

MASAHIKO AOKI

Henri and Tomoye Takahashi Professor of Japanese Studies, Emeritus
 Department of Economics
 Senior Fellow
 Stanford Institute of Economic Policy Research (SIEPR)
 Freeman and Spogli Institute of International Studies at Stanford (FSI)
 Stanford University
 Stanford, California 94305-6072, U.S.A.
 Telephone: 650-723-3975
 Fax: 650-725-5702
 E-mail: aoki@stanford.edu
 home page: www.stanford.edu/~aoki

(Coordinates in Japan)
 Distinguished Fellow
 Director, Virtual Center for Advanced Studies in Institution (VCASI)
 Tokyo Foundation
 1-2-2 Akasaka Minato-ku
 Tokyo 107-0074, Japan
 Telephone: +81 (0)3-6229-5524 [Secretary: Itaya]
 Fax: +81 (0)3-6229-5504

EDUCATION

B.A., Economics, University of Tokyo, 1962

M.A., Economics, University of Tokyo, 1964

Ph.D., Economics, University of Minnesota, 1967. Dissertation: *Increasing Returns to Scale and the Market Mechanism*

ACADEMIC AND RESEARCH POSITIONS

Stanford University: Assistant Professor of Economics, 1967-68; Visiting Professor, 1982 (Fall), Henri and Tomoye Takahashi Professor of Japanese Studies at Economics Department, 1984-2004, Emeritus 2004.

Harvard University: Assistant Professor of Economics, 1968-71; Fulbright Visiting Professor of Economics, 1979-80.

Kyoto University: Associate Professor of Economics, 1969-77; Professor of Economics, 1977-1991. Professor Emeritus (2001)

Swedish Collegium for Advanced Studies in the Social Sciences: Fellow, 1987-1988

University of Toyo: Visiting Professor, 1994 (Fall).

Keio University, Visiting Professor, 1996 (Spring), 1997 (Spring).

London School of Economics, Distinguished Visitor, STICERD, 1997 (Fall)

Hitotsubashi University Graduate School of International Corporate Strategy: Visiting Professor, 2004-Present

Tsinghua University School of Public Administration: Guest Professor, 2003-Present

Research Institute of International Trade and Industry (RIETI): President and Chief Research Officer, 2001.4-2004.3

PRIZES AND HONORS

1971 Nikkei Prize for Economic Books of the Year for *The Economic Theory of Organization and Planning*, (in Japanese), Iwanami Shoten Publishers, 1971.

1981 Fellow, Econometric Society

1985 Suntory Prize in Political Science and Economics for the Japanese edition of *The Cooperative Game Theory of the Firm* (Iwanami publishers) originally published by Clarendon Press of Oxford University, 1984.

1990 Japan Academy Prize

1990 Hiromi Arisawa Memorial Award for the Best Book in East Asian Studies (The Association of American University Press, Inc.) for *Information, Incentives, and Bargaining in the Japanese Economy*, Cambridge University Press, 1988.

1991 Iglesias Prize for Economics and Social Science of the Associazione Culturale "Lao Silesu" for *La microstruttura della economia giapponese*.

1993 Foreign Member, Swedish Royal Academy of Engineering Sciences (Economics).

1995 President, Japanese Economic Association (Vice President, 1994)

1996 Honorary Visiting Professor, People's University of China

1998 Joseph Schumpeter Prize (The International Joseph A. Schumpeter Society)

1999 Walras-Pareto Lecture, Universite de Lausanne

2003 Honorary Guest Professor, Tsinghua University

2008-11 President, The International Economic Association

2008 Clarendon Lecture in Business Studies, Oxford University

PROFESSIONAL ASSOCIATIONS AND EDITORSHIP

Econometric Society: member, 1967-present; Fellow elected, 1981; Council, 1987-1993; Far Eastern Standing Committee 1987-1993 (chairman, 1989-90); Program Committee, World Congress, 1990, 1995.

American Economic Association: member, 1967-present.

Japanese Economic Association (formerly Association for Economics and Econometrics): member, 1969-present; Council, 1978-84, 1987-1993; Vice President (1994); President (1995).

