it has become doctrine in the West, and has become something to aspire to in developing countries, large corporations and public policy circles. As a result, over the last

decade at least, the public sector's regulators have increasingly been shying away from responsibilities for the delivery of social sector services such as health, education, welfare and pension schemes. Arguably, there is now renewed interest in understanding if not addressing the challenges that globalization brings for governments and governance in general (see European Commission 2003).

As noted earlier, social values are intrinsic and fundamental to well-functioning communities, implying that their validity transcends prevailing conditions. Communities often fail to identify and adopt appropriate shared values due to complacency and/or a desire by individual members to increase their personal wealth through the pursuit of self-interest. In recent years, this complacency has arguably contributed to the increasing breakdown in socio-cultural values such as mutual respect, moral values and cultural tolerance. The standard model of social development underpinned by economic rationalism seems to be failing. As a consequence, in recent years many international agencies have recognized the role of indigenous knowledge in building social capital (Finger and Schuler 2004). This has become a key factor in bringing peace and relative political stability to many developing countries, which in turn has ensured a climate that attracts investors to grow these countries' economies. An example of this focus on social capital (respect, trust and wisdom of community elders) can be seen in the role of the Iraqi Governing Council, Haiti's council of community elders, Fiji's Great Council of Chiefs, Afghanistan's tribal elders. The impact of these social structures and the inherent social capital and appreciation of indigenous knowledge that they reflect are indicative of the need to engage the social networks of indigenous communities to provide the political and civic stability essential for attracting the economic investment needed for growth.

Furthermore, recognition of the significance of indigenous knowledge can be seen in the deliberations at a recent conference on drug production in Afghanistan (United Nations Office on Drugs and Crime 2004). It was noted that poppy cultivation has a long history in Afghani culture – and without a history of drug abuse. Indigenous moral and cultural values appear to have been successful in regulating the use of such substances. Even today cultural wisdom continues to play a role in the use of opium by locals – without having to resort to punitive measures and legislation. However, recent increases in the production of opium may mean more economic returns for Afghans while at the same time having a severe impact in western countries with drug abuse problems. The demand and supply of narcotic drugs is therefore emblematic of how indigenous knowledge and the dynamics of global social and economic capital can work together (see Isham et al. 2002). Practitioners need to develop a deep understanding of indigenous knowledge attributes and capabilities. Based on such understanding, a matrix comprising different social and

economic institutions and their inter- and intra-relationships needs to be mapped out and juxtaposed with similar data from the West to develop an appreciation of the need for global social capital. Such grass-roots-level comparative analysis may lead to the development of sustainable interventions, unlike the current substitution model where farmers are asked to plant corn instead of poppies, with huge subsidies provided to offset the economic loss. Western industrialized nations and developing countries are concerned with different types of social capital comprising different variables, as noted by Klitgaard and Fedderke (1995). There is a need to develop more holistic models that take into consideration the full range of variables that impact on growth and sustained development of social capital for all groups of people (see Serageldin 1996).

Identifying and measuring social capital

Parallel with the theorizing is increasing interest in measuring social capital so that it may be experimented with to either maximize growth or control potential adverse effects (Portes and Landolt 1995) that may be detrimental to enhancing growth and quality of life. This is especially challenging because social capital comprises concepts such as trust, reciprocity, civic solidarity, social norms and practices, knowledge types such as indigenous, global, cultural and religious, institutional structures such as business organizations, social/community groups and governments, social networks and communication systems, all of which can be difficult to quantify. The challenge is increased when one considers that the quest is to measure not just the quantity but also the quality of social capital on a variety of scales.

Given the complex nature of the construct, even the most comprehensive definitions are multidimensional, incorporating different levels and units of analysis. Identifying core factors and developing key indicators of these factors can be very challenging as properties of many of the indicators (noted above) are inherently ambiguous. Thus social capital research cannot have (and it may not even be desirable to have) a single 'true' measure. The most useful approach will be to develop a relational understanding. As a consequence, most attempts to measure social capital have been partitioned into manageable units of this complex and multidimensional construct. However, these manageable units need to be linked to other manageable units to build a grand model, because keeping them in discrete manageable units may not further our understanding.

