

Economic Growth Structure and Empirical Comparisons: China, Korea, and Japan

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1. Introduction

The purpose of this paper: I intend to apply the generalized model formulated by Kamiryo in 2001 to three countries: China, Korea, and Japan.

The generalized model is based on the Cobb-Douglas production function, $Y(t) = A(t)K(t)^\alpha L(t)^\beta$, assuming $\alpha + \beta = 1$. This model is an endogenous growth model. Solow's model is an exogenous growth model, but can be expressed as a special case of the generalized model, where the (endogenous) rate of technological progress is zero. The generalized model shows conditions of either diminishing or increasing returns to capital, using the initial parameters. However, this model can also express constant returns to capital by optimizing either the relative share of profit, alpha, or one of the three financial parameters. Effective economic policies are presented by using the differences between each initial and optimal value of three financial parameters (θ_1 , θ_2 , and γ).

Each country has its own problems with economic growth. Yet, three countries have similar high rates of saving, but the growth rate of output differs greatly. I will show the results of the comparison of the three countries. The contents of this comparison are as follow:

- (1) Comparison of the actual trend of the growth rate of output and the rate of profit for 1993-98, using national accounts data.
- (2) Comparison of the situations of IRC, CRC, or DRC¹⁾.

1) the situation of IRC, CRC, or DRC: IRC is where increasing returns to capital ↗

- (3) Comparison of the values of the three financial parameters (θ_1 , θ_2 , and γ) under $RMSE^2 = 0$.
- (4) Comparison of the variables (g_Y , g_K , and g_A) under CRC, using optimal values of alpha (α_c), and θ_1^{opt} , θ_2^{opt} , and γ^{opt} .

2. Equations and concept in the generalized model

2.1 The initial data

The generalized model needs the following seven initial values:

1. D : Dividends
2. S_{Π} : Corporate saving or undistributed profit
3. Π : Profit, where $\Pi \equiv D + S_{\Pi}$.
4. W : Compensation of employees
5. Y : Net national income, where $Y \equiv W + \Pi$.
6. K : Net capital stock
7. L : Population

For a saving-investment relationship, the following six initial values are added:

1. S_{total} : Total saving
2. S : Net saving for investment
3. S_H : Household saving
4. I_M : Imports
5. E_M : Exports
6. I_{NV} : Changes in inventories

2.2 The initial ratios

Using the above initial values, four basic parameters and variables (as a func-

prevalis, CRC is where constant returns to capital prevails, DRC is where diminishing returns to capital prevails.

- 2) RMSE means root mean square error. $RMSE \equiv \sqrt{SUM(g_{Y(model)}(100) - g_{Y(actual)})^2}$

tion of time) are calculated as follows:

n : The growth rate of workers: $n_T \equiv (L_T - L_{T-1})/L_{T-1}$, where T indicates each year in national accounts.

α : The relative share of profit or alpha: $\alpha \equiv \Pi(0)/Y(0)$.

$\Omega(0)$: The capital-output ratio: $\Omega(0) \equiv K(0)/Y(0)$.

$k(0)$: The capital-labour ratio: $k(0) \equiv K(0)/L(0)$.

Other important variables are derived using $t = 0$ as follows:

$r(0)$: The rate of profit: $r(0) \equiv \Pi(0)/K(0)$, $r(t) = \alpha/\Omega(t)$.

$y(0)$: Per capita output : $y(0) \equiv Y(0)/L(0)$,

when using the Cobb-Douglas production function,

$$Y_t = A_t K_t^\alpha L_t^{1-\alpha} \text{ or } y(0) = A(0)k(0)^\alpha$$

$A(0)$: The level of technology, $A(0) = k(0)^{1-\alpha} / \Omega(0)$ since $y_t = A_t K_t^\alpha$.

2.3 Basic concept in the generalized model

1) three financial parameters

First of all, I introduce three financial parameters into the generalized model to determine the qualitative and quantitative investment.

The three financial parameters determine the amount of investment. where investment is divided into two: quantitative and qualitative.

$$I_A(t): \text{ qualitative investment: } I_A(t) = (1-\gamma)\theta_1 S_H(t) + (1-\theta_2)S_\Pi(t)$$

$$I_K(t): \text{ quantitative investment: } I_K(t) = \gamma\theta_1 S_H(t) + \theta_2 S_\Pi(t)$$

The three financial parameters are:

1. θ_1 : a financial intermediary parameter is defined as the fraction of household saving that goes to the corporate and government sectors.
2. θ_2 : a decision-making parameter that shows the relationship between qualitative and quantitative investment decided by managers. It is defined as the fraction of the undistributed profit that the managers decide to invest in (quantitative) capital.

3. γ : a parameter for barriers to technological/structural reform that shows a balance between private and public investment in terms of efficiency. It is defined as the fraction of total household saving net of banking cost that is invested in (quantitative) capital.

The above three financial parameters are directly related to (1) the retention ratio, s_{Π} , (2) the household saving ratio, s_H , or the rate of saving, s , and (3) the relative share of profit, α . The seven initial values are needed for recursive programming: (1) dividends, D , undistributed profit, S_{Π} , profit, Π , compensation of employees, W , net national income, Y , net capital stock, K , population, L .

2) Concept of critical alpha

I define critical alpha, α_c , as the alpha that shows the situation under CRC, where the growth rate of output is flat over time and approaches the growth rate of capital.

3) Explanation of the three situations, IRC, CRC, and DRC

IRC is defined as the situation that shows the growth rate of output increasing over time, while DRC is defined as the situation that shows the growth rate of output decreasing over time. DRC approaches CRC over time.

The relationship between IRC, CRC, and DRC are expressed using critical alpha:

1. If $\alpha < \alpha_{critical}$, the situation is DRC.
2. If $\alpha = \alpha_{critical}$, the situation is CRC (by definition).
3. If $\alpha > \alpha_{critical}$, the situation is IRC.

2.4 Basic equations derived

1. $L_t = L(0) (1 + n)^t$ population.
2. $Y_t = A_t K_t^\alpha L_t^{1-\alpha}$ or $y_t = A_t k_t^\alpha$ under constant returns to scale.
3. $\Pi_t = \alpha Y_t$ profit.
4. $W_t = (1 - \alpha) Y_t$ compensation of employees.

5. $D_t = (1 - s_{\Pi})\Pi_t$ dividends.
6. $S_{Ht} = s_H(W_t + D_t)$ household saving.
7. $S_{\Pi t} = s_{\Pi}\Pi_t$ corporate saving or undistributed profit.
8. $I_K(t) = \gamma\theta_1 S_H(t) + \theta_2 S_{\Pi}(t)$ as quantitative investment.
9. $I_A(t) = (1 - \gamma)\theta_1 S_H(t) + (1 - \theta_2)S_{\Pi}(t)$ as qualitative investment.
10. $\Delta K_t = I_K$.
11. $\Delta A_t = I_A$.
12. $K_{t+1} = K_t + I_{Kt} = K_t + \gamma\theta_1 S_H(t) + \theta_2 S_{\Pi}(t)$
13. $K_{t+1} = K_t + \gamma\theta_1 \cdot s_{Ht}(W_t + D_t) + \theta_2 s_{\Pi}\Pi_t$.
14. $K_{t+1} = K_t + \gamma\theta_1 \cdot s_{Ht}((1 - \alpha)Y_t + (1 - s_{\Pi})\Pi_t) + \theta_2 s_{\Pi}\Pi_t$.
15. $K_{t+1} = K_t + \gamma\theta_1 \cdot s_{Ht}((1 - \alpha)Y_t + (1 - s_{\Pi})\alpha Y_t) + \theta_2 s_{\Pi}\alpha Y_t$.
16. $K_{t+1} = K_t + \gamma\theta_1 \cdot s_{Ht}((1 - \alpha)A_t K_t^{\alpha} + (1 - s_{\Pi})\alpha A_t K_t^{\alpha}) + \theta_2 s_{\Pi}\alpha A_t K_t^{\alpha}$.
 $= K_t + (\gamma\theta_1 \cdot s_{Ht}((1 - \alpha) + (1 - s_{\Pi})\alpha) + \theta_2 s_{\Pi}\alpha) A_t K_t^{\alpha}$.
 $= K_t + (\gamma\theta_1 \cdot s_{Ht}(1 - s_{\Pi}\alpha) + \theta_2 s_{\Pi}\alpha) A_t K_t^{\alpha}$.
17. $A_{t+1} = A_t + \Delta A_t$ the level of technology.
18. $A_{t+1} = A_t + I_{At} = A_t + (1 - \gamma)\theta_1 S_H(t) + (1 - \theta_2)S_{\Pi}(t)$.
 $= A_t + ((1 - \gamma)\theta_1 s_H(1 - s_{\Pi}\alpha) + (1 - \theta_2)s_{\Pi}\alpha) A_t K_t^{\alpha}$.
19. $g_{A_t} = \frac{\Delta A_t}{A_t}$, $\Delta A_t = A_{t+1} - A_t$, where $g_A(t)$ is the rate of technological progress.
20. $A_{t+1} - A_t = ((1 - \gamma)\theta_1 s_H(1 - s_{\Pi}\alpha) + (1 - \theta_2)s_{\Pi}\alpha) A_t K_t^{\alpha}$ (using Equation 18).
21. $g_A(t) \equiv \frac{A_{t+1} - A_t}{A_t} = ((1 - \gamma)\theta_1 s_H(1 - s_{\Pi}\alpha) + (1 - \theta_2)s_{\Pi}\alpha) K_t^{\alpha}$.
22. $g_K = \frac{\Delta K_t}{K_t}$, $\Delta K_t = K_{(t+1)} - K_t$.
23. $K_{t+1} - K_t = (\gamma\theta_1 s_{Ht}(1 - s_{\Pi}\alpha) + \theta_2 s_{\Pi}\alpha) A_t K_t^{\alpha}$ (using Equation 16).
24. $g_K(t) = g_k(t) + n$.

Note that using $K = k \cdot L$, $K(1 + g_K(t)) = k(1 + g(k))L(1 + n)$,

where $g_K(t) = g_k(t) + n + ng_k(t)$ and the value of $ng_k(t)$ is omitted.

25. $g_K(t) \equiv \frac{K_{t+1} - K_t}{K_t} + n = (\gamma\theta_1 s_H(1 - s_\Pi\alpha) + \theta_2 s_\Pi\alpha) A_t K_t^{\alpha-1} + n.$
26. $K_{t+1} = K(1 + g_K(t)).$
27. $g_Y(t) = g_A(t) + \alpha g_K(t) + (1 - \alpha)n$, where $g_Y(t)$ is the growth rate of output.
28. $\Omega(t) = k(t)/y(t)$ the capital-output ratio.
29. $r(t) = \alpha/\Omega(t)$ the rate of profit.
30. $y(0) = A(0)k(0)^\alpha$, where y is per capita output.
31. $y(t) = A(t)k(t)^\alpha$ per capita output.

