

## **Appendix 3**

### **63 GDP-based Figures: G20 & G7 as a whole system**

This List mostly presents those figures of G36, G20, and G7; by group and by country, separately from those tables and, similarly as PART Data in the end of the HEU. Those figures clarify differences of data characteristics by group and by country, 1960-2012, up-dated.

First, the author shows the core of GDP-based figures, selecting crucial items in Families I, II, and III. These figures express a bridge between ‘GDP-based’ data in the literature and the author’s ‘purely endogenous’ data, algebraic and geometrical.

Second, those figures prove new-facts findings in GDP-based data, from Families IV, V, VI, VII, VIII, IX, and X. Those figures are consistent each other wholly with the EES and the HEU, beyond space and time.

Finally and conclusively, the essential new findings are presented in Families XI of debts and XII for the G and PRI sectors. Time series and cross section have been united horizontally and vertically with eternal consistency for 100 years or more, comparing GDP-based deficits with debts.

Readers and economists may modestly deepen these implications by *learning by doing*; freely from preoccupation and with respective ideas and experiences.

#### **Here is the list of 63 figures by Family and by Item, at a glance:**

Fig. P&A-1 by G20: GDP-based of Family I-II-III

Fig. P&A-2 by G20: GDP-based of Family I-II-III

Fig. P&A-3 by G20: GDP-based of Family I-II-III

Fig. Euro-4 by G20: GDP-based of Family I-II-III

Fig. E&EastE-5 by G20: GDP-based of Family I-II-III

Fig. Rest-6 by G20: GDP-based of Family I-II-III

Fig. P&A-7 by G20: GDP-based real Wages

Fig. P&A-8 by G20: GDP-based real Wages

Fig. P&A-9 by G20: GDP-based real Wages

Fig. Euro-10 by G20: GDP-based real Wages

Fig. E&EastE-11 by G20: GDP-based real Wages

Fig. Rest-12 by G20: GDP-based real Wages

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Fig. P&A-13 by G20: GDP-based Wages, ac-en

Fig. P&A-14 by G20: GDP-based Wages, ac-en

Fig. P&A-15 by G20: GDP-based Wages, ac-en

Fig. Euro-16 by G20: GDP-based Wages, ac-en

Fig. E&EastE-17 by G20: GDP-based Wages, ac-en

Fig. Rest-18 by G20: GDP-based Wages, ac-en

Fig. P&A-19 by G20: GDP-based Profits

Fig. P&A-20 by G20: GDP-based Profits

Fig. P&A-21 by G20: GDP-based Profits

Fig. Euro-22 by G20: GDP-based Profits

Fig. E&EastE-23 by G20: GDP-based Profits

Fig. Rest-24 by G20: GDP-based Profits

Fig. P&A-25 by G20: GDP-based Net Investments

Fig. P&A-26 by G20: GDP-based Net Investments

Fig. P&A-27 by G20: GDP-based Net Investments

Fig. Euro-28 by G20: GDP-based Net Investments

Fig. E&EastE-29 by G20: GDP-based Net Investments

Fig. Rest-30 by G20: GDP-based Net Investments

Fig. P&A-31 by G20: GDP-based Taxes

Fig. P&A-32 by G20: GDP-based Taxes

Fig. P&A-33 by G20: GDP-based Taxes

Fig. Euro-34 by G20: GDP-based Taxes

Fig. E&EastE-35 by G20: GDP-based Taxes

Fig. Rest-36 by G20: GDP-based Taxes

Fig. P&A-37 by G20: GDP-based Rate of return to capital

Fig. P&A-38 by G20: GDP-based Rate of return to capital

Fig. P&A-39 by G20: GDP-based Rate of return to capital

Fig. Euro-40 by G20: GDP-based Rate of return to capital

Fig. E&EastE-41 by G20: GDP-based Rate of return to capital

Fig. Rest-42 by G20: GDP-based Rate of return to capital

Fig. P&A-43 by G20: GDP-based GDP growth rate and deficit/GDP in Family X

Fig. P&A-44 by G20: GDP-based GDP growth rate and deficit/GDP in Family X

Fig. P&A-45 by G20: GDP-based GDP growth rate and deficit/GDP in Family X

Fig. Euro-46 by G20: GDP-based GDP growth rate and deficit/GDP in Family X

Fig. E&EastE-47 by G20: GDP-based GDP growth rate and deficit/GDP in Family X

Fig. Rest-48 by G36: GDP-based GDP growth rate and deficit/GDP in Family X

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### **Comparisons:**

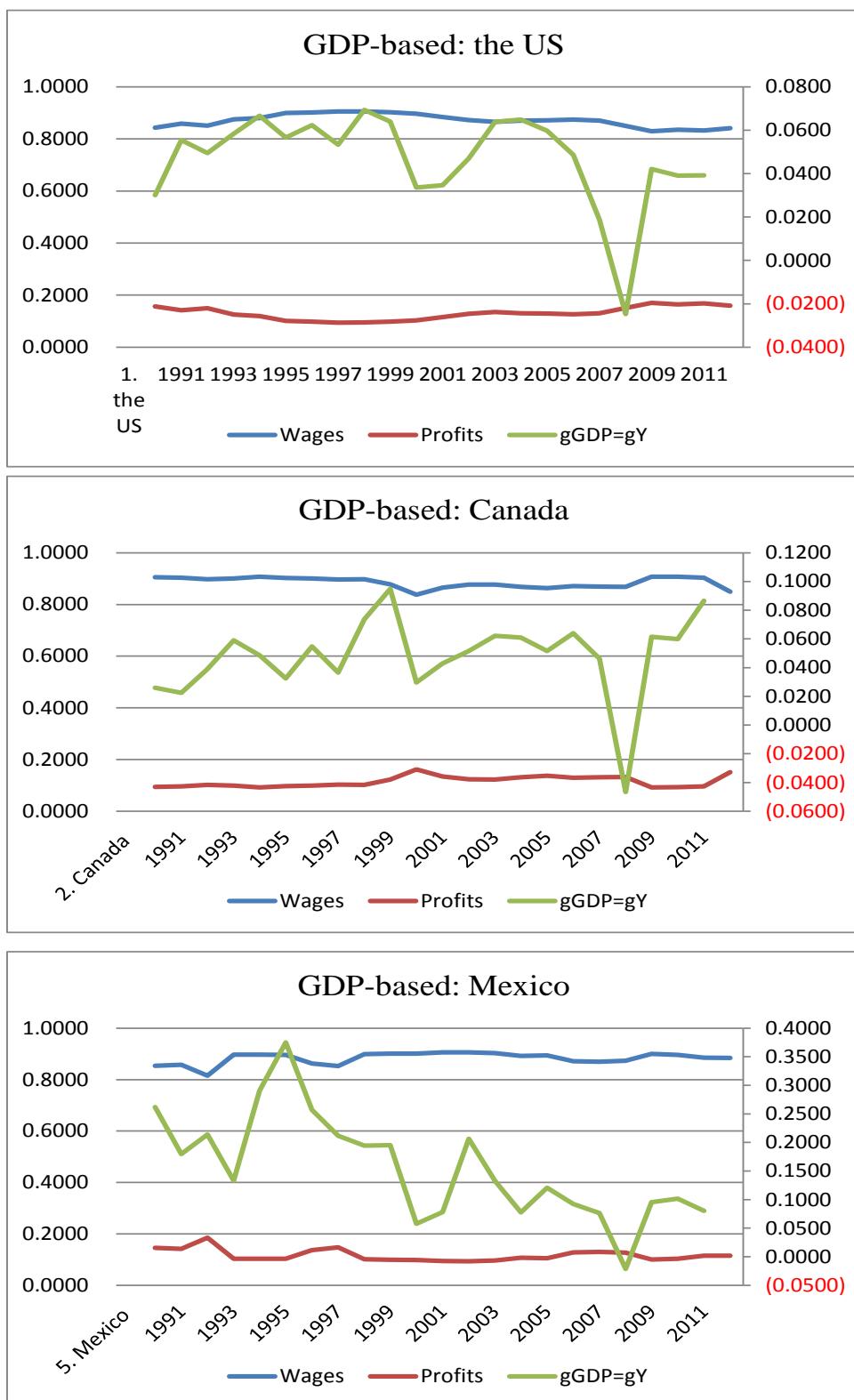
- Fig. 49 Comparison of four core ratios: the US, Japan, China, and Singapore  
Fig. 50 Comparison of four core ratios: Euro Area, the UK, Norway, Sweden  
Fig. 51 Comparison of the same four countries by core ratio:  $gGDP=gY$ ,  $gCPI$ ,  
 $gWreal$ , and rate of return to capital (1)  
Fig. 52 Comparison of the same four countries by core ratio:  $gGDP=gY$ ,  $gCPI$ ,  
 $gWreal$ , and rate of return to capital (2)

### **Cross Section:**

- Fig. 53-1 Cross section analysis for 65 countries, 1990-2012, measure-broadly  
Fig. 53-2 Cross section analysis for 65 countries, 1990-2012, measure-  
moderately  
Fig. 53-3 Cross section analysis for 65 countries, 1990-2012, measure-narrowly  
Fig. 54-1 Cross section analysis for 17 Pacific & Asia area and 14 Euro area,  
1990-2012, measure-moderately  
Fig. 54-2 Cross section analysis for 15 Europe & East Europe area and 19 Rest  
area, 1990-2012, measure-moderately
- Fig. 55 Cross section Debt & Deficit: for G20, 1990-2012, measure-broadly  
Fig. 56 Cross section Debt & Deficit: for G7, 1990-2012, measure-broadly  
Fig. 57-1 Time Series Debt & Deficit: for G7, 1990-2012, measure-broadly  
Fig. 57-2 Time Series Debt & Deficit: for G7, 1990-2012, measure-broadly
- Fig. 58 Cross section, G20: rate of technology (flow) vs. growth rate of TFP  
(stock), By the G sector, 1990-2012  
Fig. 59 Cross section, G7: rate of technology (flow) vs. growth rate of TFP  
(stock), By the PRI sector, 1990-2012  
Fig. 60 Cross section, G20: Essential connections and combinations among four  
items, By the G sector, 1990-2012  
Fig. 61 Cross section, G20: Essential connections and combinations among four  
items, By the PRI sector, 1990-2012  
Fig. 62 Cross section, G7: Essential connections and combinations among four  
items, By the G sector, 1990-2012  
Fig. 63 Cross section, G7: Essential connections and combinations among four  
items, By the PRI sector, 1990-2012

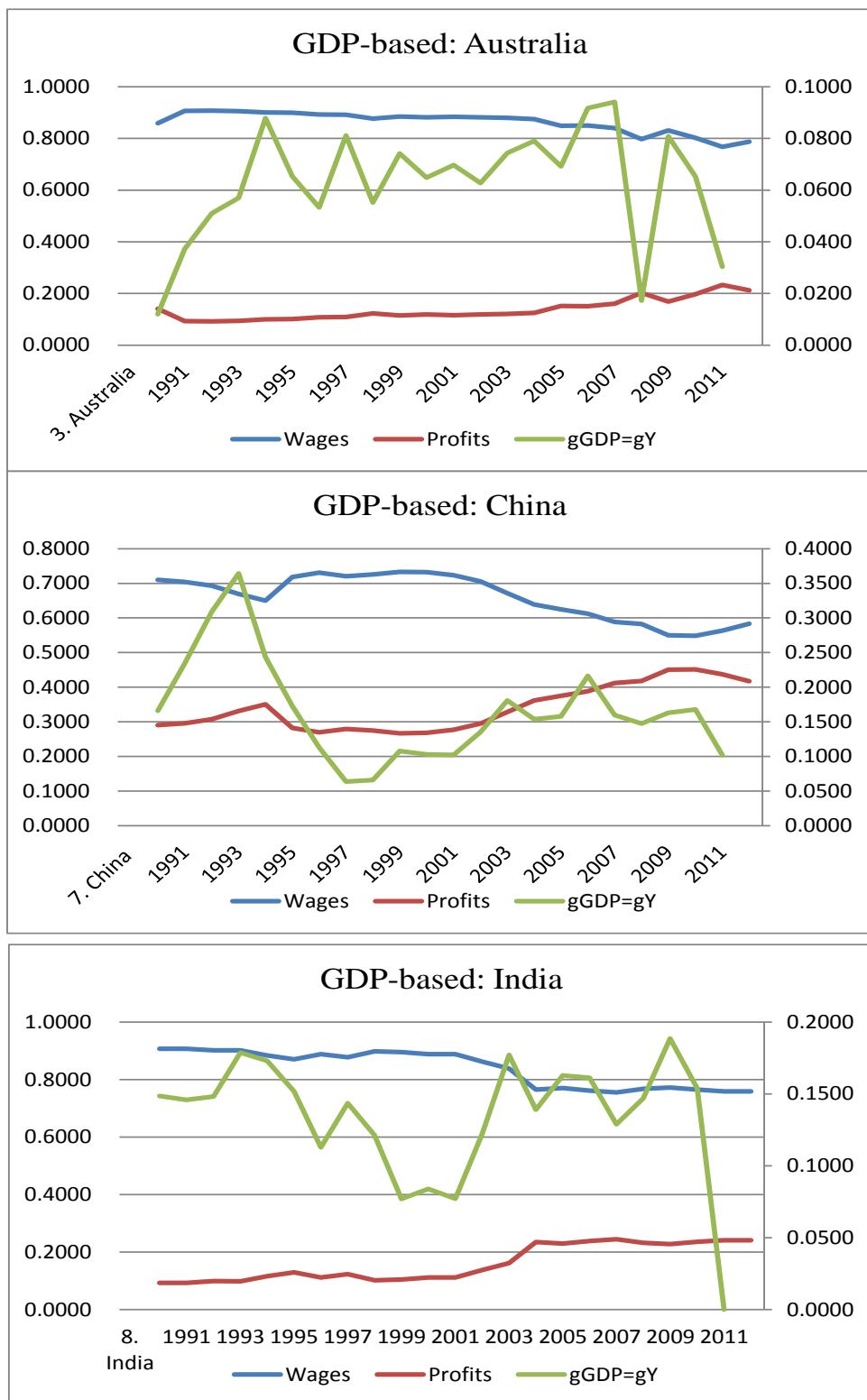
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**Fig. P&A-1 by G20: GDP-based of Family I-II-III**

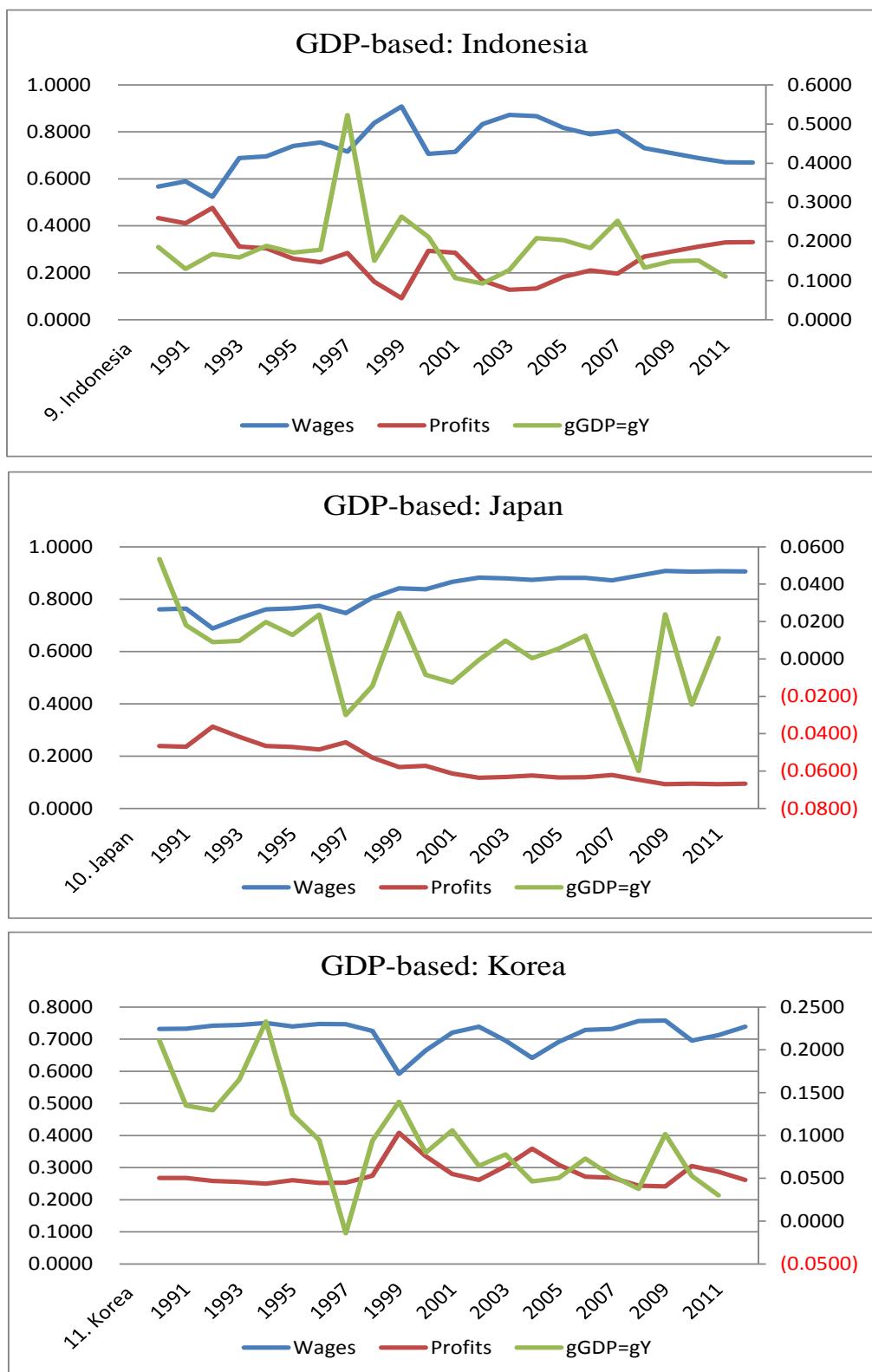
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**Fig. P&A-2 by G20: GDP-based of Family I-II-III**

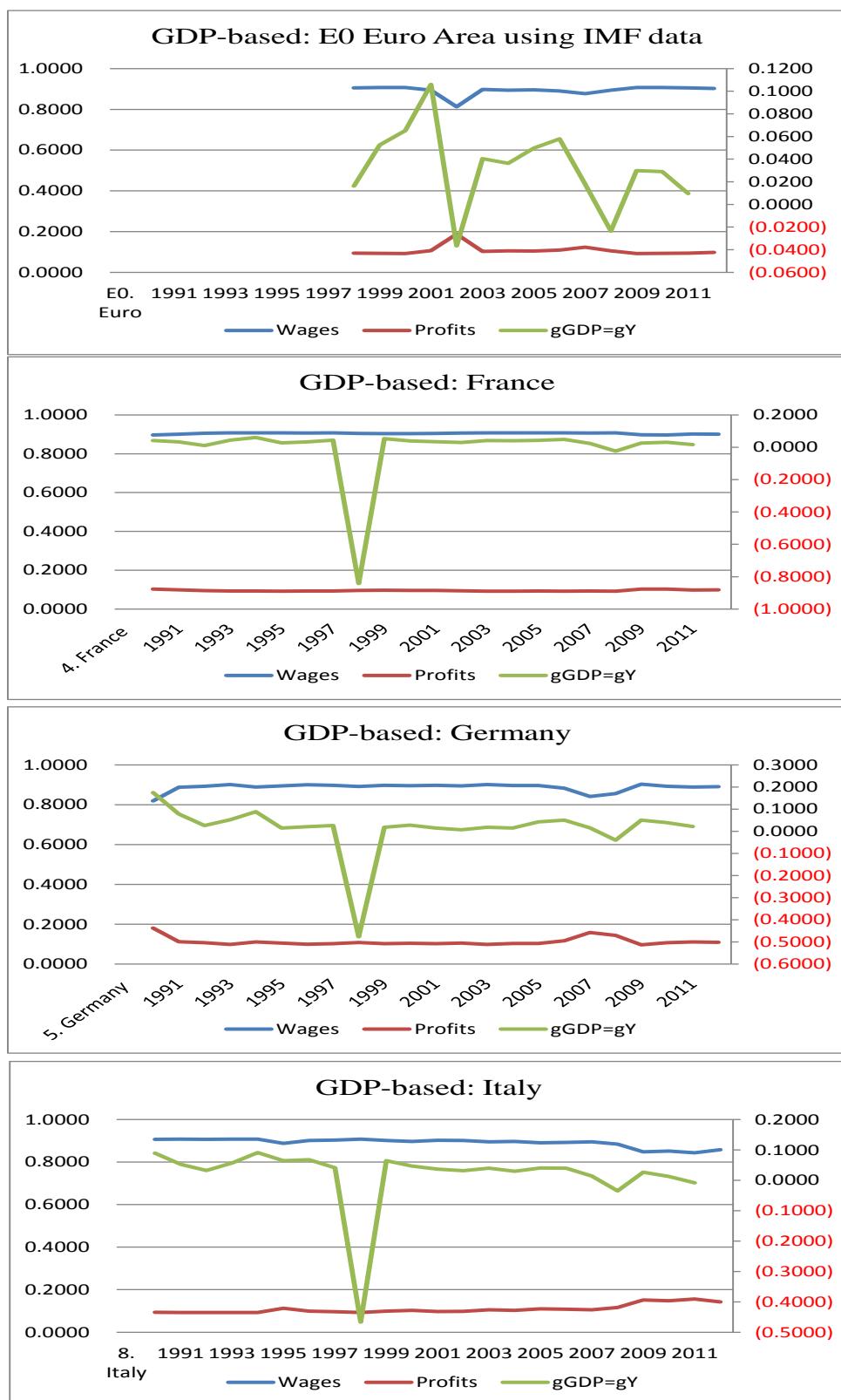
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**Fig. P&A-3 by G20: GDP-based of Family I-II-III**

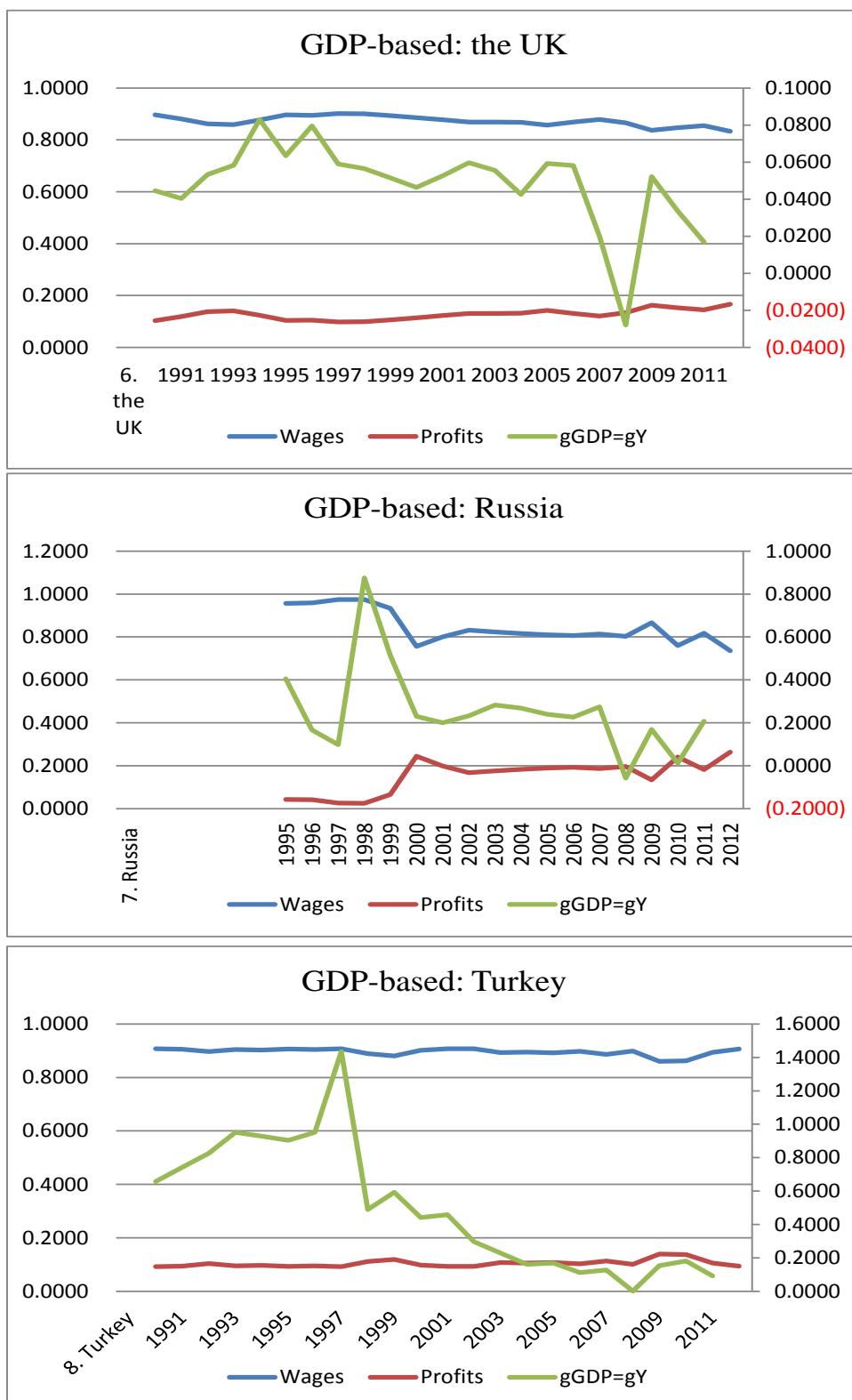
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**Fig. Euro-4 by G20: GDP-based of Family I-II-III**

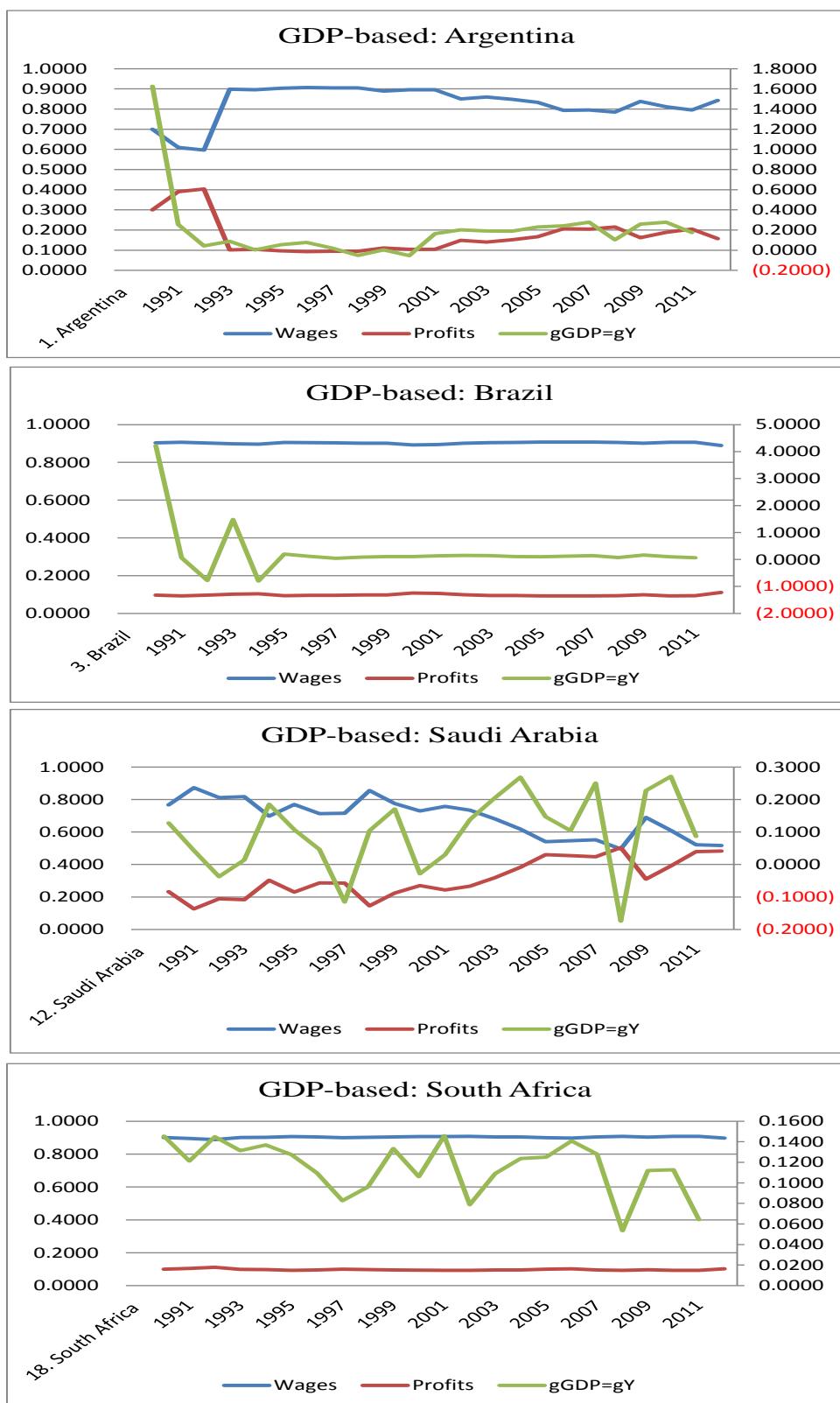
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**Fig. E&EastE-5 by G20: GDP-based of Family I-II-III**

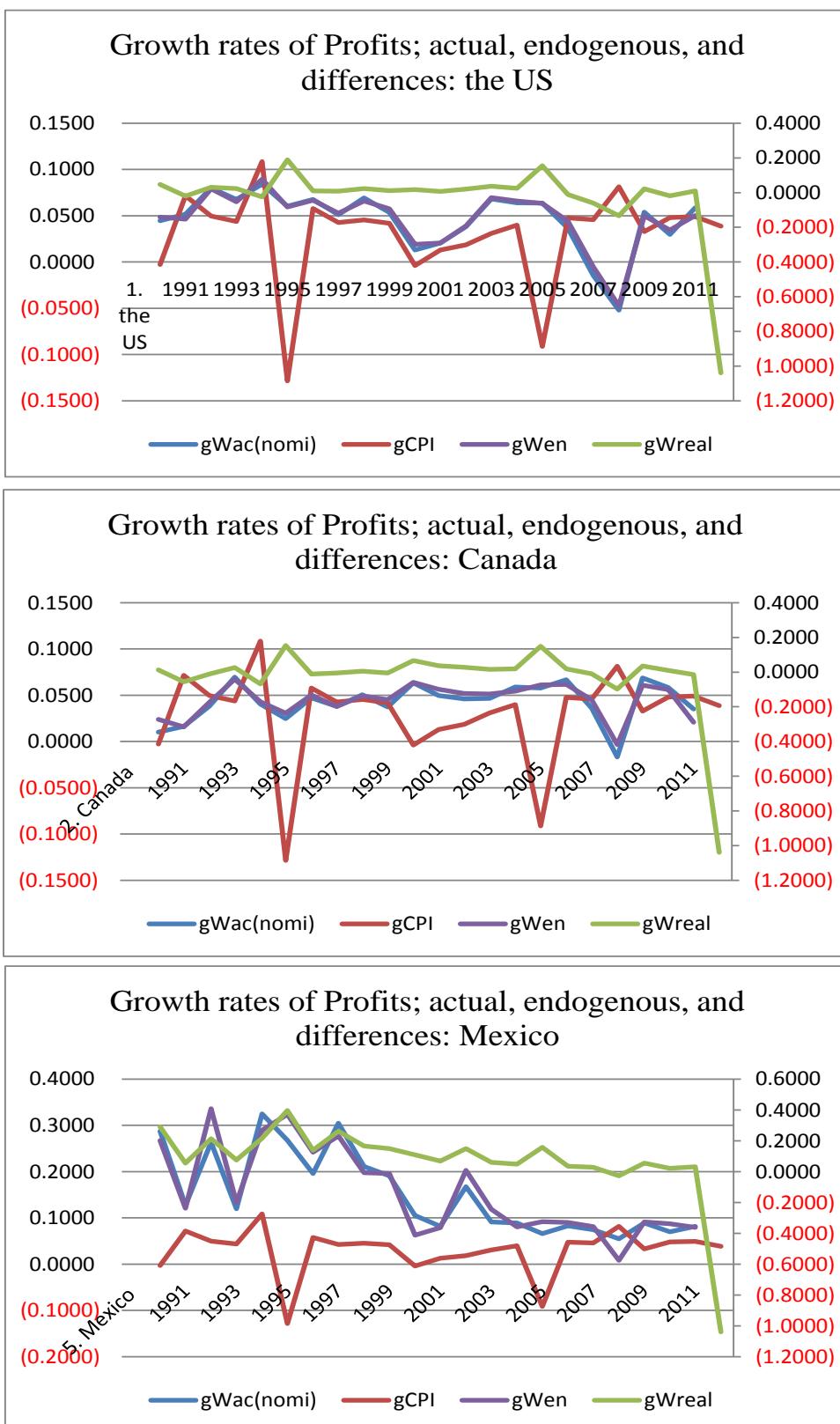
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**Fig. Rest-6 by G20: GDP-based of Family I-II-III**