Attempts to measure social capital have adopted two broad perspectives which reflect Bergson's (1956) distinction between micro- and macro-levels of tribal belonging. This may be interpreted as the social capital of small units such as community groups and small business organizations. His macro-level universal human condition may be interpreted as the social capital of a number

of communities, states, regions, nations and large national and multinational businesses. At the tribal level, studies such as Kreuter et al. (1998) compiled indexes from a range of approximate items for measures of trust, membership and reciprocity to measure social capital in community-based health promotion. Similarly, Parcel and Menaghan (1994) developed measures for ascertaining family social capital by measuring the extent and size of extended families and the frequency and quality of contact between members. Tribal-level research on social capital in the business sector can be seen in Chua's (2002) research on social interaction as a basis for knowledge creation in business organization. He examined structural, relational and cognitive dimensions as a basis for social interaction, which in turn is used as an indicator of social capital within organizations. Interest in studies similar to the above has been triggered by businesses embracing learning and knowledge as their key for success. It has led to business organizations experimenting with social capital indicators such as attitudes (value of self, trust/perceived safety, reciprocity, personal empowerment, diversity/openness, relationships and belongingness in the workplace (see Anderson and Miller 2003; Spence et al. 2003).

At the macro level of social capital, the universal human condition, most studies have been conducted with the support of international development agencies such as the World Bank and the Soros Foundation. One approach has been to embed attributes of social capital in the Living Standard Measurements Survey, directly seeking individuals' responses to survey items focusing on moral, cultural, social norms and relationships. Narayan-Parker and Pritchett (1997) constructed a measure of social capital in rural Tanzania, using data from the Tanzania Social Capital and Poverty Survey (SCPS). This large-scale survey asked individuals about the extent and characteristics of their associational activity, and their trust in various institutions and individuals. They matched this measure of social capital with data on household income in the same villages to link social capital to economic indicators. They found that village-level social capital raises household incomes. Another more holistic approach to measuring social capital can be seen in Grootaert's (2003) Social Capital Integrated Questionnaire (SC-IQ). It has six factors: groups and networks; trust and solidarity; collective action and corporation; information and communication; social cohesion and inclusion; and empowerment and political action that constituted social capital at the household level. They provided detailed descriptions of what may be included under each of the six factors, and also possible approaches to data analysis. For researching multi-level social capital (household, communities and organizations) there is the Social Capital Assessment Tool (SOCAT) developed by the World Bank (Grootaert and van Bastelaer 2001). This tool uses both questionnaire plus focus group interviews to collect data on community assets, governance, collective action, density of local organizations, relationships between organi-

zations and communities. While the above research tools are useful, it is always necessary first to review the factors and items contained in these tools to assess their appropriateness to the proposed application. To make this judgement, it is important to have a full appreciation of the constructs and measuring indicators, levels of measurement and nature of context.

Alternatively, social capital proxies are identified and used as indicators of social capital. Use of proxies can be seen in Klesner's (2003) study, where he used social trust, membership in organizations, density and distribution of telephone services, and hours of television viewed daily as proxies of social capital in Mexico to ascertain the levels of political participation of people. He found strong relationships to political participation with organizational membership. His tentative explanation is that the government structure in Mexico has traditionally encouraged personal contact with officials aimed at individualized benefits rather than group-based benefits. In this, the government is supporting the pursuit of self-interest by fostering attributes of social practices that detract from pursuit of the common good.

This chapter outlined different types of capital that are often associated with knowledge management and discussed the tensions between these types of capital at conceptual as well as operational levels. It also discussed some contemporary approaches and tools to measure social capital. While the above discussions may provide insight into types of capital in a knowledge society and their management, there is a need to understand and manage tradeoffs inherent in the tensions between the different types of capital posited here. Such understanding should form the basis for developing a holistic model which may promote a balanced knowledge society.

