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00028 Robert Göx, Jörg Budde, Jens Robert Schöndube:
Das lineare Agency Modell bei asymmetrischer Information über den Agentennutzen.

Abstract:

JEL:

Keywords:

00027 Horst Gischer:
The Impact of Central Bank Interest Rate Variations: Empirical Evidence from Germany

Abstract:

On principle, independent central banks can use either interest rates or monetary aggregates as operating targets. If money demand is a stable and given function with respect to the interest rate both strategies of monetary policy necessarily lead to the same results. A vital problem occurs if the central bank has no sufficient knowledge of the "true" money demand function. In this case the velocity of money is quite unpredictable and the quantity of money may not be tightly linked to aggregate spending as alleged in the modern quantity theory. Exactly this situation is the European Central Bank (ECB) confronted with. Although widely criticized for its conduct the ECB maintains to confide in interest rate policy. By this the ECB implicitly assumes that controlling both the monetary sector and aggregate demand is effectively feasible through interest rate variations. Our paper tries to challenge this hypothesis by investigating the impact of interest-oriented monetary policy against a backdrop of experiences made by the Deutsche Bundesbank. Using data and macroeconomic facts from Germany we rather focus on empirical evidence than theoretical analysis. As a first approach adjustments in the corporate sector regarding to interest rate variations are presented. We find that the profitability of private firms in Germany during 1971 to 1997 did not significantly respond to variations of the interest rate level. Referring to econometric techniques conceivable connections between official interest rates and interest rates on institutional financial markets are analysed in a next step. Testing for varied hypotheses of causality the data would seem to suggest that official interest rates have not exogenously been fixed by the Bundesbank. Some evidence can be given that in the period under review official interest rates occasionally "followed the market".

JEL:

Keywords:

00026 Stefan Felder, Horst Schmitt:
Regulierung im Krankenhausbereich mit Hilfe der Effizienzfrontanalyse (DEA-based regulation: Theory and Application to inpatient care in Saxony-Anhalt)

Abstract:

In this paper we present a reimbursement scheme combining yardstick competition and Data Envelopment Analysis (DEA). The scheme reimburses cost but offers a bonus for resource savings relative to a DEA-based cost norm. While this scheme minimizes informational rents, it still induces firms to minimize costs. The proposed reimbursement scheme is applied to the hospital sector in Saxony-

Anhalt based on data collected in 1999. The results indicate low regulation costs compared to potential large cost reductions due to the incentive structure of the reimbursement scheme.

JEL: L5, I1

Keywords: DEA, efficient incentive schemes, hospital regulation

00025 Joseph Heinrich, Rapporteur Wulf Albers, Robert Boyd, Gerd Gigerenzer, Kevin A. McCabe, Axel Ockenfels, H. Peyton Young:
Group Report: What is the Role of Culture in Bounded Rationality?

Abstract:

JEL:

Keywords:

00024 Werner Güth, Axel Ockenfels:
Evolutionary Norm Enforcement

Abstract:

Applying an indirect evolutionary approach with endogenous preference formation, we show that a legal system can induce players to reward trust even if material incentives dictate to exploit trust. By analyzing the crowding out or crowding in of trustworthiness implied by various verdict rules, we can assess how a court influences the share of kept promises of 'truly' trustworthy players who evolutionarily evolved as trustworthy and of opportunistic players who are only trustworthy if inspired by material incentives.

JEL: C73, K42

Keywords:

00023 Ralf Becker:
Social Self-Control, Target Efficiency and Social Discount Rate in a Three Generations Model

Abstract:

