ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Broll, Udo; Kemnitz, Alexander; Mukherjee, Vivekananda

Working Paper

Globalization and a welfare program for the marginalized

Dresden Discussion Paper Series in Economics, No. 05/09

Provided in Cooperation with:
Technische Universität Dresden, Faculty of Business and Economics

Suggested Citation: Broll, Udo; Kemnitz, Alexander; Mukherjee, Vivekananda (2009) : Globalization and a welfare program for the marginalized, Dresden Discussion Paper Series in Economics, No. 05/09, Technische Universität Dresden, Fakultät Wirtschaftswissenschaften, Dresden

This Version is available at:
https://hdl.handle.net/10419/36490

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

TU Dresden
Faculty of Business and Economics

Dresden Discussion Paper Series in Economics

Globalization and a welfare program for the marginalized

UDO BROLL

ALEXANDER KEMNITZ

VIVEKANANDA MUKJERHEE

Dresden Discussion Paper in Economics No. 05/09

ISSN 0945-4829

Address of the author(s):

Udo Broll
Technische Universität Dresden
Faculty of Business and Economics
01062 Dresden
Germany

e-mail : udo.broll@tu-dresden.de

Alexander Kemnitz
Technische Universität Dresden
Faculty of Business and Economics
01062 Dresden
Germany

e-mail : alexander.kemnitz@tu-dresden.de

Vivekananda Mukherjee
Jadavpur University
Department of Economics
700032 Kolkata
India

e-mail : mukherjeevivek@hotmail.com

Editors:

Faculty of Business and Economics, Department of Economics

Internet:

An electronic version of the paper may be downloaded from the homepage:
http://rcswww.urz.tu-dresden.de/wpeconomics/index.htm

English papers are also available from the SSRN website:
http://www.ssrn.com

Working paper coordinator:

Dominik Maltritz
e-mail: wpeconomics@mailbox.tu-dresden.de

Dresden Discussion Paper in Economics No. 05/09

Globalization and a welfare program for the marginalized

Udo Broll
Technische Universität Dresden
Faculty of Business and Economics
01062 Dresden
udo.broll@tu-dresden.de

Alexander Kemnitz
Technische Universität Dresden
Faculty of Business and Economics
01062 Dresden
alexander.kemnitz@tu-dresden.de

Vivekananda Mukherjee
Jadavpur University
Department of Economics
700032 Kolkata (India)
mukherjeevivek@hotmail.com

Abstract:

We study the economic relationship between globalization and inequality within a country. In a partial equilibrium it is shown even when the local government exclusively maximizes the welfare of the marginalized (unemployed) people, relative consumption inequality between employed and the marginalized always rises by intensified globalization. However in certain situations the relative income inequality may fall.

JEL-Classification: I30, 015, 019, F42

Keywords: Globalization, inequality, marginalization, policy.

1. Introduction

A recent study by IMF (2007) unusually admits, the observations made by economists over the years that the globalization has increased income inequalities both between the countries and within the countries, have some credence. Since these observations defy the predictions of the standard trade models, a body of theoretical literature has developed to explain and discuss these observations, see for example, Basu (1997), Rodrik (1997), Cohen (2006), Feenstra (2006), Jomo and Baudot (2007), OECD (2008) to name just a few.

It is well recognized in international economics that trade policies may bring about welfare improvement for the nation as a whole, it usually fails to construct a Pareto improvement. However, it is also apprehended that the government can make the Pareto improvement a reality by taxing the gainers and transfering the proceeds to the marginalized, see for example Broll et al. (2001), Basu (2006), Dehesa (2006), Elbers et al. (2008), Aslund and Dabrowski (2008).

What is the effect of such redistributive policies on inequality within the nation? While very few theoretical papers predict the outcome, the empirical papers overwhelmingly reports the worsening of the income inequality.[1] The one obvious explanation for these findings is that the government for various reasons fails to take care of the marginalizeds.

In this paper, however, we do not consider the case of a government failure. In contrast, we consider a government, which redistributes by excusively maximizing the welfare of the marginalizeds without any failure of its policies. We ask the same question as before: does globalization worsen income inequality within the nation? Interestingly, we find out that intensified international trade and globalization even with such an extremely pro-marginalized government the rise in the consumption inequality can not be prevented, while the income inequality may fall. The precise condition for

[1]See, for example, Sen (1999), Sachs (2005), Jomo and Baudot (2007), IMF (2007), OECD (2008).

the rise or the fall of income inequality can be shown. Furthermore we also demonstrate the way optimum tax rate in a linear income tax system may be influenced either by the tariff rate or the share of tariff revenue redistributed to the unemployed.

