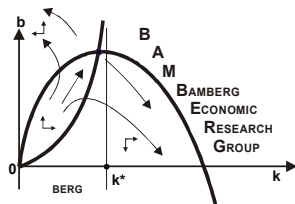


PUBLIC ECONOMICS SERIES

**BAMBERG ECONOMIC RESEARCH GROUP
(BERG)**



LEJLA LAZOVIĆ-PITA

Income, Personal Income Tax,
and Transition: The Special Case of
Bosnia and Herzegovina

Dissertation Universität Bamberg 2015
Fakultät Sozial- und Wirtschaftswissenschaften

Erstgutachter: Prof. Dr. Dr. h.c. Heinz-Dieter Wenzel

Zweitgutachter: Prof. Dr. Sead Kreso

Tag der Disputation: 16. Oktober 2015

Autor: Lejla Lazović-Pita

ISBN: 978-3-943153-22-4

BERG-Verlag, Bamberg

Bibliographic information is published by Die Deutsche Bibliothek
Die Deutsche Bibliothek lists this publication in the Deutschen National-
bibliografie; detailed bibliographic data is available in the Internet
<http://dnb.ddb.de>.

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from BERG-Verlag. Violations are liable for prosecution under the German Copyright Law.

BERG-Verlag Bamberg 2015

Our service provider for printing:

Buch bücher dd ag

<http://de.cpibooks.com/>

The use of general descriptive names, registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Acknowledgements

The presented work was written during my time as an external PhD student at the Department of Public finance at the Otto-Friedrich University of Bamberg under the guidance of Prof. Dr. Dr. h.c. H.-Dieter Wenzel.

I would like to express my gratitude to the many people who provided support during my dissertation. Without their continued efforts and support, I would have not been able to bring my work to a successful completion.

I would like express my gratitude to my first mentor, Prof. Dr. Dr. h.c. H.-Dieter Wenzel for his extraordinary support during my research. His most useful comments and suggestions helped me bring my work to a successful completion. In more than ten years, he has contributed significantly to rebuilding and uniting academic community in the South Eastern Europe and I was very lucky and honoured to have been given the opportunity to do a PhD under his supervision.

I would also like to thank my second mentor, Prof. Dr Sead Kreso for his excellent guidance, caring and patience for my everlasting questions. His numerous beneficial comments and talks helped me to comprehend the complexity of the society as a whole which surpasses this thesis.

A special thanks goes to Mrs. Ana Štambuk and Mrs. Helena Blažić for their most useful comments and suggestions. My gratitude also goes to my good friends and colleagues, Mrs. Velma Pijalović, Mrs. Lamija Šćeta and Miss. Patris Poshnjari for their advice and numerous discussions we had during this process. A special thanks goes to my patient editor, Mr. Nigel Jonas.

Last, but not least, I would like to thank my husband, Sanjin for his constant encouragement and faith in me as well as my son Emir for his cheerfulness. I would also like to thank my parents and Sanjin's parents for their support.

Contents

List of figures	vii
List of tables	ix
List of abbreviations	xi
Introduction	1
1.1. The research problem	1
1.2. Preliminary objectives of the project	15
1.3. Thesis layout	16
Chapter 1 Definition of Income, Personal Income Tax, and Tax Principles	19
1.1 Definition of Income as a Tax Base	19
1.1.1 Theoretical grounds of personal income tax	28
1.1.2 Characteristics of PIT	35
1.1.3 Income versus consumption as a tax base –recent theoretical analysis	41
1.2 Types of Personal Income Tax	49
1.2.1 An expenditure tax	51
1.2.2 (Semi) comprehensive income tax	52
1.2.3 (Semi) dual income tax	52
1.2.4 (Semi) flat tax	53
1.2.5 Hall and Rabushka flat tax model – theoretical model	53
1.2.6 Flat tax silver anniversary	56
1.2.7 Comparative analysis of tax treatment of saving in income-based and consumption-based tax models	61
1.3 Tax Principles – Efficiency, Equity, Simplicity	63
1.3.1 Theoretical aspects of efficiency	66
1.3.2 Theoretical aspects of equity	70
1.3.3 Theoretical aspects of compliance/simplicity	73
1.3.4 Measures of efficiency, equity, and compliance	74
1.4 Conclusion	84
Chapter 2 Personal Income Tax Systems in Transition Countries	87
2.1 Transition Country – Definition	87
2.1.1 Pre-transition status	92
2.1.2 Challenges of tax reforms in transition countries	96
2.1.3 Major aspects of tax reform in transition countries	99
2.1.4 Other peculiarities of transition countries in terms of tax reforms	107
2.2 Personal income tax reforms in selected transition countries	113
2.2.1 Definition of the tax base and the tax rate for comparisons across countries	116
2.2.2 The size of average incomes in EU15 and selected transition countries ..	118
2.2.3 Efficiency-equity aspects of PIT in transition countries	121
2.2.4 Personal income tax in Estonia	125
2.2.5 Personal income tax in the Slovak Republic	136
2.2.6 Personal income tax in Bulgaria	145
2.2.7 Personal income tax in Croatia	152
2.3 Conclusion	156
Chapter 3 Tax System of Bosnia and Herzegovina, with a Focus on Personal Income Tax ..	159

