Topsy-Turvy: A note on Supply and Demand

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In this paper I try to combine two basically heterodox ideas. So far I have only used them separately in teaching microeconomics, namely the possible existence of a downward sloping supply curve (based on increasing returns to scale) and an upward sloping demand curve (based on conspicuous consumption).

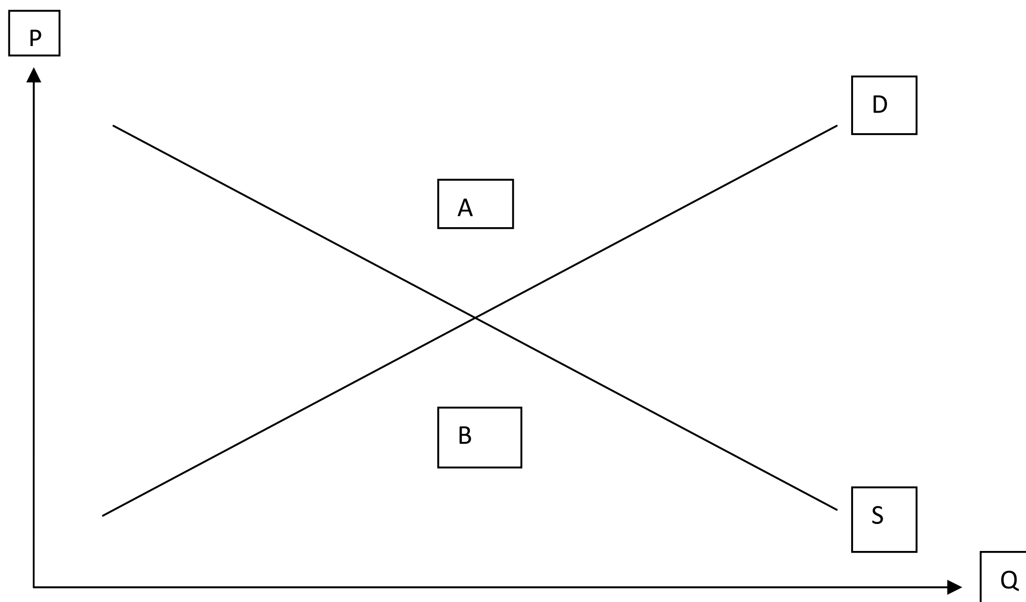
Based on arguments of economies of scale and increasing returns by Alfred Marshall (1990), W. Brian Arthur (1989, 1994 and 1996) Arrow et al. (1998) and more recently Schmidt & Marschinski (2009) marginal and average costs of production and prices are shown to decrease in some instances when output is extended, therefore it may exist a downward sloping supply curve. Marshall defines increasing returns to scale in his *Principles of Economics:* "The *law of increasing return* may be worded thus: - An increase of labour and capital leads generally to improved organization, which increases the efficiency of the work of labour and capital" (p. 265). A diagram of a downward sloping supply curve appears on page 389 of Marshall's book, another one is drawn in a footnote in appendix H on page 665. Contemporary arguments for this approach can be found in the works of Arthur (1989, 1994 and 1996). For Arthur: "Increasing returns are the tendency for that which is ahead to get further ahead, for that which loses advantage to lose further advantage. They are mechanisms of positive feedback that operate – within markets, businesses, and industries – to reinforce that which gains success or aggravate that which suffers loss" (1996: 100). In general I agree with his argument that: "Increasing returns generate not equilibrium but instability: If a product or a company or a technology – one of many competing in a market – gets ahead by chance or clever strategy, increasing returns can magnify this advantage, and the product or company or technology can go on to lock in the market" (ibid. 100). However, if this downward sloping supply curve resulting from increasing returns happens to meet an upward sloping demand curve based on arguments of conspicuous consumption by Thorstein Veblen (1899) in the market – an equilibrium may at least in principle occur.

Theoretical arguments based on conspicuous consumption seem to be not only alive and kicking, but have become quite popular recently (Bagwell & Bernheim, 1996, Basmann et al. 1988, Berry, 1994, Campbell, 1995, Canterberry, 1998, Charles et al. 2009, Corneo & Jeanne, 1997, Creedy & Slottje, 1991, Duesenberry, 1949, Eaton &

Eswaran, 2009, Fine & Leopold, 1993, Frank, 1999, Friedman & Ostrov, 2008, Frijtersa & Leigh, 2008, Himmelweit et al., 2001, Hopkins & Kornienko, 2004, Jarmillo & Moizeau, 2003, Knoedler et al. 2007, Krähmer, 2006, Lears, 1993, Leibenstein, 1950, Mason, 1981, 1984 and 1998, McClure & Kumcu, 2008, O'Cass & McEwen, 2004, Peng, 2006, Shipman, 2004, Tilman, 2006, Trigg, 2001, and Yamada, 2008). The effect of status seeking symbolic consumption means that demand is increasing when price is increasing, therefore it may exist an upward sloping demand curve.

