



ภาคผนวก

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University
All rights reserved

ภาคผนวก ก

ข้อมูลที่ใช้ในการศึกษา

ตารางที่ 1 ก ข้อมูลอัตราดอกเบี้ยเงินให้กู้ยืมระหว่างธนาคาร ตั้งแต่เดือนมีนาคม 2543 ถึง เดือน
กุมภาพันธ์ 2553 ของประเทศไทย อินโดนีเซีย มาเลเซีย ฟิลิปปินส์ และสิงคโปร์

Date	Thailand	Indonesia	Malaysia	Philippine	Singapore
15/3/2000	2	9.5	2.61	8.875	2.25
15/4/2000	1.75	9.41	2.51	8.8438	3
15/5/2000	1.5	10.07	2.55	9.2188	1.625
15/6/2000	1.5	10.2	2.54	10.3125	1.625
15/7/2000	2.375	10.97	2.6	10.3438	3.25
15/8/2000	1.875	10.76	2.78	10.3438	1.625
15/9/2000	2.25	10.74	2.79	11.1875	2.3125
15/10/2000	2	11.09	2.77	15.125	2.625
15/11/2000	1.4375	11.22	2.83	15.0938	2.125
15/12/2000	1.5	11.66	2.8	13.5625	2.875
15/1/2001	1.625	11.73	2.92	12.5625	3
15/2/2001	1.625	12.16	2.76	11.125	2.25
15/3/2001	1.5	12.71	2.78	10.5938	2.125
15/4/2001	2	13.46	2.77	10.0625	1.75
15/5/2001	1.5	14.93	2.77	9.625	2
15/6/2001	2.4375	15.54	2.76	9.0625	2.5
15/7/2001	2.375	15.19	2.77	9.0625	2
15/8/2001	2.4375	18.29	2.77	9.1563	2
15/9/2001	3.25	15.67	2.77	9.1563	1.0625
15/10/2001	2.375	15.79	2.88	8.9063	0.5
15/11/2001	2.3125	15.7	2.77	8.5	0.5
15/12/2001	2.3125	16.83	2.77	8.625	0.5

15/1/2002	2.0625	15.44	2.76	7.875	0.4375
15/2/2002	2	15.33	2.7	7.375	0.5625
15/3/2002	1.9375	15.62	2.82	6.0313	0.75
15/4/2002	1.9375	15.35	2.73	6.75	0.5625
15/5/2002	1.8125	14.87	2.71	7.0625	0.5625
15/6/2002	1.875	15.72	2.71	7.0625	0.625
15/7/2002	1.75	14.48	2.92	7.0938	0.4375
15/8/2002	1.9375	13.56	2.72	7.125	0.6875
15/9/2002	1.875	12.79	2.73	7.0625	0.9375
15/10/2002	1.9375	11.44	2.83	7.0313	0.8125
15/11/2002	1.75	11.21	2.73	7.0625	0.5625
15/12/2002	1.6875	12.24	2.74	7.0625	0.6875
15/1/2003	1.5625	12.2	2.84	7.0625	0.4375
15/2/2003	1.5	12.22	2.73	7.0625	0.4375
15/3/2003	1.5625	11.51	2.81	7.0625	0.5625
15/4/2003	1.7	11.3	2.82	7.1875	0.4375
15/5/2003	1.6875	10.77	2.8	7.0938	0.4375
15/6/2003	1.66	9.77	2.74	7.0625	0.375
15/7/2003	1.125	9.06	2.83	6.8125	0.4375
15/8/2003	1.1	9.03	2.73	6.8438	0.6875
15/9/2003	1.1	8.68	2.71	6.8125	0.4375
15/10/2003	1.1	8.61	2.73	6.8438	0.5625
15/11/2003	1.125	8.32	2.7	6.8438	0.4375
15/12/2003	1.03	8.22	2.71	6.8438	0.375
15/1/2004	1.05	7.98	2.7	6.8438	0.5
15/2/2004	1.05	7.34	2.71	6.8438	0.4375
15/3/2004	1.05	7.4	2.71	7.0313	0.375
15/4/2004	1	0	2.74	7.125	0.375
15/5/2004	1.02	0	2.7	7.0938	0.5625