International Economic Association, Program Committee, 10th World Congress, Moscow, 1992. Co-organizer for roundtable conference on "Institutional Foundations for East Asian Development," 1996. President-Elect and Executive Committee 2005-08.

Journal of Public Economics, (North-Holland), Associate Editor, 1972-82.

International Journal of Industrial Organization, (North-Holland), Associate Editor, 1982-1990.

Journal of the Japanese and International Economies, (Academic Press), Editor-in-Chief, 1987-1997. Founding Editor, 1997-present.

Industrial and Corporate Change (Oxford University Press), Associate Editor, 1991-2000, Scientific Committee 2001-present.

Cournot (Formerly, Saint Gobain) Center for Economic Studies (Paris), Scientific Committee, 2000-present.

PUBLICATIONS

Books Authored (in English):

The Cooperative Game Theory of the Firm, Oxford: Clarendon Press, 1984. Translated into Japanese.

Information, Incentives, and Bargaining in the Japanese Economy, Cambridge, UK and New York: Cambridge University Press, 1988. Spanish translation: *La Estructura de la Economía Japonesa*, Fondo de Cultura, Económica, 1990. French translation: *Economie Japonaise: information, motivations et marchandage*, Económica, 1991. Italian translation: *La Microstruttura della Economia Giapponese*, Franco Angeli, 1991. Japanese translation: *Nihon keizai no Seido Bunseki*, Chikuma Shobo, 1991. Chinese translation: *Riben Jingji Zhong de Xinxi Jili yu Tanpan*, Shangwu Yinshuguan, 1994. Russian translation: *Фирма в японской экономике*, Лениздат, 1995.

Information, Corporate Governance, and Institutional Diversity: Competitiveness in Japan, US, and Transitional Economies, translated by S. Jehlik, Oxford: Oxford University Press, 2000.

Toward A Comparative Institutional Analysis, MIT Press, 1992. Japanese translation: *Hikaku Seido Bunseki ni mukete*, NTT publishers, 2001. Chinese translation: *Bijiao Zhidu Fenxi*, Far Eastern Publishers, 2001, Best translated Book, City of Shanghai (2003). French translation, *Fondements d'une analyse institutionnelle compare*, Albin Michel, 2006.

Books Edited and Co-Authored (in English)

Economic Analysis of the Japanese Firm, Amsterdam: North-Holland, 1984.

The Firm as a Nexus of Treaties, co-edited with Bo Gustafsson and Oliver E. Williamson, London: Sage Publications, 1990.

The Japanese Firm: Its Competitive Sources, co-edited with Ronald Dore, Oxford University Press, 1994. Translated into Japanese.

The Japanese Main Bank System and Its Relevancy for Developing and Transforming Economies, co-edited with Hugh Patrick, Oxford: Oxford University Press, 1994. Translated into Japanese and Chinese.

Corporate Governance in Transitional Economies: Insider Control and Roles of Banks, World Bank Institute, 1994. Translated into Chinese, Vietnamese, and Russian.

The Role of Government in East Asian Economic Development: Comparative Institutional Analysis, co-edited with Hyung-ki Kim and Masahiro Okuno-Fujiwara, Oxford: Oxford University Press, 1997. Translated into Chinese and Japanese.

Institutional Foundations of East Asian Economic Development, Proceedings of an International Economic Association Round Table Conference, jointly edited with Yijiro Hayami, London: Macmillan Press, 1998.

Finance, Governance and Competitiveness in Japan: Essays in Honor of Hugh Patrick, co-edited with Garry Saxonhouse, Oxford: Oxford University Press, 2000.

Communities and Markets in Economic Development, co-edited with Yujiro Hayami, Oxford: Oxford University Press, 2001.

Corporate Governance in Japan: Institutional Change and Organizational Diversity, co-edited with G Jackson and H. Miyajima, Oxford University Press, 2007.

Academic Articles in English:

"A Note on Marshallian Process under Increasing Returns," *Quarterly Journal of Economics*, 84(1970), 100-12.

"Marshallian External Economies and Optimal Tax-subsidy Structure," *Econometrica*, 39(1971), pp. 35-53.