2.5 The basic structure of the generalized model

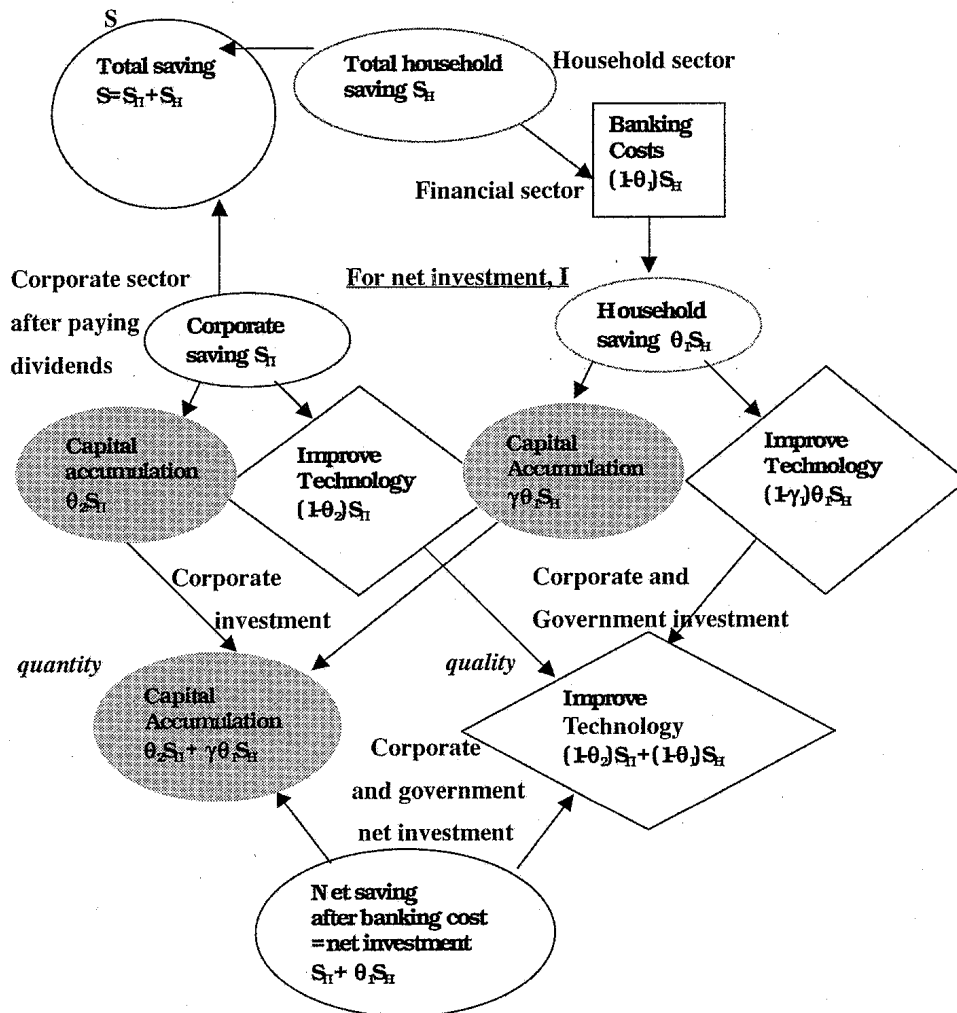
Total investment is divided into qualitative and quantitative investment, and also corporate and household saving/investment.

Saving is composed of corporate saving/undistributed profit and household saving before deducting banking costs. Saving after deducting banking costs equals net investment (for an explanation of the basic ideas, see Figure 1-1). Net investment is investment less capital consumption (depreciation). Net investment is composed of both qualitative and quantitative investment. Investment is used for the corporate and government sectors (neglecting investment within the household sector).

In the generalized model, the contents of the structure of saving/investment are shown as follow:

- 1) Total saving is divided into corporate saving/undistributed profit (S_Π) and household saving (S_H). Household saving (S_H) is total household saving after deducting banking costs. Corporate saving/undistributed profit (S_Π) is corporate profit (Π) after deducting dividends (D).
- 2) Corporate saving/undistributed profit (S_Π) is divided into qualitative investment ($I_{A\Pi}(t) = (1 - \theta_2)S_\Pi$) and quantitative investment ($I_{K\Pi}(t) = \theta_2 S_\Pi$).

Figure 1-1 Saving and investment diagram: compared with the simplified model and the Solow model



Note 1: This diagram, from Kamiryo [2001], shows $S = I$ under an assumption that exports, EX, equal imports, IM, and the household sector does not invest. When exports differ from imports, $S + IM - EX = I$. The change in inventories is first deducted from saving. As a special case of the generalized model, corporate saving/undistributed profit is only used for the improvements in technology and household saving is only used for capital accumulation. This is called the simplified model.

Note 2: The Solow [1956] model is shown with shadows in the generalized model, where saving is all used for capital accumulation: $g_A = 0$.

Source: Figure 3-2 in Kamiryo [2001].

Household saving (S_H) is divided into qualitative investment ($I_{AH}(t) = (1-\gamma)\theta_1 S_H$) and quantitative investment ($I_{KH}(t) = \gamma\theta_1 S_H$).

- 3) Net investment equals total saving after deducting banking costs. The net investment is composed of both qualitative for improvements in technology and quantitative investment for capital accumulation. Then, how can investment be divided into qualitative and quantitative investment? The three financial parameters determine each amount of investment.

$$I_A(t): \text{qualitative investment: } I_A(t) = (1-\gamma)\theta_1 S_H(t) + (1-\theta_2)S_{\Pi}(t)$$

$$I_K(t): \text{quantitative investment: } I_K(t) = \gamma\theta_1 S_H(t) + \theta_2 S_{\Pi}(t)$$

- 4) The simplified model is a special case of the generalized model. In the simplified model corporate saving/undistributed profit (S_{Π}) is only used for the qualitative investment for improvements in technology, and household saving (S_H) is only used for quantitative investment for capital accumulation.

3. Results of calibration, optimality, and elasticity

This section shows results of calibration and also methods for measuring optimal values for the financial parameters and the values of elasticity (see appendix), related to the optimal/maximized growth rates and, in particular, the elasticity of technology with respect to capital.

1) Results of calibration: China versus Korea, Japan

The results of calibration are shown in *Table1-1*, *Table1-2*, for the following: seven parameters (n^{est} , α^{est} , s_{Π}^{est} , s^{est} , θ_1^{est} , θ_2^{est} , and γ^{est} , where estimated = actual for the period), the critical value of alpha, the actual values of the growth rate of output and the rate of profit, and the growth rate of output and the rate of profit under the situation of CRC (where alpha = the critical alpha).

Table 1-1 Estimated parameter values from calibration: Korea & China

| Korea | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------------|---------|---------|---------|---------|---------|----------|
| n^{est} | 0.01080 | 0.01060 | 0.01040 | 0.00980 | 0.00930 | 0.00850 |
| α^{est} | 0.10700 | 0.11310 | 0.10600 | 0.06376 | 0.05019 | -0.08530 |
| s_{Π}^{est} | 0.81920 | 0.81010 | 0.81764 | 0.71141 | 0.67632 | 1.22265 |
| s^{est} | 0.48950 | 0.50240 | 0.52131 | 0.53288 | 0.47992 | 0.39073 |
| $1-\theta_1^{est}$ | 0.30000 | 0.30000 | 0.30000 | 0.30000 | 0.30000 | 0.30000 |
| $1-\theta_2^{est}$ | 0.21000 | 0.22000 | 0.23000 | 0.24000 | 0.25000 | 0.26000 |
| $1-\gamma^{est}$ | 0.05931 | 0.05473 | 0.06479 | 0.08113 | 0.17788 | -0.63045 |
| α_c | 0.06500 | 0.06500 | 0.06000 | 0.04000 | 0.01000 | 0.20700 |
| $\alpha^{est}-\alpha_c$ | 0.04200 | 0.04810 | 0.04600 | 0.02376 | 0.04019 | -0.29230 |
| Situation | IRC | IRC | IRC | IRC | IRC | DRC |
| g_Y^{actual} | 0.11935 | 0.13959 | 0.15214 | 0.08241 | 0.12944 | -0.17765 |
| r^{actual} | 0.05847 | 0.05383 | 0.04505 | 0.02353 | 0.01745 | -0.02176 |
| $g_Y(\alpha = \alpha_c)$ | 0.06131 | 0.06070 | 0.06657 | 0.06050 | 0.07646 | 0.03135 |
| $r(\alpha = \alpha_c)$ | 0.00952 | 0.00918 | 0.00927 | 0.00569 | 0.00240 | 0.01407 |
| $\Omega(0)$ | 1.8300 | 2.1011 | 2.3529 | 2.7097 | 2.8762 | 3.9200 |
| Leverage: | 4.5844 | 4.4834 | 5.0172 | 10.7479 | 13.1384 | (4.7447) |

| China | 1993 | 1994 | 1995 | 1996 | 1997 |
|--------------------------|---------|---------|---------|---------|---------|
| n^{est} | 0.01149 | 0.01125 | 0.01060 | 0.01047 | 0.01011 |
| α^{est} | 0.10690 | 0.10740 | 0.11510 | 0.07780 | 0.09810 |
| s_{Π}^{est} | 0.99030 | 0.97960 | 0.80130 | 0.69310 | 0.60070 |
| s^{est} | 0.41480 | 0.38670 | 0.32690 | 0.31110 | 0.28060 |
| $1-\theta_1^{est}$ | 0.30000 | 0.30000 | 0.30000 | 0.30000 | 0.30000 |
| $1-\theta_2^{est}$ | 0.20000 | 0.21000 | 0.22000 | 0.23000 | 0.24000 |
| $1-\gamma^{est}$ | 0.23457 | 0.28932 | 0.28934 | 0.25127 | 0.26559 |
| α_c | 0.01000 | 0.01000 | 0.01200 | 0.01500 | 0.01300 |
| $\alpha^{est}-\alpha_c$ | 0.09690 | 0.09740 | 0.10310 | 0.06280 | 0.08510 |
| Situation | IRC | IRC | IRC | IRC | IRC |
| g_Y^{actual} | 0.25569 | 0.35791 | 0.27417 | 0.11977 | 0.13844 |
| r^{actual} | 0.06182 | 0.06481 | 0.07042 | 0.04319 | 0.05205 |
| $g_Y(\alpha = \alpha_c)$ | 0.08510 | 0.09637 | 0.08309 | 0.07149 | 0.06721 |
| $r(\alpha = \alpha_c)$ | 0.00324 | 0.00432 | 0.00521 | 0.00546 | 0.00502 |
| $\Omega(0)$ | 1.7292 | 1.6572 | 1.6345 | 1.8013 | 1.8847 |
| Leverage: | 2.9183 | 2.6755 | 2.5444 | 4.7693 | 3.7617 |

Table 1-2 Estimated parameter values from calibration: Japan & China

| Japan | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------------|---------|----------|----------|----------|----------|----------|
| n^{est} | 0.00393 | 0.00126 | 0.00116 | 0.00675 | 0.01132 | 0.00088 |
| α^{est} | 0.0859 | 0.07800 | 0.0703 | 0.0832 | 0.0868 | 0.0666 |
| s_{Π}^{est} | 0.44601 | 0.30100 | 0.38757 | 0.57902 | 0.60870 | 0.49197 |
| s^{est} | 0.28159 | 0.25509 | 0.24264 | 0.25632 | 0.24405 | 0.20693 |
| $1-\theta_1^{est}$ | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| $1-\theta_2^{est}$ | 0.325 | 0.35 | 0.375 | 0.4 | 0.425 | 0.45 |
| $1-\gamma^{est}$ | 0.0029 | 0.00496 | -0.01862 | -0.01886 | -0.10314 | -0.31614 |
| α_c | 0.06100 | 0.08200 | 0.09000 | 0.07000 | 0.09700 | 0.16700 |
| $\alpha^{est}-\alpha_c$ | 0.0249 | -0.00400 | -0.01970 | 0.01320 | -0.01020 | -0.10040 |
| Situation | IRC | DRC | DRC | IRC | DRC | DRC |
| g_Y^{actual} | 0.02745 | 0.01652 | 0.01227 | 0.03579 | 0.02320 | -0.03660 |
| r^{actual} | 0.02210 | 0.02052 | 0.01885 | 0.02347 | 0.02451 | 0.01846 |
| $g_Y(\alpha = \alpha_c)$ | 0.01808 | 0.01767 | 0.01924 | 0.02755 | 0.03013 | 0.01696 |
| $r(\alpha = \alpha_c)$ | 0.00473 | 0.00765 | 0.00930 | 0.00771 | 0.01002 | 0.01709 |
| $\Omega(0)$ | 3.8870 | 3.8016 | 3.7285 | 3.5452 | 3.5408 | 3.6084 |
| Leverage: | 6.3499 | 9.8651 | 7.9055 | 4.3207 | 3.6191 | 5.3155 |

