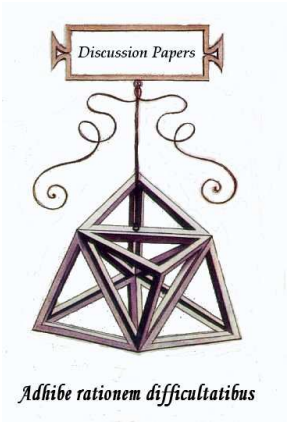
Discussion Papers
Collana di
E-papers del Dipartimento di Scienze Economiche – Università di Pisa



Luciano Fanti

Endogenous labour supply, habits and aspirations

Discussion Paper n. 143

2012

Discussion Paper n. 143, presentato: **settembre 2012**

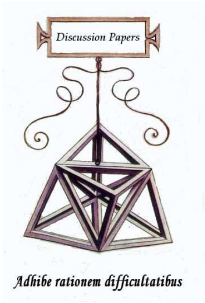
Indirizzo dell'Autore:

Luciano Fanti
Dipartimento di Scienze Economiche, Università di Pisa, Via Ridolfi 10, 56124 Pisa, ITALY
e-mail: lfanti@ec.unipi.it

© Luciano Fanti
La presente pubblicazione ottempera agli obblighi previsti dall'art. 1 del decreto legislativo luogotenenziale 31 agosto 1945, n. 660.

Si prega di citare così: Luciano Fanti (2012), "Endogenous labour supply, habits and aspirations", Discussion Papers del Dipartimento di Scienze Economiche – Università di Pisa, n. 143 (http://www.dse.ec.unipi.it/index.php?id=52).

Discussion Paper
n. 143



Luciano Fanti

Endogenous labour supply, habits and aspirations

Abstract

Abstract
Motivated by the increasing literature on endogenous preferences, this paper investigates the implications of the introduction of habit and aspiration formation when labour supply is endogenous, in an OLG small open economy. In contrast with models with exogenous labour supply where aspirations always reduce economic performance, we show that in a model with endogenous labour supply greater aspirations lead to a higher long run savings and economic performance, through their impact on the labour/leisure choice.

Keywords Endogenous preferences; Fertility; OLG model

JEL classification J22; O41

1. Introduction

An increasing economic literature has recently analysed both the theoretical and empirical implications of the existence of endogenous preferences, in particular those displaying habits or aspirations. When habits and aspirations are formed, utility depends not only on the present and future consumptions, but also on a reference consumption level with respect which current own consumption is compared to, and it is given, in general, by a certain level of past consumption.

According to the economic literature, individuals form habits when utility of their current consumption depends also on their own past experience of consumption, while for an individual with aspirations, utility depends also on the consumption experience of his predecessors.

The implications of endogenous preferences on saving, capital accumulation and dynamic stability in overlapping generations (OLG) models have been investigated by many authors (e.g. De la Croix, 1996; Lahiri and Puhakka, 1998; De la Croix and Michel, 1999; Wendner, 2002, Artige et al., 2004; Alonso-Carrera et al., 2004, 2007; Abel, 2005; Nakata, 2007). Most part of this studies analyse separately either habits or aspirations, and all of them neglect the endogenous labour/leisure choice issue. So far the standard results of the above cited literature, based on fixed labour supply, have established a positive relationship between habits and savings and, thing more relevant for the purpose of the present paper, a negative relationship between aspirations and savings, as well resumed by De la Croix (1996, p. 91): "When aspirations are high compared with wage income, adults spend much on consumption to maintain a life standard similar to the one of their parents and their propensity to save is low." Things are sharply different if we introduce an endogenous leisure/labour choice: in this case, we show that as a consequence of greater aspirations savings are increased and labour supply is higher.

A discussion of the role of labour supply in evaluating the impact of endogenous preferences and in particular the effects of aspirations on long run savings in a small open economy is the object of this paper. Using an OLG model we want to answer the

following question: what are the effects of the interaction of habits and aspirations with the leisure/labour choice of individuals as regards economic performances?

For obtaining manageable results, we focus on the usual case, in which the utility function is assumed to be logarithmic in consumption and linear in leisure and the production function is assumed to be logarithmic as well. For steady state results, the effects of greater aspirations can be summarised as follows: (*i*) domestic savings increase, (*ii*) labour supply increases, (*iii*) national output increases[1] and in this sense the effect on economic performance may be considered as positive.