The presented model of three generations reveals the relation of target efficiency and social discount rates. The present generation can choose between short-term and long-term investment to care for the distant future. A scenario of social self-control is the most interesting one of many useful reference lines for the discussion about the social discount rate. The curiosity of this self-control behavior of society is that in contrast to self-control of individuals threatened to face an unjustified reproach from this near-future generation to have overdrawn long-term investments- This is because the preferences of the first generation were supposed to be totally symmetric, and, even perhaps identical to the preferences that the near-future generation applied. Apart from this an exclusive orientation on target efficiency expressed in simple comparisons of rate of returns may be misleading, especially in the case of strongly symmetric preferences, because uncomplete altruism of the near-future generation implies an additional bias against the distant future which generates an avoidable asymmetry in the implementation of given careness levels for the near and the distant future. But contrarily target efficiency can give the proper signal for the present investment decision if we suppose constant exponential discounting. So the position towards the principle dependence of discount factors on distances between lifetimes is an essential logical bifurcation within 3GM outcome. Neither the strong nor the weak form of symmetric present preferences produces some kind of ex ante definiteness of the potential outcomes but the first clearly strengthen the weight of long-term investment. The principal result is shown for the class of CIES utility functions.

JEL: H43, E62

Keywords: social discount rate, target efficiency, social self-control, public investment

00022 Philipp Reiß:
On the Convergence Speed in Growth Models

Abstract:	
JEL:	
Keywords:	
00021	Frank Silber: Alternative Konzepte zur Anpassungsanalyse in Vektor-Fehlerkorrektur-Modellen. Makroökonomische Anpassungsprozesse am österreichischen Arbeitsmarkt.
Abstract:	Das vorliegende Arbeitspapier spezifiziert ein Vektor-Fehlerkorrektur-Modell (VECM) zur Analyse der Anpassungsprozesse am österreichischen Arbeitsmarkt. Es werden die Anpassungsprozesse mit alternativen Konzepten (orthogonale Impuls-Antwort-Folgen auf Basis von sog. Langfristrestriktionen, verallgemeinerte Impuls-Antwort-Folgen und Persistenzprofile) untersucht. Unterschiede in den Konzepten beruhen auf den unterstellten Schocks und restringierten Langfrisdynamiken. Für allgemein Anpassungsanalysen werden die verallgemeinerten Impuls-Antwort-Folgen und das Persistenzprofil bevorzugt. Die Schätzungen liefern eine Arbeitsnachfrage mit plausiblen Parametern und einer relativ starken Tendenz zur Rückkehr ins Gleichgewicht. Die Anpassungen der einzelnen Variablen auf Schocks werden quantifiziert und weisen auf umfangreiche Persistenzen hin.
JEL:	C32, C53, E24, J23
Keywords:	
00020	Frank Silber: Zum Einfluss der Saisonbereinigung auf die VECM-Spezifikation. Eine empirische Illustration anhand österreichischer Arbeitsmarktdaten.
Abstract:	Vektor- Fehlerkorrektur-Modelle (VECM) finden in der makroökonomischen Forschung u.a. dann Anwendung, wenn das Interesse an strukturellen Beziehungen gepaart ist mit der Analyse von makroökonomischen Anpassungsprozessen, kurzfristigen Prognosen und/oder von ökonomischen Schocks. Das Papier demonstriert exemplarisch, welchen Einfluß die Verwendung saisonbereinigter Daten auf die Spezifikation eines VECM hat. Da die Saisonbereinigung die empirische Dynamik beeinflusst wird für die Verwendung von unbereinigten Daten plädiert, und zwar insbesondere, wenn es gilt, anpassungsprozesse zu quantifizieren.
JEL:	C51, C32, C82, E24
Keywords:	
00019	Stefan Felder, Horst Schmitt and Bernt-Peter Robra: Nonmaleficence and the Diagnostic Cutpoints
Abstract:	The choice of cutpoints in clinical epidemiology involves trading off the utility gain of the true-positives with the utility loss of the false-positives. For tests with a continuous scale of values, this paper extends the ROC framework to include the a priori prevalence and the test's ratio of utility gain and utility loss, th so called 'relative benefit factor'. It formalizes the cutpoint choice by recurring to the principle of nonmaleficence and analyzes the effect of changes in prevalence, treatment outcome and exogenous improvements of test accuracy on the cutpoint.
JEL:	
Keywords:	Nonmaleficence, diagnostic test, thresholds, diagnostic cutpoint, sensitivity, specificity, ROC curve
00018	Udo Busch und Gerd Lindner: Berücksichtigung von Transportvorgängen im Common-Cycle-Modell

