



NETWERK ALGEMENE EN KWANTITATIEVE ECONOMIE

NETHERLANDS NETWORK OF ECONOMICS

NAKE DAY 2003

Book of Abstracts

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Dutch Central Bank, Amsterdam



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Dutch Central Bank

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Netwerk Algemene en Kwantitatieve Economie
Netherlands Network of Economics

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Francisco André

“Landfill construction and capacity expansion”

Economics and Business Administration

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Abstract:

We study the optimal capacity and lifetime of landfills taking into account their sequential nature. Such an optimal capacity is characterized by the so-called optimal capacity condition. Particular versions of this condition are obtained for two alternative settings: (i) if all the landfills are to have the same capacity; and (ii) if each of them is allowed to have a different capacity. In the second case we obtain an optimal control problem, with mixed elements of both continuous and discrete time. The resulting optimization problems involve dividing a time horizon of planning into several subintervals of endogenously decided length. The results obtained may be useful to address other economic problems such as private and public investments, consumption decisions on durable goods, etcetera.

Michèle Belot, Erik Canton and Dinand Webbink

“Educational choices and student support: the case of the Netherlands”

Education and Science

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Abstract:

This paper investigates the role of public aid to students in higher education on their educational choices (university versus non-university) and performances using data for the Netherlands. The Dutch student support system provides students with grants paid

directly by the government. These grants are subject to performance requirements and their duration depends on the official nominal duration of the study. Before 1996, students could benefit from public support for the nominal duration of their studies, with an extra year. From 1996 on, public support was strictly restricted to the nominal duration of studies. This reform constitutes a natural experiment particularly appropriate to study the effects of public support on the qualitative choices of students and their performances in higher education. We use micro data on freshmen from two cohorts: one before the change (1995) and one after the change (1997). We find that the reform of 1996 discouraged students from enrolling in university. It appears that the relatively talented students were the most affected by the reform. Furthermore, we find that the reform stimulated the students to perform better but also work more on the side, probably to compensate for the loss of public support.

Klaas Beniers and Robert Dur

“Politicians’ motivation and the quality of government decision making”

Tinbergen Institute

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Abstract:

This paper examines the quality of government decision-making given that politicians differ in competence, in policy preferences, and in the degree they care about social welfare. Elections work as a device to select competent politicians. However, electoral concerns may induce politicians who are not overly interested in social welfare to hide their incompetence. Strong re-election concerns, due to a polarized political system or to high rewards from office, may therefore lead to the continuation of inefficient policies. Furthermore, we show that a politician has a stronger incentive to continue an inefficient policy if other politicians are known to be reluctant in admitting their mistakes. A political culture may therefore be self-enforcing; an opportunistic pool of politicians induces opportunistic behavior. Finally, we show that inefficient policies are

continued more often if we introduce a cost of evaluating a policy's quality. Politicians have a stronger incentive to continue a policy if evaluating the quality of the policy is costly.

Beata Bierut

“The effects of learning in interactive monetary policy committees”

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Abstract:

Monetary policy decisions are usually taken by a group of individuals instead of 'the' central bank. We show that this fact has important consequences for the quality of interest rates decisions, especially since group decision-making involves interaction. The theoretical results from the voting literature show that interaction is detrimental to the quality of group decision making. We reconcile these results with intuition suggesting that exchange of information implicit in interaction should be beneficial for the decision making process (this intuition is moreover supported by experimental evidence). Our results show that if interaction involves learning, it improves the quality of monetary policy. Furthermore, we show that the inefficiencies induced by heterogeneous skills of committee members are to a large extent reduced by allowing for interaction. We conclude by investigating the consequences of interaction and learning for the optimal committee size.

Jan Boone

“Optimal competition: A benchmark for competition policy”

Economics

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Abstract:

This paper introduces optimal competition: the best form of competition in an industry that a competition authority can achieve (given the information constraint that it cannot observe firms' efficiency levels). We show that the optimal competition outcome in an industry becomes more competitive as more money is spent in the industry, as the competition authority puts less weight on producer surplus and more weight on employment. The relation between competition and entry costs is U-shaped. Finally, conditions are derived under which Cournot competition is too competitive compared to the optimal competition outcome.

Lex Borghans and Loek Groot

“Political knowledge, democratic representation and voter turnout”

ROA

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Abstract:

The observation that many people turn out at elections although their influence on the outcome is negligible is often considered as a paradox. From this perspective it is even more surprising that people spend time thinking and talking about political issues to increase their political knowledge. In this paper we investigate why people invest in political knowledge and vote. The analysis is based on the idea that apart from perceived influence through voting, people might derive utility from political

discussion and entertainment. Voting is considered as a complement of political discussion and entertainment. Based on a survey during the weeks before the Belgium national elections in 2003 we show that indeed both interest in political issues and political entertainment increase the probability of voting. Only intrinsic political interest is related to investments to increase political knowledge leading to greater understanding of political issues. Furthermore, people with intrinsic political interest tend to base their votes more on their perceived public interest than self-interest. Both political knowledge and stressing public interest change voters opinions, implying that increased political interest improves the quality of votes, while entertainment only increases the turnout per se.

Sebastian Buhai

“On wage evolution and separation rates in a stochastic productivity framework”

Economics

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Abstract:

We discuss a theoretical framework for the job duration of individual workers and the evolution of the wage rate during that job assuming that individual productivity follows a geometric Brownian motion. The specification of the model allows the application of option theory to calculate the value of a job and the optimal job separation rule. We provide evidence that this random growth model fits the hump-shaped tenure profile observed in data on job exit rates and is consistent with empirical evidence that log the of wages follows a random walk. We test empirically the model predictions for the evolution of the wage on a PSID sample of male household heads. Preliminary results on the experience and tenure-adjusted autocovariance and autocorrelation matrices of changes in the logarithms of reported wages agree with previous research claiming strong negative dependence between consecutive lags and absence of large or statistically significant covariances at higher lags.

Paul Cavelaars

“Has the tradeoff between productivity gains and job growth disappeared?”

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Abstract:

Policymakers' efforts to boost trend output growth may be hampered by the presence of a tradeoff between productivity gains and job creation. This paper presents empirical evidence that the negative relationship between productivity growth and employment growth that prevailed in the 1960s and 1970s has disappeared since then. This finding is robust to using alternative measures and including other explanatory variables. The improved tradeoff may be good news for policymakers who aim at raising the 'speed limit' of the economy.

Yiu Cheung

"Trading European sovereign bonds: the microstructure of the MTS trading"

Financial Studies
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Abstract:

We study the microstructure of the MTS Global Market bond trading system. This system is the largest pan European interdealer trading system for Eurozone government bonds. We study the effective spread and the volume weighted quoted spread for different classes of bond maturities and issuing countries. We find that quoted and effective spreads are related to maturity and trading intensity. Quoted spreads on EuroMTS are slightly higher than on the domestic markets, but there are no substantial differences in effective spreads. The regression results show that order flow

plays a key role in determining the price discovery in the bond market. Transitory costs are more important in markets like Italy and Belgium, which are dominated by local traders. In addition, we find a positive relationship between trading intensity and price recovery, indicating a higher impact after a longer period of inactivity. We relate these findings to the structure of bond markets and interdealer trading.