The intuition lying behind the previous results is the following: higher aspirations for young people imply higher young consumption, which in turn implies, owing to the presence of habits, a higher consumption reference for old people. This means that savings required for sustaining the increased desired old consumption is increasing with higher both habits of old people and aspirations of young people. Therefore when labour supply is exogenously given, also the income to be used either for consumption or for savings is given and cannot be altered by individuals' choices, and then the higher young consumption for accomplishing with the higher aspirations of young people always leads to a reduction rather an increase in savings, despite the need of also sustaining a higher old-age consumption induced by habits formed by the old people. By contrast, when leisure is valued and the labour supply may be endogenously chosen, then a contemporaneous increase of both young-age consumption (satisfying a higher aspirations intensity) and savings (needed to satisfy a higher consumption reference for old people) as a consequence of an increase in the aspiration intensity may occur thanks to a reduction in the leisure time and a rise in working time. Since consideration of a labour/leisure choice is a generalization of the standard OLG model, then we may argue that the effect of the aspiration intensity on long-run savings is generally always positive, and the conventional view holds only for the special case of fixed labour supply. Moreover an increase in labour supply has a twofold positive effect on domestic

[1] This occurs as a consequence of the increased labour supply, through two channels: the first one directly through the increased labour input in production, the second one indirectly through the higher stock of installed capital owing to the increased marginal productivity of capital induced, in turn, by the same increase in labour supply.

production: directly because the labour input is augmented, and indirectly because the installed capital is increased owing to the higher marginal productivity of capital induced, in turn, by a higher labour supply. Therefore, we conjecture that also the effect on foreign debt is positive but for ascertaining this it needs to assume a specific technology and to investigate whether and how the positive effect of the increased labour supply on the affluence of foreign capital is lower than the positive effect on domestic savings. The same reasoning holds as regards the welfare analysis of the effects of grater aspirations. These issues are left for future research. Overall, it follows that both higher savings and labour supply imply that greater aspirations play a positive role on the economic performance. This finding seems, to the best of our knowledge, rather novel in the OLG growth literature and shed a new light on the role played by endogenous preferences on long run savings, the labour supply and ultimately on the economic performance.

The remainder of the paper is organised as follows. Section 2 presents the model and the main steady-state results, as regards the cases of both exogenous and endogenous labour supply. Section 3 concludes.

2. The model

2.1. The production sector

The production sector in a small open economy context is the following: we assume (*i*) a constant-returns-to-scale production function – which is constant through time, twice continuously differentiable, strictly monotonic increasing and concave, and satisfies the Inada condition; (*ii*) the output produced at time t; Y_t, is: $Y_t = G(K_t;L_t) = L_t g(k_t,1-l_t)$, with $k_t=K_t/N_t$, where N_t is the number of individuals in working age, K_t and $L_t=(1-l_t)N_t$ are the capital and labour employed at time t; (*iii*) the economy is perfectly competitive so that production factors are paid their marginal product: $1+r_t=g'(k_t,1-l_t)$, and $w_t = g(k_t,1-l_t)-k_t g'(k_t,1-l_t)$, where $1+r_t$ is the gross rate of return on physical capital and w_t the wage rate per efficiency unit of labour.

For simplicity we suppose that the world rental rate is fixed at a level *r*. Since the small economy allows unrestricted lending or borrowing, its rental rate is set equal to the world rental rate, *r*. Therefore, the wage rate is treated as constant over time.[2]

2.2. Individuals with fixed labour supply

First, we consider the case of exogenously given labour supply, which is assumed to be constant and normalised to unity. Moreover we assume also that the working population is constant and normalised to unity. Agents are assumed to belong to an overlapping generations structure with finite lifetimes, and life is separated into two periods: youth and old-age (Diamond, 1965). Individuals belonging to generation t have a homothetic and separable utility function defined over young-aged and old-aged consumption, $c_{1,t}$ and $c_{2,t+1}$, respectively, which, as usual for having more manageable solutions, is assumed of the Cobb-Douglas-type. In the first period they work and receives wage income at the competitive rate w_t, which is used to finance current consumption and savings. During old-age agents are retired and live on the proceeds of their savings (s_t) plus the accrued interest at the rate r_{t+1}. Moreover, we suppose old individuals survive to the second period with (constant) probability $0 < \pi < 1$. Therefore, the existence of a perfect annuity market implies old survivors will benefit not only from their own past saving plus interest, but also from the saving plus interest of those who have deceased.

As regards habits and aspirations, we will assume that in each period individuals derive utility from the comparison of their consumption with a consumption reference. This consumption reference will be given, during young age, by the aspirations consisting in the past consumption inherited from own parents at the corresponding young age, and, during old age, will be determined by the consumption level they have reached in the previous period.

Furthermore, following the most part of the authors, such as, for instance, Lahiri and

[2] It is worth noting that individual savings are no more relevant for determining capital and output, but only for the balance of payments. A balance of payments analysis is beyond of the scope of the paper.

Puhakka (1998), Wendner (2002), De la Croix (1996), De la Croix and Michel (1999), Alonso-Carrera et al. (2004, 2007), Nakata (2007), we choose an additive formulation for the specification of the "effective" consumption.

Thus, the representative individual born at time t is faced with the following programme:

$$\max_{\{s_t\}} U_t = \ln\left(c_{1,t} - qc_{1,t-1}\right) + p\,\beta \ln\left(c_{2,t+1} - \gamma c_{1,t}\right), \tag{P}$$

subject to

$$\begin{aligned} c_{1,t} + s_t &= w \\ c_{2,t+1} &= \frac{1+r}{p} s_t \end{aligned} \tag{1}$$

where r is the expected interest rate, $c_{1,t-1}$ is the past consumption inherited from own parents when they were in young age, $0<q<1$ and $0<\gamma<1$ are a measure of the intensity of aspirations and habits, respectively, and $0<\beta<1$ is the subjective discount factor.

Maximisation of programme (P) gives the following savings function:

$$s = \frac{\pi w\left[(1+\beta\pi(1-q))\gamma + \beta(1+r)(1-q)\right]}{(1+r+\gamma\pi)(1+\beta\pi(1-q))}. \tag{2}$$

Result 1. Savings are increased by stronger habits and reduced by greater aspirations.

Result 1 straightforwardly follows by differentiating Eq. (2) with respect to the habit parameter

$$\frac{\partial s}{\partial \gamma} = \frac{pw(1+r)}{(1+r+\gamma\pi)^2 1+\beta\pi(1-q)} < 0 \tag{3}$$

and the aspiration parameter, $\dfrac{\partial s}{\partial q} = -\dfrac{\gamma pw(1+r)}{(1+r+\gamma\pi)(1+\beta\pi(1-q))^2} < 0$

(4)

The economic intuition behind Result 1 is that: (*i*) an increase in the habit intensity increases the amount of old-age consumption because a stronger preference for habits

reduce the overall utility accruing from early consumption, and since a higher old-age consumption can be achieved by means of an increasing saving rate, the amount of savings always increases; (*ii*) an increase in aspiration intensity drives young adults to increase their current consumption, causing a reduction in savings.

To sum up, greater aspirations reduce, as expected, the saving rate and thus the economic performance. These findings are in accord with the previous literature.[3]

2.3. Endogenous labour supply

In this section we extend the preceding model assuming that the working time, l, (as a fraction of the endowment of time normalised to one) is endogenously chosen by the young people.

Thus, the representative individual born at time t is faced with the following programme:

$$\max_{\{s_t, l_t\}} U_t = \ln\left(c_{1,t} - q c_{1,t-1}\right) + p\,\beta \ln\left(c_{2,t+1} - \gamma c_{1,t}\right) - \lambda l_t, \qquad \text{(P1)}$$

subject to

$$\begin{aligned} c_{1,t} + s_t &= w l_t \\ c_{2,t+1} &= \frac{1+r}{p} s_t \end{aligned} \qquad (5)$$

where $\lambda > 0$ is simply a taste parameter that determines the importance of the disutility of labour.[4]

[3] For instance, as regards the role of aspirations, de la Croix (1996, p. 91) argues that «…aspirations affect savings negatively. When aspirations are low, the adult generation has a sober lifestyle and savings are high. When aspirations are high compared with wage income, adults spend much on consumption to maintain a life standard similar to the one of their parents and their propensity to save is low."

[4] The introduction of the disutility of labour in a linear way, for obtaining clear-cut analytical results, is rather usual, e.g. Sommacal (2006).

Maximisation of programme (P1) gives the following fertility and savings functions:

$$s = \frac{wp\left[(1+\beta p(1-q))\gamma + \beta(1+r)(1-q)\right]}{\lambda(1+r+\gamma\pi)(1-q))} \tag{6}$$

$$l = \frac{1+\beta p(1-q)}{\lambda(1-q))} \tag{7}$$

Eq. (7) reveals that, if the total endowment of time is normalised to one, for ensuring economic meaning to the l variable (i.e. $l \leq 1$) the following technical condition has to hold:

$$\lambda > \beta p + \frac{1}{1-q} \tag{8}$$

From Eq. (7) the following results hold:

Result 2. *1*) labour supply is not affected by habits; *2*) aspirations increases fertility.

While the part 1) of Result 2 is self-evident by the simple observation of (7), part 2) is easily derived from:

$$\frac{\partial l_t}{\partial q} = \frac{1}{\lambda(1-q)^2} > 0 \tag{9}$$

In particular, from Eq. (9) we observe that the higher is the existing level of aspirations and the less painful is the work time, the more prolonged the work time chosen is.

As regards the effects of endogenous preferences on the long-run savings, the following result holds:

Result 3. 1) savings are positively affected by habits; 2) greater aspirations always increase savings.

Result 3 straightforwardly follows by deriving Eq. (2) with respect to the habits parameter

$$\frac{\partial s_t}{\partial \gamma} = \frac{pw(1+r)}{\lambda(1+r+\gamma p)^2(1-q)} > 0 \tag{10}$$

and the aspirations parameter

$$\frac{\partial s_t}{\partial q} = \frac{p\gamma w}{\lambda(1+r+\gamma p)(q-1)^2} > 0 \qquad (11)$$

The novelty of Result 3 is that greater aspirations always increase savings. Moreover, note that if habits are absent, aspirations always reduce savings.