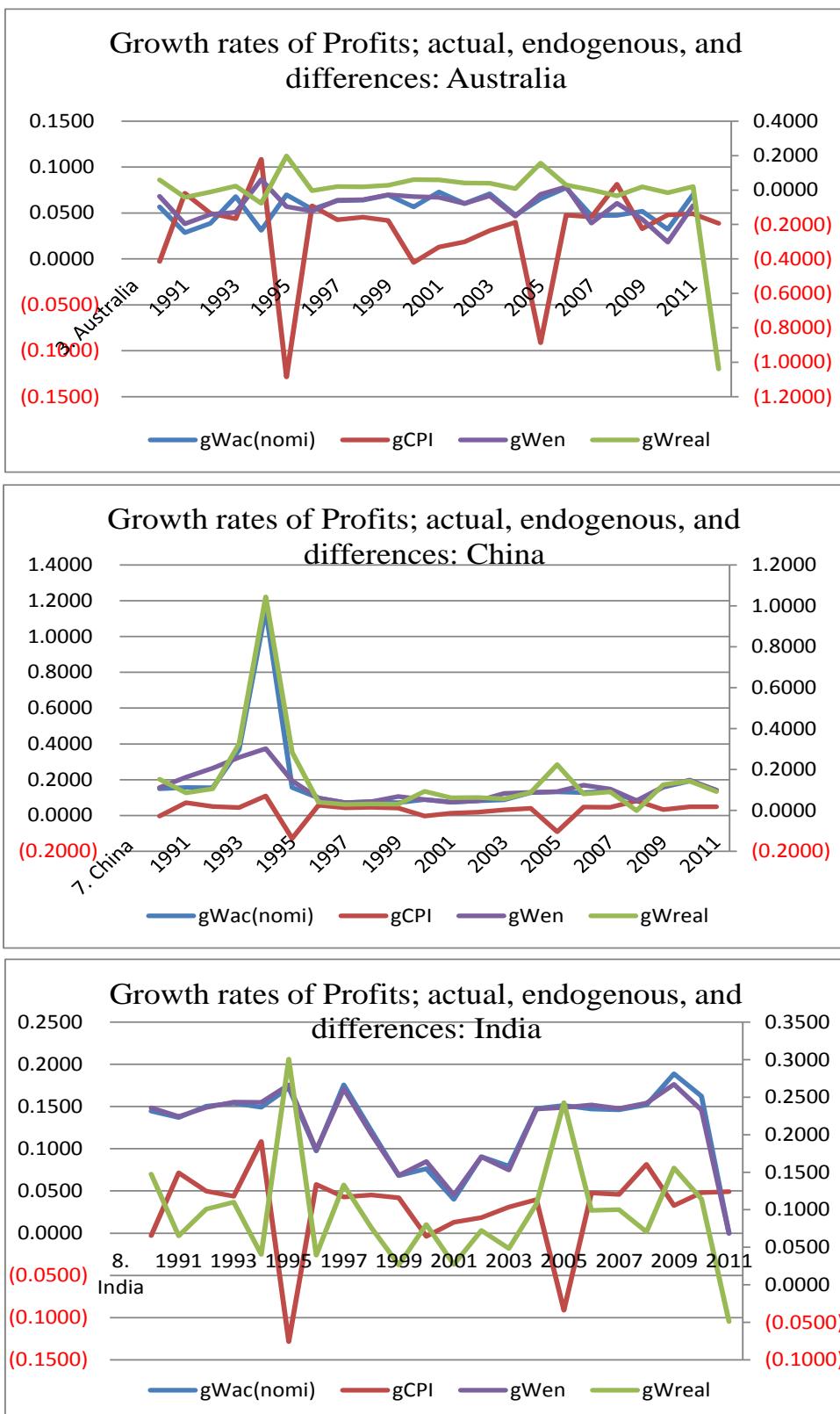
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**Fig. P&A-7 by G20: GDP-based real Wages**

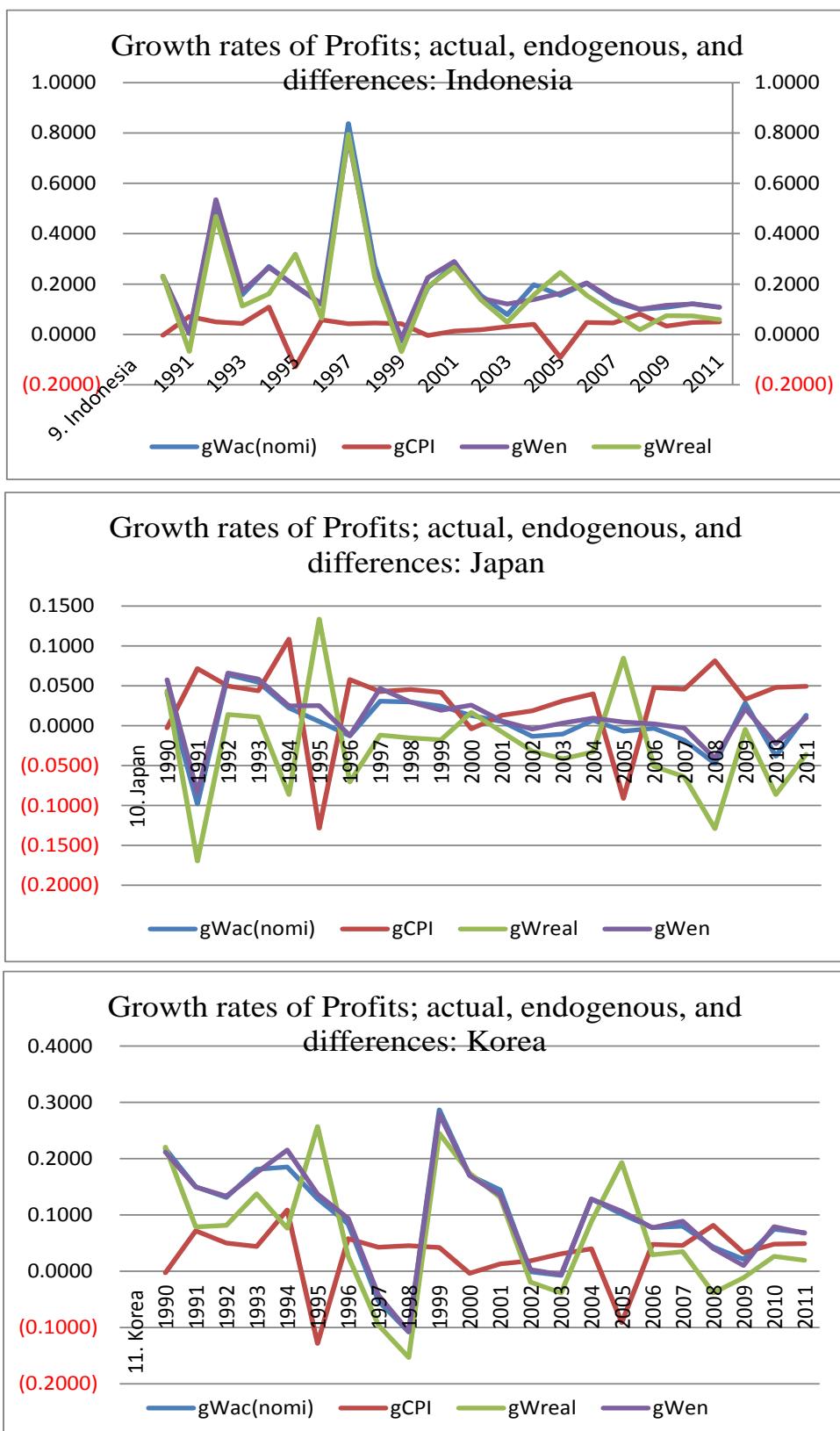
### Appendix 3, HEU



**Fig. P&A-8 by G20: GDP-based real Wages**

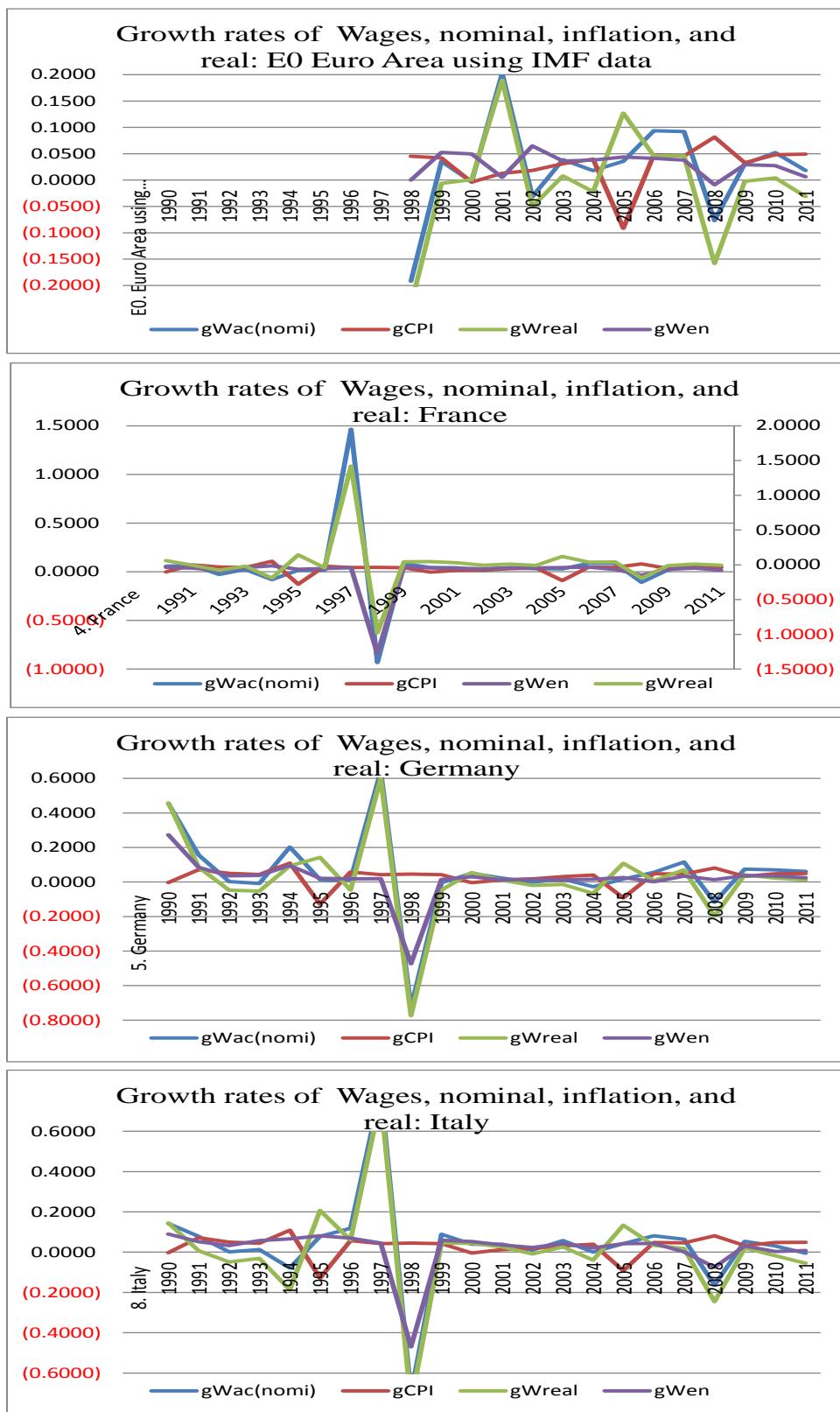
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**Fig. P&A-9 by G20: GDP-based real Wages**

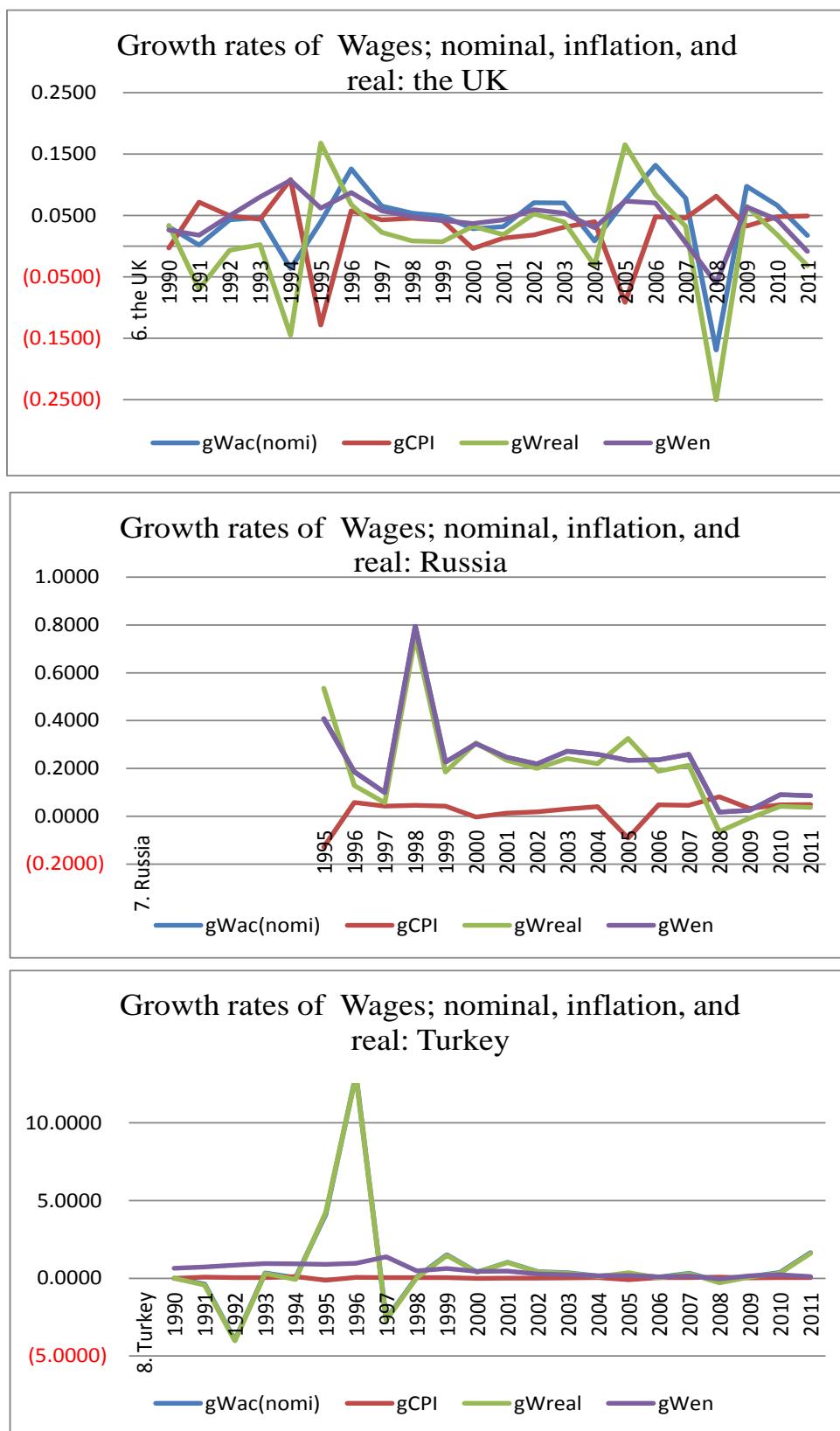
## Appendix 3, HEU



**Fig. Euro-10 by G20: GDP-based real Wages**

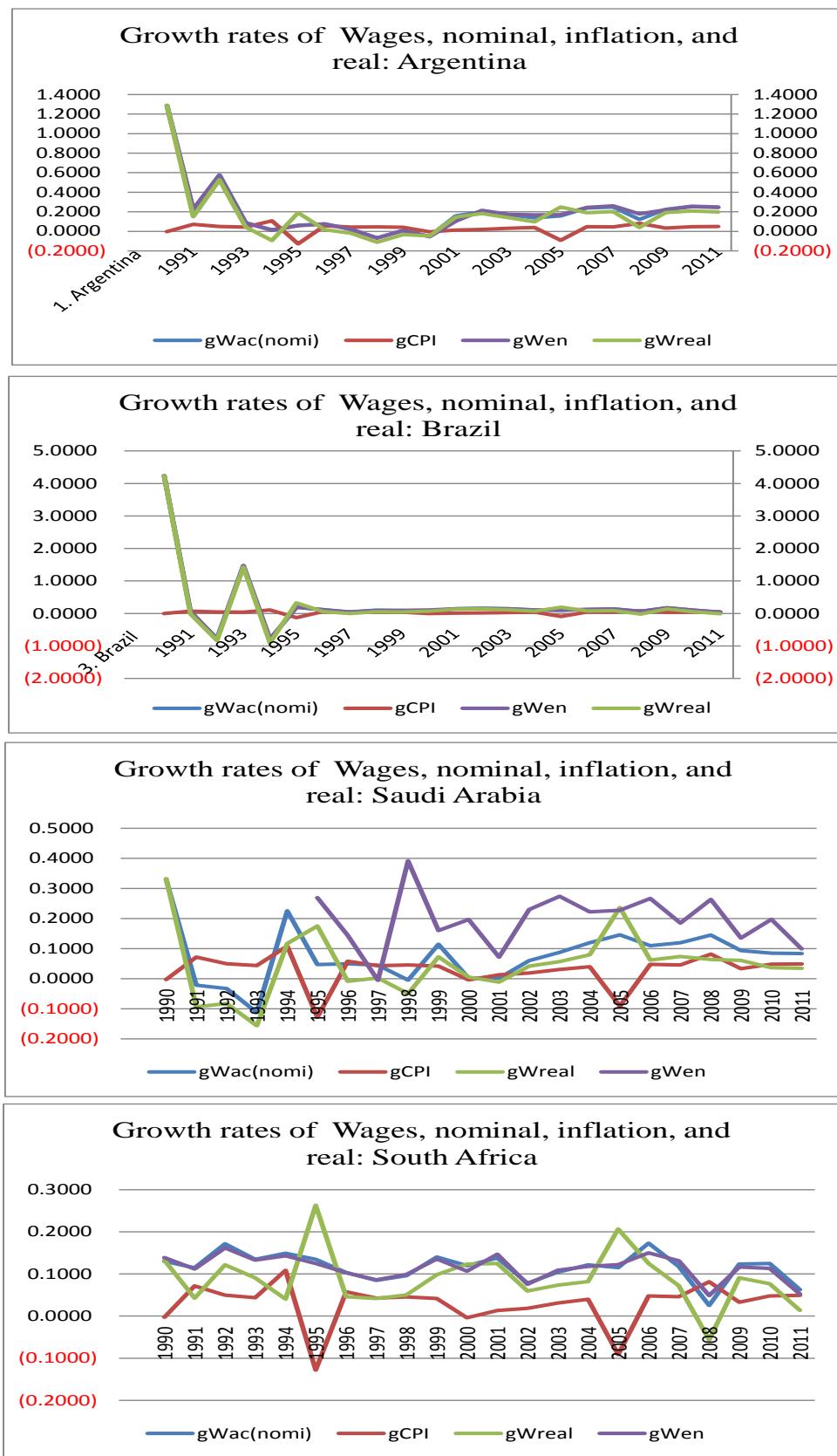
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**Fig. E&EastE-11 by G20: GDP-based real Wages**

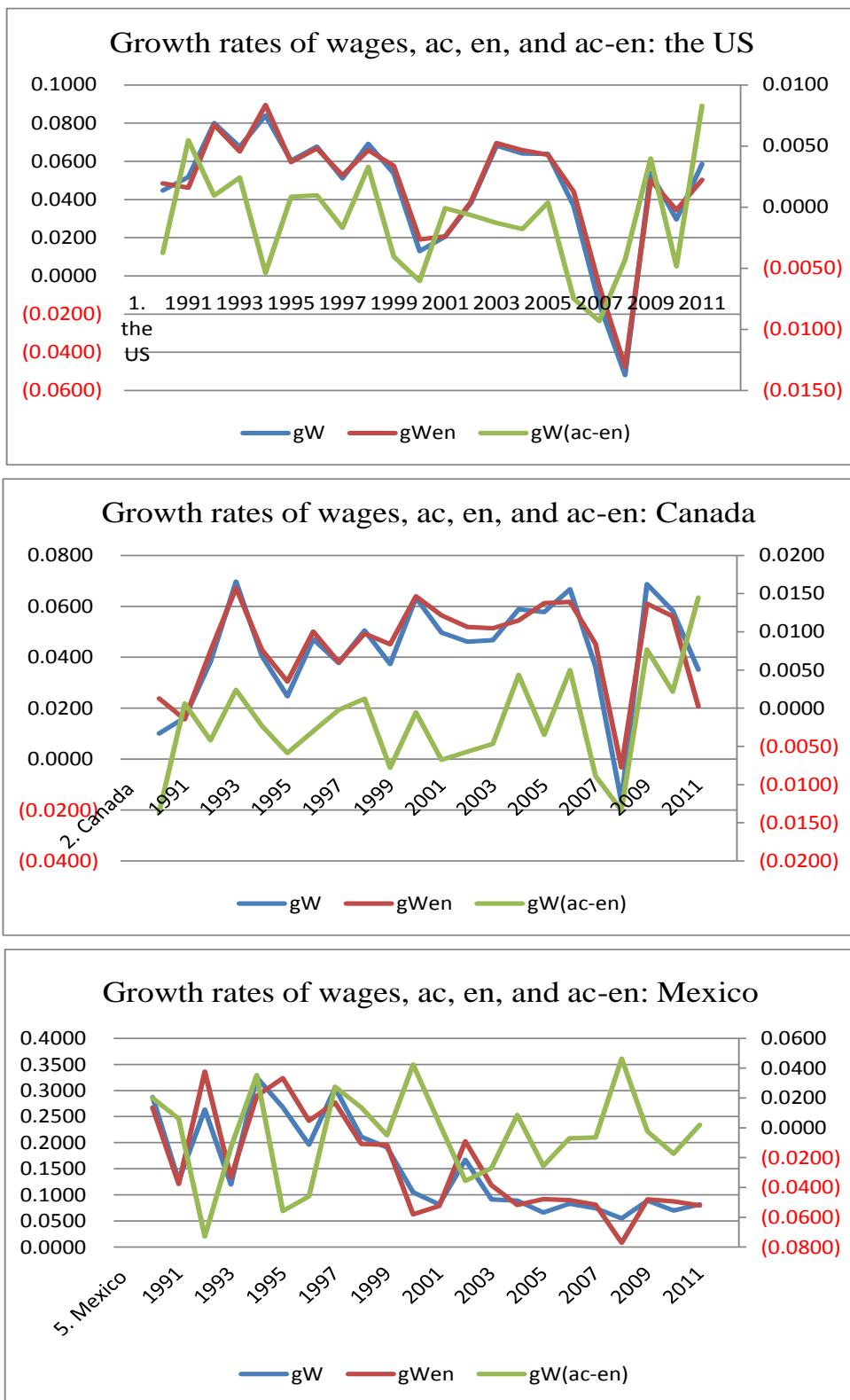
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**Fig. Rest-12 by G20: GDP-based real Wages**

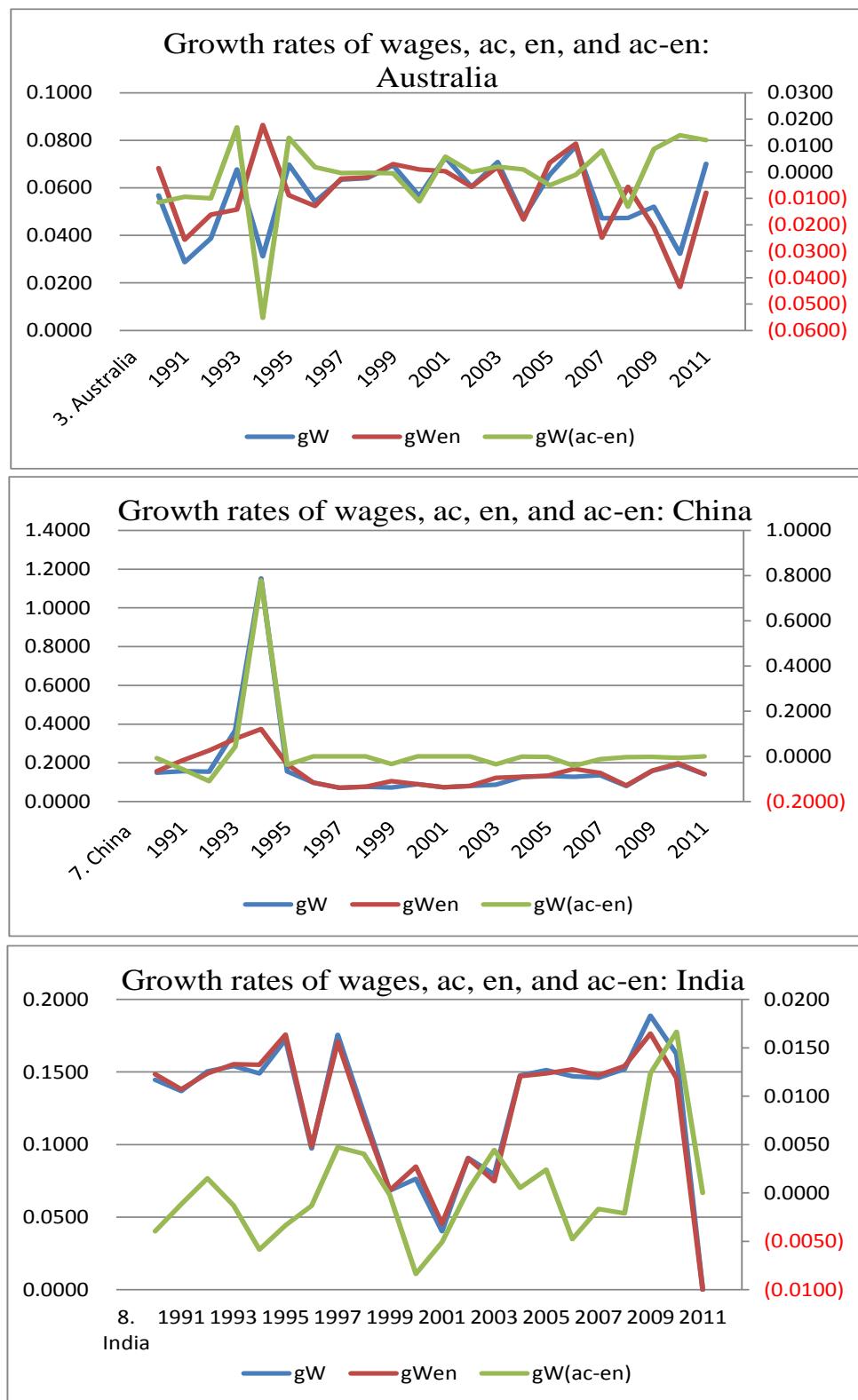
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**Fig. P&A-13 by G20: GDP-based Wages, ac-en**