Judith Cornelisse-Vermaat

“The demand for health: Differences between native Dutch and immigrants in the Netherlands”

Economics of Consumers and Household

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Abstract:

This paper estimates the demand for health to obtain insight in determinants of health. Mainly differences between native Dutch and immigrants are studied. The ‘health capital’ model is used to calculate the demand for health. A sample (2001) is used that consists of 700 Dutch, 700 Turks, 700 Surinamese/Antilleans, and 450 Moroccans. Ordered probit analysis is employed to calculate the demand for health. Subjective health (in five categories) is used as dependent variable, while socioeconomic and cultural variables are used as independent variables. To estimate the loss for overweight on health, Quality of Life Weights (QoLW) are calculated using the QALY method. The analysis shows that immigrants have a poorer health than the native Dutch. Females have a poorer health than males. For both native Dutch and immigrants the demand for health decreases with age, smoking, and overweight, and increases with being married/cohabiting. For immigrants demand for health also decreases with unemployment and increases with level of education, eating out, and the intake of extra vitamins. For native Dutch demand health also decreases with outsourcing of food preparation. The Surinamese/Antilleans suffer the highest loss in health utility due overweight, while the Moroccans have an increase in health utility due to overweight.

Ghebreegiabiher Debrezion, Eric Pels and Piet Rietveld

“The impact of railway station on property value”

Spatial Economics

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Abstract:

Based on the bicentric linear city model of Sivitanidou and Wheaton, this paper develops an urban model that allows for two transport modes (fast mode with discrete access points and slow mode with continuous access points). The introduction of multi modal transport affects classical urban modelling in that the proximity to the relatively faster mode has a similar effect of capitalizing on the value of land. Local peaks occur at the node areas of the fast mode and the global peak will be found around the centres. The differentials in the wage structure of the centres coupled with variations in speed of the modes and distance determine the land rent. Another result of our analysis is that for constant land consumption by households the size of the urban area is an increasing function of the transportation cost of the nodes. This paper also attempts to explain the variation in the empirical findings by meta-analytical procedures. Generally the variations are attributed to the nature of data, particular spatial characteristics, temporal effects and methodology. The data can vary in relation to the type of property under study. Some indication is found in support of the assertion that commercial properties enjoy a higher positive impact compared to residential properties. Commuter railway stations have a consistently higher positive impact on the property value compared to light and heavy railway/Metro stations. The inclusion of other accessibility variables (such as highways) in the models reduces the level of reported railway station impact. However, this effect becomes insignificant for properties within a quarter-mile of the station, leaving the railway station as a major accessibility point. Our analysis did not find a significant effect of spatial and temporal factors.

Maria Demertzis and Andrew Hughes Hallett

“Three Models of Imperfect Transparency in Monetary Policy”

Research Department

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Abstract:

We present three different models of imperfect transparency in monetary policy: political transparency, economic transparency and constructive ambiguity. The first two show that transparency reduces the variability of inflation and the output gap but does not affect their average levels. But if the Central Bank is unable to commit to one particular set of preferences for all circumstances, in line with the hypothesis of constructive ambiguity, we find that both the levels and the variability of output and inflation may be affected. An empirical examination of these predictions, based on an index recently constructed by Eijffinger and Geraats, shows that macroeconomic averages are not much affected by transparency. But transparency appears to reduce the variability of inflation while increasing the variability of output. That suggests that Central Banks may have been exploiting constructive ambiguity more than a lack of transparency.

Silvia Dominguez Martinez and Otto Swank

"Does electoral competition create incentives for political parties to collect information about the pros and cons of alternative policies?"

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Abstract:

A well-known rationale for representative democracy is that direct democracy leads to a serious free-rider problem as to the collection of information. A problem with this rationale is that it takes for granted that representatives collect information. In this paper we examine whether or not electoral competition induces political parties or candidates to collect information about policy consequences. We show that the answer to this question depends on the cost of information collection. More surprisingly, we find that endogenizing information may lead to divergence of policy platforms.

Arnaud Dupuy and Philip Marey

“Shifts and twists in comparative advantage: Reconciling accelerated SBTC with the productivity slowdown”

Economics and Business Administration

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Abstract:

Skill-biased technical change is usually interpreted in terms of the efficiency parameters of skilled and unskilled labor. This implies that the comparative advantage of skilled workers increases proportionally in all tasks. In contrast, we argue that technical changes also affect the curvature of the distribution of comparative advantage. Building on Rosen's (1978) tasks assignment model, this implies that not only the efficiency parameters of skilled and unskilled workers change, but also the elasticity of substitution between skill-types of labor. We argue that the technical changes observed in the last 30 years have decreased the elasticity of substitution, which in turn has contributed to a slower growth in income per capita. We find significant empirical support for a decrease in the elasticity of substitution at the end of the 70s in the United States.

Adam Elbourne and Roelof Salomons

“Monetary transmission and equity markets in the European Union”

Economics

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Abstract:

We assess the role of equity markets in the transmission of monetary policy in the European Union. We use a structural VAR model based upon the model of Kim and Roubini (2000) and we find that there are some differences in monetary policy transmission across our sample of countries although the confidence intervals surrounding the responses are quite wide and hence the differences are not, on the whole, statistically significant. We also find differences in the responses to stock market shocks. We also use variance decompositions to try to account for which shocks are driving the economies in our sample although these do not differ greatly between the countries.

Philip Franses and Marco van der Leij

“Forecasting jumps in conditional volatility: The GARCH-IE model”

Econometric Institute

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Abstract:

Conditional volatility models, like ARCH models, are often used in empirical finance. These models are useful for forecasting next period's increased volatility, given that the current observation marks the start of such a period. This property follows from the autoregressive nature of these models. The paper puts forward a GARCH-type model with an additional component (an innovation effect), which is introduced to forecast

sudden jumps in volatility. Not only the second volatile observation is forecasted but also the first. We discuss representation, parameter estimation and inference for this so-called GARCH-IE model. We illustrate the model for seven stock markets, and document that certain technical trading rules can have predictive value for such jumps.

Andrea Galeotti

“One-flow networks: The role of heterogeneity”

Tinbergen Institute

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Abstract:

The role of social and economic networks in shaping individual behavior and aggregate phenomena has been widely documented in recent years. This provides the main motivation for developing a theory of network formation. The existing literature has primarily focused on homogeneous players model. This paper focuses on the role that ex-ante asymmetries among the players play in shaping equilibrium networks. I consider a connections model where link formation is one-sided and the investment in social ties generate benefits only to the investor. I start by showing that values and costs heterogeneity are equally important in determining the level of connectedness of a network, while only costs heterogeneity are crucial in shaping the architecture of individual components in a network. I then explore the role of costs heterogeneity in societies where each player has a distinct cost of being directly accessed. I show that networks characterized by structural hole properties and an asymmetric distribution of links across players arise as equilibria, flower networks. I finally observe that the presence of a coordinator (the center of the flower) is accompanied by an over-investment in social ties comparing to what it is socially enhancing.

Jacob Goeree, Charles Plott and John Wooders

“Bidders' choice auctions”

Economics

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Abstract:

Sales of multiple real-estate properties are often conducted via a sequence of ascending auctions, giving the winner at each stage the right to choose one of the available lots. We show that when bidders are risk averse, such “bidders' choice” auctions may raise more revenues than standard simultaneous or sequential ascending auctions. We report the results of a series of laboratory experiments to investigate the effectiveness of bidder's choice auctions vis-à-vis the simultaneous ascending auction. We find that the bidder's choice auction commonly employed in practice is indeed superior in terms of revenues. We also introduce a new right-to-choose format by replacing the sequence of ascending auctions with a series of first-price sealed-bid auctions. This novel format yields even higher and less variable revenues. Finally, we compare observed bidding behavior in the experiments with theoretically predicted bids to estimate a common risk aversion from the data.

