

**List of Publications**  
**Gustav Feichtinger**

\* Book or Journal Issue

**1967**

Über die Anzahl aller nichtisomorphen transitiven Automaten von Primzahlordnung. *Elektronische Informationsverarbeitung und Kybernetik* **3**, 275-282.

Beiträge zur Theorie abstrakter Automaten. *Elektronische Datenverarbeitung* **8**, 361-366.

Über isomorphe Unterautomaten in abstrakten Automaten. *Elektronische Datenverarbeitung* **9**, 411-415.

**1968**

Der Quotientenautomat nach einem direkten Faktor einer Automorphismengruppe. *Computing* **3**, 1-8.

Zur Theorie abstrakter stochastischer Automaten. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete* **9**, 341-356.

Automatentheorie und dynamische Programmierung. *Elektronische Informationsverarbeitung und Kybernetik* **4**, 347-352.

Eine automatentheoretische Deutung des einelementigen Lernmodells der Stimulus Sampling Theorie. *Grundlagenstudien aus Kybernetik und Geisteswissenschaft* **9**, 3-19.

Ein automatentheoretischer Zugang zu Lernprozessen. *Kybernetik* **5**, 85-88.

Zur mathematischen Lerntheorie. *Grundlagenstudien aus Kybernetik und Geisteswissenschaft* **9**, 39-47.

**1969**

Stochastische Automaten als Grundlage linearer Lernmodelle. *Statistische Hefte* **10**, 5-21.

Optimale Darbietungen (Lernstrategien) zweier Items in der statistischen Lerntheorie. *Elektronische Informationsverarbeitung und Kybernetik* **5**, 109-125.

Ein Markoffsches Lernmodell für Zwei-Personen-Spiele. *Elektronische Datenverarbeitung* **7**, 322-325.

Anwendungen der Automatentheorie auf Lernprozesse. 2. Internationaler Kongreß *Datenverarbeitung im europäischen Raum*, 17-21.

Endliche stochastische Automaten als Modelle in den Verhaltenswissenschaften. *Seminarbericht 17 des Instituts für Theorie der Automaten und Schaltnetzwerke*, GMD Bonn.

**1970**

\* *Lernprozesse in stochastischen Automaten*. 'Lecture Notes in Operations Research and Mathematical Systems', Vol. **24**, Springer, Berlin.

Einige Resultate aus der Bevölkerungsmathematik. In: R. Henn (Ed.), '*Operations Research Verfahren VIII*'. Hain, Meisenheim, 89-106.

Über ein Entscheidungsproblem in der Erziehungsplanung. *Unternehmensforschung* **14**, 140-151.

Kybernetische Begriffe und Arbeitsweisen in der Lerntheorie. *Zeitschrift für experimentelle und angewandte Psychologie* **17**, 37-51.

Zur Erlernung optimalen Verhaltens in Entscheidungssituationen. *Statistische Hefte* **12**, 14-21.

BAYES-Automaten. *Elektronische Informationsverarbeitung und Kybernetik* **6**, 371-379.

Über Automatenmodelle in der statistischen Lerntheorie. *Kybernetik* **6**, 237-242.

Gekoppelte stochastische Automaten und sequentielle Zwei-Personen-Spiele. *Unternehmensforschung* **14**, 249-258.

Bemerkungen zum Thema Astrologie und Statistik. *Philosophia Naturalis* **12**, 104-115.

## 1971

\* *Stochastische Modelle demographischer Prozesse*. 'Lecture Notes in Operations Research and Mathematical Systems', Vol. **44**, Springer, Berlin.

"Wahrscheinlichkeitslernen" in der statistischen Lerntheorie. *Metrika* **18**, 35-55.

Zur Erlernung optimalen Verhaltens in Entscheidungssituationen bei Ungewißheit. *Statistische Hefte* **12**, 14-21.

Stochastische Automaten mit stetigem Zeitparameter. *Angewandte Informatik* **4**, 156-164.

Über Lernprozesse mit variabler Transitionsstruktur in Entscheidungssituationen bei Ungewißheit. *Jahrbücher für Nationalökonomie und Statistik* **186**, 14-28.

Absorbing Markov chains in population mathematics. *Proceedings of the 38th Session of the International Statistical Institute*, Washington, D.C.

Markoff-Modelle zur sozialen Mobilität. *Jahrbuch für Sozialwissenschaft* **22**, 300-316.

Automatentheoretische Lernmodelle. *Umschau in Wissenschaft und Technik* **71**, 166.

Bevölkerungswissenschaft vor neuen Problemen. *Umschau in Wissenschaft und Technik* **71**, 596-597.

## 1972

Über Sinn und Ziel der Kybernetik. In: J. Meurers (Hrsg.), '*Philosophia naturalis 13*'. Hain, Meisenheim, 185-190.

Über die Kovarianzen von Maximum Likelihood-Schätzungen gewisser Parameter bei multiplen Dekrementtafeln. *Mathematische Operationsforschung und Statistik* **3**, 217-226.

Über ein N-elementiges Modell der Reiz-Stichproben-Theorie mit stetigem Zeitparameter und zwei Antwortklassen. *Metrika* **18**, 94-109.

Stochastische Dekrementmodelle der Bevölkerungsstatistik. *Biometrische Zeitschrift* **14**, 106-125.

Zur Bayes-Analyse statistischer Entscheidungsprobleme. *Zeitschrift für Betriebswirtschaft* **7**, 42. Jg.

Neue Entwicklungen der formalen Demographie I. *Mitteilungsblatt der Österreichischen Gesellschaft für Statistik und Informatik* **5**, 23-29.

Neue Entwicklungen der formalen Demographie II. *Mitteilungsblatt der Österreichischen Gesellschaft für Statistik und Informatik* **6**, 53-64.

Stochastische Prozesse im Lichte ihrer Anwendungen. *Angewandte Informatik* **3**, 104-114.

### 1973

\* *Bevölkerungsstatistik*. de Gruyter, Berlin.

Markovian models for some demographic processes. *Statistische Hefte* **4**, 311-334.

Bemerkungen über lineare Modelle der Populationsdynamik. In: R. Henn (Ed.), 'Operations Research-Verfahren XV'. Hain, Meisenheim, 40-62 (with M. Deistler).

On the linear stochastic model in population dynamics. *Proceedings of the 39th Session of the International Statistical Institute* **4**, 301-306 (with M. Deistler).

### 1974

OR-Modelle sozio-demographischer Prozesse. In: P. Gessner et al., 'Proceedings in Operations Research 3'. Physica, Würzburg, 195-229.

Bemerkungen über stochastische Modelle der Straffälligkeit. *Allgemeines Statistisches Archiv* **58**, 198-221.

Einblicke in bevölkerungsmathematische Modelle und deren Anwendungsmöglichkeiten. *Jahrbuch für Sozialwissenschaft* **25**, 86-105.

Stochastische Modelle des Manpower Planning. *Antrittsvorlesung an der TH Wien*, Nr. **42**, TH Wien.

Von der Bevölkerungsstatistik zur demographischen Forschung. *Mitteilungsblatt der Österreichischen Gesellschaft für Statistik und Informatik* **13**, 15-36.

Nullwachstum der Bevölkerung frühestens in 100 Jahre. *Umschau in Wissenschaft und Technik* **74**, 551-552.

The linear model formulation of a multitype branching process applied to population dynamics. *Journal of the American Statistical Association* **69**, 662-664 (with M. Deistler).

Über ein Verzweigungsprozeßmodell zur Trägheit des Bevölkerungswachstums. Paper des Instituts für Ökonometrie und Operations Research, Universität Bonn (with M. Deistler).

### 1975

Bemerkungen über Wahrscheinlichkeitsmodelle für rekurrente demographische Prozesse. *Zeitschrift für Bevölkerungswissenschaft* **3/4**, 57-72.

Weltbevölkerungsjahr, -Konferenz und - Aktionsplan 1974. *Jahrbuch für Sozialwissenschaft* **26**, 123-137.

Die demographische Revolution. *Österreichische Gesellschaft für Familienplanung*, Jahrestagung in Igls.

Nullwachstum der Bevölkerung im linearen populationsdynamischen Modell. *Zeitschrift für Bevölkerungswissenschaft* **2**, 39-53 (with M. Deistler).

## **1976**

Are economically dependent groups likely to become a significant larger proportion of the population as a whole? In: '*Proceedings of the Colloque on the Changing Population Structures in Europe and Rising Social Costs*'. Council of Europe, Strasbourg.

Some economic consequences of declining fertility in the Federal Republic of Germany. In: '*Les Methodes d'Analyse en Demographie Economique, Dossiers et recherches* **1**'. Institut National d'Etudes Demographiques, Paris.

Stabile Populationsdynamik. In: R. Henn (Ed.), '*Operations Research Verfahren XXV*'. Hain, Meisenheim, 434-442.

On the generalization of stable age distributions to Gani-type manpower models. *Advances in Applied Probability* **8**, 433-445.

The recruitment trajectory corresponding to particular stock sequences in Markovian person-flow models. *Mathematics of Operations Research* **1**, 175-184 (with A. Mehlmann).

## **1977**

\* *Stationäre und schrumpfende Bevölkerungen. Demographisches Null- und Negativwachstum in Österreich*. 'Lecture Notes in Economics and Mathematical Systems', Vol. **149**, Springer, Berlin (Ed.).

Ursachen und Konsequenzen des Geburtenrückganges. In: '*Soziale Probleme der modernen Industriegesellschaft*'. Arbeitstagung des Vereins für Socialpolitik in Augsburg 1976. Duncker & Humblot, Berlin, 393-434.

Methodische Probleme der Familienlebenszyklus-Statistik. In: H. Albach, Helmstädter und R. Henn (Ed.), '*Quantitative Wirtschaftsforschung*'. Wilhelm Krelle zum 60. Geburtstag, Mohr, Tübingen.

Bevölkerung. In: W. Albers et al. (Ed.), '*Handwörterbuch der Wirtschaftswissenschaft (HdWW)*'. G. Fischer, Stuttgart, 610-631.