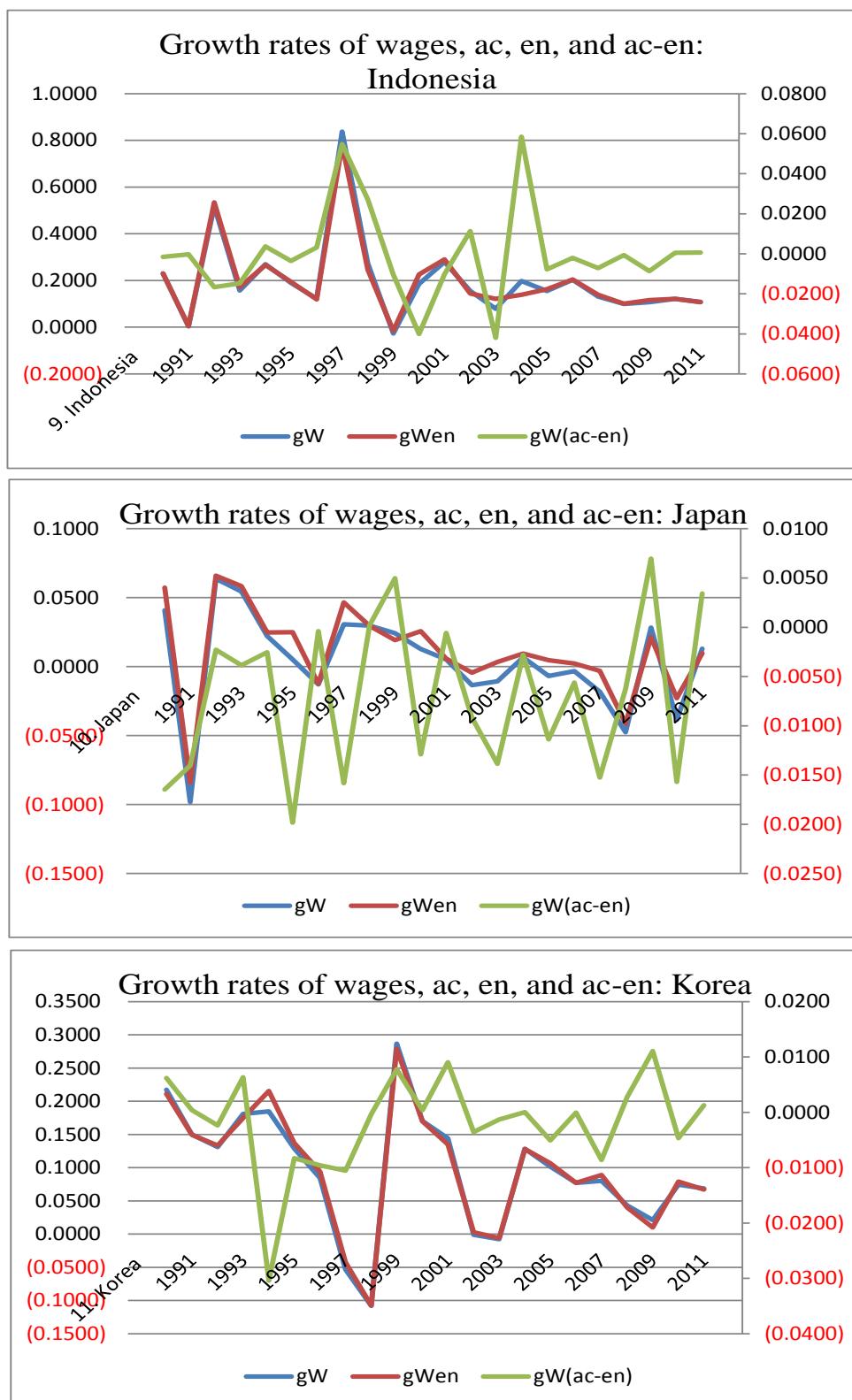
### Appendix 3, HEU



**Fig. P&A-14 by G20: GDP-based Wages, ac-en**

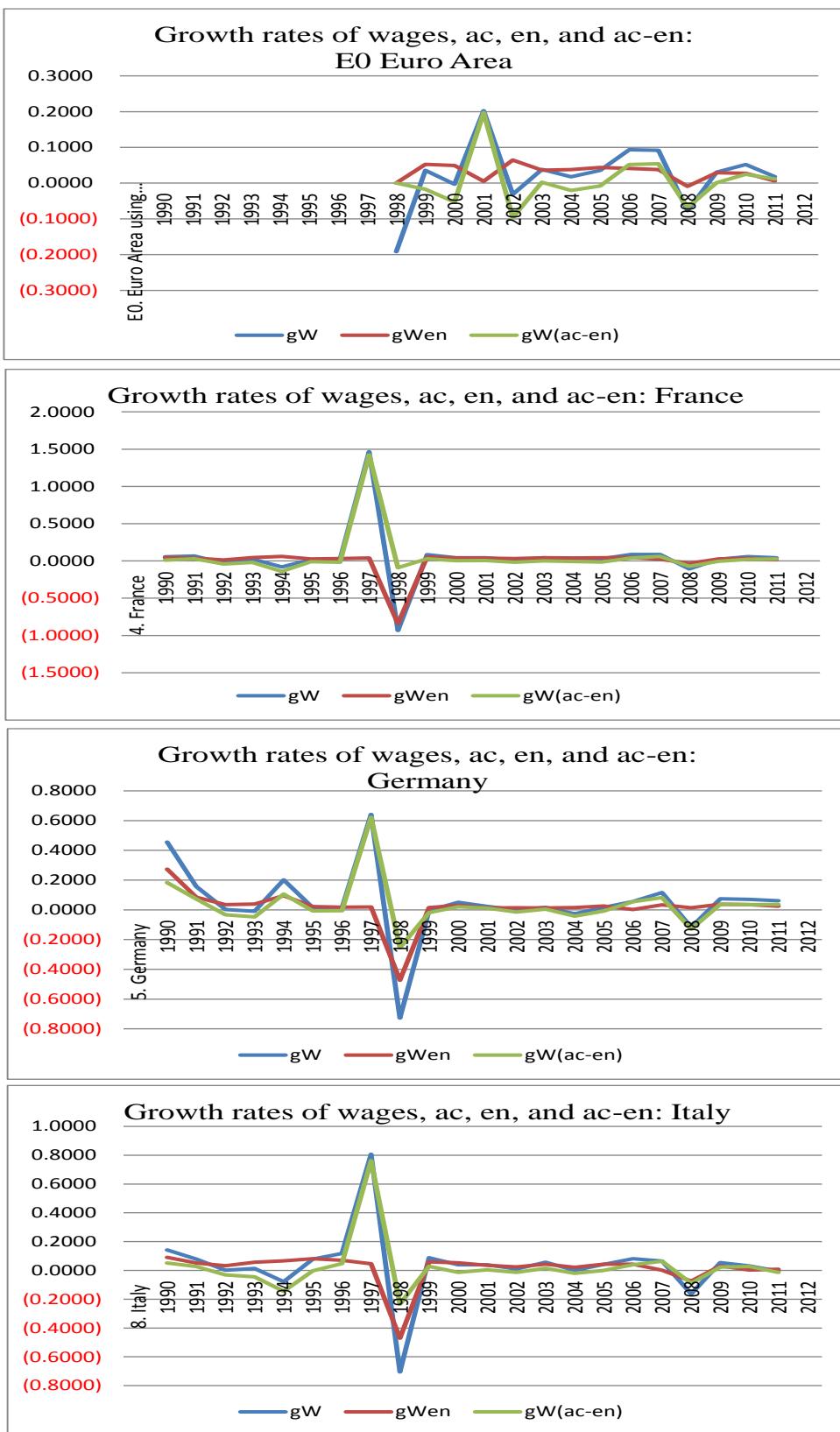
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**Fig. P&A-15 by G20: GDP-based Wages, ac-en**

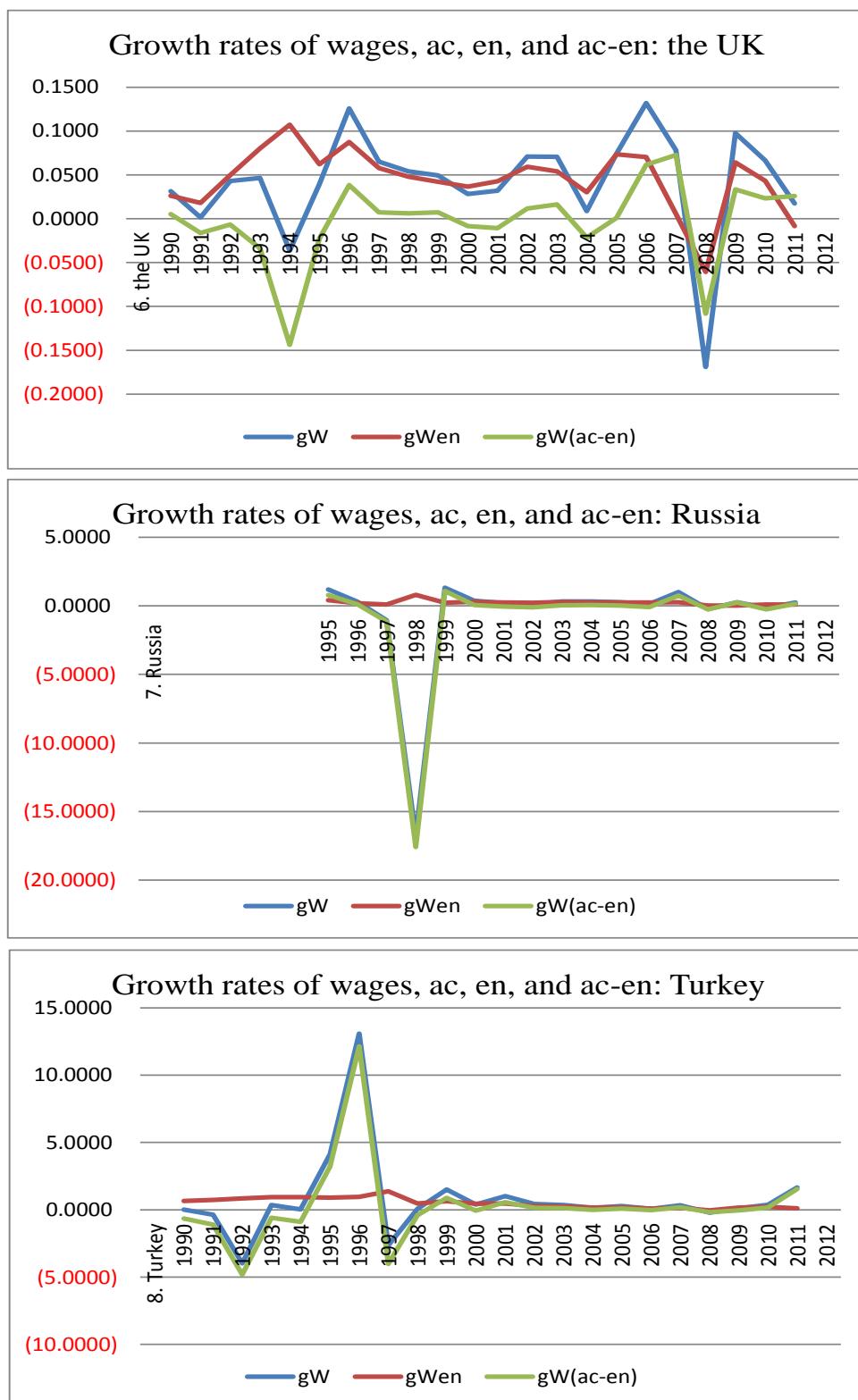
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**Fig. Euro-16 by G20: GDP-based Wages, ac-en**

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**Fig. E&EastE-17 by G20: GDP-based Wages, ac-en**

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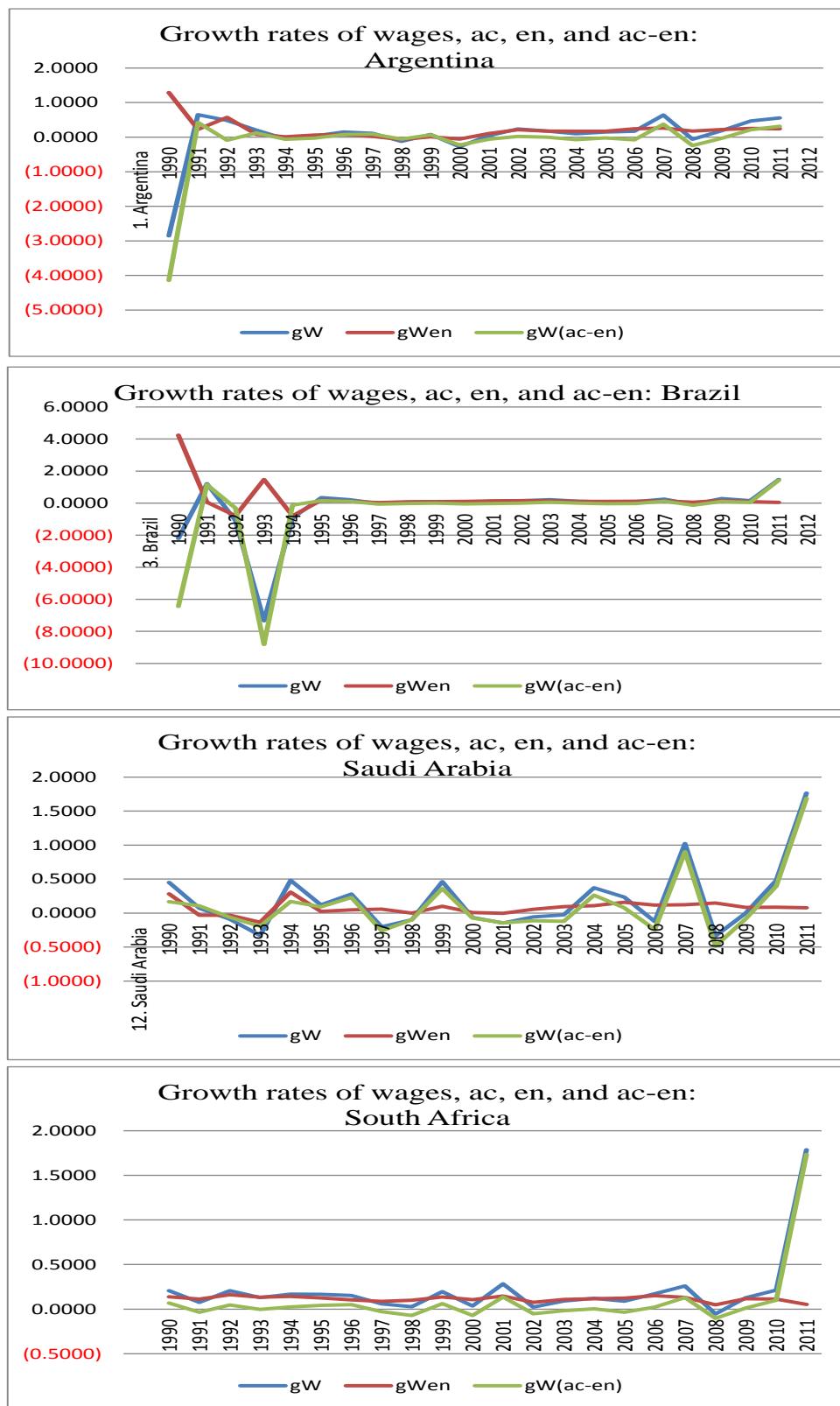
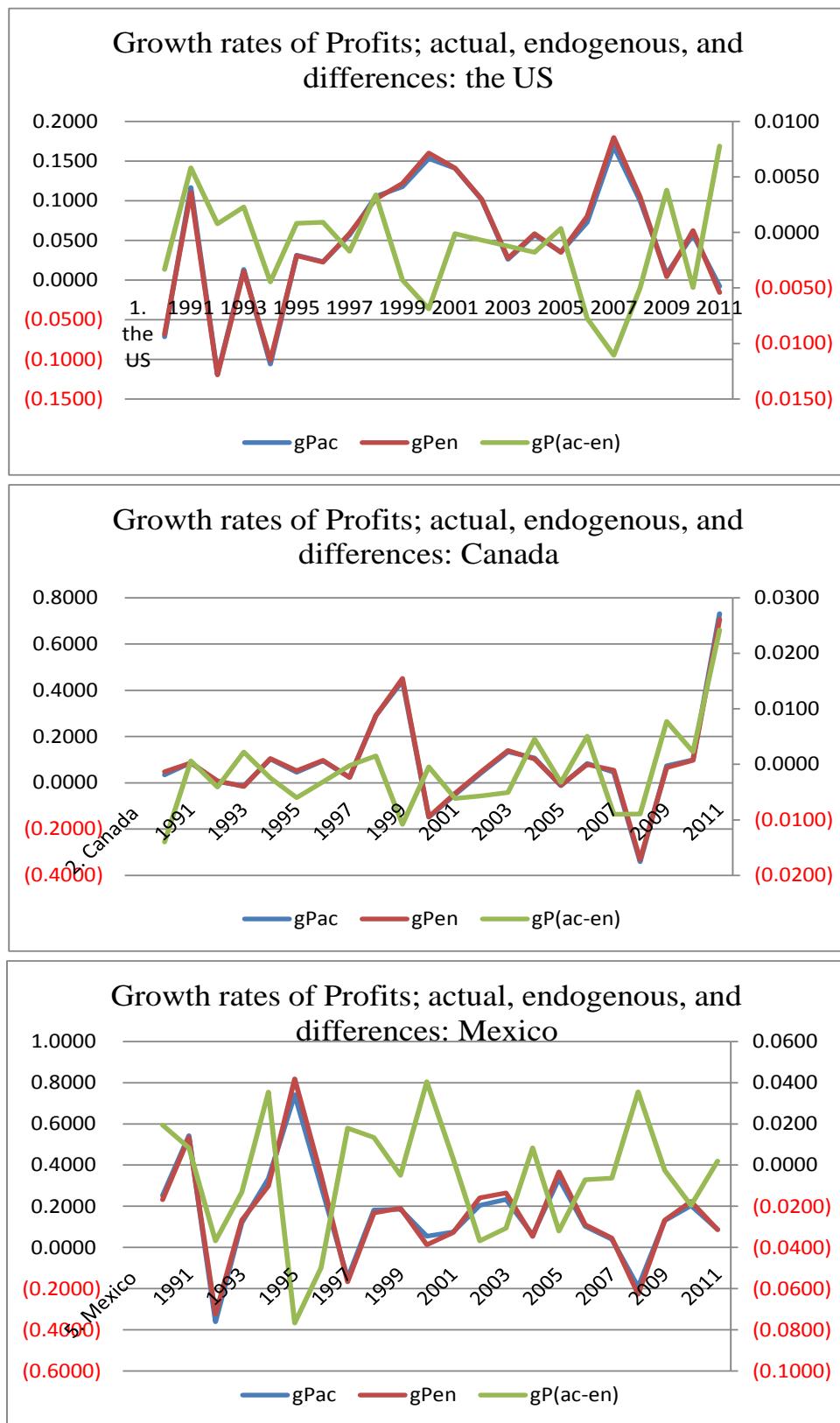


Fig. Rest-18 by G20: GDP-based Wages, ac-en

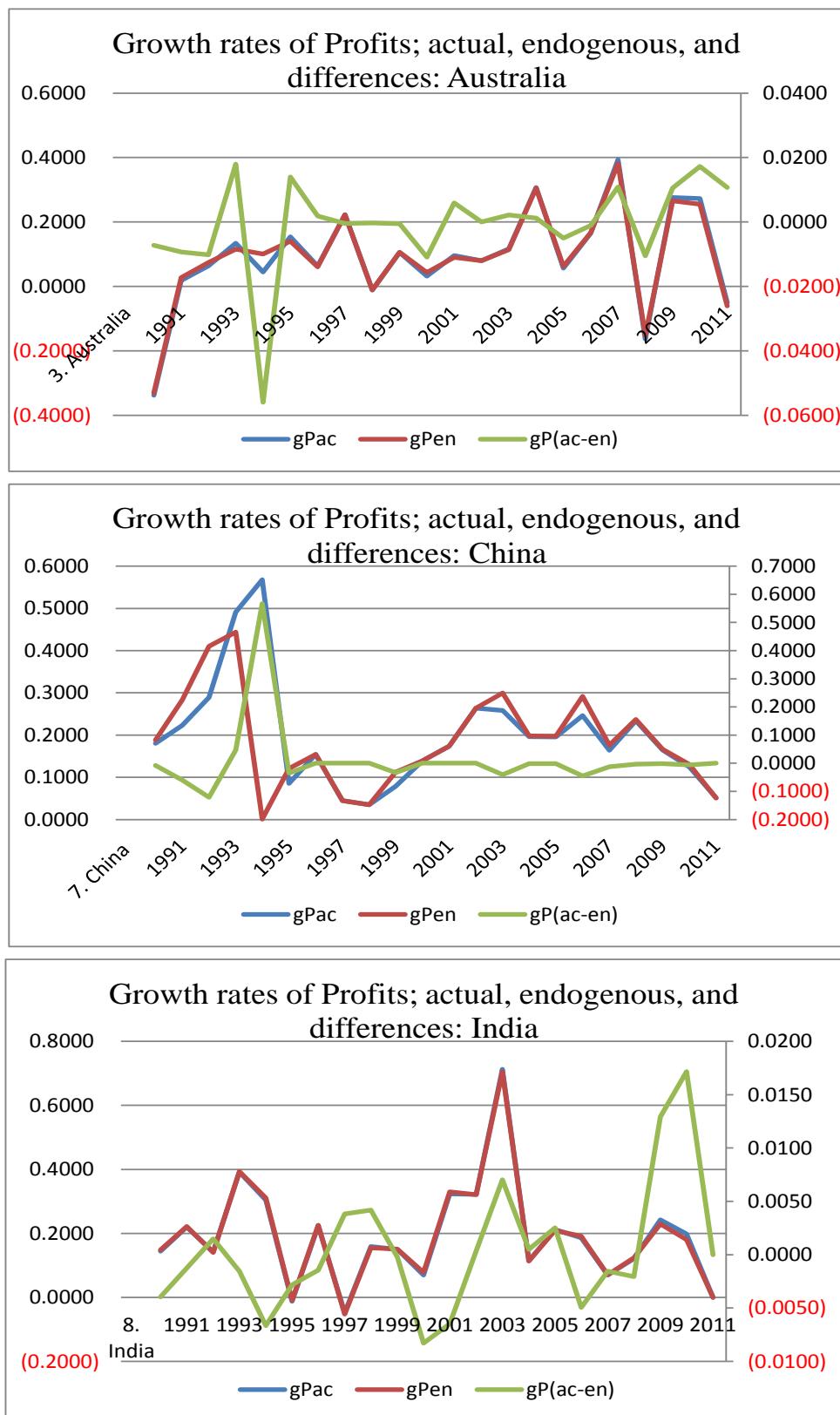
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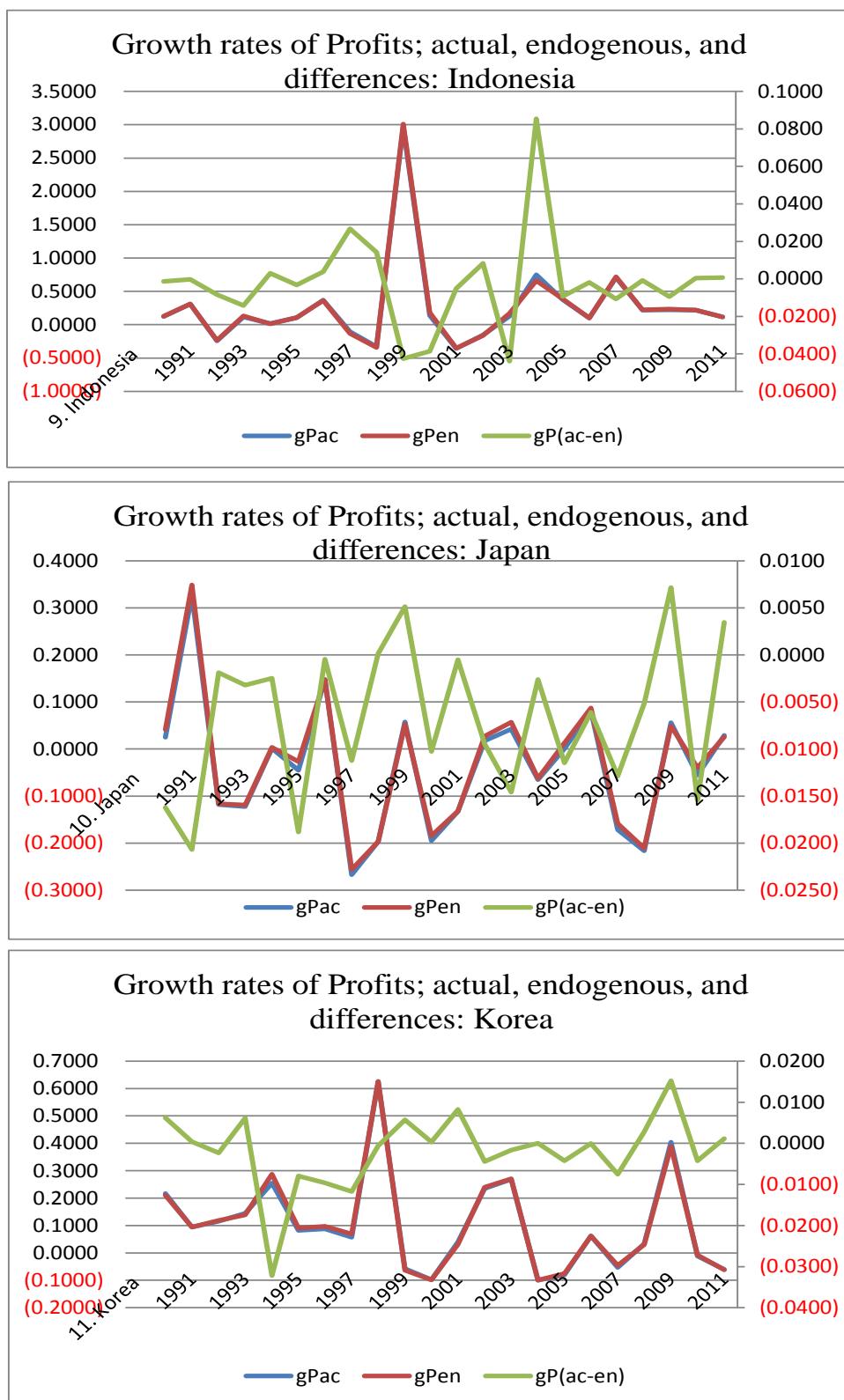
**Fig. P&A-19 by G20: GDP-based Profits**

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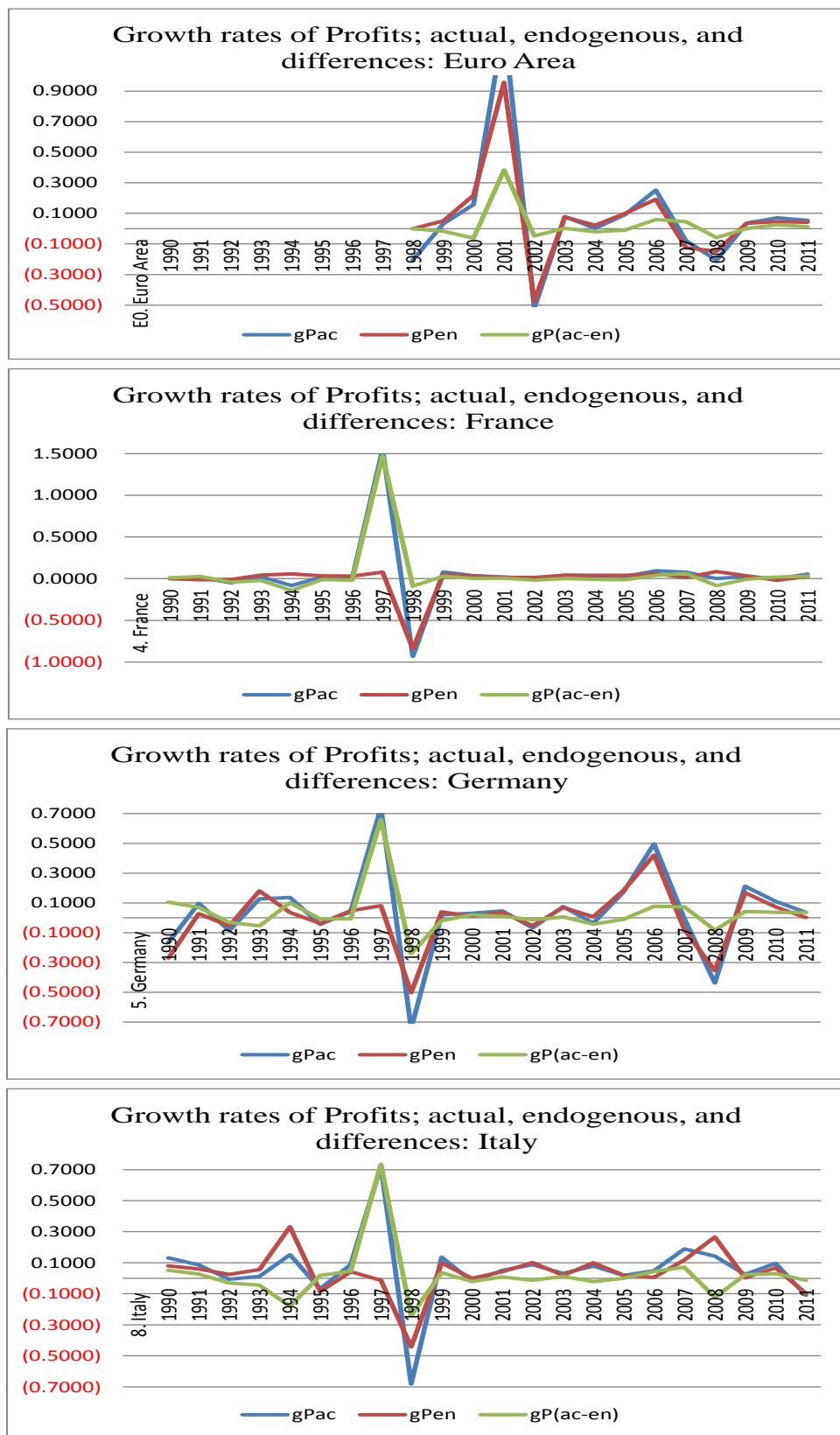
**Fig. P&A-20 by G20: GDP-based Profits**

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**Fig. P&A-21 by G20: GDP-based Profits**

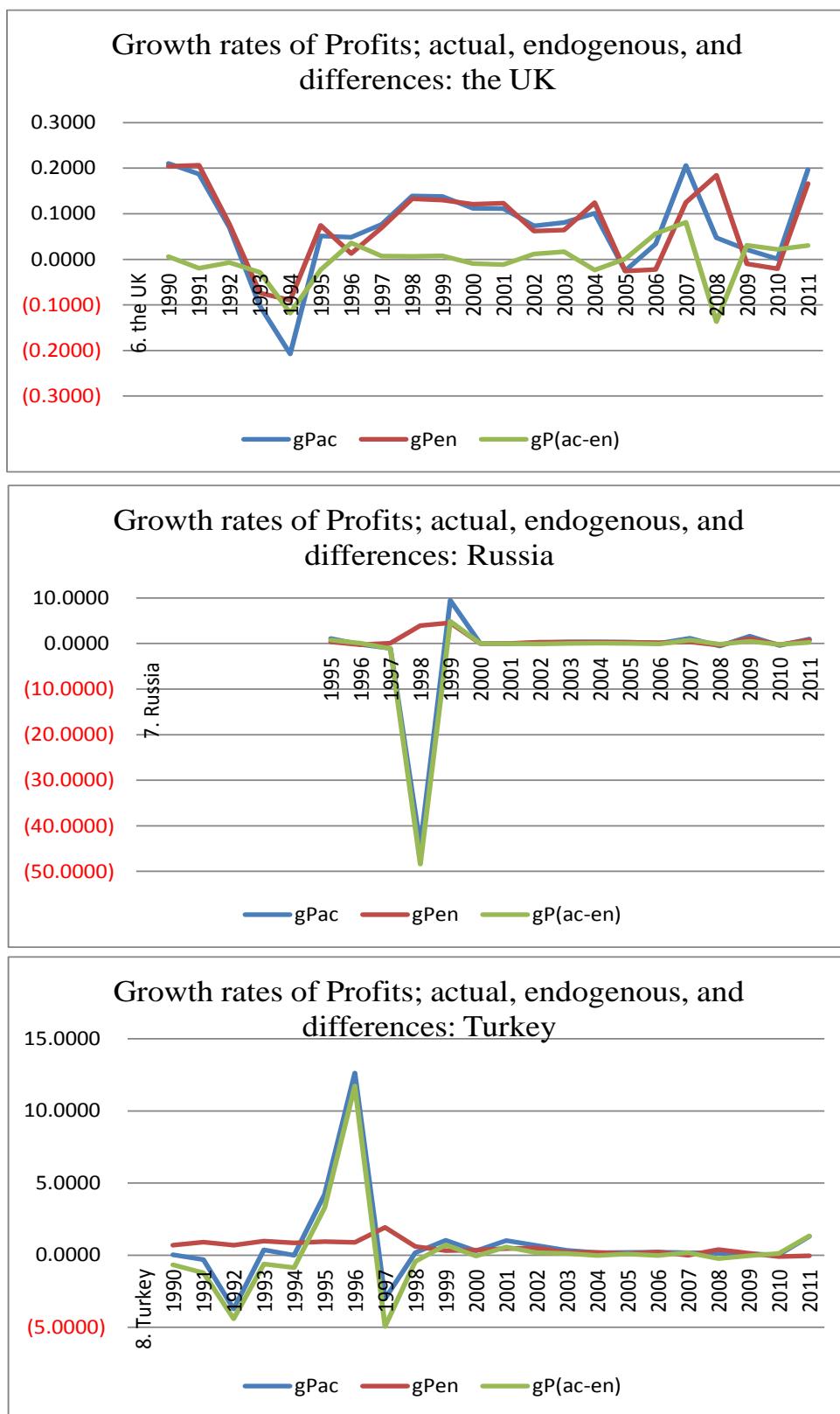
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**Fig. Euro-22 by G20: GDP-based Profits**