Abstract:	
JEL:	
Keywords:	
00017	Alfred Luhmer: Zur Dynamik der Kosten.
Abstract:	
JEL:	
Keywords:	
00016	Stefan Felder: Anreize zur Risikoselektion? Anmerkungen zum Risikostrukturausgleich in der Gesetzlichen Krankenversicherung
Abstract:	
JEL:	
Keywords:	
00015	Ruud Teunter, Karl Inderfurth, Stefan Minner and Rainer Kleber: Reverse logistics in a pharmaceutical company: a case study
Abstract:	In this paper we discuss the two main reverse logistics processes at the pharmaceutical company Schering. Both are associated with the production of active ingredients from raw material. Firstly, by-products are reused, because they contain valuable materials. Secondly, impure solvents are recycled or thermally utilized. We describe these reverse logistics processes and discuss their effects on production planning and inventory control. Additionally, we give insights into the economic valuation of product recovery.
JEL:	
Keywords:	
00014	Ludwig von Auer and Bettina Büttner: Taxing Couples
Abstract:	In our study, we are concerned with an economy comprising two-person households with individual utilities and household production. We investigate the consequences which a marginal revenue neutral tax reform entails on the members of such households. General conditions are derived under which such a tax reform makes a household better off. We also discuss some stylised facts established in recent empirical studies on labour supply. In conjunction with these stylised facts, our findings allow for simple recommendations in issues of actual social policy such as income splitting and the support of families.
JEL:	D13, H24
Keywords:	
00013	Ruud Teunter and Erwin van der Laan: On the non-optimality of the average cost approach for inventory models with remanufacturing
Abstract:	When analysing average cost (AC) inventory models, it is common use to add the discount rate times the capital tied up in a product to the out-of-pocket holding cost rate. This way, capital costs are (roughly) included. In this paper we show that such a method may not always be appropriate for reverse logistics inventory models with both remanufacturing and disposal of returned products.

JEL:	
Keywords:	inventory control, remanufacturing, disposal, costing
00012	Erwin van der Laan and Ruud Teunter: Average Costs versus Net Present Value: a comparison for multi-source inventory models
Abstract:	While the net present value (NPV) approach is widely accepted as the right framework for studying production and inventory control systems, average cost (AC) models are more widely used. For the well known EOQ model it can be verified that (under certain conditions) the AC approach gives near optimal results, but does this also hold for more complex systems? In this paper it is argued that for more complex systems, like multi-source systems, one has to be extremely careful in applying the AC approach on intuition alone, even when these systems are deterministic. Special attention is given to a two-source inventory system with manufacturing, remanufacturing, and disposal, and it is shown that for this type of models there is a considerable gap between the AC approach and the NPV approach .
JEL:	
Keywords:	Net present value, average costs, inventory control, manufacturing, remanufacturing, disposal, holding costs
00011	Ruud Teunter and Dimitrios Vlachos: An inventory system with periodic regular review and flexible emergency review
Abstract:	We analyze a discrete time inventory model with two supply modes. Regular orders are placed periodically and arrive after a deterministic lead time. Emergency orders, characterized by a shorter deterministic lead time but higher purchase costs, can be placed in case of imminent stock-outs. We propose and analyze more flexible order-up-to policies with emergency orders that arrive one, two, , up to some fixed number of time units before a regular order arrives. Based on an approximate cost model, we develop two sets of approximate closed-form optimality conditions. The first set of conditions are rather complicated, but simulation shows that they do lead to near-optimal policies in most cases. The second set of conditions are very simple and seem more practical, but they only lead to a near-optimal policy if there are enough emergency supply opportunities in a review period to prevent most backorders.
JEL:	
Keywords:	
00010	Atanasios Mitropoulos: Learning under minimal information: an experiment on mutual fate control
Abstract:	Reinforcement learning has proved quite successful in predicting subjects' adjustment behaviour in repeatedly played simple games. However, reinforcement learning does not predict convergence to the efficient cell in the minimal information game of mutual fate control, while earlier psychologist' experiments show some tendency to convergence. Our rivaling learning rule, a modification of win-stay lose-change, does predict convergence. We perform an experiment using modern economic methodology and compare these two learning rules. Our results are unfavourable for both reinforcement learning as well as win-stay lose-change. The data rather support the view that subjects search by using patterns.
JEL:	C72, C92
Keywords:	mutual fate control, learning, coordination, experimental economics, coordination failure
00009	Stefan Felder, Horst Schmitt, Bernt-Peter Robra:

