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## TABLE OF CONTENTS

	Page
INTRODUCTION	iii
CHAPTER 1: CONCEPTUAL QUESTIONS	1
◆GUTMANN, Peter M.: "The Subterranean Economy, Redux"	2 🗸
FEIGE, Edgar L.: "The Meaning of the 'Underground Economy' and the Full Compliance Deficit".	19
STEIN, Bruno: "Subterranean Labor Markets: A Conceptual Analysis"	37
BLADES, Derek W.: "Crime: What Should be Recorded in the National Accounts, and What Difference Would it Make?"	45
CHAPTER 2: EMPIRICAL EVIDENCE	59
SKOLKA, Jiri: "The Parallel Economy in Austria"	60
WECK-HANNEMANN, Hannelore / FREY, Bruno S.: "Measuring the Shadow Economy: The Case of Switzerland"	76
BROESTERHUIZEN, G.A.A.M.: "The Unobserved Economy and the National Accounts in the Netherlands" A Sensitivity Analysis	105
<ul> <li>O'HIGGINS, Michael: "The Relationship Between the Formal and Hidden Economies: An Exploratory Analysis for Four Countries"</li> </ul>	127
PESTIEAU, Pierre: "Belgium's Irregular Economy"	144
SMITH, James D.: "Market Motives in the Informal Economy"	161
CHAPTER 3: THEORETICAL APPROACHES	178
BENTAL, Benjamin, BEN-ZION, Uri, WENIG, Alois: "Macroeconomic Policy and the Shadow Economy"	179
GINSBURGH, V., MICHEL, Ph., PADOA SCHIOPPA, Fiorella, PESTIEAU, P.: "Macroeconomic Policy in the Presence of an Irregular Sector"	194
DE GIJSEL, Peter: "A Microeconomic Analysis of Black Labour Demand and Supply"	218

	Page
• ISACHSEN, Arne Jon, SAMUELSEN, Sven Ove, STRØM, Steinar: "The Behavior of Tax Evaders"	227
BENJAMINI, Yael, MAITAL, Shlomo: "Optimal Tax Evasion & Optimal Tax Evasion Policy: Behavioral Aspects"	245
SCHLICHT, Ekkehart: "The Shadow Economy and Morals: A Note"	265
CHAPTER 4: POLICY IMPLICATIONS	272
COWELL, Frank A.: "Public Policy and Tax Evasion: Some Problems"	273
HANSSON, Ingemar: "Tax Evasion and Government Policy"	285
LANGFELDT, Enno: "Is a Growing Unobserved Sector Undermining Monetary Policy in the Federal Republic of Germany?"	301
CHAPTER 5: HOUSEHOLD PRODUCTION	315
WOLFF, Edward N.: "The Disappearance of Domestic Servants and the Underground Economy"	316
GLATZER, Wolfgang, BERGER, Regina: "Household Composition, Social Networks and Household Production"	330
CHAPTER 6: EASTERN COUNTRIES	352
GALASI, Peter: "Peculiarities and Limits of the Second Economy in Socialism (The Hungarian Case)"	353
BREZINSKI, Horst: "The Second Economy in the Soviet Union and its Implications for Economic Policy"	362
BRUS, Wlodzimierz, LASKI, Kazimierz: "Repressed Inflation and Second Economy Under Central Planning" with an appendix "Maximum Principle for Speculative Money Balances" by Andrzej ZIEBA	377
AUTHOR INDEX	392

# THE SHADOW ECONOMY AND MORALS: A NOTE

by

### EKKEHART SCHLICHT

### Darmstadt Institute of Technology

ABSTRACT: If the established rules are obeyed spontaneously in an economy, this increases economic efficiency since the uncertainties, monitoring costs and incentive problems induced by opportunism can be avoided. Opportunism will be increased by increasing the incentives for unlawful behaviour, however, and a slight increase in these incentives might cause a cumulative and self-nourishing breakdown of morals. The dangers of the growing shadow economy are louring here.

### 1. Transaction Costs, Morals, and Economic Efficiency

Modern economics has assimilated Coases (1937) fundamental insight that transaction costs are paramount for understanding the formation and functioning of economic institutions (Williamson, 1975).

