CURRICULUM VITAE DAVID CASS

BIRTH: January 19, 1937; Honolulu, Hawaii.

BUSINESS ADDRESS: CARESS

Department of Economics 435 McNeil Building

University of Pennsylvania Philadelphia PA 19104

Telephone (215)898-5735

Fax (215)573-2057

Email dcass@ssc.upenn.edu

HOME ADDRESS: 339 S. 26th St.

Philadelphia PA 19103

Telephone (215)545-4628

Fax (215)545-4628

CITIZENSHIP: United States

MARITAL STATUS: Divorced; two children (Stephen Allen, born

February 1962; Lisa Elaine, born May 1968).

EARNED DEGREES: A.B. (Economics), magna cum laude, University of Oregon, 1958. Ph.D.

(major Economics, minor Statistics), Stanford University, 1965.

CURRENT POSITION:

Paul F. and E. Warren Shafer Miller Professor of Economics, University of Pennsylvania, 1988-

PREVIOUS POSITIONS:

USAR (active 1959-60), discharged 1st Lieutenant, 1959-1965.

Research Staff Member, Cowles Foundation for Research in Economics, Yale University, 1964-1970.

Assistant Professor of Economics, Yale University, 1965-1967.

Associate Professor of Economics, Yale University, 1967-1970.

Professor of Economics, Carnegie-Mellon University, 1970-1974.

Visiting Professor of Economics, Tokyo University, 1970-1971.

Professor of Economics, University of Pennsylvania, 1974-1988.

Sherman Fairchild Distinguished Scholar, California Institute of Technology, 1978-1979.

Visiting Researcher, CEPREMAP, Paris, 1983-1984.

Visiting Professor of Economics, University of Geneva, spring, 1983-1984.

Professor of Economics, European University Institute, spring, 1995-6, 1996-1997.

Visiting Professor of Economics (short term): Hebrew University, 1976; University of Paris 12, 1981, 1984; Autonoma, Barcelona, 1984, 1987; Bogaziçi University, 1985; University of Paris 1, 1986, 1990, 1994; University of Paris 10, 1987, 1996; Bonn University, 1988; CEPREMAP, Paris, 1990; Carlos III, Madrid, 1992.

HONORS:

Phi Beta Kappa, (elected) January, 1958.

Woodrow Wilson Fellowship, 1960-1961.

Haynes Foundation Dissertation Fellowship, 1963-1964.

Guggenheim Foundation Fellowship, 1970-1971.

Fellow of the Econometric Society, (elected) 1972.

Mary Elizabeth Morgan Prize for Excellence in Economics (Department of Economics, University of Chicago), 1976.

Honorary Doctorate in Economic Science, University of Geneva, 1994.

Distinguished Fellow, American Economic Association, 1999.

Fellow of the American Academy of Arts and Sciences, (elected) 2003.

MAJOR PROFESSIONAL ACTIVITIES:

American Editor. The Review of Economic Studies, 1968 - 1972.

Associate Editor, Journal of Economic Theory, 1968 - 1982.

Associate Editor, Journal of Financial Economics, 1973 - 1978.

Co-Director (with K. Shell), CARESS (Center for Analytic Research in Economics and the Social Sciences), University of Pennsylvania, 1975 - 1986; Director, 1987 -

Co-Editor, Economic Theory, 1989–2004, Advisory Board 2004-

Advisory Board, Annals of Finance, 2004 -

BOOKS:

Essays in the Theory of Optimum Economic Growth, unpublished doctoral dissertation, Stanford University, 1965.

Selected Readings in Macroeconomics from Econometrica (with L.W. McKenzie) North-Holland, 1974.

The Hamiltonian Approach to Economic Dynamics (with K. Shell), Academic Press, 1976.

ARTICLES:

Optimum growth in an aggregative model of capital accumulation. Rev Econ Studies 37, 233-240 (1965).

A re-examination of the pure consumption loans model (with M.E. Yaari). J Pol Econ 74, 353-367 (1966).

A turnpike theorem. Econometrica 34, 838-850 (1966).