Bevölkerungsmodelle. *Allgemeines Statistisches Archiv* **4**, 325-348.

Aussichten für das Erwerbspotential und den Anteil wirtschaftlich abhängiger Personen in europäischen Bevölkerungen. *Schriftenreihe des Instituts für Demographie der Österreichischen Akademie der Wissenschaften* **2**.

The impact of mortality on the life cycle of the family in Austria. *Zeitschrift für Bevölkerungswissenschaft* **4**, 51-79 (with H. Hansluwka).

Bevölkerungsschrumpfung in Österreich. Konsequenzen rückläufiger Fruchtbarkeit für die demographische Entwicklung. *Schriftenreihe des Instituts für Demographie der Österreichischen Akademie der Wissenschaften* **3** (with J. Muzicant).

### 1978

Optimales Wachstum stabiler Bevölkerungen in einem neoklassischen Modell. *Zeitschrift für Bevölkerungswissenschaft* **1**, 63-73 (with M. Deistler, M. Luptacik and A. Wörgötter).

Analyse der Fertilitätsentwicklung in Österreich nach Heiratsjahrgängen. *Schriftenreihe des Instituts für Demographie der Österreichischen Akademie der Wissenschaften* **5** (with A. Haslinger).

Pseudostabile Bevölkerungen: Populationsdynamik bei gleichmäßig sinkender Fertilität. *Schriftenreihe des Instituts für Demographie der Österreichischen Akademie der Wissenschaften* **4** (with H. Vogelsang).

Zur demographischen Translation I. Beziehungen zwischen Perioden- und Kohortenmessung demographischer Prozesse. Forschungsbericht **12** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with H. Vogelsang).

Population Dynamics with Declining Fertility. I and II. Forschungsbericht **15** und **16** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with H. Vogelsang).

### 1979

\* *Demographische Analyse und populationsdynamische Modelle: Grundzüge der Bevölkerungsmathematik*. Springer, Wien.

Cohort trends in the timing of the family life cycle in Austria and West-Germany. In: J. Dupâquier et al. (Eds.), *'Historische Demographie'*. Paris.

Optimale intertemporale Allokationen mittels des Maximumprinzips. In: J. Schwarze et al. (Eds.), *'Proceedings in Operations Research 9'*. Physica, Würzburg, 484-489.

Analyse des Familienzyklus auf demographischer Basis. In: *'Bericht über die Situation der Familie in Österreich'*. Familienbericht **1**, Bundeskanzleramt Wien.

Von sinkender zu steigender Fertilität: Bevölkerungsdynamik bei einer Trendumkehr der Fruchtbarkeit. *Zeitschrift für Bevölkerungswissenschaft* **3**, 327-340.

Zum Begriff "Schwung des Bevölkerungswachstums". *Jahrbücher für Nationalökonomie und Statistik* **194**, 399-400.

Exponentielle Niveau- und Musteränderung der Fertilität. Eine Analyse mittels stabiler Vergleichsbevölkerungen. *Zeitschrift für Bevölkerungswissenschaft* **1**, 31-63 (with H. Vogelsang).

### 1980

Optimale Politiken in kontrolltheoretischen Instandhaltungsmodellen. Forschungsbericht **25** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien.

### 1981

Optimale Allokation von Ausbildung und Berufsausübung in einem nichtlinearen Kontrollmodell. *Zeitschrift für Operations Research* **25**, 25-34.

Optimierung von Instandhaltungsinvestitionen, Produktionsintensität und Nutzungsdauer maschineller Produktionsanlagen: Anwendungen der Kontrolltheorie in der Instandhaltungs- und Produktionsplanung. In: K. Brockhoff und W. Krelle (Eds.), '*Unternehmensplanung*'. Springer, Berlin, 213-234.

A noncooperative solution of a simple pollution differential game. Forschungsbericht **34** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien.

Nash-Lösungen zustandsseparabler Nichtnullsummen Differentialspiele. Forschungsbericht **41** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien.

Ein nichtlineares Kontrollproblem der Instandhaltung. *OR-Spektrum* **3**, 49-58 (with R.F. Hartl).

## 1982

\* *Optimal Control Theory and Economic Analysis*. First Viennese Workshop on Economic Applications of Control Theory, Vienna, October 28 - 30, 1981, North-Holland, Amsterdam (Ed.).

Saddle-point analysis in a price-advertising model. *Journal of Economic Dynamics and Control* **4**, 319-340.

Optimal repair policy for a machine service problem. *Optimal Control Applications and Methods* **3**, 15-22.

Optimal pricing in a diffusion model with nonlinear price-dependent market potential. *Operations Research Letters* **1**, 236-240.

Anwendungen des Maximumprinzips im Operations Research. Teil 1 und 2. *OR-Spektrum* **4**, 171-190, 195-212.

The Nash solution of a maintenance-production differential game. *European Journal of Operational Research* **10**, 165-172.

Optimal research policies in a noncooperative project undertaken by two firms. In: G. Feichtinger (Hrsg.), '*Optimal Control Theory and Economic Analysis*'. North-Holland, Amsterdam, 373-397.

Optimal bimodal harvest policies in age-specific bioeconomic models. In: G. Feichtinger und P. Kall (Eds.), '*Operations Research in Progress*'. Reidel, Dordrecht, 285-299.

Ein Differentialspiel für den Markteintritt einer Firma. In: B. Fleischmann et al. (Eds.), '*Operations Research Proceedings 1981*'. Springer, Berlin, 636-644.

\* *Operations Research in Progress*. Reidel, Dordrecht (with P. Kall, Eds.).

## 1983

Optimale dynamische Preispolitik bei drohender Konkurrenz. *Zeitschrift für Betriebswirtschaft* **53**, 155-177.

The Nash solution of an advertising differential game: Generalization of a model by Leitmann and Schmitendorf. *IEEE Transactions on Automatic Control* **AC-28**, 1044-1048.

A differential games solution to a model of competition between a thief and the police. *Management Science* **29**, 686-699.

Pseudostabile Bevölkerungen. In: S. Rupp und K. Schwarz (Eds.), *Beiträge aus der bevölkerungswissenschaftlichen Forschung*. Festschrift für Hermann Schubnell, Schriftenreihe des Bundesinstituts für Bevölkerungsforschung **11**, 535-544.

Differential game models in management science. *European Journal of Operational Research* **14**, 137-155 (with S. Jorgensen).

Eine Fruchtbarkeitstafel auf Paritätsbasis. *Zeitschrift für Bevölkerungswissenschaft* **3**, 363-376 (with W. Lutz).

#### 1984

Optimal employment strategies of profit-maximizing and labour-managed firms. *Optimal Control Applications and Methods* **5**, 235-253.

On the synergistic influence of two control variables on the state of nonlinear optimal control models. *Journal of Operational Research Society* **35**, 907-914.

On optimal control models for the dynamics of the firm. In: R. Henn (Eds.), '*Methods of Operations Research* **51**'. Hain, Athenäum.

A note to Jorgensen's logarithmic advertising differential game. *Zeitschrift für Operations Research* **28**, B 133-B 153 (with E.J. Dockner).

Strategic Advertising and Price Management under Dynamic Conditions. Forschungsbericht **76** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with E.J. Dockner).

Hiring/Firing vs Overtime/Short-Time Working in a Dynamic Firm. Forschungsbericht **72** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with R.F. Hartl and M. Luptacik).

Alterstruktureffekt bei der Schätzung schließlicher Paritätsverteilungen. In: C. Höhn et al. (Eds.), '*Demographie in der Bundesrepublik Deutschland*'. Festschrift für Karl Schwarz. Boppard, H. Boldt (with W. Lutz).

Lagerhaltungs- und Beschäftigungsstrategien einer Firma. *OR-Spektrum* **6**, 93-107 (with A. Steindl).

#### 1985

\* *Optimal Control Theory and Economic Analysis* 2. Second Viennese Workshop on Economic Applications of Control Theory, Vienna, May 16 - 18, 1984, North-Holland, Amsterdam (Ed.).

Optimal modification of machine reliability by maintenance and production. *OR-Spektrum* **7**, 43-50.

Optimal pricing in a duopoly: a noncooperative differential games solution. *Journal of Optimization Theory and Applications* **45**, 199-218 (with E.J. Dockner).

Optimal pricing and production in an inventory model. *European Journal of Operational Research* **19**, 45-56 (with R.F. Hartl).

On the use of Hamiltonian and maximized Hamiltonian in non-differentiable control theory. *Journal of Optimization Theory and Applications* **46**, 493-504 (with R.F. Hartl).

Tractable classes of nonzero-sum open-loop Nash differential games: theory and examples. *Journal of Optimization Theory and Applications* **45**, 179-197 (with E.J. Dockner and S. Jorgensen).

Ein dynamisches Mischungsproblem. Forschungsbericht **79** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with G. Sorger).

## 1986

Production-pollution cycles. Forschungsbericht **95** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien.

Periodic optimal control: can oscillations be optimal in autonomous economic control models? In: W. Domschke et al. (Eds.), '*Methods of Operations Research* **57**'. Athenäum, Königstein, 349-366.

Dynamic advertising and pricing in an oligopoly: a Nash equilibrium approach. *Journal of Economic Dynamics and Control* **10**, 37-39 (with E.J. Dockner).

On the Value of Information in Dynamic Games of R & D. Forschungsbericht **85** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with E.J. Dockner and A. Mehlmann).

\* *Optimale Kontrolle ökonomischer Prozesse: Anwendungen des Maximumprinzips in den Wirtschaftswissenschaften*. de Gruyter, Berlin (with R.F. Hartl).

The dynamic Averch-Johnson effect revisited. Forschungsbericht **83** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with R.F. Hartl and M. Luptacik).

On the optimality of cyclical employment policies: a numerical investigation. *Journal of Economic Dynamics and Control* **10**, 457-466 (with R.F. Hartl, G. Sorger and A. Steindl).