| China | 1993 | 1994 | 1995 | 1996 | 1997 |
|--------------------------|---------|---------|---------|---------|---------|
| n^{est} | 0.01149 | 0.01125 | 0.01060 | 0.01047 | 0.01011 |
| α^{est} | 0.10690 | 0.10740 | 0.11510 | 0.07780 | 0.09810 |
| s_{Π}^{est} | 0.99030 | 0.97960 | 0.80130 | 0.69310 | 0.60070 |
| s^{est} | 0.41480 | 0.38670 | 0.32690 | 0.31110 | 0.28060 |
| $1-\theta_1^{est}$ | 0.30000 | 0.30000 | 0.30000 | 0.30000 | 0.30000 |
| $1-\theta_2^{est}$ | 0.20000 | 0.21000 | 0.22000 | 0.23000 | 0.24000 |
| $1-\gamma^{est}$ | 0.23457 | 0.28932 | 0.28934 | 0.25127 | 0.26559 |
| α_c | 0.01000 | 0.01000 | 0.01200 | 0.01500 | 0.01300 |
| $\alpha^{est}-\alpha_c$ | 0.09690 | 0.09740 | 0.10310 | 0.06280 | 0.08510 |
| Situation | IRC | IRC | IRC | IRC | IRC |
| g_Y^{actual} | 0.25569 | 0.35791 | 0.27417 | 0.11977 | 0.13844 |
| r^{actual} | 0.06182 | 0.06481 | 0.07042 | 0.04319 | 0.05205 |
| $g_Y(\alpha = \alpha_c)$ | 0.08510 | 0.09637 | 0.08309 | 0.07149 | 0.06721 |
| $r(\alpha = \alpha_c)$ | 0.00324 | 0.00432 | 0.00521 | 0.00546 | 0.00502 |
| $\Omega(0)$ | 1.7292 | 1.6572 | 1.6345 | 1.8013 | 1.8847 |
| Leverage: | 2.9183 | 2.6755 | 2.5444 | 4.7693 | 3.7617 |

1. The estimated parameter values of the rate of saving are extremely high in China, Korea, and Japan, compared with other countries.
2. The estimated parameter value of alpha differs by country.
3. Using $RMSE = 0$, the three financial parameters are estimated. Banking costs, $1-\theta_1^{est}$, are set fixed: China and Korea each 0.3 and Japan 0.2. Qualitative investment that uses corporate saving, $1-\theta_2^{est}$, and qualitative investment that uses household saving, $1-\gamma^{est}$, are more sensitive than banking costs. $1-\theta_2^{est}$ in Korea and China have similar values (0.2–0.3), while that in Japan a little lower (0.3–0.45). However, the value of $1-\gamma^{est}$ for Korea and China is much higher than that of Japan is: 0.05–0.2 in Korea and 0.25–0.3 in China. Japan's $1-\gamma^{est}$ is almost zero and after 1995 it turned to negative values. The Japanese economy is much inferior to Korea and China in the use of household saving.
4. the actual values of the growth rate of output and the growth rate of output under the situation of CRC in China are much higher than those in Korea and Japan. What are reasons for this? 1. The value of γ^{est} in China is very much lower than in Korea and Japan. This means that qualitative investment in China is much better than that in Korea and Japan. 2. The financial leverage in China is very much lower than Korea and Japan. This means that the China economy is much better than Korea and Japan in the use of household saving. As a result, the growth rate of output finally became negative in Japan in 1998.
5. As for financial leverage, Korea and Japan aggravated its level. China enjoys a low financial leverage.
6. As a result, the Chinese economy is more stable than the Korean economy. The actual growth rate of output and theoretical growth rate of output (under CRC) are higher than those in Korea. The growth rate of output under CRC in the Japanese economy is considerably lower than for

Korea and China.

7. Both Korea and China enjoyed increasing returns to capital between 1993 to 1997, but the differences between the critical alpha and alpha differ significantly. This is another indication that the Chinese economy is more stable than the Korean economy. Critical alpha in Japan is closer to alpha, but unstable. The Korean economy is more stable than Japan and has enjoyed IRC except for 1998, when the situation suddenly changed from IRC to DRC.

2) The results of Optimality

1. Concept of optimal values for the financial parameters:

Optimal values for the financial parameters are defined as those for which the growth rate of output in the long-run is maximized when alpha equals its critical value. This means optimal values for the financial parameters (θ_1^{opt} , θ_2^{opt} , and γ^{opt}) are defined as their values under the situation of CRC.

2. Objective: To try to bring each of the three financial parameters to optimal value under CRC.

- (1) Change γ using the calibrated values of the other parameters.
- (2) Change θ_1 using the calibrated values of the other parameters.
- (3) Change θ_2 using the calibrated values of the other parameters.

See the results in *Table2-1*, *Table2-2*. It is shown that China and Korea should have raised parameter γ to 1.00 in 1993-1997 in order to attain the growth rate of output under CRC.

This means that China and Korea need more quantitative investment. But Korea should have decreased parameter γ from 1.63 to 0.82 in 1998. This means that China and Korea need more qualitative investment.

Which parameter is most effective to bring about the optimal situation under CRC? Consider the following:

Table 2-1 Optimal policies for the three financial parameters: Korea and China

| | | γ^{est} | θ_1^{est} | θ_2^{est} | $g_Y(100)$ | $r(100)$ | |
|-------|------------------|------------------|------------------|------------------|------------|----------|---------|
| Korea | 1993 | γ^{opt} | 1.01 | 0.7 | 0.79 | 0.04587 | 0.01027 |
| | | θ_1^{opt} | 0.94069 | 0.001 | 0.79 | 0.04518 | 0.04924 |
| | | θ_2^{opt} | 0.94069 | 0.7 | 1.0125 | 0.4586 | 0.01026 |
| | 1994 | γ^{opt} | 1.02 | 0.7 | 0.78 | 0.04493 | 0.01029 |
| | | θ_1^{opt} | 0.94527 | -0.075 | 0.78 | 0.04467 | 0.08124 |
| | | θ_2^{opt} | 0.94527 | 0.7 | 1.0145 | 0.04494 | 0.01029 |
| | 1995 | γ^{opt} | 1.012 | 0.7 | 0.77 | 0.04837 | 0.01025 |
| | | θ_1^{opt} | 0.93521 | 0.001 | 0.77 | 0.04899 | 0.05559 |
| | | θ_2^{opt} | 0.93521 | 0.7 | 1.04 | 0.04829 | 0.01023 |
| 1996 | γ^{opt} | 0.97 | 0.7 | 0.76 | 0.04499 | 0.00604 | |
| | θ_1^{opt} | 0.91887 | 0.2879 | 0.76 | 0.04499 | 0.01331 | |
| | θ_2^{opt} | 0.91887 | 0.7 | 1.1447 | 0.04499 | 0.00604 | |
| 1997 | γ^{opt} | 0.94 | 0.7 | 0.75 | 0.05069 | 0.00635 | |
| | θ_1^{opt} | 0.82212 | 0.08 | 0.75 | 0.02883 | 0.01736 | |
| | θ_2^{opt} | 0.82212 | 0.7 | 1.8341 | 0.05069 | 0.00635 | |
| 1998 | γ^{opt} | 0.82 | 0.7 | 0.74 | 0.02821 | -0.00931 | |
| | θ_1^{opt} | 1.63045 | 0.1 | 0.74 | -0.03755 | 0.00019 | |
| | θ_2^{opt} | 1.63045 | 0.7 | 3.372 | 0.02823 | -0.00787 | |
| China | | γ^{est} | θ_1^{est} | θ_2^{est} | $g_Y(100)$ | $r(100)$ | |
| | 1993 | γ^{opt} | 1.02 | 0.7 | 0.8 | 0.03801 | 0.00949 |
| | θ_1^{opt} | 0.76543 | -0.09 | 0.8 | 0.03025 | 0.033 | |
| | θ_2^{opt} | 0.76543 | 0.7 | 1.32 | 0.03801 | 0.00949 | |
| 1994 | γ^{opt} | 1.01 | 0.7 | 0.79 | 0.04467 | 0.01238 | |
| | θ_1^{opt} | 0.71068 | -0.1 | 0.79 | 0.02969 | 0.03304 | |
| | θ_2^{opt} | 0.71068 | 0.7 | 1.35 | 0.04479 | 0.01242 | |
| 1995 | γ^{opt} | 1.03 | 0.7 | 0.78 | 0.03635 | 0.01258 | |
| | θ_1^{opt} | 0.71066 | -0.13 | 0.78 | 0.02594 | 0.03831 | |
| | θ_2^{opt} | 0.71066 | 0.7 | 1.35 | 0.03614 | 0.01250 | |
| 1996 | γ^{opt} | 0.9525 | 0.7 | 0.77 | 0.04056 | 0.01097 | |
| | θ_1^{opt} | 0.74873 | -0.02 | 0.77 | 0.02375 | 0.02998 | |
| | θ_2^{opt} | 0.74873 | 0.7 | 1.45 | 0.04059 | 0.01098 | |
| 1997 | γ^{opt} | 1.005 | 0.7 | 0.76 | 0.03056 | 0.01088 | |
| | θ_1^{opt} | 0.73441 | 0.03 | 0.76 | 0.0312 | 0.04078 | |
| | θ_2^{opt} | 0.73441 | 0.7 | 1.4725 | 0.03056 | 0.01088 | |

Table 2-2 Optimal policies for the three financial parameters: Japan and China

| Japan | | γ^{est} | θ_1^{est} | θ_2^{est} | $g_r(100)$ | $r(100)$ |
|-------|------------------|----------------|------------------|------------------|------------|----------|
| 1993 | γ^{opt} | 1.035 | 0.8 | 0.675 | 0.01401 | 0.00547 |
| | θ_1^{opt} | 0.9971 | 0.9 | 0.675 | 0.02783 | 0.00860 |
| | θ_2^{opt} | 0.9971 | 0.8 | 0.867 | 0.01405 | 0.00548 |
| 1994 | γ^{opt} | 0.98 | 0.8 | 0.65 | 0.02133 | 0.00844 |
| | θ_1^{opt} | 0.99504 | 0.4 | 0.65 | 0.01501 | 0.01128 |
| | θ_2^{opt} | 0.99504 | 0.8 | 0.53 | 0.02138 | 0.00846 |
| 1995 | γ^{opt} | 0.99 | 0.8 | 0.625 | 0.02016 | 0.00768 |
| | θ_1^{opt} | 1.01862 | 0.31 | 0.625 | 0.01452 | 0.01219 |
| | θ_2^{opt} | 1.01862 | 0.8 | 0.45 | 0.02034 | 0.00774 |
| 1996 | γ^{opt} | 1.042 | 0.8 | 0.6 | 0.02835 | 0.00928 |
| | θ_1^{opt} | 1.01886 | 2.3 | 0.6 | 0.02623 | 0.00352 |
| | θ_2^{opt} | 1.01886 | 0.8 | 0.68 | 0.02835 | 0.00928 |
| 1997 | γ^{opt} | 1.078 | 0.8 | 0.575 | 0.03011 | 0.00906 |
| | θ_1^{opt} | 1.10314 | 0.594 | 0.575 | 0.03011 | 0.01117 |
| | θ_2^{opt} | 1.10314 | 0.8 | 0.5022 | 0.03011 | 0.00906 |
| 1998 | γ^{opt} | 1.02 | 0.8 | 0.55 | 0.01922 | 0.00825 |
| | θ_1^{opt} | 1.31614 | 0.124 | 0.55 | 0.01194 | 0.01637 |
| | θ_2^{opt} | 1.31614 | 0.8 | -0.71 | 0.01926 | 0.00826 |
| China | | γ^{est} | θ_1^{est} | θ_2^{est} | $g_r(100)$ | $r(100)$ |
| 1993 | γ^{opt} | 1.02 | 0.7 | 0.8 | 0.03801 | 0.00949 |
| | θ_1^{opt} | 0.76543 | -0.09 | 0.8 | 0.03025 | 0.033 |
| | θ_2^{opt} | 0.76543 | 0.7 | 1.32 | 0.03801 | 0.00949 |
| 1994 | γ^{opt} | 1.01 | 0.7 | 0.79 | 0.04467 | 0.01238 |
| | θ_1^{opt} | 0.71068 | -0.1 | 0.79 | 0.02969 | 0.03304 |
| | θ_2^{opt} | 0.71068 | 0.7 | 1.35 | 0.04479 | 0.01242 |
| 1995 | γ^{opt} | 1.03 | 0.7 | 0.78 | 0.03635 | 0.01258 |
| | θ_1^{opt} | 0.71066 | -0.13 | 0.78 | 0.02594 | 0.03831 |
| | θ_2^{opt} | 0.71066 | 0.7 | 1.35 | 0.03614 | 0.01250 |
| 1996 | γ^{opt} | 0.9525 | 0.7 | 0.77 | 0.04056 | 0.01097 |
| | θ_1^{opt} | 0.74873 | -0.02 | 0.77 | 0.02375 | 0.02998 |
| | θ_2^{opt} | 0.74873 | 0.7 | 1.45 | 0.04059 | 0.01098 |
| 1997 | γ^{opt} | 1.005 | 0.7 | 0.76 | 0.03056 | 0.01088 |
| | θ_1^{opt} | 0.73441 | 0.03 | 0.76 | 0.0312 | 0.04078 |
| | θ_2^{opt} | 0.73441 | 0.7 | 1.4725 | 0.03056 | 0.01088 |