3.1 Introduction.....	159
3.1.1 Fiscal federalism in B&H	159
3.1.2 Pre-independence period and the Yugoslav fiscal system	162
3.1.3 Constitutional structure of B&H.....	165
3.1.4 Macroeconomic performance and tax system of B&H.....	167
3.2 Indirect taxes in B&H.....	174
3.3 Direct taxes and SSC in B&H.....	179
3.3.1 PIT in the Federation of Bosnia and Herzegovina.....	181
3.3.1.1 Progressivity measures in FB&H.....	193
3.3.1.2 Inequality measures in FB&H	194
3.3.2 PIT in Republika Srpska	197
3.3.3 Suggestions and recommendations for future PIT reforms in B&H.....	201
3.4 Conclusion	204
Chapter 4 Bosnian Experiences and Lessons from Personal Income Tax Reforms – Expert Opinion Survey.....	207
4.1 Introduction.....	207
4.2 Survey methodology	208
4.3 Tax issues and economic model in FB&H and comparisons to RS	213
4.4 Tax issues and economic model in FB&H and comparisons to Croatia.....	218
4.5 Binomial probit regression for economic values in FB&H	223
4.6 Conclusion	228
Chapter 5 Final Conclusions, Suggestions, and Recommendations	230
Appendix A	237
Appendix A1: Income versus consumption taxation in the life cycle model	237
Appendix A2: Share of VAT and PIT revenues to total taxation in OECD countries ..	239
Appendix A3: List of European countries that apply the <i>flat tax</i> (2013).....	240
Appendix A4: Musgrave’s perspective of tax systems in developing countries	240
Appendix B.....	242
Appendix B1: Overview of the main EBRD transition indicators, average of all sectors	242
Appendix B2: Overview of the main macroeconomic indicators.....	243
Appendix B3: The globalisation indices.....	245
Appendix B4: Slovak Republic – flat tax type D	246
Appendix B5: T-tests for mean differences in attitudes towards household income in 2006 and 1989.....	247
Appendix B6: Gini coefficients for selected transition countries.....	247
List of references	248

List of figures

Figure 1.1: Three phase model of PIT	35
Figure 1.2: Proportional vs. Progressive flat tax	38
Figure 1.3: Marginal and average tax rate for flat tax	39
Figure 1.4: Types of PIT in practice today	51
Figure 1.5: Types of flat tax model – an illustration	58
Figure 1.6: Flat tax reforms	75
Figure 1.7: Four types of European models: a typology	81
Figure 2.1: Annual rate of growth of GDP (% change) in selected transition countries (1971-1990)	94
Figure 2.2: Life in Transition survey 2006: Responses to the statement: the economic situation in this country is better today than around 1989.....	97
Figure 2.3: Life in Transition survey 2006: Responses to the statement: the political situation in this country is better today than around 1989.....	98
Figure 2.4: Types of welfare states in selected transition countries	107
Figure 2.5: Life in Transition survey 2006: Responses to the statement: there is less corruption now than around 1989.....	110
Figure 2.6: Aggregate tax morale across selected transition countries – 1995, 1999, 2008	112
Figure 2.7: Linking theory and practice of flat tax versus progressive PIT in transition and developed countries – an illustration.....	120
Figure 2.8: Life in Transition survey: Household attitudes towards household income in 1989 and 2006 in Estonia	131
Figure 2.9: Distribution of gross monthly earnings in Estonia from 2005-2010, according to NACE 1.1 and NACE 2, in % of total employed, in Euro	134
Figure 2.10: PIT revenue elasticity to wage earnings in the Slovak Republic.....	138
Figure 2.11: Life in Transition survey, household attitudes towards household income in 1989 and 2006 in the Slovak Republic.....	142
Figure 2.12: Distribution of gross monthly earnings in the Slovak Republic from 2002-2008 according to NACE 1.1 and NACE 2 in %of full time employed, in Slovak Koruna	143
Figure 2.13: Distribution of gross monthly earnings in Slovak Republic in 2009 and 2011, according to NACE 2 in % of full time employed, in Euro	145