Elena Grigorieva, Jean-Jacques Herings, Rudolf Muller and Dries Vermeulen

“The private value single item bisection auction”

Quantitative Economics

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Abstract:

This paper presents a new auction, the bisection auction, which can be used for the sale of a single indivisible object. The auction starts with a lower and upper bound on the bidders valuations that determine the initial interval. The price sequence starts at the middle of the initial interval. Bidders report their demand at a current ask price by sealed bids. As a function of these bids, the auctioneer announces the price of the next round. If more than one bidder announces demand, the price increases to the middle of the upper half interval. If at most one bidder announces demand at the current price, the price decreases to the middle of the lower half interval. The query of announced prices converges to the smallest Walrasian price in logarithmic time that guarantees a fast and predictable termination of the auction. Modeling the bisection auction as an extensive form game with incomplete information we analyzed its equilibrium properties. We have proved that under integer valuations this auction is incentive compatible, that is truth-telling is a weakly dominant strategy and the equilibrium that results when everyone tells the truth is efficient in the sense that the player with the highest valuation gets the object. Furthermore, we have shown that in the setting of continuous valuations the bisection auction has an ex-post equilibrium in which bidders use a certain amount of bluff: from time to time they overstate their valuation. As a side effect the auction does not always yield an efficient outcome. Nevertheless, we argue that in the equilibrium the loss of efficiency tends to zero as the number of bidders becomes large.

Marco Haan

“Voluntary overcompliance”

Economics

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Abstract:

We explain voluntary over compliance, the phenomenon in which firms voluntarily choose to over comply with environmental regulations. In our model, a polluting firm faces a rent-seeking contest with an environmental group. By making a small concession beforehand, by over complying voluntarily, the firm lowers the stake the environmental group has in the rent-seeking contest, which lowers the group's stake in that contest. Voluntary over compliance increases social welfare, yet the firm undersupplies over compliance from a welfare point of view. An increase in the effectiveness of lobbying of the environmental group, increases the level of over compliance.

Ralph de Haas

"Foreign banks and credit stability in Central and Eastern Europe. A panel data analysis"

Monetary and Economic Policy Department

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Abstract:

We study whether foreign and domestic banks in Central and Eastern Europe have reacted differently to business cycle conditions and host country banking crises. Our unique panel dataset comprises data of more than 300 banks for the period 1993-2000, with detailed information on bank ownership and mode of entry. Our analysis shows that during crises periods domestic banks contracted their credit and deposit bases, whereas foreign banks, especially greenfields did not. Also, home country conditions matter for foreign bank growth, as there is a significant and negative relationship between home country economic growth and host country credit by foreign banks.

Rainer Haselmann

“The role of financial markets in the growth process of the Eastern European economies”

Macroeconomics

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Abstract:

This paper focuses on the relationship between financial market development and economic growth in the Eastern European transition economies. By observing the growth rate of new establishments of various industry branches, this paper concludes that the number of establishments in sectors depending on external finance grows faster in countries with a higher level of financial development. This positive effect on the growth rate is more pronounced in transition economies compared to a world sample. Furthermore, the influence of different ownership characteristics of the banking sector on economic growth is examined. In particular, a high rate of foreign penetration in the banking sector fosters the transition progress of the Eastern European countries.

Pim Heijnen

“Competition in the market for lobby services”

Economics

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Abstract:

A contest between a group of agents and an one individual agent is considered. A delegate is willing to represent the group. The group and the delegate engage in a contract, but contrary to the existing literature (e.g. Wärneryd, 2000) it is the delegate

that offers the contract to the group. Competition between two potential delegates is also studied. We show, that in the ‘one delegate’-case, the delegate has a larger stake and, therefore, a higher probability of winning the contests compared to the ‘two delegate’-case. This implies that the group prefers the ‘one delegate’-case (that is the monopoly) over the ‘two delegate’-case (price as instrument and therefore a competitive market). However, one member of the group is strictly worse off.

Marco Hoeberichts

“Central bank communication and interest rate rule”

Research Departement

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Abstract:

The central bank's influence on private sector expectations is an important channel of monetary policy transmission. Therefore, it is important for a central bank to pay attention to its communication. It should also be aware that the public might not be willing or able to process all the information that the central bank provides. In this paper, we explicitly take the public's information processing constraint into account when we design the interest rate rule. We find that if inflationary expectations are important relative to the output gap in determining current inflation, the central bank should be less activist when the public has a tighter information processing constraint.

Lennart Hoogerheide

“Functional approximations to posterior densities: A neural network approach to efficient sampling”

Tinbergen Instituut

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Abstract:

The performance of Monte Carlo integration methods like importance sampling or Markov Chain Monte Carlo procedures greatly depends on the choice of the importance or candidate density. Usually, such a density has to be ‘close’ to the target density in order to yield numerically accurate results with efficient sampling. Neural networks seem to be natural importance or candidate densities, as they have a universal approximation property and are easy to sample from. That is, conditionally upon the specification of the neural network, sampling can be done either directly or using a Gibbs sampling technique. A key step in the proposed class of methods is the construction of a neural network that approximates the target density accurately. The methods are tested on a set of illustrative models, which include a mixture of normal distributions, a Bayesian instrumental variable regression problem with weak instruments and near-identification, and a two-regime growth model for US recessions and expansions. These examples involve experiments with non-standard, non-elliptical posterior distributions. The results indicate the feasibility of the neural network approach.

Robert Inklaar, Robert McGuckin and Bart van Ark

“Common patterns, different trends ICT use and productivity in Europe and the United States”

Economics

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Abstract:

A growing literature has been attempting to explain the large and growing productivity gap between Europe and the United States. Using new data on ICT investment by industry we show that the pattern of ICT use is remarkably stable over time and similar across countries. We also show that cyclical factors are much less important in explaining the exceptional United States growth than previously thought. Trend analysis shows an increasing divergence in productivity growth trends between Europe and the United States.

Vasso Ioannidou

“Does monetary policy affect the central bank's role in bank supervision?”

Department of Economics & CentER

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Abstract:

This paper examines whether monetary policy responsibilities alter the central bank's role as a bank supervisor. The analysis focuses on the United States, where the Fed shares supervisory duties with two other federal agencies (the OCC and the FDIC). Among these three institutions, the Fed is the only one responsible for monetary policy. Hence, the Fed's supervisory behavior is compared with the behavior of the other two agencies. The comparison is made using a new panel dataset that includes all

insured commercial and savings banks in the United States and all formal regulatory actions issued against these institutions during the period 1990:I-1998:IV. The results suggest that the Fed's monetary policy responsibilities do alter its bank supervisory behavior: indicators of monetary policy affect the supervisory actions of the Fed, but do not affect the actions of the other two agencies. Moreover, the scenario in which the Fed uses bank supervision to reinforce the objectives of monetary policy is not supported by the data.

Jos Jansen and C.J. Stokman

“Foreign direct investment and international business cycle comovement”

Monetary and Economic Policy Department

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Abstract:

This paper investigates the relationship between bilateral foreign direct investment positions and cross-country business cycle correlations in the period 1982-2001. We find that countries that have comparatively intensive FDI relations also have more synchronized business cycles during 1995-2001. Before 1995, we also find a positive association between FDI linkages and output comovement, but this may partly reflect the effects of trade relations. Moreover, more intensive FDI links are also associated with a greater vulnerability to lagged output spillovers from abroad, whereas trade links are not. Policy implications of our research are: (1) there is an underlying tendency for business cycles to exhibit greater comovement in the future; and (2) policy makers need to incorporate the FDI linkage among economies in their models and analytical framework for policy analysis.