1. The difference between the optimal value of γ and estimated γ is not so much larger in Korea than China. This means Korea can more effectively use economic policies for improving this γ .
2. The difference between estimated and optimal values of γ is larger in China than in Korea. China needs more quantitative investment than Korea. This difference is the smallest in Japan, which means that Japan can raise the growth rate of output by improving structural reform using household saving. On the contrary, the difference was large and unstable in 1998 in Korea. This implies that Korea may approach a normal DRC situation (as seen in many countries) unless saving is invested more qualitatively.
3. The difference between optimal value of θ_1 and estimated θ_1 is comparatively large in Korea and China. This implies that both countries cannot make use of the value of θ_1 for improving its economic policies, and that banking costs cannot so effectively be used for optimality. There is much room for Japan to improve banking costs since the difference between optimal value of θ_1 and estimated θ_1 is smaller than that of Korea and China.
4. The difference between optimal value of θ_2 and estimated θ_2 is comparatively large in China while this difference is comparatively small in Japan. The situation of Korea is between those of China and Japan. This implies that the situation of China is extreme IRC and that China can reach CRC by slowing down technological progress in the corporate sector. On the other hand, Korea can reach CRC easily by changing the estimated θ_2 . Despite Korea's economic difficulties after 1997, its optimal θ_2 is rather stable. This implies that Korea can recover from the economic difficulties quickly.

3) The result of elasticity values

Define each value of elasticity as follows:

$$1. \quad e_{\gamma}^{\alpha_c} = \frac{(\alpha - \alpha_c) / \alpha}{(\gamma^{est} - \gamma^{opt}) / \gamma_1^{est}} \quad (\text{elasticity of } \alpha_c \text{ with respect to } \gamma).$$

$$2. \quad e_{\theta_1}^{\alpha_c} = \frac{(\alpha - \alpha_c) / \alpha}{(\theta_1^{est} - \theta_1^{opt}) / \theta_1^{est}} \quad (\text{elasticity of } \alpha_c \text{ with respect to } \theta_1).$$

$$3. \quad e_{\theta_2}^{\alpha_c} = \frac{(\alpha - \alpha_c) / \alpha}{(\theta_2^{est} - \theta_2^{opt}) / \theta_2^{est}} \quad (\text{elasticity of } \alpha_c \text{ with respect to } \theta_2).$$

$$4. \quad e_{capital}^{tech} = \frac{(\alpha - \alpha_c) / \alpha}{g_A(100) / g_K(100)} \quad (\text{elasticity of technology with respect to capital}).$$

When a value of this elasticity is high, the related financial parameter is more effectively used to change economic growth. When the value of elasticity of technology with respect to capital is low, the situation is close to the situation of CRC. The values of elasticity differ greatly by parameter and country, thus showing characteristics of each country's growth structure.

In general, if financial leverage is high, the elasticity of the critical alpha with respect to γ will be effective for improving the economy. This implies that household saving should be invested as effectively as corporate saving. The following comparisons are useful for better understanding of the three economies (see *Table3-1*, *Table3-2*):

1. The above value of the elasticity of the critical alpha with respect to γ is higher in Korea than in China. This means that the financial parameter γ in Korea is more effectively used than that in China.
2. In particular, the elasticity of technology with respect to capital is lower in Korea than that in China except for 1998. This means that the situation of IRC is more close to the situation of CRC in Korea it is in China.
3. This is because the critical alpha is so low in China. Note that the value of the theoretical g_A/g_K is much higher in China and lower in Japan than

Table 3-1 The values of elasticity: Korea and China

| | $e^{\alpha_c}_{\gamma}$ | $e^{\alpha_c}_{\theta_1}$ | $e^{\alpha_c}_{\theta_2}$ | $(\alpha - \alpha_c)/\alpha$ | $g_A/g_K(100)$ | $e^{tech}_{capital}$ |
|--------------|-------------------------|---------------------------|---------------------------|------------------------------|----------------|----------------------|
| Korea | | | | | | |
| 1993 | -5.3274 | 0.3931 | -1.9381 | 0.39252 | 0.8997 | 0.43628 |
| 1994 | -5.3795 | 0.4259 | -1.5796 | 0.42529 | 0.9157 | 0.46445 |
| 1995 | -5.4237 | 0.4344 | -1.237 | 0.43375 | 0.9247 | 0.46908 |
| 1996 | -6.6969 | 0.5217 | -0.944 | 0.37265 | 0.8723 | 0.42719 |
| 1997 | -5.5846 | 0.9041 | -0.6322 | 0.80076 | 0.9247 | 0.86592 |
| 1998 | -3.7447 | 3.9965 | -1.002 | 3.42559 | -21.9 | -0.156 |
| China | | | | | | |
| 1993 | -2.7255 | 0.8032 | -1.3945 | 0.90645 | 0.9505 | 0.95366 |
| 1994 | -2.1532 | 0.7935 | -1.2794 | 0.90689 | 0.9653 | 0.9348 |
| 1995 | -2.0707 | 0.7848 | -1.2733 | 0.9305 | 0.9571 | 0.97222 |
| 1996 | -2.9659 | 0.7848 | -0.9140 | 0.8072 | 0.9061 | 0.89085 |
| 1997 | -2.3544 | 0.9063 | -0.9253 | 0.86748 | 0.9202 | 0.94275 |
| 1998 | | | | | | |

Elasticity of the crucial alpha with respect to the financial parameters:

$$e^{\alpha_c}_{\gamma} = ((\alpha - \alpha_c) / \alpha) / ((\gamma^{est} - \gamma^{opt}) / \gamma^{est})$$

$$e^{\alpha_c}_{\theta_1} = ((\alpha - \alpha_c) / \alpha) / ((\theta_1^{est} - \theta_1^{opt}) / \theta_1^{est})$$

$$e^{\alpha_c}_{\theta_2} = ((\alpha - \alpha_c) / \alpha) / ((\theta_2^{est} - \theta_2^{opt}) / \theta_2^{est})$$

$$e^{tech}_{capital} = ((\alpha - \alpha_c) / \alpha) / (g_A(100) / g_K(100))$$

Table 3-2 The values of elasticity: Japan and China

| | $e^{\alpha_c}_{\gamma}$ | $e^{\alpha_c}_{\theta_1}$ | $e^{\alpha_c}_{\theta_2}$ | $(\alpha - \alpha_c)/\alpha$ | $g_A/g_K(100)$ | $e^{tech}_{capital}$ |
|--------------|-------------------------|---------------------------|---------------------------|------------------------------|----------------|----------------------|
| Japan | | | | | | |
| 1993 | -7.6262 | -2.319 | -1.0191 | 0.28987 | 0.7669 | 0.37798 |
| 1994 | -3.3939 | -0.1026 | -0.2778 | -0.0513 | 0.7262 | -0.0706 |
| 1995 | -9.973 | -0.4575 | -1.0008 | -0.2802 | 0.6215 | -0.4509 |
| 1996 | -6.9843 | -0.0846 | -1.1899 | 0.15865 | 0.7572 | 0.20952 |
| 1997 | -5.1564 | -0.4564 | -0.9281 | -0.1175 | 0.3902 | -0.3012 |
| 1998 | -6.6998 | -1.784 | -0.658 | -1.5075 | -26.056 | 0.05786 |
| China | | | | | | |
| 1993 | -2.7255 | 0.8032 | -1.3945 | 0.90645 | 0.9505 | 0.95366 |
| 1994 | -2.1532 | 0.7935 | -1.2794 | 0.90689 | 0.9653 | 0.9348 |
| 1995 | -2.0707 | 0.7848 | -1.2733 | 0.9305 | 0.9571 | 0.97222 |
| 1996 | -2.9659 | 0.7848 | -0.9140 | 0.8072 | 0.9061 | 0.89085 |
| 1997 | -2.3544 | 0.9063 | -0.9253 | 0.86748 | 0.9202 | 0.94275 |
| 1998 | | | | | | |

Elasticity of the crucial alpha with respect to the financial parameters:

$$e^{\alpha_c}_{\gamma} = ((\alpha - \alpha_c) / \alpha) / ((\gamma^{est} - \gamma^{opt}) / \gamma^{est})$$

$$e^{\alpha_c}_{\theta_1} = ((\alpha - \alpha_c) / \alpha) / ((\theta_1^{est} - \theta_1^{opt}) / \theta_1^{est})$$

$$e^{\alpha_c}_{\theta_2} = ((\alpha - \alpha_c) / \alpha) / ((\theta_2^{est} - \theta_2^{opt}) / \theta_2^{est})$$

$$e^{tech}_{capital} = ((\alpha - \alpha_c) / \alpha) / (g_A(100) / g_K(100))$$

that value in Korea. The Japanese economy in recent years only used public investment for the recovery of demand and surprisingly lowered the value of $g_A(100)/g_K(100)$: 0.7669 in 1993, 0.3902 in 1997, and -26.056 in 1998.

4. In these three countries, the rate of saving is extremely high, yet Chinese economic policies using household saving is more effective than those in Korea and Japan. If China continues to invest extremely in public capital, the above situation may change.
5. In general, China is stable although the effectiveness of economic policies is not so much compared with Korea and Japan.

Finally, it is noted that the three financial parameters are interrelated. For example, the higher θ_2 for corporate saving/investment the lower γ for household saving/investment. Financial leverage (the ratio of household saving to undistributed profit) is also involved in this interrelationship. Financial leverage is "neutral" only if the values of all three financial parameters remain unchanged. Korea and Japan each have a high level of financial leverage.

In particular, when the situation is under DRC, we should focus on economic policies that lower banking costs, remove barriers to technology and structural reform, and invest more qualitatively than quantitatively.