15/6/2004	1.03	7.03	2.7	7.3438	0.4375
15/7/2004	1.06	6.54	2.71	7.25	0.8125
15/8/2004	1.05	6.53	2.7	7.1563	1
15/9/2004	1.47	6.73	2.69	7	1.125
15/10/2004	1.47	6.05	2.7	6.9688	1
15/11/2004	1.7	6.5	2.69	7.0625	1
15/12/2004	1.875	5.09	2.69	6.9688	0.938
15/1/2005	1.9	5.39	2.73	7.0625	1.5
15/2/2005	1.85	4.1	2.7	7.1875	1.5
15/3/2005	1.95	6.1	2.7	7.125	1.5625
15/4/2005	2.0375	4.63	2.7	7.5625	1.6875
15/5/2005	2.24	8.14	2.69	7.2188	1.625
15/6/2005	2.46	3.91	2.7	7.125	1.625
15/7/2005	2.65	6.7	2.71	7.2188	1.625
15/8/2005	2.75	4.82	2.7	7.25	1.6875
15/9/2005	3.235	4.88	2.71	7.4063	1.9375
15/10/2005	3.125	7.53	2.69	7.5313	2.125
15/11/2005	3.64	7.32	2.69	7.9688	2.625
15/12/2005	3.89	8.05	3	7.7813	2.875
15/1/2006	3.875	8.65	2.99	7.6875	3
15/2/2006	4.145	8.35	3	7.6563	1.125
15/3/2006	4.25	8.89	3.25	7.9375	3.125
15/4/2006	4.63	8.96	3.25	7.9063	3.125
15/5/2006	4.65	8.81	3.5	7.875	3.125
15/6/2006	4.7	7.95	3.48	8.125	3.125
15/7/2006	4.79	16.19	3.51	8.25	3.125
15/8/2006	4.95	15.12	3.48	7.9063	3.1875
15/9/2006	4.865	9.76	3.52	8.25	3.125
15/10/2006	4.98	6.94	3.5	8.25	3.1875

15/11/2006	4.965	5.5	3.51	5.5313	3.125
15/12/2006	4.75	5.38	3.5	7.5625	3.125
15/1/2007	4.945	4.88	3.49	7.9688	3.125
15/2/2007	4.715	4.71	3.5	8	3.0625
15/3/2007	4.29	4.52	3.5	8	2
15/4/2007	3.835	15.93	3.51	8	2.25
15/5/2007	4.055	4.76	3.51	6.0313	1.8125
15/6/2007	3.53	3.96	3.51	8	2.25
15/7/2007	3.485	5.23	3.49	8	2.1875
15/8/2007	3.14	10.73	3.49	7	2.25
15/9/2007	3.2606	9.13	3.5	6.7188	2
15/10/2007	3.26	6.7	3.51	6.2188	2.125
15/11/2007	3.26	8.48	3.49	6.75	1.75
15/12/2007	3.1356	5.34	3.5	6.5	1.625
15/1/2008	3.215	4.32	3.5	5.6563	1
15/2/2008	3.205	6.91	3.5	5.125	0.875
15/3/2008	2.905	8.4	3.5	5.125	0.25
15/4/2008	3.2	8.67	3.5	5.1563	0.375
15/5/2008	3.17	8.16	3.5	5.2188	0.375
15/6/2008	3.13	8.5	3.49	5.375	0.25
15/7/2008	3.1925	9.3	3.49	5.375	0.25
15/8/2008	3.445	9.44	3.49	5.875	0.75
15/9/2008	3.605	9.35	3.49	5.5313	0.875
15/10/2008	3.64	10.09	3.49	5.7188	0.5
15/11/2008	3.675	9.61	3.49	6.125	0.5
15/12/2008	2.5	9.38	3.25	6	0.25
15/1/2009	1.775	8.81	3.25	5.5	0.1875
15/2/2009	1.75	8.36	2.49	5.1563	0.125
15/3/2009	1.25	7.82	2	4.9688	0.1875