How do we then reconcile these striking theoretical predictions of our paper with the empirical findings? The answer solves a long-standing puzzle. The fact is, in most of the countries, specially in the developing countries with large informal sectors, the income inequalities are measured with consumption data as the specific income data are not available. Therefore, it is not surprising that the empirical literature finds that the income inequality rising with globalization within these nations, while the truth can be something else as we apprehend in this paper. However, this paper works out a simple formula applying which the income inequality can be caculated from the consumption inequality. Applied to the real life data, it certainly promises to change the way the empirical studies look at the data to find the relation between globalization and inequality within a country.

Our study proceeds as follows: Section 2 presents a partial equilibrium model of a country having its population separated between into two homogeneous groups of people: employed and unemployed (or marginalized). The unemployed are supported mainly by the income tax imposed on the income of employed people, which is supplemented by the tariff revenue. The tariff revenue is collected from the import of the commodity that is exclusively consumed by the employed consumers. Given the tariff rate and the tax rate, we derive the equilibrium levels of income and consumption of the two groups. Section 3 demonstrates the relationship between globalization, inequality within a nation and the welfare program for the marginalized. The main results are derived and discussed. Section 4 concludes the paper.

2. The model

The paper studies the interaction of the globalization policy and the welfare program for the marginalized on the inequality within the nation. Therefore we consider a small open economy. The population of the economy is divided between two different groups of people: marginalized, i.e., unemployed and non marginalized, i.e. employed people. We denote the number of employed and nonemployed as e and n, respectively. Labor is the only factor

of production in the economy. In order to support the unemployed population, the national government of the country runs a redistribution program which taxes the income of the employed and transfers the proceeds to the marginalized. Income tax is proportional at the rate $t \in (0, 1)$.

In addition to the income tax, the government has another source of revenue that comes from the imposition of a tariff on the imported goods. The tariff revenue is exclusively collected from the employed people as they are the only one to consume the imported commodity. But, like the tax revenue the government does not necessarily redistribute the entire amount of tariff revenue to the unemployed. It redistributes a proportion γ of the tariff revenue to the unemployed and $1 - \gamma$ to the employed, respectively. For simplicity, we assume that the economy imports only one commodity and exports a different good. Within the economy a non-traded good is produced. While the exported commodity is not consumed within the economy, the non-traded commodity is consumed exclusively by the unemployed people.

The tariff inclusive price of the imported commodity is $p + \tau$, when p is the international price of the commodity and τ is the specific tariff rate. We assume $\tau < p$. The economy being small in the international trade environment can not control p. It can neither control the value of τ, which is determined as part of international negotiations on liberalization trade. We use τ as an index of the extent of globalization of the country. The lower the value of τ is, the more globalized is the economy.

Suppose c is the consumption of the imported commodity by the representative employed individual; w is her wage rate and l is her consumption of leisure. The wage rate $w(\tau)$ is a decreasing function of tariff rate τ. As τ falls, the employed individual produces more of the exported commodity in which her productivity is higher and which has higher price at the world market. Therefore, w rises. We note this as a separate assumption of the model.

Assumption (A.1) $dw(\tau)/d\tau < 0$.

We can write the budget constraint of the representative employed individual as

$$(p + \tau)c = w(\tau)(1 - t)(T - l) + (1 - \gamma)\tau c,$$

where T is the endowment of time and l denotes leisure. The budget equation

can be rewritten as

$$(p + \gamma\tau)c = w(\tau)(1 - t)(T - l). \tag{1}$$

For the employed individuals we assume a utility function

$$u(c, l) = 2c^{1/2} + l.$$

The representative employed individual maximizes $u(c, l)$ by choosing appropriate values of (c, l) such that the budget equation (1) is satisfied. Assuming interior solution, (c^*, l^*) solve the decision problem of the household.

