Labour Markets In Developing Countries

Ayse Arzu Yavuz PhD in Economics University of Exeter

September 2009

Labour Markets In Developing Countries 1 Volume

Submitted by Ayse Arzu Yavuz to the University of Exeter as thesis for the degree of Doctor of Philosophy in Economics, September 2009.

This thesis is available for Library use on understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

.....(signature)

Abstract

This thesis basic aim is to have a better understanding of how labour markets work and to explore different transmission mechanisms that might be responsible for making these markets different from their counterparts in the developed world. I analyzed problems created by large public sector employment by using two different frameworks and I made an empirical study about the social factors related to gender issues. In the second chapter, the government's excess employment in the economy is placed under the efficiency wage framework. It is aimed to find out how the wage and effort differentials between public and private sectors actually affect the labour market or more specifically equilibrium levels of employment, wages and productivity. The chapter investigates how the total welfare responds to changes in these differentials in terms of two different models. The results show that an effort of raising employment by the government eventually leads to a reduction in the total welfare by curbing private employment. This chapter contributes to the existing literature by providing a different approach by defining an explicit outside option, namely the government sector, to the efficiency wage theory. Another aspect analyzed is the relation between public sector employment and output growth. In chapter three, I try to establish a link between the government employment and economic growth rate underlying several mechanisms; distortionary taxes, productive government expenditure and productivity link resulting from the interaction of government and private labour markets inspiring from the efficiency wage theory. I endogenize the growth rate by introducing a public sector capital term in government expenditures. The production function in the growth model is constructed such that productivity of private worker decreases when size of public employment increases. I concluded that the abundant government employment force private sector either to pay higher wages or to have lower productivity of labour as outside option for the workers are now plenty. While higher wage leads more unemployment, productivity decline causes output to reduce. Developing countries social dynamics have unforeseen consequences on the labour markets. Thus, in order to understand the social and traditional values explaining the employment decisions taken by the labour force in the developing countries, in the fourth chapter of this thesis an empirical study is carried out to investigate the existence of and the potential behavioral change in son preference in Turkey, by using different statistical techniques. The main contribution of this part is that, it provides a broad analysis of son preference behavior in Turkey by using the latest econometric techniques. In particular, it investigates whether the process of urbanization and modernization in Turkey had an effect on son preference behavior over time. The results imply that there is clear and strong son preference in Turkey and the difference between progression ratios of families with and without sons is larger in 1993 compared to 1998. It is also found that the regional effects are more dominant on childbearing decision and urbanization had a diminishing effect on son preference behavior in Turkey.

Contents

1	Intr	roduction	1
	1.1	An Overview of Labour Markets in DC	2
		1.1.1 The Importance of the Labour Markets in DC	2
		1.1.2 Features of DC Labour Markets	3
	1.2	1.1.3 An example of a DC Labour Market: The Turkish Case Labour Markets in the context of Efficiency Wages, Growth and Social	8
		Factors	22
		1.2.1 Shirking Model Including Government Sector	23
		1.2.2 A Growth Model with Public Employment and Efficiency Wages	27
		1.2.3 A Social Factor Related to Gender Preference	29
2	Lab	our market interactions	32
	2.1	Introduction	32
	2.2	Literature Review	34
	2.3	Model	40
		2.3.1 General Framework	40
		2.3.2 Model Specifics and Solution	44
	2.4	Tax and Welfare Analysis	50
	2.5	Endogenizing Government Wage and Effort	57
	2.6	Conclusion	65
3	Gov	vernment employment and growth	68
	3.1	Introduction	68
	3.2	Model	72
	3.3	Model with government employment affecting the productivity of the	
		private sector	78
	3.4	Endogenous Model	83
		3.4.1 Outline of the main endogenous growth model	84
		3.4.2 Endogenous model with government employment affecting the	
		productivity of the private sector	88
	3.5	Conclusion	91
4	Son	Preference in Turkey	94
	4.1	Introduction	94