Transaction costs, however, are heavily influenced by morals: If people observe the rules spontaneously, this saves control costs and increases economic efficiency thereby. Hence working morals, tax morals, business morals, and the spontaneous observation of property rights are important factors of economic efficiency. Think on how our economy would look like if everybody behaved absolutely opportunistically: Half of the population at least would be employed as policemen, and they would be corrupt<sup>1)</sup>: Transaction costs might well become prohibitively large, rendering the market system, as compared to other systems of economic co-ordination, hopelessly inefficient. These considerations lead me, as an economist who is concerned with economic efficiency, to worry about morals and to present some thoughts on the impact of the emerging shadow economy on morals.

 $<sup>^{\</sup>star})$  I would like to thank an anonymous referee for helpful hints.

<sup>1)</sup> See also Schlicht (1983), section 1.1. Note, by the way, that markets closest to perfect competition, like the stockmarket, are heavily institutionalized (I owe this observation to R. Coase) and that the proper functioning of other markets hinges critically upon the observation of certain conventions, see Akerlof (1976).

### 2. Moral Externalities

Exceptions undermine principles, and rules get enfeebled if it becomes customary to disobey them according to circumstances. The great dangers associated with the emerging shadow economy seems to me to be of this kind. Since the growth of the shadow economy renders the violation of laws customary, this weakens the binding force of laws, in general: In this sense, we ought to expect moral externalities leading inevitably to the necessity of enforcing the observation of laws in general more closely. This leads to increasing cost of policing which are sunk.

In a wider political sense, there are additional social costs associated with such a transition: An increasing degree of surveillance restricts freedom, changes the political climate and induces considerable psychic costs for the population at large. In addition social psychology predicts that an increasing degree of control will undermine the intrinsic motivation to law-obedience still further, establishing another one-way road to serfdom.

In a more restricted economic sense the erosion of law obedience will induce a shift of the tax burden away from activities which are difficult to monitor, and towards more easily controllable activities. The associated allocative distortions increase dead-weight losses. Although one could argue that a decreasing degree of law-obedience decreases the power of the state, I think it is a doubtful argument to maintain that this will decrease the scale of government activities and thereby decrease dead-weight losses. But even if this holds true, it might be at most a third best solution having to put up with the additional costs of surveillance and distortions.

### 3. A Model of the Breakdown of Morals

In economics we are accustomed to think in terms of marginal changes. Hence we might be led to think that slightly increasing incentives to unlawful behaviour will only lead to a slightly lesser degree of law-obedience.

I would like to argue that this is not necessarily the case and that, at a certain point, a cumulative and self-sustaining breakdown of morals might be initiated by a small increase in incentives to behave un-lawfully.

Consider a certain legal or customary rule like making a correct tax return, and assume that the degree of observation of this rule can be measured by a number  $a_i \in (0, 1)$  where  $a_i = 1$  denotes strict obedience and  $a_i = 0$  denotes non-obedience, and the subscript i refers to the number of the particular individual chosen.

We assume the individual to select its  $a_i$  optimally such as to maximize net gains which are calculated by taking into account psychic as well as non-psychic advantages and disadvantages.

Denote the average degree of law-obedience in the economy as a whole by a. Reference group theory suggests that the psychic costs of disobedience rise with increasing  $a^{1}$ : People try not to deviate from established rules. Hence we ought to expect  $a_{1}$  to be an increasing function of a.

(In addition, there might be direct advantages for reference group behaviour: Think about the observation of traffic lights. If it is custom not to observe them, the other drivers will be on their guard, and the potential damage due to disregarding the lights will be smaller than otherwise.)

Furthermore we might assume that the degree of obedience  $a_i$  is affected by an externally fixed economic incentive e, embodied, for instance, in a tax law, which establishes an additional advantage for non-obedience. Hence we are led to write:  $^{2}$ 

(1) 
$$a_i = f^i(a,e)$$
  $a_i, a_i(0, 1)$   $f_1^i > 0, f_2^i < 0$ 

Calculating the average over individulas leads to a new average degree of law obedience

(2) 
$$\bar{a} = f(a,e)$$
  $\bar{a}$ ,  $a \in [0, 1]$   $f_1 > 0$ ,  $f_2 < 0$ 

It is assumed that some spontaneous (or random) instances of law obedience occur even for a=0, and some disobedience occurs even for a=1, amounting to

(3) 
$$f(0, e) > 0$$
,  $f(1, e) < 1$ 

Consider now the change of an over time.