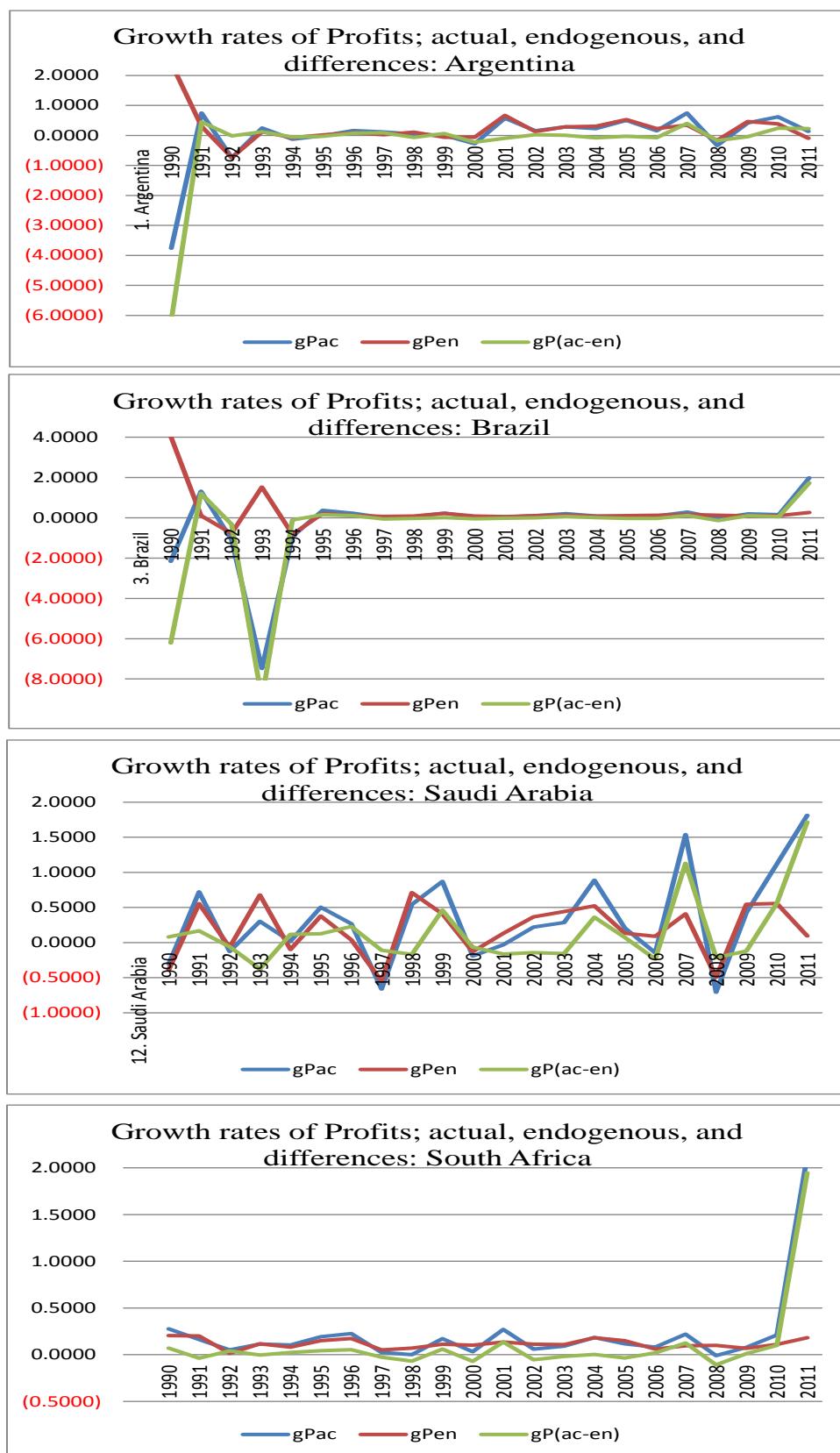
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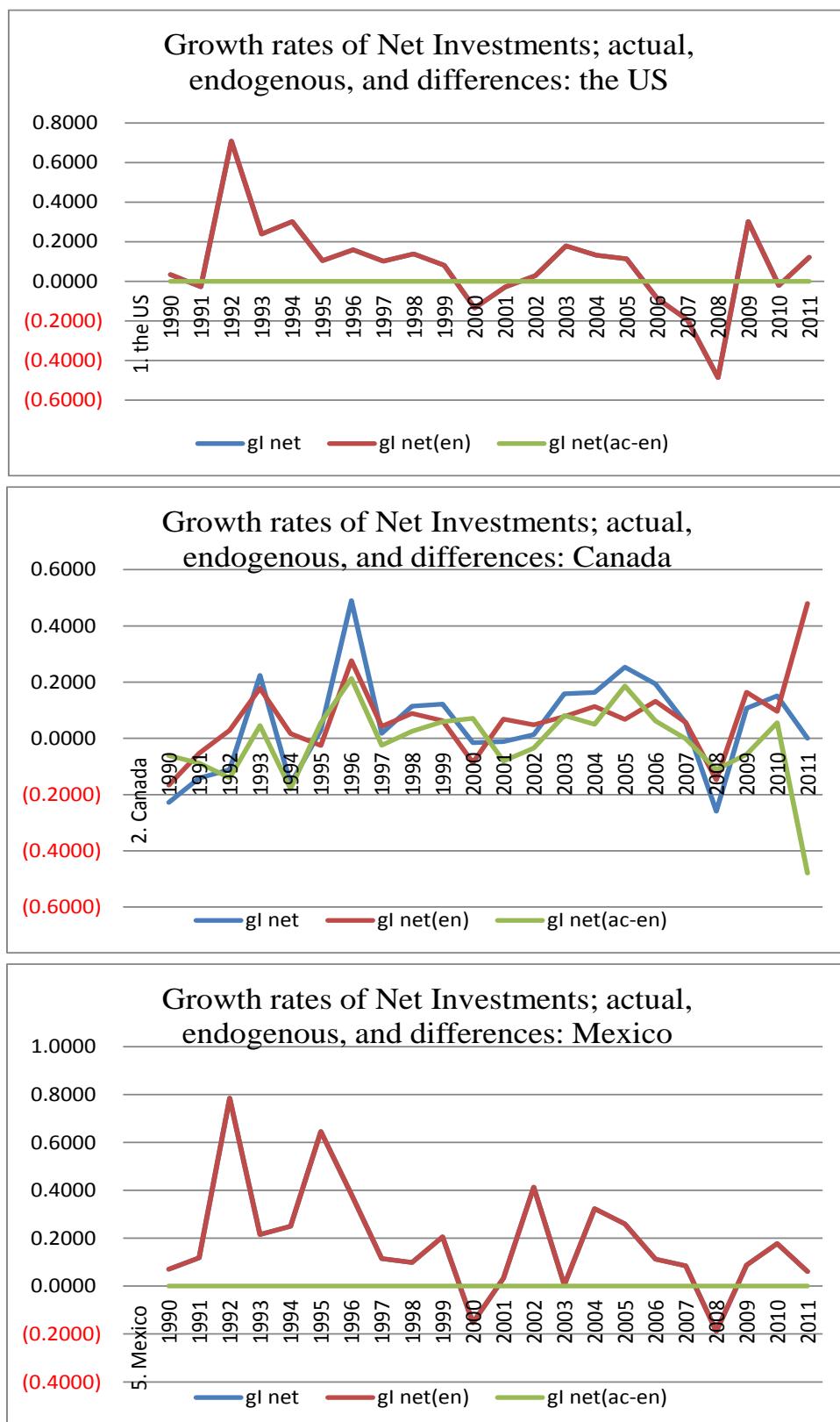
**Fig. E&EastE-23 by G20: GDP-based Profits**

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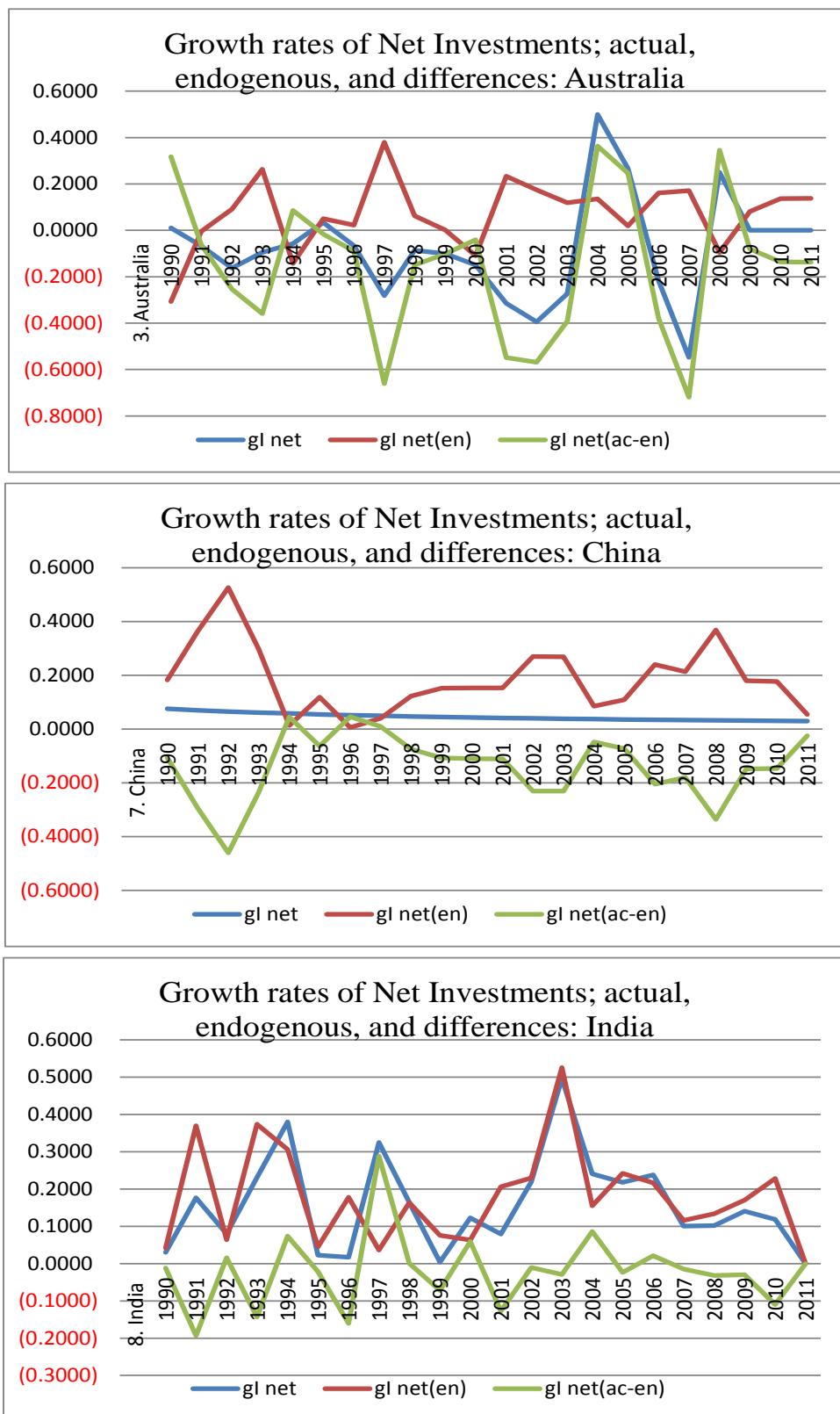
**Fig. Rest-24 by G20: GDP-based Profits**

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**Fig. P&A-25 by G20: GDP-based Net Investments**

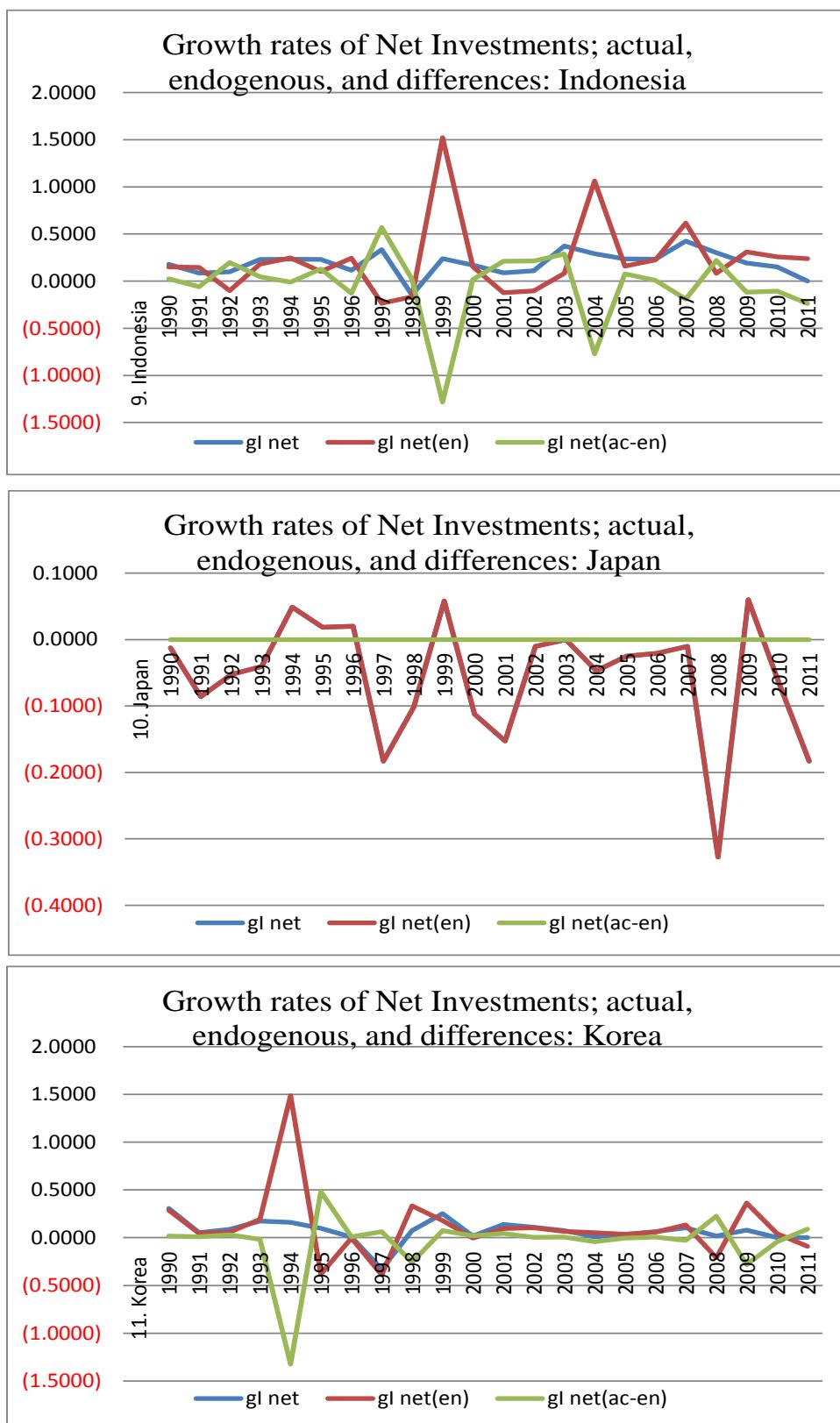
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**Fig. P&A-26 by G20: GDP-based Net Investments**

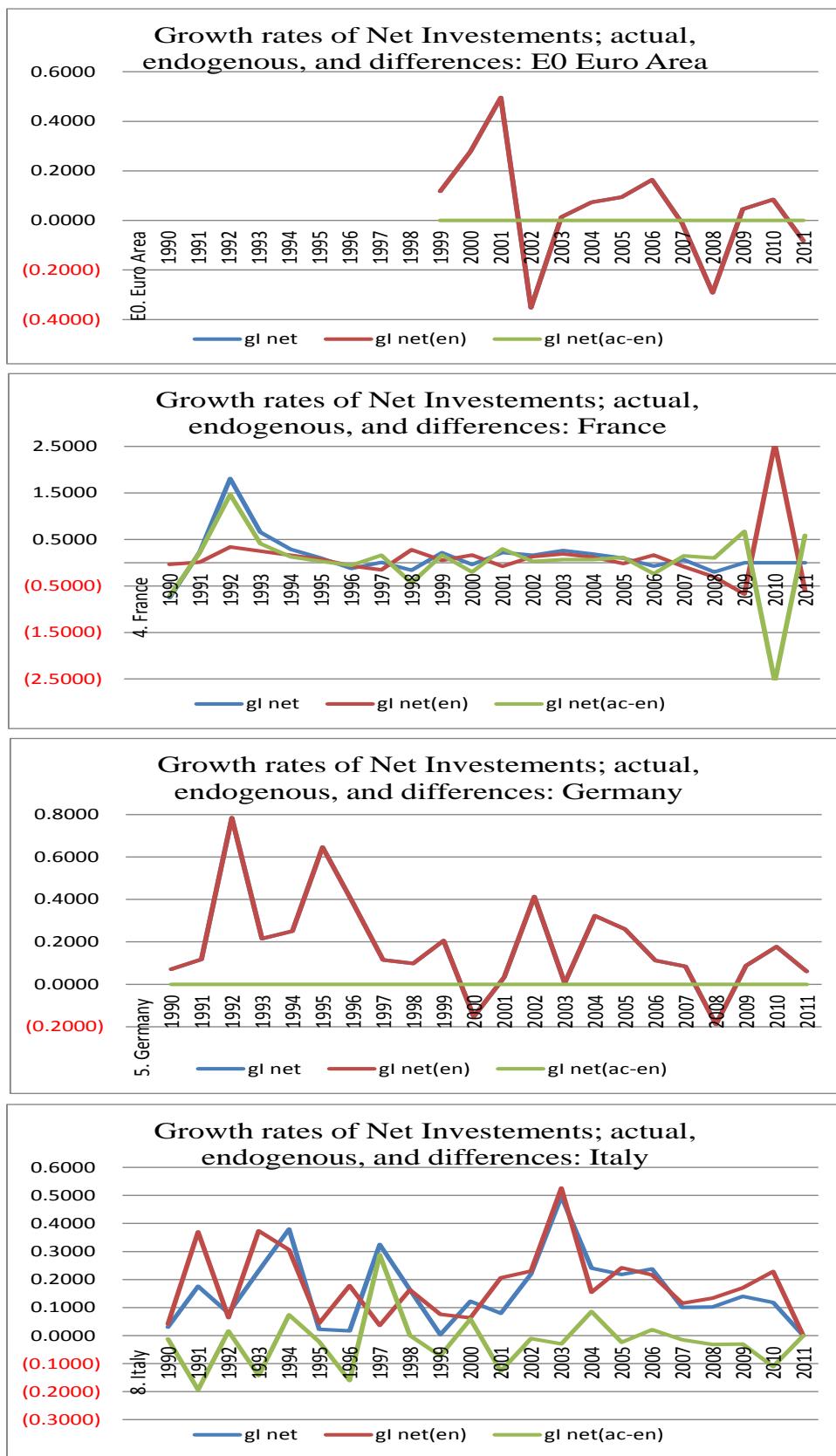
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. P&A-27 by G20: GDP-based Net Investments**

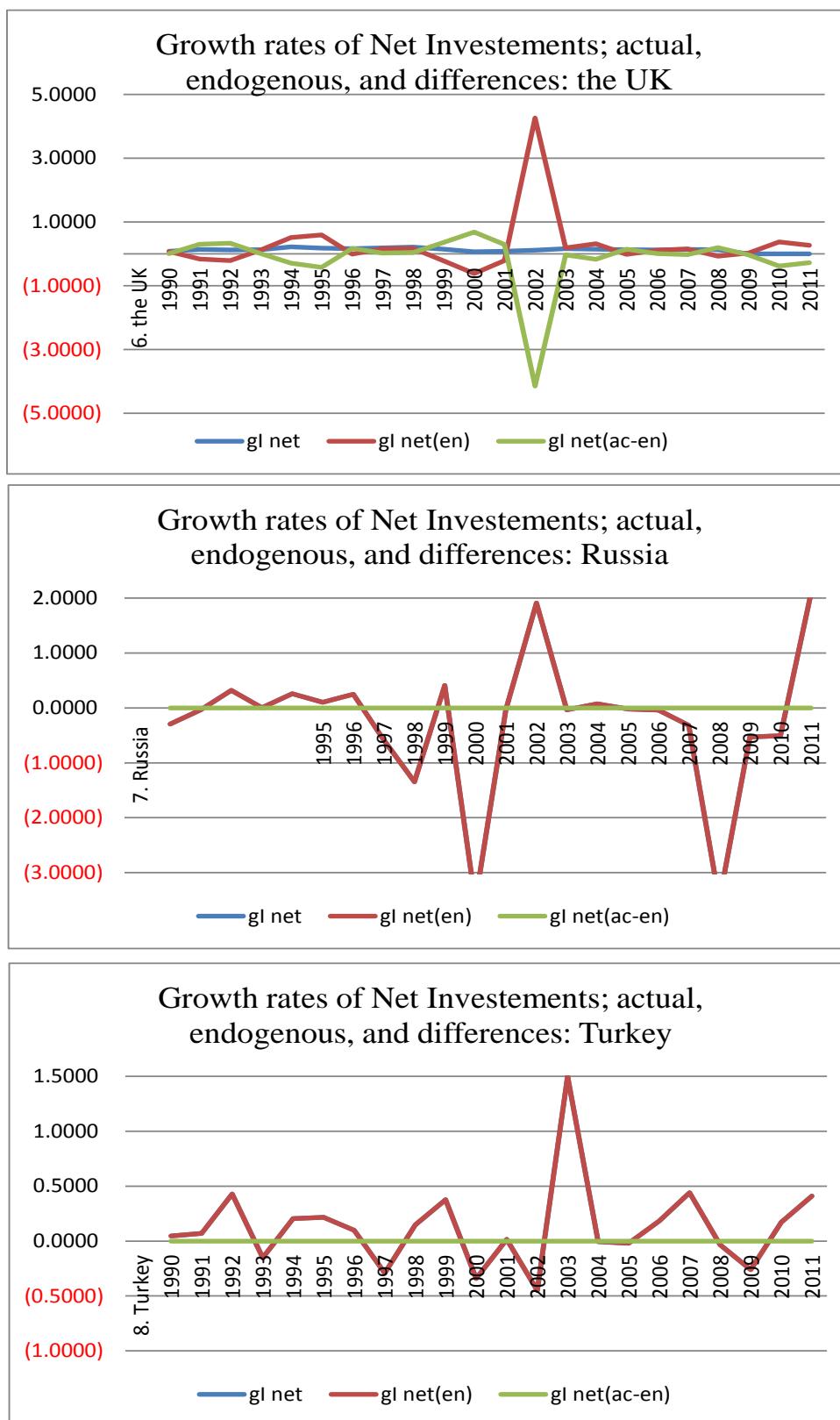
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**Fig. Euro-28 by G20: GDP-based Net Investments**

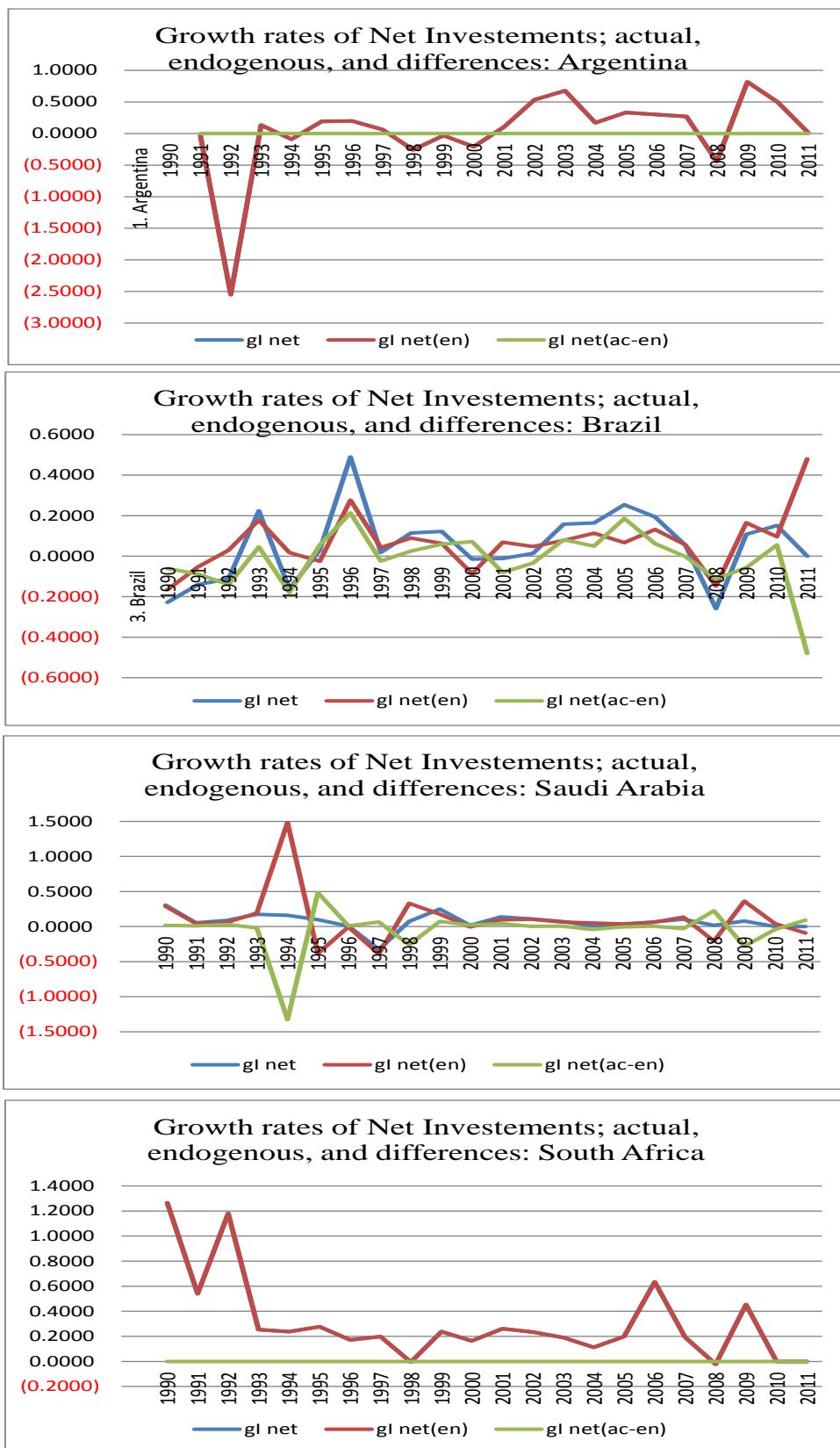
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. E&EastE-29 by G20: GDP-based Net Investments**

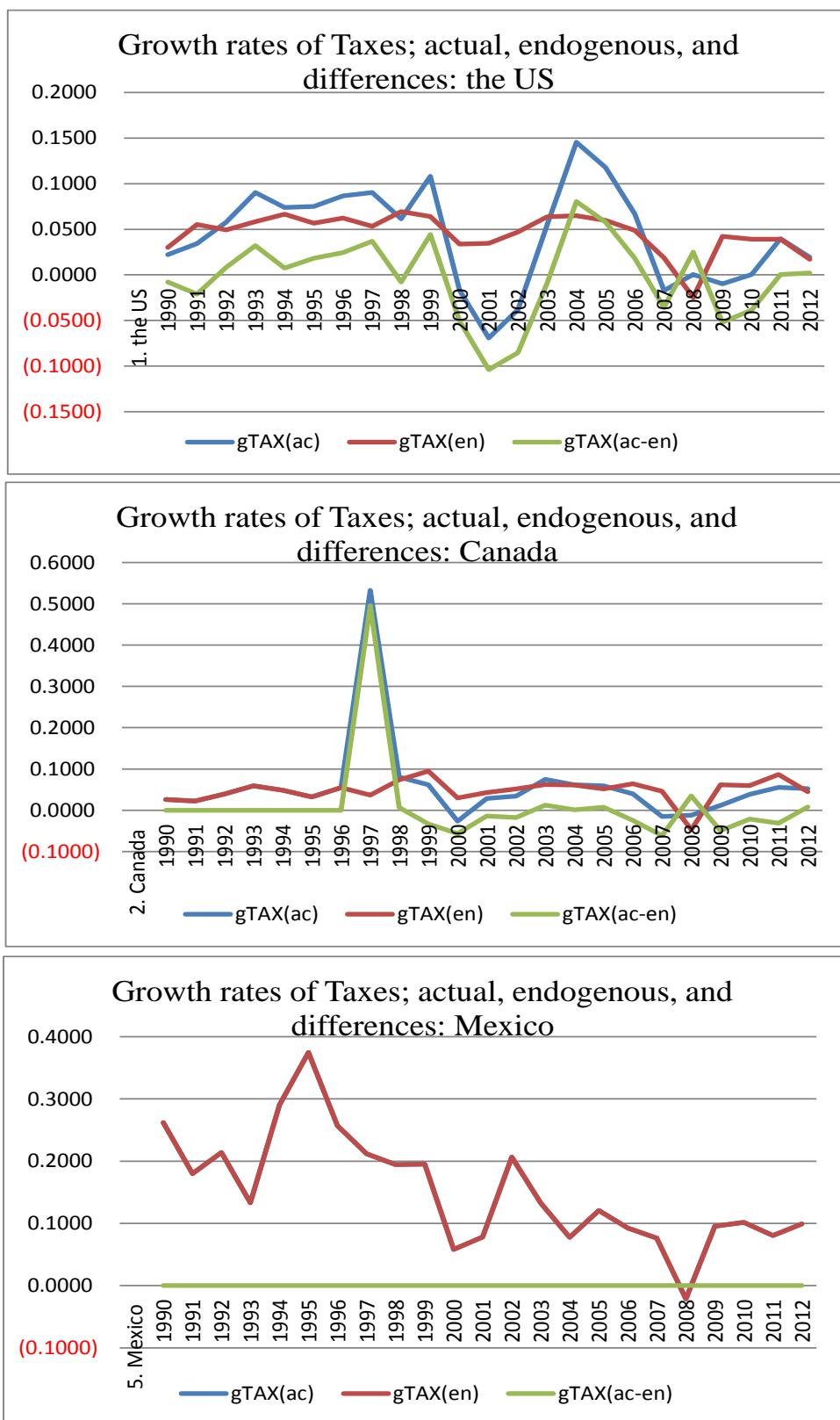
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**Fig. Rest-30 by G20: GDP-based Net Investments**