Planning the unusual: applications of control theory to nonstandard problems. *Acta Applicandae Mathematicae* **7**, 79-102 (with A. Mehlmann).

On the exploitation of curious resources. In: M.J. Beckmann et al. (Eds.), '*Methods in Operations Research* **54**'. Hain, Athenäum, 127-145 (with A. Mehlmann).

Optimal oscillations in control models: how can constant demand lead to cyclical production? *Operations Research Letters* **5**, 277-281 (with G. Sorger).

Optimale Dauer und Verteilung von Arbeitspausen. Forschungsbericht **97** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with G. Sorger and A. Novak).

## 1987

Limit cycles in economic control models. In: R. Bulirsch et al. (Eds.), '*Optimal Control*'. Proceedings of the Conference on Optimal Control and Variational Calculus Oberwolfach, West-Germany, June 15-21, 1986. Springer, Berlin, 46-55.

Intertemporal optimization of wine consumption at a party: an unusual optimal control model. In: G. Gandolfo and F. Marzano (Eds.), '*Keynesian Theory Planning Models and Quantitative Economics*'. Essays in Memory of Vittorio Marrama, Vol. **II**. Giuffrè, Milano, 777-797.



Zur Anwendung der Kontrolltheorie auf die Optimierung ökonomischer Prozesse. In: Th. Fischer (Ed.), '*Betriebswirtschaftliche Systemforschung und ökonomische Kybernetik*'. Duncker & Humblot, Berlin, 271-289.

The statistical measurement of the family life cycle: table methods for analyzing the tempo and structure of the family life cycle. In: J. Bongaarts (Hrsg.), '*Family Demography: Methods and Their Applications*'. Clarendon Press, Oxford, 81-101.

A new sufficient condition for most rapid approach paths. *Journal of Optimization Theory and Applications* **54**, 403-411 (with R.F. Hartl).

Optimal production and abatement policies of a firm. *European Journal of Operational Research* **29**, 274-285 (with M. Luptacik).

Optimal employment and wage policies of a monopolistic firm. *Journal of Optimization Theory and Applications* **53**, 59-83 (with M. Luptacik).

Intertemporal sharecropping: a differential game approach. In: G. Bamberg and K. Spremann (Eds.), '*Agency Theory, Information and Incentives*'. Springer, Berlin, 415-438 (with G. Sorger).

## 1988

\* *Optimal Control Theory and Economic Analysis 3*. Third Viennese Workshop on Optimal Control Theory and Economic Analysis, Vienna, May 20 - 22, 1987, North-Holland, Amsterdam (Ed.).

Optimal persistent oscillations and adjustment costs. In: P. Flaschel and M. Krüger (Eds.), '*Recent Approaches to Economic Dynamics*'. P. Lang, Frankfurt, 119-131.

Ein dynamisches Modell des Intensitätssplittings. *Zeitschrift für Betriebswirtschaft* **11**, 1242-1258 (with K.-P. Kistner and A. Luhmer).

Optimal price and advertising policy in convenience goods retailing. *Marketing Science* **7**, 187-201 (with A. Luhmer and G. Sorger).

ADPULS in continuous time. *European Journal of Operational Research* **34**, 171-177 (with A. Luhmer, A. Steindl, R.F. Hartl and G. Sorger).

Periodic research and development. In: G. Feichtinger (Ed.), '*Optimal Control Theory and Economic Analysis 3*'. Third Viennese Workshop on Optimal Control Theory and Economic Analysis, Vienna, May 20 - 22, 1987. North-Holland, Amsterdam, 121-141 (with G. Sorger).

## 1989

Demographische Prognosen und populationsdynamische Modelle. In: B. Felderer (Hrsg.), '*Bevölkerung und Wirtschaft*'. Duncker & Humblot, Berlin, 71-92.

On cyclical inventory and marketing decisions. In: U. Rieder et al., '*Methods of Operations Research*' **62**. Hain, Meisenheim, 387-388 (with E.J. Dockner).

A note on optimal redistributive taxation. Forschungsbericht **119** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with E.J. Dockner).

Noncooperative solutions for a differential game model of fishery. *Journal of Economic Dynamics and Control* **13**, 1-20 (with E.J. Dockner and A. Mehlmann).

Self-generated fertility waves in a non-linear continuous overlapping generations model. *Journal of Population Economics* **2**, 267-280 (with G. Sorger).

### 1990

Optimal periodic policies in dynamic economic systems. *National Contribution of Austria. IFORS 1990*, Athen. In: H.E. Bradley (Ed.), 'Operational Research '90'. Pergamon Press, Oxford, 771-782.

Capital accumulation, endogenous population growth, and Easterlin cycles. *Journal of Population Economics* **3**, 73-87 (with E.J. Dockner).

Oligopolistisches Preismanagement bei Lerneffekten und Überkapazitäten. *Zeitschrift für Betriebswirtschaft* **1**, 7-19 (with E.J. Dockner).

Interaction of price and advertising under dynamic conditions. In: K.-P. Kistner et al. (Eds.), 'Operations Research Proceedings 1989'. Springer, Berlin, 547-554 (with E.J. Dockner and G. Sorger).

Capital accumulation, aspiration adjustment, and population growth: limit cycles in an Easterlin-type model. *Mathematical Population Studies* **2**, 93-103 (with G. Sorger).

### 1991

On the optimality of limit cycles in dynamic economic systems. *Journal of Economics* **53**, 31-50 (with E.J. Dockner).

\* *Methods of Operations Research: OR 1990, International Conference on Operations Research 1990 in Vienna*. Anton Hain, Frankfurt (with R.F. Hartl, W. Janko, W.E. Katzenberger and A. Stepan, Eds.).

Cyclical production and marketing decisions: application of Hopf bifurcation theory. *International Journal of Systems Science* **22**, 1035-1046 (with E.J. Dockner and A. Novak).

Zyklen beim Schilift. Forschungsbericht **138** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with W. Herold and P. Zinner).

A note on the optimal use of environmental resources by an indebted country. *Journal of Institutional and Theoretical Economics* **147**, 547-555 (with A. Novak).

Politico-economic cycles of regulation and deregulation. *European Journal of Political Economy* **7**, 469-485 (with F. Wirl).

### 1992

\* *Dynamic Economic Models and Optimal Control*. North-Holland, Amsterdam (Ed.).

Hopf bifurcation in an advertising diffusion model. *Journal of Economic Behavior & Organisation* **17**, 401-411.

Rational addictive cycles ('binges') under a budget constraint. *Optimal Control Applications and Methods* **13**, 95-104.

Optimal control of economic systems. In: S. Tzafestas (Ed.), 'Automatic Control Handbook'. M. Dekker, New York, 1023-1044.

Limit cycles in dynamic economic systems. In: G. Feichtinger and R.F. Hartl (Eds.), '*Nonlinear Methods in Economic Dynamics and Optimal Control*'. Annals of Operations Research **37**. Baltzer, Basel, 313-344.

Nonlinear threshold dynamics: Further examples for chaos in social sciences. In: G. Haag, U. Mueller and K.G. Troitzsch (Eds.), '*Economic Evolution and Demographic Change, Formal Models in Social Sciences: Formal Models in Social Sciences*'. Lecture Notes in Economics and Mathematical Systems **395**. Springer, Berlin, 141-154.

A nonlinear dynamical model on the arms race. Forschungsbericht **145** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with D. Behrens).

\* *Operations Research Proceedings: Papers of the International Conference on Operations Research 1990*. Springer, Berlin (with W. Bühler, R.F. Hartl, F.J. Radermacher and P. Stähly).

Does society gain from the actions of environmentalists? Forschungsbericht **143** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with E.J. Dockner).

\* *Nonlinear Methods in Economic Dynamics and Optimal Control*. Annals of Operations Research **37**, Baltzer, Basel (with R.F. Hartl, Eds.).

Optimal recycling of tailings for the production of building materials. *Czechoslovak Journal for Operations Research* **1**, 181-192 (with R.F. Hartl and G.T. Kirakossian).

Stable resource-employment limit cycles in an optimally regulated fishery. In: G. Feichtinger (Ed.), '*Dynamic Economic Models and Optimal Control*'. North-Holland, Amsterdam, 163-184 (with V. Kaitala and A. Novak).

A note on the optimal exploitation of migratory fish stocks. *Dynamics and Control* **2**, 255-263 (with A. Novak).

Optimal consumption, training, working time and leisure over the life cycle. *Journal of Optimization Theory and Applications* **75**, 369-388 (with A. Novak).

Seltsames Verhalten nichtlinearer demographischer Prozesse. *Acta Demographica*, 131-156 (with A. Prskawetz).

Immigration into a population with fertility below replacement level - the case of Germany. *Population Studies* **46**, 275-284 (with G. Steinmann).

### **1993**

Strange addictive behaviour: Periodic and chaotic binges. In: W.E. Diewert, K. Spremann and F. Stehling (Eds.), '*Mathematical Modelling in Economics*'. Essays in Honor of Wolfgang Eichhorn. Springer, Berlin, 149-162.

Complex solutions of dynamic optimization models. Forschungsbericht **167** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien.

Cyclical consumption patterns and rational addiction. *American Economic Review* **83**, 256-263 (with E.J. Dockner).

Dynamic R & D competition with memory. *Journal of Evolutionary Economics* **3**, 145-152 (with E.J. Dockner and A. Mehlmann).

Chaos in nonlinear dynamical systems exemplified by an R & D model. *European Journal of Operational Research* **68**, 145-159 (with M. Kopel).

Optimal treatment of cancer diseases. *International Journal of Systems Science* **24**, 1253-1263 (with A. Novak).

A dynamic variant of the battle of the sexes. *International Journal of Game Theory* **22**, 359-380 (with F. Wirl).

#### **1994**

Optimal complex dynamics in environmental economics. *Proceedings of International Conference of Dynamical Systems and Chaos*, Tokyo. World Scientific.