"Two Planning Processes for an Economy with Production Externalities," *International Economic Review*, 12(1971), pp. 403-14.

"An Investment Planning Process for an Economy with Increasing Returns," *Review of Economic Studies*, 38(1971), 273-80. Reprinted in *The Economics of Increasing Returns*, edited by G. Heal, International Library of Critical Writings in Economics, Edward Elgar.

"Dual Stability in a Cambridge-type Model," *Review of Economic Studies*, 64 (1977), pp. 143-51.

"Worker Management and Worker-owner Sharing in the Hierarchical Work Organization," *Economic Analysis and Workers Management*, 13 (1979), pp. 97-107.

"Linear Wage Contract vs. the Spot Market in their Risk-bearing Functions," *Economic Studies Quarterly*, 30 (1979), pp. 97-106.

"A Model of the Firm as a Stockholder-Employee Cooperative Game," *American Economic Review*, 70 (1980), pp. 600-10.

"Equilibrium Growth of the Hierarchical Firm: Shareholder-Employee Cooperative Game," *American Economic Review*, 72 (1982), pp. 1097-110.

"Managerialism Revisited in the Light of Bargaining-Game Theory," *International Journal of Industrial Organization*, 1(1983), pp. 1-21.

"Aspects of the Japanese Firm," in *Economic Analysis* (1984): pp. 3-43.

"Shareholders' Non-Unanimity on Investment Financing: Bank vs. Individual Investors," *ibid*, pp. 193-224.

"Innovative Adaptation through Quasi-Tree Structure: An Emerging Aspect of Japanese Entrepreneurship," *Zeitschrift für Nationalökonomie*, (1984), supplementum, pp. 177-98.

"Comments on C. Pissarides, 'Dynamics of Unemployment, Vacancies, and Real Wages with Trade Unions,'" *Scandinavian Journal of Economics*, 87(1985), pp. 404-7.

"Horizontal vs. Vertical Information Structure of the Firm," *American Economic Review*, 76(1986), pp. 971-83. Reprinted in *The Theory of the Firm: Critical Perspectives*, edited by N.Foss, Routledge.

"Macroeconomic Background for High-tech Industrialization in Japan," in R. Landau and N. Rosenberg (eds.), *The Positive Sum Strategy*, National Academy Press, 1986, pp. 569-81.

"Incentive to Share Knowledge: An Aspect of the Japanese Industrial Organization," in S. Hedlund, *Incentive and Economic Systems*, Croom Helm, 1987, pp. 57-75.

"The Japanese Firm in Transition," in Y. Yasuba and K. Yamamura (eds.), *The Japanese Political Economy: Vol. 1, The Domestic Transformation*, Stanford University Press, 1987, pp. 263-88.

"Incentive-Compatible Approximation of a Nashlike Solution under Non-convex Technology," in T. Groves, R. Radner and S. Reiter (eds.), *Information, Incentives and Economic Mechanisms: Essays in Honor of Leonid Hurwicz*, University of Minnesota Press and Basil Blackwell, 1987, pp. 295-307.

"The Japanese Bureaucracy in Economic Administration: A Rational Regulator or Pluralist Agent?" in John Shoven (ed.), *Government Policy Towards Industry in the United States and Japan*, Cambridge University Press, 1988, pp. 265-300.

"The Japanese Firm as an Innovating Institution," co-authored by Nathan Rosenberg, included in Takashi Shiraishi and Shigeto Tsuru, (eds.), *Economic Institutions in a Dynamic Society*, Macmillan, 1989, pp. 137-154.

"The Japanese Firm as a Nexus of Employment and Financial Contracts," *Journal of the Japanese and International Economies*, 3(1989), pp. 345-66.

"The Participatory Generation of Information Rents and the Theory of the Firm," in *The Firm as a Nexus* (1990): pp. 26-52.

"Towards an Economic Model of the Japanese Firm," *Journal of Economic Literature*, 28(1990): pp. 1-27. Reprinted in *Transaction Cost Economics*, edited by O. E. Williamson and S. E. Masten, *International Library of Critical Writings in Economics Series*, No. 54, Edward Elgar; and in *The Economics of Modern Business Enterprise*, edited by M. Ricketts, *International Library of Critical Writings in Economics*.