Based on arguments of economies of scale by Alfred Marshall and W. Brian Arthur marginal and average costs of production and prices are decreasing when output is extended, therefore it exist a downward sloping supply curve. From arguments based on Veblen's conspicuous consumption, however, results an upward sloping demand curve.

Both can be combined in the usual supply and demand diagram leading to an equilibrium:



Why is there an equilibrium?

A) Excess demand: Suppliers try to take advantage of increasing returns and move along the learning curve and therefore increase production and supply => lowering of the prices. The product looses prestige and consumers/snobs turn to other products to enhance their status via conspicuous consumption => e.

B) Excess supply: Suppliers decrease production because of overflowing inventories and have to increase prices because of loss of increasing returns, prices have to increase to cover higher costs and consumers are drawn back to the product because its value in terms of status and conspicuous consumption increases with price => e.

Whilst following Arthur's computer technology examples (1996), I at first thought of cell phone ring tones as a possible real world case to illustrate this type of prestige and increasing returns based market. Jens Beckert of Max-Planck Institute for the Study of Societies in Cologne, however, suggested the wine market which seems to fit this framework pretty well. Highly priced wine usually has high status due to its quantity being restricted because it is produced in particular limited areas or times or it is only available in low quantity because it is old and only a few bottles are left. Cheap wine on the other hand is produced in bulk, blended and its production is based on increasing returns, therefore its costs and price is low.

References:

- Arrow, Kenneth J., Ng, Yew-Kwang and Yang, Xiaokai, (eds.) (1998): Increasing Returns and Economic Analysis, New York: St. Martin's Press; London: Macmillan Press.

- Arthur, W. Brian (1989): "Competing Technologies, Increasing Returns and Lock-in by Historical Events", *The Economic Journal,* 99(394): 116-131.

- Ders. (1994): Increasing Returns and Path Dependence in the Economy, University of Michigan Press.

- Ders. (1996): Increasing Returns and the New World of Business, *Harvard Business Review,* 74(4): 100-109.

- Bagwell, L. S. and Bernheim, B. D. (1996): 'Veblen Effects in a Theory of Conspicuous Consumption', *American Economic Review* 86(3): 349-373.

- Basmann , R. L., Molina, D. J. and Slottje, D. J. (1988): 'A Note on Measuring Veblen's Theory of Conspicuous Consumption', *Review of Economics and Statistics* 70(3): 532-535.

- Beckert, Jens (2010): The Transcending Power of Goods – Imaginative Value in the Economy, *MPIfG Discussion Paper* 10/4, Max Planck Institute for the Study of Societies, Cologne.

- Berry, J. Christopher (1994): The Idea of Luxury: A Conceptual and Historical Investigation, Cambridge and New York: Cambridge University Press.

- Campbell, Colin (1995): ‘Conspicuous Confusion? A Critique of Veblen’s Theory of Conspicuous Consumption’, *Sociological Theory* 13(1): 37-47.
- Canterberry, E. Ray (1998): ‘The Theory of the Leisure Class and the Theory of Demand’, in Samuels, W. E. (ed.) *The Founding of Institutional Economics*, London: Routledge, pp. 139-156.
- Canterberry, E. Ray (1999): ‘Thorstein Veblen and The Great Gatsby’, *Journal of Economic Issues*, 33(2): 297-304.
- Charles, Kerwin Kofi, Hurst, Erik and Roussnov, Nikolai (2009): Conspicuous consumption and race, *The Quarterly Journal of Economics* , 124(2): 425-467.
- Corneo, Giacomo and Jeanne, Oliver (1997): Conspicuous consumption, snobbism and conformism, *Journal of Public Economics,* 66: 55-71.
- Creedy, John and Slottje, D. J. (1991): ‘Conspicuous Consumption in Australia’ Research Paper No. 307, University of Melbourne, June.
- Diggins, P. John (1999): *Thorstein Veblen: Theorist of the Leisure Class,* Princeton: Princeton University Press.
- Duesenberry, J.S. (1949): Income, Saving and the Theory of Consumer Behavior, Harvard University Press, Cambridge, MA.
- Eaton, B. Curtis and Eswaran, Mukesh (2009): Well-being and affluence in the presence of a Veblen Good, *The Economic Journal*, 119: 1088–1104.
- Fine, Ben and Leopold, E. (1993): ‘The World of Consumption’, London: Routledge.
- Frank, Robert H. (1999): *Luxury Fever: Why Money Fails to Satisfy in an Era of Excess,* New York: Free Press.
- Friedman, Daniel and Ostrov, N. Daniel (2008): ‘Conspicuous Consumption Dynamics’, *Games and Economic Behavior*, 64: 121-145.
- Frijtersa, Paul and Leigh, Andrew (2008): Materialism on the March: From conspicuous leisure to conspicuous consumption? *The Journal of Socio-Economics*, 37: 1937–1945.
- Himmelweit, Susan, Simonetti, Roberto and Trigg, Andrew (2001): *Microeconomics: Neoclassical and Institutionalist Perspectives on Economic Behaviour,* London: Thomson Learning.