The per capita value of consumption, c^*, turns out to be

$$c^* = \frac{[w(\tau)]^2(1 - t)^2}{(p + \gamma\tau)^2}. \tag{2}$$

We calculate the tax revenue

$$etw(\tau)(T - l^*) = \frac{et[w(\tau)]^2(1 - t)}{p + \gamma\tau}. \tag{3}$$

Furthermore tariff revenue collected by the government reads

$$e\tau c^* = e\tau\frac{[w(\tau)]^2(1 - t)^2}{(p + \gamma\tau)^2}. \tag{4}$$

Therefore, the per capita transfer of the government to the marginalized, S_n, is given by

$$S_n = \frac{e}{n}\left\{\frac{t[w(\tau)]^2(1 - t)}{(p + \gamma\tau)} + \gamma\tau\frac{t[w(\tau)]^2(1 - t)^2}{(p + \gamma\tau)^2}\right\}. \tag{5}$$

The per capita tariff revenue transfer, denoted by S_e, to the employed is

$$S_e = (1 - \gamma)\tau\frac{t[w(\tau)]^2(1 - t)^2}{(p + \gamma\tau)^2}. \tag{6}$$

Since the marginalized population does not earn from labor supply, the only source of income for a representative unemployed individual is the transfer received from the government given by S_n in equation (5). If y represents the per capita income of the unemployed it must be $y = S_n$.

On the other hand, the per capita income of the employed, from the labor supply as well as from the possible government transfer, turns out to be

$$Y = w(\tau)(1-t)(T-l^*) + S_e. \tag{7}$$

Now, consider a representative unemployed individual. The price of the non-traded commodity she consumes is p_n. Observe, $p_n(\tau)$ is a decreasing function of the tariff rate τ. This is implied by assumption (A.1). Since the employed labor also produces the non-traded commodity, as τ falls and consequently $w(\tau)$ rises, $p_n(\tau)$ also rises.We note this separately in the following

Assumption (A.2) $dp_n(\tau)/d\tau < 0$.

We can write the income constraint of the representative unemployed individual as $p_n(\tau)c_n = S_n$. Therefore per capita consumption is

$$c_n = \frac{S_n}{p_n(\tau)}. \tag{8}$$

The utility function of the representative unemployed individual takes the following form by assumption

$$V(c_n) = 2c_n^{1/2} + T.$$

On substitution of the value of c_n we find out the indirect utility function of a representative marginalized individual as[2]

$$V^* = 2[\frac{S_n(\tau,\gamma,p,t)}{p_n(\tau)}]^{1/2}. \tag{9}$$

Now we are ready to discuss the relationship between globalization, inequality in income and consumption. The aim of the model is to study the possibility of a welfare program for the marginalized in this economy in the following section.

3. Globalization, tax policy and inequality

The objective of our study is to analyze the interaction between globalization, relative inequality in income and consumption for the marginalized people.

[2]In the following we eliminate the exogenous variable T.

We ask questions about the effectiveness of domestic policy instruments in favour of the marginalized. It is assumed that the domestic government is maximizing exclusively the welfare of the marginalized people. The policy instrument is the tax rate. To facilitate the analysis in the following we use the indirect utility function of the marginalized, i.e. unemployed people.

3.1 Tax policy

For any given γ and τ the government maximizes the utility function of the unemployed V^* by choosing an appropriate value of tax rate t.

$$V^*(\tau, \gamma, p) = \arg\max_t 2[\frac{S_n(t, \tau, \gamma, p)}{p_n(\tau)}]^{1/2}. \tag{10}$$

We summarize our first findings as follows.

Proposition 1 *(tax policy and redistribution) (a) If $\gamma > 0$, then $t^* = 1/2 - \gamma\tau/2p$. As τ decreases t^* increases. (b) If $\gamma = 0$, then $t^* = 1/2$. As τ decreases t^* does not change.*

Proof The first-order condition for program (10) is given by

$$\frac{\partial V^*}{\partial t} = \frac{c_n^{-1/2} e(w(\tau))^2}{p_n(\tau) n (p + \gamma\tau)^2}(p - \gamma\tau - 2t^* p) = 0. \tag{11}$$

The solution to the welfare maximization problem is represented by t^*. Note that the sign of equation (11) depends on the sign of $(p - \gamma\tau - 2t^* p)$. This term is a monotonically decreasing function of t. As t goes to zero, it attains $(p - \gamma\tau)$, which is positive owing to the assumptions $\tau < p$ and $\gamma \in [0, 1]$. On the other hand, it achieves $-(\gamma\tau + p) < 0$ as t goes to 1.

Therefore, there exists a value of the tax rate $t^* \in (0, 1)$ for which (10) is maximized. The value of income tax rate, which represents the interior solution to the government's maximization problem is $t^* = \frac{1}{2} - \frac{\gamma\tau}{2p}$. Q.E.D.