15/4/2009	0.98	7.68	2	4.7813	0.1875
15/5/2009	0.965	7.47	1.99	4.5625	0.1563
15/6/2009	0.955	6.95	2	4.3438	0.1563
15/7/2009	0.95	6.71	1.99	4.1563	0.1563
15/8/2009	0.945	6.35	1.99	4.1563	0.1875
15/9/2009	1.055	6.32	1.99	4.0625	0.1875
15/10/2009	0.9525	6.41	1.99	4.0625	0.2813
15/11/2009	0.96	6.37	1.99	4	0.2813
15/12/2009	1.06	6.33	2	4.125	0.125
15/1/2010	0.96	6.23	1.99	4.25	0.1875
15/2/2010	1.0525	6.23	1.99	4.0938	0.1875

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

ตารางที่ 2 ก ข้อมูลดัชนีราคาผู้บริโภค ตั้งแต่เดือนมีนาคม 2543 ถึง เดือนกุมภาพันธ์ 2553 ของ ประเทศไทย อินโดนีเซีย มาเลเซีย ฟิลิปปินส์ และสิงคโปร์

Date	Thailand	Indonesia	Malaysia	Philippine	Singapore
15/3/2000	83.3	52.19	91.4	99.16	87.09
15/4/2000	83	52.48	91.4	99.29	87.215
15/5/2000	83.1	52.92	91.5	99.76	86.901
15/6/2000	83.3	53.18	91.5	100.49	87.043
15/7/2000	83.3	53.86	91.6	100.95	87.488
15/8/2000	83.9	54.14	91.6	101.61	87.949
15/9/2000	84.2	54.11	91.6	102.08	87.97
15/10/2000	83.8	54.74	92	102.81	88.037
15/11/2000	83.9	55.46	92.2	104	88.231
15/12/2000	83.9	56.54	92.5	104.8	88.378
15/1/2001	84	56.72	92.8	105.53	88.703
15/2/2001	84.5	57.22	93	105.73	88.536
15/3/2001	84.5	57.73	92.8	105.8	88.694
15/4/2001	85.1	57.99	92.9	105.99	88.937
15/5/2001	85.4	58.64	93	106.26	88.581
15/6/2001	85.1	59.62	92.9	107.19	88.096
15/7/2001	85.1	60.89	92.9	107.85	88.624
15/8/2001	85.1	60.76	92.8	108.05	88.572
15/9/2001	85.3	61.15	92.9	108.32	88.449
15/10/2001	84.9	61.56	92.8	108.45	88.227
15/11/2001	84.7	62.62	93.6	108.72	88.041
15/12/2001	84.5	63.63	93.6	109.05	87.858
15/1/2002	84.7	64.9	93.8	109.58	87.731
15/2/2002	84.8	65.87	94.1	109.38	87.989
15/3/2002	85	65.86	94.7	109.65	87.913