Frank de Jong

"Pension fund investments and the valuation of liabilities under conditional indexation"

Finance Group

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Abstract:

This paper reviews the investment policy of collective pension plans. The defined benefit nature of these plans would call for an investment portfolio that fully consists of long-term, index-linked bonds. In practice, pension plans have substantial investments in equities and real estate. We suggest two reasons to invest in equities: the lack of a well-developed market in index-linked bonds, and deliberate deviations from the defined benefit nature of the plan. Given a particular investment profile, this paper assesses the value of liabilities under the conditional indexation rules that are found in many plans.

Nicole Jonker, Jelena Jakulj and Marga Peeters

"Employment dynamics within small, medium and large establishments in the Netherlands at the end of the 1990s"

Research Department

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Abstract:

This study analyzes Dutch employment growth and dynamics during the booming end 1990s. In this period many new jobs were created, as employment growth was strongly positive. Next to these net flows of employment the gross flows of employment, that is the number of jobs created and number of jobs destructed, are calculated per

establishment in 1994, 1996 and 1998. From the analyses follows that relatively many jobs were destructed. Further, more job creation/destruction took place in small establishments than in large establishments. Significant evidence for job creation caused by government-subsidized programs was not found. Neither did the development of real wages affect job creation or destruction during the end 1990s.

Jan Kakes and Cees Ullersma

“Indicators for financial crises”

Afdeling Monetair en Economisch Beleid

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Abstract:

This paper identifies patterns underlying financial crises for a panel of 20 industrial countries. We consider both banking and asset market crises over the period 1970-2002. Crises tend to be correlated across countries and concentrated in specific sub periods. Several variables-such as the ratio of credit to GDP and interest rates-are important indicators in the run-up to crises. Despite the increase in macroeconomic stability, the number of crises has not fallen since the 1980s. In particular, hikes in short-term interest rates, although less likely in an environment of price stability, appears important triggers for asset price crises.

Arie Kapteyn, Jim Smith and Arthur van Soest

“Measuring disability”

Economics

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Abstract:

Disability rolls vary greatly in different countries. Moreover the number of people receiving disability benefits varies over time and appears to exhibit some cyclicity, at least in the United States. A comparison of the United States and The Netherlands suggests that at the very least differences in definition and eligibility rules as well as differences in incentives may play a role in explaining the very different incidence of disability benefits across the two countries. A fundamental problem with explaining differences in disability benefit take up is the measurement of disability itself. Whether one considers a particular health problem as limiting one's disability for work is colored by cultural and institutional differences as well as personal experiences and differences in tastes and opinions. Following a recently developed strand of research in cross-cultural comparability of measurement in survey research (King et al., 2003) we are conducting so-called vignette experiments where we normalize respondents' evaluation of their own health related work limitations by their rating of a number of stylised hypothetical cases. Currently the experiments are being done in the Netherlands with plans for follow-ups in the United States. The literature on health related work limitations has suggested several biases that may influence respondents' evaluation of their own health related work limitations. Our preliminary findings suggest a relatively minor role for such biases.

Thijs Knaap

“Ageing, nontradeable goods and the real value of pensions”

Ocfef

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Abstract:

Dutch workers have dutifully saved up for retirement, as the size of our pension assets (over 100 percent of GDP) shows. But how much are these pensions worth by the time they are paid out? If we take into account the fact that a large share of a pensioner's consumption takes the form of nontradeables, it is not hard to foresee a shortage of

locally produced goods and services arising in a few decades. The rise in nontradeable demand and the decline in local capacity will lead to inflation and an erosion of real pension benefits. We use a calibrated overlapping generations general equilibrium model to assess the size of the problem, and project a likely scenario. We find that the nontradeables sector needs to grow from 60 percent to 85 percent of the economy to accommodate the extra demand. Depending on the size of the rigidities in the Dutch economy, this causes inflation, which must lead to higher pensions or less than full indexation for pensioners. We sketch the resulting taxes and premiums and discuss the policy options.

Roger Laeven

“Notions for stochastic ordering in rank-dependent utility theory and cumulative prospect theory”

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Abstract:

This paper reviews and introduces several notions of stochastic order, which are intimately related to specific subclasses of the class of rank-dependent utility maximizers and the class of decision makers following cumulative prospect theory. These subclasses exhibit prominent types of risk averse or risk seeking behavior. For two stochastic order notions under concern we prove the existence of a generating process, which establishes the stochastic order by transitive closure of appropriately defined single crossings operations between distribution functions.

Christian Lazar

"Stock options and risk - evidence from German DAX30 companies"

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Abstract:

This paper investigates empirically the influence of modern corporate governance measures on the risk of firms. As a possible solution to the principal-agent conflict, shareholders started extensive stock option programs in order to make sure that managers consider shareholders interests. In contradiction to most existing theoretical models that state that managers do not always have incentives to increase the volatility of stock returns after stock options the empirical findings in this survey show another picture. By analyzing stock option programs of the biggest German DAX-corporations the average volatilities of stock price returns increase after stock options although market and sector volatilities decrease. Using as framework the market model, it indicates an average increase of 9.7 percent for the unsystematic risk after a stock option program. Applying a two-factor model the unsystematic risk increases on average even to 17.8 percent. As a result shareholders should reconsider their diversification strategy if transaction costs exist.

Kai Ming Lee

"Estimating stochastic models with multiple synchronized business cycles"

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Abstract:

When cycles are extracted from different time series and compared with each other, the timings of peaks and troughs assesses whether cycles are leading or lagging. Since economic conditions vary over time, relative timings of peaks and troughs between cycles may also change over time. This paper adopts a class of multivariate stochastic cycle component models that allow for individual cycles to be shifted. The model is generalized by having shift coefficients as dynamic stochastic processes. The stochastic cycles can therefore be shifted in different directions and lengths, in different time periods. When shift coefficients are constant over time, the model can be formulated as a linear state space model and the Kalman filter can be used to construct the log likelihood function. The model with stochastic shifts requires a non-linear equivalent of the Kalman filter. In this paper we consider the extended and the unscented Kalman filters for signal extraction and for the construction of a quasi-log likelihood function. The new non-linear model and its estimation method are illustrated by analyzing the business cycles of the United States, the United Kingdom and the Euro area.

Marco van der Leij, Sanjeev Goyal and Jose-Luis Moraga-Gonzalez

"Economics: an emerging small world?"

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Abstract:

This paper examines the small world hypothesis. The first part of the paper presents empirical evidence on the evolution of a particular world: the world of journal publishing economists during the period 1970-2000. We identify three general trends at the aggregate level: (1) this world has grown in numbers greatly; (2) distinct groups of co-authors have started collaborating and this has led to the emergence of a giant group of interlinked economists which comprises a majority of the population; and (3) the average distance between economists in this giant group has been falling over time while the clustering remains high. This leads us to the view that the world of economic

research is an emerging small world. An exploration of the micro aspects of the network reveals two interesting patterns: (1), there has been a significant increase in co-authorship levels among economists, and (2), there are a number of stars, people who have a large number of co-authors (25 times the average number) and most of these co-authors do not write with each other. The number of stars as well as their connections has grown sharply in the period under study.