"New Paradigm of Work Organization and Coordination: Lessons from Japanese Experiences," in Stephen Marglin (ed.), *The Golden Age of Capitalism*, Oxford University Press, 1990, pp. 267-93.

"Global Competition, Firm Organization and Total Factor Productivity: A Comparative Micro Perspective," in OECD, *Technology and Productivity, The Challenge for Economic Policy*, OECD, 1991.

"Decentralization-Centralization in Japanese Organization: A Duality Principle," in S. Kumon and H. Rosovsky (eds.), *The Japanese Political Economy Vol. 3*, Stanford University Press, 1992, pp. 142-69.

"Bargaining Game Theoretic Approach to the Japanese Firm," in Paul Sheard (ed.), *International Adjustment and the Japanese Firm*, Allen and Unwin, 1992, pp. 30-49.

"Corporate Organization, Finance and Innovation," jointly with G. Dosi, in V. Zamagni (ed.) *Finance and*

the Enterprise, Academic Press, 1992, pp. 37-61.

"The Motivational Role of an External Agent in the Informationary Participatory Firm," in S. Bowles and H. Gintis (eds.), *Democracy and Markets: Problems of Participation and Efficiency*, Cambridge University Press, 1993, pp. 231-47.

"The Japanese Firm as a System of Attributes" in *The Japanese Firm* (1994): pp. 11-40.

"Contingent Governance of Teams: Analysis of Institutional Complementarity," *International Economic Review*, (1994): pp. 657-76.

"Towards Comparative Institutional Analysis," in A. Heertje (ed.), *The Makers of Modern Economics*, Vol. 2, Edward Elgar, 1994, pp. 417-74.

"The Japanese Main Bank System: An Overview," jointly with Hugh Patrick and P. Sheard, in *The Japanese Main Bank System* (1994): pp. 3-50.

"Monitoring Characteristic of the Japanese Main Bank System: Analytical and Developmental View," *ibid*, pp. 109-41.

"Controlling Insider Control: Issues of Corporate Governance in Transitional Economies," in *Corporate Governance in Transitional Economies* (1994): pp. 3-29.

"An Evolving Diversity of Organizational Mode and Its Implications for Transitional Economies," *Journal of Japanese and International Economies*, 10(1995), pp. 330-353.

"The Gains from Organizational Diversity: An Evolutionary Game Parable," in H. Siebert (ed.), *Trends in Business Organization: Do Participation and Cooperation Increase Competitiveness?*, J.C.B. Moha (Paul Siebeck) Tübingen 1995, pp. 265-79.

"Elements of Social Capability: The Case of Japan," in Bon Ho Koo and Dwight Perkins (eds.); *Social Capability and Long-Term Economic Growth*, 1995, Macmillan Press, pp. 159-80.

"Non-Hierarchical Aspects of Internal Organization," in Beth Allen (ed.), *Economics in a Changing World*, Tenth World Congress of the International Economic Associations Proceedings, Macmillan Press and St. Martin's Press, 1996, pp. 239-75.

"Towards a Comparative Institutional Analysis: Motivations and Some Tentative Theorizing," Presidential address to the annual meeting of the Japan Association of Economics and Econometrics, *Japanese Economic Review*, 1996, pp. 1-19. Reprinted in C. Menard (ed.), *The Foundations of the new Institutional Economics, The international library of the New Institutional Economics*, Vol. 1, Cheltenham, UK, pp. 477-495.

"An Evolutionary Parable of the Gains from International Organizational Diversity," in R. Landau, T. Taylor and G. Wright (eds.), *Mosaic of Economic Growth*, Stanford University Press, 1996, pp. 247-63.

"Beyond *the East Asian Miracle*: Introducing the Market Enhancing View," jointly with K. Murdock and M. Okuno-Fujiwara, in *The Role of Government* (1997): pp. 1-37.

"Unintended Fit: Organizational Evolution and Government Design of Institutions in Japan," *ibid*: p. 233-53.