15/4/2002	85.5	65.7	94.7	109.84	88.002
15/5/2002	85.6	66.22	94.7	110.11	88.275
15/6/2002	85.4	66.46	94.8	110.38	88.221
15/7/2002	85.3	67.01	94.8	110.64	88.249
15/8/2002	85.4	67.2	94.7	111.24	88.185
15/9/2002	85.7	67.56	94.8	111.44	88.075
15/10/2002	86.2	67.92	94.7	111.37	88.05
15/11/2002	85.8	69.18	95	111.44	88.247
15/12/2002	85.9	70.01	95.2	111.9	88.242
15/1/2003	86.6	70.57	95.4	112.3	88.497
15/2/2003	86.5	70.71	95.6	112.6	88.335
15/3/2003	86.5	70.62	95.4	112.5	88.581
15/4/2003	86.8	70.77	95.6	113	88.761
15/5/2003	87.2	71.02	95.7	113.1	88.198
15/6/2003	86.8	71.12	95.6	114.2	87.935
15/7/2003	86.8	71.15	95.8	114.3	88.484
15/8/2003	87.3	71.56	95.7	114.5	88.588
15/9/2003	87.2	71.84	95.8	114.7	88.682
15/10/2003	87.3	72.29	95.9	114.7	88.62
15/11/2003	87.4	72.96	96	115.1	88.741
15/12/2003	87.4	73.56	96.3	115.5	88.901
15/1/2004	87.7	73.97	96.3	116.5	89.095
15/2/2004	88.4	73.96	96.4	116.7	90.118
15/3/2004	88.5	74.23	96.3	117.1	89.455
15/4/2004	89	74.95	96.5	117.7	90.058
15/5/2004	89.3	75.61	96.8	118.3	90.275
15/6/2004	89.5	75.98	96.9	120.3	89.57
15/7/2004	89.6	76.27	97	121.8	90.293
15/8/2004	90	76.34	97	122.3	90.167

15/9/2004	90.3	76.35	97.4	123	90.358
15/10/2004	90.3	76.78	98	123.5	90.321
15/11/2004	90	77.46	98.1	124.5	90.298
15/12/2004	90	78.27	98.3	125.4	90.063
15/1/2005	90.1	79.39	98.6	126.3	89.442
15/2/2005	90.6	79.25	98.7	126.6	90.101
15/3/2005	91.4	80.76	98.7	127	89.835
15/4/2005	92.1	81.04	98.9	127.7	90.392
15/5/2005	92.6	81.21	99.7	128.3	90.249
15/6/2005	92.9	81.62	99.9	129.4	89.419
15/7/2005	94.4	82.25	99.9	130.5	90.359
15/8/2005	95	82.7	100.6	131.1	90.79
15/9/2005	95.7	83.27	100.8	131.6	90.918
15/10/2005	96	90.52	101	132.2	91.285
15/11/2005	95.3	91.7	101.4	133.3	91.179
15/12/2005	95.2	91.66	101.5	133.8	91.21
15/1/2006	95.4	92.91	101.8	134.8	90.997
15/2/2006	95.6	93.45	101.9	136.2	91.188
15/3/2006	96.6	93.48	103.4	136.7	90.873
15/4/2006	97.7	93.52	103.4	136.8	91.372
15/5/2006	98.4	93.87	103.6	137.1	91.237
15/6/2006	98.4	94.29	103.8	138.1	90.678
15/7/2006	98.5	94.72	104	138.8	91.363
15/8/2006	98.6	95.02	103.9	139.3	91.408
15/9/2006	98.3	95.39	104.1	139.1	91.326
15/10/2006	98.7	96.21	104.1	139.3	91.679
15/11/2006	98.6	96.54	104.4	139.5	91.671
15/12/2006	98.5	97.71	104.6	139.6	91.946
15/1/2007	98.3	98.73	105.1	140	90.413