Abstract: This paper presents a Bayesian approach to clinical decision-making that incorporates utility and cost in the prediagnostic stage, which is the prevalence rate where a clinician is indifferent between treatment and no treatment given no further diagnostic information. The expected utility and cost of diagnostic information are then compared against this background. Our framework generalises the threshold concept in clinical decision analysis and adds to it the marginal cost-benefit criterion that determines the choice between several diagnostic strategies. The paper provides and discusses an application of this framework in cardiography.

JEL:

Keywords: Bayesian decision-making, clinical decision analysis, prevalence thresholds, marginal cost-benefit ratio

00008

Gudrun Kiesmüller, Stefan Minner, Rainer Kleber:
Optimal Control of a One Product Recovery System with Backlogging

Abstract:

In this paper a product recovery system for one product is investigated. The system contains one inventory for returned and recoverable items and one for serviceable items. Demands are satisfied from serviceable inventory where backlogging of demands is allowed. In addition, there is the possibility of disposal for the returned products. We assume deterministic but dynamic return and demand rates and linear cost structure. Pontryagin's Maximum Principle is used to determine the optimal production, remanufacturing and disposal policy.

JEL:

Keywords:

00007

Rainer Kleber, Stefan Minner, Gudrun Kiesmüller:
Multiple options in dynamic product recovery systems

Abstract:

Due to undesired environmental effects, limited availability of natural resources to manufacture new products, recovery quotas to avoid disposal, manufactures assigned to be responsible for returned products on the one hand and economic incentives on the other represent product recovery motives. Economic incentives especially arise, if a returned product can be upgraded and sold as a new product at lower costs compared to manufacturing a new product and disposing of the returned one. Since product returns and material requirements for production do not necessarily coincide, a co-ordination in terms of collecting and storing returned items is required. Most production and inventory management models for reverse logistics are restricted to stationary demand and return conditions which therefore can not address seasonal effects, product life cycle effects, and the dependency of returns on past sales. In our work, we focus on the determination of return collection and recovery time intervals under dynamic conditions. Additionally, returns can be used to satisfy several demand streams, i.e. there exist multiple recovery options. Production, recovery, and disposal is coordinated over time and the model is analyzed within a control theoretic framework by applying Pontryagin's Maximum Principle.

JEL:

Keywords: Reverse logistics, optimal control, deterministic inventory model, recovery options

00006

Jeannette Brosig, Joachim Weimann, Chun-Lei Yang:
Emotions and reasons in a hot versus cold experiment

Abstract:

This paper investigates the interaction of emotions and reason in a sequential bargaining experiment. In particular, we employ two new one-shot sequential games of 2x2 format which are somewhat similar to the well-known trust game with the difference that the inefficient outside option of no trust could be punished by the second mover at some cost. The design has two control variables, the decision

procedure (hot, in which the second mover reacts to the actual decision of the first mover, versus cold, in which the second mover has to deliver a complete strategy) and the costs of punishment (high vs. low).
 Our results reveal that behavior is influenced by both variables. In fact, punishment occurs only in the hot situation and only when the costs are low enough. However, there is no significant difference in second mover behavior if the first mover chooses the trust subgame, namely almost no reward. Moreover, first mover behavior seems to be rather puzzling given our observations of the second mover. Despite the higher likelihood of being punished, they chose the nontrust action of two effects: the so-called consensus effect and the so-called positive self-image effect. While the former describes the phenomenon that people tend to believe that others behave the same as they do, the latter refers to the observation that people maintain unrealistic and positive beliefs about themselves; that is, they dislike thinking of themselves as being capable of exploiting or harming others.