The Role of Community Norms and Government in East Asian Rural-inclusion Development and Institutional Building, in *The Institutional Foundations* (1998): pp. 29-51.

"The Evolution of Organizational Conventions and Gains from Diversity," *Industrial and Corporate Change* 7(1998): pp. 399-431. Reprinted in G. Dosi et al (eds.) *Understanding Industrial and Corporate Change*, Oxford UK: Oxford University Press, 2005, pp. 137-66.

A Note on the Role of Banking in Developing Economies in the Aftermath of the East Asian Crisis, presented at the 1st ABCDE-Europe conference of the World Bank in Paris, June 1999.

"Relational Banking as an Institution and its Viability under Competition," jointly with Serdar Dinc, in G. Saxonhouse and M. Aoki (eds.) *Finance, Governance and Competitiveness in Japan*, op cit.: pp. 9-42.

"Institutional Evolution as Punctuated Equilibria," in C. Menard (ed.), *Institutions, Contracts, Organizations: Perspectives from New Institutional Economics*, Edward Elgar, 2000. Reprinted in C. Menard (ed.), *The Foundations of the New Institutional Economics, The International Library of the New Institutional Economics*, Vol. 1, Cheltenham, UK, pp.268-90.

"Information and Governance in the Silicon Valley Model," in X. Vives (ed.), *Corporate Governance: Theoretical and Empirical Perspectives*, Cambridge, UK: Cambridge University Press, 2000, pp. 169-195.

"Community Norms and Embeddedness: A Game Theoretic Approach," in M. Aoki and Y. Hayami (eds.), *Communities and Markets*, op. cit.: pp.97-125.

"Information, Incentives and Option Value: the Silicon Valley Model," co-authored with Hirokazu Takizawa, *Journal of Comparative Economics*, 30(2002), pp. 759-786.

"Modularity in Industrial Architecture: its Relevance to Efficiency and Innovative Capability," co-authored with H. Takizawa, *mimeo*, 2002.

"An Organizational Architecture of T-form: Silicon Valley Clustering and its Institutional Coherence," *Industrial and Corporate Change*, 13(2004), pp.967-81.

"Comparative Institutional Analysis of Corporate Governance" in A. Grandori (ed.) *Corporate Governance and Firm Organization: Microfoundations and Structural Forms*, Oxford, UK: Oxford University Press, 2004, pp. 31-44.

"Schumpeterian Innovation in Institution," in F. Malerba and S. Brusoni (eds.), *Perspectives on Innovation*, Cambridge, U.K.: Cambridge University Press, 2007, pp. 227-50.

"Endogenizing Institution and Institutional Change," *Journal of Institutional Economics*, 3 (2007), pp.1-31. Slightly different version was published as "Analyzing Institutional Change: Integrating Endogenous and Exogenous Views," in J. Kornai, L. Martyas and G. Roland (eds.), *Institutional Change and Economic Behaviour*, IEA Conference Volume N.144, London: Palgrave Macmillan, 2008, pp.113-133.

"Whither Japan's Corporate Governance?" in M. Aoki et al (eds.), *Corporate Governance in Japan: Institutional Change and Organizational Diversity*, Oxford University Press,(2007), pp. 427-48.

"Understanding an Emergent Diversity of Corporate Governance and Organizational Architecture: An Essentiality-based Analysis," *Industrial and Corporate Change* (2008) , pp. 1-27.

CONSULTING FOR INTERNATIONAL ORGANIZATIONS, FOREIGN GOVERNMENTS

The World Bank, Economic Development Institute. Project leader on "The Japanese Main Bank System and Its Relevancies for Developing and Transforming Socialist Economies," 1991-1993. Project leader on "Corporate Governance in Transitional Economies: Insider Control and Role of Banks," 1993-94. Project leader on "Role of the Government in East Asia Development: Comparative Institutional Analysis," 1993-95. Project leader on "Communities and Markets in Economic Development", 1997-99.

The World Bank, Senior Academic Advisor for *World Development Report 1997, 2000*.

Government of China and the World Bank, Policy Options for Reform of Chinese State-Owned Enterprises, 1995.