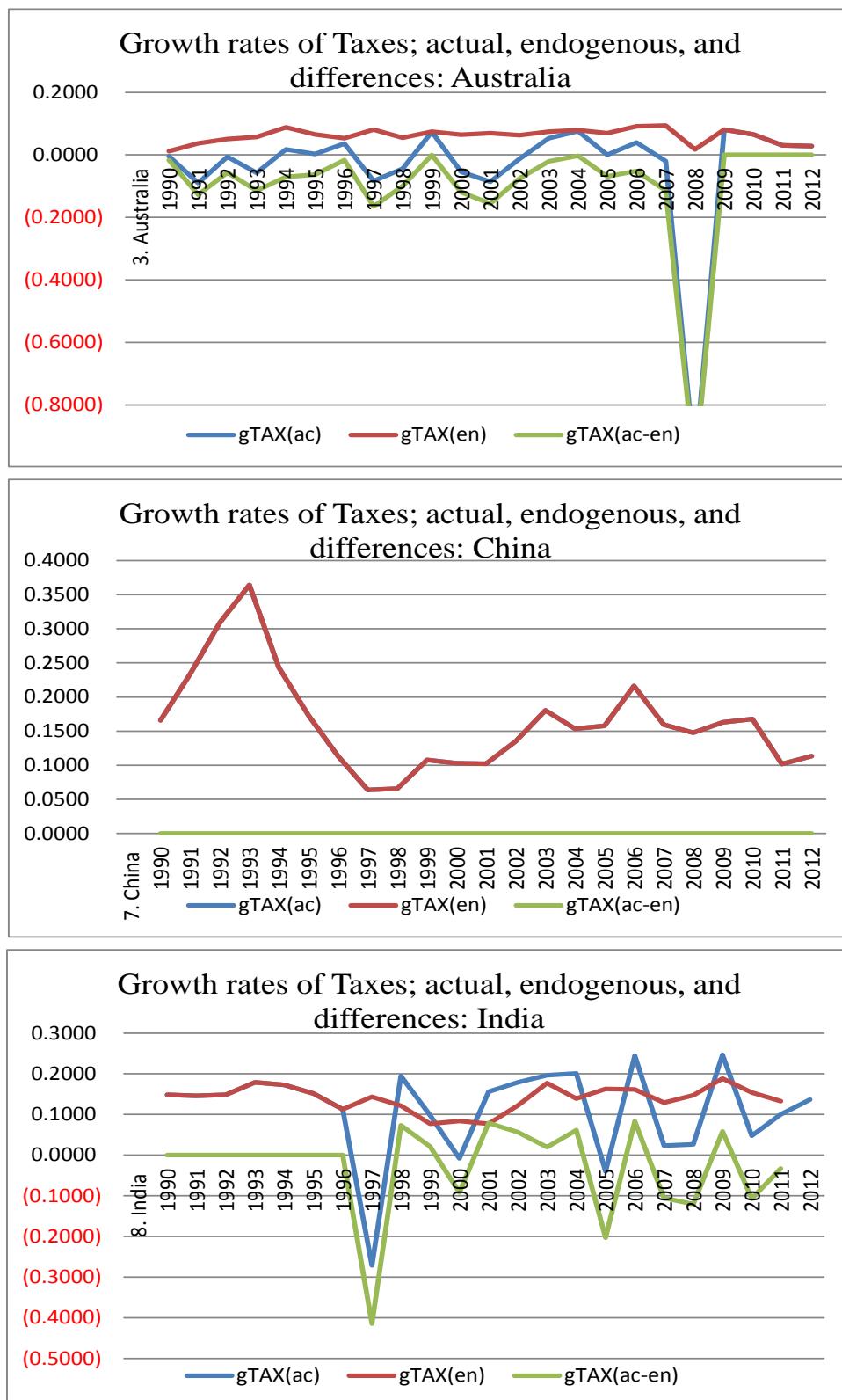
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. P&A-31 by G20: GDP-based Taxes**

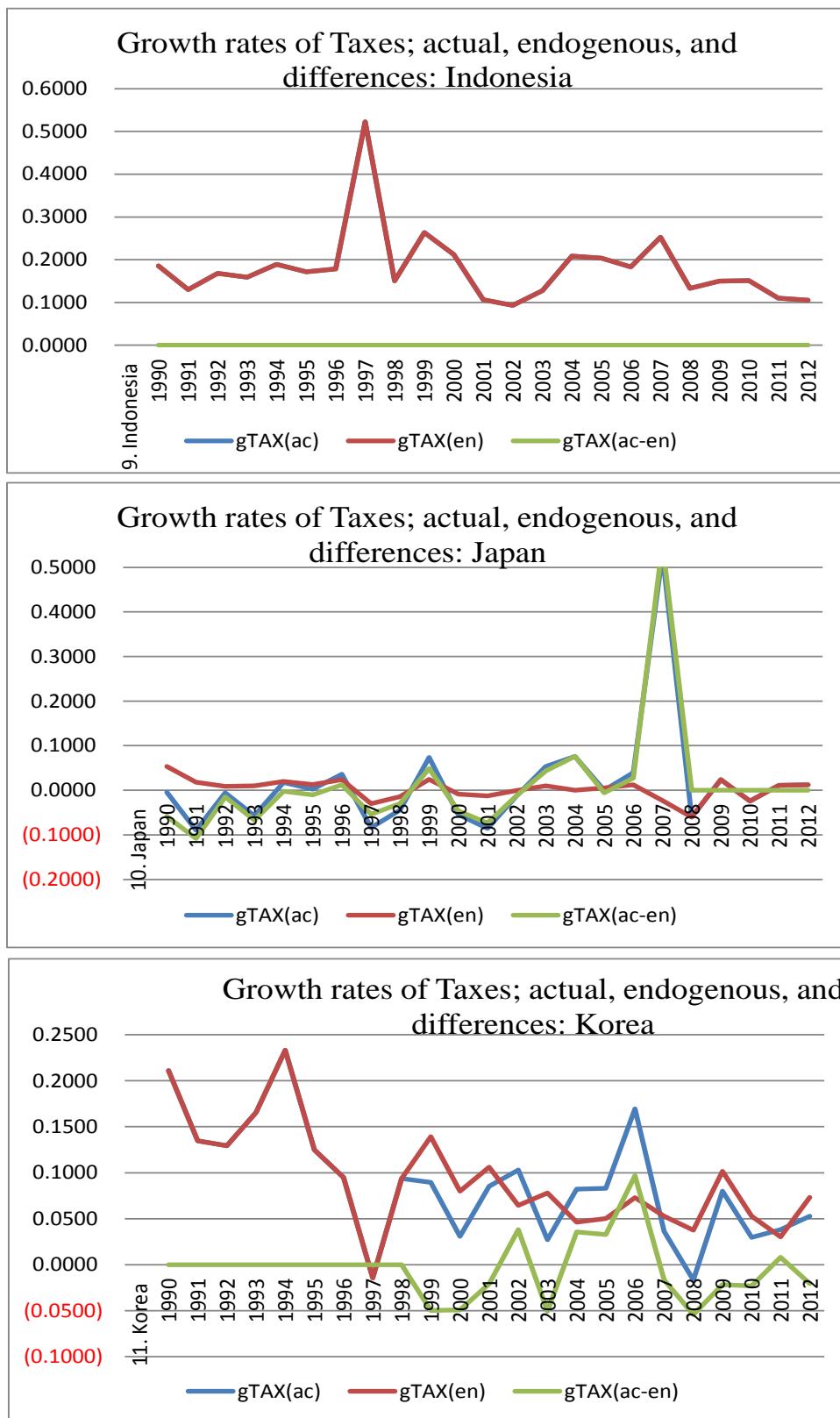
### Appendix 3, HEU



**Fig. P&A-32 by G20: GDP-based Taxes**

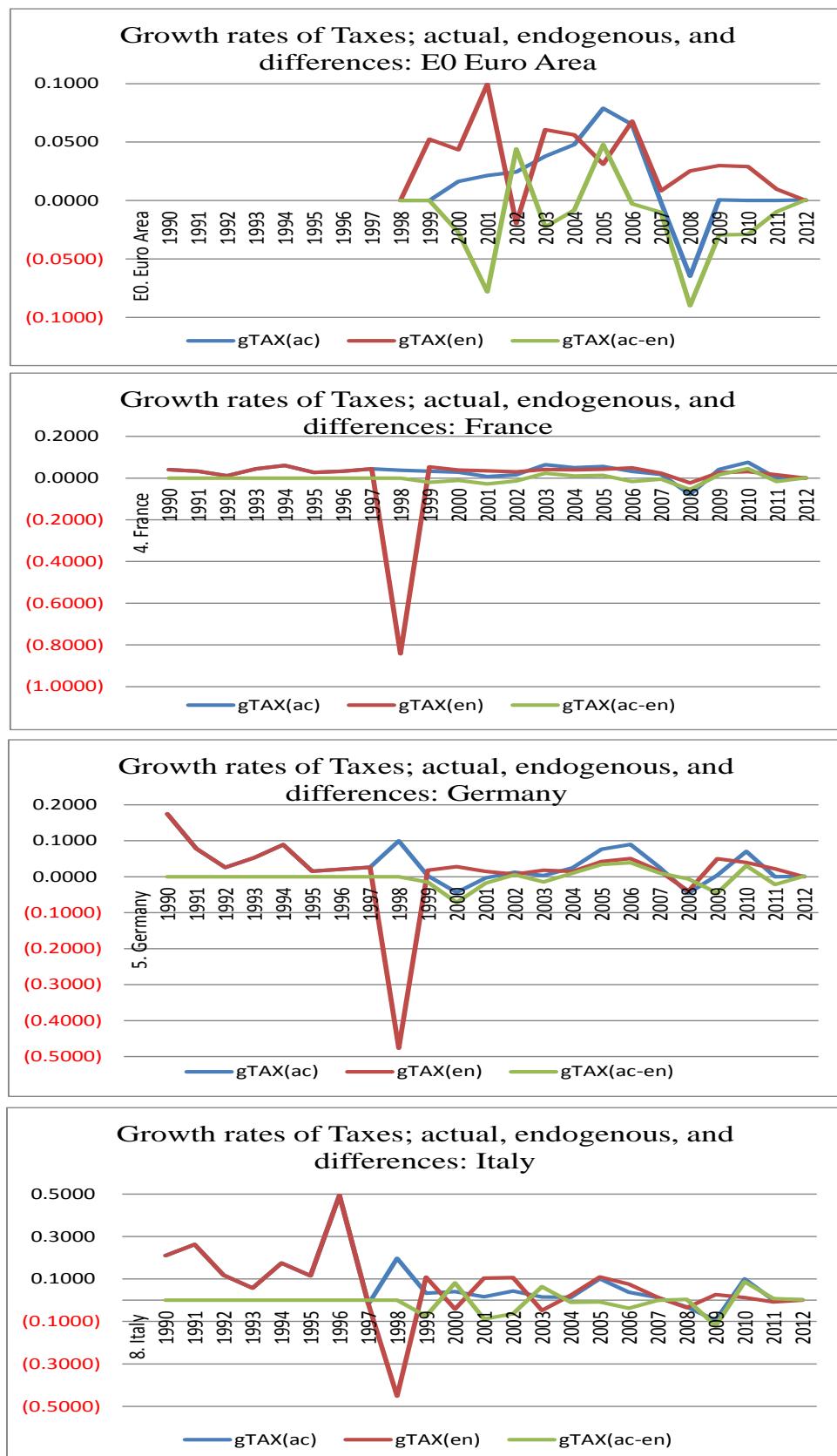
## 63 GDP-based Figures: G20 & G7 as a whole system

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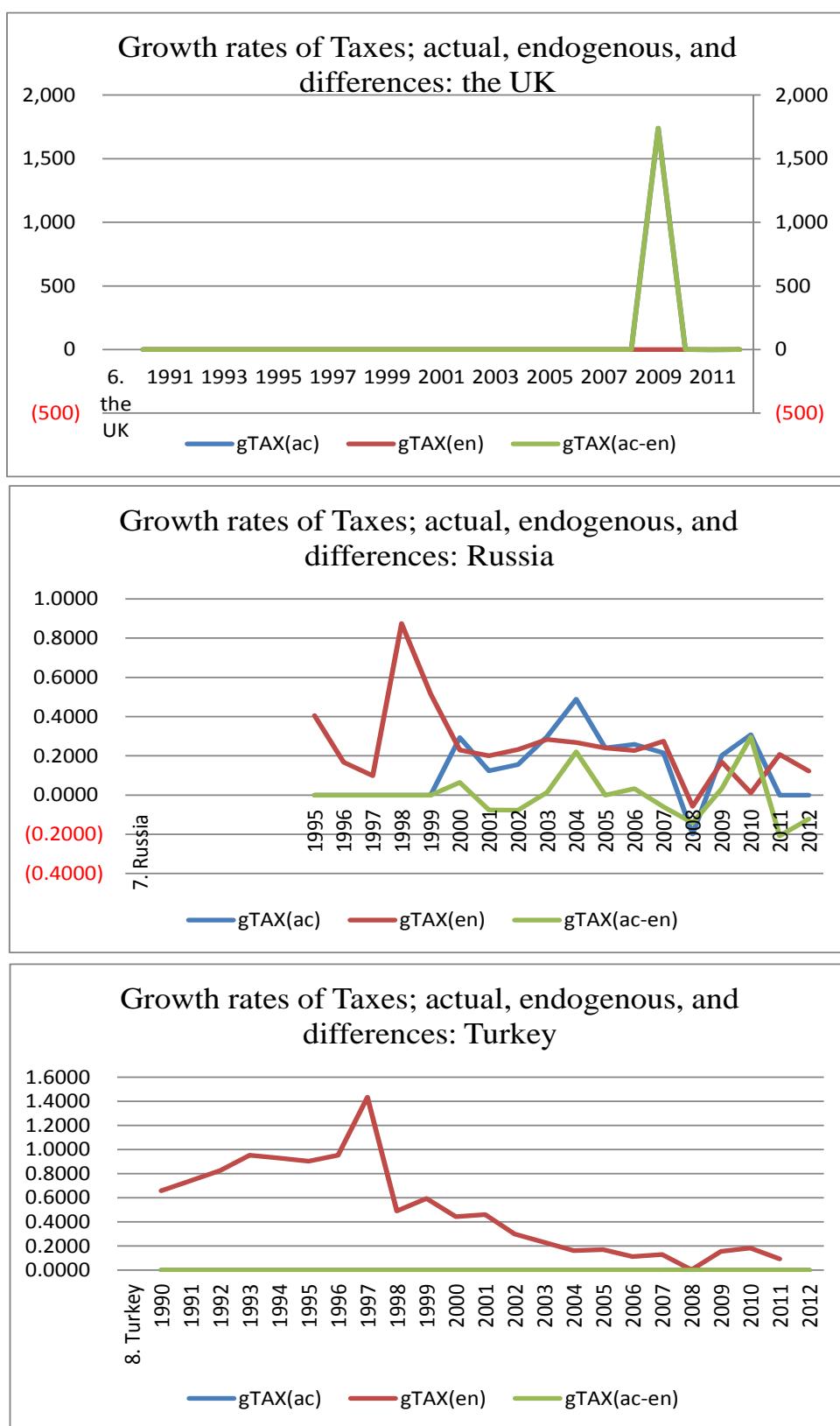
**Fig. P&A-33 by G20: GDP-based Taxes**

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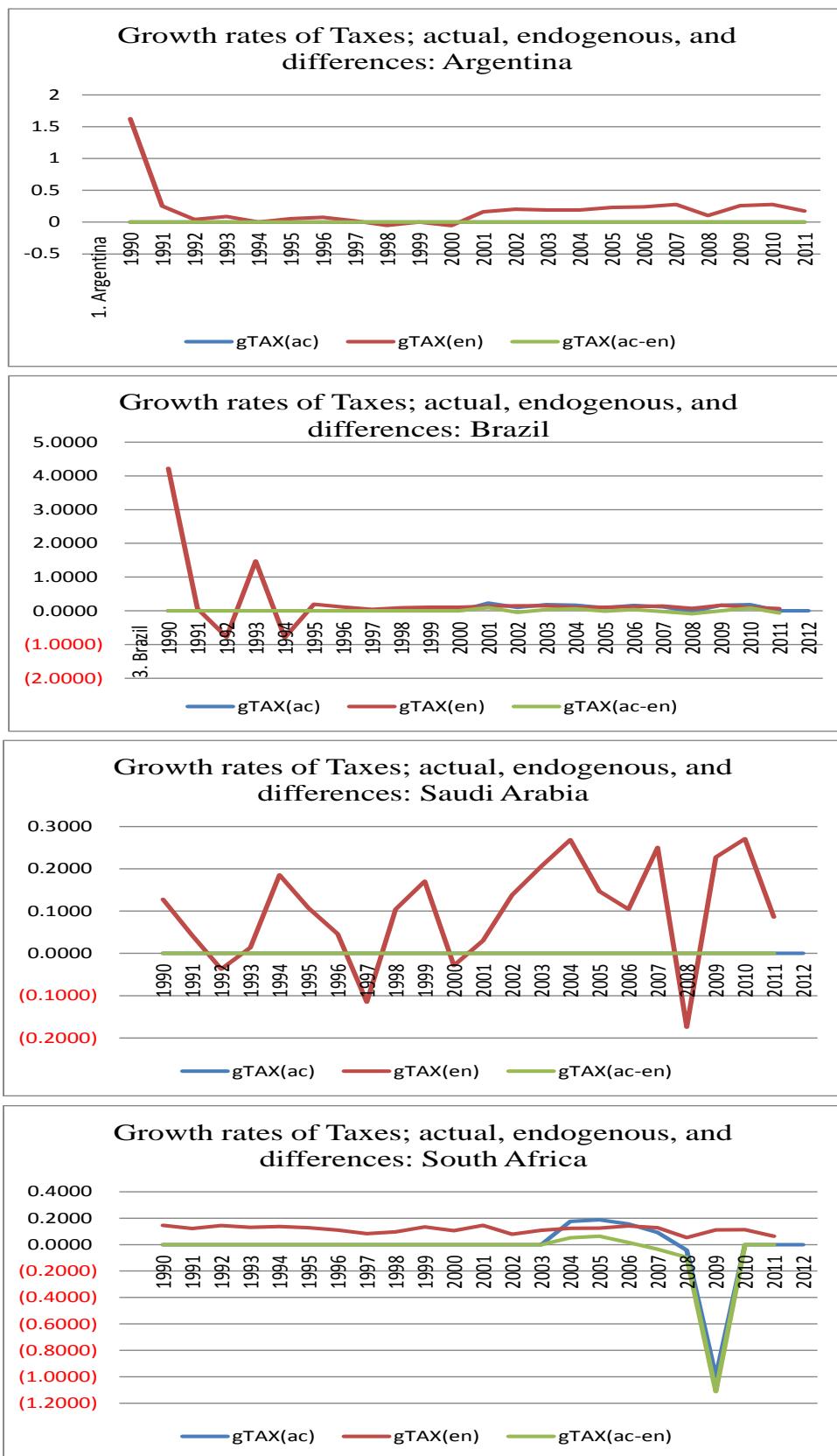
**Fig. Euro-34 by G20: GDP-based Taxes**

### 63 GDP-based Figures: G20 & G7 as a whole system



**Fig. E&EastE-35 by G20: GDP-based Taxes**

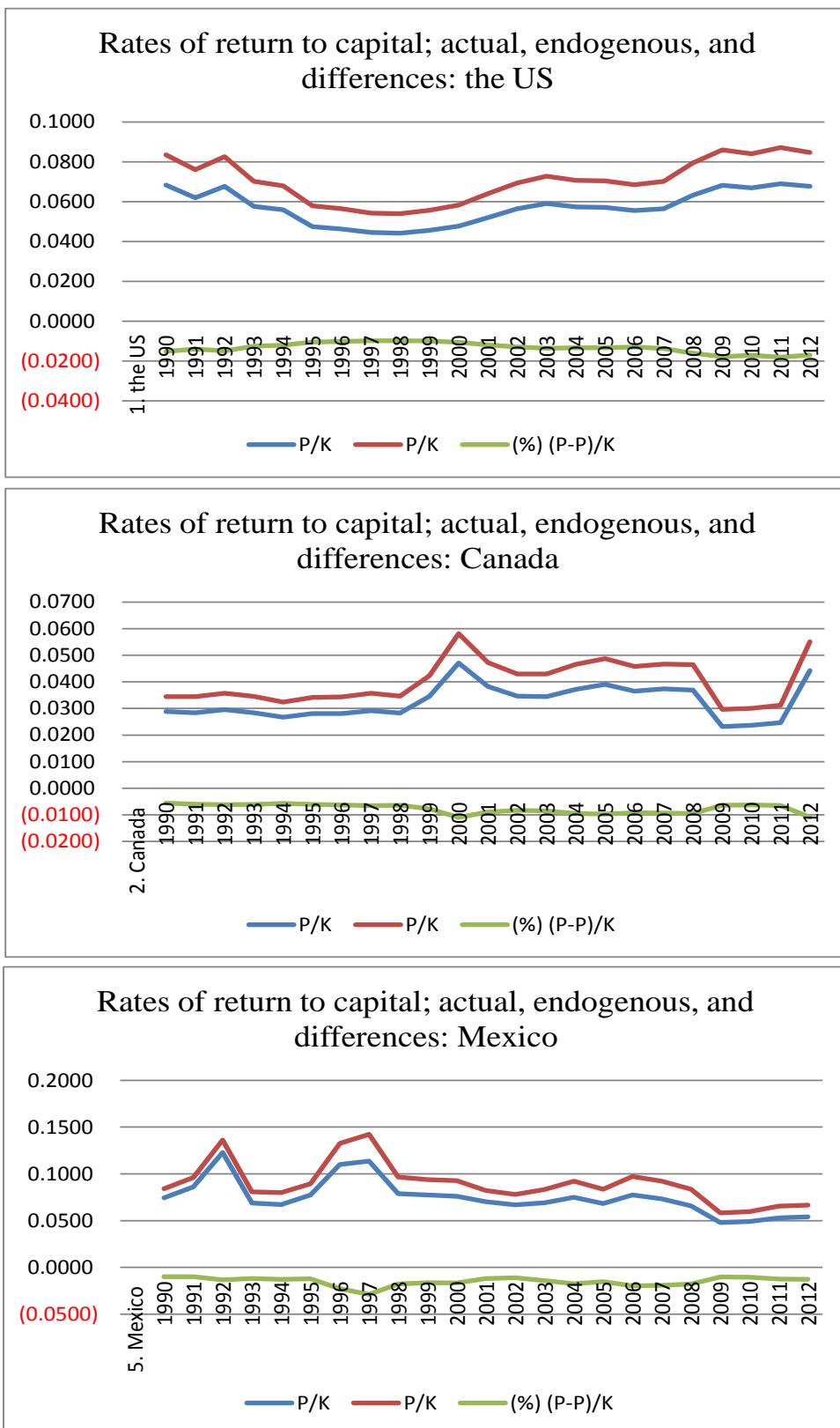
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**Fig. Rest-36 by G20: GDP-based Taxes**

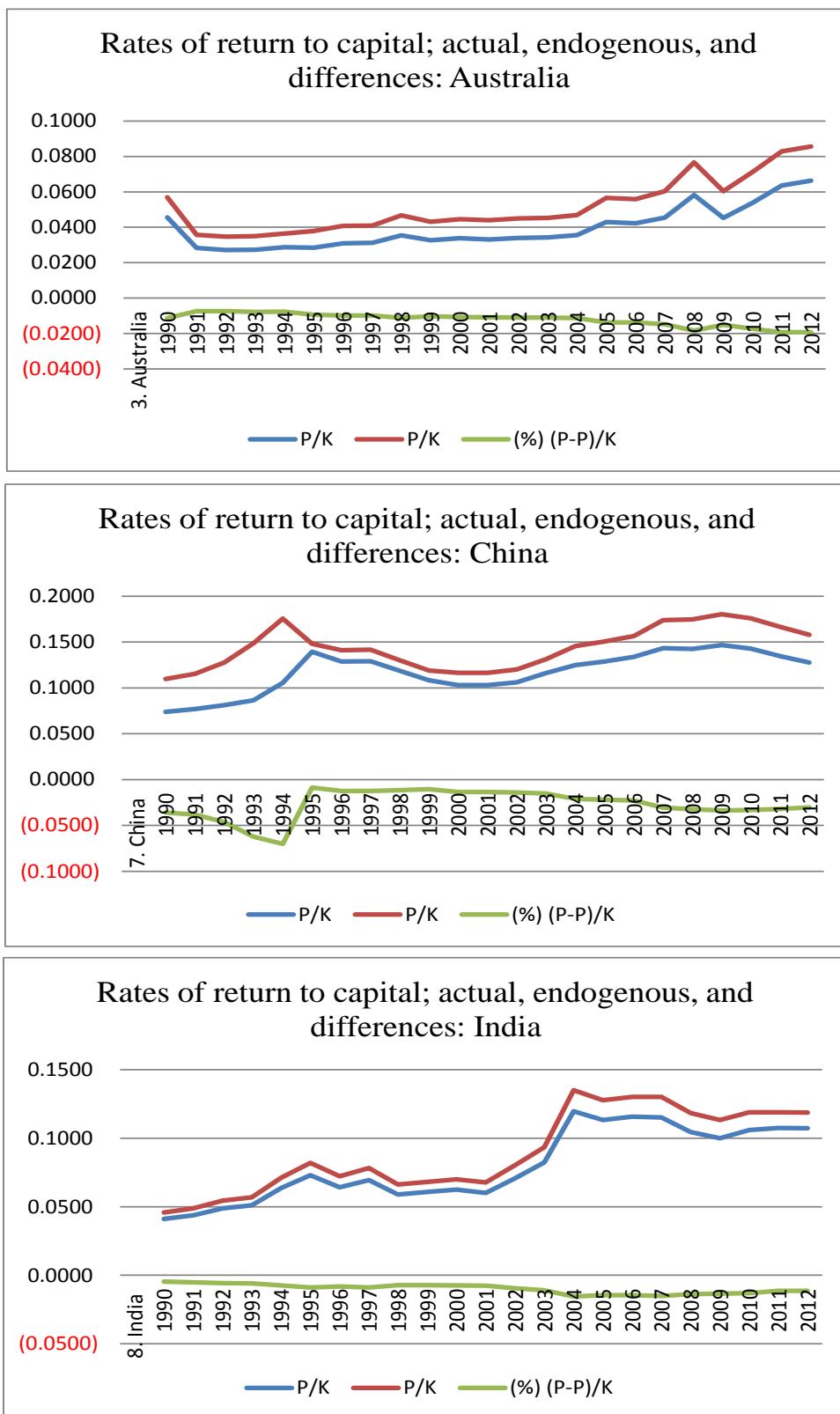
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. P&A-37 by G20: GDP-based Rate of return to capital**

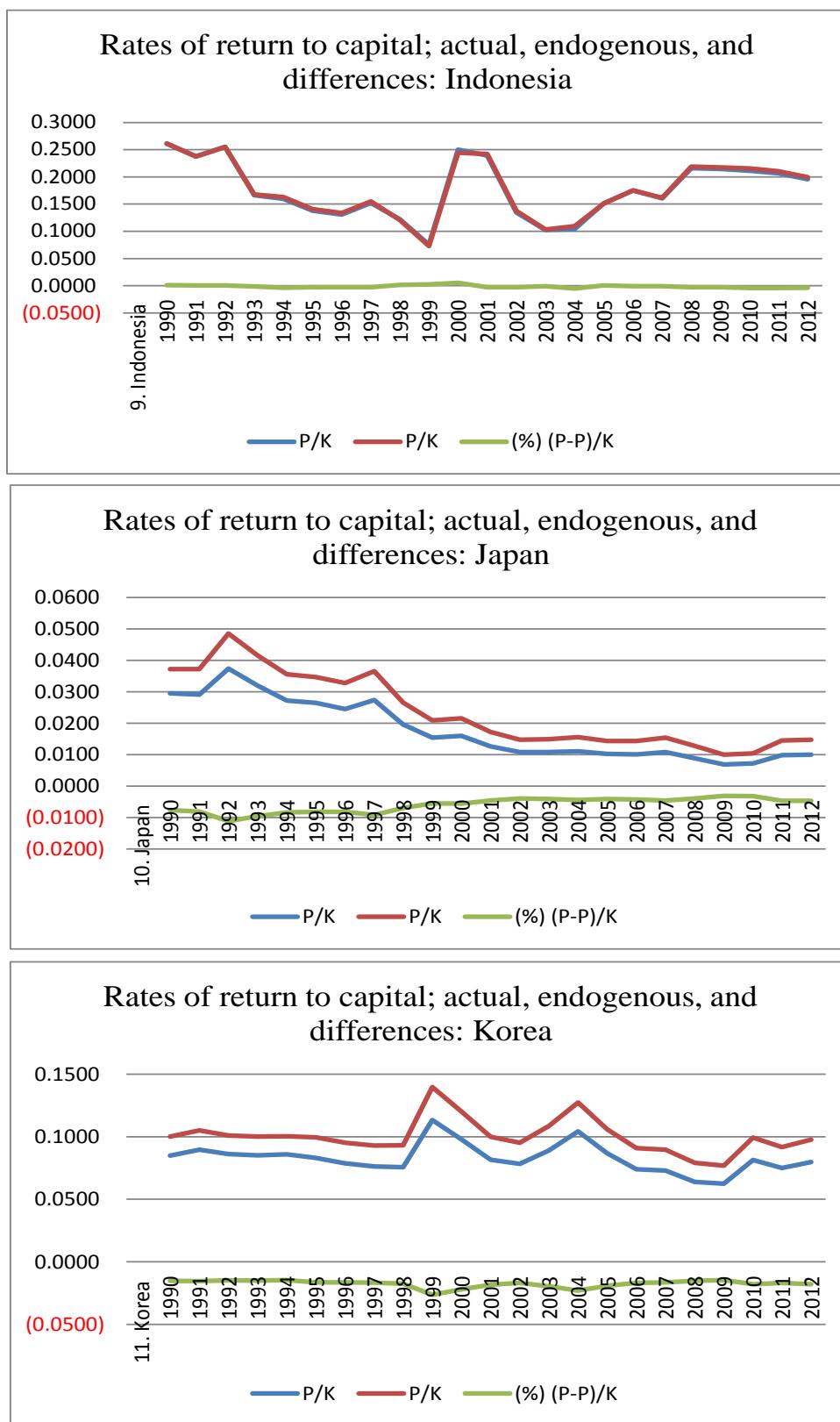
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**Fig. P&A-38 by G20: GDP-based Rate of return to capital**

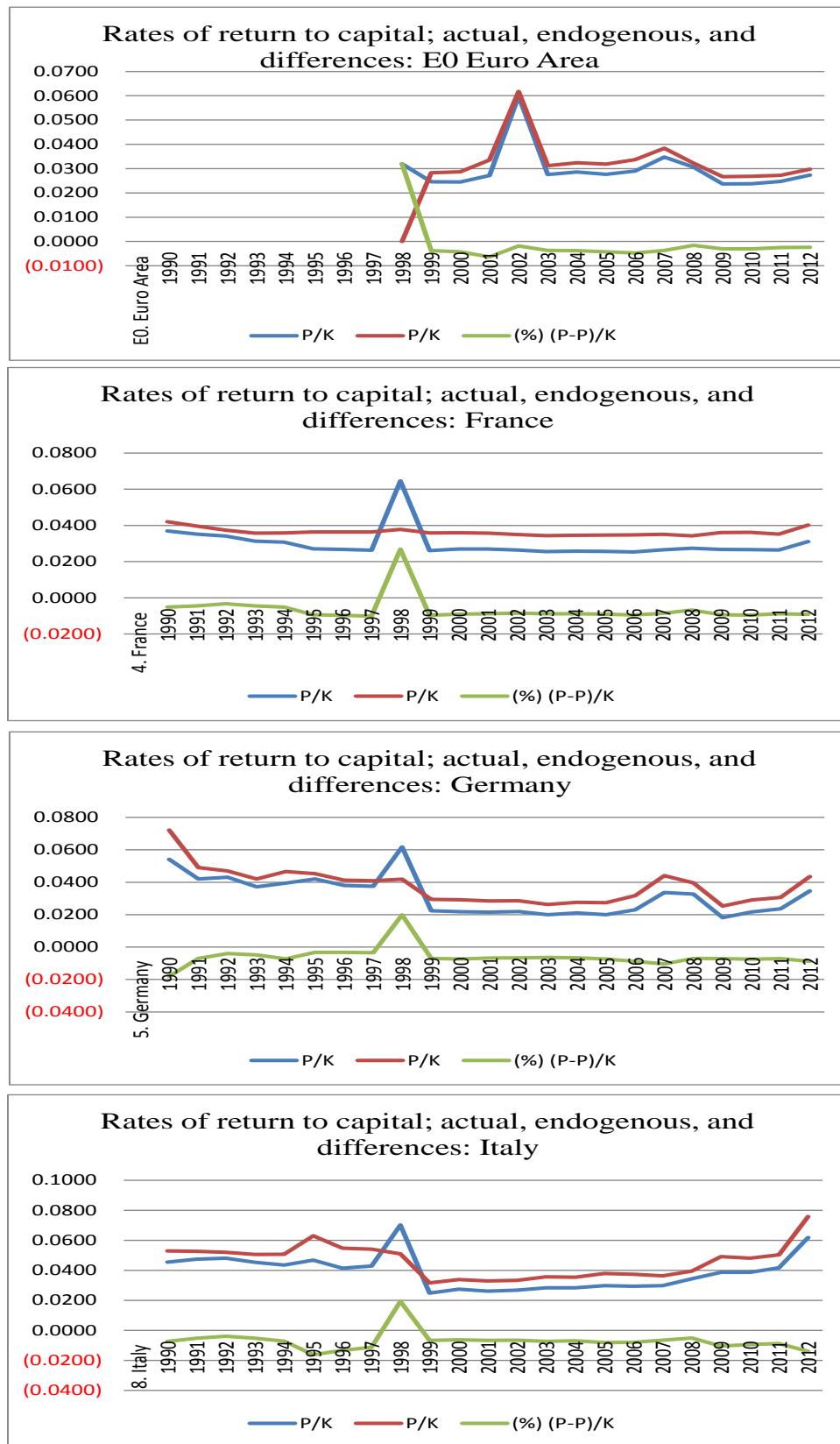
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. P&A-39 by G20: GDP-based Rate of return to capital**