4. Conclusions

The generalized model [Kamiryo, 2001] endogenously measures the rate of technological progress and the growth rates of output and capital. This model also clarifies the situation under DRC or IRC that exists close to CRC. The situation of IRC is young and vibrant because this situation shows that investment is more qualitative than quantitative. The maximized growth rate of output is only found and measured at the situation of CRC. If the critical alpha is significantly low, the growth rate of output is also low even under CRC. This

implies that alpha in the real world should be closer to the critical alpha in order to attain a higher growth rate of output. By using economic policies, we can approach the situation that DRC or IRC is close to CRC. In other words, economic policies are executed using four paths: critical alpha, optimal theta 1, optimal theta 2, and optimal gamma. Which path is better? The selection of the best path is done based on the year and country by comparing four values of elasticity with each other.

First, in China both the actual and theoretical growth rates of output are very high. The situation is always under an extreme IRC, where qualitative investment is larger than quantitative investment (gamma is quite small: 0.7). Also critical alpha in China is significantly low (0.01 to 0.015). How can this country approach a more moderate CRC?: (1) by decreasing alpha to critical alpha (but it is impossible), (2) by increasing gamma for household saving by investing more quantitative investment, or (3) by increasing theta 2 for corporate saving by the same way as (2). The growth rate of output under CRC is between 0.05 to 0.03 (the actual growth rate is between 0.3 to 0.12).

Second, in Korea the actual growth rate of output is 0.08 to 0.15, and that under CRC is between 0.06 to 0.07 except for 1998. Also critical alpha in Korea is from 0.01 to 0.065 except for 1998. The situation was under IRC between 1993 to 1997. Gamma is between 0.82 to 0.95. Nevertheless, financial leverage is high (from 4.6 in 1993 to 13 in 1997). Thus, it seems that the trend is stable except for 1998, but the circumstances were aggravated over years. In 1998, the situation is suddenly reversed: gamma is 1.63 under an extreme DRC. Household saving must be used much more effectively than before just like the case of Japan. More qualitative investment is necessary for Korea and Japan to recover from extreme DRC. Then, the growth rate of output under CRC will recover more quickly to the level of 0.03 in Korea. In the case of Japan, the growth rate of output will be at most 0.02 even if de-regularization

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and structural reform are executed thoroughly (by decreasing gamma from 1.3 to
1.0).

In conclusion, the Chinese economy is younger in many respects than the
Korean economy. However, compared with the Japanese economy, where
extreme DRC prevailed in 1998, the Korean economy after 1998 can recover
much quicker (see the values of elasticity in Table 3). The three countries have
significantly high rates of saving, yet investment that uses household saving
differ greatly by country. The difference comes from the fact that Japanese
people have a responsibility for choosing a political system based on individual
self-interest more than the "common welfare." This comes from a lack of
Confucianism or public interest. In this respect, I hope that the Korean and
Chinese governments take strong actions much quicker for sustainable economic
growth in the long-run under CRC.

Appendix

Table 5AC-9-1 China 1993

Table 5AC-9-2 China 1994

Table 5AC-9-3 China 1995

Table 5AC-9-4 China 1996

Table 5AC-9-5 China 1997

Table 5AK-9-1 Korea 1993

Table 5AK-9-2 Korea 1994

Table 5AK-9-3 Korea 1995

Table 5AK-9-4 Korea 1996

Table 5AK-9-5 Korea 1997

Table 5AK-9-6 Korea 1998

Table 5AJ-9-1 Japan 1993

Table 5AJ-9-2 Japan 1994

Table 5AJ-9-3 Japan 1995

Table 5AJ-9-4 Japan 1996

Table 5AJ-9-5 Japan 1997

Table 5AJ-9-6 Japan 1998

Table 5AT-9-1 Taiwan 1993

Table 5AT-9-2 Taiwan 1994

Table 5AT-9-3 Taiwan 1995

Table 5AT-9-4 Taiwan 1996

Table 5AT-9-5 Taiwan 1997

Table 5AT-9-6 Taiwan 1998

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Table 5AC-9-1 China 1993

| | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ | $(\alpha-\beta)C/\alpha$ |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 |
| | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 | 0.90645 |
| 0.0149 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 |
| 2.9183 | 1.7293 | 3.1344 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 |
| | 0.2096 | 1.0000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 |
| | 0.2096 | 1.0000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 |
| | 0.2096 | 1.0000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 |
| | 0.2096 | 1.0000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 | 0.70000 |

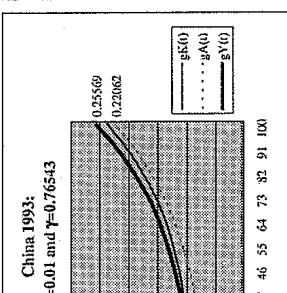
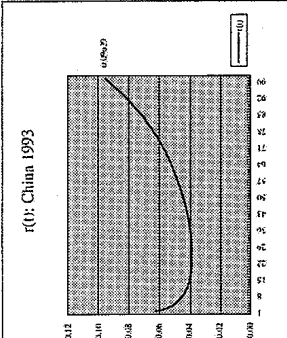


Table 5AC-9-4 China 1996

Table with 40 columns and 41 rows of data for China 1996. Columns include statistical metrics like R-squared, F-statistic, Durbin-Watson, and various regression coefficients. The table is divided into two sections: 'China 96' (rows 1-17) and 'China 96' (rows 18-41). Each section includes two line graphs showing the relationship between variables, with parameters such as alpha and g values indicated.

Table 5AK-9-1 Korea 1993

| n | $\Omega(0)$ given | $\Omega(1)$ given | $\Omega(2)$ given | $\Omega(3)$ given | $\Omega(4)$ given | $\Omega(5)$ given | $\Omega(6)$ given | $\Omega(7)$ given | $\Omega(8)$ given | $\Omega(9)$ given | $\Omega(10)$ given |
|----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| 0 | 2.6353 | 1.0000 | 0.8126 | 0.7000 | 0.6000 | 0.5000 | 0.4000 | 0.3000 | 0.2000 | 0.1000 | 0.0000 |
| 1 | 2.7469 | 1.0108 | 0.8226 | 0.7100 | 0.6100 | 0.5100 | 0.4100 | 0.3100 | 0.2100 | 0.1100 | 0.0100 |
| 2 | 2.8654 | 1.0217 | 0.8386 | 0.7256 | 0.6256 | 0.5256 | 0.4256 | 0.3256 | 0.2256 | 0.1256 | 0.0256 |
| 3 | 2.9910 | 1.0328 | 0.8549 | 0.7410 | 0.6410 | 0.5410 | 0.4410 | 0.3410 | 0.2410 | 0.1410 | 0.0410 |
| 4 | 3.1241 | 1.0439 | 0.8714 | 0.7577 | 0.6577 | 0.5577 | 0.4577 | 0.3577 | 0.2577 | 0.1577 | 0.0577 |
| 5 | 3.2651 | 1.0552 | 0.8881 | 0.7741 | 0.6741 | 0.5741 | 0.4741 | 0.3741 | 0.2741 | 0.1741 | 0.0741 |
| 6 | 3.4143 | 1.0666 | 0.9049 | 0.7909 | 0.6909 | 0.5909 | 0.4909 | 0.3909 | 0.2909 | 0.1909 | 0.0909 |
| 7 | 3.5723 | 1.0781 | 0.9218 | 0.8077 | 0.7077 | 0.6077 | 0.5077 | 0.4077 | 0.3077 | 0.2077 | 0.1077 |
| 8 | 3.7394 | 1.0897 | 0.9388 | 0.8245 | 0.7245 | 0.6245 | 0.5245 | 0.4245 | 0.3245 | 0.2245 | 0.1245 |
| 9 | 3.9163 | 1.1015 | 0.9559 | 0.8412 | 0.7412 | 0.6412 | 0.5412 | 0.4412 | 0.3412 | 0.2412 | 0.1412 |
| 10 | 4.1036 | 1.1134 | 0.9731 | 0.8579 | 0.7579 | 0.6579 | 0.5579 | 0.4579 | 0.3579 | 0.2579 | 0.1579 |
| 11 | 4.3018 | 1.1254 | 0.9904 | 0.8746 | 0.7746 | 0.6746 | 0.5746 | 0.4746 | 0.3746 | 0.2746 | 0.1746 |
| 12 | 4.5116 | 1.1376 | 1.0078 | 0.8912 | 0.7912 | 0.6912 | 0.5912 | 0.4912 | 0.3912 | 0.2912 | 0.1912 |
| 13 | 4.7337 | 1.1499 | 1.0253 | 0.9078 | 0.8078 | 0.7078 | 0.6078 | 0.5078 | 0.4078 | 0.3078 | 0.2078 |
| 14 | 4.9689 | 1.1623 | 1.0429 | 0.9244 | 0.8244 | 0.7244 | 0.6244 | 0.5244 | 0.4244 | 0.3244 | 0.2244 |
| 15 | 5.2180 | 1.1748 | 1.0606 | 0.9410 | 0.8410 | 0.7410 | 0.6410 | 0.5410 | 0.4410 | 0.3410 | 0.2410 |
| 16 | 5.4818 | 1.1875 | 1.0784 | 0.9571 | 0.8571 | 0.7571 | 0.6571 | 0.5571 | 0.4571 | 0.3571 | 0.2571 |
| 17 | 5.7614 | 1.2003 | 1.0963 | 0.9731 | 0.8731 | 0.7731 | 0.6731 | 0.5731 | 0.4731 | 0.3731 | 0.2731 |
| 18 | 6.0576 | 1.2133 | 1.1154 | 0.9891 | 0.8891 | 0.7891 | 0.6891 | 0.5891 | 0.4891 | 0.3891 | 0.2891 |
| 19 | 6.3717 | 1.2264 | 1.1354 | 1.0059 | 0.9059 | 0.8059 | 0.7059 | 0.6059 | 0.5059 | 0.4059 | 0.3059 |
| 20 | 6.7047 | 1.2397 | 1.1563 | 1.0227 | 0.9227 | 0.8227 | 0.7227 | 0.6227 | 0.5227 | 0.4227 | 0.3227 |
| 21 | 7.0578 | 1.2531 | 1.1781 | 1.0395 | 0.9395 | 0.8395 | 0.7395 | 0.6395 | 0.5395 | 0.4395 | 0.3395 |
| 22 | 7.4325 | 1.2666 | 1.2000 | 1.0562 | 0.9562 | 0.8562 | 0.7562 | 0.6562 | 0.5562 | 0.4562 | 0.3562 |
| 23 | 7.8301 | 1.2803 | 1.2228 | 1.0729 | 0.9729 | 0.8729 | 0.7729 | 0.6729 | 0.5729 | 0.4729 | 0.3729 |
| 24 | 8.2522 | 1.2941 | 1.2465 | 1.0896 | 0.9896 | 0.8896 | 0.7896 | 0.6896 | 0.5896 | 0.4896 | 0.3896 |
| 25 | 8.7004 | 1.3081 | 1.2711 | 1.1062 | 1.0062 | 0.9062 | 0.8062 | 0.7062 | 0.6062 | 0.5062 | 0.4062 |
| 26 | 9.1764 | 1.3222 | 1.2966 | 1.1228 | 1.0228 | 0.9228 | 0.8228 | 0.7228 | 0.6228 | 0.5228 | 0.4228 |
| 27 | 9.6822 | 1.3365 | 1.3230 | 1.1395 | 1.0395 | 0.9395 | 0.8395 | 0.7395 | 0.6395 | 0.5395 | 0.4395 |
| 28 | 10.2198 | 1.3509 | 1.3503 | 1.1562 | 1.0562 | 0.9562 | 0.8562 | 0.7562 | 0.6562 | 0.5562 | 0.4562 |
| 29 | 10.7914 | 1.3655 | 1.3785 | 1.1729 | 1.0729 | 0.9729 | 0.8729 | 0.7729 | 0.6729 | 0.5729 | 0.4729 |
| 30 | 11.3993 | 1.3802 | 1.4076 | 1.1896 | 1.0896 | 0.9896 | 0.8896 | 0.7896 | 0.6896 | 0.5896 | 0.4896 |
| 31 | 12.0461 | 1.3952 | 1.4375 | 1.2062 | 1.1062 | 1.0062 | 0.9062 | 0.8062 | 0.7062 | 0.6062 | 0.5062 |
| 32 | 12.7345 | 1.4102 | 1.4682 | 1.2228 | 1.1228 | 1.0228 | 0.9228 | 0.8228 | 0.7228 | 0.6228 | 0.5228 |
| 33 | 13.4674 | 1.4255 | 1.5000 | 1.2395 | 1.1395 | 1.0395 | 0.9395 | 0.8395 | 0.7395 | 0.6395 | 0.5395 |
| 34 | 14.2480 | 1.4408 | 1.5336 | 1.2562 | 1.1562 | 1.0562 | 0.9562 | 0.8562 | 0.7562 | 0.6562 | 0.5562 |
| 35 | 15.0798 | 1.4564 | 1.5689 | 1.2729 | 1.1729 | 1.0729 | 0.9729 | 0.8729 | 0.7729 | 0.6729 | 0.5729 |
| 36 | 15.9662 | 1.4721 | 1.6059 | 1.2896 | 1.1896 | 1.0896 | 0.9896 | 0.8896 | 0.7896 | 0.6896 | 0.5896 |
| 37 | 16.9197 | 1.4880 | 1.6445 | 1.3062 | 1.2062 | 1.1062 | 1.0062 | 0.9062 | 0.8062 | 0.7062 | 0.6062 |
| 38 | 17.9197 | 1.5041 | 1.6847 | 1.3228 | 1.2228 | 1.1228 | 1.0228 | 0.9228 | 0.8228 | 0.7228 | 0.6228 |
| 39 | 18.9955 | 1.5204 | 1.7265 | 1.3395 | 1.2395 | 1.1395 | 1.0395 | 0.9395 | 0.8395 | 0.7395 | 0.6395 |
| 40 | 20.1439 | 1.5368 | 1.7700 | 1.3562 | 1.2562 | 1.1562 | 1.0562 | 0.9562 | 0.8562 | 0.7562 | 0.6562 |
| 41 | 21.3704 | 1.5534 | 1.8152 | 1.3729 | 1.2729 | 1.1729 | 1.0729 | 0.9729 | 0.8729 | 0.7729 | 0.6729 |
| 42 | 22.6806 | 1.5701 | 1.8621 | 1.3896 | 1.2896 | 1.1896 | 1.0896 | 0.9896 | 0.8896 | 0.7896 | 0.6896 |
| 43 | 24.0810 | 1.5871 | 1.9107 | 1.4062 | 1.3062 | 1.2062 | 1.1062 | 1.0062 | 0.9062 | 0.8062 | 0.7062 |