Lestano, Jan Jacobs and Gerard Kuper

“Indicators of financial crises do work! An early-warning system for six Asian countries”

Economics

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Abstract:

This paper shows that indicators of financial crises do work, at least in an early warning system for six countries in Asia. We distinguish three types of financial crises, currency crises, banking crises and debt crises, and distill four groups of indicators from the literature that affect the probability of financial crises, external, financial, domestic (real and public), and global indicators. The significance of the groups of indicators is tested in a multivariate logit model on a panel of six Asian countries for the period 1970:01-2001:12. We distinguish between four versions of currency crises dating schemes. A within-sample signal extraction experiment reveals that some dating schemes outperform others.

Gert-Jan Linders, Henri de Groot and Raymond Florax

“Systematic variation in the impact of distance on international trade patterns”

Spatial Economics

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Abstract:

There is an irrevocable impact of distance on the patterns of international trade. The literature identifies various factors that can explain the impact of geographical proximity on the intensity of bilateral trade flows, ranging from transport costs to cultural familiarity. This paper performs a meta-analysis of existing empirical studies of bilateral trade, in order to contribute to our understanding of the distance barrier to trade. We focus on two key issues. First, we identify whether the impact of distance declines over time. Second, we investigate whether the distance effect varies systematically according to the control variables taken into account in the primary regression analysis.

Andre Lucas

“Business and default cycles for credit risk”

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Abstract:

Various economic theories are available to explain the existence of credit and default cycles. There remains empirical ambiguity, however, as to whether these cycles coincide. Recent papers suggest by their empirical research set-up that they do, or at least that defaults and credit spreads tend to co-move with macroeconomic variables. If true, this is important for credit risk management as well as for regulation and systemic risk management. In this paper, we use 1927-1997 U.S. data on real GDP,

credit spreads, and business failure rates to shed new light on the empirical evidence. We use a multivariate unobserved components framework to disentangle credit cycles from business cycles. It turns out that cyclical co-movements arise between default rates, but not real GDP. There is, however, a contemporaneous correlation between real GDP and default rates. Regarding the longer-term evolution of the series, credit spreads influence default rates and real GDP, but not vice versa. This corroborates some of the empirical findings in the recent literature on the correlation between macro variables and default rates. It also suggests the use of credit spreads besides or instead of economic growth rates to forecast the dynamics of future default rates.

Philip Marey

“Small sample bias and expectational error in uncovered interest parity tests”

ROA

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Abstract:

Small sample bias in uncovered interest parity tests caused by the persistence in interest differentials depends on the underlying exchange rate expectations mechanism, even if the rational expectations hypothesis is satisfied. The resulting interaction between small sample bias and expectational error may lead to large deviations from the uncovered interest parity hypothesis, especially when the interest differential process is close to a unit root.

Jose Carlos Melendez Hidalgo

“Wider effects of transport infrastructure investment”

Spatial Economics

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Abstract:

The paper develops a general equilibrium model with agglomeration effects and a government sector that allow us to study the effects of transport infrastructure improvements (especially infrastructure investment) on the entire economy and compare the results with a traditional Cost benefits analysis (CBA) approach. The main conclusion of the model is that combining growth and agglomeration externalities creates a trade-off between spatial efficiency and equity when infrastructure policies reduce transport costs either between or inside regions and this originates an important difference from traditional CBA project appraisal results.

Albert Menkveld

“Round-the-clock price discovery for cross-listed stocks: U.S.-Dutch evidence”

FEWEB - Economics

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Abstract:

United States trading in non-United States stocks has grown dramatically. Round-the-clock, these stocks trade in the home market, in the United States market and, potentially, in both markets simultaneously. We use a state-space model to study 24-hour price discovery. As opposed to the standard “variance ratio” approach, this model deals naturally with: (i) simultaneous quotes in an overlap; (ii) missing observations in a non-overlap; (iii) noise due to transitory microstructure effects; and (iv) contemporaneous correlation in returns due to market-wide factors. For NYSE-listed Dutch stocks, continued trading in New York is not more informative than the overnight, non-trading period. Strong persistence in returns and noisy midquotes in the overlap support the predicted order-splitting behavior, both through time and across markets. These results significantly differ from the variance ratio approach.

Robert Mosch and Frank den Butter

“Trade, trust and transaction costs”

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Abstract:

Transaction costs are a major reason why international trade flows are much smaller than traditional trade theory would suggest. Trust between trading partners lowers transaction costs and may therefore enhance trade. The empirical analysis of this paper shows that more trust leads to more trade so that part of the “mystery of missing trade” can be attributed to the lack of trust between trading partners, for example of cultural differences and habits, or because of insufficient information on product quality and reliability. Our estimates show that both measures of formal and informal trust contribute to the explanation of bilateral trade flows. Moreover they suggest that the causal relation runs primarily from trust to trade.

Evguenia Motchenkova

“Determination of optimal penalties for antitrust violations in dynamic settings”

Econometrics and OR

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Abstract:

We analyze a differential game describing the interactions between the firm violating competition law and the antitrust authority. The objective of the authority is to minimize social costs (loss in consumer surplus) induced by price fixing. Assuming that price-fixing is always worse for consumers than the competitive outcome, we search for the penalty schedule, which blocks any degree of price-fixing in dynamic settings. The

main implication of the model is the penalty schemes, which are used in the EU and US legislation, appear not to be as efficient as desired from the view of minimization of consumer loss from price-fixing activities of the firm. We prove the result that, this framework, the full compliance behavior is not sustainable as a Nash Equilibrium in Markovian strategies for all periods. This equilibrium will never arise as the long-run steady state equilibrium of the model. We investigated which penalty system enables us to completely deter cartel formation in a dynamic setting. This socially desirable outcome can be achieved in case the penalty is an increasing function of the degree of offence and negatively related to the probability of law enforcement.

Joan Muysken and W. Mitchell

“The paradox of equilibrium unemployment: The Netherlands, 1960–2003”

Economics

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Abstract:

A central notion in the Central Planning Bureau (CPB) analysis of unemployment in the Netherlands is that of ‘equilibrium unemployment’ (Broer, Draper, Huizinga, 2000; van der Horst, 2003). This concept has two dimensions: that of a long-run steady-state phenomenon and that of market equilibrium. Both properties have many testable implications for the empirical analysis, which we test for the Netherlands, 1960-2003. We show that the long-run steady-state nature of the analysis imposes restrictions on the time series used, which are not satisfied by the data used by the CPB in its analysis. Also the coefficient restrictions on the structural model, which follow from the equilibrium nature of the analysis are not met. Both conclusions are in line with the scant literature on this subject. As a consequence we conclude that the ‘equilibrium unemployment’ type of analysis is not able to explain the development of unemployment in a satisfactory way and that the CPB-policy conclusions cannot be founded on such an analysis. We provide an alternative view on unemployment

(Mitchell, Muysken 2002, 2003). The policy conclusions resulting from that view do differ from those by the CPB.

Sander Onderstal, Florian Englmaier, Pablo Guillen, L. Llorente , R. Sausgruber
“The chopstick auction: a study of the exposure problem in multi-unit auctions”

Unit Competition and Regulation

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Abstract:

Multi-unit auctions are sometimes plagued by the so-called exposure problem. In this paper, we analyze a simple game called the 'chopstick auction' in which bidders are confronted with the exposure problem. We analyze the chopstick auction with incomplete information both in theory and in a laboratory experiment. In theory, the chopstick auction has an efficient equilibrium and is revenue equivalent with the second-price sealed-bid auction in which the exposure problem is not present. In the experiment, however, we find that the chopstick auction is slightly less efficient but yields far more revenue than the second-price sealed-bid auction. Conclusion: auction designers do not have to worry that the exposure problem leads to low revenue and inefficiency.