- Hopkins, Ed and Kornienko, Tatiana (2004): Running to Keep in the Same Place: Consumer Choice as a Game of Status, *The American Economic Review,* 94(4): 1085-1107.
- Jarmillo, Fernando and Moizeau, Fabien (2003): Conspicuous consumption and social selection, *Journal of Public Economic Theory*, 5(1): 1-24.
- Knoedler, T. Janet, Prasch, E. Robert and Dell, Champlin P. (2007): *Thorstein Veblen and the Revival of Free Market Capitalism*, Cheltenham UK and Northampton US: Edward Elgar.
- Krähmer, Daniel (2006): Advertising and Conspicuous Consumption, *Journal of Institutional and Theoretical Economics JITE*, 162: 661–682.
- Lears, T. S. (1993): 'Beyond Veblen: Remapping Consumer Culture in Twentieth Century America', in Hollander, S. C. and Russell, K. M. (eds.): *Marketing,* Vol. 2, Edward Elgar, pp. 27-40.
- Leibenstein, Harvey (1950): 'Bandwagon, Snob and Veblen Effects in the Theory of Consumers' Demand' *The Quarterly Journal of Economics*, 64(2): 183-207.
- Marshall, Alfred (1990): Principles of Economics, Philadelphia: Porcupine Press.
- Mason, S. Roger (1981): *Conspicuous Consumption: A Study of Exceptional Consumer Behaviour*, New York: St. Martin's Press.
- Mason, S. Roger (1984): 'Conspicuous Consumption: A Literature Review', *European Journal of Marketing,* 18(3): 26-39.
- Mason, S. Roger (1998): *The Economics of Conspicuous Consumption: Theory and Thought since 1700,* Cheltenham UK and Northampton US: Edward Elgar.
- McClure, James and Kumcu, Erdogan (2008): Promotions and product pricing: Parsimony versus *Veblenesque* demand, *Journal of Economic Behavior & Organization,* 65: 105–117.
- O'Cass, Aron and McEwen, Emily (2004): 'Exploring Consumer Status and Conspicuous Consumption', *Journal of Consumer Behaviour,* 4(1): 25-39.
- Peng, Baochun (2006): A Model of Veblenian Growth, *Topics in Macroeconomics*, 6(1), article 11, 25 June, 2010 retrieved from: http://www.bepress.com/bejm/topics/vol6/iss1/art11
- Schmidt, Robert C. and Marschinski, Robert (2009): A model of technological breakthrough in the renewable energy sector, *Ecological Economics*, 69: 435–444.

- Shipman, Alan (2004): Lauding the Leisure Class: Symbolic Content and Conspicuous Consumption, Review of Social Economy, 62(3): 277-289

- Tilman, Rick (2006): Colin Campbell on Thorstein Veblen on Conspicuous Consumption, *Journal of Economic Issues*, 40(1): 97-112.

- Trigg, Andrew (2001): 'Veblen, Bourdieu and Conspicuous Consumption', *Journal of Economic Issues*, 35(1): 99-115.

- Yamada, Katsunori (2008): Macroeconomic implications of conspicuous consumption: A Sombartian dynamic model, *Journal of Economic Behavior & Organization*, 67: 322–337.

- Veblen, Thorstein ([1899] 1973): *The Theory of the Leisure Class*, Boston: Houghton Mifflin.