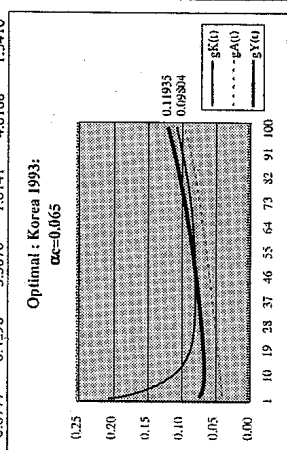
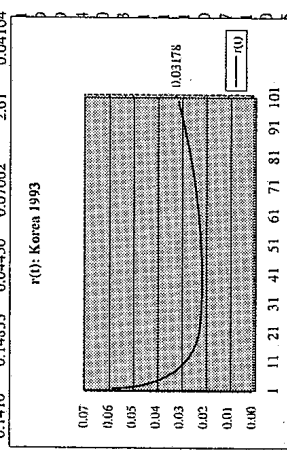


Table 5AK-9-6 Korea 1998

| time | 0.7000 | | | | 0.1000 | | | | 0.0000 | | | | 0.0000 | | | | 0.0000 | | | | 0.0000 | | | | 0.0000 | | | | | | | | | | | | | | |
|------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|---------|----------|----------|----------|---------|----------|----------|----------|---------|----------|----------|----------|---------|----------|----------|----------|---------|----------|----------|---------|---------|---------|
| | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | α | β | γ | δ | | | |
| 0 | 0.00850 | 0.04850 | 0.00850 | 0.04850 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | 0.08571 | 0.00853 | 0.00853 | 0.00853 | | | |
| 1 | 4.0739 | 1.22265 | 0.7000 | 0.08533 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | | | |
| 2 | 3.2947 | 0.08826 | 0.26711 | 0.0486 | 0.02185 | 2.7788 | 1.2675 | 2.5063 | 3.1926 | 1.5806 | 3.1926 | 1.5806 | 0.08533 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | | |
| 3 | 2.6659 | 0.06504 | 0.2150 | 0.0392 | 0.1738 | 2.2364 | 1.0201 | 2.0605 | 1.0052 | 0.5061 | 0.07354 | -0.19086 | -0.18791 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 4 | 1.7514 | 0.04915 | 0.17335 | 0.0316 | 0.1419 | 1.8044 | 0.8231 | 1.6625 | 0.8110 | 0.4083 | 0.05765 | -0.18984 | -0.18553 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 5 | 1.4214 | 0.03780 | 0.1273 | 0.0261 | 0.1199 | 1.5844 | 0.6626 | 1.4526 | 0.6626 | 0.2611 | 0.01622 | -0.18637 | -0.17809 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 6 | 1.1541 | 0.02315 | 0.0922 | 0.0194 | 0.0891 | 1.3215 | 0.4922 | 1.1541 | 0.4922 | 0.0194 | 0.00111 | -0.18637 | -0.17809 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 7 | 0.9376 | 0.01631 | 0.0701 | 0.0146 | 0.0671 | 1.0701 | 0.3547 | 0.9376 | 0.3547 | 0.0146 | 0.001062 | -0.18633 | -0.17801 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 8 | 0.7619 | 0.01163 | 0.0526 | 0.0110 | 0.0492 | 0.8110 | 0.2611 | 0.7619 | 0.2611 | 0.0110 | 0.000990 | -0.18627 | -0.17789 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 9 | 0.6194 | 0.008826 | 0.04168 | 0.008826 | 0.04168 | 0.6194 | 0.1926 | 0.6194 | 0.1926 | 0.008826 | 0.00964 | -0.18624 | -0.17789 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 |
| 10 | 0.5036 | 0.00738 | 0.0316 | 0.00738 | 0.0316 | 0.5036 | 0.1584 | 0.5036 | 0.1584 | 0.00738 | 0.00942 | -0.18623 | -0.17780 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 11 | 0.4095 | 0.00609 | 0.0231 | 0.00609 | 0.0231 | 0.4095 | 0.1163 | 0.4095 | 0.1163 | 0.00609 | 0.00925 | -0.18621 | -0.17777 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 12 | 0.3331 | 0.00492 | 0.0168 | 0.00492 | 0.0168 | 0.3331 | 0.0823 | 0.3331 | 0.0823 | 0.00492 | 0.00911 | -0.18620 | -0.17775 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 13 | 0.2709 | 0.00392 | 0.01163 | 0.00392 | 0.01163 | 0.2709 | 0.0626 | 0.2709 | 0.0626 | 0.00392 | 0.00890 | -0.18618 | -0.17772 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 14 | 0.2204 | 0.00322 | 0.008826 | 0.00322 | 0.008826 | 0.2204 | 0.0492 | 0.2204 | 0.0492 | 0.00322 | 0.00883 | -0.18617 | -0.17769 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 15 | 0.1793 | 0.00261 | 0.00738 | 0.00261 | 0.00738 | 0.1793 | 0.03780 | 0.1793 | 0.03780 | 0.00261 | 0.00877 | -0.18617 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 16 | 0.1459 | 0.00212 | 0.00609 | 0.00212 | 0.00609 | 0.1459 | 0.02944 | 0.1459 | 0.02944 | 0.00212 | 0.00872 | -0.18617 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 17 | 0.1187 | 0.00172 | 0.00492 | 0.00172 | 0.00492 | 0.1187 | 0.02315 | 0.1187 | 0.02315 | 0.00172 | 0.00868 | -0.18617 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 18 | 0.0966 | 0.00146 | 0.00416 | 0.00146 | 0.00416 | 0.0966 | 0.01834 | 0.0966 | 0.01834 | 0.00146 | 0.00864 | -0.18616 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 19 | 0.0786 | 0.00114 | 0.00340 | 0.00114 | 0.00340 | 0.0786 | 0.01461 | 0.0786 | 0.01461 | 0.00114 | 0.00862 | -0.18616 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 20 | 0.0640 | 0.00092 | 0.00284 | 0.00092 | 0.00284 | 0.0640 | 0.01163 | 0.0640 | 0.01163 | 0.00092 | 0.00862 | -0.18616 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 21 | 0.0521 | 0.00075 | 0.00231 | 0.00075 | 0.00231 | 0.0521 | 0.008826 | 0.0521 | 0.008826 | 0.00075 | 0.00862 | -0.18616 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 22 | 0.0424 | 0.00061 | 0.00192 | 0.00061 | 0.00192 | 0.0424 | 0.00738 | 0.0424 | 0.00738 | 0.00061 | 0.00862 | -0.18616 | -0.17768 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | 0.00853 | |
| 23 | 0.0345 | 0.00050 | 0.00158 | 0.00050 | 0.00158 | 0.0345 | 0.00609 | 0.0345 | 0.00609 | 0.00050 | 0.00862 | -0.18616 | -0.17768 | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 5AT-9-4 Taiwan 1996

| (α - α)/ α | 0.56934 | 0.77000 | 0.8937 | 0.63706 | 0.03961 | 0.04195 | 0.01229 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 |
| IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 |
| IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 | IF RMSE=0 |
| n | 15.086 | 15.086 | 15.086 | 15.086 | 15.086 | 15.086 | 15.086 |
| Leverage $L(100)$ | 2.2326 | 2.2430 | 2.1900 | 2.1900 | 2.2326 | 2.2430 | 2.1900 |
| time | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| $K(t)$ | 44.0455 | 44.0455 | 44.0455 | 44.0455 | 44.0455 | 44.0455 | 44.0455 |
| $Y(t)$ | 47.79 | 47.79 | 47.79 | 47.79 | 47.79 | 47.79 | 47.79 |
| $S(t)$ | 51.75 | 51.75 | 51.75 | 51.75 | 51.75 | 51.75 | 51.75 |
| β_1 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_2 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_3 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_4 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_5 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_6 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_7 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_8 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_9 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{10} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{11} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{12} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{13} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{14} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{15} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{16} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{17} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{18} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{19} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{20} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{21} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{22} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{23} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{24} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{25} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{26} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{27} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{28} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{29} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{30} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{31} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{32} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{33} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{34} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{35} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{36} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{37} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{38} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{39} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{40} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |
| β_{41} | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 | 0.0238 |

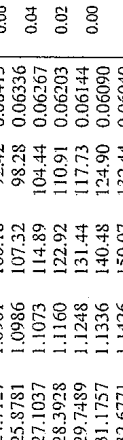
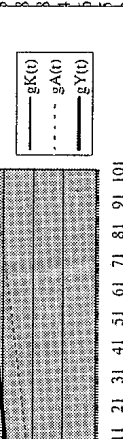
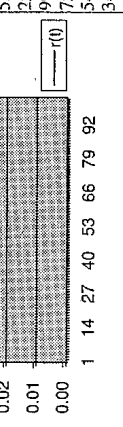