Daan Ooms

“Effects of dairy policy reform for Dutch dairy farming: a primal approach using GMM estimation”

Agricultural Economics and Rural Policy Group

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Abstract:

The purpose of this research is to estimate the production function for milk avoiding the endogeneity problem and using the estimation to determine the economic effects for Dutch dairy farming of EU dairy policy reform. A GMM estimator for the production function is used avoiding the endogeneity problem. It shows how the first order conditions of profit maximization can be used to determine demand for variable inputs and shadow prices of quasi-fixed inputs with the use of estimated parameter values. Complicated is that milk production takes place under a supply quota regime. The model was then used to determine the economic effects for Dutch dairy farming of the Common Agricultural Policy (CAP) reform agreement of June 26 2003. The model estimated proves to be a flexible tool for policy analysis. Assuming both aggregate inputs and household labor variable shows a decrease in profit of 22.5 percent after implementing the CAP reform agreement. European Union direct payments compensate roughly 50 percent of this profit loss.

Sander Oosterloo and Dirk Schoenmaker

“Financial supervision in an integrating Europe: Measuring cross-border externalities”

Financial Markets

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Abstract:

Against the backdrop of an integrating Europe, the debate on the need for European arrangements for financial supervision and stability is intensifying in the literature as well as in the policy arena. While there is a consensus that the need for European arrangements ultimately depends on the intensity of cross-border spill-over effects or externalities within the European Union, there has been no attempt to measure these cross-border externalities on an individual basis. The aim of this paper is to fill this gap. A new data-set on cross-border penetration (as a proxy for cross-border externalities) of large banking groups is collected. It is found that cross-border penetration within the European Union is currently limited: only seven banks out of

the sample of 30 large banking groups are considered to be 'European' banks that have the potential to pose significant cross-border externalities. But aggregate data show a gradual increase of cross-border penetration in the European Union. Policy-makers may thus in the (near) future face the challenge of designing European structures for financial supervision and stability.

Vincent Otto

"Estimating feedback effects in technological change: A frontier approach"

Environmental Economics and Natural Resources

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Abstract:

We examine whether there is a joint positive feedback from diffusion to innovation. This joint feedback includes network externalities, increased market size, learning-by-doing, and learning-by-using. Components of the Malmquist productivity index are used to measure effects of innovation and diffusion on productivity changes. These components are empirically derived from aggregate production data of 26 OECD countries for 1980 through 1997. We then regress innovation effects on lagged diffusion effects and other explanatory variables. Our panel data model yields conclusive evidence on a joint positive feedback from diffusion to innovation.

Eric Pels and Erik Verhoef

"The economics of airport congestion pricing"

Spatial Economics

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Abstract:

Conventional economic wisdom suggests that congestion pricing would be an appropriate response to cope with the growing congestion levels currently experienced at many airports. Several characteristics of aviation markets, however, may make naive congestion prices equal to the value of marginal travel delays a non-optimal response. This paper develops a model of airport pricing that captures a number of these features. The model in particular reflects that (1) airlines typically have market power and are engaged in oligopolistic competition at different sub-markets; (2) part of external travel delays that aircraft impose are internal to an operator and hence should not be accounted for in congestion tolls; and (3) different airports in an international network will typically not be regulated by the same authority. We present an analytical treatment for a simple two-node network and some numerical results to illustrate our findings. Some main conclusions are that second-best optimal tolls are typically lower than what would be suggested by congestion costs alone and may even be negative, and that cooperation between regulators need not be stable but that non-cooperation may lead to welfare losses also when compared to a no-tolling situation.

Simon Polbennikov, Bertrand Melenberg and Bas Werker

“Option pricing and the dynamics of implied prices of volatility risk: An empirical analysis”

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Abstract:

It is well known that in case of stochastic volatility models markets are generally incomplete in terms of the underlying assets, which means that the volatility risk premium is not identifiable on the basis of the underlying asset dynamics. Traded option contracts can be used to extract the lacking information about the pricing mechanism. In particular, Implied Volatility Risk Premiums (IVRP) can be estimated on a daily basis using option data. Analogously to implied volatilities of the Black-

Scholes model, IVRP reflect the information contained in option prices for SV modelling. They can be interpreted as the market's attitude toward risk. From this perspective, it is interesting to analyze the dynamics of the IVRP. In this work we propose a dynamic model for IVRP and show that modeling the dynamics of IVRP significantly improves out-of-sample option pricing performance.

Eduard Ponds

“Pension funds and value-based generational accounting”

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Abstract:

The raison d'être of wage-indexed defined benefit pension funds is to provide insurance against standard-of-living risk after retirement, based on intergenerational risk-sharing. Pension funds necessarily have to accept mismatch risk in providing this kind of insurance. Mismatch risk taken by the pension fund is risk for the fund's stakeholders. We combine the value-based approach and the method of generational accounting to analyze the economic value of the stakes of the different generations and the issue of who gains and who loses (transfers of value between generations) from alternative funding and indexation policies. Rules concerning the allocation of a funding surplus or funding shortage in particular are decisive to the direction and to the size of transfers of value between stakeholders. We put forward two criteria to evaluate alternative policies employed by pension funds: (i) the funding policy and allocation rules must give an ex ante fair compensation for risk taken by generations; and (ii) the sustainability of a pension plan must be checked with respect to ex post redistributive effects for current and future generations. Value-based generational accounting provides a tool for testing a pension fund policy for these two criteria.

Kirsten Rohde and Jean-Jacques Herings

“Time-inconsistent preferences in general equilibrium”

Economics

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Abstract:

There is a growing body of research in economics that studies the consequences of time-inconsistent preferences. This paper introduces time-inconsistent preferences in a general equilibrium setting. The standard notion of competitive equilibrium has to be extended in order to allow for changes in intertemporal preferences. Depending on whether or not agents recognize that their intertemporal preferences change, agents are called sophisticated or naïve. We present competitive equilibrium notions for economies with naïve agents and economies with sophisticated agents and show that both types of equilibria exist under standard assumptions. We also introduce appropriate constrained efficiency concepts that are related to traditional Pareto efficiency. For some of the concepts naïve and sophisticated equilibria are typically not constrained efficient, whereas for other concepts they are constrained efficient under suitable conditions. An example shows that sophisticated equilibria could be dominated by naïve equilibria.

Ward Romp and Ben Heijdra

“Growth effects of infrastructure: the role of tradeable goods”

Economics

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Abstract:

In traditional macroeconomic models, transport costs and the transport sector are most often neglected or modelled using Samuelson's 'Iceberg' costs. In this paper we develop a dynamic general equilibrium model for the small open economy with a separate sector producing transport services. Services provided by this sector are used to import tradeable products. The transport sector uses a free publicly owned stock of infrastructural capital and competes with other sectors on the labor market. Modelled in this way, transport services are produced by a sector-specific production function and the production of these services makes use of scarce production factors. With this highly simplified model we analyze the effects of changes in the stock of infrastructure and different modes to finance investments in infrastructure.

