

HOT ARTICLES

OCTOBER 2016

BUSINESS & ECONOMICS



Title: Bubbles and unemployment in an endogenous growth model

Author: Ken-ichi Hashimoto and Ryonghun Im

Journal: Oxford Economic Papers

Volume: 68, **Issue:** 4 (October 2016), **Pages:** 1084-1106

DOI: 10.1093/oep/gpw032

Abstract

We construct a continuous-time overlapping-generations model with labour market frictions to examine the relationships among unemployment, asset bubbles, and economic growth. We show that the existence of asset bubbles is contingent upon the unemployment rate: a bubble (non-bubble) regime arises in equilibrium when unemployment is relative low (high). Our framework focuses on the boom and bust of asset bubbles caused by changes in fundamental variables, not a stochastic probability. Then, as labour market frictions generate a negative relationship between the unemployment rate and economic growth, we find that the bubble regime exhibits a higher growth rate than the non-bubble regime. Furthermore, we show that policy or parameter changes that have a positive influence on the labour market shift the economy from a non-bubble regime to a bubble regime.

Database

Oxford Journals

Title: AGING AND FISCAL SUSTAINABILITY IN A SMALL EURO AREA ECONOMY

Author: Gabriela Castro, Jose R. Maria, Ricardo Mourinho Felix and Claudia Rodrigues Braz

Journal: Macroeconomic Dynamics

Published online: 28 September 2016

DOI: 10.1017/S1365100515001029

Abstract

Economic and social impacts of aging trends will be of the utmost importance in the near future. We embed a stylized pay-as-you-go (PAYG) pension system into a DSGE model with overlapping generations to assess the macroeconomic effects of aging in a small Euro Area economy. The simulations suggest large negative impacts on GDP and private consumption. In addition, external imbalances may widen significantly under the PAYG system. All results are conditional on the policy options addressing debt sustainability—the impacts tend to be very large if the government finances the aging with higher social security premia instead of lower replacement ratios. Sensitivity analysis reveals that GDP and private consumption impacts are less robust than those on external imbalances. Results also imply that supranational policy coordination may be crucial if the objective is to preserve economic and financial stability in the Euro Area.

Database

Cambridge Journals Online

Title: Integration of sheep grazing for cover crop termination into market gardens:

Agronomic consequences of an ecologically based management strategy

Author: Sean C. McKenzie, Hayes B. Goosey, Kevin M. O'Neill and Fabian D. Menalled

Journal: Renewable Agriculture and Food Systems

Published online: 29 September 2016

DOI: 10.1017/S1742170516000326

Abstract

Cover crops are suites of non-marketable plants grown to improve soil tilth and reduce erosion. Despite these agronomic benefits, the use of cover crops is often limited because they do not provide a direct source of revenue for producers. Integrating livestock to graze cover crops could provide both an expeditious method for cover crop termination and an alternative source of revenue. However, there has been little research on the agronomic impacts of grazing for cover crop termination, especially in horticultural market-gardens. We conducted a 3-year study comparing the effects of sheep grazing to terminate a four species cover crop (buckwheat, sweetclover, peas and beets) with those of mowing on soil quality indicators, cover crop termination efficacy, and subsequent cash-crop yields. In addition, we tested the nutritional quality of the cover crop as forage. Compared with mowing, sheep grazing did not affect soil chemistry, temperature or moisture. Our study demonstrates that sheep grazing removed more cover crop biomass than mowing at termination. The assessment of nutritional indices suggests that the four-species cover crop mixture could provide high-quality forage with a potential value of US\$144.00–481.80 ha⁻¹ of direct revenue as a grazing lease. Cash-crop yields did not differ between previously grazed and previously mowed plots in the subsequent growing season. We conclude that integrating sheep grazing into market vegetable garden operations could make cover crops more economically viable without having adverse effects on subsequent cash crops.

Database

Cambridge Journals Online

Title: Risk-balanced dimensioning and pricing of End-to-End differentiated services

Author: Gaivoronski, A. A., Nesse, P. J., Osterbo, O. N. and Lonsethagen, H.