References

- Anderson, A.R. and C.J. Miller. 2003. '“Class matters”: Human and social capital in the entrepreneurial process'. *Journal of Socio-Economics* 32:17–36.
- Asian Development Bank. 1999. *Fighting Poverty in Asia and the Pacific: The Poverty Reduction Strategy*. Manila: ADB.
- Baron, S., J. Field and T. Schuller. 2000. *Social Capital: Critical Perspectives*. Oxford: Oxford University Press.
- Bergson, H. 1956. *The Two Sources of Morality and Religion*. Garden City, NY: Doubleday.
- Bourdieu, P. 1986. *Forms of Capital: Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press.
- Burt, R.S. 2000. 'The network structure of social capital', in *Research in Organizational Behavior*, vol. 22, edited by R.I. Sutton and B.M. Staw. Greenwich, CT: JAI Press.
- Chua, A. 2002. 'The influence of social interaction on knowledge creation'. *Journal of Intellectual Capital* 3:375–93.
- Coleman, J. 1988. 'Social capital and the creation of human capital'. *American Journal of Sociology* 94(supplement):s95–s120.
- European Commission. 2003. 'Second progress report on economic and social cohesion (January 2003): Unity, solidarity, diversity for Europe, its people and its territory'. Luxembourg: Office for Official Publications of the European Communities.
- Finger, J.M. and P. Schuler. 2004. *Poor People's Knowledge: Promoting Intellectual Property in Developing Countries*. Washington, DC: World Bank.

- Foray, D. and D. Hargreaves. 2002. 'The development of knowledge of different sectors: A model and some hypothesis', in *OECD Conference on Knowledge Management and Learning*. Oxford.
- Fukuyama, F. 1995. *Trust: The Social Virtues and the Creation of Prosperity*. London: Hamish Hamilton.
- Granovetter, M. 1985. 'Economic action and social structure: The problems of embeddedness'. *American Journal of Sociology* 91:481-510.
- Grootaert, C. 2003. *Measuring Social Capital: An Integrated Questionnaire*. Washington, DC: World Bank.
- Grootaert, C. and T. van Bastelaer. 2001. 'Understanding and measuring social capital: A synthesis of findings from the social capital initiative'. Washington, DC: World Bank.
- Isham, J.T., T. Kelly and S. Ramaswamy. 2002. *Social Capital and Economic Development: Well Being in Developing Countries*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
- James, W. 1909. *A Pluralistic Universe*. London: Longmans Green.
- Klesner, J.L. 2003. 'Political attitudes, social capital, and political participation: The United States and Mexico compared'. *Mexican Studies* 19:29-64.
- Klitgaard, R. and J. Fedderke. 1995. 'Social integration and disintegration: An exploratory analysis of cross-country data'. *World Development* 23:357-69.
- Knack, S. and P. Keefer. 1977. 'Does social capital have an economic payoff? A cross country investigation'. *Quarterly Journal of Economics* 112:1251-88.
- Kreuter, M., N. Lezin and B. Baker. 1998. *Is Social Capital a Mediating Structure for Effective Community-Based Health Promotion?* Atlanta, GA: Health.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny 1997. 'Legal determinants of external finance'. *Journal of Finance* 52:1131-50.
- Narayan-Parker, D. and L. Pritchett. 1997. 'Cents and sociability: Household income and social capital in rural Tanzania', in *Policy Research Working Paper No. 1796*. Washington, DC: World Bank.
- Nelson, R.R. and S.G. Winter. 1982. *An Evolutionary Theory of Economic Change*. Cambridge, MA: Belknap Press of Harvard University Press.
- Osberg, L. 2003. *The Economic Implications of Social Cohesion*. Toronto and London: University of Toronto Press.
- Parcel, T.L. and E.G. Menaghan. 1994. *Parents' Jobs and Children's Lives*. Hawthorne, NY: Aldine de Gruyter.
- Portes, A. and P. Landolt. 1995. 'The downside of social capital'. *The American Prospect* 26:18-21.
- Putnam, R.D., R. Leonardi and R. Nanetti. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Serageldin, I. 1996. 'Sustainability as opportunity and the problem of social capital'. *Brown Journal of World Affairs* 3:187-203.
- Soros, G. 2000. *Open Society: Reforming Global Capitalism*. New York: Public Affairs.
- Spence, L.J., R. Schmidpeter and A. Habisch. 2003. 'Assessing social capital: Small and medium sized enterprises in Germany and the U.K.'. *Journal of Business Ethics* 41:17-29.
- Suzuki, T.D. 2002. 'The challenge of the 21st century: Setting the real bottom line'. *Journal of Business Administration and Policy Analysis* 30:47-66.
- United Nations Office on Drugs and Crime. 2004. *International Counter Narcotics Conference on Afghanistan*. http://www.unodc.org/pdf/afg/afg_intl_counter_narcotics_conf_2004.pdf.
- World Bank. 2003. *Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries*. Washington, DC: World Bank.

PART II

POLICY