Table 5AT-9-5 Taiwan 1997

| α | β | γ | δ | ϵ | ζ | η | θ | ι | κ | λ | μ | ν | ξ | \omicron | π | ρ | σ | τ | υ | ϕ | χ | ψ | ω | |
|----------|----------|----------|----------|------------|---------|---------|----------|---------|----------|-----------|---------|--------|---------|------------|---------|---------|----------|---------|------------|---------|---------|---------|----------|---------|
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |
| 0.01013 | 0.013616 | 0.03819 | 0.04933 | 0.0742 | 0.0988 | 0.17588 | 0.03934 | 0.01069 | 0.04583 | 0.7600 | 0.01998 | 0.8350 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 | 0.03934 | 0.01069 |

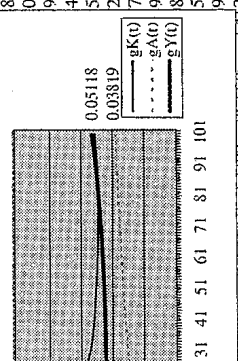
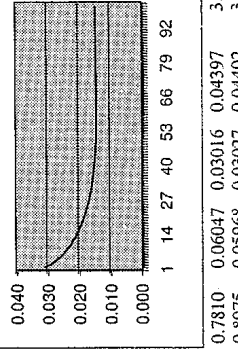


Table SAT-9-6 Taiwan 1998

| time | $g_A(t)$ | $g_K(t)$ | $g_Y(t)$ | $g_H(t)$ | $g_S(t)$ | $g_C(t)$ | $g_I(t)$ | $g_G(t)$ | $g_X(t)$ | $g_Z(t)$ | $g_U(t)$ | $g_V(t)$ | $g_W(t)$ | $g_T(t)$ | $g_B(t)$ | $g_F(t)$ | $g_D(t)$ | $g_E(t)$ |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 0.55683 | 0.06763 | 0.0045 | 0.7000 | 0.0700 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 17.2948 | 58.95 | 59.42 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 | 1.0086 |
| 2 | 18.0762 | 64.27 | 63.26 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 | 1.0172 |
| 3 | 18.8970 | 69.42 | 67.78 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 | 1.0259 |
| 4 | 19.7592 | 74.88 | 72.54 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 | 1.0346 |
| 5 | 20.6651 | 80.67 | 77.53 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 | 1.0435 |
| 6 | 21.6169 | 86.82 | 82.78 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 | 1.0524 |
| 7 | 22.6171 | 93.35 | 88.29 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 | 1.0614 |
| 8 | 23.6683 | 100.27 | 94.08 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 | 1.0705 |
| 9 | 24.7733 | 107.62 | 100.17 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 | 1.0796 |
| 10 | 25.9350 | 115.42 | 106.58 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 | 1.0889 |
| 11 | 27.1564 | 123.70 | 113.31 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 | 1.0982 |
| 12 | 28.4408 | 132.48 | 120.39 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 | 1.1076 |
| 13 | 29.7917 | 141.81 | 127.84 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 | 1.1170 |
| 14 | 31.2128 | 151.71 | 135.67 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 | 1.1266 |
| 15 | 32.7078 | 162.22 | 143.91 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 | 1.1362 |
| 16 | 34.2808 | 173.38 | 152.58 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 | 1.1459 |
| 17 | 35.9363 | 185.24 | 161.71 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 | 1.1557 |
| 18 | 37.6789 | 197.82 | 171.31 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 | 1.1656 |
| 19 | 39.5133 | 211.19 | 181.42 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 | 1.1756 |
| 20 | 41.4447 | 225.39 | 192.07 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 | 1.1856 |
| 21 | 43.4786 | 240.47 | 203.28 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 | 1.1958 |
| 22 | 45.6309 | 256.50 | 215.09 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 | 1.2060 |
| 23 | 47.8776 | 273.52 | 227.53 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 | 1.2163 |
| 24 | 50.2552 | 291.62 | 240.63 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 | 1.2267 |
| 25 | 52.7608 | 310.85 | 254.44 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 | 1.2372 |
| 26 | 55.4015 | 331.29 | 269.00 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 | 1.2478 |
| 27 | 58.1852 | 353.02 | 284.34 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 | 1.2584 |
| 28 | 61.1202 | 376.12 | 300.52 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 | 1.2692 |
| 29 | 64.2152 | 400.69 | 317.58 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 | 1.2800 |
| 30 | 67.4794 | 426.82 | 335.58 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 | 1.2910 |
| 31 | 70.9229 | 454.61 | 354.56 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 | 1.3020 |
| 32 | 74.5560 | 484.17 | 374.58 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 | 1.3132 |
| 33 | 78.3899 | 515.63 | 395.72 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 | 1.3244 |
| 34 | 82.4365 | 549.10 | 418.02 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 | 1.3357 |
| 35 | 86.7003 | 584.73 | 441.57 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 | 1.3471 |
| 36 | 91.2188 | 622.65 | 466.43 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 | 1.3587 |
| 37 | 95.9821 | 663.02 | 492.69 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 | 1.3703 |
| 38 | 101.0000 | 706.01 | 520.42 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 | 1.3820 |
| 39 | 106.2798 | 751.79 | 549.72 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 | 1.3938 |
| 40 | 111.8188 | 800.56 | 580.68 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 | 1.4057 |
| 41 | 117.5252 | 852.52 | 613.40 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 | 1.4177 |

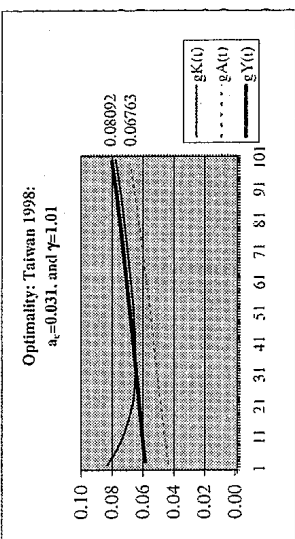
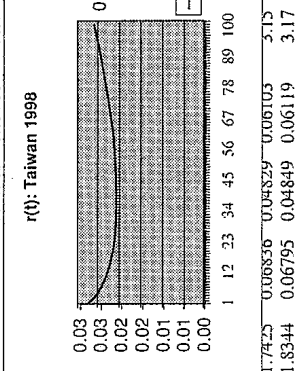