Individual saving, aggregate capital accumulation and efficient growth (with M.E. Yaari). Essays in the Theory of Optimal Economic Growth (K. Shell, ed.), MIT, 1967.

The implications of alternative saving and expectations hypotheses for the choice of techniques and patterns of growth (with J.E. Stiglitz). *J Pol Econ* 77, 586-627 (1969).

The structure of investor preferences and asset returns, and separability in portfolio allocation (with J.E. Stiglitz). *J Econ Theory* 2, 122-160 (1970).

Present values playing the role of efficiency prices in the one-good growth model (with M.E. Yaari). *Rev Econ Studies* 38, 331-339 (1971).

- On capital overaccumulation in the aggregative, neoclassical model of economic growth: A complete characterization, J Econ Theory 4, 200-203 (1972).
- Distinguishing inefficient competitive growth paths: A note on capital overaccumulation and rapidly diminishing future value of consumption in a fairly general model of capitalistic production. *J Econ Theory* 4, 224-240 (1972).
- Risk aversion and wealth effects on portfolios with many assets (with J.E. Stiglitz. *Rev Econ Studies* 39, 331-354 (1972).
- On the Wicksellian point-input, point-output model of capital accumulation: A modern view (or neoclassicism slightly vindicated). *J Pol Econ* 81, 71-97 (1973).
- Duality: A symmetric approach from the economist's vantage point. J Econ Theory 7, 272-295 (1974).
- The Hamiltonian representation of static competitive or efficient allocation. *Essays in Modern Capital Theory*, (M. Brown, K. Sato, and P. Zaremba, eds.), North-Holland, 1976.
- The structure and stability of competitive dynamical systems (with K. Shell). *J Econ Theory* 12, 31-70 (1976).
- The role of money in supporting the Pareto optimality of competitive equilibrium in consumption-loan type models (with M. Okuno and I. Zilcha). *J Econ Theory* 20, 41-80 (1979); reprinted in *Models of Monetary Economies* (J.H. Kareken and N. Wallace, eds.), Federal Reserve Bank of Minneapolis, 1980.
- Efficient intertemporal allocation, consumption-value maximization and capital-value transversality: A unified view (with M. Majumdar). *General Equilibrium, Growth and Trade: Essays in Honor of Lionel McKenzie* (J.R. Green and J.A. Scheinkman, eds.), Academic Press, 1979.
- Money in consumption-loan type models: An addendum. *Models of Monetary Economies* (J.H. Kareken and N. Wallace, eds.), Federal Reserve Bank of Minneapolis, 1980.
- In defense of a basic approach (with K. Shell). *Models of Monetary Economies* (J.H. Kareken and N. Wallace, eds.), Federal Reserve Bank of Minneapolis, 1980.
- Existence of competitive equilibrium in a general overlapping-generations model (with Y. Balasko and K. Shell). *J Econ Theory* 23, 307-322 (1980).
- Do sunspots matter? (with K. Shell). *J Pol Econ* 91, 193-227 (1983); a different, earlier version was published (in French translation) as Les taches solaires ont-elles de l'importance? (with K. Shell). *Cahiers du Seminaire d'Econometrie*, 24, 93-127 (1983).
- Optimality with unbounded numbers of households: I. Overlapping (or overlapping-generations) structure and the first basic theorem of welfare. *Optimalité et Structures: Mélanges en Hommage à Edouard Roussier* (G. Ritschard and D. Royer, eds.), Economica, Paris, 1985.
- On the existence of optimal stationary equilibria with a fixed supply of fiat money: I. The case of a single consumer (with L.M. Benveniste). *J Pol Econ* 94, 402-417 (1986).