JEL: C7, C9

Keywords: Experimental Economics, Sequential Games, Bargaining, Strategy Method

00005 Jörg Budde:
 Performance evaluation, efficient job assignment, and incentives

Abstract: In recent years, performance measurement has become an important issue in management accounting. Several concepts which try to capture the long-term effects of management decisions have been suggested, the most popular among those the balanced scorecard. While most of the literature focuses on the decision facilitating function, some authors suggested to use the acquired information also for incentive purposes. However, critics argue that such multi-purpose use of information might have counterproductive effects. Referring to this criticism, the present paper considers a situation where performance information has to be used in a decision facilitating context in order to provide incentives in the decision influencing context. In particular, a principal has to decide whether to promote an agent to a different job or not. The incentive mechanism is renegotiation proof only if the principal benefits from the modified task allocation. Therefore, the performance measure has to be informative not only about the agent's effort, but also about his qualification for the new task. Conditions are derived to rank different signals under this requirement.

JEL:

Keywords:

00004 Dietmar Hornung:
 Endogenous Growth with Negative Intertemporal R&D Spillovers

Abstract: Semi-endogenous growth models propose that in the absence of population growth, consumption's long run growth rate is zero. The reason are negative intertemporal R&D spillovers, motivated by the exhaustion of technological opportunities. In the present paper, we complement this exhaustion effect of R&D by a positive productivity effect: a higher level of technical knowledge increases the profits that accrue to successful innovators. Thus, even in the long run, R&D investment is profitable, and consumption's growth rate remains positive. Our model reinstates the essential result of endogenous growth theory according to which policy may affect the long-run growth rate. Furthermore, our model holds excessive growth as a possibility.

JEL: D43, L13, O31, O41

Keywords: endogenous growth, R&D, innovation

00003 Dietmar Hornung:
 Is Growth Mere R&D? - A Model with Two-Stage Product Differentiation

Abstract: The paper presents a growth model where entrepreneurs may invest either in R&D or in physical capital

spreading a two-stage product differentiation. The model finds a double suboptimality. Apart from a static inefficiency which follows from the economy's structure, the model detects a dynamic inefficiency: with laissez-faire, both capital accumulation and innovation are too slow, since entrepreneurs disregard the positive external effect of their investment. Optimum policy measures that make the decentralized market outcome and the social planner's solution coincide are derived.

JEL: D43, L13, O31, O41

Keywords: endogenous growth, R&D

00002 Ludwig von Auer:
Inversion Tests for Price and Quantity Indices

Abstract: It is a primary occupation of axiomatic index theory to develop tests which help to assess an index formula's economic plausibility. Some of these tests find almost universal approval. Some other tests, however, are highly controversial. Screened by the set of approved tests, some index formulas pass without any complaint. In the present study I show that in various situations these same index formulas may generate economically nonsensical results. This suggests that an additional screening device is required. I therefore introduce the *inversion test*. Interestingly, the Marshall-Edgeworth and the Fisher formulas pass the inversion test, whereas the Laspeyres and Paasche formulas do not.

JEL: C43

Keywords: index theory, price index, quantity index

00001 Ludwig von Auer:
Consistency in Aggregation

Abstract: A price index number can be calculated either from the elementary commodities, or in two or more stages, by first computing subindex numbers for subsets of commodities, and from these subindex numbers, the index number for the total set. If both approaches generate the same number, the applied price index is *consistent in aggregation*. For official price statistics this is a fundamental requirement. In former studies it has been argued that prominent price indices like the Fisher, Törnqvist, and Marshall-Edgeworth index are not consistent in aggregation. However, these studies have a somewhat arbitrary focus which results in a too restrictive notion of consistency. In the present study this arbitrariness is removed and a less restrictive notion of consistency is introduced. It is examined whether this new approach results in additional price indices becoming consistent in aggregation.

JEL: C43

Keywords: index theory, price index, quantity index, aggregation, tests

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