Date: 01 /27/97

To: Prof. Goldman

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Subject: Problem Set # 1

1.-The National Account identity can be written:

Y = Cp + Cg + I + E - M

In the space below each symbol fill in the quantities for 1993 (in billion of Bahl) and verify the result . Use the figures for Gross Domestic Product.

Answer: Since there is no indication on the type of the required GDP I assume the main two hypothesis one can verify :

a) Y= Nominal GDP at market prices.

3,161.4= 1,700.2 + 325.5 +1,265.0+1,169.8 - 1,299.1

b) Y=Real GDP (GDP at constant price-base 1987) at market prices.

2,312.5= 1,288.1 + 206.9 + 929.2 +943.8 - 1,055.5

2.-Show in figures how to go from GDP to gross national product for Thailand in 1993 . What is the difference ?

Answer: Since GNP is the output produced by nationals within the national territory and abroad, it is a much broader concept than GDP, which happens to measure the output produced within the corresponding country territory by residents and also payments received by them for factor services (labor and capital). The difference (positive or negative) between both is called Net Factor Income from abroad, which is the measure of the output produced by people from abroad within a country in contrast with the one produced by nationals who happen to be abroad. In the case we are working on, the net factor is negative .

So,

GNP= GDP + NFI

3,102.7= 3,161.4 + (-)58.7. ---------nominal terms

3.-Calculate GDP at factor cost from GDP at market prices:

Answer: When the GDP is calculated one can assume two different perspectives in making it: the demand side, which leads to the concept of GDP at market prices or,the productivity side, that aims to a productivity and return-on-factor measure . So, GDP at factor cost is the result of the sum of every single factor minus the indirect taxes that are attached to the business activity itself. Then,

GDP at market price = GDP at factor cost + Indirect taxes

And GDP at factor cost= GDP at market price - Indirect taxes

GDP at factor cost = 3,161.4 - 379.8 = 2,781.6

4.-Assuming that private households and firms pay taxes of 220 Billion Bahl, calculate: Private savings, Government savings., Total savings as a share of GDP.

Answer:

X-M=(Sp-Ip)+(Sg-Ig)~ X-M=(Sp-Ip)+(**Tg-Cg**-Ig)

1,169.8-1,299.1=(Sp-Ip)+(**220 - 325.5** - Ig).

-129.3 = (Sp-Ip) + (**220 - 325.5** - Ig)

***Finding Sg:**

Sg = Tg - Cg>>> 220 - 325.5>>>>> **Sg = - 105.5**

* **Finding Sp:**

Gross Domestic Savings= Sp+(T-Cg)

1,135.7 = Sp + (220 - 325.5) >>>> 1,135.7= Sp + (-) 105.5

1,135.7 = Sp - 105.5 >>>>>>>> Sp = 1,135.7 + 105.5

Sp = 1,241.2

***Finding Ip:**

Sp = Cp-Ip>>>> Ip= Cp-Sp

Ip= 1,700.2-1,241.2>>>>> **Ip= 459**

*__Finding Ig:__

Gross Domestic Investment = Ip + Ig

Ig= Gross Domestic Investment - Ip

Ig= 1,265 - 459>>>>>>>>>> **Ig= 806**

Filling in:

- 129.3 = (1,241.2 - 459) + (220 - 325.5 - 806)

- 129.3 = 782.2 + (-) 911.5>>>>>>>> **- 129.3 = - 129.3** **>>>>>>>>Then,**

Sp = 1,241.2 **Sg = - 105.5**

Total Savings as Share of GDP = 1,135.7 that represents 36,62% of the GDP (Nominal)

5.- Assuming GDP in 1985 is equal to 100, calculate real GDP in 1993 (GDP in 1985 prices)

Answer: GDP Deflator 1985=94.05 = 100 % . Then, a new correlation is to be made between this new 100 % and the corresponding figure (136.71 is the GDP deflator in 1993) . So,

136.71---------------94.05

3,161.4---------------- x = (3,161.4 * 94.05)/136.71 = 2,174.89

6.-Show the national accounts in a simple social accounting matrix.(data from #4)

	Prod.	Househ.	Govt.	Capital	RoW	Total
Producers		1,700.2	325.5	1,265	1,169.8	4,460.5
Households						
Government						
Capital			-105.5			
Rest of World	1,299.1					
Total(Name of aggrgt)						
	Enterprise Accounts	Household Budget	Govenmt. Budget	Savings Identity	Balance of Payments	