	4.2	Data, Methodology and Empirical Results
		4.2.1 Data
		4.2.2 Models and Empirical Results
		4.2.3 Further comparisons between the years 1993 and 1998 113
	4.3	Conclusion
_	~	
5	Con	clusion 118
	5.1	Policy Recommendations
		5.1.1 Importance of Social Security System for Employment Creation
		in the Private Sector: The Turkish Case
	5.2	Further Research
\mathbf{A}	Lab	our market interactions 133
	A.1	Simple Model (\overline{w} increases and decreases)
	A.2	Simple Model (\overline{e} increases and decreases)
	A.3	Simple Model (U_b increases and decreases)
	A.4	Tax on Private Sector (Main Model)
	A 5	Tax on Private Sector (\overline{w} increase) 141
	A 6	Tax on Private Sector (\overline{e} increase) 145
	Δ 7	Tax on Private Sector $(U_{\rm increase})$ 140
	л.1 Л 8	The Effects of Tax Einanced Increase in \overline{u} 153
		Find granizing Public Sector Wage and Effort 154
	A.9	Endogenizing I ubic Sector wage and Enort
В	Gov	remnent employment and growth 156
	B.1	Exogenous Main Model Steady State Values
	B.1 B.2	Exogenous Main Model Steady State Values
	B.1 B.2	Exogenous Main Model Steady State Values $\ldots \ldots \ldots$
	B.1 B.2 B.3	Exogenous Main Model Steady State Values $\ldots \ldots \ldots$
	B.1 B.2 B.3	Exogenous Main Model Steady State Values $\dots \dots \dots$
	B.1 B.2 B.3	Exogenous Main Model Steady State Values
	B.1B.2B.3B.4	Exogenous Main Model Steady State Values
	B.1B.2B.3B.4B.5	Exogenous Main Model Steady State Values
	 B.1 B.2 B.3 B.4 B.5 B.6 	Exogenous Main Model Steady State Values
	 B.1 B.2 B.3 B.4 B.5 B.6 	Exogenous Main Model Steady State Values.156Steady states values for the exogenous model in which government employment affecting the productivity of the private sector with $\lambda = 0.6$.158Steady states values for the exogenous model in which government employment endogenized to see its effect on the productivity of the private.159Steady state values and growth rates of endogenous models.161Graphs for Levels of the Main Endogenous Growth Model.161Model.162
С	 B.1 B.2 B.3 B.4 B.5 B.6 Son 	Exogenous Main Model Steady State Values.156Steady states values for the exogenous model in which government employment affecting the productivity of the private sector with $\lambda = 0.6$.158Steady states values for the exogenous model in which government employment endogenized to see its effect on the productivity of the private.159Steady state values and growth rates of endogenous models.160Graphs for Levels of the Main Endogenous Growth Model.161Model.162preference in Turkey163
С	 B.1 B.2 B.3 B.4 B.5 B.6 Son C.1 	Exogenous Main Model Steady State Values
С	 B.1 B.2 B.3 B.4 B.5 B.6 Son C.1 C.2 	Exogenous Main Model Steady State Values.156Steady states values for the exogenous model in which government employment affecting the productivity of the private sector with $\lambda = 0.6$.158Steady states values for the exogenous model in which government employment endogenized to see its effect on the productivity of the private.159Steady state values and growth rates of endogenous models.160Graphs for Levels of the Main Endogenous Growth Model.161Graphs for Steady State Growth Rates of the Main Endogenous Growth.162 preference in Turkey163 Parity Progression Logistic Regression (1998).164Parity Progression.165
С	 B.1 B.2 B.3 B.4 B.5 B.6 Son C.1 C.2 C.3 	Exogenous Main Model Steady State Values156Steady states values for the exogenous model in which government employment affecting the productivity of the private sector with $\lambda = 0.6$ 158Steady states values for the exogenous model in which government employment endogenized to see its effect on the productivity of the private159Steady state values and growth rates of endogenous models160Graphs for Levels of the Main Endogenous Growth Model161Graphs for Steady State Growth Rates of the Main Endogenous Growth162 preference in Turkey 163Parity Progression Logistic Regression (1998)164Parity Progression Logistic Regression165Parity Progression Logistic Regression165

C.5	Cox Proportional Hazards Model
C.6	Hazards Model with Last Boy Dummy
C.7	Simple Cox Proportional Hazards Model
C.8	PP Logistic Regression (year and regional dummy)
C.9	Pooled regressions

List of Tables

1.1.1 Labour Force Participation Rates (percent)	4
1.1.2 Summary of Turkish Labour Force (15+Age, Thousand, Average) $\ .$.	9
1.1.3 Share of Employment by Employment Status in Turkey, percentage $~$. $~$ 1	.1
1.1.4 Distribution of employed persons in agricultural, informal and formal	
sector in Turkey (percentage)	5
1.1.5 Government Employment in Turkey 1	.7
2.3.1 Effects of the changes on labour markets	17
2.4.1 Effects of the changes on labour markets including tax $\ldots \ldots \ldots \ldots $	7
2.5.1 Effects of the changes on government monitoring on labour market	
variables, t= 0.1	51
4.2.1 Parity Progression)7
4.2.2 Parity Progression Logistic Regression	18
4.2.3 Effects of Changes in Son Preference Variables	9
4.2.4 Cox Proportional Hazards Model	.2
4.2.5 PP Logistic Regression with Year Dummy Interaction	4