Environmentalists versus resources exploiters: a dynamic game analysis. In: G.L. Paredes V. (Ed.), *International Symposium on Systems Analysis and Management Decisions in Forestry*. Universidad Austral of Chile Press, 392-398 Valdivia (with E.J. Dockner).

Nonconcavity and proper optimal periodic control. *Journal of Economic Dynamics and Control* **18**, 975-990 (with M. Han and R.F. Hartl).

Dynamic optimal control models in advertising: recent developments. *Management Science* **40**, 195-226 (with R.F. Hartl and S.P. Sethi).

Chaos in a simple deterministic queueing system. *Zeitschrift für Operations Research* **40**, 109-119 (with C.H. Hommes and W. Herold).

Complex dynamics in a threshold advertising model. *OR-Spektrum* **16**, 101-111 (with C.H. Hommes and A. Milik).

Nichtlineare dynamische Systeme und Chaos: Neue Impulse für die Betriebswirtschaftslehre? *Zeitschrift für Betriebswirtschaft* **64**, 7-34 (with M. Kopel).

Differential game model of the dynastic cycle: 3-D canonical system with a stable limit cycle. *Journal of Optimization Theory and Applications* **80**, 407-423 (with A. Novak).

Optimal pulsing in an advertising diffusion model. *Optimal Control Applications and Methods* **15**, 267-276 (with A. Novak).

How stock-dependent flow rates imply chaos in educational planning. *Mathematical Population Studies* **5**, 75-85 (with A. Novak).

Limit cycles in intertemporal adjustment models - theory and applications. *Journal of Economic Dynamics and Control* **18**, 353-380 (with A. Novak and F. Wirl).

Endogenous population growth and the exploitation of renewable resources. *Mathematical Population Studies* **5**, 87-106 (with A. Prskawetz and F. Wirl).

A nonlinear model of population growth and renewable resources. *Chaotische Nachrichten* **31**, 16-21 (with A. Prskawetz and F. Wirl).

On the stability and potential cyclicity of corruption in governments subject to popularity constraints. *Mathematical Social Sciences* **28**, 113-131 (with F. Wirl).

#### **1995**

On the optimal trade-off between consumption and pollution. *Izvestiya of the Academy of Sciences. Control Theory and Systems* **6**, 235-239.

Complex optimal policies in an advertising diffusion model. *Chaos, Solitons and Fractals* **5**, 45-53 (with H. Dawid).

- Optimal resource exploitation may be chaotic. *Central European Journal for Operations Research and Economics* **3**, 111-122 (with H. Dawid and G. Tragler).
- Chaotic behavior in an advertising diffusion model. *International Journal of Bifurcation and Chaos* **5**, 255-263 (with L.L. Ghezzi and C. Piccardi).
- Bifurcations of love: the passionate-avoiding couple. *Forschungsbericht* **196** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with A. Gragnani).
- Slow-fast limit cycles in controlled drug markets. *Proceedings of 3<sup>rd</sup> European Control Conference* **4**, 3031-3034 (with A. Gragnani and S. Rinaldi).
- Habit formation with threshold adjustment: addiction may imply complex dynamics. *Journal of Evolutionary Economics* **5**, 157-172 (with W. Herold, A. Prskawetz and P. Zinner).
- Rationalität und komplexes Verhalten. Homo oeconomicus und Chaos - Ein Widerspruch? *Zeitschrift für Betriebswirtschaftliche Forschung* **6**, 545-557 (with M. Kopel).
- Resource leasing and optimal periodic capital investments. *Zeitschrift für Operations Research* **42**, 47-67 (with A. Novak and V. Kaitala).
- Endogenous population growth may imply chaos. *Journal of Population Economics* **8**, 59-80 (with A. Prskawetz).
- Persistent cyclical consumption: variations on the Becker-Murphy model of addiction. *Rationality and Society* **7**, 156-166 (with F. Wirl).
- 1996**
- Chaos theory in Operations Research. *International Transactions of Operations Research* **3**, 23-36.
- Crime and punishment: a dynamic approach. *Forschungsbericht* **195** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien.
- Optimal allocation of drug control efforts: a differential game analysis. *Journal of Optimization Theory and Applications* **91**, 279-297 (with H. Dawid).
- On the persistence of corruption. *Journal of Economics* **64**, 177-193 (with H. Dawid).
- Economic crimes and law enforcement: a differential game. *Forschungsbericht* **204** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien (with H. Dawid and S. Jorgensen).
- Despotism and anarchy in ancient China: Visualizing the dynastic cycle. *Jahrbuch für Wirtschaftswissenschaften* **47**, 1-13 (with G. Fischel, E. Gröller and A. Prskawetz).
- A nonlinear dynamical model for the dynastic cycle. *Chaos, Solitons and Fractals* **7**, 257-271 (with C. Forst and C. Piccardi).
- The Geometry of Wonderland. *Chaos, Solitons and Fractals* **7**, 1989-2006 (with E. Gröller, R. Wegenkittl, A. Milik, A. Prskawetz and W.C. Sanderson).
- Slow-fast dynamics in Wonderland. *Environmental Modeling and Assessment* **1**, 3-17 (with A. Milik, A. Prskawetz and W.C. Sanderson).

Persistent oscillations in a threshold adjustment model. *Mathematical Modelling of Systems* **2**, 197-211 (with A. Novak).

### 1997

Komplexe Dynamik in den Sozialwissenschaften. In: F. Stadler (Hrsg.), *Wissenschaft als Kultur. Österreichs Beitrag zur Moderne*. Springer, Wien, 197-214.

Complex dynamics and control of arms race. *European Journal of Operational Research* **100**, 192-215 (with D. Behrens and A. Prskawetz).

Complex solutions of nonconcave dynamic optimization models. *Economic Theory* **9**, 427-439 (with H. Dawid and M. Kopel).

Indeterminacy of open-loop Nash equilibria: The ruling class versus the tabloid press. In: H.G. Natke and Y. Ben-Haim (Eds.), *Uncertainty: Models and Measures*. Akademie-Verlag, Berlin, 124-136 (with H. Dawid, A. Novak and F. Wirl).

Non-linear dynamics and predictability in the Austrian stock market. In: Ch. Heij et al. ed., *System Dynamics in Economic and Financial Models*. Wiley, Chichester, 43-70 (with E.J. Dockner and A. Prskawetz).

Cyclic dynamics in romantic relationships. *International Journal of Bifurcations and Chaos* **7**, 2611-2619 (with A. Gragnani and S. Rinaldi).

Dynamics of drug consumption: a theoretical model. *Socio-Economic Planning Science* **31**, 127-137 (with A. Gragnani and S. Rinaldi).

Chaotic consumption patterns in a simple 2-D addiction model. *Economic Theory* **10**, 147-173 (with C.H. Hommes and A. Milik).

Einfache dynamische Werbestrategien im Kampf um Marktanteile. *Marketing Zeitschrift für Forschung und Praxis* **4**, 221-231 (with M. Kopel and F. Wirl).

### 1998

Optimale Kontrolle des Drogenkonsums. *OR News* **3**, 6-12 (with D. Behrens and G. Tragler).

Solution techniques for periodic control problems: a case study in production planning. *Optimal Control Applications and Methods* **19**, 185-203 (with C. Büskens and H. Maurer).

Periodic and chaotic programs of intertemporal optimization models with non-concave net benefit function. *Journal of Economic Behavior & Organization* **33**, 435-447 (with H. Dawid and M. Kopel).

Optimal enforcement policies (crackdowns) on an illicit drug market. *Optimal Control Applications and Methods* **19**, 169-184 (with R.F. Hartl, J.L. Haunschmied and P. Kort).

The accomplishment of the Maastricht criteria with respect to initial debt. *Journal of Economics* **68**, 93-110 (with M. Luptacik and A. Prskawetz).

A model on the escape from the Malthusian trap. *Journal of Population Economics* **11**, 535-550 (with A. Prskawetz and G. Steinmann).

Corruption dynamics in democratic societies. *Complexity* **3**, 53-64 (with S. Rinaldi and F. Wirl).

## 1999

- Dynamic economic models of optimal law enforcement. In: U. Leopold-Wildburger, G. Feichtinger, K.-P. Kistner, *Modelling and Decisions in Economics*. Essays in Honor of Franz Ferschl. Springer, Heidelberg, 269-293.
- Variances of population projections: Comparison of two approaches. IIASA Report IR-99-063 (with D. Bauer, W. Lutz, W. Sanderson).
- A dynamic model of drug initiation: Implications for treatment and drug control. *Mathematical Biosciences* **159**, 1-20 (with D. Behrens, J.P. Caulkins, J.L. Haunschmied and G. Tragler).
- \* *Optimal Control and Differential Games*. *Annals of Operations Research* **88** (with H. Dawid and R.F. Hartl).
- \* *Nonlinear Dynamical Systems and Adaptive Methods*. *Annals of Operations Research* **89** (with H. Dawid and R.F. Hartl).
- Optimal offending in view of the offender's criminal record. *Central European Journal of Operations Research* **7**, 111-127 (with T. Fent and M. Zalesak).
- Optimal firm investment in security. *Annals of Operations Research* **88**, 81-98 (with J.L. Haunschmied and P.M. Kort).
- Endogenous growth of population and income depending on resource and knowledge. *European Journal of Population* **14**, 305-331 (with F.X. Hof, M. Luptacik, W. Lutz, A. Milik, A. Prskawetz and F. Wirl).
- Petrarch's "Canzoniere": Rational addiction and amorous cycles. *Journal of Mathematical Sociology* **23**, 225-240 (with S. Jorgensen and A. Novak).
- Threshold advertising rules in a duopoly framework. *Central European Journal of Operations Research* **7**, 39-52 (with M. Kopel and F. Wirl).