The economic intuition behind our first result is as follows. Given the values of γ and τ as the government's objective is to maximize the welfare of the marginalized, it chooses the tax rate in such a way that it maximizes the per capita transfer to the unemployed. As it chooses the higher value of the tax rate, given that the representative employed individual does not change

her labor supply, it earns a higher amount of revenue. But, since for the employed person, as the tax rate goes up and her post tax wage rate falls, the substitution effect dominates the income effect. Therefore she reduces her labor supply. Consequently, her income and the tax revenue falls.

The government while choosing the optimum tax rate balances between these two countervailing forces of the marginal benefit and the marginal cost. It settles at the tax rate $t^* = 1/2 - \gamma\tau/2p < 1$. If γ increases, the employed receive a lower share of the tariff revenue. Therefore, it acts as an additional tax on the employed persons. It is evident from equation (2) that the increase in the value of γ feeds into the substitution effect further, to reduce the supply of labor from the employed persons. So, the marginal cost from choosing the higher tax rate gets magnified. Therefore, as γ increases the government chooses a lower value of t^*. If $\gamma = 0$, it chooses the highest optimal possible value of the tax rate which is $t^* = 1/2$.

Observe, from equation (2) again, given $\gamma > 0$, the value of the tariff rate τ also influences the choice of t^* exactly in the same way as γ. As τ increases the consumption of imports of the employed people becomes more costly. So, it feeds in the substitution effect to reduce further the supply of labor due to taxation. Like γ, it also magnifies the marginal cost of choosing the higher value of the tax rate for the government. However, the opposite happens if the value of τ falls. Given $\gamma > 0$, the marginal cost of choosing the higher tax rate for the government falls for given marginal benefit. It chooses a higher tax rate.

Globalization provides the domestic government the opportunity to increase the tax rate to maximize the welfare of the marginalized of the economy. Note if $\gamma = 0$, this effect does not work. In this situation, the government redistributes the entire amount of tariff revenue to the employed persons only. Therefore, the change in tariff rate no longer influences the marginal cost of taxation. The government keeps the tax rate unchanged even if the tariff rate falls as the economy becomes more integrated in the global market.[3]

[3]For different types of tax policies see Kemnitz (2006), Marjit et al. (2006), Kreickemeier and Raimondos-Moller (2008).

3.2 Consumption and income inequalities

Now we explore the effect of globalization on relative income and consumption inequality in the economy. We denote R_c as the ratio of equilibrium consumption of both groups, $R_c = c_e^*/c_n^*$. Furthermore, we define R_y as the ratio of income of employed and the marginalized in equilibrium, $R_y = Y^*/y^*$. The value of R_c defines the relative extent of consumption inequality in the economy. The higher value of R_c stands for the relative higher inequality in the economy. Similarly, R_y stands for higher relative income inequality in the economy.

As we substitute the values of t^* in equations (2) and (8) we obtain the equilibrium values of per capita consumption, c^* and c_n^*. We get the consumption ratio

$$R_c = \frac{n}{e} \cdot \frac{p_n(\tau)(1-t^*)}{(t^*p + \gamma\tau)}. \tag{12}$$

Similarly, from equations (7) and $y^* = S_n^*$ we obtain

$$R_y = \frac{n}{e} \cdot \frac{p_n(\tau)(1-t^*)(p+\tau)}{(t^*p + \gamma\tau)}. \tag{13}$$

Using equation (12) and the value of R_y in equation (13) the income ratio can be rewritten as

$$R_y = R_c(p+\tau). \tag{14}$$

Now we are in a position to examine how the inequalities in relative income and consumption, R_y and R_c, change as globalization increases, i.e. the tariff rate τ decreases.