European Bank of Reconstruction and Development, Academic Advisory Committee for research project on “Transition Economies”, 2003-present.

Asian Development Bank Institute, Advisory Committee, 2004-present

Deutsches Institut fuer Japanstudien, Academic Advisory Board, 2005-present.

World Economic Forum, Global Agenda Council, 2008

PUBLIC SERVICES in Japan

The Research Institute of International Trade, Industry and Economy, IAI, President and Chief Research Officer, 2001-2003.

The Japan Society for Academic Promotion, Center of Excellence Program Committee, Member and Chairman of Social Sciences Division, 2004-present.

The Ministry of International Trade and Industry: Research Institute of International Trade and Industry, Advisory Board, 1988-1990, Overseas Advisory Board, 1994-1997, Director-in-General, 1997-2001.

The Prime Minister's Office: Economic Council, 1981-82; Science and Technology Council, General Planning Committee, 1988-1990; Science and Technology System Reform Committee, 2001-2004.

Stanford Japan Center, Board of Directors, 1989-present.

Supreme Court, General Rule-Making Consultative Committee, 2002-2004.

Japan Association of Corporate Executives (Keizai Douyuukai), Special Advisor to the Chairman, 2004-present.

Books Authored and Edited in Japanese (excluding translations of books authored/edited in English)

『組織と計画の経済理論』 (*Economic Theory of Organization and Planning*), Tokyo: Iwanami Shoten, 1971.

『経済体制論 I : 経済学的基礎』 (*Theory of Economic Systems I: Economic Foundation*), edited, Toyo Keizai Shinposha, 1977.

『企業と市場の模型分析』 *Model Analysis of the Firm and the Market*, Tokyo: Iwanami Shoten, 1978.

『所得分配の理論』 (*Theory of Income Distribution*), Chikuma Shobo, 1979.

『企業の経済学』 (*Economics of the Firm*), co-authored with H. Itami, Iwanami Shoten, 1985.

『日本企業の経済学』 (*Economics of the Japanese Firm*), coauthored with K. Koike and I. Nakatani, Tokyo: TBS-Britannica, 1986.

『日本企業のグローバル化 ; 情報システム、R & D と人的資源開発』 (*The Globalization of the Japanese Firm: Information System, R&D and Human Resource Development*), co-authored with K. Koike and I. Nakatani, PHP Research Institute, 1989.

『日本企業の組織と情報』 (*The Organization and Information of the Japanese Firm*), Toyo Keizai Shinposha, 1989.

『京都とスタンフォードのあいだで』 (*Between Kyoto and Stanford*), Chikuma Syobo, 1992.

『経済システムの進化と多元性』 (*The Evolution and Diversity of Economic Systems*), Toyo Keizai Shinposya, 1995. Translated into English as *Information, Corporate Governance and Institutional Diversity* (*op cit*).

『経済システムの比較制度分析』 (*Comparative Institutional Analysis of Economic Systems*), co-authored with M. Okuno-Fujiwara, Tokyo: University of Tokyo Press, 1996. Translated into Chinese and Korean.

『市場の役割、国家の役割』 (*The Role of the Market, the Role of the State*), co-edited with T. Okazaki and M.Okuno-Fujiwara, Toyo-keizai Shinposha, 1999.

『転換期のアジア経済と日本企業』 (*The East Asian Economies and Japanese Companies at a Turning Point*), co-edited with J. Teranishi, Toyo-keizai Shinposha, 2000.

『大学改革』 (*University Reform*), co-edited with A. Sawa and Daido, Toyo-Keiza Shinposha, 2001

『モジュール化:新しい産業アーキテクチャの本質』 (*Modularity: the Nature of Emergent Organizational Architecture*), co-edited with H. Ando, Toyo-keizai Shinposha, 2002. Translated into Chinese.

『移りゆく十年、変わらぬ視点』 (*Unwavering Coordinates in a Decade of Flux*), Nikkei Bizinesuman Bunko, 2002.

『日本の財政改革：「国のかたちをどう変えるか」』 (*Fiscal System Reform in Japan: How to Change the Frame of the State*) co-edited with K.Tsuru, Toyo-Keizai Shinposha, 2004.