## 2000

- BAVEJA A. - G. FEICHTINGER - R.F. HARTL - J.L. HAUNSCHMIED - P.M. KORT: A resource-constrained optimal control model for crackdown on illicit drug markets. *Journal of Mathematical Analysis and Applications* **249**, 53-79.
- BEHRENS D.A. - J.P. CAULKINS - G. TRAGLER - G. FEICHTINGER: Optimal control of drug epidemics: prevent and treat - but not at the same time? *Management Science* **46**, 333-347.
- BORISOV V. - G. FEICHTINGER - A. KRYAZHIMSKII: Optimal enforcement on a pure seller's market of illicit drugs. *Journal of Optimization Theory and Applications* **106**, 1-22.
- CAULKINS J.P. - M. DWORAK - G. FEICHTINGER - G. TRAGLER: Price-raising drug enforcement and property crime: a dynamic model. *Journal of Economics* **71**, 227-253.
- DAWID H. - G. FEICHTINGER - S. JORGENSEN: Crime and law enforcement: A multistage game. In: J.A. Filar, V. Gaitsgory, K. Mizukami (Ed.), *Advances in Dynamic Games and Applications*. Birkhäuser, Boston, 341-35.

FEICHTINGER G.: The Control of Age-Structured Populations: A Dynamic Cost-Benefit Approach. Forschungsbericht **236** des Instituts für Ökonometrie, OR und Systemtheorie, TU Wien. Prepared for the Age Structured Transitions and Policy Implications, IUSSP/APN Meeting in Phuket, Thailand.

FEICHTINGER G.: On the economics of corruption and illicit drugs. *Applications of Mathematics and Statistics in Economy* **6**, 21-26.

FEICHTINGER G. - F. WIRL: Instabilities in concave, dynamic, economic optimization. *Journal of Optimization Theory and Applications* **107**, 277-288.

PRSKAWETZ A. - G. STEINMANN - G. FEICHTINGER: Human capital, technological progress and the demographic transition. *Mathematical Population Studies* **7**, 343-363.

## 2001

ALMEDER C. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER: Age-specific multi-stage drug initiation models: insights from considering heterogeneity. *Bulletin on Narcotics* **LIII**, 105-118.

BEHRENS D.A. - G. FEICHTINGER - G. TRAGLER: Wer nicht lernen will, muß fühlen! *OR-News* **13**, 5-9.

CAULKINS J.P. - R.F. HARTL - G. TRAGLER - G. FEICHTINGER: Why politics makes strange bedfellows: dynamic model with DNS curves. *Journal of Optimization Theory and Applications* **111**, 237-254.

\* DAWID H. - G. FEICHTINGER - R.F. HARTL (Eds.): *Nonlinear Dynamics: Theory and Economic Applications*. Special Issue of *Central European Journal of Operations Research* **9**, 1-2.

FEICHTINGER G.: Optimal control of law enforcement. In: F. Udwadia, A. Kryazhimskii and G. Leitmann, *Advances in Dynamics and Control*. Gordon & Breach Science Publ., London, 151-160.

FEICHTINGER G.: Environmental policy design and the economics of crime: some analogies in intertemporal optimization. In: P. Kischka, U. Leopold-Wildburger, R.H. Möhring, F.-J. Radermacher (Eds), *Models, Methods and Decision Support for Management*. Essays in Honor of Paul Stähly. Physica, Heidelberg, 23-47.

\* FEICHTINGER G. - R.F. HARTL - P. KORT (Eds.): *Economic Applications of Optimal Control*. Special Issue of *Optimal Control Applications and Methods* **22**, 5/6.

FEICHTINGER G. - R.F. HARTL - P. KORT - A. NOVAK: Terrorism control in the tourism industry. *Journal of Optimization Theory and Applications* **108**, 283-296.

FEICHTINGER G. - R.F. HARTL - P.M. KORT - F. WIRL: The dynamics of a simple relative adjustment cost framework. *German Economic Review* **2**, 255-268.

GREINER A. - G. FEICHTINGER - J.L. HAUNSCHMIED - P.M. KORT - R.F. HARTL: Optimal periodic development of a pollution generating tourism industry. *European Journal of Operational Research* **134**, 582-591.

TRAGLER G. - J.P. CAULKINS - G. FEICHTINGER: Optimal dynamic allocation of treatment and enforcement in illicit drug control. *Operations Research* **49**, 352-362.

## 2002



BEHRENS D.A. - J.P. CAULKINS - G. TRAGLER - G. FEICHTINGER: Why present-oriented societies undergo cycles of drug epidemics. *Journal of Economic Dynamics and Control* **26**, 919-936.

DAWID H. - G. FEICHTINGER - A. NOVAK: Extortion as an obstacle to economic growth: a dynamic game analysis. *European Journal of Political Economy* **18**, 499-516.

DWORAK M. - F. WIRL - A. PRSKAWETZ - G. FEICHTINGER: Optimal long-run budgetary policies subject to the Maastricht criteria or a stability pact. *Macroeconomic Dynamics* **6**, 665-686.

\* FEICHTINGER G. - R. GISSER - J. KYTIR (Hg.): Demographie im interdisziplinären Kontext. Festschrift 25 Jahre Institut für Demographie der Österreichischen Akademie der Wissenschaften.

FEICHTINGER G. - W. GRIENAUER - G. TRAGLER: Optimal dynamic law enforcement. *European Journal of Operational Research* **141**, 58-69.

\* FEICHTINGER G. - R.F. HARTL - S. JORGENSEN (Eds.): *International Game Theory Review*. Special Issue of *Differential Game Applications* **4**, **1**.

FEICHTINGER G. - G. TRAGLER: Multiple equilibria in an optimal control model for law enforcement. *Proceedings of the Steklov Institute of Mathematics* **236**, 449-460 (American Mathematical Society).

FEICHTINGER G. - G. TRAGLER: Skiba thresholds in optimal control of illicit drug use. In: G. Zaccour (Ed.), *Optimal Control and Differential Games*. Essays in Honor of Steffen Jorgensen. Kluwer Academic Publ., Boston, 3-21.

FENT T. - G. FEICHTINGER - G. TRAGLER: A dynamic game of offending and law enforcement. *International Game Theory Review* **4**, 71-89.

KORT P.M. - A. GREINER - G. FEICHTINGER - J.L. HAUNSCHMIED - A. NOVAK - R.F. HARTL: Environmental effects of tourism industry investments: an intertemporal trade-off. *Optimal Control Applications and Methods* **23**, 1-19.

LUTZ W. - S. SCHERBOV - A. PRSKAWETZ - M. DWORAK - G. FEICHTINGER: Population, natural resources, and food security: lessons from comparing full and reduced-form models. *Population and Development Review* **28**, Bd. 2, Supplement 199-224.

PICCARDI C. - G. FEICHTINGER: Peak-to-Peak dynamics in the dynastic cycle. *Chaos, Solitons and Fractals* **13**, 195-202.

WIRL F. - G. FEICHTINGER: Intrafamilial consumption and saving under altruism and wealth considerations. *Economica* **69**, 93-111.

## 2003

\* FEICHTINGER G.: *Vienna Yearbook of Population Research*. Verlag der Österreichischen Akademie der Wissenschaften, Wien.

FEICHTINGER G. - G. TRAGLER - V.M. VELIOV: Optimality conditions for age-structured control systems. *Journal of Mathematical Analysis and Applications* **288**, 47-68.

HARTL R.F. - P. KORT - G. FEICHTINGER: Offense control taking into account heterogeneity of age. *Journal of Optimization Theory and Applications* **116**, 591-620.

HAUNSCHMIED J.L. - P.M. KORT - R.F. HARTL - G. FEICHTINGER: A DNS-curve in a two-state capital accumulation model: a numerical analysis. *Journal of Economic Dynamics and Control* **27**, 701-716.

PRSKAWETZ A. - M. WINKLER-DWORAK - G. FEICHTINGER: Production, distribution and insecurity of food: a dynamic framework. *Structural Change and Economic Dynamics* **14**, 317-337.

PRSKAWETZ A. - A. GRAGNANI - G. FEICHTINGER: Reconsidering the dynamic interaction of renewable resources and population growth: a focus on long-run sustainability. *Environmental Modeling and Assessment* **8**, 35-45.

## 2004

ALMEDER C. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER: An age-structured single-state drug initiation model - cycles of drug epidemics and optimal prevention programs. *Socio-Economic Planning Sciences* **38**, 91-109.

\* BARNETT W.A. - C. DEISSENBERG - G. FEICHTINGER (Ed): *Economic Complexity: Non-linear Dynamics, Multi-Agents Economies, and Learning*. Elsevier, Amsterdam, 1-467.

BEHRENS D.A. - J.P. CAULKINS - G. FEICHTINGER: A model of chaotic drug markets and their control. *Journal of Nonlinear Dynamics, Psychology and Life Sciences* **8**, 373-399.

DEISSENBERG C. - G. FEICHTINGER - W. SEMMLER - F. WIRL: Multiple equilibria, history dependence, and global dynamics in intertemporal optimisation models. In: W.A. Barnett, C. Deissenberg, G. Feichtinger, *Economic Complexity: Non-linear Dynamics, Multi-Agents Economies, and Learning*. Elsevier, Amsterdam, 91-122.

FEICHTINGER G.: Multiple equilibria in optimal control models - A research program. In: Feichtinger G., K.-P. Kistner, C. Schneeweiss, OR, Economics and Statistics *Central European Journal of Operations Research* **12**, Special Issue 2. Essays in Honor of Franz Ferschl. Physica, Heidelberg, 157-169.

FEICHTINGER G. - R.F. HARTL - P.M. KORT - V. VELIOV: Dynamic investment behavior taking into account ageing of the capital goods. In: F.E. Udawadia, H.I. Weber, G. Leitmann (ed.), *Dynamical Systems and Control*. Chapman & Hall/CRC, London, 379-391.

\* FEICHTINGER G. - K.-P. KISTNER - C. SCHNEEWEISS: OR, Economics and Statistics. *Central European Journal of Operations Research* **12**, Special Issue 2. Essays in Honor of Franz Ferschl. Physica, Heidelberg, 105-230.

FEICHTINGER G. - A. PRSKAWETZ - V. VELIOV: Age-structured optimal control in population economics. *Theoretical Population Biology* **65**, 373-387.

