

【經濟學二】 作業一

繳交日期：2010年3月17日

1. 下表為 Macronia 在 2009 年依最終使用者所編製的 GDP 中各主要項目金額 (單位：10 億元)。

項目	金額
民間消費	
耐久財	1,082.8
非耐久財	2,833.0
服務	5,794.4
民間投資	
固定資本投資額	2,134.0
非住宅	1,503.8
住宅	630.2
民間存貨變動	-3.6
淨出口	
出口	1,662.4
進口	2,370.2
政府消費及投資支出	
中央政府	9,179.3
地方政府	1,695.5

- 請算出民間消費金額。
- 請算出民間投資支出。
- 請算出政府購買支出。
- 請算出 GDP。
- 請算出民間消費占 GDP 比率。
- 請算出出口占貿易總金額比率。

2. **Francesta** 經濟體僅生產三種商品：個人電腦、DVD 以及麵包。下表顯示這三種商品在 20X1，20X2 以及 20X3 所生產的數量(Q)以及交易價格(P，單位：元)。

	電腦		DVD		麵包	
	P	Q	P	Q	P	Q
20X1	9,000	10	100	100	15	2
20X2	10,000	11	120	105	16	2
20X3	10,500	12	140	110	20	3

- 請算出 20X1，20X2 以及 20X3 這三年 **Francesta** 的名目 GDP。
- 若將 20X2 年定為基年 (base year)，請以基年價格算出 20X1，20X2 以及 20X3 這三年 **Francesta** 的實質 GDP。
- 請算出 20X1，20X2 以及 20X3 的 GDP 價格平減指數(GDP deflator)與 20X2 及 20X3 物價膨脹率 (inflation rate)。

3.

- 請寫下如何由國內生產毛額(GDP)調整得出國民生產毛額(GNP)。

閱讀 “**Measure for measure**” 後，回答以下問題：

- 為何在愛爾蘭以 GNP 衡量整體國民經濟活動較 GDP 為適合。
- 為何愛爾蘭模式是否成功可用 GDP 與 GNP 差距是否縮小做為衡量指標。
- 出口有無可能超過 GDP？

4. 【第四版】課本 23 章第 12 題

5. 【第四版】課本 24 章第 10 題

6. 【第四版】課本 25 章第 6 題

7. 【第四版】課本 25 章第 10 題

Measure for measure

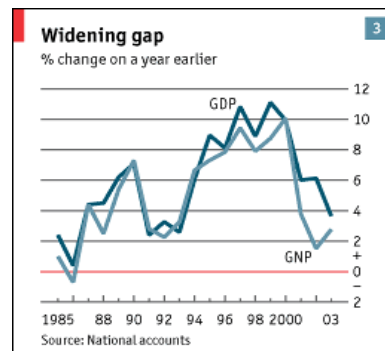
Oct 14th 2004

From The Economist print edition

The tangled tale of GDP and GNP

ANY first-year economics student knows that national-income figures can be collected in three

different ways, using income, output or expenditure numbers. Although the three are supposed to produce the same result, they rarely do. But the differences are tiny compared with a more obscure oddity that affects the Irish economy: the huge gap between gross domestic product (GDP) and gross national product (GNP).



GDP is the more common measure of national income, to which GNP adds an item known as net transfers of factor incomes. This means adding the overseas profits of Irish companies that are repatriated to Ireland, and subtracting the profits of foreign multinationals operating in Ireland that are sent abroad. In most countries the two numbers will be small, and may also broadly balance out. But because of Ireland's large FDI base, coupled with its enticingly low corporate taxes, lots of big foreign companies make (or at least report) big profits in Ireland which they transfer back to their head offices. As a result, Ireland's GNP is as much as 25% smaller than its GDP.

What this means in practice is that GDP figures overstate the national income available to Irish people to spend. Ireland's diplomats in Brussels wised up to this long ago. When they want to crow about the brilliant economic policies that created the Celtic Tiger, they use the GDP figures, noting proudly that Irish GDP per person is now the third-highest in the EU, well above Britain's. However, when the talk turns to EU regional subsidies, the diplomats switch to the "more appropriate" GNP measure, which puts Ireland close to the EU average, and mutter about the country's huge infrastructure backlog.

As the Irish economy develops, GDP and GNP might be expected to converge, but instead the gap seems to have widened recently (see chart 3). That is largely because American multinationals have been racking up (or at least recording) such big profits in Ireland. In some ways, this is a mark of the country's economic immaturity, and its failure to nurture indigenous industry. Chris Coughlan, a vice-president of HP Compaq and chairman of the Galway Chamber of Commerce, suggests that Ireland's future success could be measured in part by whether GDP and GNP converge, which would indicate that homegrown industry has matured. That might, sadly, put an end to another splendid quirk with which to confuse those first-year students: that Ireland's total exports exceed the country's national income.