

DISCUSSION PAPERS IN ECONOMICS

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The Effect of Child Benefit Policies on Fertility and
Female Labor Force Participation in Canada

Robert McNown

*Department of Economics and Population Program at IBS
University of Colorado at Boulder, Colorado*

Cristóbal Ridao-Cano

*Department of Economics and Population Program at IBS
University of Colorado at Boulder, Colorado*

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Center for Economic Analysis
Department of Economics



University of Colorado at Boulder
Boulder, Colorado 80309

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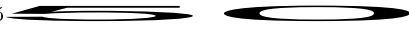
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¹⁵ These last two changes would raise the rate of return to human capital (corresponding to increases in β and ω).

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Table 1. Dickey-Fuller Tests for Unit Roots

Variables	Null Hypothesis	
	I[2]	I[1]
Real female wage	-6.65 (0)	-0.52(0,t)/-1.55 (0)
Real male income	-2.86 (1)	-0.49(0,t)/-2.96 (0)
Female education	-2.47 (0)	-2.45(1,t)/-1.26 (1)
Real child benefits	-8.79 (0)	-3.40(0,t)/-1.35 (0)
Labor force participation of women aged 20-44	-1.97 (1,2)	-1.22(2,3,t)/-2.16 (2,3)
Fertility rate of women aged 20-44	-3.48 (1)	-2.70(1,t)/-0.38 (1)

Notes: Number of lagged first and second differences for the I[1] and I[2] model, respectively, are shown in parentheses, with t if deterministic trend is included in the test equation. Five and ten percent critical values are -2.93 and -2.60 with no trend, and -3.50 and -3.18 when the trend term is included.

Table 2. Tests of cointegration among fertility and labor market variables

Test of cointegration rank in I[2] model					
I[0]	I[2]				
	5	4	3	2	1
0	289.55 (198.2)	230.20 (167.9)	188.53 (142.2)	157.11 (119.8)	145.77 (101.5)
1		182.07 (137.0)	135.88 (113.0)	101.68 (92.2)	90.98 (75.3)
2			106.93 (86.7)	63.28 (68.2)	48.46 (53.2)
3				61.29 (47.6)	27.34 (34.4)
4					30.01 (19.9)

Residual diagnostics

Autocorrelation: $\chi^2_{[25]}$ (p-value) 24.50 (0.49)

Error correction equation for: Fertility Labor supply Female wage Male income Female edu.

Normality:

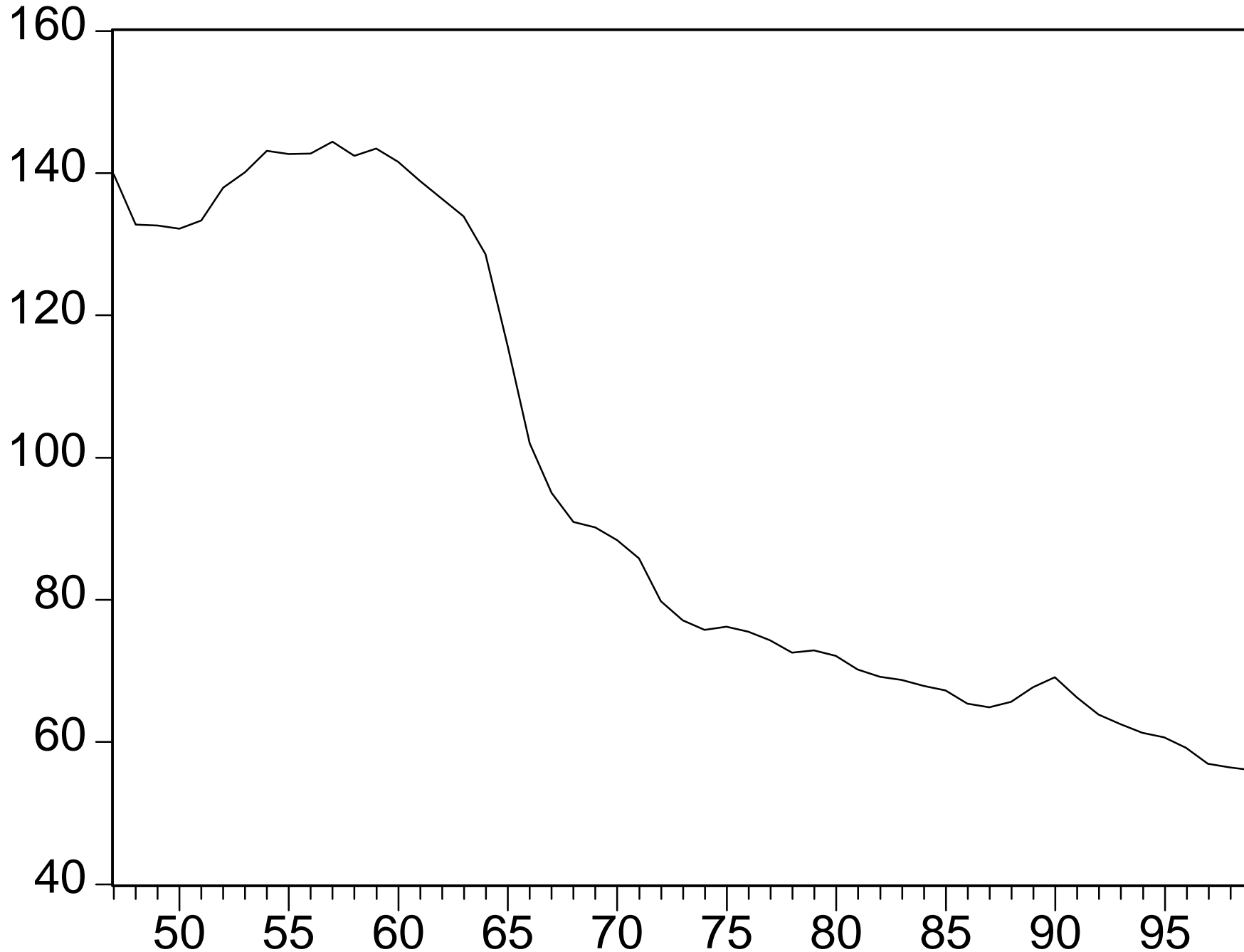
Table 3. Maximum likelihood estimates of the long-run and short-run coefficients of the Error Correction Model

Fertility

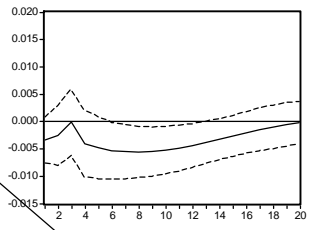
Figure 1. Total child benefits



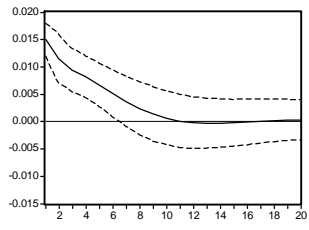
Figure 2. Fertility rates for women aged 20-44



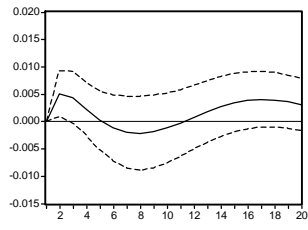
Response of MI to CB



Response of MI to MI



Response of MI to EDU



Response of MI to FW