Journal: European Journal of Operational Research

Volume: 254, **Issue:** 2 (16 October 2016), **Pages:** 644

Abstract

End-to-End differentiated services refer to information services, delivered over the modern Internet with a differentiated grade of Quality of Service (QoS) over heterogeneous networks. Such services represent a prospective way of satisfying the needs of demanding customers, which cannot be satisfied with QoS delivered by the usual best effort Internet connectivity. This paper focuses on the differentiation aspect and develops stochastic optimization models designed for the selection of a portfolio of services with varying degrees of QoS by a risk-averse service provider under uncertainty concerning demand, generated by a multi-segment market of heterogeneous users. The model includes decisions concerning service offer, quality of services, pricing and network capacity expansion. The risk/profit trade-off is computed using an industry-specific risk measure, which is the fraction of demand not satisfied under the required QoS. This paper provides the evaluation of a plausible stepwise business strategy for the introduction of these services.

Database

ABI/INFORM Complete

Title: Multiple customer order decoupling points within a hybrid MTS/MTO manufacturing supply chain with uncertain demands in two consecutive echelons

Author: Ghalekhondabi Iman, Sormaz Dusan and Weckman Gary

Journal: Opsearch

Volume: 53, **Issue:** 4 (October 2016), **Pages:** 976-997

Abstract

For decades, manufacturers have dealt with uncertain demands, and many solutions--such as manufacturing semi-finished products-have been presented to help manage the uncertainties. This paper considers the demand uncertainties in two echelons of a supply chain, unlike most of the field research, which has focused on the final customers' demand uncertainty. In order to decrease the operating costs of a manufacturer, a model is proposed to use hybrid manufacturing in two levels of a supply chain with two echelons of manufacturers. The output of the presented model is the quantity of semi-finished products ordered to the decoupling point upstream manufacturer. The number of processes that must be done based upon Make to Stock, the order quantity of the decoupling point downstream manufacturers, and the order quantity of the final customers are obtained by the presented model as well. A numerical example and a vast sensitivity analysis are presented to better show the applicability of the presented model.

Database

ABI/INFORM Complete

Title: Business innovation and government regulation for the promotion of electric vehicle use: lessons from Shenzhen, China

Author: Ying Lia, Changjie Zhan, Martin de Jong and Zofia Lukszo

Journal: Journal of Cleaner Production

Volume: 134, **Issue:** Part A (15 October 2016), **Pages:** 371–383

DOI: 10.1016/j.jclepro.2015.10.013

Abstract

The deployment of electric vehicles has attracted growing attention and is now seen as a possible pathway for a transition towards sustainable transportation. This paper provides insight into the commercialization of electric vehicles in Shenzhen focusing on business innovation and the regulatory context in which it occurs. Using the business model canvas framework, this paper analyzes interactions between enterprises and governments along the value chain of electric vehicles in the bus and taxi fleets. It also discusses the strengths and weaknesses of the Shenzhen model both in business innovation and government regulation for promoting electric vehicle use. This paper finds that Shenzhen has succeeded in fostering a distinct government-enterprise cooperation model that not only reduces the financial pressure on the local government to promote electric vehicle use, but also gives enterprises significant leeway to experiment with various innovative business models. The joint result of these efforts is that the commercialization of electric vehicles has become feasible for delivering the public transport service (buses and taxis) in Shenzhen. Still, this paper argues that the current model of Shenzhen can be further enhanced by: 1) encouraging private investment in charging infrastructures by means of public-private-partnerships; and 2) standardizing electric-vehicle technologies and production to break down the local protectionism in the electric vehicle market. The Shenzhen model acts as a source of inspiration by pointing out the significance of integrating business innovations and government regulations to facilitate the deployment of electric vehicles, which provides practical lessons for industrial players and policy makers in other cities. Furthermore, this work offers theoretical references regarding the application of the multi-actor perspective and the business model canvas framework to analyze the actors and interactions along the value chain of innovative technologies.

Database

ScienceDirect

Title: Energy, exergy, economic and environmental (4E) analysis of a solar desalination system with humidification-dehumidification

Author: Emrah Deniz and Serkan Cinar

Journal: Energy Conversion and Management

Volume: 126 (15 October 2016), **Pages:** 12 - 19

DOI: 10.1016/j.enconman.2016.07.064

Abstract

A novel humidification-dehumidification (HDH) solar desalination system is designed and tested with actual conditions and solar energy was used to provide both thermal and electrical energy. Energy-exergy analyses of the system are made and economic and enviro-economic properties are investigated using data obtained from experimental studies. In this way, economic and environmental impacts of the HDH solar desalination systems have also been determined. The maximum daily energy efficiency of the system was calculated as 31.54% and the maximum exergy efficiency was found as 1.87%. The maximum fresh water production rate is obtained as 1117.3 g/h. The estimated cost of fresh water produced through the designed HDH system is 0.0981 USD/L and enviro-economic parameter is 2.4041 USD/annum.