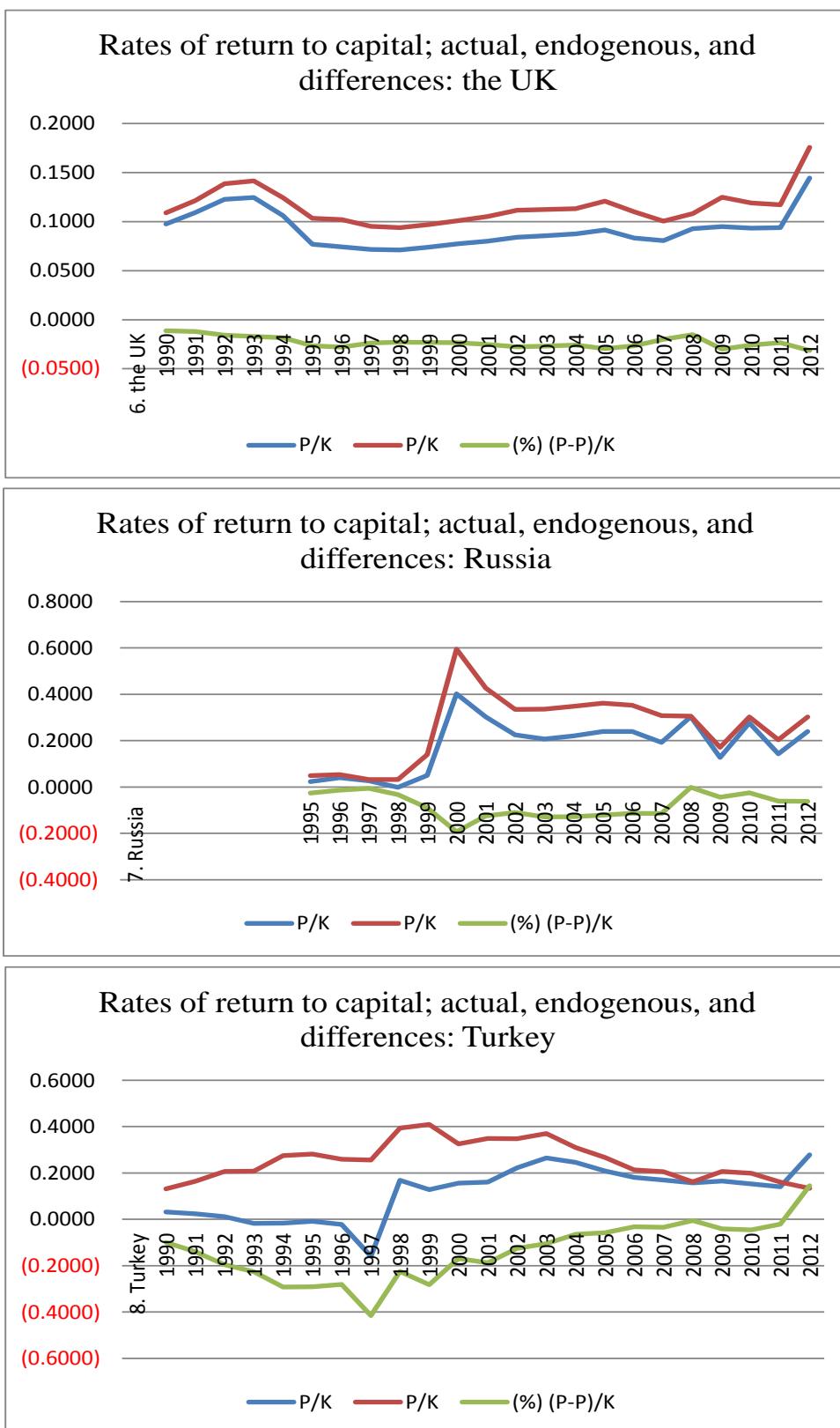
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**Fig. Euro-40 by G20: GDP-based Rate of return to capital**

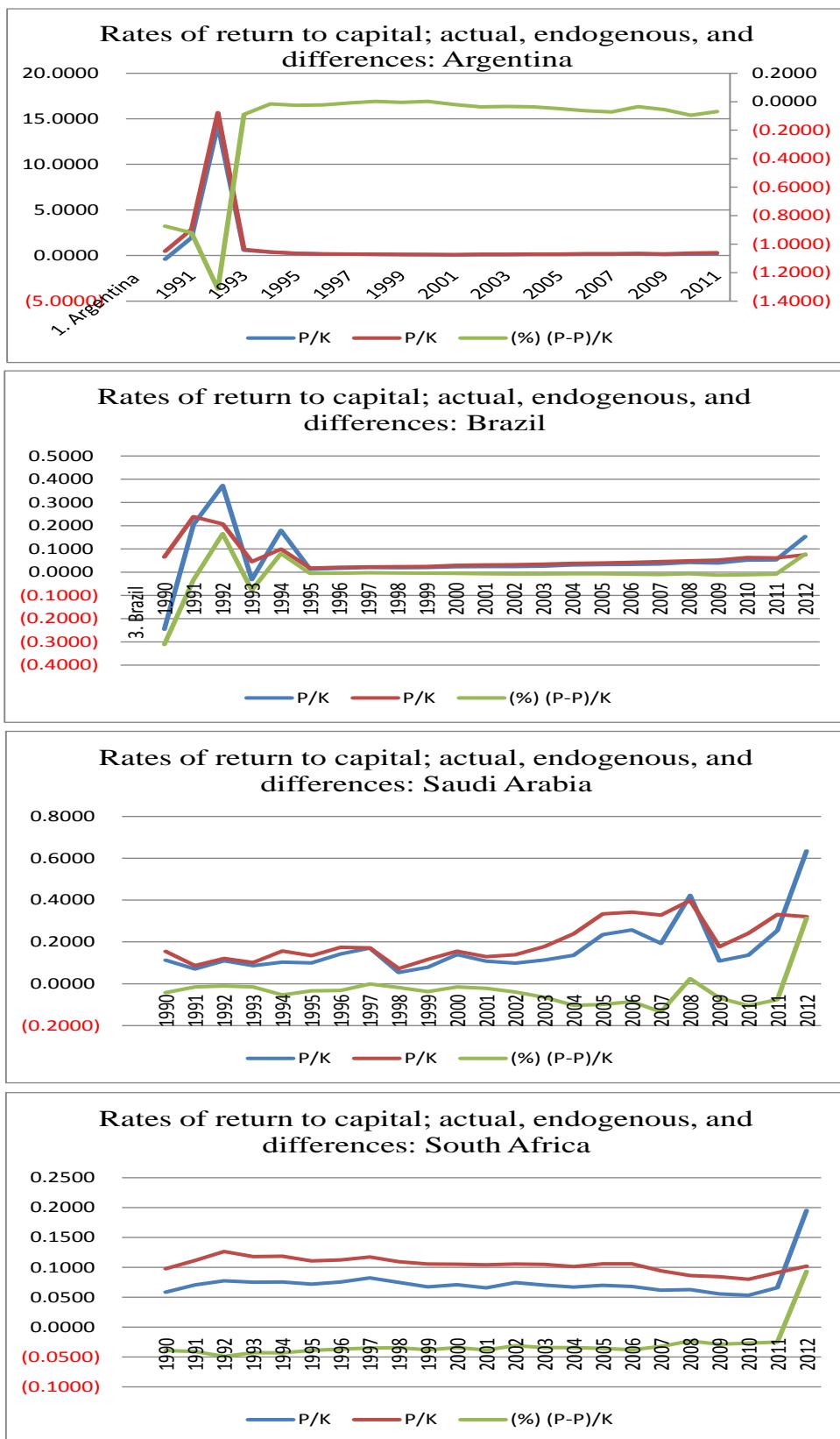
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**Fig. E&EastE-41 by G20: GDP-based Rate of return to capital**

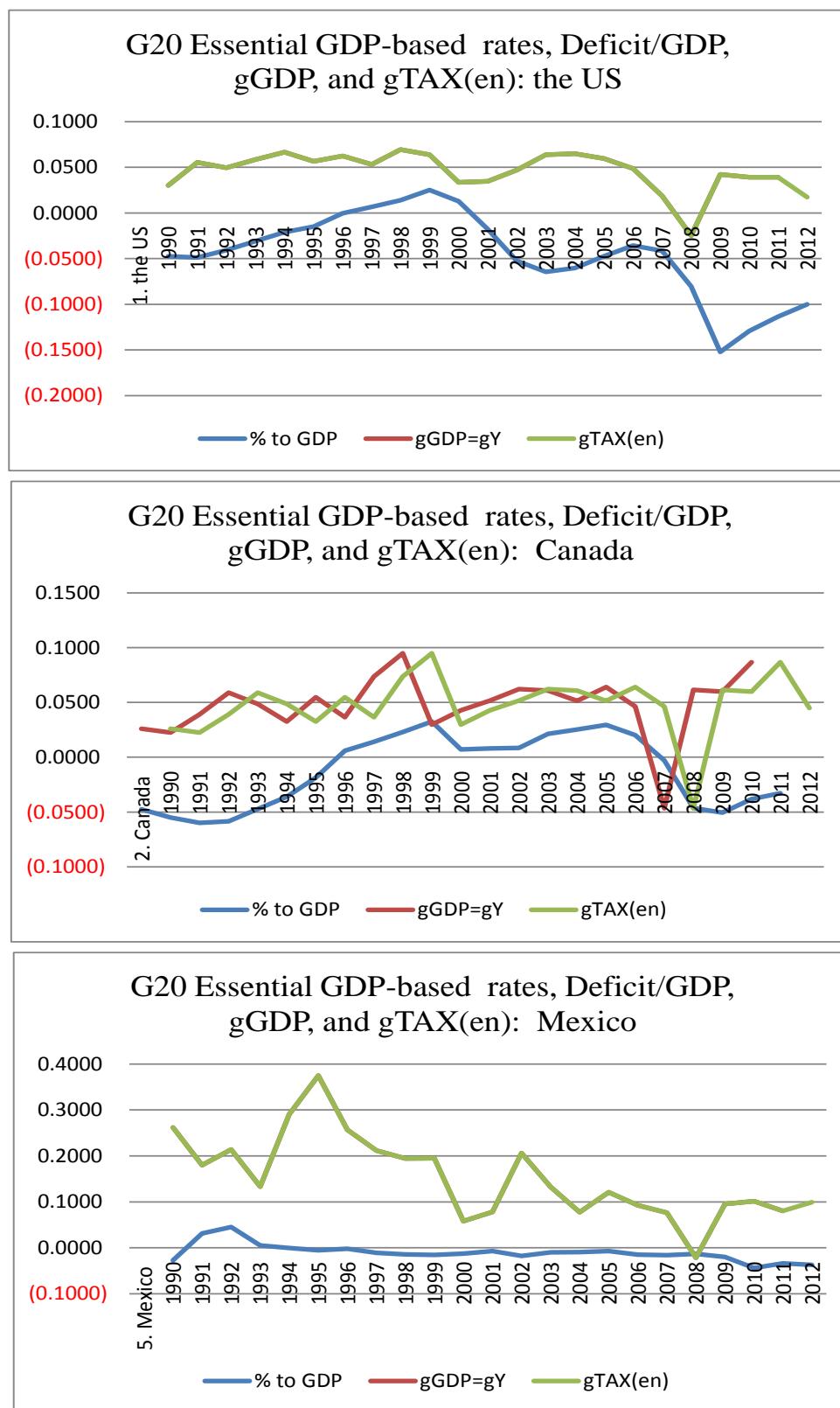
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**Fig. Rest-42 by G20: GDP-based Rate of return to capital**

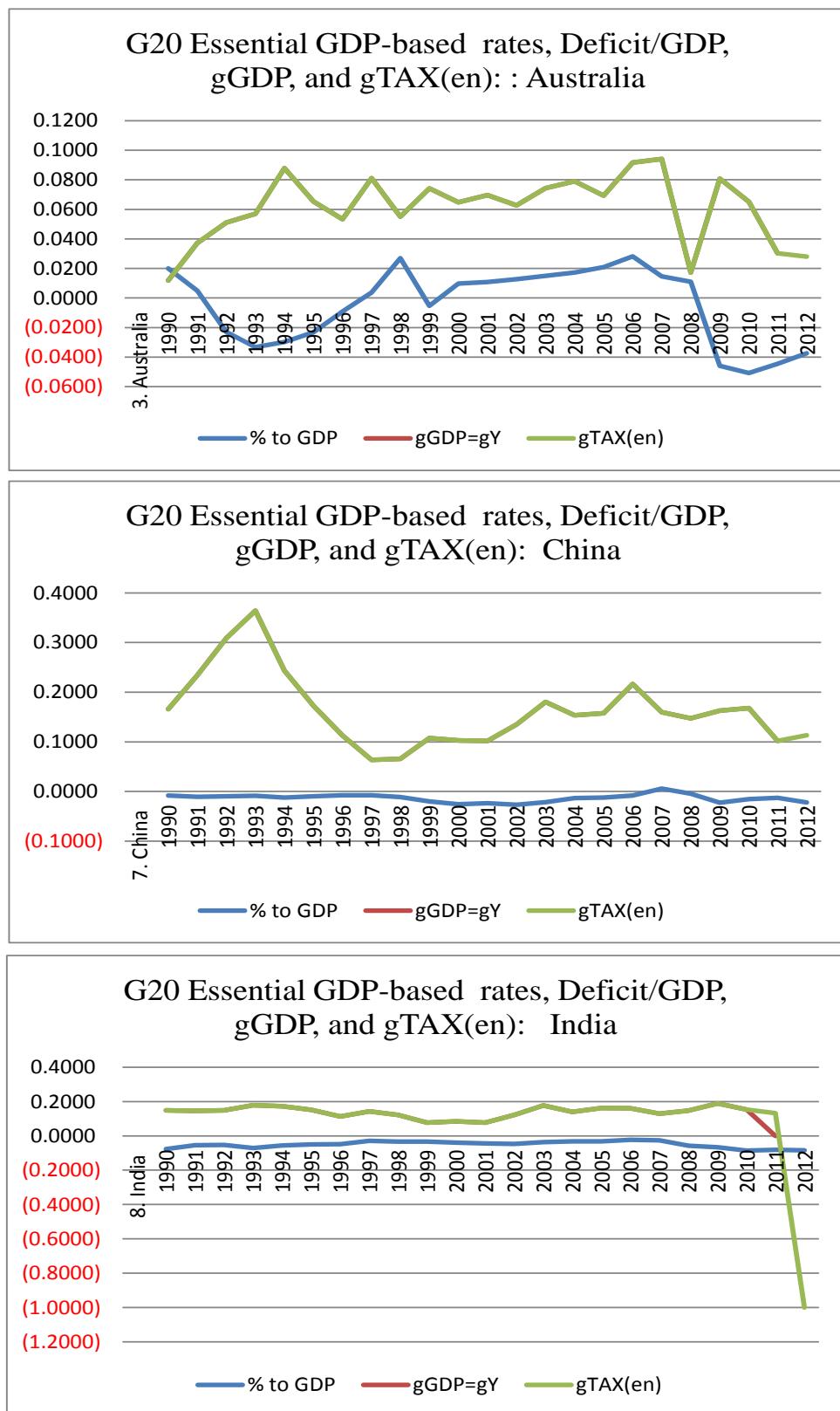
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**Fig. P&A-43 by G20: GDP-based GDP growth rate and Deficit/GDP in Family X**

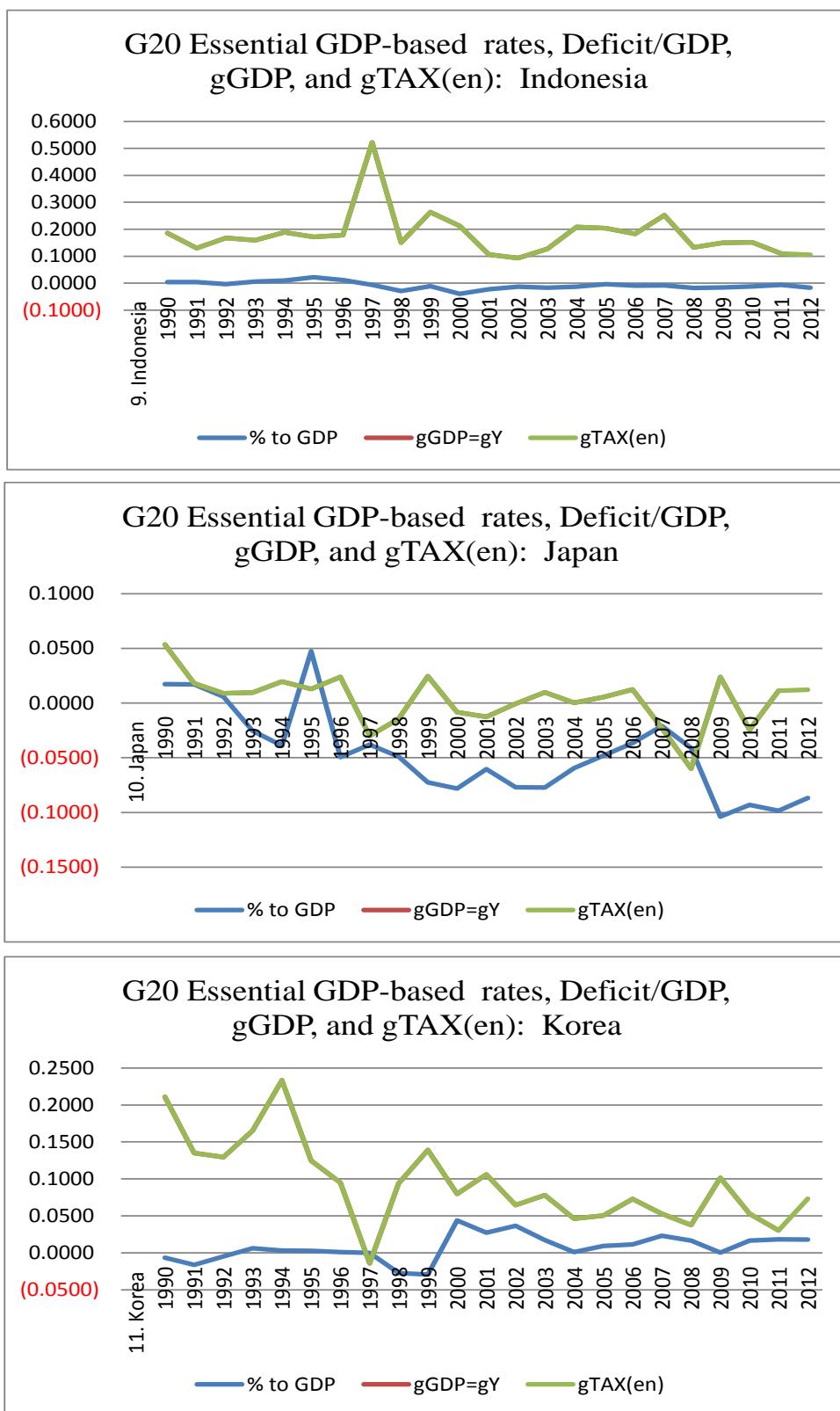
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**Fig. P&A-44** by G20: GDP-based GDP growth rate and Deficit/GDP in Family X

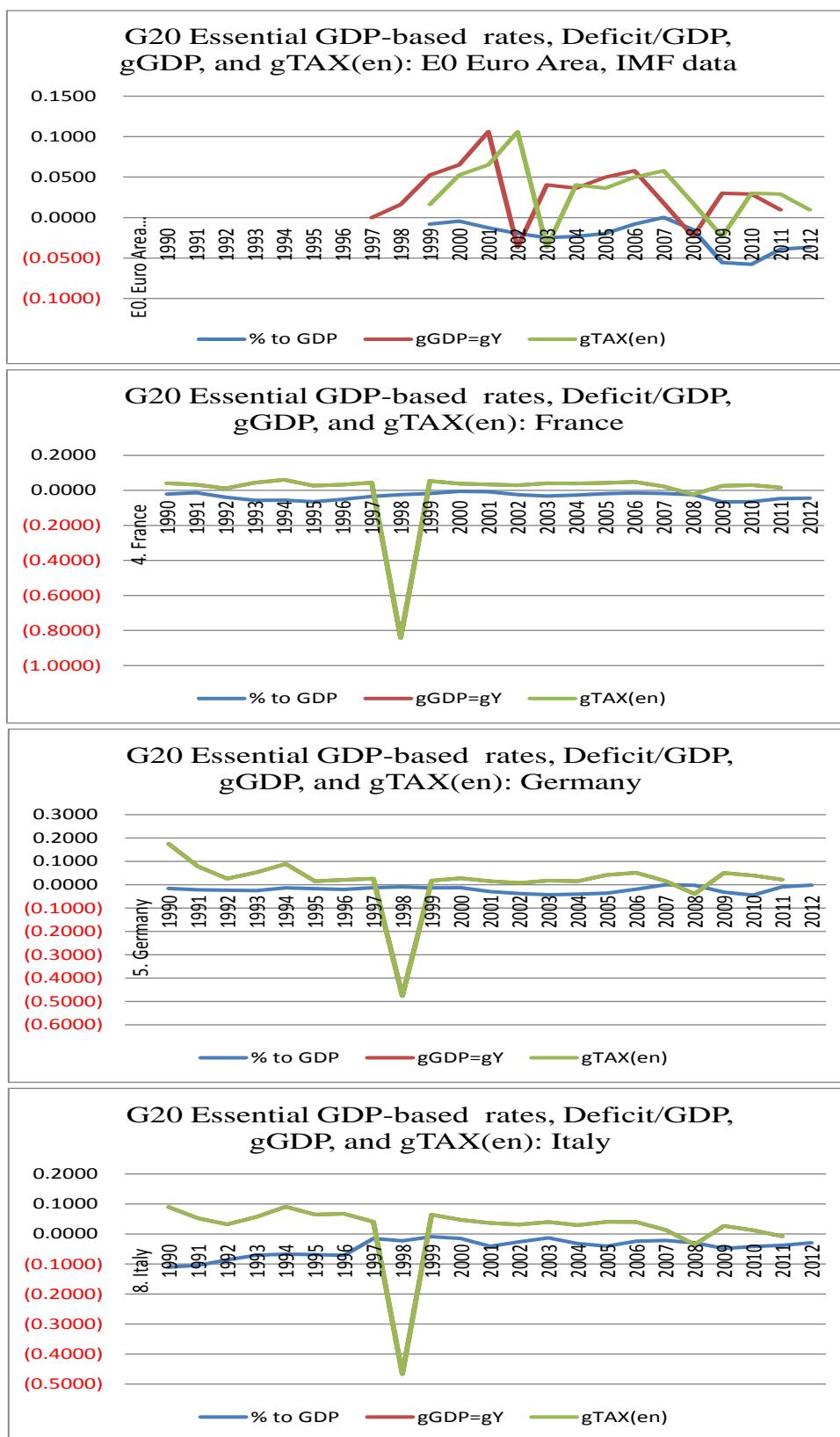
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**Fig. P&A-45 by G20: GDP-based GDP growth rate and Deficit/GDP in Family X**

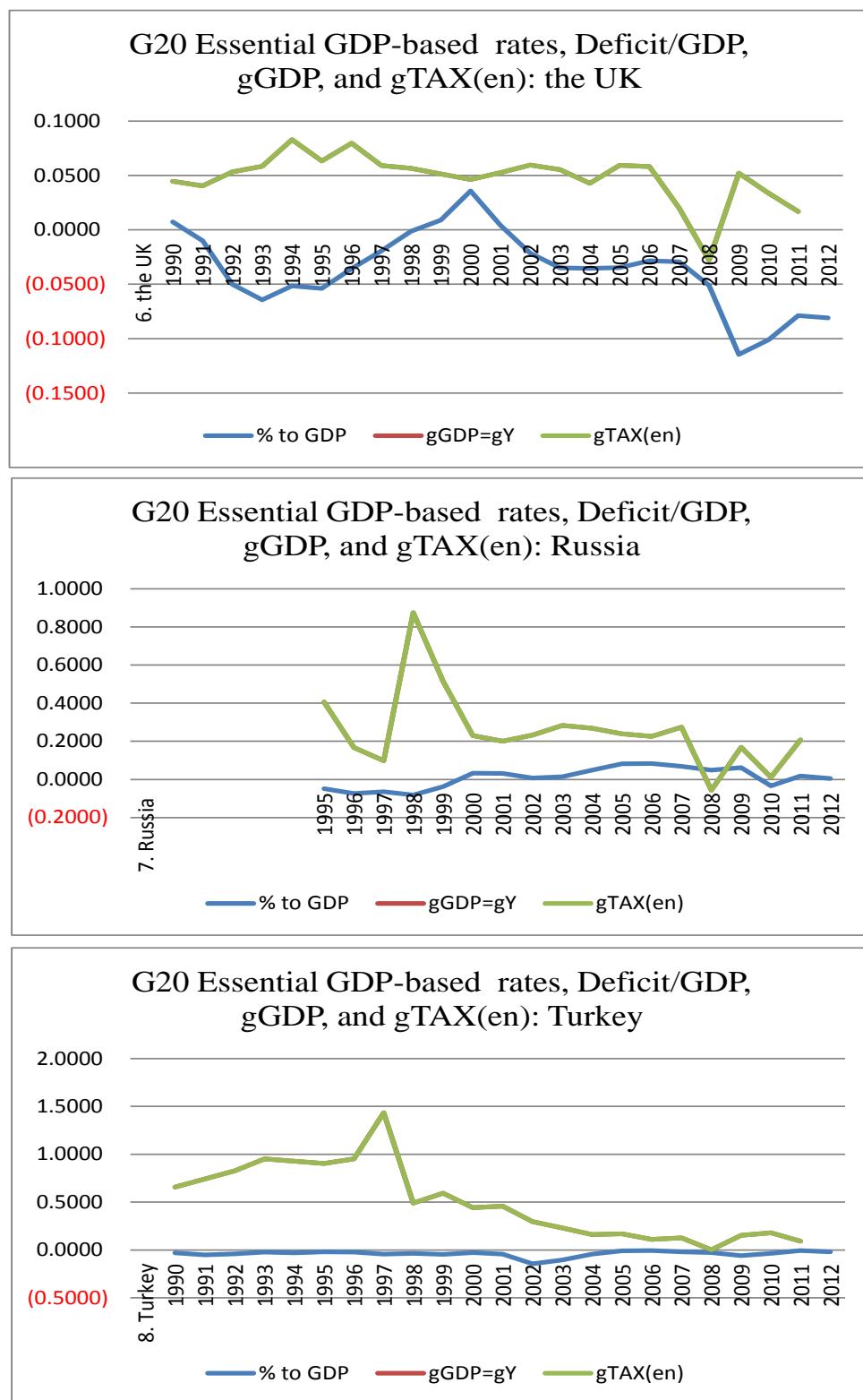
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**Fig. Euro-46 by G20: GDP-based GDP growth rate and Deficit/GDP in Family X**

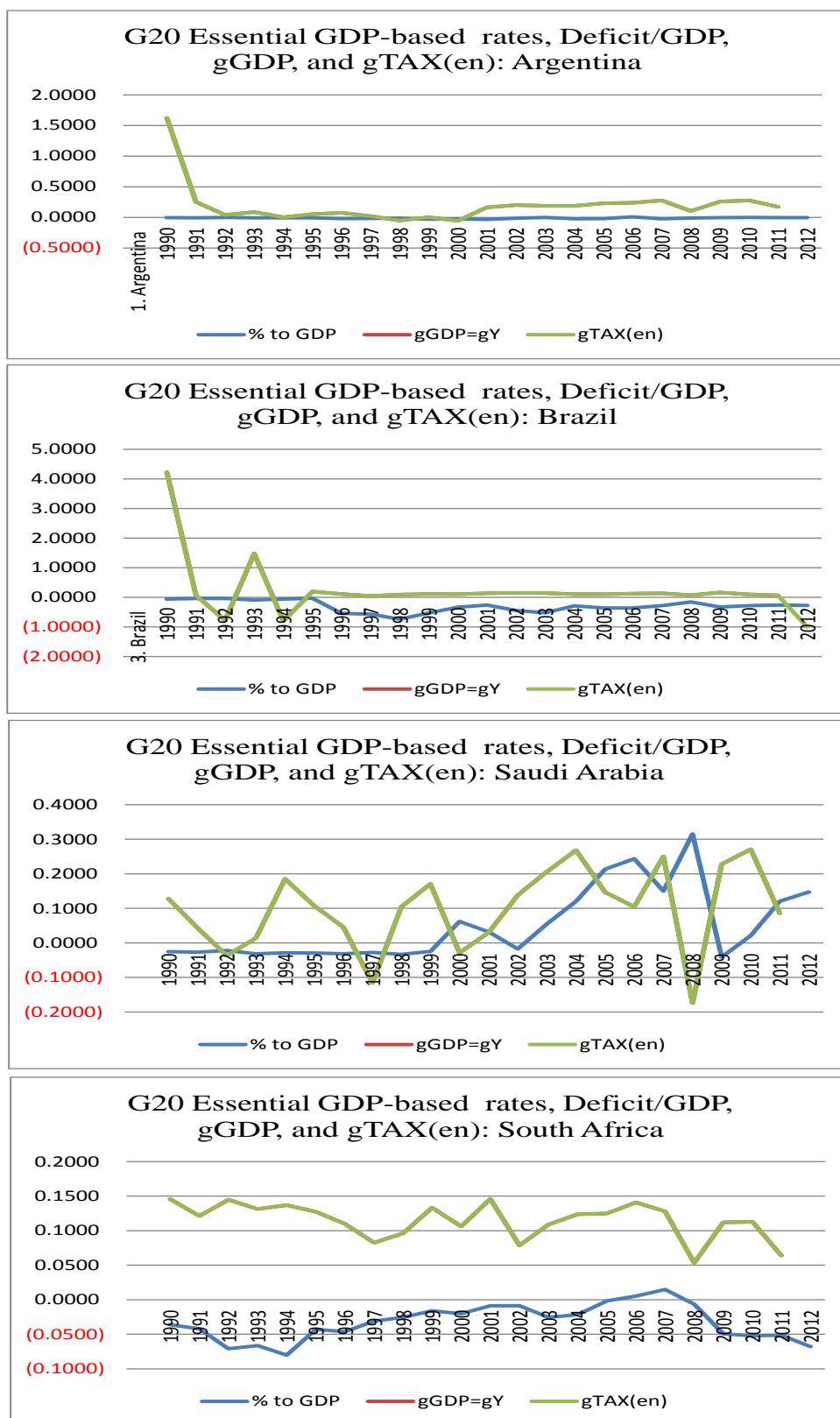
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**Fig. E&EastE-47** by G20: GDP-based GDP growth rate and Deficit/GDP in Family X

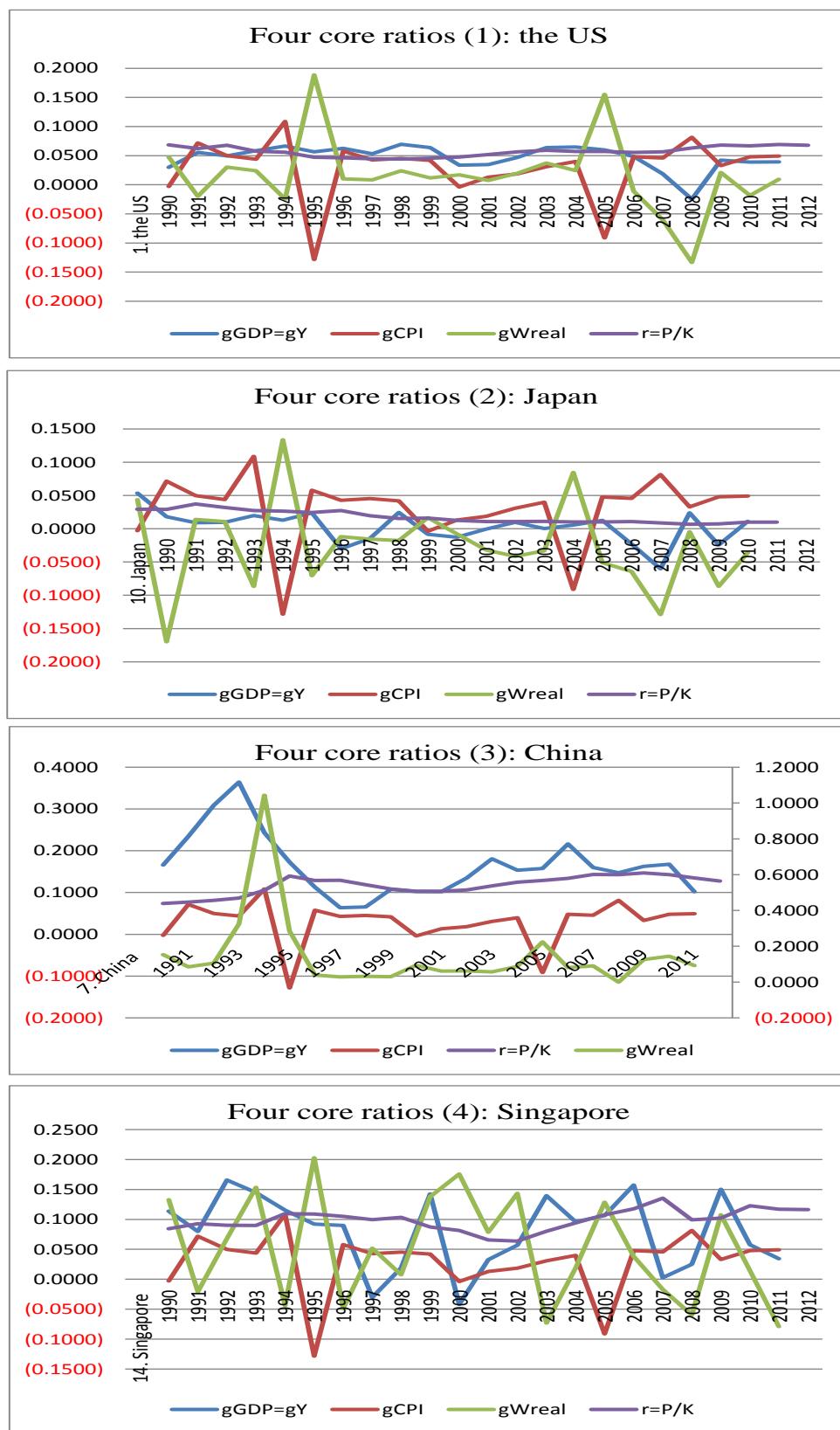
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**Fig. Rest-48 by G36: GDP-based GDP growth rate and Deficit/GDP in Family X**

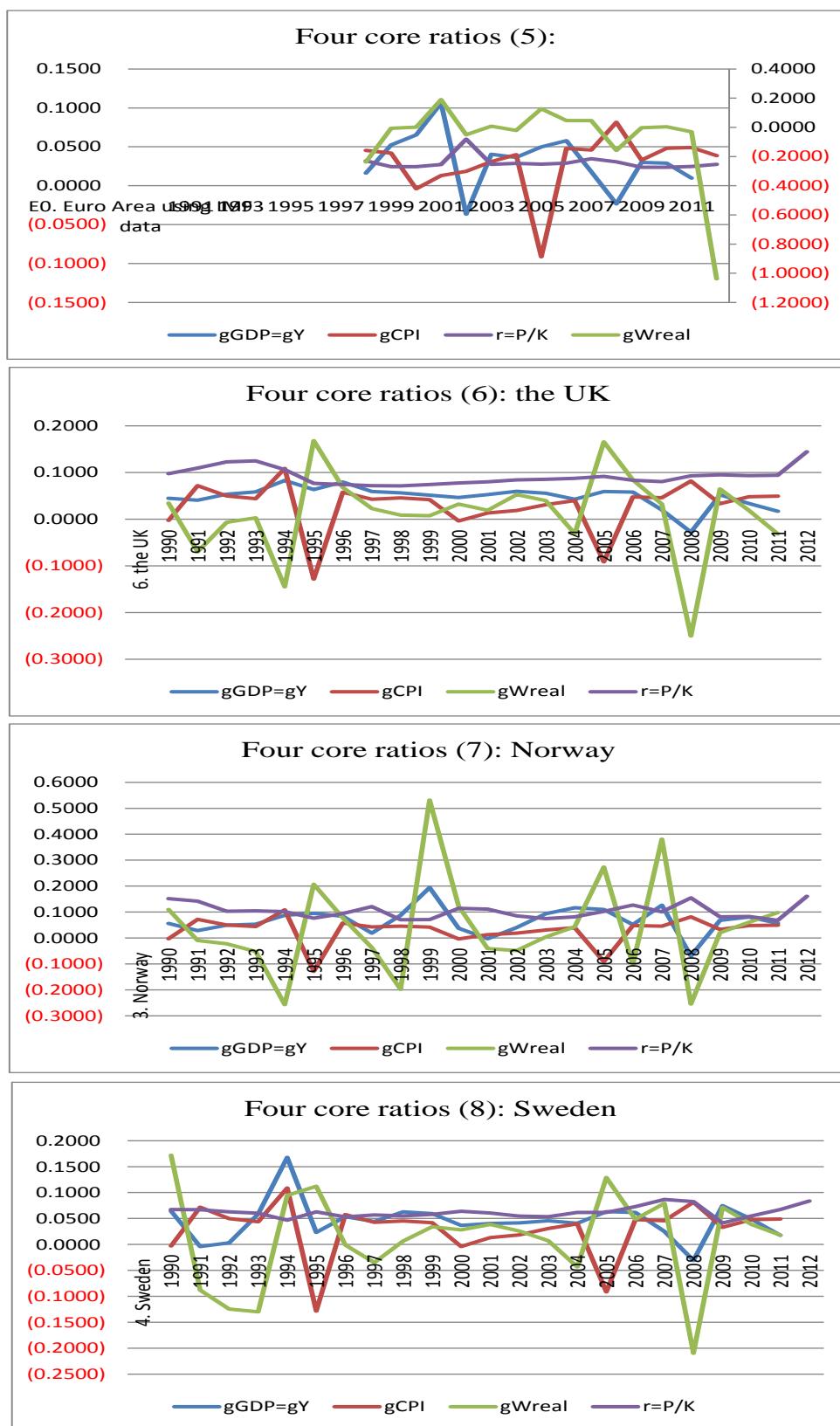
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**Fig. 49** Comparison of four core ratios: the US, Japan, China, and Singapore

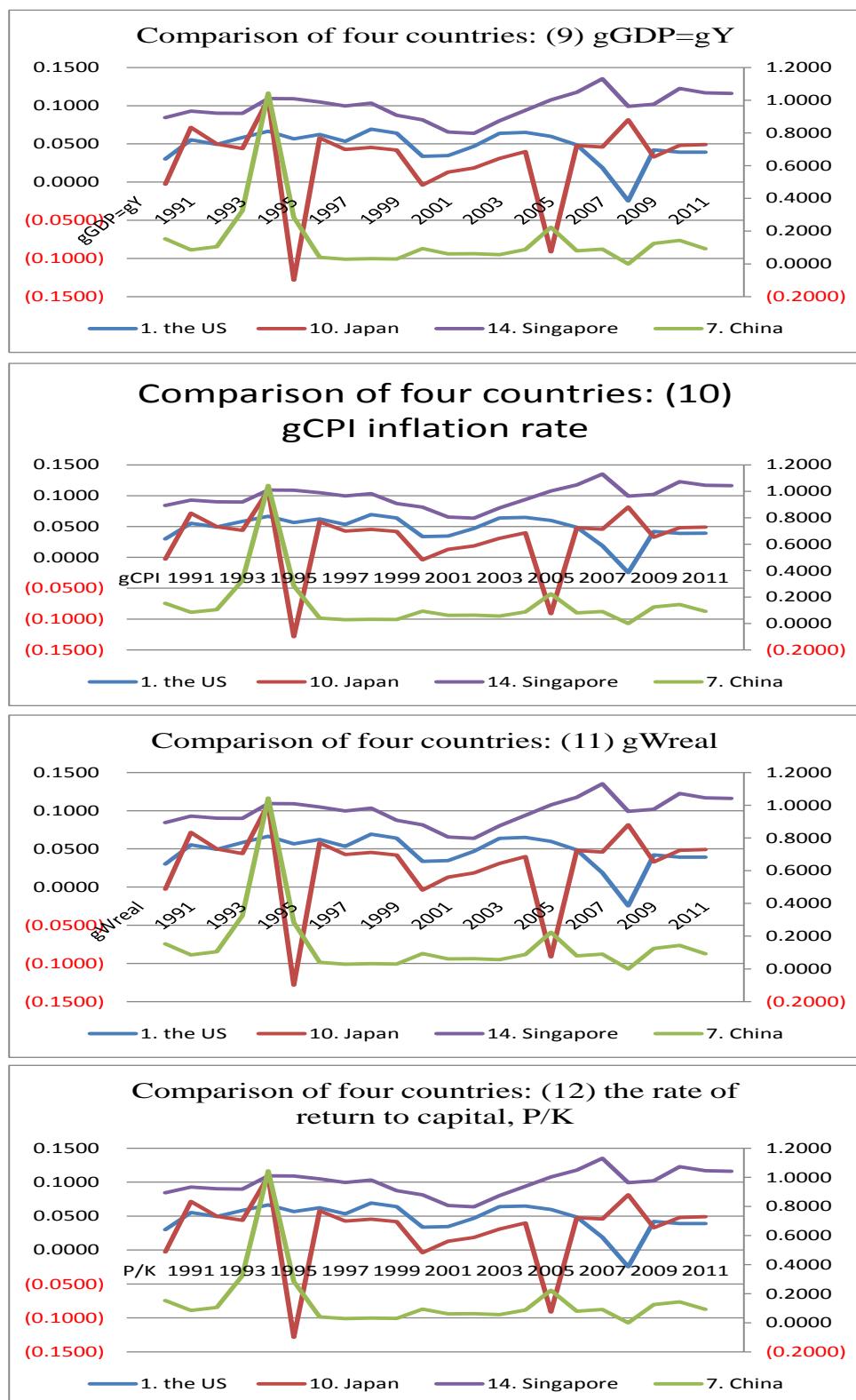
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**Fig. 50** Comparison of four core ratios: Euro Area, the UK, Norway, and Sweden

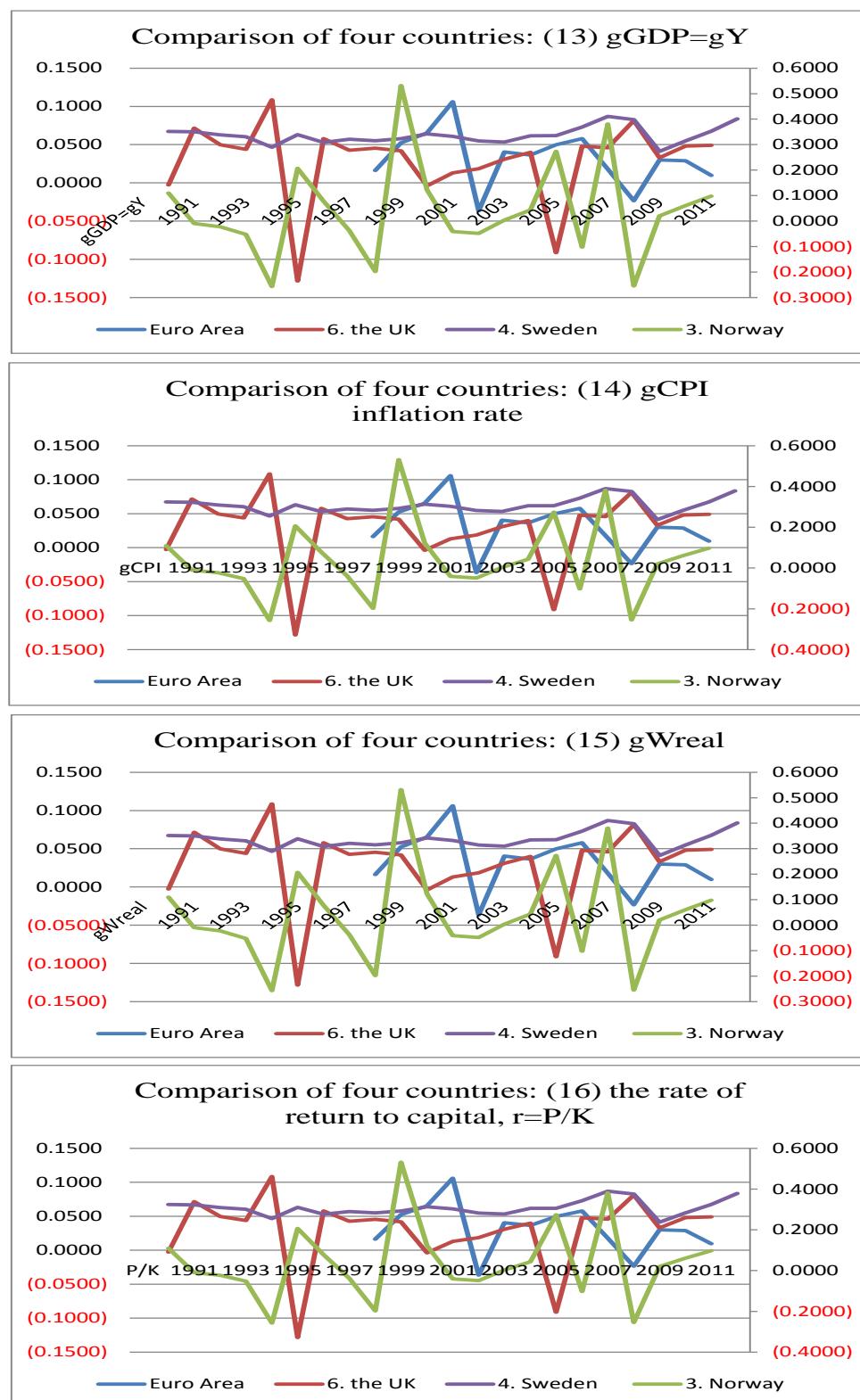
## 63 GDP-based Figures: G20 & G7 as a whole system

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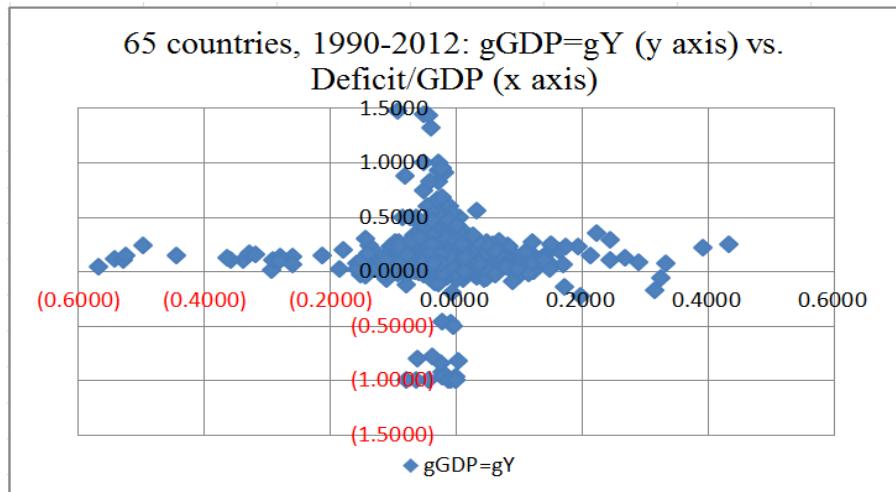
**Fig. 51** Comparison of the same four countries by core ratio:  $gGDP=gY$ ,  $gCPI$ ,  $gWreal$ , and rate of return to capital (1)

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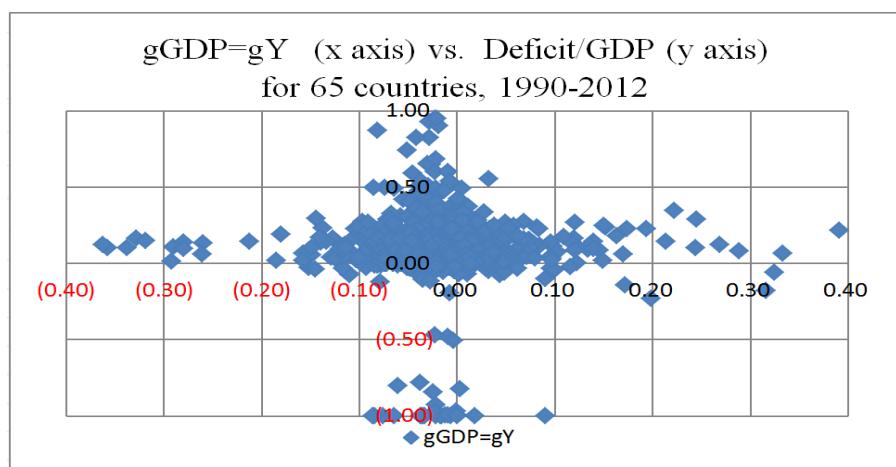


**Fig. 52** Comparison of the same four countries by core ratio:  $gGDP=gY$ ,  $gCPI$ ,  $gWreal$ , and rate of return to capital (2)

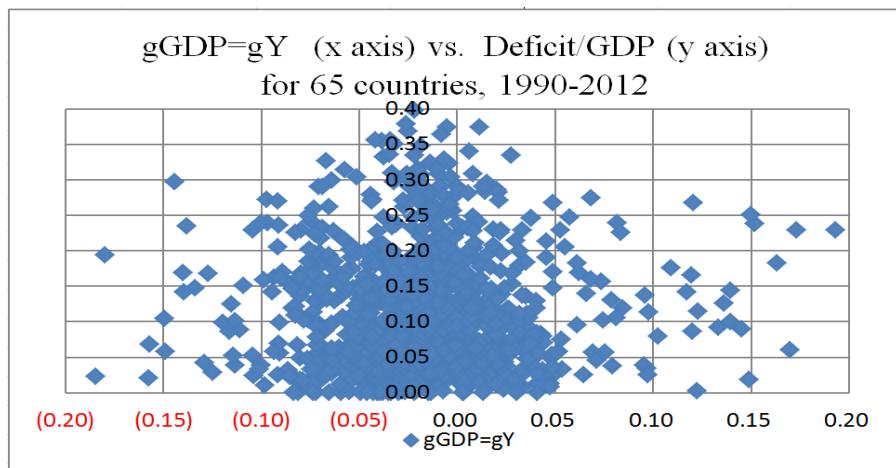
## **63 GDP-based Figures: G20 & G7 as a whole system**



**Fig. 53-1** Cross section analysis for 65 countries, 1990-2012, measure-broadly



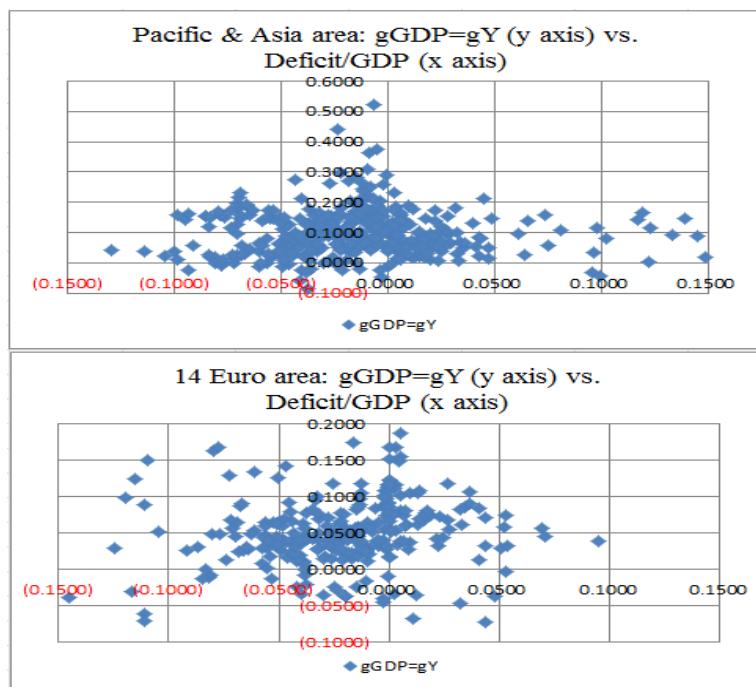
**Fig. 53-2** Cross section analysis for 65 countries, 1990-2012, measure-moderately



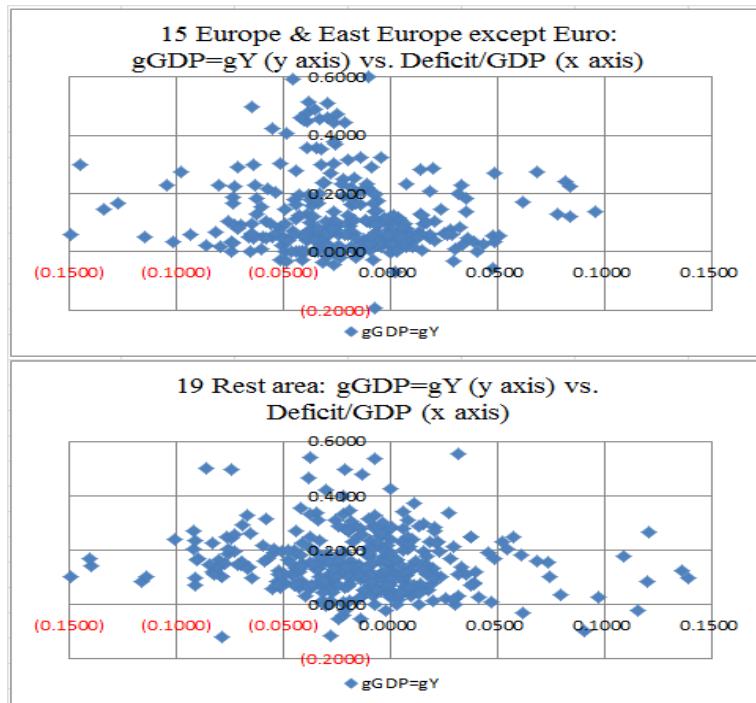
**Fig. 53-3** Cross section analysis for 65 countries, 1990-2012, measure-narrowly

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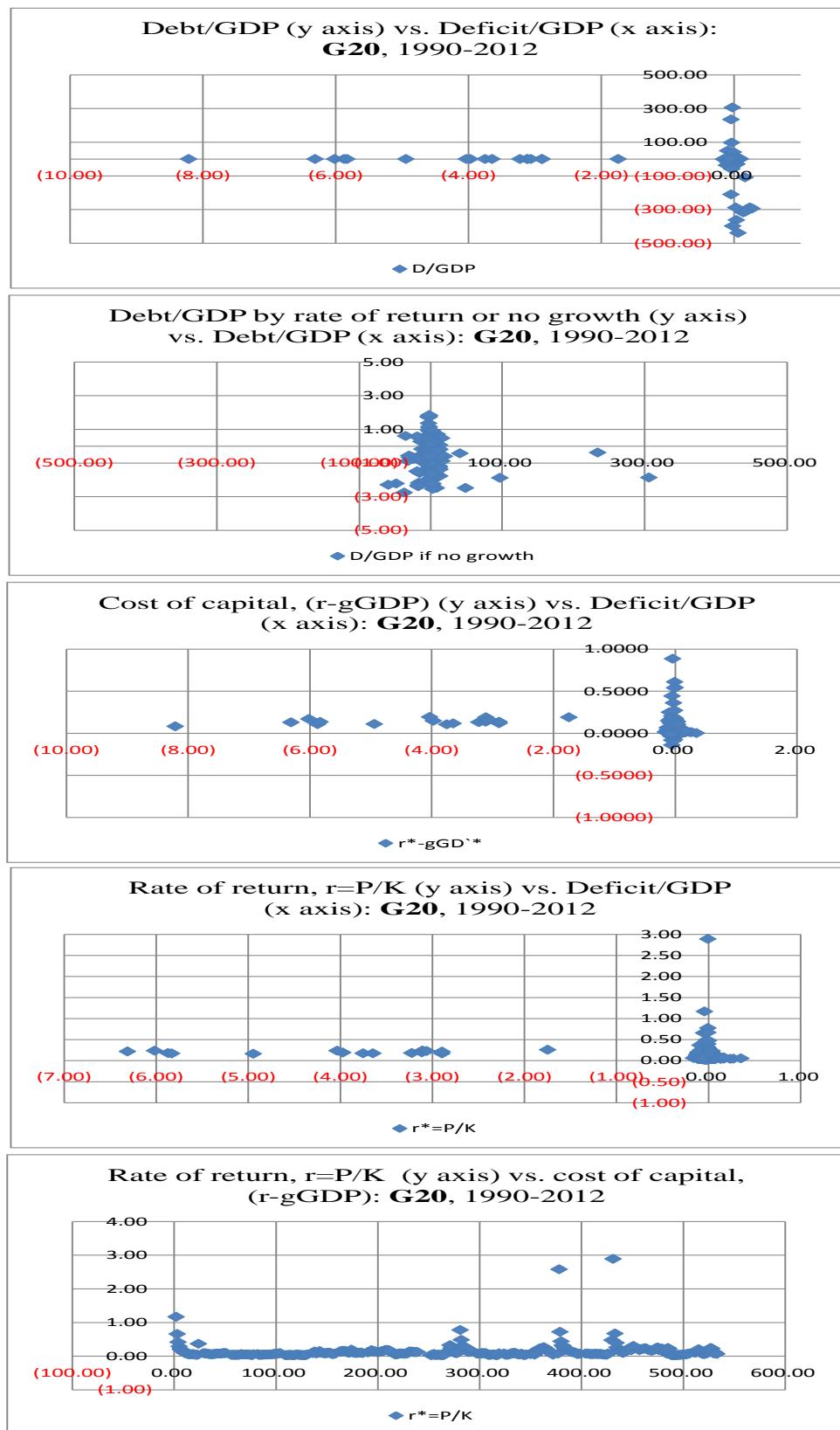
**Fig. 54-1** Cross section analysis for 17 Pacific & Asia area and 14 Euro area, 1990-2012, measure-moderately



**Fig. 54-2** Cross section analysis for 15 Europe & East Europe area and 19 Rest area, 1990-2012, measure-moderately

## 63 GDP-based Figures: G20 & G7 as a whole system

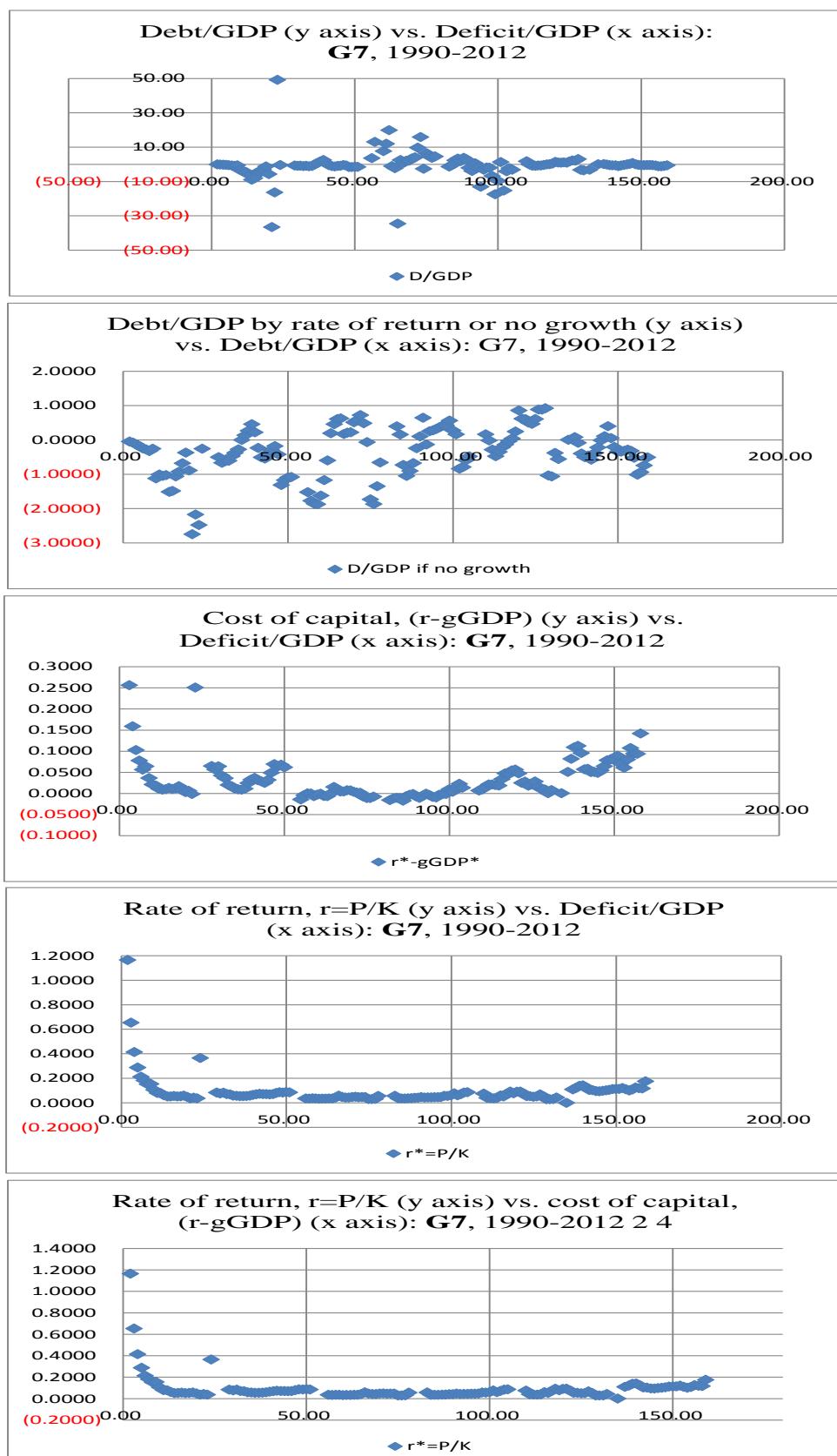
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**Fig. 55** Cross section Debt & Deficit: for G20, 1990-2012, measure-broadly

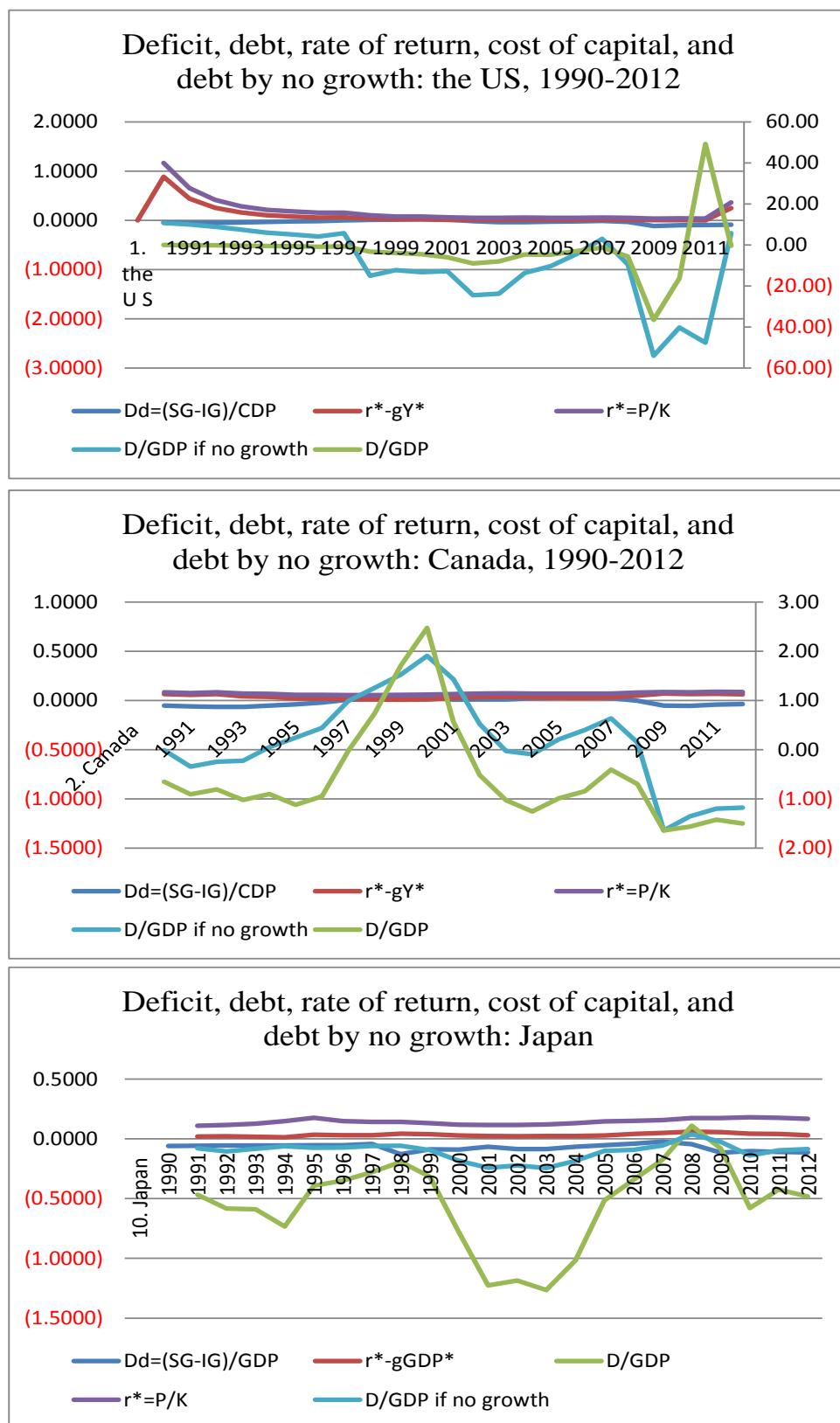
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**Fig. 56** Cross section Debt & Deficit: for G7, 1990-2012, measure-broadly

## 63 GDP-based Figures: G20 & G7 as a whole system



**Fig. 57-1** Time Series Debt & Deficit: for G7, 1990-2012, measure-broadly

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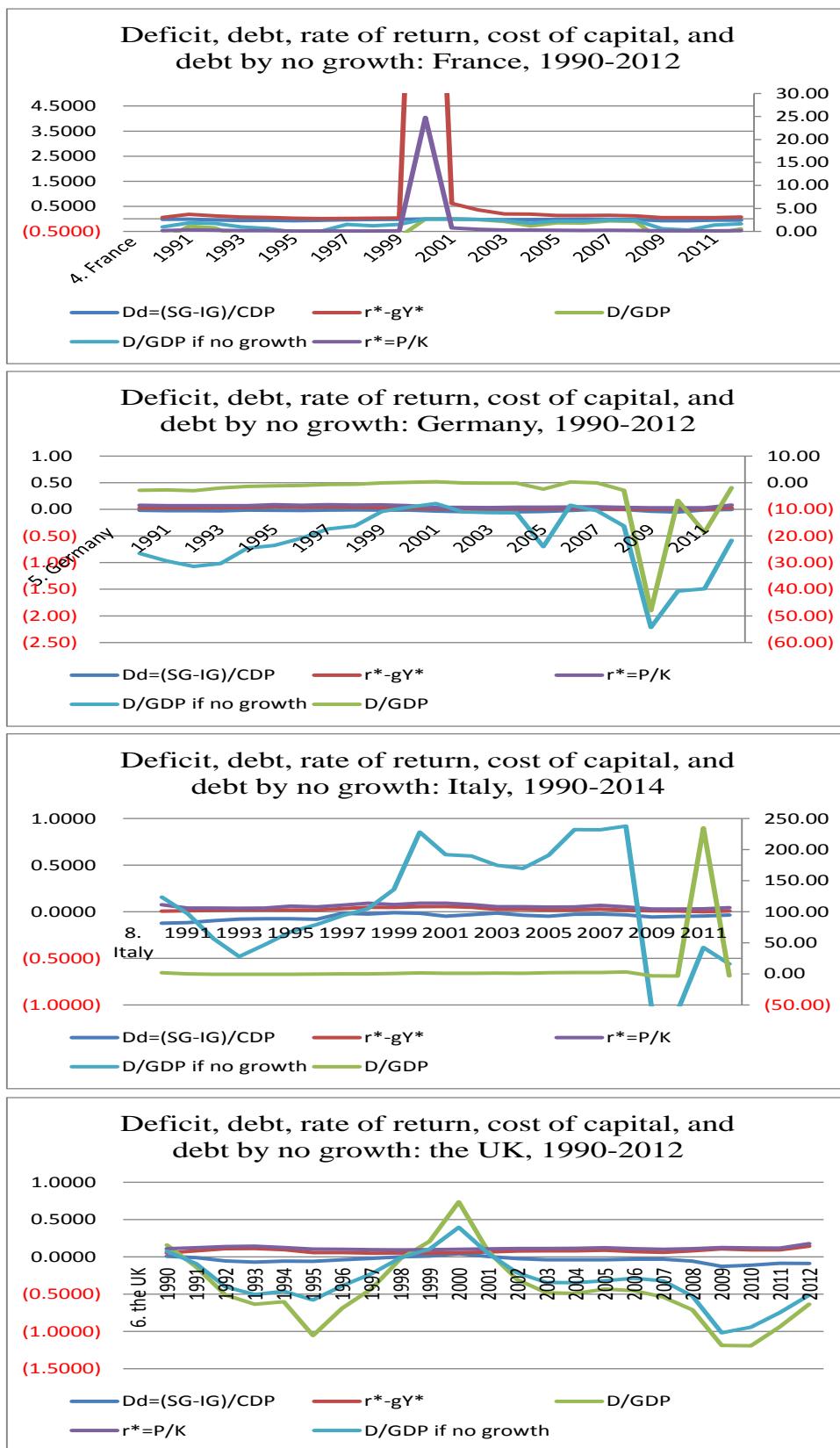
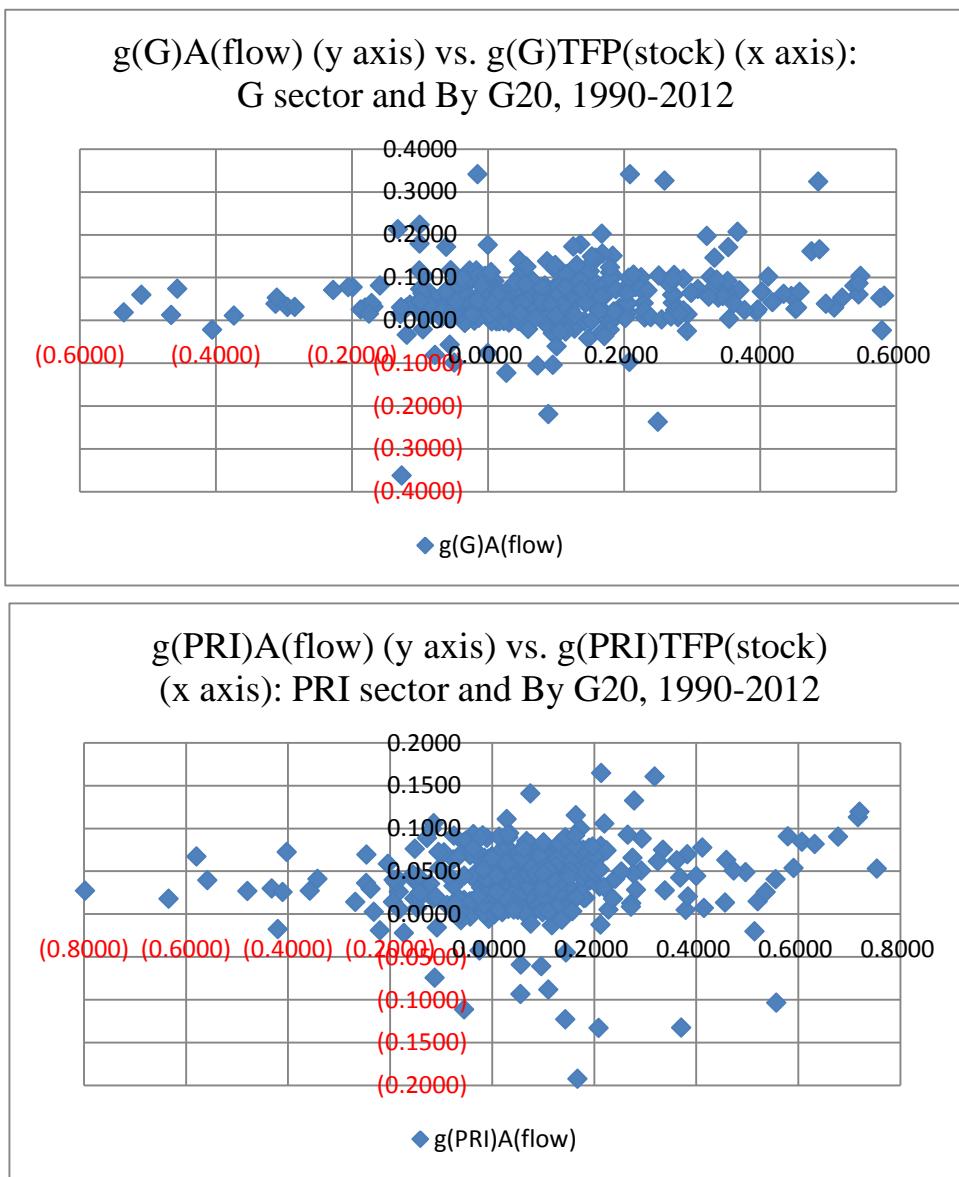


Fig. 57-2 Time Series Debt & Deficit: for G7, 1990-2012, measure-broadly

## 63 GDP-based Figures: G20 & G7 as a whole system

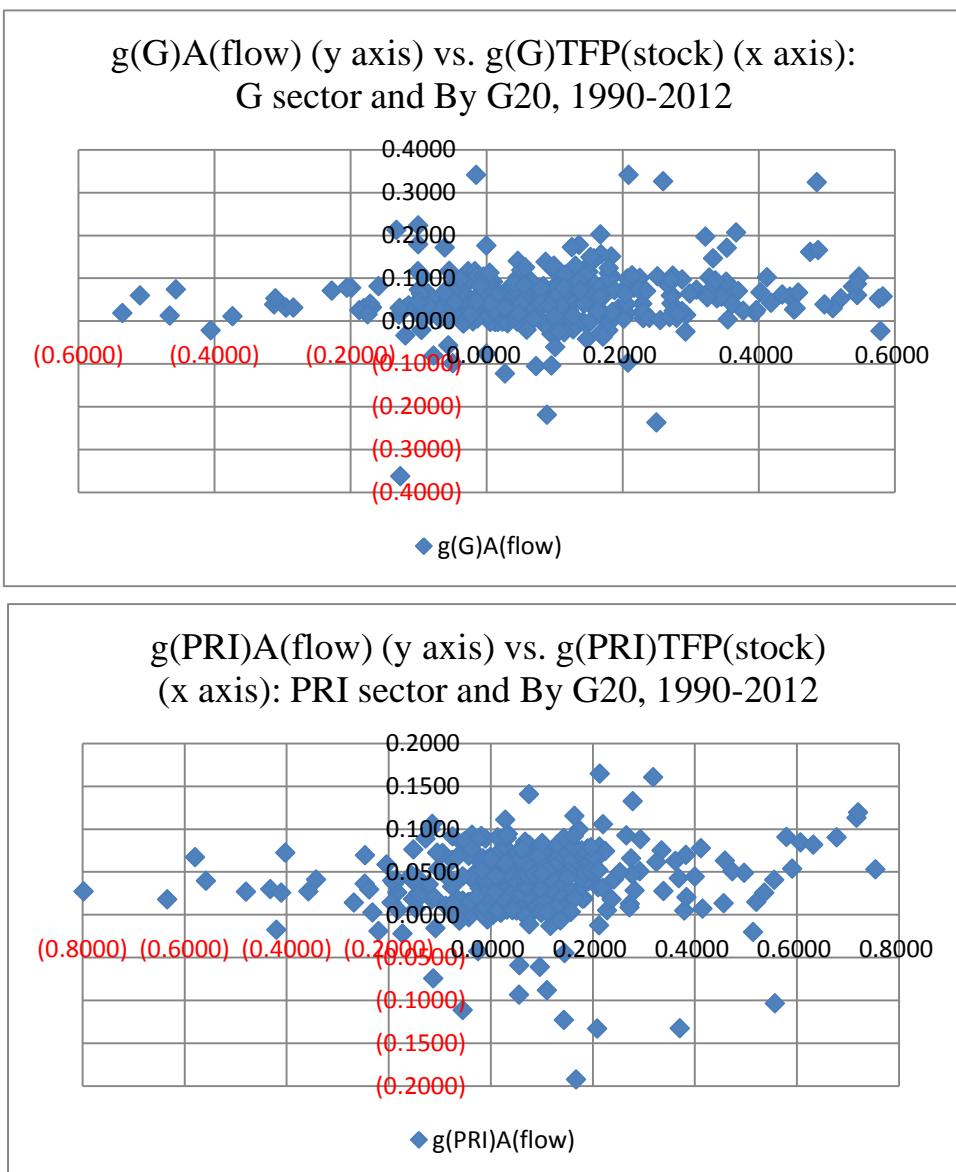
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**Fig. 58** Cross section, G20: rate of technology (flow) vs. growth rate of TFP (stock), By the G sector, 1990-2012

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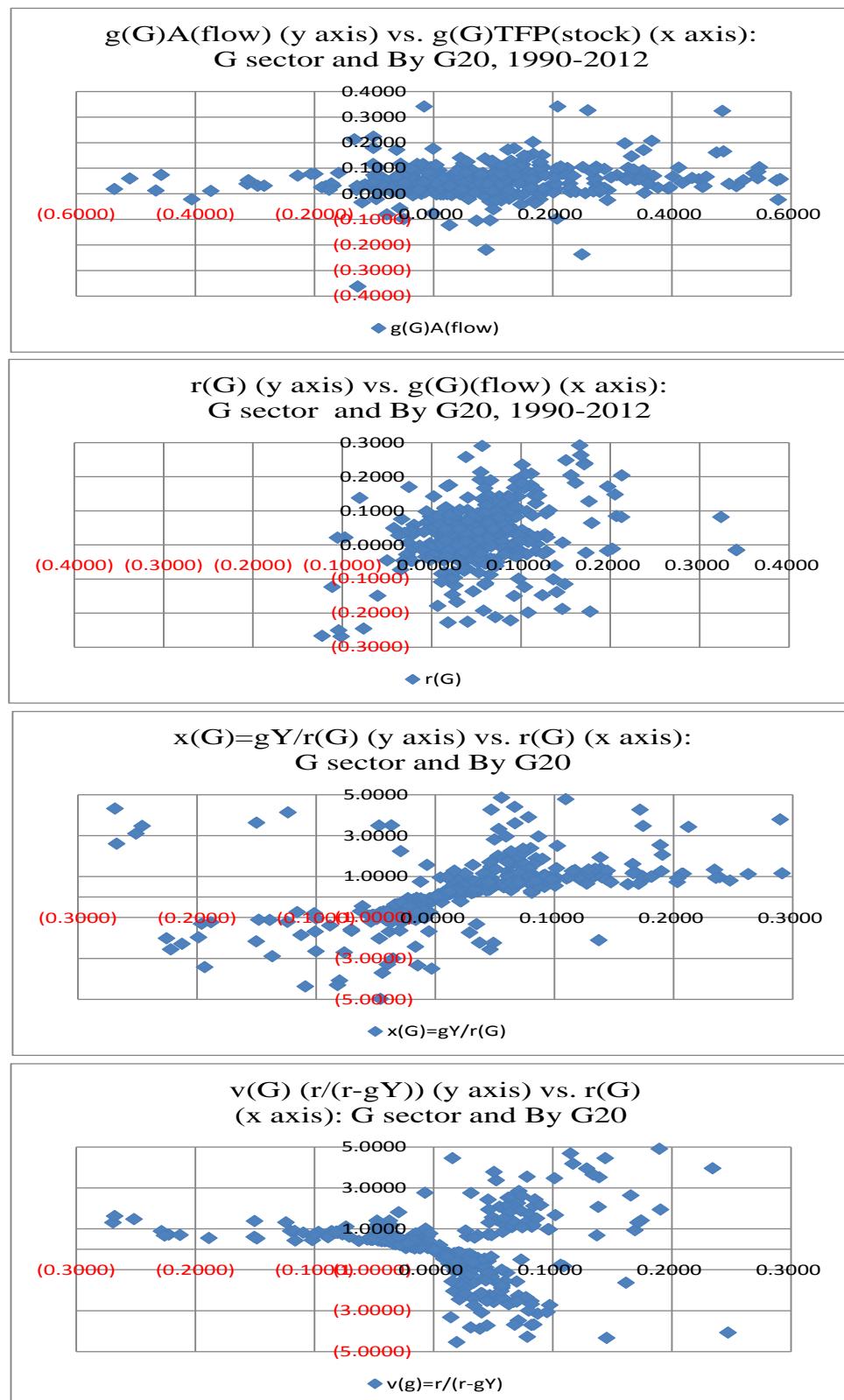
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**Fig. 59** Cross section, G7: rate of technology (flow) vs. growth rate of TFP (stock), By the PRI sector, 1990-2012

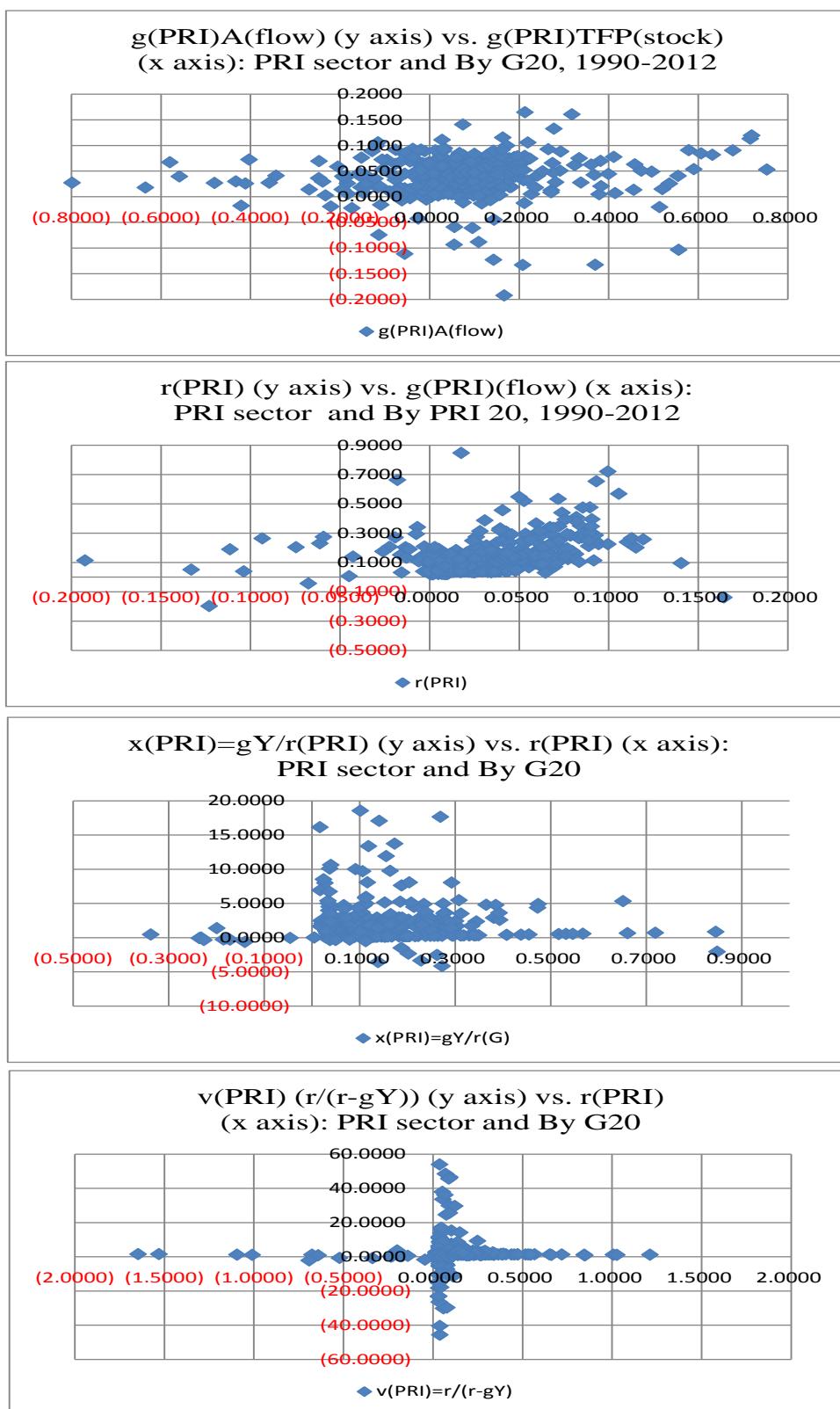
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. 60** Cross section, G20: Essential connections and combinations among four items, By the G sector, 1990-2012

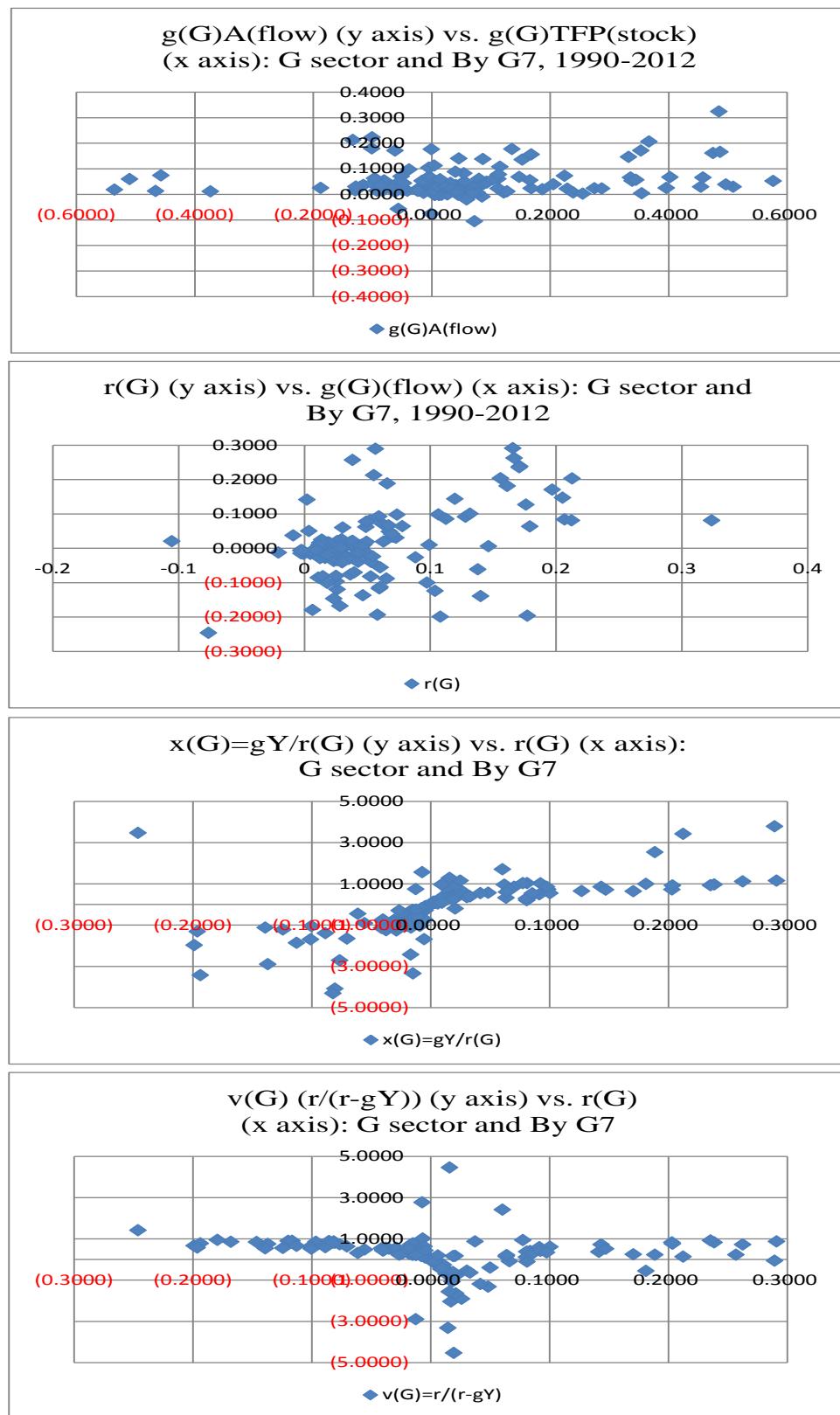
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**Fig. 61** Cross section, G20: Essential connections and combinations among four items, By the PRI sector, 1990-2012

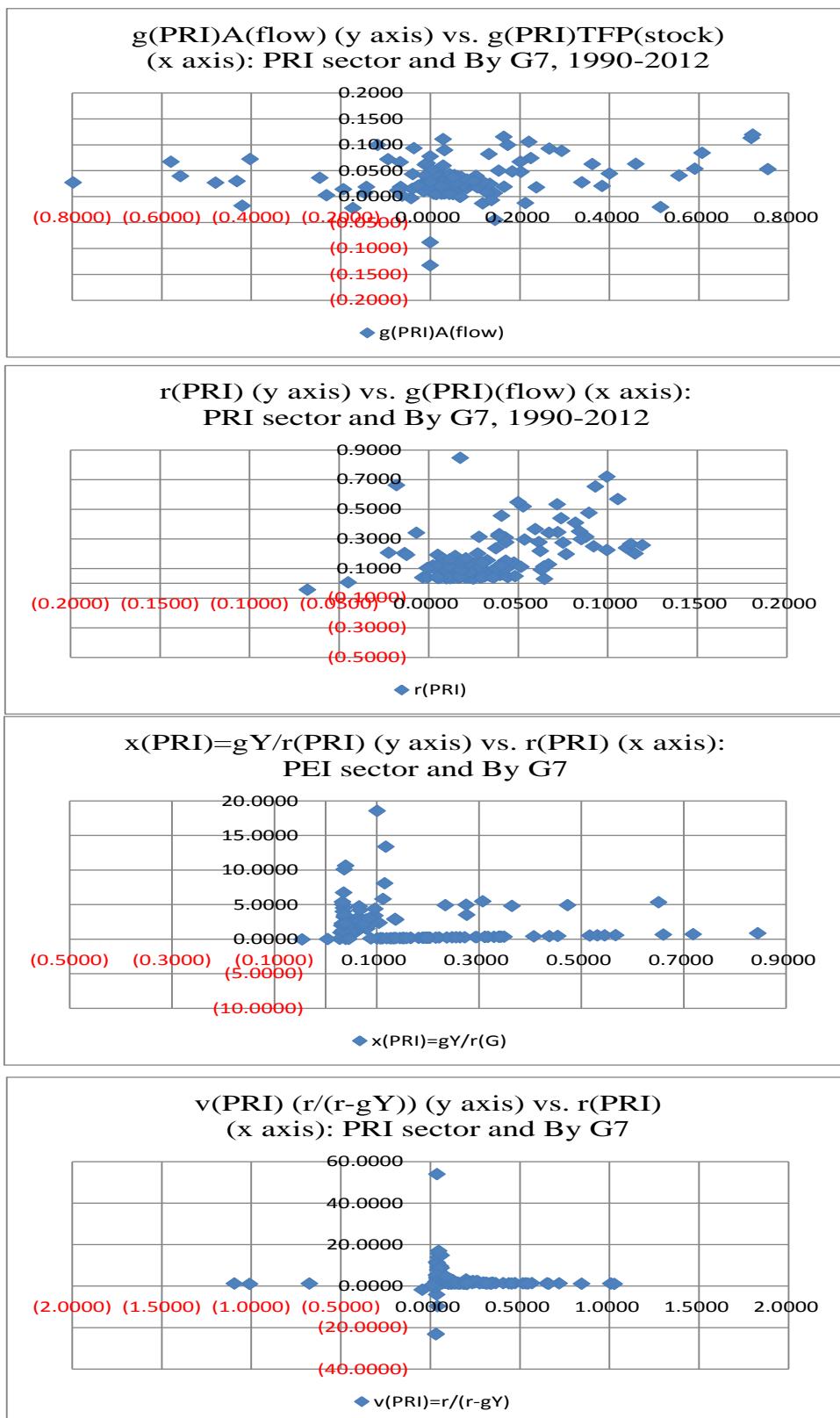
## 63 GDP-based Figures: G20 & G7 as a whole system

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**Fig. 62** Cross section, G7: Essential connections and combinations among four items, By the G sector, 1990-2012

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**Fig. 63** Cross section, G7: Essential connections and combinations among four items, By the PRI sector, 1990-2012