15/2/2007	97.9	99.34	105.1	139.8	91.12
15/3/2007	98.5	99.57	105	139.7	91.084
15/4/2007	99.5	99.41	105	140	91.781
15/5/2007	100.3	99.51	105.1	140.4	92.402
15/6/2007	100.3	99.14	105.3	141.3	92.214
15/7/2007	100.3	99.72	105.7	142.4	94.068
15/8/2007	99.7	100.28	105.9	142.6	94.59
15/9/2007	100.3	100.98	106	142.8	94.102
15/10/2007	101.2	101.78	106.1	143.1	95.456
15/11/2007	101.6	101.99	106.8	144	96.145
15/12/2007	101.7	102.52	107.1	145.1	95.326
15/1/2008	102.5	104.22	107.5	146.8	96.416
15/2/2008	103.2	104.99	107.9	147.3	97.071
15/3/2008	103.8	105.88	107.9	148.6	97.18
15/4/2008	105.6	106.16	108.2	151.6	98.709
15/5/2008	107.9	107.48	109.1	153.8	99.319
15/6/2008	109.1	110.08	113.4	157.4	99.137
15/7/2008	109.5	111.59	114.7	159.9	100.228
15/8/2008	106.2	112.16	114.9	160.4	100.642
15/9/2008	106.4	113.25	114.7	159.7	100.427
15/10/2008	105.1	113.76	114.2	159.1	101.539
15/11/2008	103.8	113.9	112.9	158.2	101.445
15/12/2008	102.1	113.86	111.8	156.7	100.554
15/1/2009	102.1	113.78	111.7	157.2	100.562
15/2/2009	103.1	114.02	111.9	158	100.242
15/3/2009	103.6	114.27	111.7	158.1	99.673
15/4/2009	104.6	113.92	111.5	158.9	99.031
15/5/2009	104.3	113.97	111.7	158.8	99.561
15/6/2009	104.7	114.1	111.8	159.8	99.122

15/7/2009	104.7	114.61	111.9	160.2	99.968
15/8/2009	105.1	115.25	112.1	160.5	100.327
15/9/2009	105.3	116.46	112.4	160.8	99.975
15/10/2009	105.5	116.68	112.5	161.7	100.577
15/11/2009	105.8	116.65	112.8	162.7	100.631
15/12/2009	105.7	117.03	113	163.6	100.023
15/1/2010	106.3	118.01	113.2	163.9	100.765
15/2/2010	106.9	118.36	113.2	164.6	101.2

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

ภาคผนวก ข

ผลการคำนวณจากโปรแกรม

ตารางที่ 1 ข ผลการประมาณค่าตามแนวคิดของ Johansen test

Vector Error Correction Estimates		
Date: 04/25/10 Time: 15:16		
Sample (adjusted): 2000M08 2010M02		
Included observations: 568 after adjustments		
Standard errors in () & t-statistics in []		
Cointegrating Eq:	CointEq1	
LNI(-1)	1.000000	
LNCPI(-1)	-1.618379	
	(0.92040)	
	[-1.75834]	
C	8.075574	
	(4.23879)	
	[1.90516]	
Error Correction:	D(LNI)	D(LNCPI)
CointEq1	-0.018440	0.001239
	(0.00546)	(0.00017)
	[-3.37530]	[7.18847]
D(LNI(-1))	-0.245607	-0.002048
	(0.04125)	(0.00130)
	[-5.95362]	[-1.57379]
D(LNI(-2))	-0.049998	-0.003167
	(0.04259)	(0.00134)
	[-1.17381]	[-2.35717]
D(LNI(-3))	0.025412	-0.000119
	(0.04296)	(0.00136)
	[0.59157]	[-0.08795]

D(LNI(-4))	0.003177 (0.04170) [0.07618]	-0.002783 (0.00132) [-2.11556]
D(LNCPI(-1))	2.220810 (1.33125) [1.66822]	0.234277 (0.04200) [5.57830]
D(LNCPI(-2))	0.730964 (1.36420) [0.53582]	0.023431 (0.04304) [0.54444]
D(LNCPI(-3))	1.079953 (1.35941) [0.79443]	0.113439 (0.04289) [2.64510]
D(LNCPI(-4))	2.839650 (1.33539) [2.12645]	-0.071990 (0.04213) [-1.70881]
R-squared	0.080711	0.145073
Adj. R-squared	0.067554	0.132838
Sum sq. resids	21.13562	0.021036
S.E. equation	0.194447	0.006134
F-statistic	6.134792	11.85715
Log likelihood	128.7328	2091.883
Akaike AIC	-0.421594	-7.334095
Schwarz SC	-0.352793	-7.265294
Mean dependent	-0.009199	0.003257
S.D. dependent	0.201368	0.006588
Determinant resid covariance (dof adj.)		1.41E-06
Determinant resid covariance		1.37E-06
Log likelihood		2222.567
Akaike information criterion		-7.751997
Schwarz criterion		-7.591461