Figure 2.14: Life in Transition survey, household attitudes towards the household income in 1989 and 2006 in Bulgaria	150
Figure 2.15: Distribution of gross annual earnings in Bulgaria in 2006 and 2010 according to NACE 2, % of full- and part-time employed, in Bulgarian Lev	152
Figure 2.16: Life in Transition survey, household attitudes towards the household income in 1989 and 2006 in Croatia	154
Figure 2.17: Distribution of net monthly earnings in Croatia from 2005 to 2009 according to NACE 1.1 and NACE 2, in % of full and part-time employed, in Croatian Kuna	155
Figure 3.1: Constitutional structure of B&H	166
Figure 3.2: Share of average gross wages in public administration, defence, etc. to total average gross wages (in %) in 2006-2010	170
Figure 3.3: Share of employees in public administration, defence, and compulsory social security to total employed (NACE 2. classification)	171
Figure 3.4: Fiscal structures of B&H since 2006	174
Figure 3.5: Indirect tax collection in B&H, 2002-2012	178
Figure 3.6: PIT revenue elasticity to wage earnings in FB&H	191
Figure 3.7: Life in Transition survey, household attitudes towards the household income in 1989 and 2006 in B&H	196
Figure 3.8: Distribution of net monthly earnings in FB&H in 2008 and 2010 according to NACE 1.1 and NACE 2, in % of total employed, in BAM	197
Figure 3.9: Distribution of net monthly earnings in RS in 2006 and 2008 according to NACE 1.1 and NACE 2, in % of total employed, in BAM	201
Figure 4.1: The structure of the dataset in FB&H	211
Figure 4.2: Educational structure of the dataset in FB&H	212

List of tables

Table 1.1: Taxes in hypothetical tax system.....	36
Table 1.2: Comparison between tax treatment of saving in an income and consumption- based tax models.....	62
Table 1.3: Main efficiency (and equity) measures in developed countries.....	68
Table 1.4: Empirical results of different approaches to efficiency-equity trade-off.....	76
Table 2.1: Inflation (CPI), end of period consumer prices –annual percentage change.....	94
Table 2.2: Correlation coefficients between responses to the questions regarding economic and political situation in selected transition countries.....	99
Table 2.3: General government tax revenues of the Central and Eastern European economies in 1986 in % of GDP.....	101
Table 2.4: Share of VAT revenues to total revenues in selected transition countries, 1995- 2011.....	114
Table 2.5: Share of PIT revenues to total revenues in selected transition countries, 1995- 2011.....	114
Table 2.6: Comparison between EU5 and Tran5 using weighted averages for the year 2008	121
Table 2.7: Labour tax wedge in selected transition countries for a single worker at two- thirds of average earnings in %, no children.....	124
Table 2.8: Main differences between theoretical and practical flat tax – Estonian case.....	129
Table 2.9: Interdecile ratio (D9/D1) of gross and net earnings, full and part time employees	136
Table 2.10: Tax brackets and the marginal tax rate before and after the reform in the Slovak Republic, in Slovak Koruna.....	137
Table 2.11: Main differences between theoretical and practical flat tax – Slovakian case....	140
Table 2.12: PIT reform in Bulgaria in 2008.....	146
Table 2.13: Main differences between theoretical and practical flat tax – Bulgarian case....	147
Table 3.1: Possible detailed tax assignment (by major types of taxes).....	161
Table 3.2: B&H pre and post-war levels of GDP, millions of US\$.....	168
Table 3.3: RST rates in FB&H and RS (1995-2004).....	176
Table 3.4: Changes in SSC legal provisions in RS and FB&H (2001-2013).....	181
Table 3.5: Average monthly net wage earnings calculation in FB&H in 2008 (prior to PIT reform).....	183
Table 3.6: Annual tax on total income – Thresholds with tax rates for each canton within FB&H in 2008.....	185

Table 3.7: Share of tax on total income to total revenues in FB&H, in %, 2005-2008	186
Table 3.8: Main differences between theoretical and practical flat tax – FB&H case.....	187
Table 3.9: Average gross monthly earnings calculation in FB&H in 2012	188
Table 3.10: Legal PIT changes in RS 1992-2014	198
Table 3.11: Average gross monthly earnings calculation in RS in 2012	199
Table 4.1: Respondent structure in two B&H entities.....	211
Table 4.2: Degree of consensus (number of statements, without neutral response).....	213
Table 4.3: Summary of Expert Attitudes on Indirect Taxes in RS and FB&H, in %	214
Table 4.4: Summary of Expert Attitudes to General Tax issues and Economic Models in RS and FB&H (%).....	216
Table 4.5: Summary of Expert Attitudes to Direct Taxes in RS and FB&H (%).....	218
Table 4.6: Summary of attitudes regarding PIT system in FB&H and Croatia amongst three groups of experts, in %.....	220
Table 4.7: Summary of attitudes regarding general tax issues in FB&H and Croatia amongst three groups of experts, in %	222
Table 4.8: Binomial probit regression results for economic values in FB&H.....	227

List of abbreviations

- AETR – Average Effective Tax Rate
- AW – Average wage
- B&H – Bosnia and Herzegovina
- CIT – Corporate Income Tax
- DB – District Brčko
- EMU – European Monetary Union
- EU – European Union
- FB&H – Federation of Bosnia and Herzegovina
- GDP – Gross Domestic Product
- GFC – Global Financial Crisis (2008-2009)
- GMP – Gross Material Product
- IMF – International Monetary Fund
- ITA – Indirect Tax Authority (Tax administration for indirect taxes in B&H)
- NMS – New Member States of the European Union
- OECD – Organisation for Economic Cooperation and Development
- OHR – Office of the High Representative
- PIT – Personal Income Tax
- RS – Republika Srpska
- RST – Retail Sales Tax
- SSC – Social Security Contributions
- VAT – Value Added Tax
- WB – The World Bank