<sup>1)</sup> See Schlicht (1983) for some underlying theory and references.

The following analysis is a modification of the theory developed in Schlicht (1981).

A natural specification is

(4) 
$$a = \mu(f(a, e) - a)$$
  $\mu > 0$ 

for some speed of adjustment  $\mu$ .Under the assumption (3) (and given continuous differentiability of f) there exists at least one stable degree of law-obedience a \* satisfying

(5) 
$$f(a^*, e) = a^*$$
  $f_1(a^*, e) < 1$ 

It need not be unique, however. On the contrary: A possible shape of f is as depicted in Figure 1:

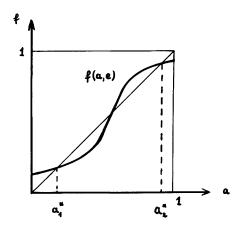
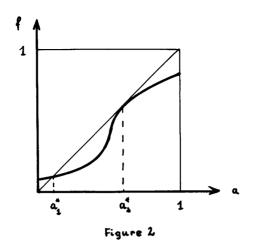


Figure 1

This type of shape will result if the incentives for reference group behaviour are strong and people tend to behave as the majority does.

Since, according to (4), a rises if f(a, e) > a, and a declines if f(a, e) < a, two stable states of law-obedience arise:  $a_1^*$  and  $a_2^*$ .

Assume that initially a high degree of morality prevails: We have  $a=a_2^\star$ . Assume now that the external incentive for transgressing the law is increased. This will shift the f-curve downward. Hence  $a_2^\star$  will be reduced. This can continue until the position depicted in Figure 2 is reached.



An unstable situation is reached, and a slight increase in the economic incentive e will result in a collapse:  $a_2^*$  will disappear and the single stable degree of law-obedience will be the low one. At this point, a slight increase of the economic incentive will decrease the degree of law-obedience a little ( $f_2 \cdot de$ ). This reduces the average degree of law-obedience. Through reference group behaviour, this reduces law-obedience still further, and a cumulative and self-nourishing breakdown of law-obedience results, until the low equilibrium  $a_1^*$  is reached.

Starting from low law-obedience at  $a_1^*$ , it is rather difficult to reach the high equilibrium in  $a_1^*$  (Figure 1). Hence the establishment of adequate morals, as long as their observation is strongly determined by reference group behaviour, might prove to be difficult and costly. In this sense, the breakdown of morals caused by slight economic incentives might be a costly affair.

### 4. What Can be Done?

The growth of the shadow economy seems to be at least partially caused by economic incentives. The growth of the shadow economy, however, weakens the observation of legal rules everywhere. This induces moral externalities: efficiency losses within the legal sector of the economy. As illustrated in the last section, this might lead, at worst, to a collapse of morals.

To suppress this development by power of police might be counterproductive since it undermines the intrinsic motivation to observe the  $law^{1}$ .

<sup>1)</sup> See above, section 2.

The other alternative is, of course, to reduce the gains from unlawful behaviour: Individuals ought to decide on their social insurance contributions independently of their reported income, for instance.

To prevent massive moral externalities it seems to be advisable, furthermore to legalize those shadow activities which cannot be controlled anyhow and which are accepted as legitimate in society. By erecting a fence in a contested territory one might hope to reduce fights whereas a fence somewhere in the middle of the village of one of the parties will simply increase transaction costs, and will appear as being rather unfair.

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# AUTHOR INDEX

Adatia, Y.	p. 304, 313
Aitken, S.	p. 17
Akerlof, G.	p. 265, 271
Albertin, L.	p. 351
Alford, R.R.	p. 105, 125
Algera, S.B.	p. 106, 125
Allingham, M.G.	p. viii, 226, 255, 262, 263, 279, 281, 285, 300
Andersen, P.	p. 285, 298, 300
Archambault, E.	p. 361
Badelt	p. 74
Baldry, J.C.	p. 285, 300
Barro, R.	p. 196, 217
Barry, F.	p. 365, 374
Baumann, Z.	p. 367, 374
Baumol, W.J.	p. 322, 323
Becker, G.S.	p. 198, 217, 245, 263
Ren-Zion, U.	p. vi, xiii, 179
Benassy, J.P.	p. 196, 216, 217
Benjamini, Y.	p. viii, xiv, 245, 263
Bental, B.	p. vi, xiii, 179
Berger, R.	p. x, xiv, 330
Bernstein, P.	p. 16
Binder, S.	p. 313
Bjerkholt, O.	p. 232, 244
Blackman, S.A.	p. 322, 329
Blades, D.W.	p. v, xiii, 45, 73, 76
Block, M.K.	p. 245, 263

p. 107, 125

Blokland, J.

Böhm, E.	p. 374
Bonneville, L.	p. 17
Bowsher, N.N.	p. 312, 313
Boyle, G.E.	p. 141
Brachtl, W.	p. 350
Brezinski, H.	p. x, xiv, 362, 364, 369, 374
Broesterhuizen, G.A.A.M.	p. v, xiii, 106, 125
Brunner, K.	p. 310, 313
Brus, W.	p. xi, xiv, 369, 377
Bunich, P.	p. 365, 374
Burgdorff, S.	p. 375
Burns, S.	p. 351
Bush, K.	p. 386
Cagan, P.	p. 89, 102, 306, 310, 313
Carson, C.	p. 162
Cassel, D.	p. 130, 141
Charreyron, A.	p. 370, 374
Christiansen, V.	p. 273, 281
Coase, R.	p. 265, 271
Cohen, H.	p. 105, 125
Contini, B.	p. 85, 102, 141
Courant, P.N.	p. 344, 351
Cowell, F.A.	p. viii, xiv, 226, 273, 278, 279, 281, 285, 300
De Gijsel, P.	p. vii, xiii, 179, 180, 193, 218, 226
De Grazia, R.	p. 160
de Lapparrent, D.	p. 373, 375
Denison, E.F.	p. 46, 47, 162
Dezsenyi-Gueulette, A.	p. 362, 374
Dilnot, A.	p. 74, 84, 102, 141
Dow, G.K.	p. 344, 351

Duchene, G.	p.	353, 361, 364, 370, 374
Egner, E.	p.	351
Ehrlich, I.	p.	245, 263
Eisner, R.	p.	36, 306, 313
Ericson, R.E.	p.	369, 373
Ernst, U.	p.	102
Feige, E.L.	p.	iv, xiii, 5, 7, 16, 17, 19, 35, 76, 87, 102, 105, 118, 125, 127, 128, 129, 130, 131, 132, 135, 140, 141, 161, 162, 176, 193, 305, 307, 310, 313, 314, 318, 327, 329, 361, 374
Feldbrugge, F.J.M.	p.	366, 372, 374
Fiala, J.	p.	76
Fisher, N.W.F.	p.	93, 102, 162
Fourgeaud, C.	p.	216, 217
Frank, M.	p.	145, 148, 160
Franz, A.	p.	60, 63, 65, 71, 74
Freud, D.	p.	129, 141
Frey, B.S.	p.	v, xiii, 74, 76, 77, 94, 95, 99, 102, 104, 127, 128, 141, 146, 160, 179, 193, 194, 217, 304, 313
Friedland, N.	p.	252, 255, 257, 263
Fua, G.	p.	85, 102
Futaky, I.	p.	375
Gabor, I.R.	p.	353, 355, 361, 364, 374
Galasi, P.	p.	x, xiv, 353, 361
Gandolfo, G.	p.	186, 193
Garcia, G.	p.	16, 161
Garvey, G.	p.	386
Geeroms, H.	p.	144, 160
Gershuny, J.	p.	73, 140, 141, 351
Ginsburgh, V.	p.	vi, vii, xiii, 159, 180, 193

p. x, xiv, 330, 350, 351

Glatzer, W.

Goldschmidt-Clermont, L.	p.	73, 75
Gorsler, B.	p.	76
Gramatzki, H.E.	p.	368, 374
Greenslade	p.	367, 375
Greffe, X.	p.	361
Gregory, P.R.	p.	367, 374
Gretschmann, K.	p.	226, 361
Grosfeld, I.	p.	353, 361
Grossman, G.	p.	363, 374, 377, 387, 388
Grossman, H.	p.	196, 217
Gutmann, P.M.	p.	iii, iv, xiii, 2, 16, 17, 18, 89, 102, 139, 161, 162, 179, 193
Habich, R.	p.	350
Haffner, F.	p.	365, 374
Hansson, I.	p.	ix, xiv, 142, 285, 293, 298, 299, 300
Hare, P.	p.	361, 375
Haulk, C.	p.	161
Haveman, F.H.	p.	75
Hedtkamp, G.	p.	374, 375
Heertje, A.	p.	105, 125
Heineke, J.M.	p.	263
Heintze, R.	p.	226, 361
Henry	p.	162
Holloway, T.	p.	36
Isachsen, A.J.	p.	vii, xiv, 74, 87, 103, 159, 160, 227, 244, 285, 298, 300, 310, 313
Jaszi, G.	p.	3
Jessen, R.S.	p.	147, 160
Juster, F.T.	p.	344, 351
Kahneman, D.	p.	245, 250, 251, 264
Kalecki, M.	p.	380, 388

Katsenelinboigen, A.	p.	354, 361, 374
Keegan, V.	p.	129, 142
Kemeny, I.	p.	353, 361
Kirchgässner, G.	p.	76, 89, 103, 127, 130, 139, 142, 179, 193, 304, 308, 313
Klinkmüller, E.	p.	363, 375, 377, 388
Klovland, J.T.	p.	5, 88, 89, 99, 100, 103, 160, 227, 244
Kofler, E.	p.	94, 103
Kogan, N.	p.	256, 263
Kolm, S.C.	p.	254, 263
Konrad, G.	p.	370, 375
Kornai, J.	p.	355, 361, 377, 379, 381, 388
Kucharski, M.	p.	379, 388
Laffer	p.	13
Land, K.C.	p.	351
Lang, S.	p.	350
Langfeldt, E.	p.	ix, xiv, 139, 142, 301, 302, 304, 306, 307, 308, 313
Laski, K.	p.	xi, xiv, 362, 369, 377
Laurent	p.	161
Leeuw, F.	p.	36
Lehment, H.	p.	307, 308
Lehner, G.	p.	60, 70, 71, 75
Lenclud, B.	p.	217
Leptin, G.	p.	363, 375, 377, 388
Levine, H.S.	p.	374
Lind, R.	p.	245
Link, W.	p.	351
Longva, S.	p.	244
Loretan, M.	p.	76, 89
Lundstedt, S.B.	p.	262, 264

p. 74, 83, 88, 103, 142

Macaffe, K.

Maital, S.	p. viii, xiv, 245, 252, 255, 257, 262, 263
Malaguerra, C.	p. 76
Malinvaud, E.	p. 196, 217
Malish, A.F.	p. 372, 375
Mantelaers, P.A.H.M.	p. 125
Markish, Y.	p. 372, 375
Marer, P.	p. 374
Marrese, M.	p. 364, 375
Matthews, E.	p. 128, 129
Mc Gee, R.T.	p. 36, 105, 118, 125, 305, 314
Meltzer, A.H.	p. 310, 313
Menges, G.	p. 94, 103
Mettelsiefen, B.	p. 226, 361
Meyer, F.	p. 373, 375
Michel, P.	p. vi, xiii, 180, 194, 217
Millar, J.R.	p. 362, 375
Miller, R.	p. 88, 103
Mirus, R.	p. 88, 103, 142
Mlynar, Z.	p. 372, 375
Molefsky, B.	p. 8, 17, 142
Mont, J.	p. 144, 160
Montias, J.M.	p. 365, 371, 375
Mooslechner, P.	p. 60, 65, 66, 74
Mork, A.	p. 262
Moroney, R.M.	p. 339, 351
Morris, C.N.	p. 74, 84, 102, 141
Moyer, T.	p. 35
Müller-Andritzky, M.	p. 350
Murphy, M.	p. 35
Neubauer, H.	p. 60, 66, 67, 68, 69, 70, 75