ตารางที่ 2 ข ผลการประมาณค่าโดยใช้สมการถดถอยแบบ pooled OLS

Dependent Variable: DLNI
 Method: Panel Least Squares
 Date: 04/12/10 Time: 10:43
 Sample (adjusted): 2000M05 2010M02
 Periods included: 118
 Cross-sections included: 5
 Total panel (unbalanced) observations: 586

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.019326	0.009093	-2.125358	0.0340
DLNCPI	2.970395	1.248102	2.379929	0.0176
DLNI(-1)	-0.235671	0.039973	-5.895783	0.0000
R-squared	0.064728	Mean dependent var		-0.007803
Adjusted R-squared	0.061519	S.D. dependent var		0.203106
S.E. of regression	0.196759	Akaike info criterion		-0.408568
Sum squared resid	22.57033	Schwarz criterion		-0.386179
Log likelihood	122.7103	Hannan-Quinn criter.		-0.399843
F-statistic	20.17393	Durbin-Watson stat		2.037335
Prob(F-statistic)	0.000000			

ตารางที่ 3 ข ผลการประมาณค่าโดยใช้สมการถดถอยแบบ Fixed Effect Model

Dependent Variable: DLNI
 Method: Panel Least Squares
 Date: 04/12/10 Time: 10:46
 Sample (adjusted): 2000M05 2010M02
 Periods included: 118
 Cross-sections included: 5
 Total panel (unbalanced) observations: 586

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.019601	0.009216	-2.126782	0.0339
DLNCPI	3.052073	1.319234	2.313519	0.0210
DLNI(-1)	-0.236749	0.040095	-5.904767	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.066528	Mean dependent var	-0.007803
Adjusted R-squared	0.056854	S.D. dependent var	0.203106
S.E. of regression	0.197247	Akaike info criterion	-0.396842
Sum squared resid	22.52690	Schwarz criterion	-0.344601
Log likelihood	123.2747	Hannan-Quinn criter.	-0.376484
F-statistic	6.877448	Durbin-Watson stat	2.039379
Prob(F-statistic)	0.000000		

ตารางที่ 4 ข ผลการประมาณค่าโดยใช้สมการถดถอยแบบ Random Effect Model

Dependent Variable: DLNI
 Method: Panel EGLS (Cross-section random effects)
 Date: 04/12/10 Time: 10:47
 Sample (adjusted): 2000M05 2010M02
 Periods included: 118
 Cross-sections included: 5
 Total panel (unbalanced) observations: 586
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.019326	0.009116	-2.120095	0.0344
DLNCPI	2.970395	1.251200	2.374036	0.0179
DLNI(-1)	-0.235671	0.040072	-5.881184	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.197247	1.0000
Weighted Statistics				
R-squared	0.064728	Mean dependent var		-0.007803
Adjusted R-squared	0.061519	S.D. dependent var		0.203106
S.E. of regression	0.196759	Sum squared resid		22.57033
F-statistic	20.17393	Durbin-Watson stat		2.037335
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.064728	Mean dependent var		-0.007803
Sum squared resid	22.57033	Durbin-Watson stat		2.037335

ประวัติผู้เขียน

ชื่อ - สกุล

นางสาวกรรณิการ์ ดวงเนตร

วัน เดือน ปี เกิด

21 มกราคม 2530

ประวัติการศึกษา สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนวัดโนนทัยพยับ
ปีการศึกษา 2547

สำเร็จการศึกษาปริญญาตรีเศรษฐศาสตรบัณฑิต (เกียรตินิยมอันดับหนึ่ง)
มหาวิทยาลัยเชียงใหม่ ปีการศึกษา 2552

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved