Figures for Main Relationships and for Business Cycles in Kamiryo Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005 by Country and by Sector

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This note is composed of two volumes: **M** for *main* relationships and **B** for *business cycles*. These figures use my data-sets of nine counties 1960–2005, by country and by sector. Each figure is composed of three pages: (1) Russia, China, Korea, (2) Japan, the US, Australia, and (3) India, Brazil, Mexico. The original data source is IFSY and GFSY, IMF. Such countries as Russia and China shifted previous nati›nal accounts system to the SNA 1993 and thus, the periods are shorter than those of other countries. The data of the above figures in this note are simultaneously published in *Journal of Economic Sciences* 11 (Sep, 1). I will increase the number of countries in the near future if I could get continuously budget surplus/deficit and government gross investment by country in IMF data.

This is because there are no data-sets that publish capital stock and returns or rents by country and by sector. Penn World Table stopped publishing the capital-labor ratio after 1995 (or, at the time when PWT published PWT 6.1 and PWT 6.5). OECD and the Jorgenson researchers will continue to publish capital of the business sector in the future. Nevertheless, I point out that it will be difficult for statistics and econometries to estimate capital and returns at the macro-level if the estimation starts with micro data. The reason comes from the fact that the macro-level data and the micro-level data cannot be consistently estimated. My data, model, and methods for estimation go together. My

methods depend on my endogenous growth model that integrates, under the discrete case, national accounts and the Cobb-Douglas production function. My data, model, and methods are based on national disposable income *NDI* (which is output *Y* in my model) or the sum of consumption and saving, instead of *GDP*. This is justified when I apply a labor function of consumption to my model and methods. If wages and returns are estimated so that the sum is equal to *NDI*, the data-set of an economy holds consistently, where capital and returns or rents are also estimated at the macro-level and furthermore by sector based on accounting identity except for the ratio of the discount rate of consumption goods and that of saving (for a preliminary discussion, see Kamiryo (IARIW, 2006 that uses the 30 country data-sets by sector 1995–2004).

A problem lying in the SNA is that wages or compensation and operating surplus in *GDP* are actual but in vague to consumption and saving. It is difficult to prove annual ex-post equilibrium by using the data-set based on *GDP*. It is easy to prove the ex-post equilibrium by using the data-set based on *NDI*. Furthermore, it is easy to prove ex-ante equilibrium, once the Cobb-Douglas production function is settled, by using the data-set based on *NDI*, where my model measures the transitional path of all variables endogenously over time (helped and verified by recursive programming). My data-sets are theoretical (not actual) except for some current/initial values (*L, S, C, ΔK*—before dividing investment into qualitative and quantitative—, *S-I, S_G-I_G*) from IMF. My data-set clarifies the relationship between ex-post set at the current situation and ex-ante set at convergence, using equations, where variables at the current situation are compared with variables at convergence. The data-set by year shifts the Cobb-Douglas production function. The ex-ante data-set by country uses each fixed Cobb-Douglas production function.

PS: For data, see tables in *Journal of Economic Sciences* 11 (Sep, 1). For future perspectives and for global rules, see a summary at the end of the above journal.

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Table A-1 Notations of values and ratios of the total economy as a base

L	Labor or population	Y_G/Y	The ratio of government NDI to the total economy NDI
n	The growth rate of population	K_G/K	The ratio of government capital to the total economy capital
BOP=Ex-Im	Exports less imports; BOP in a narrow sense=$S-I$	alpha	The relative share of returns/rents/capital to NDI
Bud deficit	Budget surplus/deficit=S_G-I_G in the G sector	(r/w)	The ratio of the rate of return to the wage rate
ΔK_{GROSS}	Gross capital investment; I_{GROSS}	w=W/L	The wage rate (for convenience, I asssume $w=w_G=w_{PRI}$)
Depreciation	Capital consumption	gw	The growth rate of the wage rate
ΔK_{NET}	Net capital investment after depreciation; I_{NET}	gr	The rate of change in the rate of return
C	Consumption	k=K/L	The capital-labor ratio
S	Saving; net saving	$K=K_0+\Delta K$	Capital as the sum of the previous stock plus net investment
Y=NDI	National disposable income=$C+S$	Ω=K/Y	The capital-output ratio,where output=NDI
W=(1−α)Y	Compensation/wages; alpha is the relative share of labor	TFP	Total factor productivity as an input stock=$k^{(1-\alpha)}/\Omega$
S_G=Bud+I_G	Government saving=$(S_G-I_G)+I_G$	g_{TFP}	The growth rate of TFP
y=Y/L	Per capita NDI	g_A	The growth rate of the capital-labor ratio
g_y	The growth rate of per capita NDI	g_A	The growth rate of tech. progress $g_A(t)=i(1-\beta(t))k(t)^{\alpha-\delta(}$
i=I/Y	The ratio of net investemnt to NDI	g_A/g_{TFP}	The ratio of g_A to g_{TFP}; if it is 1.0, alpha is constant over years
θ=i/s	The ratio of net investment to saving	g_w/g_y	The ratio of g_w to g_y; if it is 1.0, alpha does not change.
c=C/Y	The ratio of consumption to NDI	$B^*=(1-\beta^*)/\beta^*$	The ratio of qualitative to quantitative investment at convergence
(rho/r)	The consumption coefficient. rho is time preference.	β^*=beta*	The ratio of quantitative investment to total net investemnt
r=α/Ω	The rate of return; the ratio of returns/rents to capital	g_A^*=i(1-β*)	The growth rate of tech progress at convergence
r_{CB}	Central Bank discount rate or the market rate	s-i=BOP/NDI	The ratio of BOP or $(S-I)$ to NDI
c_{CB} =r/r_{CB}	The coefficient of financial asset neutrality	s_G-i$_G$=Budget	The ratio of Budget=(S_G-I_G) to NDI
delta	A paramete that neutralizes diminishing returns to capital	s=S/NDI	The ratio of saving to NDI or the saving rate
1/λ	The years for convergence; (r/w)	$1/\lambda$=l/(1−α)n+(1-δ)g$_A^*$	Ω_G	The capital-output ratio of the government sector
sigma	The elasticity of k w.r.t. (r/w)	σ=(Δk/k)/(Δ(r/w))/(r/w)	Ω_P	The capital-output ratio of the private sector

Notes:
(1) My framework of BOP as exports net, (S-I)=(S_G-I_G)+$(S_{PRI}-I_{PRI})$, is based on NDI ., where budget deficit (S_G-I_G) equals Taxes less C_G .
Here NDI is actually domestic disposable income since we cannot obtain factor income from abroad by country in IMF data. My framework is consistent with the framework of Rudiger Dornbusch (1980, pp.19-28) based on GNP or GDP . I will discuss this issue in Kamiryo (IARIW, 2008).
(2) For China and Russia, (rho/r)=1.8075*c^2-2.2549*c+1.4688. For Japan, (rho/r)=1.4672*c^2-0.9273*c+0.6983.   For the US, (rho/r)=3.0095c^2-3.0426c+1.4193.
(3) For (r/w) by country and by sector, use 'goal seek' to (r/w) as a goal, by making K=kL (where k=(α/(1-α))/(r/w)) equal to K=K_0+ΔK .
(rho/r) is definitely an external parameter. But, (r/w) is an external parameter only if   K=L(α/(1-α))/(r/w)) is not connected with K=K_0+ΔK .

Table A-2 Notations of values and ratios by sector: the government and private sectors

(rho/r)=rho/r	The utility/consumption coefficient of the total economy	g_{TFP}	The growth rate of TFP in the total economy
(rho/r)$_G$=rho$_G$/	The utility coefficient of the government sector	$g_{TFP(G)}$	The growth rate of TFP in the government sector
(rho/r)$_{PRI}$	The utility coefficient of the government sector	$g_{TFP(P(PRI)}$	The growth rate of TFP in the private sector
(r/w)	The ratio of the rate of return to the wage rate	g_A	The growth rate of tech progress in the total economy
(r/w)G	The ratio of the rate of return to the wage rate in G	$g_{A(G)}$	The growth rate of tech progress in the government sector
(r/w)$_{PRI}$	The ratio of the rate of return to the wage rate in PRI	$g_{A(PRI)}$	The growth rate of tech progress in the private sector
k=K/L	The capital-labor ratio of the total economy	g_A/g_{TFP}	The ratio of g_A as the flow level to g_{TFP} as the stock level
k$_G$=K$_G$/L$_G$	The capital-labor ratio of the total economy in G	$g_{A(G)}/g_{TFP(PRI)}$	The ratio of g_A to g_{TFP} in the government sector
k$_{PRI}$=K$_P$/L$_P$	The capital-labor ratio of the total economy in PRI	$g_{A(PRI)}/g_{TFP(PPRI)}$	The ratio of g_A to g_{TFP} in the private sector
TFP=k^α/Ω	Total factor productivity of the total economy	i-I/Y	The ratio of net investemnt to ntional disposable income NDI
TFP$_G$	Total factor productivity of the government sector	i$_G$=I$_G$/Y$_G$	The ratio of net investemnt to NDI in the government sector
TFP$_{PRI}$	Total factor productivity of the private sector	i$_{PRI}$=I$_{PRI}$/Y$_{PRI}$	The ratio of net investemnt to NDI in the private sector
alpha= Π/Y	The relative share of capital/rents of the total economy	g_A^*	The growth rate of tech progress at convergence
α$_G$=Ω$_G$r$_G$	The relative share of capital/rents of the G sector	$g_{A(G)}^*$	The growth rate of tech progress at convergence in the G sector
α$_{PRI}$=Ω$_P$r$_P$	The relative share of capital/rents of the PRI sector	$g_{A(PRI)}^*$	The growth rate of tech progress at convergence in the PRI sector
r=Π/K	The rate of return of the total econmoy	B*	The ratio of qualitative to quantitative investment at convergence
r$_G$=Π$_G$/K$_G$	The rate of return of the government sector	B$_G$*	The ratio of qualitative to quantitative investment at convergence in G
r$_{PRI}$=Π$_{\Pi PI}$/K$_{PRI}$	The rate of return of the private sector	B$_{PRI}$*	The ratio of qualitative to quantitative investment at convergence in PRI
σ=η(k/(r/w))	Elasticity of substitution of the total economy	delta	A paramete that neutralizes diminishing returns to capital
σ$_G$	Elasticity of substitution of the government sector	delta$_G$	A paramete that neutralizes diminishing returns to capital in G
σ$_{PRI}$	Elasticity of substitution of the private sector	delta$_{PRI}$	A paramete that neutralizes diminishing returns to capital in PRI
gy	The growth rate of per capita NDI in the total economy	1/λ	The years for convergence of the total economy: λ is conv. coeffiiciet
g$_{y(G)}$	The growth rate of per capita NDI in the G sector	1/λ$_G$	The years for convergence of the G sector: λ is conv. coeffiiicient
g$_{y(PRI)}$	The growth rate of per capita NDI in the PRI sector	1/λ$_{\Pi PI}$	The years for convergence of the PRI sector: λ is conv. coeffiiicient

Notes:
(1) By an accounting identity, expenditures C$_G$ equals wages W$_G$ in the government sector : C$_G$=W$_G$, where saving equals returns, S$_G$=P$_G$.
By setting w=w$_G$=w$_{PRI}$, the share of government labor to labor is settled: (1) (rho/r)$_G$=1.0, (2) w=r/(r/w), (3) (r/w)$_G$=L(W$_G$/W), and (4) w=w$_G$=W$_G$/W.
(2) By comparing each of values and ratios of the total economy, the government sector and the private sector, economic and fiscal policies are evaluated.
I tress that the reivew of the values and ratios of the totalwhole economy is not enough to clarify the real movements of economic and fiscal policies.

Contents of two table series in Kamiryo Endogenous World Table (KEWT 1.07)

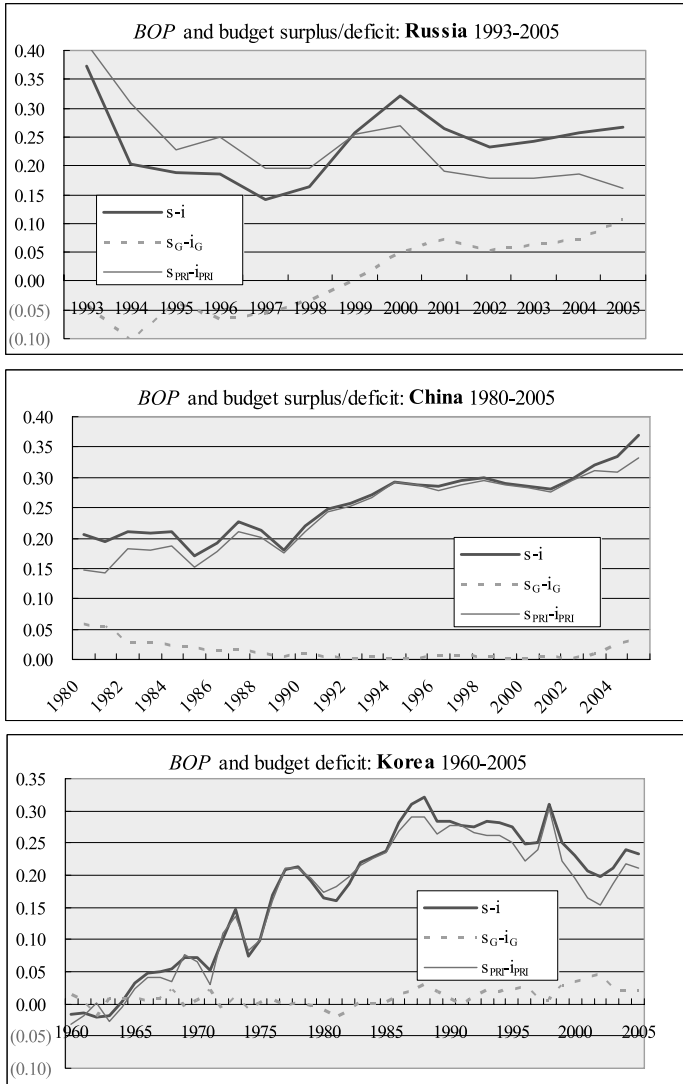**For Main Tables**, where output=national disposable income:

Figure M1   The difference between saving and net investment divided by output by sector

Figure M2   The rate of change in the difference between saving and net investment by sector

Figure M3   The growth rate of per capita output by sector

Figure M4   The ratio of net investment to output by sector

Figure M5   The growth rate of net investment to output by sector
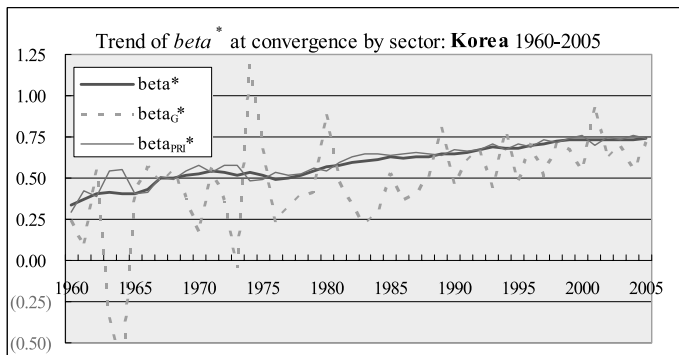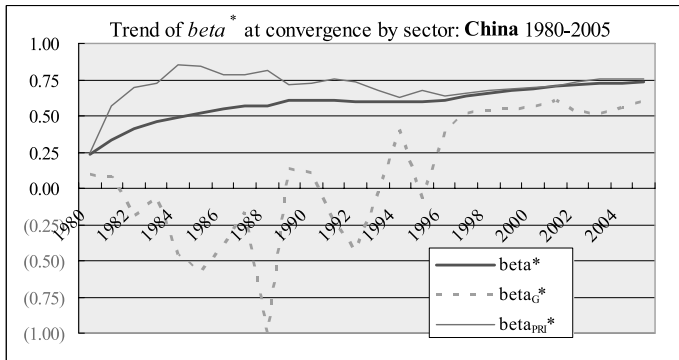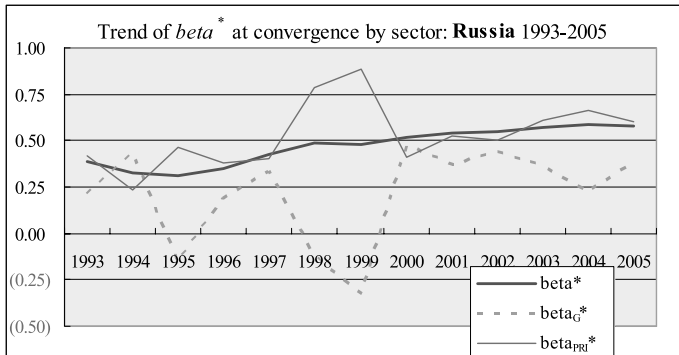
Figure M6   The growth rate of net investment $I=\Delta K$ by sector

Figure M7   The ratio of quantitative investment to investment at convergence $beta^*$ by sector

Figure M8   The growth rate of technological progress in flow at convergence g_A^* by sector

Figure M9   The growth rate of technological progress in TFP, g_{TFP}, by sector

Figure M10   *delta* as a parameter that neutralizes DRC at the current situation by sector

Figure M11   The years for convergence $1/lambda$ ($\lambda=(1-\alpha)n+(1-\delta)g_A^*$) by sector

Figure M12   The marginal relative share of capital and the marginal propensity to consume, both in the private sector

Figure M13   The rate of technological progress and the consumption-multiplier $\Delta C/\Delta K$

Figure M14   The propensity to consume and the relative share of capital, and each marginal ratio, $\Delta C/\Delta Y$ and $\Delta\Pi/\Delta Y$

For Business cycle Tables, where output=national disposable income:

Figure B1   The capital-output ratio, the elasticity of substitution *sigma*, and the rate of tech. progress in flow / the growth rate of *TFP*

Figure B2   The relative share of capital, the rate of return, and the growth rate of net investment in the private sector

Figure B3   The relative share of capital *alpha* by sector and the rate of return in the government sector r_G

Figure B4   The relationship between $\alpha/(1-\alpha)$ and (r/w) connected with the capital-labor ratio

Figure B5   The rates of change in the rate of return, the interest rate of central bank (r_{CB}), *CPI*, and the theoretical wage rate *w*

Figure B6   Trend of the relative share of capital in the private sector and its regression equations

Figure B7   Trend of the growth rate of net investment in the private sector and its regression equations

Figure B8   Business cycle of the private sector derived from net investment in the private sector, considering the trend of *alpha* in the private sector

Figure B9   Investment and consumption, $\mu=K/C$ and the marginal $\Delta\mu=\Delta K/\Delta C$

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Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
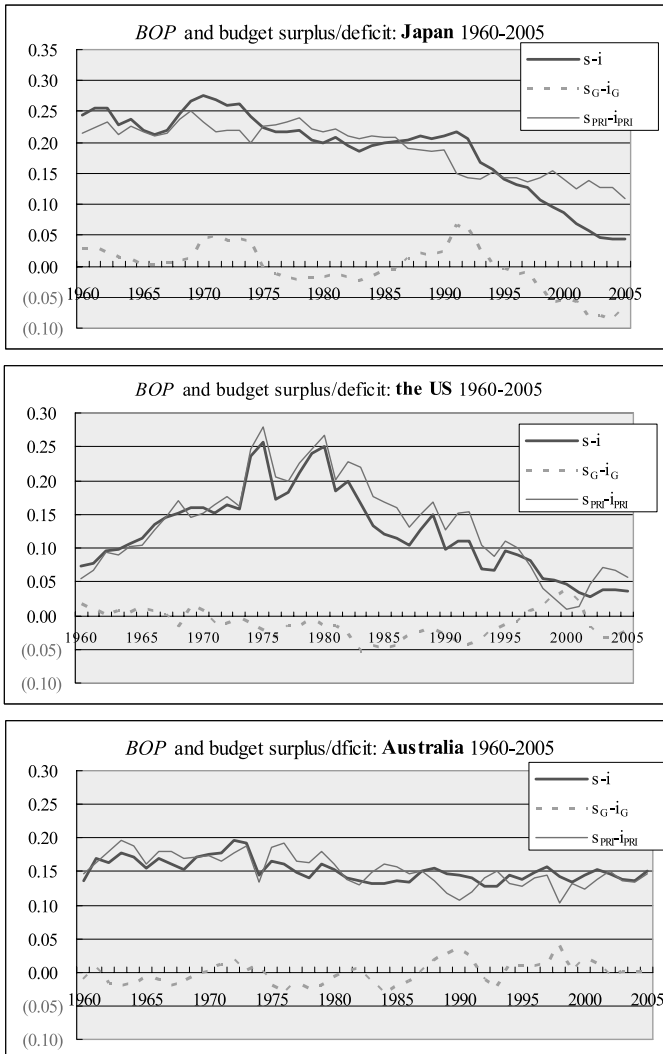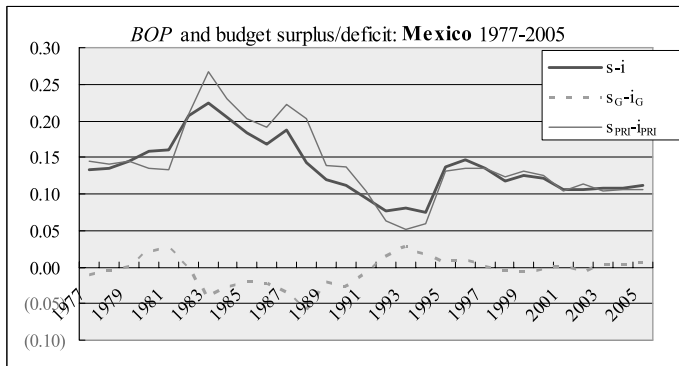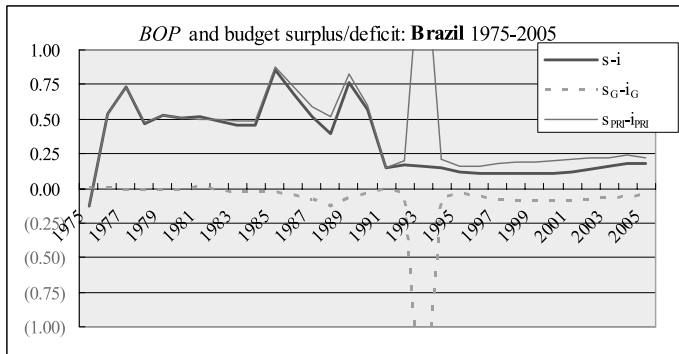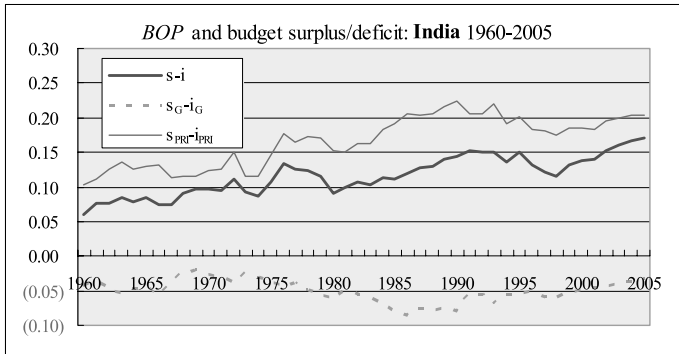by Country and by Sector

Figure M1   The difference between saving and net investment divided by output by sector (1)

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Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
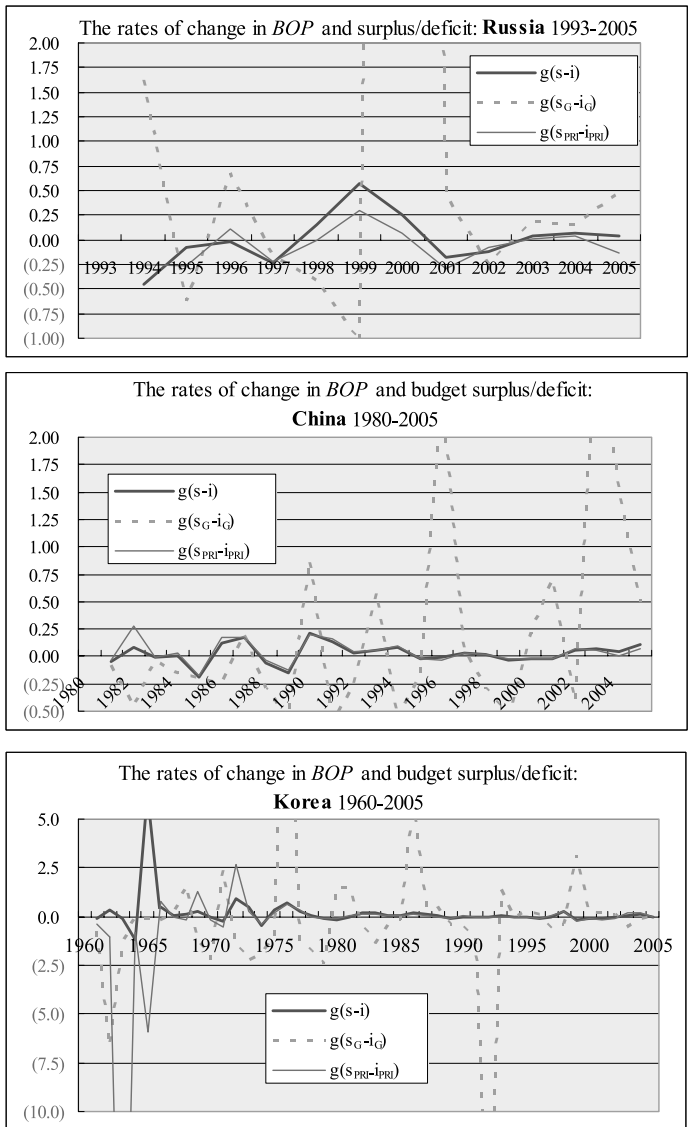by Country and by Sector

Figure M1 The difference between saving and net investment divided by output by sector (2)

Figure M1   The difference between saving and net investment divided by output by sector (3)

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Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

The rates of change in *BOP* and surplus/deficit: **Russia** 1993-2005

The rates of change in *BOP* and budget surplus/deficit:
China 1980-2005
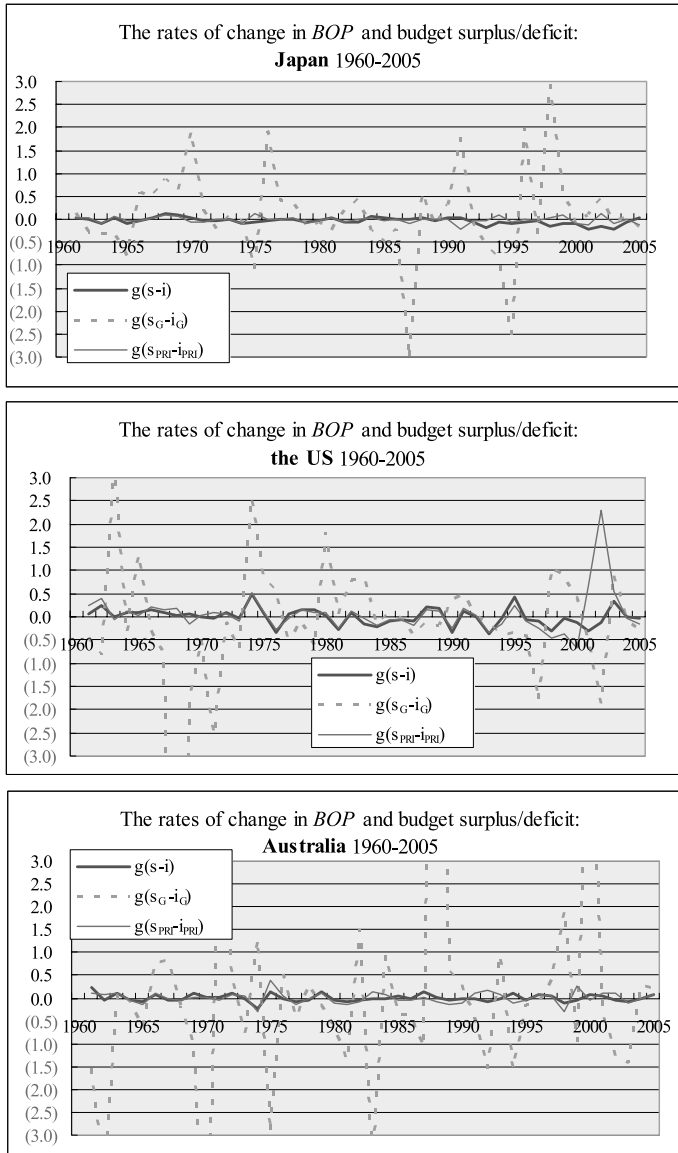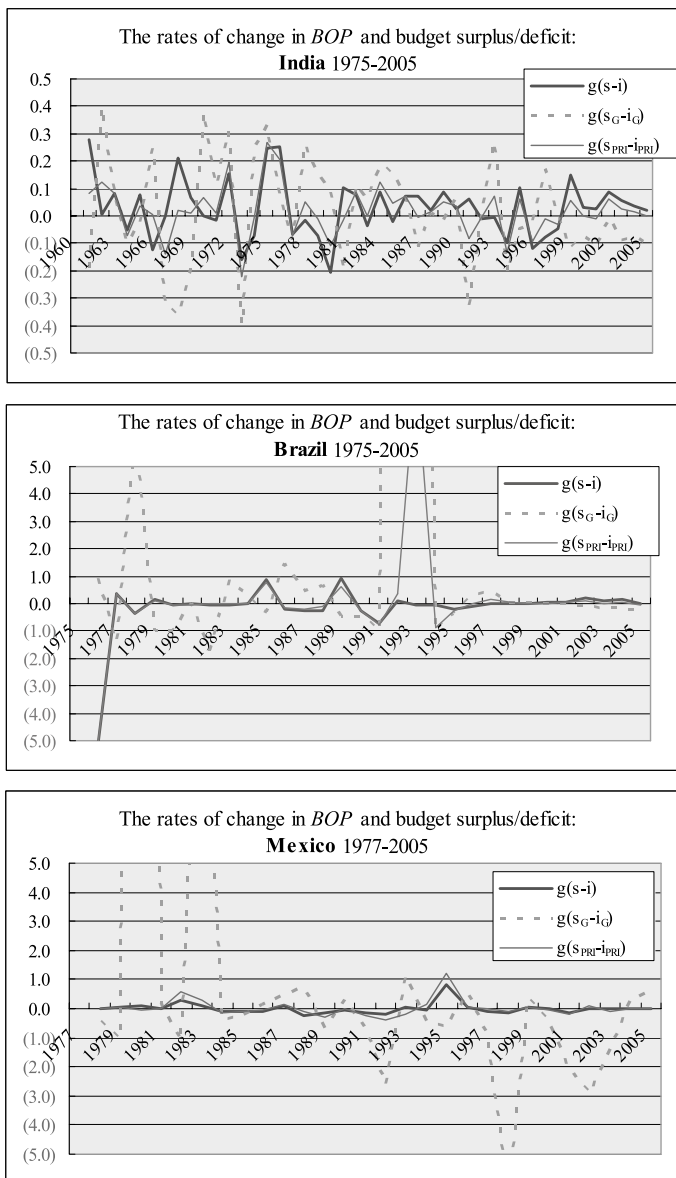
The rates of change in *BOP* and budget surplus/deficit:
Korea 1960-2005

**Figure M2   The rate of change in the difference between saving and net investment
by sector (1)**

The rates of change in *BOP* and budget surplus/deficit: **Japan** 1960-2005

The rates of change in *BOP* and budget surplus/deficit: **the US** 1960-2005

The rates of change in *BOP* and budget surplus/deficit: **Australia** 1960-2005

Figure M2   The rate of change in the difference between saving and net investment by sector (2)

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The rates of change in *BOP* and budget surplus/deficit:
India 1975-2005

g(s-i)
g(s_G-i_G)
g(s_PRI-i_PRI)

The rates of change in *BOP* and budget surplus/deficit:
Brazil 1975-2005

g(s-i)
g(s_G-i_G)
g(s_PRI-i_PRI)

The rates of change in *BOP* and budget surplus/deficit:
Mexico 1977-2005

g(s-i)
g(s_G-i_G)
g(s_PRI-i_PRI)

Figure M2   The rate of change in the difference between saving and net investment by sector (3)

The growth rate of per capita output by sector: **Russia** 1993-2005

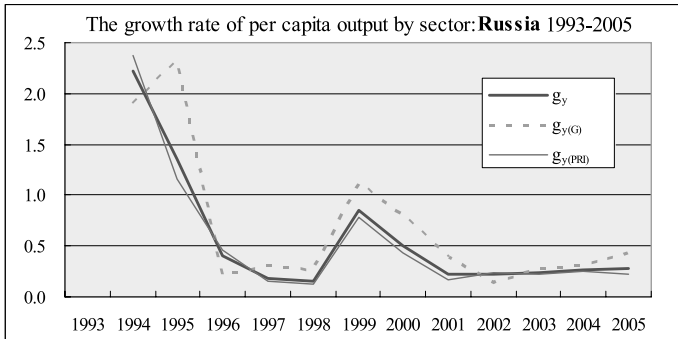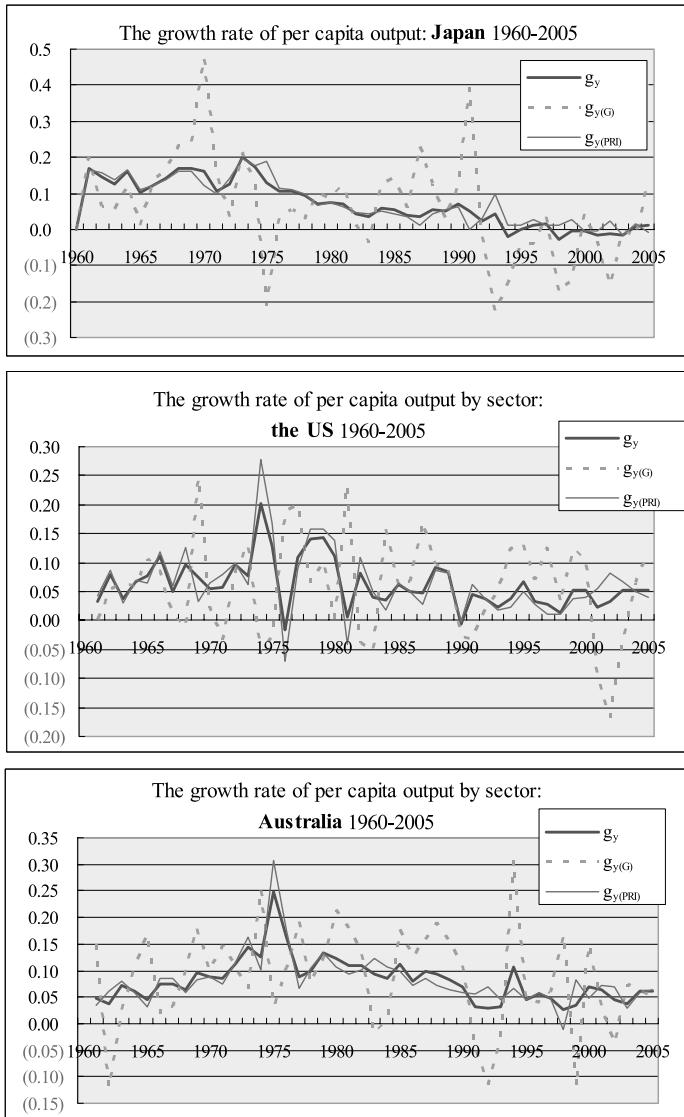The growth rate of per capita output by sector: **China** 1980-2005
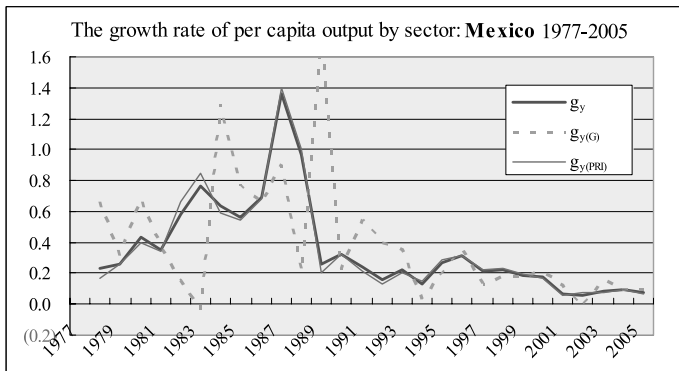
The growth rate of per capita output: **Korea** 1960-2005

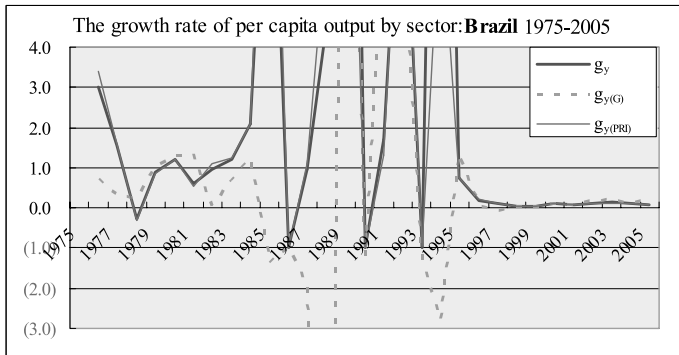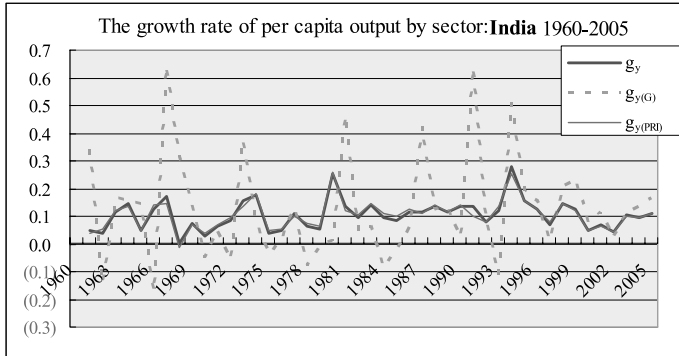**Figure M3   The growth rate of per capita output by sector (1)**
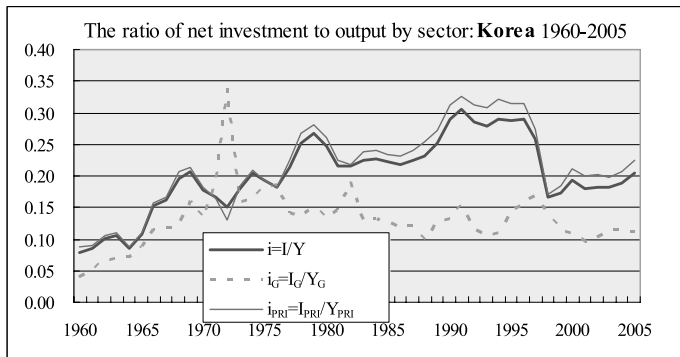
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The growth rate of per capita output: **Japan** 1960-2005

The growth rate of per capita output by sector:
the US 1960-2005

The growth rate of per capita output by sector:
Australia 1960-2005

Figure M3   The growth rate of per capita output by sector (2)

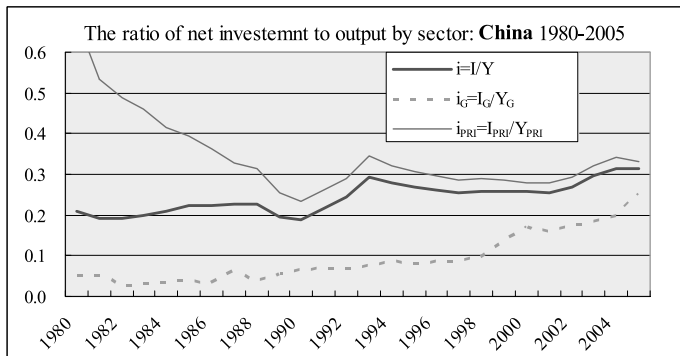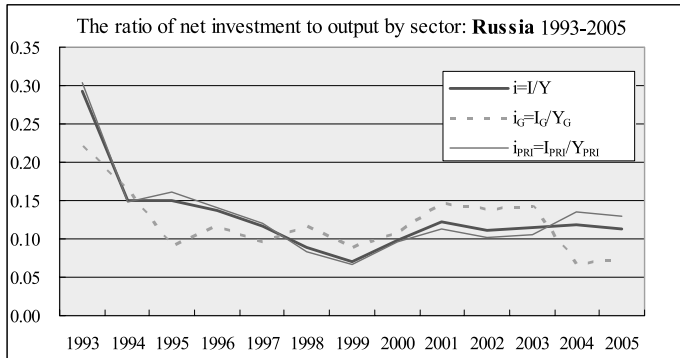The growth rate of per capita output by sector:**India** 1960-2005

The growth rate of per capita output by sector:**Brazil** 1975-2005

The growth rate of per capita output by sector: **Mexico** 1977-2005

Figure M3   The growth rate of per capita output by sector (3)

The ratio of net investment to output by sector: **Russia** 1993-2005

$i=I/Y$
$i_G=I_G/Y_G$
$i_{PRI}=I_{PRI}/Y_{PRI}$

The ratio of net investemnt to output by sector: **China** 1980-2005

$i=I/Y$
$i_G=I_G/Y_G$
$i_{PRI}=I_{PRI}/Y_{PRI}$

The ratio of net investment to output by sector: **Korea** 1960-2005
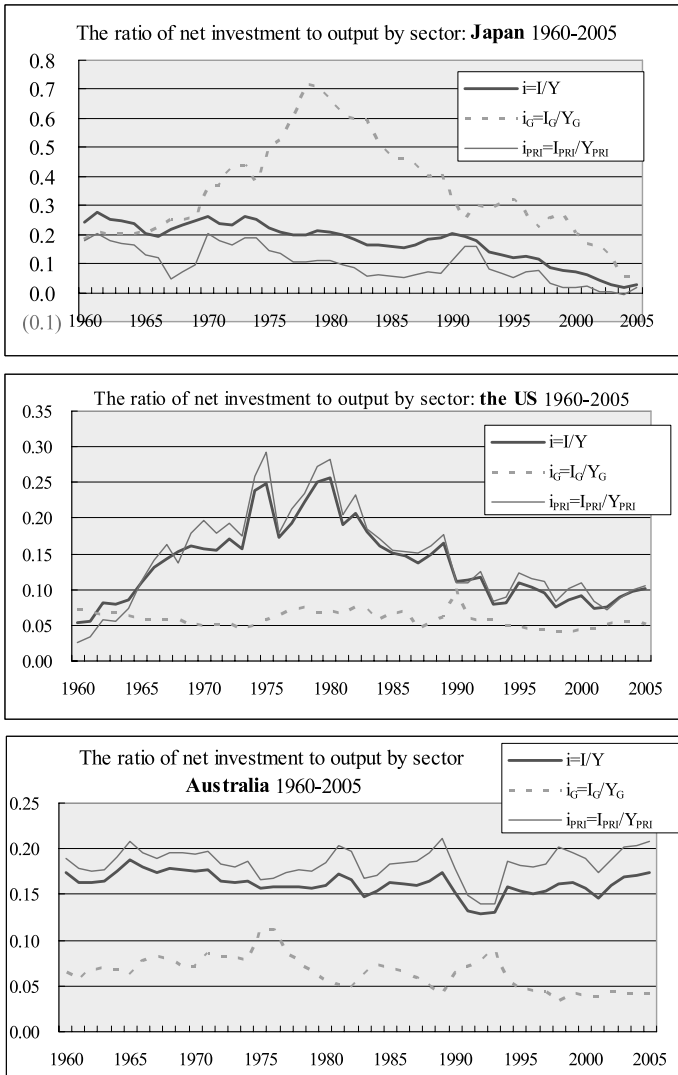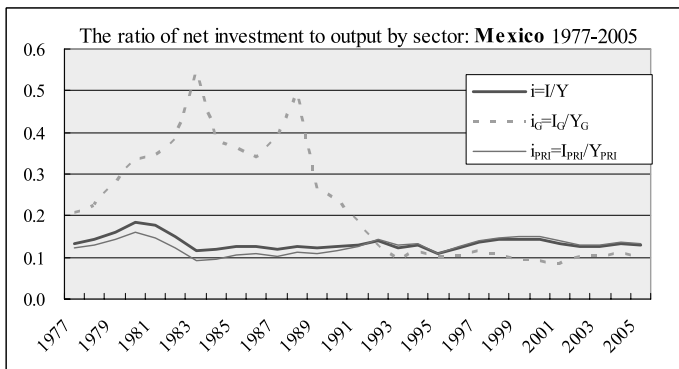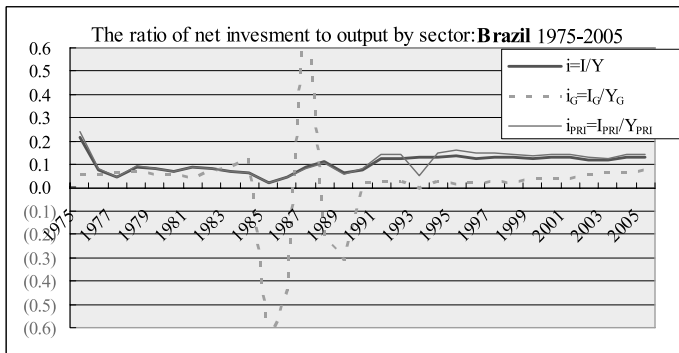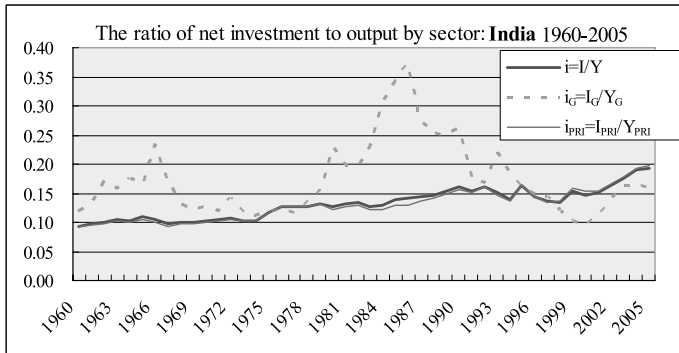
$i=I/Y$
$i_G=I_G/Y_G$
$i_{PRI}=I_{PRI}/Y_{PRI}$

Figure M4　The ratio of net investment to output by sector (1)

The ratio of net investment to output by sector: **Japan** 1960-2005

i=I/Y
i$_G$=I$_G$/Y$_G$
i$_{PRI}$=I$_{PRI}$/Y$_{PRI}$

The ratio of net investment to output by sector: **the US** 1960-2005

i=I/Y
i$_G$=I$_G$/Y$_G$
i$_{PRI}$=I$_{PRI}$/Y$_{PRI}$

The ratio of net investment to output by sector
Australia 1960-2005

i=I/Y
i$_G$=I$_G$/Y$_G$
i$_{PRI}$=I$_{PRI}$/Y$_{PRI}$

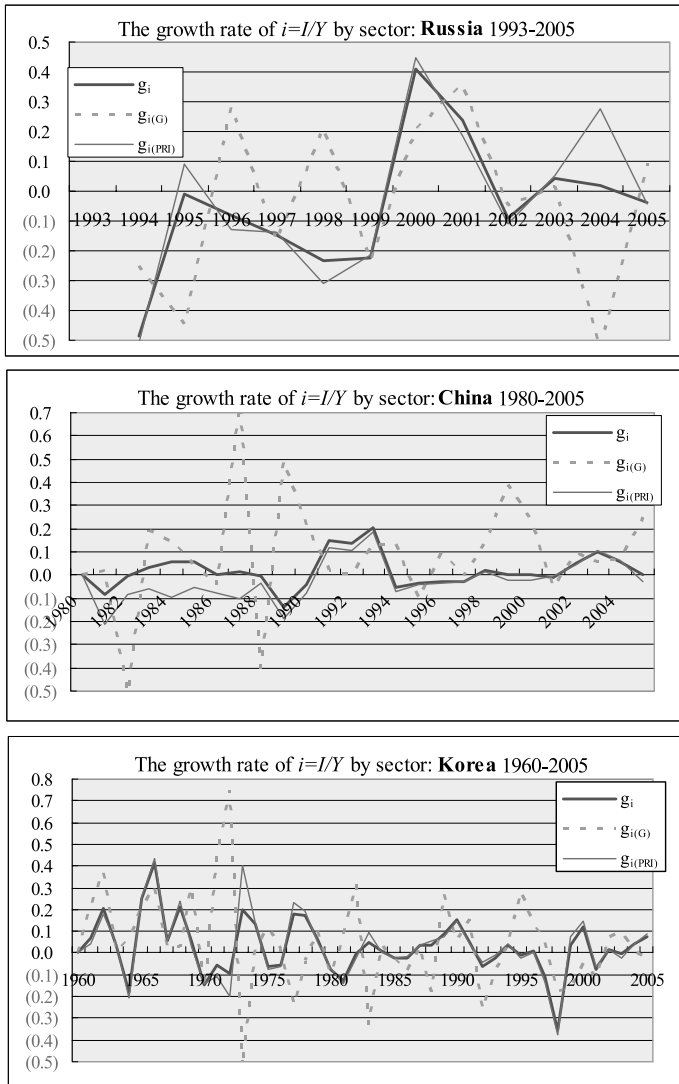**Figure M4   The ratio of net investment to output by sector (2)**

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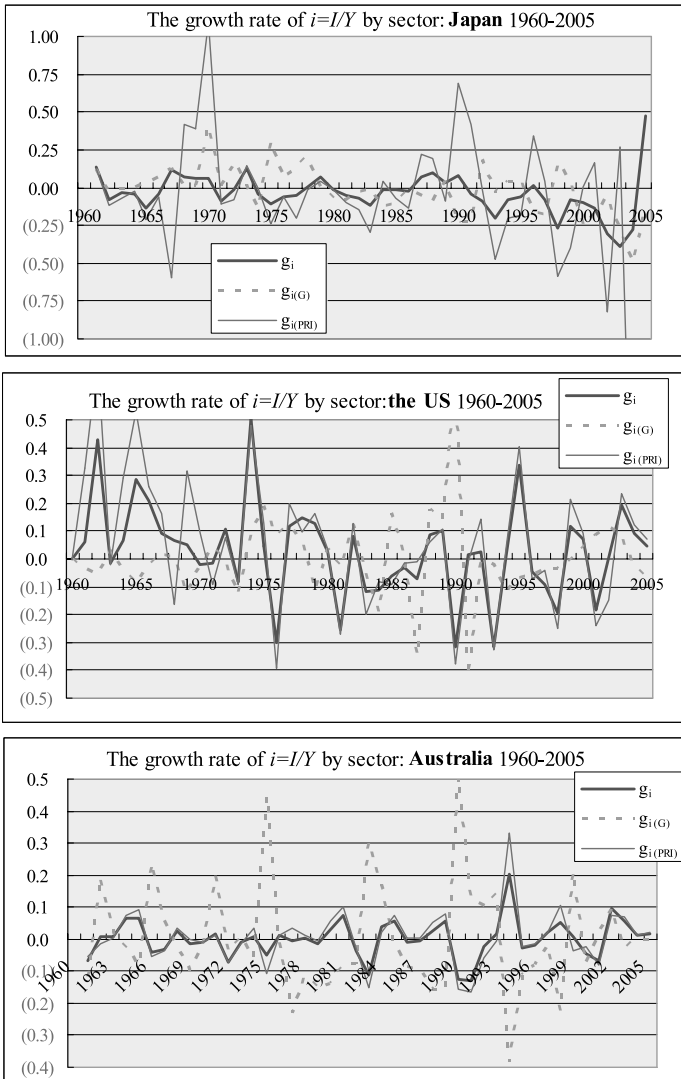Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

The ratio of net investment to output by sector: **India** 1960-2005

The ratio of net invesment to output by sector: **Brazil** 1975-2005

The ratio of net investment to output by sector: **Mexico** 1977-2005

Figure M4   The ratio of net investment to output by sector (3)

The growth rate of $i=I/Y$ by sector: **Russia** 1993-2005

The growth rate of $i=I/Y$ by sector: **China** 1980-2005

The growth rate of $i=I/Y$ by sector: **Korea** 1960-2005

Figure M5 The growth rate of net investment to output by sector (1)

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Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
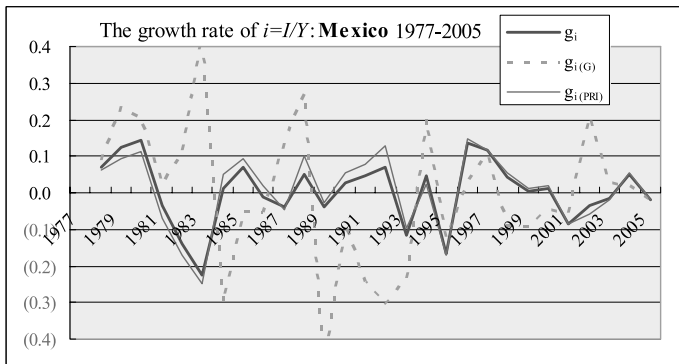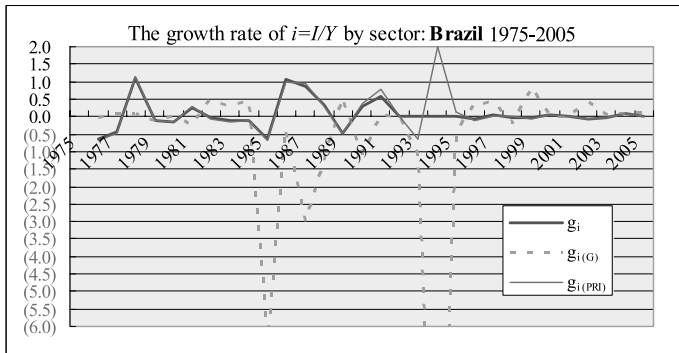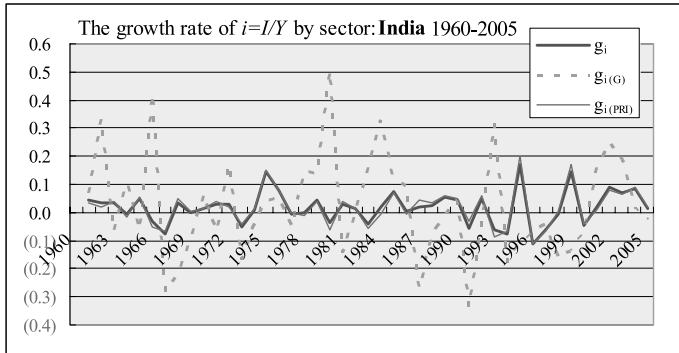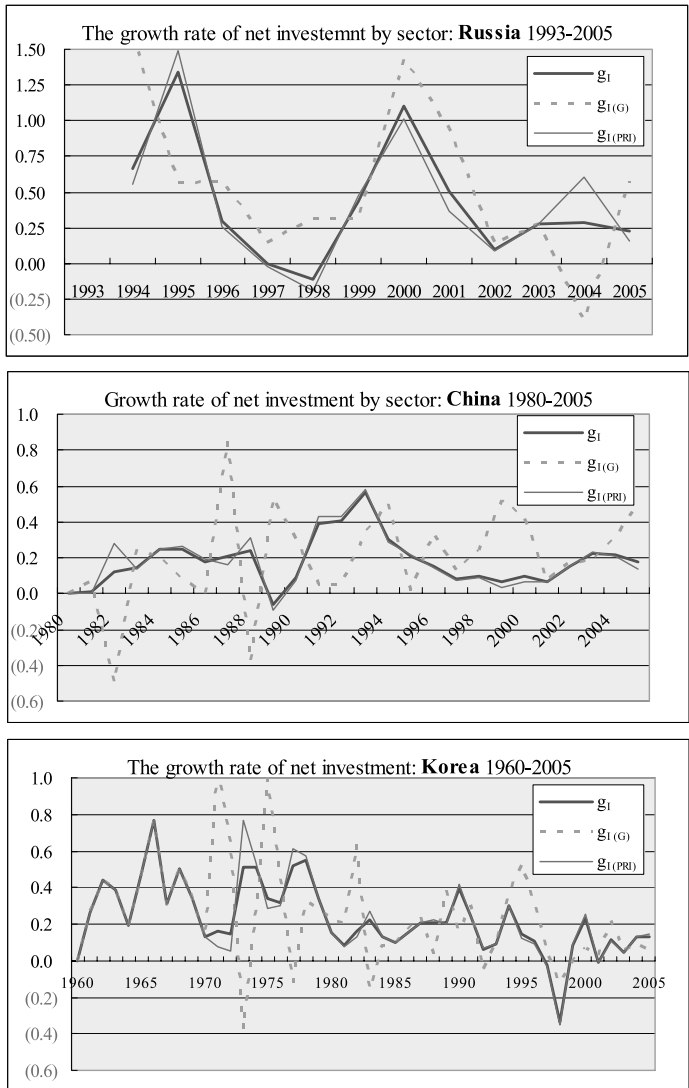by Country and by Sector

The growth rate of $i=I/Y$ by sector: **Japan** 1960-2005

The growth rate of $i=I/Y$ by sector: **the US** 1960-2005

The growth rate of $i=I/Y$ by sector: **Australia** 1960-2005

Figure M5   The growth rate of net investment to output by sector (2)

The growth rate of $i=I/Y$ by sector: **India** 1960-2005

The growth rate of $i=I/Y$ by sector: **Brazil** 1975-2005

The growth rate of $i=I/Y$: **Mexico** 1977-2005

Figure M5　The growth rate of net investment to output by sector (3)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
                     Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
                     by Country and by Sector

The growth rate of net investemnt by sector: **Russia** 1993-2005
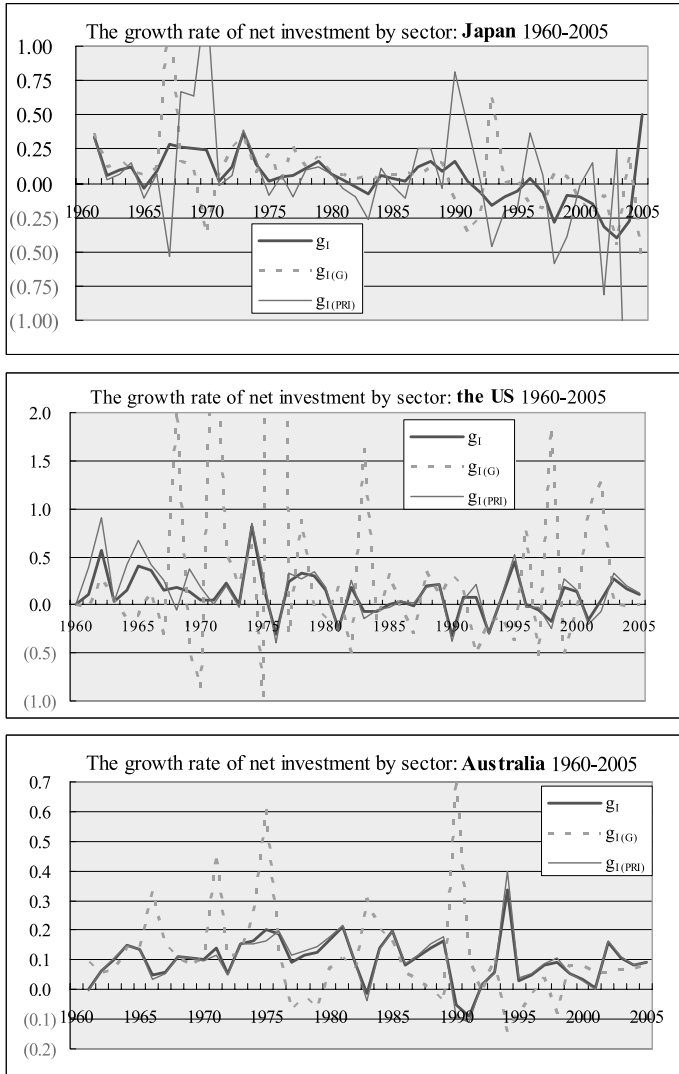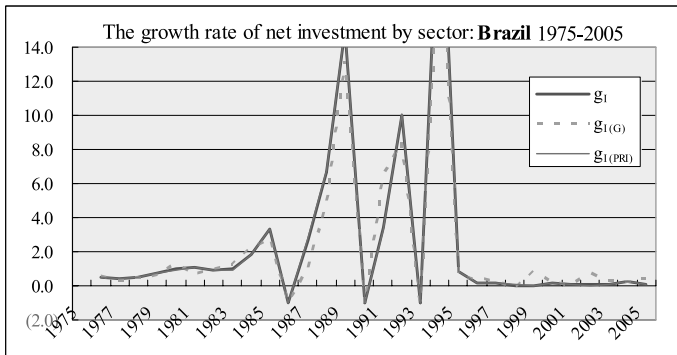
Growth rate of net investment by sector: **China** 1980-2005

The growth rate of net investment: **Korea** 1960-2005

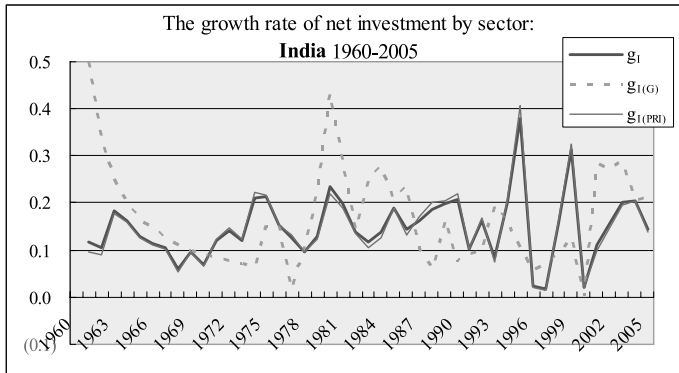**Figure M6   The growth rate of net investment $I=\Delta K$ by sector (1)**

The growth rate of net investment by sector: **Japan** 1960-2005

The growth rate of net investment by sector: **the US** 1960-2005

The growth rate of net investment by sector: **Australia** 1960-2005

Figure M6   The growth rate of net investment $I=\Delta K$ by sector (2)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

The growth rate of net investment by sector:
India 1960-2005

The growth rate of net investment by sector: **Brazil** 1975-2005

The growth rate of net investment by sector: **Mexico** 1977-2005

Figure M6   The growth rate of net investment *I=ΔK* by sector (3)

Figure M7   The ratio of quantitative investment to investment at convergence *beta*[*] by sector (1)

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Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
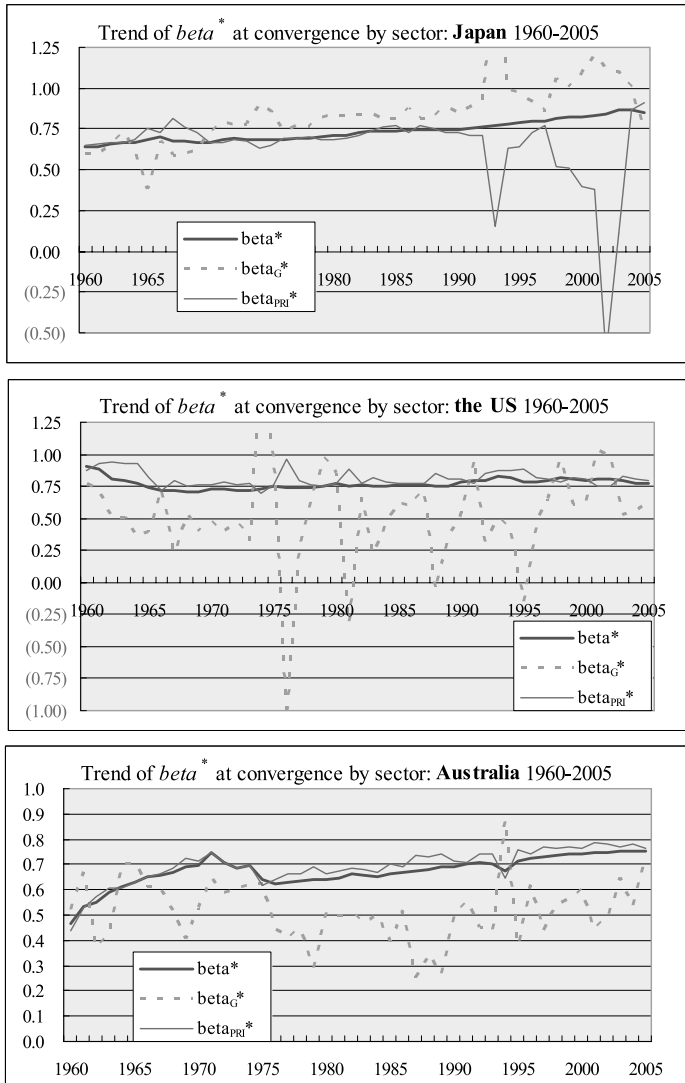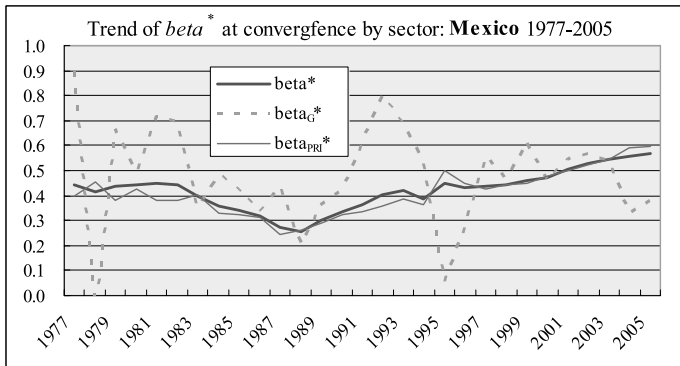by Country and by Sector

Trend of *beta*[*] at convergence by sector: **Japan** 1960-2005

Trend of *beta*[*] at convergence by sector: **the US** 1960-2005

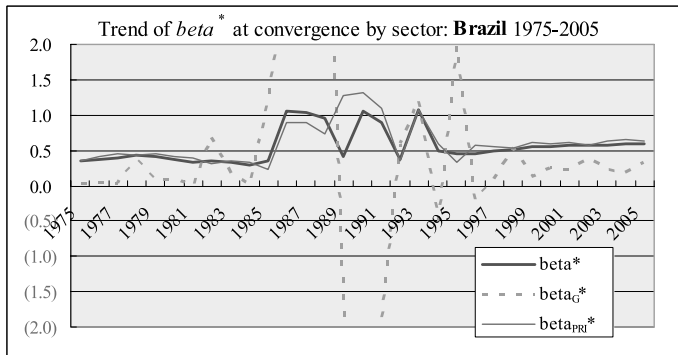Trend of *beta*[*] at convergence by sector: **Australia** 1960-2005

**Figure M7　The ratio of quantitative investment to investment at convergence *beta*[*]
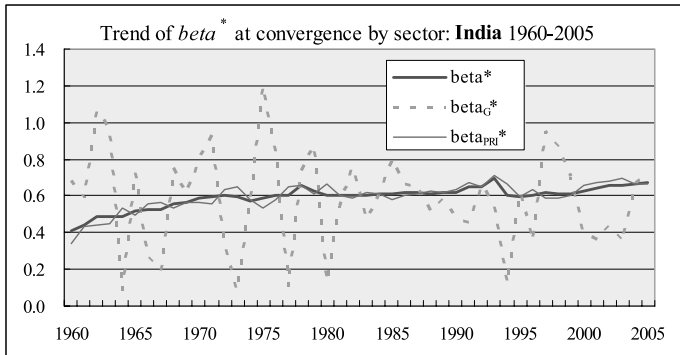by sector (2)**

Figure M7   The ratio of quantitative investment to investment at convergence *beta**
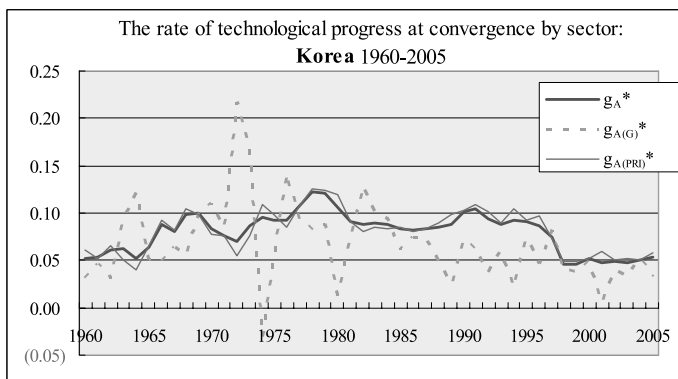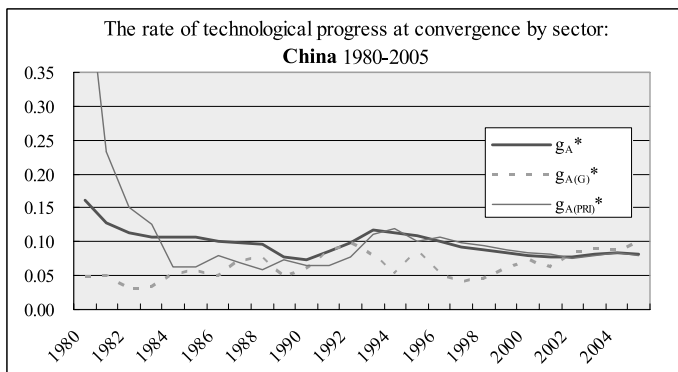**by sector (3)**

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
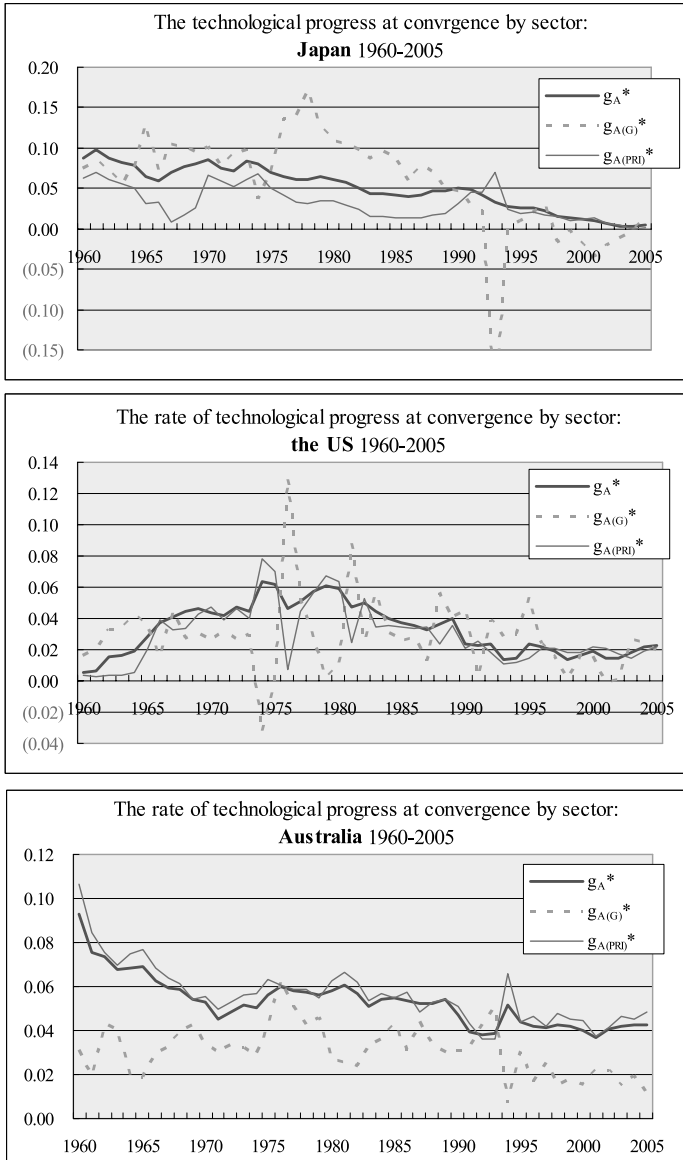Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

The rate of technological progress at convergence by sector: **Russia** 1993-2005

The rate of technological progress at convergence by sector: **China** 1980-2005

The rate of technological progress at convergence by sector: **Korea** 1960-2005

Figure M8   The growth rate of technological progress in flow at convergence g_A^* by sector (1)

The technological progress at convrgence by sector: **Japan** 1960-2005

The rate of technological progress at convergence by sector: **the US** 1960-2005

The rate of technological progress at convergence by sector: **Australia** 1960-2005

Figure M8 **The growth rate of technological progress in flow at convergence g_A^* by sector (2)**

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

The rate of technological progress at convergence by sector:
India 1960-2005

The rate of technological progress at convergence by sector:
Brazil 1975-2005

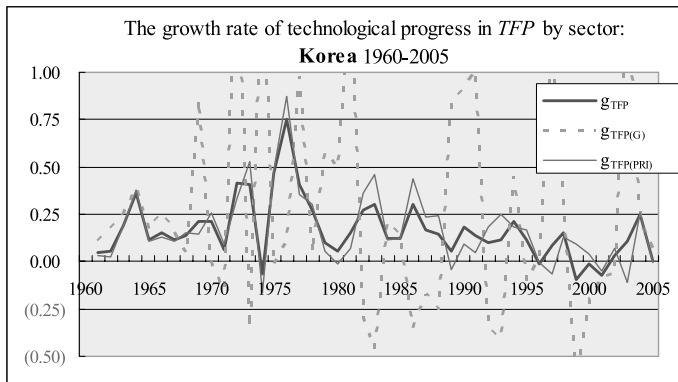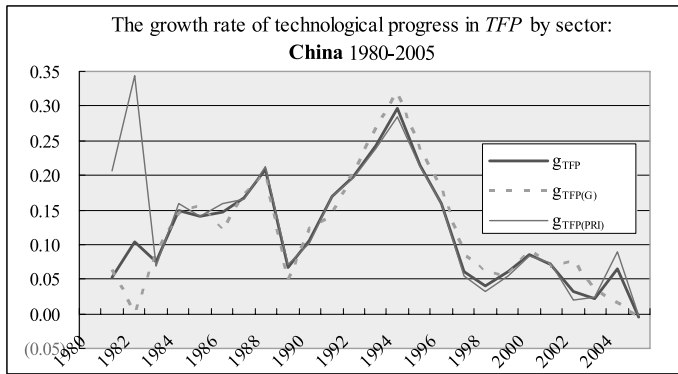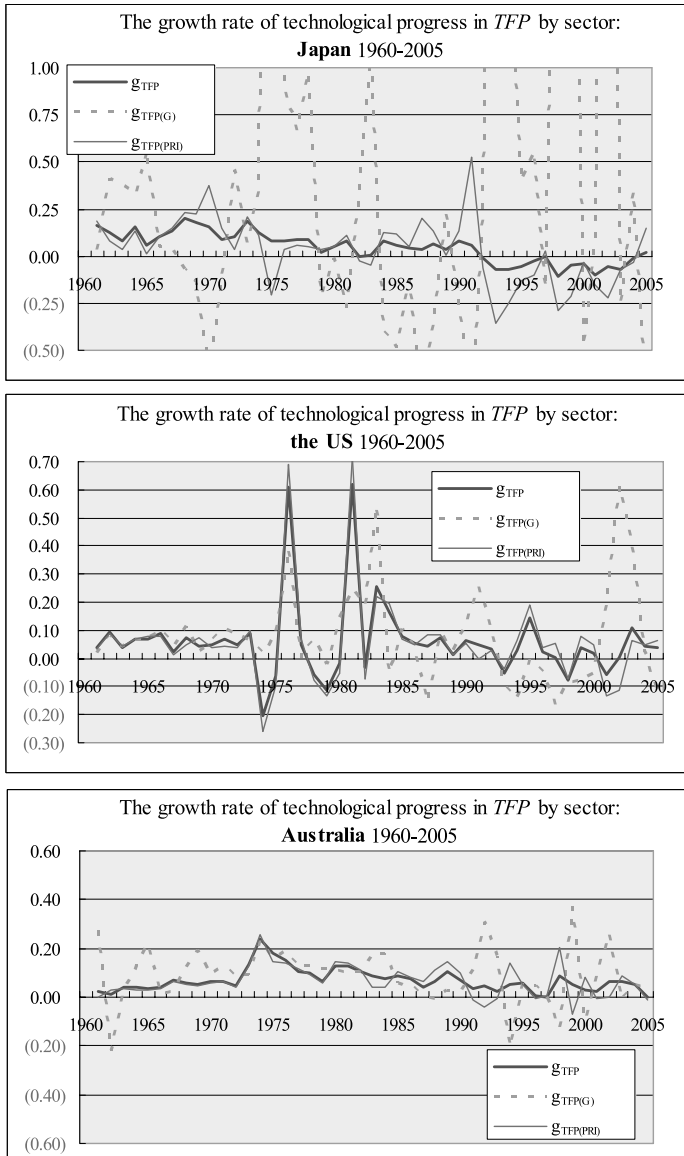The rate of technological progress at convergence by sector:
Mexico 1977-2005

Figure M8   The growth rate of technological progress in flow at convergence g_A^* by sector (3)

Figure M9   The growth rate of technological progress in *TFP*, *g_TFP*, by sector (1)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

The growth rate of technological progress in *TFP* by sector:
Japan 1960-2005

The growth rate of technological progress in *TFP* by sector:
the US 1960-2005

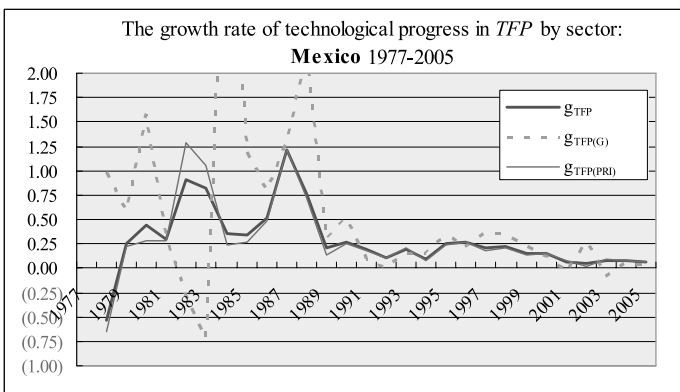The growth rate of technological progress in *TFP* by sector:
Australia 1960-2005

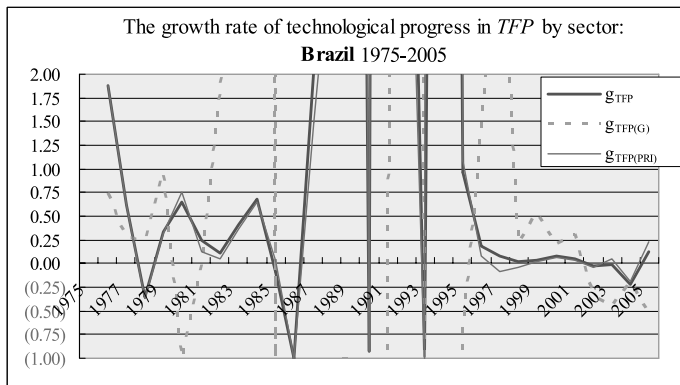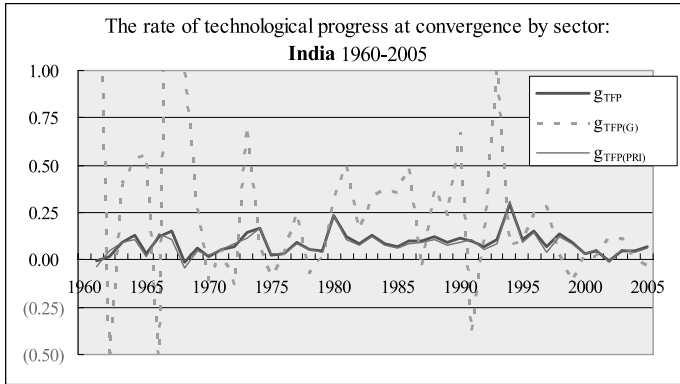**Figure M9   The growth rate of technological progress in *TFP*, g_{TFP}, by sector (2)**

Figure M9   The growth rate of technological progress in *TFP*, g_{TFP}, by sector (3)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

delta that neutralizes DRC at thecurrent situation:
Russia 1993-2005

delta that neutralizes DRC at the current situation:
China 1980-2005

delta that neutralizes DRC at the current situation:
Korea 1960-2005
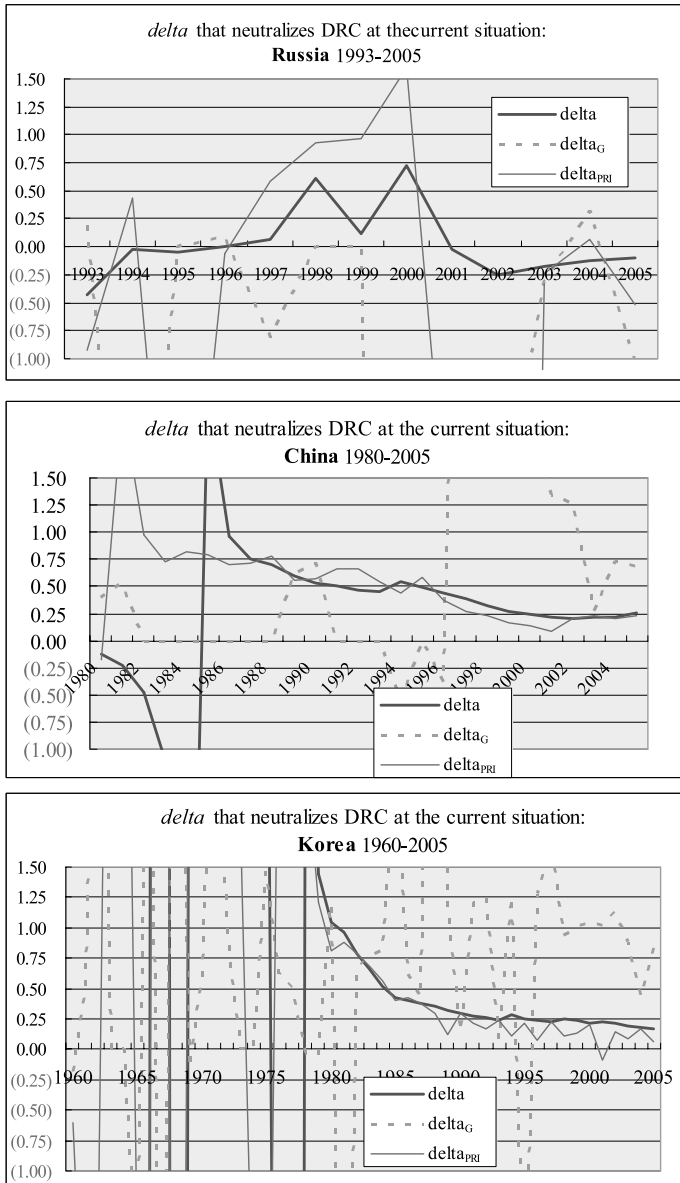
**Figure M10   *delta* as a parameter that neutralizes DRC at the current situation by
sector (1)**
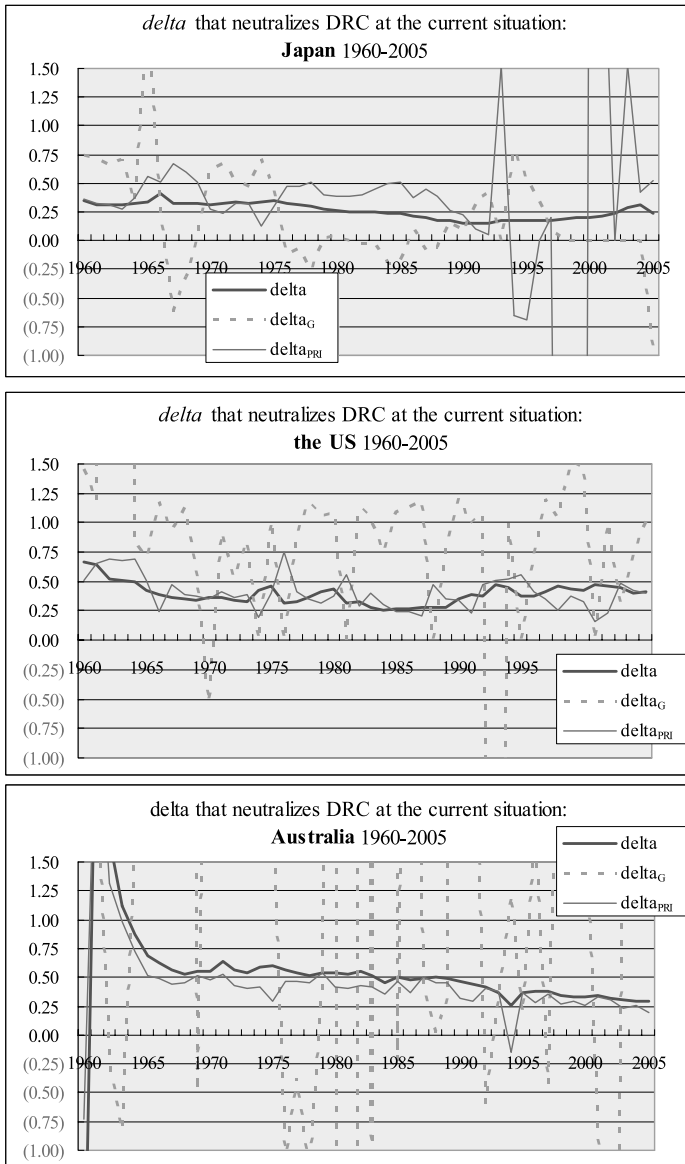
Figure M10 *delta* **as a parameter that neutralizes DRC at the current situation by sector (2)**

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

delta that neutralizes DRC at the current situation:
India 1960-2005

delta that neutralizes DRC at the current situation:
Brazil 1975-2005

delta that neutralizes DRC at the current situation:
Mexico 1977-2005

Figure M10   *delta* **as a parameter that neutralizes DRC at the current situation by sector (3)**

The years for convergence: **Russia** 1993-2005

The years for convergence: **China** 1980-2005

The years for convergence: **Korea** 1960-2005

Figure M11   The years for convergence 1/*lambda* (λ=(1-α)n+(1-δ)g_A^*) by sector (1)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
                      Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
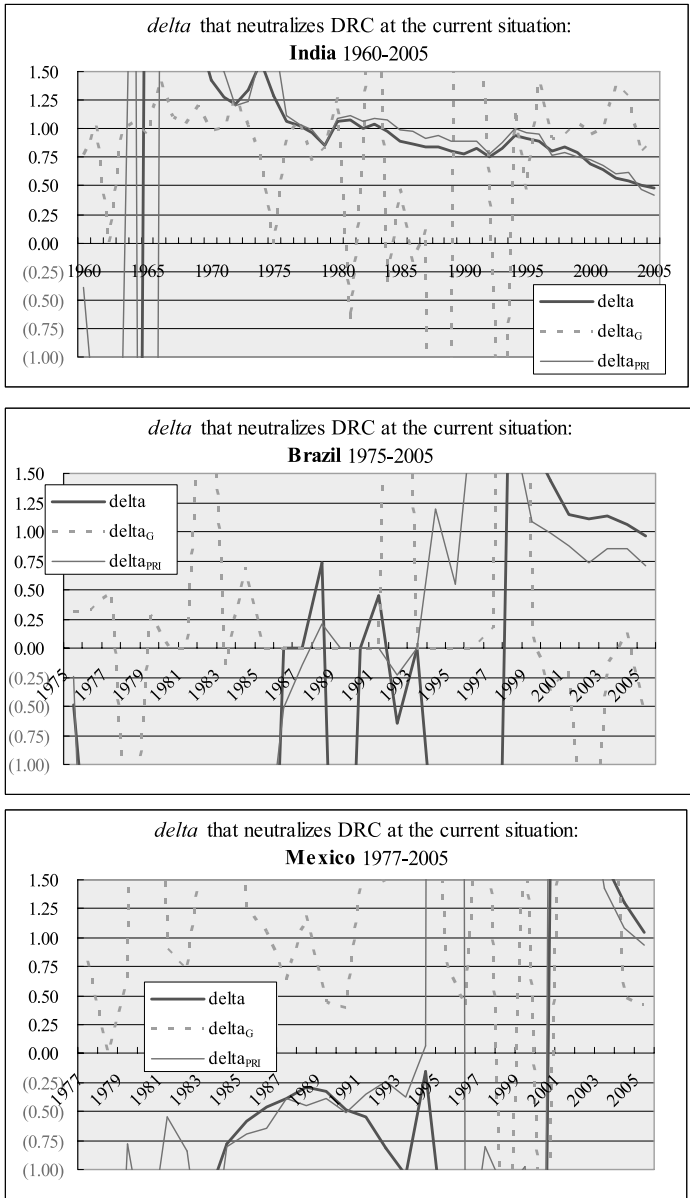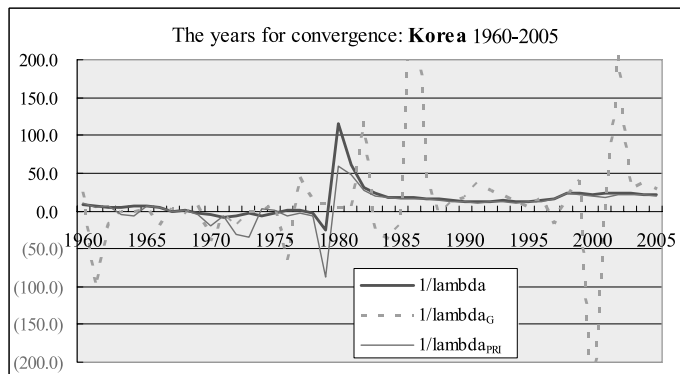   by Country and by Sector

The years for convergence: **Japan** 1960-2005

Legend:
- 1/lambda
- 1/lambda$_G$
- 1/lambda$_{PRI}$

The years for convergence: **the US** 1960-2005

Legend:
- 1/lambda
- 1/lambda$_G$
- 1/lambda$_{PRI}$

The years for convergence: **Australia** 1960-2005

Legend:
- 1/lambda
- 1/lambda$_G$
- 1/lambda$_{PRI}$

Figure M11   The years for convergence $1/lambda$ ($\lambda=(1-\alpha)n+(1-\delta)g_A^*$) **by sector (2)**

The years for convergence: **India** 1960-2005

The years for convergence: **Brazil** 1975-2005

The years for convergence: **Mexico** 1977-2005

Figure M11   The years for convergence 1/*lambda* ($\lambda=(1-\alpha)n+(1-\delta)g_A^*$) by sector (3)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
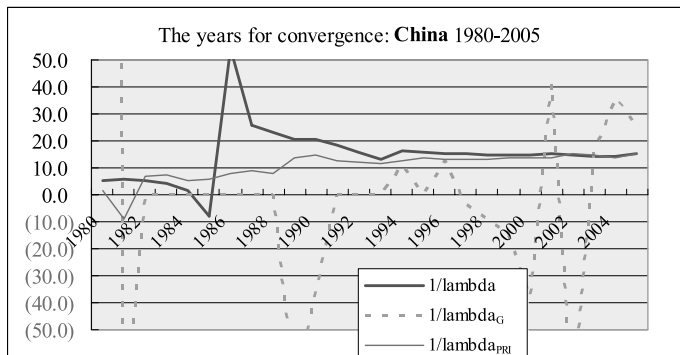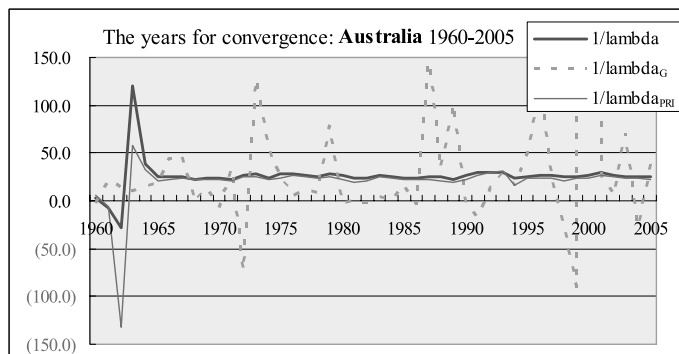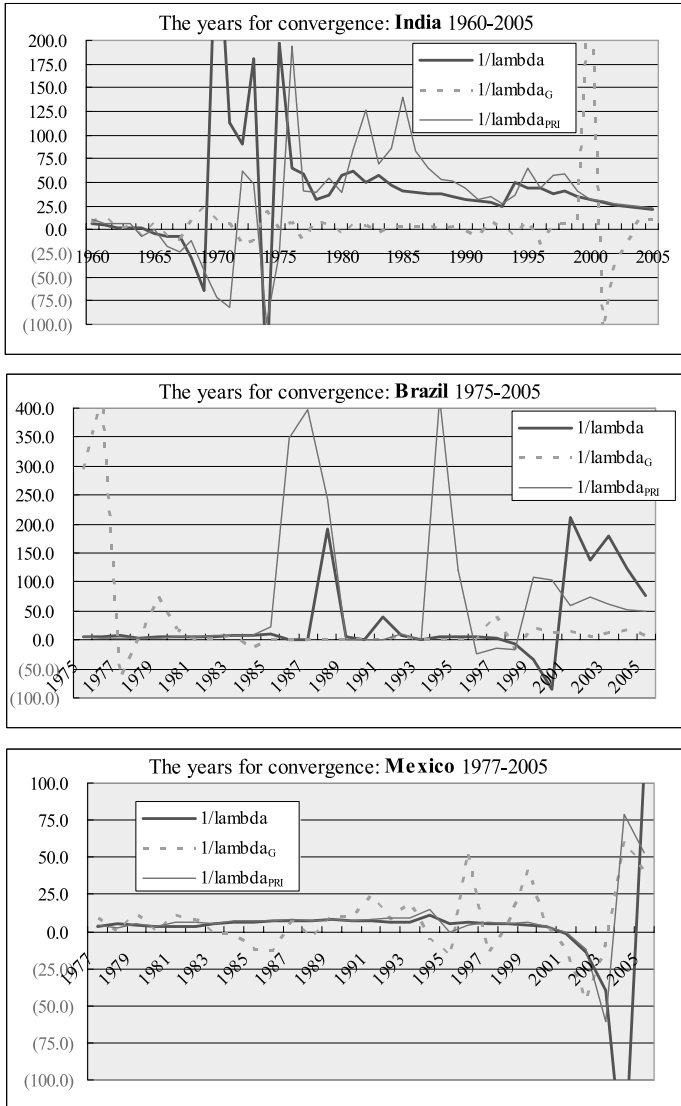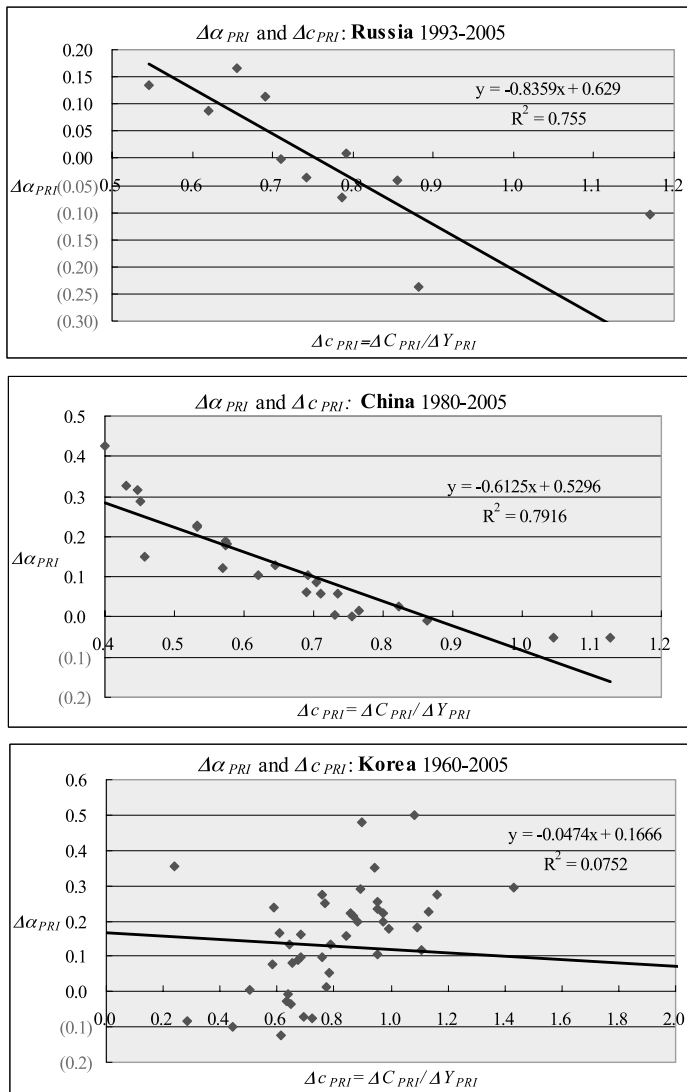Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

$\Delta\alpha_{PRI}$ and Δc_{PRI}: **Russia** 1993-2005

$y = -0.8359x + 0.629$
$R^2 = 0.755$

$\Delta c_{PRI} = \Delta C_{PRI}/\Delta Y_{PRI}$

$\Delta\alpha_{PRI}$ and Δc_{PRI}: **China** 1980-2005

$y = -0.6125x + 0.5296$
$R^2 = 0.7916$

$\Delta c_{PRI} = \Delta C_{PRI}/\Delta Y_{PRI}$

$\Delta\alpha_{PRI}$ and Δc_{PRI}: **Korea** 1960-2005

$y = -0.0474x + 0.1666$
$R^2 = 0.0752$

$\Delta c_{PRI} = \Delta C_{PRI}/\Delta Y_{PRI}$

Figure M12   The marginal relative share of capital and the marginal propensity to consume, both in the private sector (1)

$\Delta\alpha_{PRI}$ and Δc_{PRI}: **Japan** 1960-2005

$y = -1.698x + 1.2633$
$R^2 = 0.6781$

$\Delta c_{PRI} = \Delta C_{PRI} / \Delta Y_{PRI}$

$\Delta\alpha_{PRI}$ and Δc_{PRI}: **the US** 1960-2005

$y = -2.3747x + 2.8764$
$R^2 = 0.9981$

$y = -0.0033x^2 - 1.7165x + 2.313$
$R^2 = 0.4882$

$\Delta c_{PRI} = \Delta C_{PRI} / \Delta Y_{PRI}$

$\Delta\alpha_{PRI}$ and Δc_{PRI}: **Australia** 1960-2005

$y = -1.0525x + 0.9932$
$R^2 = 0.9999$

$\Delta c_{PRI} = \Delta C_{PRI} / \Delta Y_{PRI}$

Figure M12   The marginal relative share of capital and the marginal propensity to consume, both in the private sector (2)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
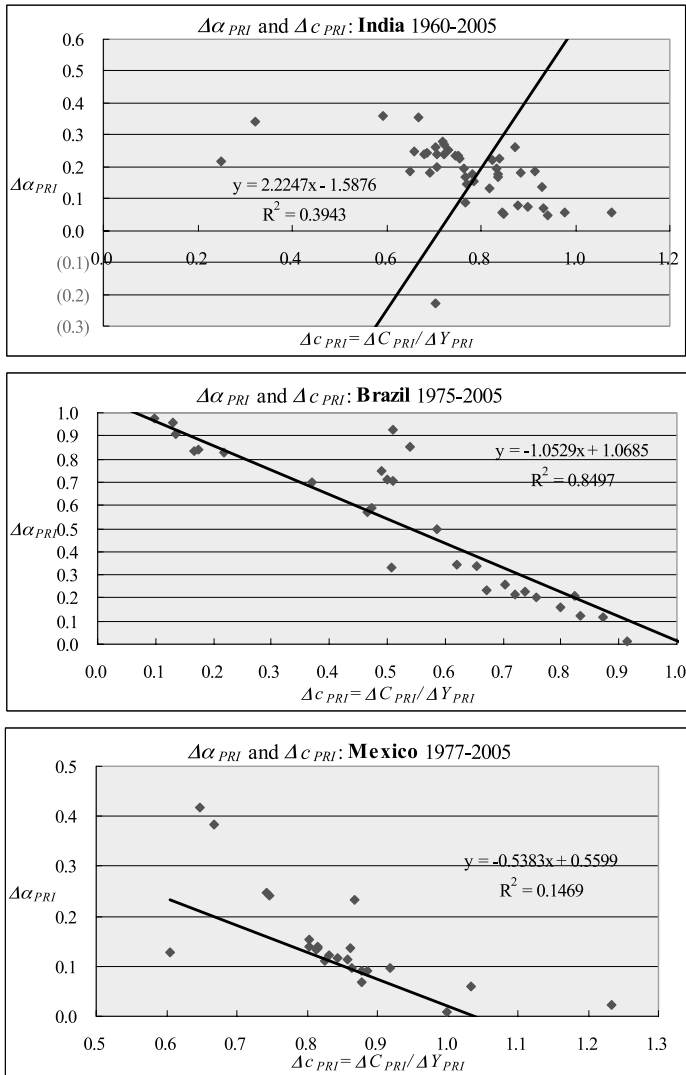Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

**Figure M12   The marginal relative share of capital and the marginal propensity to
consume, both in the private sector (3)**

g_A and consumption-multiplier $Mc = \Delta C / \Delta K$: **Russia** 1993-2005

$y = 0.9295x - 0.1806$
$R^2 = 0.7841$

g_A and consumption multiplier $Mc = \Delta C / \Delta K$: **China** 1980-2005

$y = 0.2958x + 0.0126$
$R^2 = 0.4913$

g_A and consumption-multiplier $Mc = \Delta C / \Delta K$: **Korea** 1960-2005

$y = 0.061x + 0.0932$
$R^2 = 0.2425$

Figure M13   The rate of technological progress and the consumption-multiplier $\Delta C / \Delta K$ (1)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
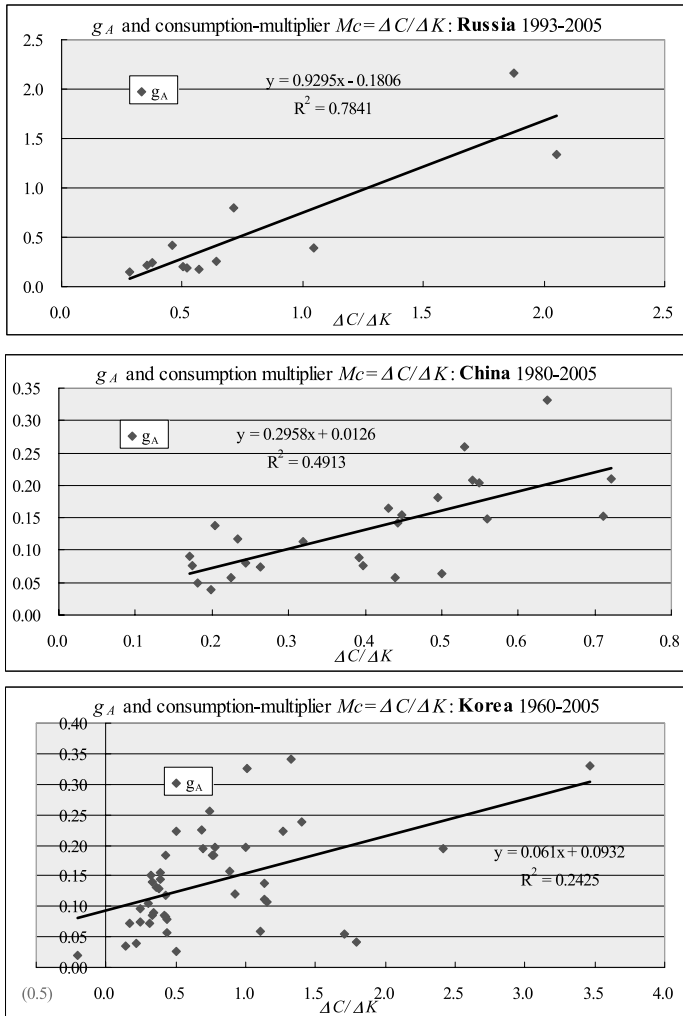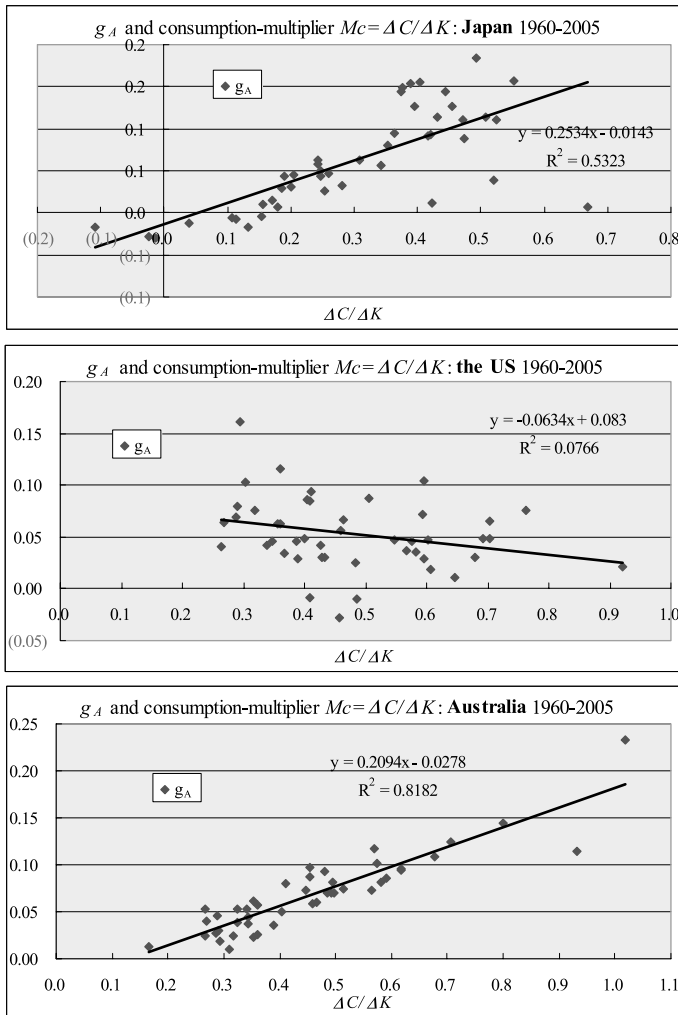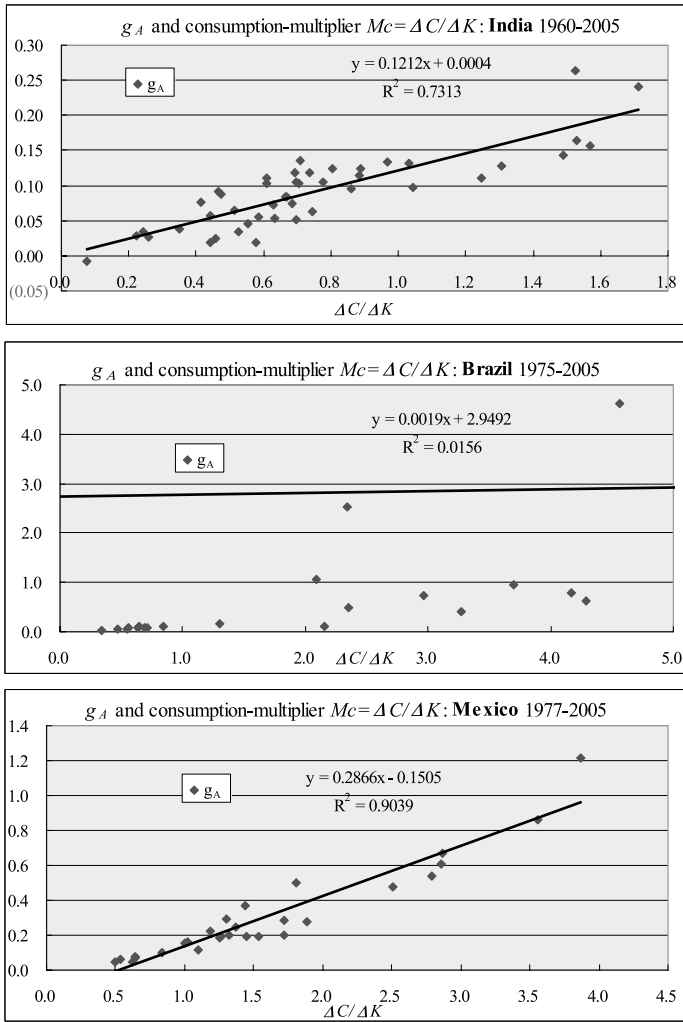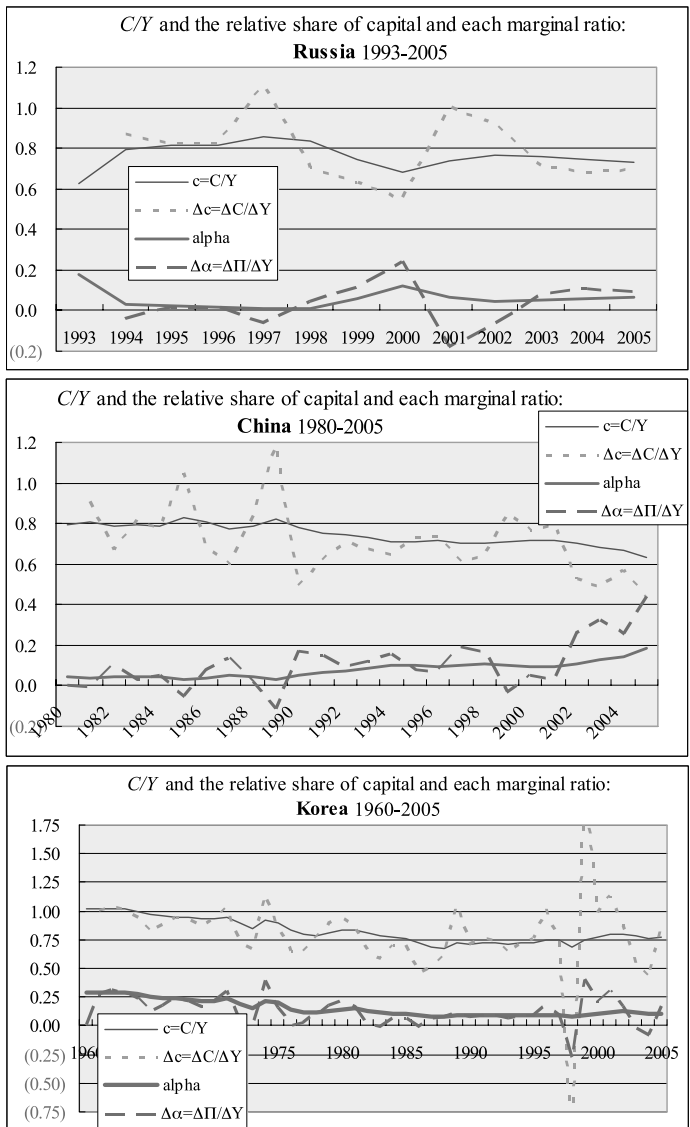by Country and by Sector

Figure M13   The rate of technological progress and the consumption-multiplier
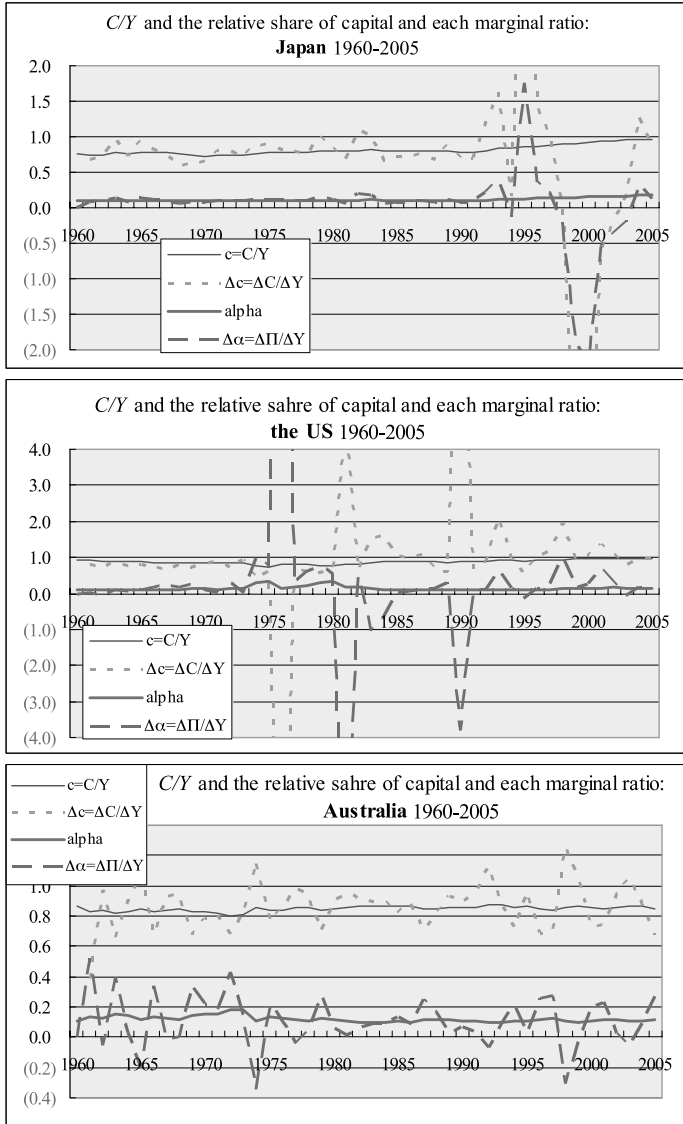$\Delta C/\Delta K$ **(2)**

Figure M13   The rate of technological progress and the consumption-multiplier $\Delta C/\Delta K$ (3)

Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
by Country and by Sector

C/Y and the relative share of capital and each marginal ratio:
Russia 1993-2005

C/Y and the relative share of capital and each marginal ratio:
China 1980-2005

C/Y and the relative share of capital and each marginal ratio:
Korea 1960-2005

**Figure M14   The propensity to consume and the relative share of capital, and each
marginal ratio, *ΔC/ΔY* and *Δ Π/ΔY* (1)**

Figure M14   The propensity to consume and the relative share of capital, and each marginal ratio, $\Delta C/\Delta Y$ and $\Delta \Pi/\Delta Y$ (2)
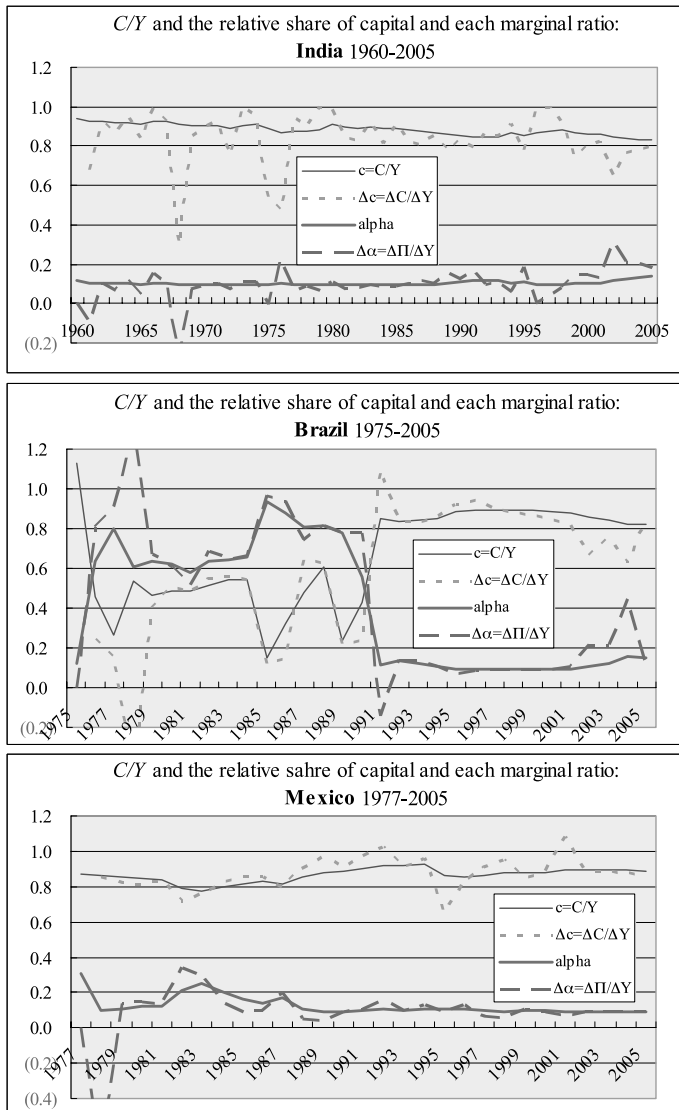
Hideyuki Kamiryo: Figures for Main Relationships and for Business Cycles in Kamiryo
                      Endogenous World Table (KEWT 1.07) Data-Sets 1960–2005
                      by Country and by Sector

C/Y and the relative share of capital and each marginal ratio:
India 1960-2005

C/Y and the relative share of capital and each marginal ratio:
Brazil 1975-2005

C/Y and the relative sahre of capital and each marginal ratio:
Mexico 1977-2005

Figure M14   The propensity to consume and the relative share of capital, and each marginal ratio, *ΔC/ΔY* and *ΔΠ/ΔY* (3)