Neumann, M.J.M.	p. 308, 314
Noll, H.H.	p. 350
Noth, A.	p. 84, 103
Nove, A.	p. 353, 361
O'Hearn, D.	p. 366, 367, 368, 369, 373, 375, 377, 383, 388
O'Higgins, M.	p. v, xiii, 76, 83, 88, 103, 127, 129, 130 142
Offerdal, E.	p. 232, 244
Olsen, O.	p. 244
Padoa Schioppa, F.	p. vi, xiii, 180, 194
Paglin, M.	p. 10, 17
Pak	p. 161
Park, T.	p. 83, 84, 103, 142
Parker, R.P.	p. 36
Pasquier, J.N.	p. 73
Peacock, A.	p. 75
Pencavel	p. 227, 232
Pestieau, P.	p. vi, xiii, 144, 180, 194
Petersen, HG.	p. 84, 103, 142, 304, 314
Pieper, P.J.	p. 36, 313
Pommerehne, W.W.	p. 76, 77, 94, 95, 99, 102, 104, 128, 141, 146, 160, 179, 193, 194, 217, 304, 313
Radice, H.	p. 361, 375
Reid, M.	p. 72, 73
Reuter, P.	p. 8, 17
Reymann, S.	p. 363, 374
Rose-Ackerman, S.	p. 365, 375
Rose, R.	p. 93, 103
Rosefielde, S.	p. 365, 375
Rumer, B.	p. 372, 375
Rutenberg, A.	p. 252, 255, 257, 263

Sabel, F.	p. 353, 361
Sagi, E.	p. 245, 263
Samuelson, S.O.	p. vii, xiv, 227, 255
Sandmo, A.	p. viii, 226, 255, 262, 273, 279, 281, 285, 299, 300
Schlesinger, H.	p. 305, 314
Schlicht, E.	p. viii, xiv, 265, 267, 271
Schmolders, G.	p. 263
Schmucker, H.	p. 304, 314
Schneider, F.	p. 76, 89
Schneider, M.	p. 67, 68, 69, 75
Schroeder, G.E.	p. 367, 375
Sethuraman, S.V.	p. 73
Shaw, G.K.	p. 75
Siara, C.	p. 350
Siebke, J.	p. 310, 311, 314
Simes, D.K.	p. 373, 375
Simhandl, G.	p. 73
Simis, K.M.	p. 365, 367, 368, 369, 373, 375
Simon, C.P.	p. 3, 5, 16, 35, 53, 77, 103, 161
Simons, E.R.	p. 313
Sitzler, K.	p. 371, 375
Sjoquist, D.L.	p. 245, 263
Skog, G.	p. 298
Skolka, J.	p. v, xiii, 35, 60, 72, 73, 74, 75
Sloan, A.P.	p. 35
Smith, A.H.	p. 366, 375
Smith, A.	p. 13, 194, 217
Smith, J.D.	p. vi, xiii, 35, 74, 76, 132, 133, 143, 161
Smith, R.S.	p. 88, 103, 142
Smolar, A.	p. 353, 361

Solari, L.	p. 73
Spicer, M.W.	p. 262, 264
Stark, D.	p. 353, 361
Stein, B.	p. v, xiii, 37
Stiglitz, J.E.	p. 277, 278, 281
Strøm, S.	p. vii, xiv, 74, 88, 160, 227, 232, 244, 285, 298, 300, 310, 313
Stuart, C.	p. 293, 298, 300
Stuart, R.C.	p. 367, 374
Summers, R.	p. 322, 329
Swain, N.	p. 361, 375
Tanzi, V.	p. 5, 8, 16, 17, 76, 89, 103, 104, 105, 125, 143, 144, 160, 161, 179, 193, 244, 308, 313
Toffler, A.	p. 73
Treml, V.	p. 363, 376
Trzcinski, E.	p. 35
Tversky, A.	p. 245, 250, 251, 264
van Eck, R.	p. 106, 107, 125
van Tuinen, H.K.	p. 107, 109, 125
van Veen, P.	p. 374
Vogel, J.	p. 262, 264
Waerness, K.	p. 351
Walker, M.	p. 103
Wallach, M.A.	p. 256, 263
Weck-Hannemann, H.	p. v, xiii, 74, 76, 94, 95, 99, 102, 104, 127, 128, 141, 179, 193, 304, 313
Weinblatt, J.	p. 245, 263
Weiss, L.	p. 277, 281
Wenig, A.	p. vi, xii, xiii, 179
Wiles, P.	p. 364, 370, 376

p. 265, 271

Williamson, O.E.

Willms, M.

p. 311, 314

Witte, A.D.

p. 3, 5, 16, 35, 53, 77, 103, 161, 162

Wolff, E.N.

p. ix, x, xiv, 127, 316, 322, 329

Yitzhaki, S.

p. 285, 300

Zapf, W.

p. 331, 350, 351

Zaslavskaia, T.I.

p. 362, 369, 370, 376

Zieba, A.

p. 384, 389