Moreover, from Eq. (11) we observe that the larger the existing level of aspirations, the future discount factor and longevity are, the more intense is the positive response of savings to greater aspirations. This means that an increase in the aspiration intensity could raise savings in a more significant way in developed rather than in either developing or less-developed economies.

To sum up Result 3 overturns the conventional view (i.e., Result 1) as regards the role of greater aspirations on long run savings and thus economic performance. Such a sharp contrast depends on the possibility of a leisure/labour choice: when such a choice is allowed, individuals response to the formation of greater aspirations by increasing both labour supply and savings, thus providing a twofold engine for enhancing the long run economic performance.

3. Conclusions

This paper, motivated by the increasing literature on endogenous preferences, has investigated the interaction of habit and aspiration formation with the endogenous determination of labour supply, in an OLG small open economy. According to the conventional view emerging from the previous literature in models with exogenous labour supply, aspirations always reduce economic performance. Our results show, in contrast with the previous literature, that greater aspirations always increase the economic performance through a twofold positive effect on the capital accumulation and on the individual work time.

In particular, the proposed model found in the standard labour/leisure choice the mechanism through which individuals with greater aspirations are able to increase not only young consumption but also the saving rate thanks to a sufficient increase in the working time. The value added of our results is that, since the labour supply is generally

endogenously chosen, then aspirations can be considered, also as regards policy design, as an engine instead of a restrain for savings and economic performances. Therefore this study may be considered a contribution to the literature on economic growth of a small open economy generalising previous studies with endogenous preferences. Finally, we note that for getting some analytical insight on the role played by the interaction of endogenous preferences with labour/leisure choices we assumed a simple, although usual, utility function and focused only on the small open economy context: an extension to more general utility functions as well as a closed economy context may be useful for checking the robustness of our findings. Moreover this paper focused only on a "positive" point of view, although aspirations might generate an intergenerational taste externality also requiring a "normative" analysis. This represents a promising direction of our future research agenda.

References

Abel, A., 1990. Asset prices under habit formation and catching up with the Joneses. *American Economic Review* 80, 38–42.

Abel, A., 2005. Optimal taxation when consumers have endogenous benchmark levels of consumption. *Review of Economic Studies* 75, 21–42.

Alonso-Carrera, J., Caballé, J., Raurich, X., 2004. Consumption externalities, habit formation and equilibrium efficiency. *Scandinavian Journal of Economics* 106, 231–51.

Alonso-Carrera, J., Caballé, J., Raurich, X., 2007. Aspirations, habit formation and bequest motive. *Economic Journal* 117, 813–836.

Artige, L., Camacho, C., de la Croix, D., 2004. Wealth breeds decline: reversals of leadership and consumption habits. *Journal of Economic Growth* 9, 423–449.

Becker, G.S., 1960. An economic analysis of fertility. In: Easterlin, R. (Ed.), *Demographic and Economic Change in Developed Countries*. Princeton University Press, Princeton.

Carroll, C., 2000. Solving consumption models with multiplicative habits. *Economics Letters* 68, 67–77.

Carroll, C., Overland, J., Weil, D., 2000. Saving and growth with habit formation. *American Economic Review* 90, 1–15.

de la Croix, D., 1996. The dynamics of bequeathed tastes. *Economics Letters* 53, 89–96.

de la Croix, D., Michel P. 1999. Optimal growth when tastes are inherited. *Journal of Economic Dynamics and Control* 23, 519–537.

de La Croix, D., Michel, P., 2002. *A theory of Economic Growth. Dynamics and Policy in Overlapping Generations*. Cambridge University Press, Cambridge.

Diamond, P.A., 1965. National debt in a neoclassical growth model. *American Economic Review* 55, 1126–1150.

Ferson, W.E., Constantinides, G.M., 1991. Habit persistence and durability in aggregate consumption: Empirical Test. *Journal of Financial Economics* 29, 199–240.

Eckstein, Z., Wolpin, K.I., 1985. Endogenous fertility and optimal population size. *Journal of Public Economics* 27, 93–106.

Galor, O., Weil, D.N., 1996. The gender gap, fertility, and growth. *American Economic Review* 86, 374–387.

Heaton, J., 1995. An empirical investigation of asset pricing with temporally dependent preference specifications. *Econometrica* 63, 681–717.

Lahiri, A., Puhakka, P., 1998. Habit persistence in overlapping generations economies under pure exchange. *Journal of Economic Theory* 78, 176–188.

Nakata T., 2007, Habit formation, parents' education spending, and growth. *Economics Bulletin* 5, 1–9.

Sommacal A., 2006, Pension systems and intragenenerational redistribution when labor supply is endogenous. *Oxford Economic Papers* 58, 379–406.