FEICHTINGER G. - W. SANDERSON - V.M. VELIOV: The optimal mix of medication and prevention: dynamics and control of the HIV/AIDS epidemics in Botswana. *IFORS Newsletter for Developing Countries* **12**, 6-7.

FEICHTINGER G. - G. TRAGLER: Ein dynamischer Kosten-Nutzen-Ansatz zur Drogenabhängigkeit. In: F. Tretter, B. Erbas, G. Sonntag (Hrsg.), *Ökonomie der Sucht und Suchttherapie*. Pabst Sci. Publ., Lengerich, 373-394.

FEICHTINGER G. - T. TSACHEV - V.M. VELIOV: Maximum principle for age and duration structured systems: a tool for optimal prevention and treatment of HIV. *Mathematical Population Studies* **11**, 3-28.

\* FEICHTINGER G. - V.M. VELIOV (Eds.): *Age-Structured Models in Population Dynamics and Economics*. Special Issue of *Mathematical Population Studies* **11**, 3-4.

HARTL R.F. - P.M. KORT - G. FEICHTINGER - F. WIRL: Multiple equilibria and thresholds due to relative investment costs. *Journal of Optimization Theory and Applications* **123**, 49-82.

STEINDL A. - G. FEICHTINGER: Bifurcations to periodic solutions in a production/inventory model. *Journal of Nonlinear Science* **14**, 469-503.

## 2005

CAULKINS J.P. - G. FEICHTINGER - D. GRASS - G. TRAGLER: A model of moderation: finding Skiba points on a slippery slope. *Central European Journal of Operations Research* **13**, 45-64.

CAULKINS J.P. - G. FEICHTINGER - M. JOHNSON - G. TRAGLER - Y. YEGOROV: Skiba thresholds in a model of controlled migration. *Journal of Economic Behavior & Organisation* **57**, 490-508.

CAULKINS J.P. - G. FEICHTINGER - D. GRASS - M. JOHNSON - G. TRAGLER - Y. YEGOROV: Placing the poor while keeping the rich in their place: separating strategies for optimally managing residential mobility and assimilation. *Demographic Research* **13**, 1-34.

FEICHTINGER G. - R.F. HARTL - P.M. KORT - V.M. VELIOV: Environmental policy, the Porter hypothesis and the composition of capital: effects of learning and technological progress. *Journal of Environmental Economics and Management* **50**, 434-446.

GAVRILA C. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER - R.F. HARTL: Managing the reputation of an award to motivate performance. *Mathematical Methods of Operations Research* **61**, 1-22.

GAVRILA C. - G. FEICHTINGER - G. TRAGLER - R.F. HARTL - P.M. KORT: History-dependence in a rational addiction model. *Mathematical Social Sciences* **49**, 273-293.

LEVY A. - G. FEICHTINGER: A theory of random-lifetime-rational junk-food consumption. *Central European Journal of Operations Research*.

WIRL F. - G. FEICHTINGER: History dependence in concave economies. *Journal of Economic Behavior & Organisation* **57**, 390-407.

## 2006

CAULKINS J.P. - G. FEICHTINGER - C. GAVRILA - A. GREINER - J.L. HAUNSCHMIED - P.M. KORT - G. TRAGLER: Dynamic cost-benefit analysis of drug substitution programs? *Journal of Optimization Theory and Applications* **128**: 279-294.

CAULKINS J.P. - G. FEICHTINGER - J.L. HAUNSCHMIED - G. TRAGLER: Quality cycles and the strategic manipulation of value. *Operations Research* **54**: 666-677.

- CAULKINS J.P. - A. GRAGNANI - G. FEICHTINGER - G. TRAGLER: High and low frequency oscillations in drug epidemics. *International Journal of Bifurcation and Chaos* **16**: 3275–3289.
- FEICHTINGER, G. - R.F. HARTL - P.M. KORT - V. VELIOV: Anticipation effects of technological progress on capital accumulation: a vintage capital approach. *Journal of Economic Theory* **126**: 143-164.
- FEICHTINGER G. - HARTL R.F. - P.M. KORT - V.M. VELIOV: Capital accumulation under technological progress and learning: a vintage capital approach. *European Journal of Operational Research* **172**: 293-310.
- FEICHTINGER G. - A. STEINDL: DNS curves in a production/inventory model. *Journal of Optimization Theory and Applications* **128**: 295-308.
- FEICHTINGER G. - G. TRAGLER - D.A. BEHRENS: Optimale Kontrolle des Drogenkonsums. *OR News, Sonderausgabe*, 105-110.
- FEICHTINGER G. - M. WINKLER-DWORAK - I. FREUND - A. PRSKAWETZ: Zur Altersdynamik Gelehrter Gesellschaften - dargestellt am Beispiel der ÖAW. *Anzeiger der philosophisch-historischen Klasse* **141**, 43-74. Verlag der Österreichischen Akademie der Wissenschaften, Wien.
- HAUNSCHMIED J.L. - G. FEICHTINGER - R.F. HARTL - P.M. KORT: Keeping up with the technology pace: a DNS-curve in a limit cycle in a technology investment decision problem. *Journal of Economic Behavior & Organization* **57**: 509-529.
- KORT P.M. - J.P. CAULKINS - R.F. HARTL - G. FEICHTINGER: Brand image and brand dilution in the fashion industry. *Automatica* **42**: 1363-1370.
- WIRL F. - G. FEICHTINGER: History versus expectations: increasing returns or social influence? *The Journal of Socio-Economics* **35**: 877-888.

## 2007

- ALMEDER C. - G. FEICHTINGER - W.C. SANDERSON - V.M. VELIOV: Prevention and medication of HIV/AIDS - the case of Botswana. *Central European Journal of Operations Research* **15**: 47-61.
- BEHRENS D.A. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER: Incentive Stackelberg strategies for a dynamic game on terrorism. In: Jørgensen S. - Quincampoix M. - Vincent T.L. (eds.): *Advances in Dynamic Game Theory and Application. Numerical Methods, Algorithms, and Applications to Ecology and Economics* (Annals of the International Society of Dynamic Games 9), Birkhäuser, Boston, 223-253.
- CAULKINS J.P. - G. FEICHTINGER - D. GRASS - G. TRAGLER: Bifurcating DNS thresholds in a model of organizational bridge building. *Journal of Optimization Theory and Applications* **133**: 19-35.
- CAULKINS J.P. - G. FEICHTINGER - G. TRAGLER - V. VELIOV: Cycles of violence: A dynamic control analysis. *European Journal of Operational Research* **181**: 350-361.
- CAULKINS J.P. - R.F. HARTL - P.M. KORT - G. FEICHTINGER: Explaining fashion cycles: Imitators chasing innovators in product space. *Journal of Economic Dynamics and Control* **31**: 1535-1556.

FEICHTINGER G.: Dynamik und Steuerung von Populationen in konstanter Größe. In: Ch. Höhn, J. Dorbritz (Hrsg.): Demographischer Wandel – Wandel der Demographie. Festschrift für Karl Schwarz. Schriftenreihe des Bundesinstituts für Bevölkerungsforschung, Band 37: 95-122.

FEICHTINGER G. - R.F. HARTL - P.M. KORT - Y. YEGOROV: A new solution property in optimal control: the lens. *Automatica* **43**: 744-747.

FEICHTINGER G. - V.M. VELIOV: On a distributed control problem arising in dynamic optimization of a fixed-size population. *Siam Journal on Optimization* **18**: 980-1003.

FEICHTINGER G. - M. WINKLER-DWORAK - I. FREUND - A. PRSKAWETZ - F. RIOSMENA: On the age dynamics of learned societies - Taking the example of the Austrian Academy of Sciences. *Vienna Yearbook of Population Research*: 107-132.

KUHN M. - A. PRSKAWETZ - S. WRZACZEK - G. FEICHTINGER: Health, survival and consumption over the life cycle: Individual versus social optimum and the role of externalities. Rostocker Zentrum zur Erforschung des Demografischen Wandels. Diskussionspaper **16**.

## 2008

BULTMANN R. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER: Modeling supply shocks in optimal control models of illicit drug consumption. In *Lecture Notes in Computer Sciences* **4818**: 285-292, Springer, Heidelberg.

BULTMANN R. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER: How should policy respond to disruptions in markets for illegal drugs? *Contemporary Drug Problems*. **35**(203): 371-395.

CAULKINS J.P. - G. FEICHTINGER - D. GRASS - G. TRAGLER: Optimizing counter-terror operations: should one fight with "Fire" or "Water"? *Computer and Operations Research* **35**: 1874-1885.

FEICHTINGER G. - R.F. HARTL - P.M. KORT - V.M. VELIOV: Financially constrained capital investments: the effects of disembodied and embodied technological progress. *Journal of Mathematical Economics* **44**: 459-483.

FEICHTINGER G. - A.J. NOVAK: Terror and counterterror operations: differential game with cyclical Nash solution. *Journal of Optimization Theory and Applications* **139**: 541-556.

GRASS D. - J.P. CAULKINS - G. FEICHTINGER - G. TRAGLER - D.A. BEHRENS: *Optimal Control of Nonlinear Processes. With Applications in Drugs, Corruption, and Terror*. Springer, Berlin.

## 2009

BEHRENS D.A. - J.P. CAULKINS - G. TRAGLER - G. FEICHTINGER: Memory, contagion, and capture rates: characterizing the types of addictive behavior that are prone to repeated epidemics. Forthcoming in *Mathematical Biosciences*.

CAULKINS J.P. - G. FEICHTINGER - D. GRASS - G. TRAGLER: Optimal control of terrorism and global reputation. A case study with novel threshold behavior. *OR Letters* **37**(6): 387-391.

DAWID H. - G. FEICHTINGER - J.R. GOLDSTEIN - V.M. VELIOV: Keeping a learned society young. *Demographic Research* **20**(22): 541-558.