Jan Rouwendal and John Pommer

"The second car"

Spatial Economics

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Abstract:

Much of the growth in car ownership and use in recent years is due to an increasing share of households with multiple cars. This paper provides a quantitative analysis of this phenomenon on the basis of Dutch data. We start with an exploratory analysis of ownership of two cars, demand for car kilometres, variable and fixed costs of the cars, which are interpreted as indicators of car quality, and the distribution of total car kilometres over the two cars. We continue by formulating a structural model that explains the decisions to own and use one or two cars as a result of utility maximizing behavior. The approach we use is similar to that of De Jong (1991), who analyzed ownership and use of one car. We specify an indirect utility function in which the prices of the two cars are separable from other prices in order to formulate a convenient model. Estimation results are used to investigate the consequences of

'variabilization', that is a shift in car taxes from car tax (increasing the fixed cost) to a kilometres tax or a higher fuel tax (increasing the variable cost).

Jan Rouwendal and Arianne de Blaeij

"Inconsistent choices in stated preference analysis"

Spatial Economics

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Abstract:

Economists make increasing use of stated choice data. A fundamental assumption in such analyses is that the choices made reflect the preferences of the respondents. Inconsistent answers cannot be interpreted as such and are therefore in principle problematic. This paper analyzes the phenomenon of inconsistent choices. It observes that the logit model, which is often used to analyze stated choice data, actually predicts the occurrence of inconsistent choices unless the random term is interpreted as part of the preferences of the respondents and compares these predictions with the observed frequencies of inconsistent choices in data where respondents were asked to answer the same question twice (at the beginning and end of the questionnaire). The actual frequency of such choices is smaller than predicted by the model and this motivates an examination of other approaches, such as mixed logit (where the random term is partly due to preference heterogeneity) and logit models with misclassification.

Bulat Sanditov

"ICT revolution, globalization and informational lock-in"

MERIT

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Abstract:

We examine a model of social learning in networks following the lines of Bala and Goyal (1998, 2001). As a model of agents' behavior we have chosen the model of informational cascades of Bikhchandani et al. (1992). Similarly to Bala and Goyal we find that the higher is 'degree of integration' within the society, the more likely is that conformity of actions will arise. However, unlike their results our model suggest that in the presence of informational externalities, globalization of informational flows, expressed in the increasing density of communication channels in a network, may drive down the expected social welfare.

Wendy Smits

“Industry-specific or generic training? Conflicting interests of firms and workers”

Research Centre for Education and the Labour Market

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Abstract:

In this paper I develop a model of the training decision for two types of transferable skills namely industry-specific and generic skills. The market for generic skills is perfectly competitive while the market for industry-specific skills is not. I show that firms in the industry can appropriate a positive share of the returns to training and that this share is increasing in the level of industry-specific training and decreasing in the level of generic training. Therefore firms and workers have conflicting interests with respect to the training levels for industry-specific and generic skills. Firms prefer more industry-specific and less generic training than workers.

Piotr Stryszowski

"The effects of brain drain on economic growth"

Economics

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Abstract:

Technology is typically viewed as disembodied and a non-rival factor of production. Hence, ideas should be easily transmitted between countries. Nevertheless, there are still significant differences between productivities of various regions. We argue that one of the reasons of such lag in development is the "brain drain", which occurs when high-skilled individuals migrate from developing to developed countries. A lower per-capita income in the South creates incentives for agents to move to the North, nevertheless only individuals of high ability will be allowed in. As such skilled agents are the core element of creation and adoption of new ideas, the difference in welfare between these two regions will be sustained. In addition, the brain drain boosts the rate of technological progress of the North. So a possible solution for the South could be to rely on adoption of the technology created abroad instead of investing in its own sector of ideas, even if such policy makes the lag in income between these two countries sustainable.

Paul Tang and Richard Nahuis

"Environmental policy and differential tax treatment"

International Economic Analysis

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Abstract:

The Kyoto Protocol binds the level of greenhouse gas emissions in participating countries. It does, however, not dictate how the countries are to achieve this level. The economic costs of reaching emission targets are generally evaluated to be low. For example, evaluations with applied general-equilibrium model estimate the costs to be in the range of 0.2 percent to 0.5 percent of GDP, when international trade in emissions rights among governments is allowed for. We argue that important costs are overlooked since governments are inclined to choose highly distorting tax schemes. This paper employs a monopolistic competition model with direct consumption of energy and indirect consumption of the energy content of the tradeable varieties. In such a context, governments generally choose different energy tax rates for households and for internationally operating firms. If governments do not behave strategically and thus do not try to attract firms, they choose to tax firms more than households. The reason is that part of the firm's energy consumption is for production of foreign consumer goods and does not benefit domestic consumers. On the other hand, if governments do behave strategically, they set higher energy tax rates for households than for firms. This is the result of tax competition: governments try to undercut other governments to attract firms to their country. In both cases, the incentive for firms and household to use or save energy is different at the margin. Applied general-equilibrium models usually ignore the tax differential and thereby significantly underestimate the economic costs of the Kyoto Protocol. Both cases call for coordination of climate change policies that goes beyond a binding ceiling on greenhouse gas emissions and international trade in permit rights among governments alone. The European Union will implement a system of tradeable permits, in which also firms can buy and sell permits and thus internationally face the same incentive at the margin. This, however, will not avoid competition among governments completely. The paper shows that governments allocate too much and too cheap permits to firms. The paper thus suggests that tighter co-Ordination of national climate change policies is called for to reduce the economic costs of these policies.

Ben Tims

“A range-based multivariate model for exchange rate volatility”

Financial Management

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Abstract:

In this paper we present a parsimonious multivariate model for exchange rate volatilities based on logarithmic high-low ranges of daily exchange rates. The multivariate stochastic volatility model divides the log range of each exchange rate into two independent latent factors, which are interpreted as the underlying currency specific components. Due to the normality of logarithmic volatilities the model can be estimated conveniently with standard Kalman filter techniques. Our results show that our model fits the exchange rate data quite well. Exchange rate news seems to be very currency-specific and allows us to identify which currency contributes most to both exchange rate levels and exchange rate volatilities.

Axel Tonini

“Productivity growth in agriculture and intertemporal frontier separation for six CEECs and the EU-15 Members”

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Abstract:

The aim of this paper is to analyze total factor productivity growth in agriculture for six Central Eastern European Countries (CEECs) and the current EU-15 member states. The purpose is to determine whether both the CEECs and EU-15 members followed similar productivity growth patterns in agriculture. Our measure of productivity

growth relies on the Malmquist Index (MI) introduced by Caves et al. (1982). In order to test for a frontier separation between the 6-CEECs and the EU-15 members we follow the work of Grosskopf and Valdmanis (1987) and its development in Fizele and Nunnikhoven (1992). To preserve stability, the frontier separation approach is combined with the intertemporal production set notion, a technique developed by Tulkens and Vanden Eeckaut (1995). We find the average annual change in agricultural productivity to increase at almost 1.5 percent per annum over the considered period 1993-2000. On average the annual productivity increase for the EU-15 member states was higher than that of the CEECs. It appears that there was a remarkable difference between the frontier of the 6-CEECs and the EU-15 countries, which signals that both sub-groups belonged to a different frontier.

Linda Toolsema-Veldman and Marco Haan

“License auctions when winning bids are financed through debt”

Economics

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Abstract:

We study an auction where two licenses to operate on a new market are sold. Winners finance their bids on a competitive debt market. Due to limited liability, the amount of debt affects their behavior on the product market. In equilibrium, consumer prices are lower than with a beauty contest, where firms obtain their licenses for free. Winning bids are lower than in a model where firms have internal funds. Higher bids cannot be financed due to credit rationing. Expected net firm profits are strictly positive, although firms are a priori identical and have the same information.