Proposition 2 *(income and consumption inequality) (a) As globalization increases, inequality in consumption, R_c, rises. (b) As globalization increases, income inequality R_y rises if and only if $\epsilon > \tau/(p+\tau)$, where ϵ is the elasticity of the non-traded commodity price p_n with respect to the tariff rate. Otherwise relative income inequality, R_y, remains constant.*

Proof (a) From equation (12) we get

$$\frac{dR_c}{d\tau} = \frac{n}{e}\left[\frac{-p_n(\tau)(p+\gamma\tau)dt^*/d\tau - (1-t^*)\gamma}{(t^*p+\gamma\tau)^2} + \frac{1-t^*}{t^*p+\gamma\tau}\frac{dp_n}{d\tau}\right]. \tag{15}$$

Note by assumption (A.2) $dp_n/d\tau < 0$. If $\gamma = 0$, Proposition 1 implies $dt^*/d\tau = 0$. Since $t^* \in (0, 1)$, therefore, from equation (15) it follows

$$\frac{dR_c}{d\tau} = \frac{n}{e} \cdot \frac{(1-t^*)}{t^*p} \frac{dp_n}{d\tau} < 0.$$

If $\gamma > 0$, Proposition 1 implies $dt^*/d\tau = -\gamma/2p$. Substituting this value of $dt^*/d\tau$ in equation (15) yields

$$\frac{dR_c}{d\tau} = \frac{n}{e} \cdot \frac{(1-t^*)}{(t^*p + \gamma\tau)} \frac{dp_n}{d\tau} < 0.$$

The statement of the first part of the claim follows.

(b) From equation (14) we obtain

$$\frac{dR_y}{d\tau} = (p+\tau)\frac{dR_c}{d\tau} + R_c. \tag{16}$$

Substituting the value of R_c from equation (12) and the value of $dR_c/d\tau$ from equation (15) in equation (16) we get

$$\frac{dR_y}{d\tau} = \frac{n}{e} \cdot \frac{(1-t^*)}{(t^*p + \gamma\tau)} \frac{(p+\tau)p_n}{\tau} (\frac{\tau}{p+\tau} - \epsilon) \tag{17}$$

From equation (17) the claim of the second part of Proposition 2 follows. Q.E.D.

Inspection of Proposition 2 leads us to the following result. As the economy is more globalized, induced by an exogenous reduction in the tariff rate and an induced increase in international trade, the consumption inequality within the economy rises even if the government focuses exclusively on the maximization of the welfare of the marginalized. But, it also shows, depending on the elasticity of the non-traded commodity price p_n with respect to the tariff rate, ϵ, as the economy is more globalized, it may well be the case that the income inequality within the economy falls. As a consequence of more globalization, which means a decrease in the value of τ, if the price of the non-traded commodity, which is consumed by the unemployed only does not rise too much, i.e. if the value of ϵ is fairly low, then Proposition 2 predicts a fall in income inequality. We note this observation separately.

Corollary Suppose the economy is going to be more globalized. When the government exclusively maximizes the welfare of the marginalized people in the economy, although the relative consumption inequality always rises, in certain situations the relative income inequality may fall.

4. Concluding remarks

Has globalization led to a greater inequality or less inequality within nations and within nations? A new IMF research (2007), contained in the fund's semiannual economic review, the World Economic Outlook, confirms that the work of other economists, who have been trying to figure out why income inequality has widened in both rich and poor countries over the past two decades. The report is an unusal admission by the IMF of the downsides of globalization.

In a partial equilibrium framework this paper has discussed the relationship between an increase in globalization and relative income and consumption inequality within a country. If the economy is going to be more globalized and when the government exclusively maximizes the welfare of the marginalized people in the economy, although the consumption inequality always rises, in certain situations the income inequality may fall. As a consequence of more globlization, which means a decrease in the tariff rate, if the price of the non-traded commodity, which is consumed by the unemployed only does not rise too much, i.e., if the price elasticity is fairly low, then the model predicts a fall in income inequality.

Acknowledgements

Vivekananda Mukherjee would like to thank Dr. Wolfgang Händel for financial support.

References

Aslund, A. and M. Dabrowski (eds), 2008, Challenges of globalization: imbalances and growth, Peterson Institute for International Economics, Washington.

Basu, K., 1997, Analytical development economics: the less developed economy revisited, Cambridge, London.

Basu, K., 2006, Globalization, poverty and inequality: what is the relationship? what can be done? World Development 34, 1361-1373.

Broll, U., Mallick, R. and K.P. Wong, 2001, International trade and hedging in economies in transation, Economic Systems 25, 149-159.

Cohen, D., 2006, Globalization and its enemies, Cambridge, London.

Dehesa, G., 2006, Winners and losers in globalization, Malden, MA.

Elbers, C., Lanjouw, P., Mistiaen, J.A. and B. Ölzer, 2008, Reinterpreting between group inequality, Journal of Economic Inequality 6, 231-246.