GAVRILA C. - H. POLLACK - P.M. KORT - G. FEICHTINGER - G. TRAGLER: Optimal control of methadone treatment in preventing blood-borne disease. Forthcoming in *Medical Decision Making*.

## 2010

CAULKINS J.P. - G. FEICHTINGER - G. TRAGLER - D. WALLNER: When in a drug epidemic should the policy objective switch from use reduction to harm reduction? *European Journal of Operational Research* **201**: 308–318.

FEICHTINGER G. - A.J. NOVAK - V.M. VELIOV: Applying the Leitmann-Stalford sufficient conditions to maximization control problems with non-concave Hamiltonian. *Applied Mathematics and Computation* **217**(3): 1017-1022. [Research Report 2010-02](#), ORCOS, TU Wien

NOVAK A.J. - G. FEICHTINGER - G. LEITMANN: A differential game related to terrorism: Nash and Stackelberg strategies. *Journal of Optimization Theory and Applications* **144**(3): 533-555.

VELIOV V.M., H. DAWID, E. DOCKNER, R.F. HARTL, J. HAUNSCHMIED, U. LEOPOLD-WILDBURGER, M. LUPTACIK, A. MEHLMANN, A. PRSKAWETZ, M. RAUNER, G. SORGER, G. TRAGLER: Special issue in honour of Gustav Feichtinger - Gustav Feichtinger celebrates his 70-th birthday. *Central European Journal of Operations Research* **18**(4): 437-451.

WIRL F., G. FEICHTINGER: Modelling Social Dynamics (of Obesity) and Thresholds: *Games* **2010**(1): 395-414.

WRZACZEK S., M KUHN, A. FÜRNKRANZ-PRSKAWETZ, G. FEICHTINGER: The reproductive value in distributed optimal control models. *Theoretical Population Biology* **77** (3): 164 - 170.

CAULKINS J. P., GRASS D., FEICHTINGER G., TRAGLER G.: Optimizing counter-terror operations. IFAC Workshop on Supplemental Ways for Improving International Stability, Kosovo (2010), *International Stability* **8**(1)

## 2011

CAULKINS J.P., FEICHTINGER G., GRASS D., HARTL R.F., KORT P.M. & SEIDL, A. 2011. Optimal Pricing of a Conspicuous Product in a Recession that Freezes Capital Markets, *Journal of Economic Dynamics and Control*, **35**(1): 163-174.

HUSCHTO T., FEICHTINGER G., HARTL R.F., KORT P.M., SAGER S., SEIDL A.: Numerical solution of a conspicuous consumption model with constant control delay, *Automatica*, **47** (9): 1868-1877. Available as [Research Report 2010-11](#), ORCOS, TU Wien

KUHN M, WRZACZEK S, PRSKAWETZ A, FEICHTINGER G: Externalities in a life cycle model with endogenous survival. *Journal of Mathematical Economics* **47** (2011), 4 - 5; 627 - 641.

KUHN M, WRZACZEK S, PRSKAWETZ A, FEICHTINGER G: Optimal choice of health and retirement in a lifecycle model. *LEPAS Conference Proceedings*, <http://www.lepas-fp7.de/lepas-proc-2011-18.pdf>

G. FEICHTINGER, M KUHN, A. FÜRNKRANZ-PRSKAWETZ, S. WRZACZEK: The reproductive value as part of the shadow price of population. *Demographic Research*, **Vol. 24** (2011), Article 28; S. 709 - 718.

## 2012

M. KUHN, S. WRZACZEK, A. FÜRNKRANZ-PRSKAWETZ, G. FEICHTINGER: Optimal choice of health and retirement in a life-cycle model; Bericht für Institute of Mathematical Methods in Economics (Research Unit on Economics); Working Paper 01/2012, 2012; 47 S. In Submission.

SIMON C, BELYAKOV AO, FEICHTINGER G. Minimizing the dependency ratio in a population with below-replacement fertility through immigration. *Theoretical Population Biology*. 2012 Nov;82(3):158-69. doi: 10.1016/j.tpb.2012.06.009. Available as [Research Report 2011-13](#), ORCOS, TU Wien.

FEICHTINGER, G., NOVAK, A., WRZACZEK, S (2012) Optimizing counter-terroristic operations in an asymmetric Lanchester model. IFAC Conference, Rimini, Italy, 2012. *Control Applications of Optimization*, 15(1), 27-32, doi: 10.3182/20120913-4-IT-4027.00056

G. FEICHTINGER, A. KRASOVSKII, A. PRSKAWETZ · V. M. VELIOV: Optimal age-specific election policies in two-level organizations with fixed size, *Central European Journal of Operations Research*, (2012) 20:649-677, DOI 10.1007/s10100-011-0197-4 Available as [Research Report 2012-05](#), ORCOS, TU Wien, 2012

RIOSMENA F., M. WINKLER-DWORAK, A. PRSKAWETZ, and G. FEICHTINGER. (2011) "The Impact of Policies Influencing the Demography of Age Structured Populations: Lessons from Academies of Science". *Genus* LXVII(2):29-59. DOI:10.4402/genus-401 Available as [Research Report 2012-08](#), ORCOS, TU Wien, 2012.

## 2013

CAULKINS, J.P., FEICHTINGER, G., GRASS, D., HARTL, R.F., KORT, P.M., NOVAK, A.J. & SEIDL, A. 2013. Leading Bureaucracies to the Tipping Point: An Alternative Model of Multiple Stable Equilibrium Levels of Corruption. *European Journal of Operational Research*. 225(3), 541-546. doi:10.1016/j.ejor.2012.10.026. Available as [Research Report 2011-05](#), ORCOS, TU Wien, 2011

CAULKINS, J.P., FEICHTINGER, G., GRASS, D., HARTL, R.F., KORT, P.M. & SEIDL, A. 2013. When to Make Proprietary Software Open Source, *Journal of Economic Dynamics and Control*, 37(6), 1182-1194. doi:10.1016/j.jedc.2013.02.009 Available as [Research Report 2011-07](#), ORCOS, TU Wien

CAULKINS, J.P., FEICHTINGER, G., HARTL, R.F., KORT, P.M., NOVAK, A.J. & SEIDL, A. 2013. Long Term Implications of Drug Policy Shifts: Anticipating and Non Anticipating Consumers. *Annual Reviews in Control*, 37(1), 105-115. doi:10.1016/j.arcontrol.2013.03.005. Available as [Research Report 2011-12](#), ORCOS, TU Wien.

F. WIRL, G. FEICHTINGER, P.M.KORT 2013: Individual Firm and Market Dynamics of CSR Activities, *Journal of Economic Behavior & Organization* Vol 86, 169-182. Available as [Research Report 2011-08](#), ORCOS, TU Wien.

G. FEICHTINGER, A. PRSKAWETZ, A. SEIDL, C. SIMON, S. WRZACZEK: Do Egalitarian Societies Boost Fertility?; *Research Report 2013-05*, ORCOS, TU Wien, 2013 ([full text in PDF-Format](#)). In Submission.

CAULKINS, J.P., FEICHTINGER, G., HARTL, R.F., KORT, P.M., NOVAK, A.J. & SEIDL, A. 2013. Multiple Equilibria and Indifference-Threshold Points in a Rational Addiction Model. *Central European Journal of Operations Reserarch*, 21(3), 507-522, DOI: 10.1007/s10100-012-0260-9.

## 2014

CAULKINS, J.P., FEICHTINGER, G., GRASS, D., HARTL, R.F., KORT, P.M., NOVAK, A., SEIDL, A. & WIRL, F. 2014. A Dynamic Analysis of Schelling's Binary Corruption Model: A Competitive Equilibrium Approach. *Journal of Optimization Theory & Applications*, 161(2), 608-625. doi: 10.1007/s10957-013-0420-7.

MOSER, E., SEIDL, A. & FEICHTINGER, G. 2013. History-Dependence in Production-Pollution-Trade-Off Models: A Multi-Stage Approach. *Annals of Operations Research* (2014) 222:457-481. doi: 10.1007/s10479-013-1349-9

## 2015

CAULKINS, J.P., FEICHTINGER, G., GRASS, D., HARTL, R.F., KORT, P.M. & SEIDL, A. 2015. Skiba Points in Free End-time Problems, *Journal of Economic Dynamics and Control*, 51(1), 404-419. doi:10.1016/j.jedc.2014.11.003

M. KUHN, S. WRZACZEK, A. FÜRNRKRAZ-PRSKAWETZ, G. FEICHTINGER: Optimal choice of health and retirement in a life-cycle model; *Journal of Economic Theory* 158(2015)186-212. DOI: 10.1016/j.jet.2015.04.006

CAULKINS, J.P., FEICHTINGER, G., OUARDIGHI F.: Accelerating Diffusion by Marketing-Operation Efforts. In Submission

J.P. CAULKINS, G. Feichtinger, A. Seidl, D. Grass, R.F. Hartl, P.M. Kort: Capital stock management during a recession that freezes credit markets. *Journal of Economic Behavior & Organization*, 116, 1-14. doi: 10.1016/j.jebo.2015.02.023. Available as Research Report 2013-06, ORCOS, TU Wien, 2013 ([full text in PDF-Format](#)).

STEINDL A, SEIDL A, and G. FEICHTINGER: Degenerated Hopf Bifurcations in a Demographic Diffusion Model. Ludwig Reich 75. A Tribute by Students, Colleagues and Friends. Harald Friepertinger, Wolfgang Prager, Jens Schwaiger, and Jörg Tomaschek (Eds.), Grazer Math.Ber., ISSN 1016-7692, Bericht Nr. 363 (2015), 42-58.