List of Figures

1.1.1 ILO unemployment rates for males and females, 2006	5
$1.1.2 \; {\rm Employment}$ in the informal economy as a $\%$ of total employment $~.~.~$	6
1.1.3 Share of Public Employment in Selected Countries	7
1.1.4 Employment Shares By Economic Activity and Sex in Years 1960 and	
2005 in Turkey	11
1.1.5 The Distribution of Employment by Employment Status, Geographical	
Location and Gender, Turkey, 2000 (%)	12
1.1.6 Labour Force Participation Rates by Gender and Geographic Location	
in Turkey	19
1.1.7 Productivity, Production and Working Hour in Public Manufacturing	
Sector in Turkey	20
1.1.8 Productivity, Production and Working Hour in Private Manufacturing	
Sector in Turkey	21
1.1.9 Quarterly Real Wages Index (1997=100)	22
2.3.1 The Effects of Increase in \overline{w} on Labour Market Variables in the Simple	
$Model \dots \dots$	49
2.4.1 Government Labour Demand, Total Employment and Tax $\ .\ .\ .$.	53
2.4.2 The Effects of Tax Change on Labour Market Variables	54
2.4.3 Welfare Structures	55
2.4.4 The effects of tax financed increase in \overline{w}	56
2.5.1 Government Labour, Total Employment and Tax with Endogenized	
Public Wage and Effort	62
2.5.2 Welfare Structures with Endogenized Public Wage and Effort \ldots .	63
2.5.3 Government Labour and Per Capita Labour Payoffs	64
3.2.1 Steady states values when government employment changes in the main	
exogenous model	77
3.2.2 Private Employment and Tax rate when government employment changes	
in the main exogenous model	78
3.3.1 Steady states values of the exogenous model in which government em-	
ployment affecting the productivity of the private sector $\lambda = 0.6$	80

3.3.2 Steady states values of wage, rent, saving and capital in the exogenous	
model in which government employment affecting the productivity of	
the private sector $(\lambda(L_g) = \frac{1}{1+L_{\frac{1}{2}}^{\frac{1}{2}}})$	82
3.3.3 Steady states values of production, consumption, government expen-	
diture and private employment in the exogenous model in which gov-	
ernment employment affecting the productivity of the private sector	
$\left(\lambda(L_g) = \frac{1}{1+L_a^{\frac{1}{4}}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	82
3.4.1 The endogenous model steady states growth and tax rates with different	
levels of government employment	89
3.4.2 Endogenous model in which government employment affecting the pro-	
ductivity of the private sector	90
3.4.3 Comparision of growth rates when lambda is constant and endogenized	90

Acknowledgements

I would like to express my deepest appreciation to my supervisor Professor Gareth Myles being to me an invaluable mentor as well as an excellent teacher. I am deeply indebted to him for his guidance and help through my PhD studies. In numerous occasions Professor Gareth Myles showed his most encouraging support.

My gratitude goes also to Professor Nigar Hashimzade for her support and help in the son preference paper. I would like to thank Professor John Fender and Professor Tatiana Kirsanova for the valuable discussion and their comments during the viva.

The support and friendship of many staff members and my fellow research students at the University of Exeter were certainly unforgettable. The completion of the work described in this thesis would not have been possible without the scholarship offered by the Central Bank of the Republic of Turkey. Many thanks also go to my friends Jack Rogers and John Hawkins who helped me to correct my English.

My parents, Mr Ahmet Cetinkaya and Mrs Hatice Handan Cetinkaya, my inlaws Mr Fevzi Yavuz and Mrs Ayten Yavuz, my sister, Canan Gedik and her family supported my dreams and efforts during many difficult moments. Mr Abdullah Kuzu, Mrs Ayse Kuzu and Miss Lale Kuzu are like a second family for me now and they helped me on numerous occasions. I also would like to thank to Mrs Sevil Fertinger and Miss Cosku Fertinger for their support and friendship.

Finally, I would like to thank my husband, Devrim Yavuz, for his unconditional support for everything. Without his support, I would not have finished this thesis.