Table 5AJ-9-3 Japan 1995

| n | A_0 | $L(0)$ | $L(1)$ | $L(2)$ | $L(3)$ | $L(4)$ | $L(5)$ | $L(6)$ | $L(7)$ | $L(8)$ | $L(9)$ | $L(10)$ | $L(11)$ | $L(12)$ | $L(13)$ | $L(14)$ | $L(15)$ | $L(16)$ | $L(17)$ | $L(18)$ | $L(19)$ | $L(20)$ | $L(21)$ | $L(22)$ | $L(23)$ | $L(24)$ | $L(25)$ | $L(26)$ | $L(27)$ | $L(28)$ | $L(29)$ | $L(30)$ | $L(31)$ | $L(32)$ | $L(33)$ | $L(34)$ | $L(35)$ | $L(36)$ | $L(37)$ | $L(38)$ | $L(39)$ | $L(40)$ | $L(41)$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----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| 0 | 3.6445 | 1.0000 | 1.0058 | 1.0117 | 1.0175 | 1.0233 | 1.0291 | 1.0349 | 1.0407 | 1.0465 | 1.0523 | 1.0581 | 1.0639 | 1.0697 | 1.0755 | 1.0813 | 1.0871 | 1.0929 | 1.0987 | 1.1045 | 1.1103 | 1.1161 | 1.1219 | 1.1277 | 1.1335 | 1.1393 | 1.1451 | 1.1509 | 1.1567 | 1.1625 | 1.1683 | 1.1741 | 1.1799 | 1.1857 | 1.1915 | 1.1973 | 1.2031 | 1.2089 | 1.2147 | 1.2205 | 1.2263 | 1.2321 | 1.2379 | 1.2437 | 1.2495 | 1.2553 | 1.2611 | 1.2669 | 1.2727 | 1.2785 | 1.2843 | 1.2901 | 1.2959 | 1.3017 | 1.3075 | 1.3133 | 1.3191 | 1.3249 | 1.3307 | 1.3365 | 1.3423 | 1.3481 | 1.3539 | 1.3597 | 1.3655 | 1.3713 | 1.3771 | 1.3829 | 1.3887 | 1.3945 | 1.4003 | 1.4061 | 1.4119 | 1.4177 | 1.4235 | 1.4293 | 1.4351 | 1.4409 | 1.4467 | 1.4525 | 1.4583 | 1.4641 | 1.4699 | 1.4757 | 1.4815 | 1.4873 | 1.4931 | 1.4989 | 1.5047 | 1.5105 | 1.5163 | 1.5221 | 1.5279 | 1.5337 | 1.5395 | 1.5453 | 1.5511 | 1.5569 | 1.5627 | 1.5685 | 1.5743 | 1.5801 | 1.5859 | 1.5917 | 1.5975 | 1.6033 | 1.6091 | 1.6149 | 1.6207 | 1.6265 | 1.6323 | 1.6381 | 1.6439 | 1.6497 | 1.6555 | 1.6613 | 1.6671 | 1.6729 | 1.6787 | 1.6845 | 1.6903 | 1.6961 | 1.7019 | 1.7077 | 1.7135 | 1.7193 | 1.7251 | 1.7309 | 1.7367 | 1.7425 | 1.7483 | 1.7541 | 1.7599 | 1.7657 | 1.7715 | 1.7773 | 1.7831 | 1.7889 | 1.7947 | 1.8005 | 1.8063 | 1.8121 | 1.8179 | 1.8237 | 1.8295 | 1.8353 | 1.8411 | 1.8469 | 1.8527 | 1.8585 | 1.8643 | 1.8701 | 1.8759 | 1.8817 | 1.8875 | 1.8933 | 1.8991 | 1.9049 | 1.9107 | 1.9165 | 1.9223 | 1.9281 | 1.9339 | 1.9397 | 1.9455 | 1.9513 | 1.9571 | 1.9629 | 1.9687 | 1.9745 | 1.9803 | 1.9861 | 1.9919 | 1.9977 | 2.0035 | 2.0093 | 2.0151 | 2.0209 | 2.0267 | 2.0325 | 2.0383 | 2.0441 | 2.0499 | 2.0557 | 2.0615 | 2.0673 | 2.0731 | 2.0789 | 2.0847 | 2.0905 | 2.0963 | 2.1021 | 2.1079 | 2.1137 | 2.1195 | 2.1253 | 2.1311 | 2.1369 | 2.1427 | 2.1485 | 2.1543 | 2.1601 | 2.1659 | 2.1717 | 2.1775 | 2.1833 | 2.1891 | 2.1949 | 2.2007 | 2.2065 | 2.2123 | 2.2181 | 2.2239 | 2.2297 | 2.2355 | 2.2413 | 2.2471 | 2.2529 | 2.2587 | 2.2645 | 2.2703 | 2.2761 | 2.2819 | 2.2877 | 2.2935 | 2.2993 | 2.3051 | 2.3109 | 2.3167 | 2.3225 | 2.3283 | 2.3341 | 2.3399 | 2.3457 | 2.3515 | 2.3573 | 2.3631 | 2.3689 | 2.3747 | 2.3805 | 2.3863 | 2.3921 | 2.3979 | 2.4037 | 2.4095 | 2.4153 | 2.4211 | 2.4269 | 2.4327 | 2.4385 | 2.4443 | 2.4501 | 2.4559 | 2.4617 | 2.4675 | 2.4733 | 2.4791 | 2.4849 | 2.4907 | 2.4965 | 2.5023 | 2.5081 | 2.5139 | 2.5197 | 2.5255 | 2.5313 | 2.5371 | 2.5429 | 2.5487 | 2.5545 | 2.5603 | 2.5661 | 2.5719 | 2.5777 | 2.5835 | 2.5893 | 2.5951 | 2.6009 | 2.6067 | 2.6125 | 2.6183 | 2.6241 | 2.6299 | 2.6357 | 2.6415 | 2.6473 | 2.6531 | 2.6589 | 2.6647 | 2.6705 | 2.6763 | 2.6821 | 2.6879 | 2.6937 | 2.6995 | 2.7053 | 2.7111 | 2.7169 | 2.7227 | 2.7285 | 2.7343 | 2.7401 | 2.7459 | 2.7517 | 2.7575 | 2.7633 | 2.7691 | 2.7749 | 2.7807 | 2.7865 | 2.7923 | 2.7981 | 2.8039 | 2.8097 | 2.8155 | 2.8213 | 2.8271 | 2.8329 | 2.8387 | 2.8445 | 2.8503 | 2.8561 | 2.8619 | 2.8677 | 2.8735 | 2.8793 | 2.8851 | 2.8909 | 2.8967 | 2.9025 | 2.9083 | 2.9141 | 2.9199 | 2.9257 | 2.9315 | 2.9373 | 2.9431 | 2.9489 | 2.9547 | 2.9605 | 2.9663 | 2.9721 | 2.9779 | 2.9837 | 2.9895 | 2.9953 | 3.0011 | 3.0069 | 3.0127 | 3.0185 | 3.0243 | 3.0301 | 3.0359 | 3.0417 | 3.0475 | 3.0533 | 3.0591 | 3.0649 | 3.0707 | 3.0765 | 3.0823 | 3.0881 | 3.0939 | 3.0997 | 3.1055 | 3.1113 | 3.1171 | 3.1229 | 3.1287 | 3.1345 | 3.1403 | 3.1461 | 3.1519 | 3.1577 | 3.1635 | 3.1693 | 3.1751 | 3.1809 | 3.1867 | 3.1925 | 3.1983 | 3.2041 | 3.2099 | 3.2157 | 3.2215 | 3.2273 | 3.2331 | 3.2389 | 3.2447 | 3.2505 | 3.2563 | 3.2621 | 3.2679 | 3.2737 | 3.2795 | 3.2853 | 3.2911 | 3.2969 | 3.3027 | 3.3085 | 3.3143 | 3.3201 | 3.3259 | 3.3317 | 3.3375 | 3.3433 | 3.3491 | 3.3549 | 3.3607 | 3.3665 | 3.3723 | 3.3781 | 3.3839 | 3.3897 | 3.3955 | 3.4013 | 3.4071 | 3.4129 | 3.4187 | 3.4245 | 3.4303 | 3.4361 | 3.4419 | 3.4477 | 3.4535 | 3.4593 | 3.4651 | 3.4709 | 3.4767 | 3.4825 | 3.4883 | 3.4941 | 3.4999 | 3.5057 | 3.5115 | 3.5173 | 3.5231 | 3.5289 | 3.5347 | 3.5405 | 3.5463 | 3.5521 | 3.5579 | 3.5637 | 3.5695 | 3.5753 | 3.5811 | 3.5869 | 3.5927 | 3.5985 | 3.6043 | 3.6101 | 3.6159 | 3.6217 | 3.6275 | 3.6333 | 3.6391 | 3.6449 | 3.6507 | 3.6565 | 3.6623 | 3.6681 | 3.6739 | 3.6797 | 3.6855 | 3.6913 | 3.6971 | 3.7029 | 3.7087 | 3.7145 | 3.7203 | 3.7261 | 3.7319 | 3.7377 | 3.7435 | 3.7493 | 3.7551 | 3.7609 | 3.7667 | 3.7725 | 3.7783 | 3.7841 | 3.7899 | 3.7957 | 3.8015 | 3.8073 | 3.8131 | 3.8189 | 3.8247 | 3.8305 | 3.8363 | 3.8421 | 3.8479 | 3.8537 | 3.8595 | 3.8653 | 3.8711 | 3.8769 | 3.8827 | 3.8885 | 3.8943 | 3.9001 | 3.9059 | 3.9117 | 3.9175 | 3.9233 | 3.9291 | 3.9349 | 3.9407 | 3.9465 | 3.9523 | 3.9581 | 3.9639 | 3.9697 | 3.9755 | 3.9813 | 3.9871 | 3.9929 | 3.9987 | 4.0045 | 4.0103 | 4.0161 | 4.0219 | 4.0277 | 4.0335 | 4.0393 | 4.0451 | 4.0509 | 4.0567 | 4.0625 | 4.0683 | 4.0741 | 4.0799 | 4.0857 | 4.0915 | 4.0973 | 4.1031 | 4.1089 | 4.1147 | 4.1205 | 4.1263 | 4.1321 | 4.1379 | 4.1437 | 4.1495 | 4.1553 | 4.1611 | 4.1669 | 4.1727 | 4.1785 | 4.1843 | 4.1901 | 4.1959 | 4.2017 | 4.2075 | 4.2133 | 4.2191 | 4.2249 | 4.2307 | 4.2365 | 4.2423 | 4.2481 | 4.2539 | 4.2597 | 4.2655 | 4.2713 | 4.2771 | 4.2829 | 4.2887 | 4.2945 | 4.3003 | 4.3061 | 4.3119 | 4.3177 | 4.3235 | 4.3293 | 4.3351 | 4.3409 | 4.3467 | 4.3525 | 4.3583 | 4.3641 | 4.3699 | 4.3757 | 4.3815 | 4.3873 | 4.3931 | 4.3989 | 4.4047 | 4.4105 | 4.4163 | 4.4221 | 4.4279 | 4.4337 | 4.4395 | 4.4453 | 4.4511 | 4.4569 | 4.4627 | 4.4685 | 4.4743 | 4.4801 | 4.4859 | 4.4917 | 4.4975 | 4.5033 | 4.5091 | 4.5149 | 4.5207 | 4.5265 | 4.5323 | 4.5381 | 4.5439 | 4.5497 | 4.5555 | 4.5613 | 4.5671 | 4.5729 | 4.5787 | 4.5845 | 4.5903 | 4.5961 | 4.6019 | 4.6077 | 4.6135 | 4.6193 | 4.6251 | 4.6309 | 4.6367 | 4.6425 | 4.6483 | 4.6541 | 4.6599 | 4.6657 | 4.6715 | 4.6773 | 4.6831 | 4.6889 | 4.6947 | 4.7005 | 4.7063 | 4.7121 | 4.7179 | 4.7237 | 4.7295 | 4.7353 | 4.7411 | 4.7469 | 4.7527 | 4.7585 | 4.7643 | 4.7701 | 4.7759 | 4.7817 | 4.7875 | 4.7933 | 4.7991 | 4.8049 | 4.8107 | 4.8165 | 4.8223 | 4.8281 | 4.8339 | 4.8397 | 4.8455 | 4.8513 | 4.8571 | 4.8629 | 4.8687 | 4.8745 | 4.8803 | 4.8861 | 4.8919 | 4.8977 | 4.9035 | 4.9093 | 4.9151 | 4.9209 | 4.9267 | 4.9325 | 4.9383 | 4.9441 | 4.9499 | 4.9557 | 4.9615 | 4.9673 | 4.9731 | 4.9789 | 4.9847 | 4.9905 | 4.9963 | 5.0021 | 5.0079 | 5.0137 | 5.0195 | 5.0253 | 5.0311 | 5.0369 | 5.0427 | 5.0485 | 5.0543 | 5.0601 | 5.0659 | 5.0717 | 5.0775 | 5.0833 | 5.0891 | 5.0949 | 5.1007 | 5.1065 | 5.1123 | 5.1181 | 5.1239 | 5.1297 | 5.1355 | 5.1413 | 5.1471 | 5.1529 | 5.1587 | 5.1645 | 5.1703 | 5.1761 | 5.1819 | 5.1877 | 5.1935 | 5.1993 | 5.2051 | 5.2109 | 5.2167 | 5.2225 | 5.2283 | 5.2341 | 5.2399 | 5.2457 | 5.2515 | 5.2573 | 5.2631 | 5.2689 | 5.2747 | 5.2805 | 5.2863 | 5.2921 | 5.2979 | 5.3037 | 5.3095 | 5.3153 | 5.3211 | 5.3269 | 5.3327 | 5.3385 | 5.3443 | 5.3501 | 5.3559 | 5.3617 | 5.3675 | 5.3733 | 5.3791 | 5.3849 | 5.3907 | 5.3965 | 5.4023 | 5.4081 | 5.4139 | 5.4197 | 5.4255 | 5.4313 | 5.4371 | 5.4429 | 5.4487 | 5.4545 | 5.4603 | 5.4661 | 5.4719 | 5.4777 | 5.4835 | 5.4893 | 5.4951 | 5.5009 | 5.5067 | 5.5125 | 5.5183 | 5.5241 | 5.5299 | 5.5357 | 5.5415 | 5.5473 | 5.5531 | 5.5589 | 5.5647 | 5.5705 | 5.5763 | 5.5821 | 5.5879 | 5.5937 | 5.5995 | 5.6053 | 5.6111 | 5.6169 | 5.6227 | 5.6285 | 5.6343 | 5.6401 | 5.6459 | 5.6517 | 5.6575 | 5.6633 | 5.6691 | 5.6749 | 5.6807 | 5.6865 | 5.6923 | 5.6981 | 5.7039 | 5.7097 | 5.7155 | 5.7213 | 5.7271 | 5.7329 | 5.7387 | 5.7445 | 5.7503 | 5.7561 | 5.7619 | 5.7677 | 5.7735 | 5.7793 | 5.7851 | 5.7909 | 5.7967 | 5.8025 | 5.8083 | 5.8141 | 5.8199 | 5.8257 | 5.8315 | 5.8373 | 5.8431 | 5.8489 | 5.8547 | 5.8605 | 5.8663 | 5.8721 | 5.8779 | 5.8837 | 5.8895 | 5.8953 | 5.9011 | 5.9069 | 5.9127 | 5.9185 | 5.9243 | 5.9301 | 5.9359 | 5.9417 | 5.9475 | 5.9533 | 5.9591 | 5.9649 | 5.9707 | 5.9765 | 5.9823 | 5.9881 | 5.9939 | 5.9997 | 6.0055 | 6.0113 | 6.0171 | 6.0229 | 6.0287 | 6.0345 | 6.0403 | 6.0461 | 6.0519 | 6.0577 | 6.0635 | 6.0693 | 6.0751 | 6.0809 | 6.0867 | 6.0925 | 6.0983 | 6.1041 | 6.1099 | 6.1157 | 6.1215 | 6.1273 | 6.1331 | 6.1389 | 6.1447 | 6.1505 | 6.1563 | 6.1621 | 6.1679 | 6.1737 | 6.1795 | 6.1853 | 6.1911 | 6.1969 | 6.2027 | 6.2085 | 6.2143 | 6.2201 | 6.2259 | 6.2317 | 6.2375 | 6.2433 | 6.2491 | 6.2549 | 6.2607 | 6.2665 | 6.2723 | 6.2781 | 6.2839 | 6.2897 | 6.2955 | 6.3013 | 6.3071 | 6.3129 | 6.3187 | 6.3245 | 6.3303 | 6.3361 | 6.3419 | 6.3477 | 6.3535 | 6.3593 | 6.3651 | 6.3709 | 6.3767 | 6.3825 | 6.3883 | 6.3941 | 6.3999 | 6.4057 | 6.4115 | 6.4173 | 6.4231 | 6.4289 | 6.4347 | 6.4405 | 6.4463 | 6.4521 | 6.4579 | 6.4637 | 6.4695 | 6.4753 | 6.4811 | 6.4869 | 6.4927 | 6.4985 | 6.5043 | 6.5101 | 6.5159 | 6.5217 | 6.5275 | 6.5333 | 6.5391 | 6.5449 | 6.5507 | 6.5565 | 6.5623 | 6.5681 | 6.5739 | 6.5797 | 6.5855 | 6.5913 | 6.5971 | 6.6029 | 6.6087 | 6.6145 | 6.6203 | 6.626 |