Zhang, J., Zhang, J., 1998. Social security, intergenerational transfers, and endogenous growth. *Canadian Journal of Economics* 31, 1225–1241.

Wendner, R., 2002. Capital accumulation and habit formation, *Economics Bulletin* 4, 1–10.

Discussion Papers – Collana del Dipartimento di Scienze Economiche – Università di Pisa

142 – Luciano Fanti (2012)

Habitus, aspirations and endogenous fertility

141-Luciano Fanti, Piero Manfredi and Alberto D'Onofrio (2012)

Walrasian dynamics and the Phillips curve

140 - Tommaso Luzzati and Gianluca Gucciardi (2012)

•Una classifica robusta della sostenibilità delle regioni italiane

• 139 - Nicola Meccheri and Luciano Fanti (2012)

Informal incentive labour contracts and product market competition

• 138 - Luciano Fanti and Nicola Meccheri (2012)

Managerial delegation under alternative unionization structures

• 137 - Nicola Meccheri and Luciano Fanti (2012)

Managerial delegation schemes in a duopoly with endogenous production costs: a comparison of sales and relative profit delegation under centralised unionisation

• 136 - Luciano Fanti and Nicola Meccheri (2012)

Price competition, merger and welfare under firm-specific unions: on the role of unions' preference towards wages

• 135 - Luciano Fanti and Nicola Meccheri (2012)

Merger results under price competition and plant-specific unions

• 134 - Luciano Fanti and Nicola Meccheri (2012)

Differentiated duopoly and horizontal merger profitability under monopoly central union and convex costs

• 133 - Luciano Fanti and Nicola Meccheri (2012)

Profits and competition in a unionized duopoly model with product differentiation and labour decreasing returns

• 132 - Andrea Mangani (2011)

Italian print magazines and subscription discounts

• 131 - Luciano Fanti (2011)

When an efficient bargaining is more "efficient" than a competitive labour market

• 130 - Luciano Fanti (2011)

When do firms prefer either monopolistic unions or an efficient bargaining?

• 129 - Luciano Fanti (2011)

Product differentiation and duopoly: when social welfare benefits from cross-shareholding

• 128 - Luciano Fanti (2011)

Cross-ownership and unions in a Cournot duopoly: when profits reduce with horizontal product differentiation

• 127 - Luciano Fanti (2011)

Cross-participated firms and welfare

• 126 - Alberto Chilosi (2011)

Stakeholder protection in corporate governance and in the legal system, the varieties of capitalism, and long term unemployment

• 125 - Luciano Fanti (2011)

Welfare effects of cross-ownership in a unionised duopoly

• 124 - Daniel Sakyi (2011)

On the Implications of Trade Openness, Foreign Aid and Democracy for Wagner's Law in Developing Countries: Panel Data Evidence from West African Monetary Zone (WAMZ)

• 123 - Luciano Fanti and Luca Gori (2011)

Stability in a Cournot duopoly under asymmetric unionism

• 122 - Luciano Fanti and Luca Gori (2011)

Stability analysis in a Bertrand duopoly with different product quality and heterogeneous expectations

• 121 - Luciano Fanti and Luca Gori (2011)

The dynamics of a differentiated duopoly with quantity competition

• 120 - Luciano Fanti and Luca Gori (2011)

The dynamics of a Bertrand duopoly with differentiated products and bounded rational firms revisited

• 119 - Lorenzo Corsini (2011)

On Wealth, Unemployment Benefits and Unemployment Duration: some Evdence from Italy

• 118 - Lorenzo Corsini (2011)

Is there really no link between international trade and wage differentials? A cross-country analysis

• 117 - Davide Fiaschi - Andrea Mario Lavezzi (2011)

Growth Volatility and the Structure of the Economy

• 116 - Marco Guerrazzi (2011)

Expectations, Employment and Prices: A Suggested Interpretation of the New 'Farmerian' Economics

• 115 - Alessandro Gandolfo E Valeria De Bonis(2011)

Il gioco pubblico in Italia fra tradizione e innovazione: aspetti economici e di marketing

• 114 - Mario Morroni (2011)

Production of commodities by means of processes

• 113 - Mario Morroni (2011)

New insights on the interaction between transaction costs and capabilities considerations in shaping organisational boundaries

• 112 - Luciano Fanti – Nicola Meccheri (2011)

Do profits always decrease with decreasing product differentiation? A reversal result in a unionized duopoly
- 111 - Francesco Arzilli and Andrea Morescalchi (2011)

Housing Tenure and Job Search Behaviour. A Different Analysis of the Impact of the UK Jobseeker's Allowance
- 110 - Andrea Borghini e Mario Morroni (2011)

Perché il Nobel a Elinor Ostrom e a Oliver Williamson

- 109 - lettra Agliardi, Luigi Sereno (2011)

The effects of environmental taxes and quotas on the optimal timing of emission reductions under Choquet-Brownian uncertainty
- 108 - Mario Morroni (2010)