- Sunspots and incomplete financial markets: The leading example. The Economics of Imperfect Competition and Employment: Joan Robinson and Beyond (G. Feiwel, ed.), MacMillan, London, 1989.
- The structure of financial equilibrium with exogenous yields: The case of incomplete markets (with Y. Balasko). *Econometrica* 57, 135-162 (1989).
- Sunspot equilibrium in an overlapping-generations economy with an idealized contingent claims market (with K. Shell). *Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity* (W.A. Barnett, J. Geweke, and K. Shell, eds.). Cambridge University Press, Cambridge, England, 1989.
- The structure of financial equilibrium with exogenous yields: The case of restricted participation (with Y. Balasko and P. Siconolfi). *J Math Econ* 19, 195-216 (1990).
- Convexity and sunspots: A remark (with H. Polemarchakis). J Econ Theory 52, 433-439 (1990).
- Perfect equilibrium with incomplete financial markets: An elementary exposition. *Value and Capital, Fifty Years Later* (L.W. McKenzie and S. Zamagni, eds.). MacMillan, London, 1991.
- Indefinitely sustained consumption despite exhaustible natural resources (with T. Mitra). *Econ Theory* 1, 119-146 (1991).
- Regular demand with several, general budget constraints (with Y. Balasko). *Equilibrium and Dynamics:* Essays in Honor of David Gale (M. Majumdar, ed.), Macmillan, London, 1992.
- Incomplete financial markets and indeterminacy of competitive equilibrium. *Advances in Economic Theory, VI* (J.-J. Laffont, ed.), Cambridge University Press, Cambridge, England, 1992.
- Sunspots and incomplete financial markets: The general case, in the Mini-Symposium on "The Structure of Sunspot Equilibria in the Presence of Incomplete Financial Markets". *Econ Theory* 2, 341-358 (1992).
- Stationary equilibria with incomplete markets and overlapping generations (with R.C. Green and S.E. Spear). *Intl Econ Rev* 33, 495-512 (1992).
- Real indeterminacy from imperfect financial markets: Two addenda. *General Equilibrium, Growth, and Trade II* (R. Becker, M. Boldrin, R. Jones, and W. Thomson, eds.), Academic Press, San Diego, 1993.
- Market participation and sunspot equilibrium (with Y. Balasko and K. Shell). *Rev Econ Studies* 62, 491-512 (1995).
- Notes on Pareto improvement in incomplete financial markets. *Rivista di Matematica per le Scienze Economiche e Sociale* 18, 3-14 (1995).
- Individual risk and mutual insurance: A reformulation (with G. Chichilnisky and H.-M. Wu). *Econometrica* 64, 333-341 (1996).
- Pareto improving financial innovation in incomplete markets (with A. Citanna). *Economic Theory*, 11, 467-494 (1998).

Generic regularity of competitive equilibrium with restricted participation on financial markets (with P. Siconolfi and A. Villanacci). *J Math Econ* 36, 61-76 (2001).

On trees and logs (with A. Pavlova). J Econ Theory 116, 41-83 (2004)

Competitive equilibrium with incomplete financial markets. J Math Econ, forthcoming.

Musings on the Cass Trick, J Math Econ. forthcoming.

UNPUBLISHED RESEARCH:

- A note on the role of money in providing sufficient intermediation (with M.E. Yaari). Cowles Foundation Discussion Paper, Yale University, September, 1966.
- On the "number" of equilibrium allocations with incomplete financial markets. CARESS Working Paper, University of Pennsylvania, May, 1985.
- Segmented markets: A case of restricted market participation where, nonetheless, sunspots can never matter (with L.M. Benveniste). CARESS Working Paper, University of Pennsylvania, October, 1985.
- Compatible beliefs and equilibrium. Mimeo, Department of Economics, University of Pennsylvania, March, 2004.
- Notes on an overarching model. Mimeo, Department of Economics, University of Pennsylvania, April, 2004.
- Multiple equilibria in a stock market with investment restrictions (with S. Basak and A. Pavlova. Mimeo, Sloan School, MIT, December, 2004.

MISCELLANY:

- On women. Unpublished text of a talk given to the graduate students in Economics at the University of Pennsylvania, September 12, 1994.
- Comment (on Proposed Policy on Consensual Sexual Relations Between Faculty and Students). *Almanac*, University of Pennsylvania, April 25, 1995.
- An interview with David Cass (conducted by Stephen Spear and Randall Wright). *Macroeconomic Dynamics* 2, 533-558 (1998).