Albert de Vaal and Joachim Stibora

“Trade policy in a Ricardian model with a continuum of goods under nonhomothetic preferences”

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Abstract:

We develop a Ricardian trade model with a continuum of goods that are ordered according to priority in consumption. Goods at the lower end of the spectrum are consumed by all households and when income increases households add higher-ranked goods to their consumption baskets. We apply this framework to address the issue of trade liberalization between a poor and rich country. The poor (rich) country has comparative advantage in the production of lower (higher) ranged goods characterised by low (high) income elasticities of demand. We find that the effects of trade liberalization on the terms of trade, specialization patterns and consumer welfare might differ fundamentally from the results predicted by trade models with homothetic preferences. For instance, whereas normally a unilateral tariff reduction of a country unambiguously improves the terms of trade of the other country, in our framework this might be exactly opposite. Consequently, when preferences are non-homothetic, trade liberalization by rich countries is not necessarily good news for poor countries. In addition, by allowing for income differences within countries as well, we show that the effects of trade liberalization on the relative income position of poor households in society depends in an unexpected way on how tariff revenues are redistributed over households. In the wake of trade liberalization, it appears that tariff revenue redistribution from rich to poor households increases the burden for poor households!

Jeroen van de Ven and Anton Souvorov

“Rewards, self-confidence and motivation: the hidden rewards of rewards”

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Abstract:

There are several channels through which a monetary reward can have an impact on motivation. Almost the entire economic literature has focused on the direct channel: the preference of agents for more money. Quite unexpectedly, experiments show that bonuses can have negative effects on motivation. There are, so to say, “hidden costs of rewards”. In this paper we study the effect of rewards on self-confidence. Whenever an agent is more confident about his ability to succeed, he is more likely to try to undertake a task. We show how a bonus can signal ability, and therefore influence motivation through its effect on self-confidence. Bénabou and Tirole have shown how a bonus can decrease self-confidence, explaining the experimental results. By contrast, we show how an unexpected bonus increases self-confidence. In addition, the model offers an explanation why unexpected rewards are given in a game with a finite number of rounds. Our results are in line with those from experiments.

Erik Verhoef

“Speed-flow relations and cost functions for congested traffic: Theory and empirical analysis”

Spatial Economics

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Abstract:

A dynamic 'car-following' extension of the conventional economic model of traffic congestion is presented, which predicts the average cost function for trips in stationary states to be significantly different from the conventional average cost function derived from the speed-flow function. When applied to a homogeneous road, the model reproduces the same stationary state equilibria as the conventional model, including the hyper congested ones. However, stability analysis shows that the latter are dynamically unstable. The average cost function for stationary state traffic coincides with the conventional function for non-hyper congested traffic, but rises vertically at the road's capacity due to queuing, instead of bending backwards. When extending the model to include an upstream road segment, it predicts that such queuing will occur under hyper congested conditions, while the general shape of the average cost function for full trips does not change, implying that hyper congestion will not occur on the downstream road segment. These qualitative predictions are verified empirically using traffic data from a Dutch bottleneck.

Herman Vollebergh and Rob Aalbers

“An economic analysis of mixing wastes”

Economics

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Abstract:

Allowing for heterogeneous waste and illegal dumping, we replicate previous results that the presence of costly (and unobserved) waste reduction effort the first-best optimal deposit-refund system no longer works. If, in addition, households may also opt for mixing waste streams, this result holds even in cases where household waste reduction effort is observable, and taxable. The second-best problem we include transaction costs in the model, in particular for land filling, recycling and monitoring. We find that (no) unit pricing occurs if the transaction costs of land filling are smaller/larger than the reduced externality due to the introduction of unit pricing. In

both cases we find the unique solution to be the first-best deposit refund system in previous work augmented for transaction costs. There is no monitoring in either case.

Markus Walzl

“When bidding more is not enough: Auctions with handicaps”

Economics

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Abstract:

While auction theory typically assumes that a good is allocated to the participant who submitted the highest bid, in reality many auctions or contests treat bidders asymmetrically in the sense that one bidder wins the item or the competition even if he bids less than some of his competitors. As an example consider procurement auctions with home-advantages, the regulation of natural oligopoly markets or the in-dubio-pro-reo-rule in legal litigations. I consider standard two-player auctions with independent values, where the valuation for the object is private information to each bidder. The crucial feature is that one bidder is favored by the allocation rule in the sense that he need not bid as much as the other bidder to win the auction. Analogously, the other bidder is handicapped by the rule as overbidding the rival may not be enough to win the auction. Clearly, this has important implications on equilibrium behavior. We derive pure strategy Bayesian Nash equilibria and discuss their uniqueness. Furthermore, we analyze the impact of the degree of unfairness on allocation efficiency and expected payments. This leads to a discussion of the optimal degree of unfairness from a mechanism designer's point of view.

Riccardo Welters

“Deadweight loss: in search of the culprit”

Economics

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Abstract:

In this paper we merge insights of the literature on employment subsidy evaluation and the literature on employer search to explore uncharted territory: unveiling firm and job characteristics leading to deadweight loss in employment subsidy schemes. We find that firms who experience low screening costs (large firms), firms who forego substantial production due to unfilled jobs (vacancies for full-time jobs) and firms operating in slack labor market conditions cause significantly more deadweight loss. The insights gained into the main features perpetrating deadweight loss are valuable to policy makers attempting to reduce deadweight loss shares in employment subsidy schemes.

Rong Zhang, Piet Rietveld, Erik Verhoef

“A monopolistic market for advanced traveller information systems and road system efficiency”

Spatial Economics

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Abstract:

The literature suggests that information can improve the efficiency of road use. This study seeks to establish a model system for exploring the interactions between a transport market and a monopolist market for ATIS. These arise from the mutual interactions between road use and traveller information benefits, in turn affecting

system efficiency. We examine the properties of the information market, and the relationship between monopoly information pricing and system efficiency. From model experiments, we find that increasing information penetration will lead to negative effects for the already informed drivers. In addition, monopoly information pricing is not the most attractive option from a system efficiency viewpoint, because of the relatively high price charged by the monopolist. A user or a producer subsidy on the information market can help realize the second-best optimum of road use. Relatively low uncertainty on the road and high information costs limit the monopolist's profit on the information market, as well as relative system efficiency. While relatively inelastic demand for mobility negatively affects the monopolist's profit, information is less useful for the system as a whole at both low and high levels of demand elasticities.

Guan Zhengfei, Alfons Oude Lansink, Ada Wossink and Ruud Huirne

“Damage control inputs: a comparison of conventional and organic farming systems”

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Abstract:

The economic literature on pest control exclusively assumes a non-negative marginal product of pesticides and a monotonic non-decreasing function of damage abatement. This specification of non-negative productivity may bias pesticide productivity and entail incorrect policy implications. Theoretically, this paper contributes to the literature by proposing a specification that allows for negative marginal product of pesticides. Furthermore, the specification addresses the damage abating role of labor and machinery. Empirically, the paper tests the production technology of conventional and organic farms and compares the damage abatement process of the two farming systems. The application addresses the Dutch arable farming sector. With the proposed specification, pesticide productivity is found to be lower than those reported in previous literature. Shadow price of pesticide input suggests under-use of pesticides in conventional farms, which argues for a policy of economic compensation if pesticide use

is restricted. Conventional farms rely considerably on pesticides and machinery for damage abatement whereas organic farms rely on preventative measures through changes in cultural practices. Tests reject the Cobb-Douglas technology and the hypothesis of identical production technologies in two farming systems. On average Dutch arable farms are producing at decreasing returns to scale, which results mainly from the limiting factor of land and intensive use of capital and fertilizer.

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