Database

ScienceDirect

Title: Economic growth, human capital and structural change: A dynamic panel data analysis

Author: Aurora A.C. Teixeira and Anabela S.S. Queiros

Journal: Research Policy

Volume: 45, **Issue:** 8 (October 2016), **Pages:** 1636–1648

DOI: 10.1016/j.respol.2016.04.006

Abstract

Human capital is identified as one of the main determinants of economic growth and plays an important role in the technological progress of countries. Nevertheless, existing studies have to some extent neglected the importance of human capital in the growth process via the interaction it can have with a country's industrial specialization. Additionally, the emphasis is mainly placed on supply-side determinants, while demand-side factors are neglected, particularly the relevance of the processes of structural change. Thus, using a growth model which integrates variables from both the supply side and demand side, we assess the direct and indirect effects of human capital on economic growth, including in the latter the interaction of human capital with the industrial specialization of countries. Based on dynamic panel data estimations, we found that human capital and the countries' productive specialization dynamics are crucial factors for economic growth. Moreover, the interaction between human capital and structural change in high knowledge-intensive industries impacts significantly on economic growth. However, the sign of this effect depends on the type of country and the period of analysis. Specifically, over a longer time span (1960–2011) and for more highly developed (OECD) countries, the impact of the interaction between human capital and structural change is positive. When we also include transition and Mediterranean countries over a shorter time period (1990–2011), we find that human capital significantly and positively impacts on the countries' economic growth but the effect of human capital via specialization in high-tech and knowledge-intensive activities is negative. The latter result indicates that the lack of industrial structures able to properly integrate highly educated individuals into the productive system leads countries to experience disappointing economic returns.

Database

ScienceDirect

Title: Exposure to Sexual Economics Theory Promotes a Hostile View of Heterosexual Relationships

Author: Janell C. Fetterolf and Laurie A. Rudman

Journal: Society for the Psychology of Women

Published online: 28 September 2016

DOI: 10.1177/0361684316669697

Abstract

Proponents of sexual economics theory argue that women exchange sex for men's resources. This idea is likely to promote a competitive view of gender relationships that undermines gender equality by characterizing women as manipulative and financially dependent on men. Heterosexual college students (N = 474) who were randomly exposed to a popular YouTube video describing sexual economics theory increased their (1) behavioral support for sexual exchange concepts, (2) endorsement of the theory, and (3) adversarial views of heterosexual relationships, compared with a control group of students. Sexual exchange theory endorsement and adversarial heterosexual beliefs positively covaried, and both attitudes were related to participants' sexism. Reading a critique of sexual exchange theory, that emphasized mutual respect and affection as precursors to heterosexual intimacy, counteracted the consequences of exposure to the theory. The findings provide evidence that disseminating sexual exchange theory via video on the Internet negatively affects young adults' views of gender relationships. Educators, and others who wish to explore sexual economics theory through the use of this video, should also include a discussion of the countervailing evidence available.

Database

SAGE Journal Online

Title: Transmission and generation investment in electricity markets: The effects of market splitting and network fee regimes

Author: Veronika Grimm, Alexander Martin, Martin Schmidt, Martin Weibelzahl and Gregor Zottl

Journal: European Journal of Operational Research

Volume: 254, **Issue:** 2 (16 October 2016), **Pages:** 493–509

DOI: 10.1016/j.ejor.2016.03.044

Abstract

We propose an equilibrium model that allows to analyze the long-run impact of the electricity market design on transmission line expansion by the regulator and investment in generation capacity by private firms in liberalized electricity markets. The model incorporates investment decisions of the transmission system operator and private firms in expectation of an energy-only market and cost-based redispatch. In different specifications we consider the cases of one vs. multiple price zones (market splitting) and analyze different approaches to recover network cost—in particular lump sum, generation capacity based, and energy based fees. In order to compare the outcomes of our multilevel market model with a first best benchmark, we also solve the corresponding integrated planner problem. Using two test networks we illustrate that energy-only markets can lead to suboptimal locational decisions for generation capacity and thus imply excessive network expansion. Market splitting heals these problems only partially. These results are valid for all considered types of network tariffs, although investment slightly differs across those regimes.

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