Overcoming Cournot's dilemma on increasing returns and competition
- 107 - Luciano Fanti - Nicola Meccheri (2010)

The Cournot-Bertrand profit differential in a differentiated duopoly with unions and labour decreasing returns
- 106 - Marco Guerrazzi (2010)

How to Reduce Unemployment: Notes on Macro-Economic Stability and Dynamics
- 105 - Davide Fiaschi - Lisa Gianmoena - Angela Parenti (2010)

The Dynamics of Labour Productivity across Italian Provinces: Convergence and Polarization
- 104 - Chiara Franco - Manuela Gussoni (2010)

Firms' R&D cooperation strategies: the partner choice
- 103 - Luciano Fanti and Nicola Meccheri (2010)

Labour incentive schemes in a Cournot duopoly with simple institutional constraints
- 102 - Irene Brunetti e Davide Fiaschi (2010)

Intergenerational Mobility in Italy
- 101 - Davide Burgalassi (2010)

Defining and Measuring Polycentric Regions. The Case of Tuscany
- 100 - Luciano Fanti and Luca Gori (2010)

A two-sector overlapping generations economy: economic growth and multiple equilibria
- 99 - Giulio Bottazzi, Angelo Secchi and Federico Tamagni (2010)

Financial Constraints and Firm Dynamics
- 98 - Meccheri N. and Morroni M. (2010)

Incentive-Based and Knowledge-Based Theories of the Firm: Some Recent Developments
- 97 - Alberto Chilosi (2010)

Poverty, Population, Inequality, and Development in Historical Perspective
- 96 - Lorenzo Corsini, Pier Mario Pacini and Luca Spataro (2010)

Workers' Choice on Pension Schemes: an Assessment of the Italian TFR Reform Through Theory and Simulations
- 95 -Marco Guerrazzi (2010)

Stochastic Dynamics and Matching in the Old Keynesian Economics: A Rationale for the Shimer's Puzzle
- 94 - Marco Guerrazzi and Nicola Meccheri (2009)

From Wage Rigidities to Labour Market Rigidities: A Turning-Point in Explaining Equilibrium Unemployment?
- 93 - Luciano Fanti and Luca Gori (2009)

Child policy ineffectiveness in an OLG small open economy with human capital accumulation and public
- 92 - Luciano Fanti and Luca Gori (2009)

Endogenous lifetime in an overlapping generations small open economy
- 91 - Luciano Fanti and Luca Gori (2009)

Endogenous fertility, endogenous lifetime and economic growth: the role of health and child policies
- 90 - Manuela Gussoni - Andrea Mangani (2009)

The impact of public funding for innovation on firms' R&D investments: Do R&D cooperation and appropriability matter?
- 89 - Fanti L. e Spataro L. (2009)

Fertility and public debt
- 88 - Floridi M., Pagni S., Falorni S. e Luzzati T. (2009)

Una valutazione di sostenibilità delle Regioni Italiane
- 87 - Conti G. e Scatamacchia R. (2009)

Stato di fiducia, crisi finanziarie e crisi politiche nell'Italia liberale prima del 1914
- 86 - Gussoni M. (2009)

The determinants of inter-¯rms R&D cooperation and partner selection. A literature overview
- 85 - Fiaschi D., Lavezzi A.M. and Parenti A. (2009)

Counterfactual Distribution Dynamics across European Regions
- 84 - Fiaschi D., Lavezzi A.M. and Parenti A. (2009)

Productivity Dynamics across European Regions: the Impact of Structural and Cohesion Funds
- 83 - Fiaschi D. e Marsili M. (2009)

Distribution of Wealth and Incomplete Markets: Theory and Empirical Evidence
- 82 - Davide Fiaschi (2009)

Natural Resources, Social Conflict and Poverty Trap
- 81 - Fiaschi D. - Romanelli M. (2009)

Nonlinear Dynamics in Welfare and the Evolution of World Inequality
- 80 - Lavezzi, A. e Meccheri N. (2009)

Transitions Out of Unemployment: the Role of Social Networks' Topology and Firms' Recruitment Strategies
- 79 - Gori, L. (2009)

Endogenous fertility, family policy and multiple equilibria
- 78 - Fanti, L. e Gori, L. (2009)

On economic growth and minimum wages
- 77 - Fanti, L. e Gori, L. (2009)

Longevity, fertility and PAYG pension systems sustainability
- 76 - Fanti, L. e Gori, L. (2009)

Child policy solutions for the unemployment problem
- 75 - Fanti, L. e Gori, L. (2008)

PAYG pensions and economic cycles: Exogenous versus endogenous fertility economies
- 74 - Fanti, L. e Gori, L. (2008)

"Backyard" technology and regulated wages in a neoclassical OLG growth model
- 73 - Lorenzo Corsini e Elisabetta Olivieri (2008)

Technological Change and the Wage Differential between Skilled and Unskilled Workers: Evidence from Italy
- 72 - Nicola Meccheri (2008)