## 2016

- SEIDL, A., KAPLAN, E.H., CAULKINS, J.P., WRZACZEK, S. & FEICHTINGER, G. 2016. Optimal Control of a Terror Queue Model, *Europ. Journal of Operations Research* 248(1), 246-256
- A. SEIDL, S. WRZACZEK, F. EL OUARDIGHI, G. FEICHTINGER: Optimal Career Strategies and Brain Drain in Academia. *Research Report 2014-05*, ORCOS, TU Wien, 2014 ([full text in PDF-Format](#)) *Journal of Opt. Theory and Appl.* 2016, 168(1)268-295
- TEMPLIN, T., SEIDL, A., WICKSTRÖM, B.A., FEICHTINGER, G. 2016. Optimal Language Policy for the Preservation of a Minority Language, *Mathematical Social Sciences*, 81(1), 8-21. doi:10.1016/j.mathsocsci.2016.03.006
- H. DAWID, K. DÖRNER, G. FEICHTINGER, P.M. KORT, A. SEIDL (eds.):  
\* Dynamic Perspectives on Managerial Decision Making - Essays in Honor of Richard Hartl. in Buchreihe "Dynamic Modeling and Econometrics in Economics and Finance", Buchreihen-Herausgeber: W. Semmler, S. Mittnik; Springer International Publishing, 2016, ISBN: 978-3-319-39118-2, 527 S.
- A. NOVAK, G. FEICHTINGER, G. LEITMANN: On the Optimal Trade-Off Between Fire Power and Intelligence in a Lanchester Model; in: *Dynamic Perspectives on Managerial Decision Making - Essays in Honor of Richard Hartl*, Springer International Publishing Switzerland, 2016, ISBN: 978-3-319-39118-2, S. 217 - 231.
- E. MOSER, A. FÜRNKRANZ-PRSKAWETZ, G. FEICHTINGER, B. BARAKAT:  
Maximizing Female Labor Force Participation in a Stationary Population;  
in: *Dynamic Perspectives on Managerial Decision Making - Essays in Honor of Richard Hartl*, Springer International Publishing Switzerland, 2016, ISBN: 978-3-319-39118-2; S. 167 - 188.
- F. EL OUARDIGHI, G. FEICHTINGER, D. GRASS, R.F. HARTL, P. KORT:  
Autonomous and advertising-dependent 'word of mouth' under costly dynamic pricing; *European Journal of Operational Research*, 251 (2016), S. 860 - 872.
- EL OUARDIGHI, F., FEICHTINGER, G., GRASS, D., HARTL, R. F., & KORT, P. M. (2016). Advertising and Quality-Dependent Word-of-Mouth in a Contagion Sales Model. *Journal of Optimization Theory and Applications*, 170 (1), 323-342.

## 2017

- WRZACZEK, S., KAPLAN, E.H., CAULKINS, J.P., SEIDL, A. & FEICHTINGER, G. 2017. Differential Terror Queue Games, *Dynamic Games and Applications*, 7(4): 578-593. [doi 10.1007/s13235-016-0195-1](https://doi.org/10.1007/s13235-016-0195-1),
- CAULKINS, J.P., FEICHTINGER, G., GRASS, D., HARTL, R.F., KORT, P.M., SEIDL, A. 2017. Interaction of Pricing, Advertising and Experience Quality: A Dynamic Analysis. *European Journal of Operational Research*, 256(3), 877-885 [doi:10.1016/j.ejor.2016.06.056](https://doi.org/10.1016/j.ejor.2016.06.056)
- M. SANCHEZ-ROMERO, D. EDIEV, G. FEICHTINGER, A. PRSKAWETZ: How many old people have ever lived? *Demographic Research*, 36(54), 1667-1702. [doi: 10.4054/DemRes.2017.36.54](https://doi.org/10.4054/DemRes.2017.36.54)
- F. EL OUARDIGHI, G. FEICHTINGER, G. FRUCHTER: Accelerating the diffusion of innovations under mixed word of mouth through marketing-operations interaction. *Annals of Operations Research*, (2017). [doi: 10.1007/s10479-017-2649-2](https://doi.org/10.1007/s10479-017-2649-2)
- G. FEICHTINGER et al.: Kontrolltheorie und Differentialspiele in Österreich. ÖGOR Arbeitskreis "Optimal Control and Dynamic Games" [https://orcos.tuwien.ac.at/oegor/entwicklungen\\_in\\_der\\_kontrolltheorie/](https://orcos.tuwien.ac.at/oegor/entwicklungen_in_der_kontrolltheorie/)
- G. FEICHTINGER, A. PRSKAWETZ, A. SEIDL, C. SIMON, S. WRZACZEK: A Bifurcation Analysis of Gender Equality and Fertility. *Journal of Evolutionary Economics*, 27 (5), 1221-1243. [doi.org/10.1007/s00191-017-0534-4](https://doi.org/10.1007/s00191-017-0534-4)

## 2018

- \* G. FEICHTINGER, R.M. KOVACEVIC, G. TRAGLER: Control Systems and Mathematical Methods in Economics. Essays in Honor of Vladimir M. Veliov. Springer 2018. [doi 10.1007/978-3-319-75169-6](https://doi.org/10.1007/978-3-319-75169-6)
- M. KRESS, J.P. CAULKINS, G. FEICHTINGER, D. GRASS, A. SEIDL, (2018). Lanchester model for three-way combat. *European Journal of Operational Research*, 264 (1), 46-54. [doi.org/10.1016/j.ejor.2017.07.026](https://doi.org/10.1016/j.ejor.2017.07.026)
- G. FEICHTINGER,, A. PRSKAWETZ, M. SÁNCHEZ-ROMERO, S. WRZACZEK, (2018). Does Demography Change Wealth Inequality? In *Control Systems and Mathematical Methods in Economics*, 687:349–375. [doi.org/10.1007/978-3-319-75169-6\\_17](https://doi.org/10.1007/978-3-319-75169-6_17)

## 2019

- G. FEICHTINGER, M. WINKLER-DWORAK, D. GRASS: Mathematics of ageing: Linking demography and operations research to study the greying of academia.  
[ORCOS Research Report 2019-03](#).  
*CEJOR*, <https://doi.org/10.1007/s10100-019-00661-w>
- G. FEICHTINGER : Disparitäten in Wissenschaftskarrieren.  
[ORCOS Research Report 2019-06](#). OR News Nr. 65/April 2019, 6–13
- Y. YEGOROV, D. GRASS, M. MIRESCU, G. FEICHTINGER, F. WIRL. 2019. Growth and Collapse of Empires: A Dynamic Optimization Model.  
[ORCOS Research Report 2019-02](#). *JOTA* 186(2), 620-643, August 2020.  
<https://doi.org/10.1007/s10957-020-01719-5>
- G. FEICHTINGER, D. GRASS, P.M. KORT: Optimal scientific production over the life cycle. Research Report 2018-09, ORCOS, TU Wien.  
*Journal of Economic Dynamics and Control*, 108 (2019) 103752  
<https://doi.org/10.1016/j.jedc.2019.103752>

## 2020

- G. FEICHTINGER, P.M. KORT, D. GRASS, A. SEIDL: On the Matthew Effect in research careers: Abnormality on the boundary. [ORCOS Res Rep 2020-01](#)  
*Journal of Economic Dynamics and Control*, 2021, 104058  
<https://doi.org/10.1016/j.jedc.2020.104058>
- Y. YEGOROV, F. WIRL, D. GRASS, M. EIGRUBER, G. FEICHTINGER: On the Matthew effect on individual investments into skills in arts, sports and science. [ORCOS Res Rep 2020-05](#)  
Submitted to *JEBO*.
- D. GRASS, G. FEICHTINGER, P. M. KORT, A. SEIDL: Why (some) abnormal problems are 'normal' (IIASA-FB), [ORCOS Research Report 2020-06](#)
- A. SEIDL, R.F. HARTL, P. M. KORT, G. FEICHTINGER: Optimal investments with a self-financing constraint.
- RÉGIS Y. CHENAVAZ, G. FEICHTINGER, R. F. HARTL, P. M. KORT: Modeling the impact of product quality on dynamic pricing and advertising policies. *European Journal of Operational Research*, 284 (2020) 990-1001
- A. NOVAK, G. FEICHTINGER: Accumulation and obsolescence of research knowledge.  
[ORCOS Research Report 2020-08](#).  
Submitted to *CJOR*.

- J. CAULKINS, D. GRASS, G. FEICHTINGER, R. HARTL, PETER M. KORT, A. PRSKAWETZ, A. SEIDL, S. WRZACZEK: How Long Should the COVID-19 Lockdown Continue? [ORCOS Research Report 2020-10](#)  
*PLoS ONE* 15(2020)12. [DOI: 10.1371/journal.pone.0243413](https://doi.org/10.1371/journal.pone.0243413).
- J. CAULKINS, D. GRASS, G. FEICHTINGER, R. HARTL, PETER M. KORT, A. PRSKAWETZ, A. SEIDL, S. WRZACZEK: The optimal lockdown intensity for COVID-19. [ORCOS Research Report 2020-11](#)  
*Journal of Mathematical Economics*, 2021,  
<https://doi.org/10.1016/j.jmateco.2021.102489>
- G. FEICHTINGER, A. NOVAK, F. WIRL: Institutional change, education and population growth: lessons from dynamic modelling. [ORCOS Research Report 2020-14](#).  
In Book *Dynamic Economic Problems with Regime Switches*, 2020, pp 37-56.

## 2021

- G. FEICHTINGER, L. LAMBERTINI, G. LEITMANN, S. WRZACZEK: Managing the tragedy of commons and global warming: a uni\_ed view:  
Submitted to *Review of Economic Studies*.
- J. CAULKINS, D. GRASS, G. FEICHTINGER, R. HARTL, P.M. KORT, A. PRSKAWETZ, A. SEIDL, S. WRZACZEK: COVID-19 and optimal lockdown strategies: The effect of new and more virulent strains. [ORCOS Research Report 2021-01](#), and [ECON WPS - Working Papers in Economic Theory and Policy](#) 02/2021,
- J. CAULKINS, D. GRASS, G. FEICHTINGER, R. HARTL, P.M. KORT, A. PRSKAWETZ, A. SEIDL, S. WRZACZEK: Schwedischer Weg oder chinesisches Modell?  
*Demographische Forschung Aus Erster Hand*, 18 (2021), 1. Quartal.