Feenstra, R.C. 2007, Globalization and its impact on labor, Global Economy Lecture, 2007, Vienna Institute for Internationale Economic Studies.

IMF - World Economic Outlook, 2007, Globalization and inequality, Washington.

Jomo, K.S. and J. Baudot (eds), 2007, Flat world, big gaps: economic liberalization, globalization, poverty and inequality, London, New York.

Kemnitz, A., 2006, Immigration, unemployment and domestic welfare, Tübingen.

Kreickemeier, U. and P. Raimondos-Moller, 2008, Tariff-tax reforms and market access, Journal of Development Economics 87, 85-91.

Marjit, S., V. Mukherjee and M. Kolmar, 2006, Poverty, taxation and governance, Journal of International Trade and Economic Development 15, 325-333.

OECD, 2008, Growing unequal? Income distribution and poverty in OECD countries, OECD, Paris.

Rodrik, D., 1997, Has globalization gone too far? Institut for International Economics, Washington.

Sachs, J.D., 2005, The end of poverty: economic possibilities for our time, New York.

Sen, A., 1999, Development as freedom, New York.

Dresden Discussion Paper Series in Economics

01/08 **Hirte, Georg / Brunow, Stephan:** The Age Pattern of Human Capital and Regional Productivity

02/08 **Fuchs, Michaela / Weyh, Antje:** The Determinants of Job Creation and Destruction: Plant-level Evidence for Eastern and Western Germany

03/08 **Heinzel, Christoph:** Implications of Diverging Social and Private Discount Rates for Investments in the German Power Industry. A New Case for Nuclear Energy?

04/08 **Bieta, Volker / Broll, Udo / Siebe, Wilfried:** The Banking Firm: The Role of Signaling with Collaterals

05/08 **Felder, Stefan / Werblow, Andreas:** Do the Age Profiles of Health Care Expendidure Really Steepen over Time? New Evidence from Swiss Cantons

06/08 **Broll, Udo / Wahl, Jack E. / Wessel, Christoph:** Export Production, Hedging Exchange Rate Risk: The Duopoly Case

07/08 **Choi, Jay-Pil / Thum, Marcel:** The Economics of Political-Connected Firms

08/08 **Broll, Udo / Gilroy, B. Michael / Lukas, Elmar:** Export Production under Exchange Rate Uncertainty

09/08 **Broll, Udo / Schmidt, Christian W.:** The Effect of Exchange Rate Risk on US Foreign Direct Investment: An Empirical Analysis

10/08 **Lehmann-Waffenschmidt, B. Cornelia:** An Evolutionary Agent-Based Simulation Model for the Industry Lifecycle

11/08 **Mukherjee, Vivekananda / Ramani, Shyama V.:** R&D Cooperation, Asymmetrical Technological Capabilities and Rationale for Technology Parks

12/08 **Lehmann-Waffenschmidt, Marco / Roth, Gerhard / Thießen, Friedrich:** Die (innere) Logik des Entscheidens – Zur neurobiologischen Fundierung ökonomischer Entscheidungen

13/08 **Dopfer, Kurt:** Zur Neubestimmung von Geschichte und Theoriegeschichte in den Wirtschaftswissenschaften – Ko-evolution von Wirtschaftsbeobachtung und Wirtschaftswirklichkeit

14/08 **Lessmann, Christian / Markwardt, Gunther:** One Size fits all? Decentralization, Corruption, and the Monitoring of Bureaucrats

15/08 **Farzanegan, Mohammad Reza / Markwardt, Gunther:** The Effects of Oil Price Shocks on the Iranian Economy

16/08 **Fuchs, Michaela / Wohlrabe, Klaus:** Instituitions, Trade and Integration: What can be expected within the enlarged EU?

01/09 **Broll, Udo / Egozcue, Martin / Wong, Wing-Keung:** Prospect Theory and Two Moment Model: the Firm under Price Uncertainty

02/09 **Broll, Udo / Eckwert, Berhard:** Modelling Information and Hedging: the Exporting Firm

03/09 **Binswanger, Hans Christoph:** Die Wachstumsspirale in der Krise – Ansätze zu einem nachhaltigem Wachstum

04/09 **Brunow, Stefan / Hirte, Georg:** Regional Age Structure and Economic Growth: An Econometric Study for German Regions

05/09 **Broll, Udo / Kemnitz, Alexander / Mukherjee, Vivekananda:** Globalization and a Welfare Program for the Marginalized