A Note on Noncompetes, Bargaining and Training by Firms
- 71 - Luciano Fanti and Luca Gori (2008)

Neoclassical Economic Growth and Lifetime Welfare in a Simple OLG Model with Unions
- 70 - Luciano Fanti and Luca Gori (2008)

Fertility and regulated wages in an OLG model of neoclassical growth: Pensions and old age support
- 69 - Carlo Brambilla and Giandomenico Piluso (2008)

Italian investment and merchant banking up to 1914: Hybridising international models and practices
- 68 - Luciano Fanti and Luca Gori (2007)

Economic Growth and Welfare in a Simple Neoclassical OLG Model with Minimum Wage and Consumption Taxes
- 67 - Luciano Fanti and Luca Spataro (2007)

Neoclassical OLG growth and underdeveloped, developing and developed countries
- 66 - Luciano Fanti e Luca Spataro (2007)

Poverty traps and intergenerational transfers
- 65 - Maurizio Lisciandra (2007)

The Role of Reciprocating Behaviour in Contract Choice
- 64 - Alga D. Foschi (2006)

La concentrazione industriale per i sistemi di trasporto sostenibile
- 63 - Alga D. Foschi (2006)

La concentrazione industriale per i sistemi di trasporto sostenibile: un caso di successo nel Mediterraneo orientale
- 62 - Fioroni Tamara (2006)

Life Expectancy, Health Spending and Saving
- 61 - Binotti Annetta Maria e Ghiani Enrico (2006)

La politica economica di breve periodo e lo sviluppo dei primi modelli mocroeconometrici in Italia: dalla vicenda ciclica degli anni ’60 alla prima crisi petrolifera
- 60 - Akos Dombi (2006)

Scale Effects in Idea-Based Growth Models: a Critical Survey
- 59 - Mario Morroni (2006)

Innovative activity, substantive uncertainty and the theory of the firm
- 58 - Mario Morroni (2006)

Complementarities among capability, transaction and scale-scope considerations in determining organisational boundaries
- 57 - Lorenzo Corsini (2006)

Firm's Entry, Imperfect Competition and Regulation
- 56 - Tommaso Luzzati (2005)

Leggere Karl William Kapp (1910-1976) per una visione unitaria di economia, società e ambiente
- 55 - Annetta Binotti e Enrico Ghiani (2005)

Changes of the aggregate supply conditions in Italy: a small econometric model of wages and prices dynamics
- 54 - Marco Guerrazzi (2005)

Notes on Continuous Dynamic Models: the Benhabib-Farmer Condition for Indeterminacy
- 53 - Alga D. Foschi (2005)

Lo shipping, la cantieristica ed i porti nell’industria marittima
- 52 - Alga D. Foschi – Xavier Peraldi – Michel Rombaldi (2005)

Inter – island links in Mediterranean Short Sea Shipping Networks
- 51 - Carlo Casarosa e Luca Spataro (2005)

Propensione aggregata al risparmio, rapporto ricchezza-reddito e distribuzione della ricchezza nel modello del ciclo di vita "egualitario": il ruolo delle variabili demografiche
- 50 - Valeria Pinchera (2004)

Consumo d’arte a Firenze in età moderna. Le collezioni Martelli, Riccardi e Salviati nel XVII e XVIII secolo
- 49 - Marco Guerrazzi (2004)

Lo shipping, la cantieristica ed i porti nell’industria marittima
- 48 - Alga D. Foschi (2004)

Politiques communautaires de soutien au short sea shipping (SSS)
- 47 - Alga D. Foschi (2004)

A cost – transit time choice model: monomodality vs. intermodality
- 46 - Alga D. Foschi (2004)

The coast port industry in the U.S.A:a key factor in the process of economic growth
- 45 - Luzzati T. - Franco A. (2004)

Idrogeno fonti rinnovabili ed eco-efficienza: quale approccio alla questione energetica?

- 44 - Fabrizio Bulckaen - Marco Stampini

Commodity Tax Reforms In A Many Consumers Economy: A Viable Decision-Making Procedure

- 43 - Lorenzo Corsini - Marco Guerrazzi (2004)

Searching for Long Run Equilibrium Relationships in the Italian Labour Market: a Cointegrated VAR Approach

- 42 - Andrea Mario Lavezzi - Nicola Meccheri (2004)

Job Contact Networks, Inequality and Aggregate Output

- 41 - Nicola Meccheri (2004)

Wages Behaviour and Unemployment in Keynes and New Keynesians Views. A Comparison

- 40 - Gaetano Alfredo Minerva (2004)

How Do Cost (or Demand) Asymmetries and Competitive Pressure Shape Trade Patterns and Location?

- 39 - Luciano Fanti – Luca Spataro (2004)

Economic growth, poverty traps and intergenerational transfers

- 38 - Luciano Fanti – Luca Spataro (2004)

Dynamic inefficiency, public debt and endogenous fertility

- 37 - Piero Manfredi – Luciano Fanti (2004)

Age distribution and age heterogeneities in economic profiles as sources of conflict between efficiency and equity in the Solow-Stiglitz framework

- 36 - Luciano Fanti – Luca Spataro (2004)

The optimal fiscal policy in a OLG model with endogenous fertility

- 35 - Luciano Fanti – Luca Spataro (2004)

Welfare implications of national debt in a OLG model with endogenous fertility

- 34 - Luciano Fanti (2004)

Neo-classical labour market dynamics and uniform expectations: chaos and the “resurrection” of the Phillips Curve

- 33 - Paolo Di Martino (2004)

Was the Bank of England responsible for inflation during the Napoleonic wars (1897-1815)? Some preliminary evidence from old data and new econometric techniques

- 32 - Francesco Drago (2004)

Redistributing opportunities in a job search model: the role of self-confidence and social norms

- 31 - Domenico Delli Gatti - Mauro Gallegati - Alberto Russo (2004)

Technological Innovation, Financial Fragility and Complex Dynamics

- 30 - Paolo Mariti (2004)

Costi di transazione e sviluppi dell’economia d’impresa

- 29 - Giuseppe Freni - Fausto Gozzi - Neri Salvadori (2004)

Existence of Optimal Strategies in linear Multisector Models

- 28 - Annetta Maria Binotti - Enrico Ghiani (2004)

Interpreting reduced form cointegrating vectors of incomplete systems. A labour market application

- 27 - Giuseppe Conti - Alessandro Polsi (2004)

Elites bancarie durante il fascismo tra economia regolata ed autonomia

- 26 - Alga D. Foschi (2003)

Industria portuale marittima e sviluppo economico negli Stati Uniti

- 25 - Davide Fiaschi - Andrea Mario Lavezzi (2003)

On the Determinants of Growth Volatility: a Nonparametric Approach

- 24 - Alga D. Foschi (2003)

The maritime container transport structure in the Mediterranean and Italy

- 23 - Giuseppe Conti (2003)

Strategie di speculazione, di sopravvivenza e frodi bancarie prima della grande crisi

- 22 - Luciano Fanti - Luca Spataro (2003)

Endogenous labour supply and Diamond's (1965) model: a reconsideration of the debt role

- 21 - Luciano Fanti - Piero Manfredi (2003)

Neo-classical labour market dynamics, chaos and the Phillips Curve

- 20 - Luciano Fanti (2003)

Technological Diffusion and Cyclical Growth

- 19 - Luciano Fanti (2003)

Notes on Keynesian models of recession and depression

- 18 - Davide Fiaschi (2003)

Fiscal Policy and Welfare in an Endogenous Growth Model with Heterogeneous Endowments

- 17 - Luciano Fanti (2003)

The growth cycle and labour contract lenght

- 16 - Rodolfo Signorino- Davide Fiaschi (2003)

Come scrivere un saggio scientifico:regole formali e consigli pratici

- 15 - Luciano Fanti (2003)

Fiscal policy and tax collection lags: stability, cycles and chaos

- 14 - Davide Fiaschi - Andre Mario Lavezzi (2003)

Nonlinear economic growth; some theory and cross-country evidence

- 13 - Davide Fiaschi - Pier Mario Pacini

Growth and coalition formation

- 12 - Pompeo Della Posta (2003)

Optimal Monetary Instruments and Policy Games Reconsidered

- 11 - Luciano Fanti - Piero Manfredi (2003)

Progressive Income Taxation and Economic Cycles: a Multiplier-Accelerator Model
- 10 - Gaetano Alfredo Minerva (2003)

Location and Horizontal Differentiation under Duopoly with Marshallian Externalities
- 9 - Piero Manfredi - Luciano Fanti (2003)

Cycles in dynamic economic modelling
- 8 - Luciano Fanti - Piero Manfredi (2003)

The Solow's model with endogenous population: a neoclassical growth cycle model
- 7 - F. Bulckaen - A. Pench - M. Stampini (2003)

Evaluating Tax Reforms without utility measures : the performance of Revenue Potentialities
- 6 - Giuseppe Conti (2003)

Institutions locales et banques dans la formation et le développement des districts industriels en Italie
- 5 - Pompeo Della Posta (2003)

Vecchie e nuove teorie delle aree monetarie ottimali
- 4 - Paolo Mariti (2003)

The BC and AC Economics of the Firm
- 3 - Nicola Meccheri (2003)

Performance-related-pay nel pubblico impiego: un'analisi economica
- 2 - Andrea Mario Lavezzi (2003)

Complex Dynamics in a Simple Model of Economic Specialization
- 1 - Luca Spataro (2003)

Social Security And Retirement Decisions In Italy

REDAZIONE

Giuseppe Conti
Luciano Fanti, coordinatore
Davide Fiaschi
Paolo Scapparone