

**DIVISION OF INTERNATIONAL FINANCE
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM**

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To: [REDACTED]

From: Guy Stevens

Subject: Hypotheses and Empirical Support for Reasons Why Rates of Return on DI Abroad are Greater than DI in US, and Why These Latter Are Less than Rates for U.S. Domestically-Owned Firms

I. Income Shifting to Low Tax Jurisdictions by Transfer Pricing and Other Means

Considerable evidence in 1993 article by Harris et.al. in NBER volume *Studies in International Taxation*. Regression results of ratio of US taxes divided by assets or sales for a U.S. multinational is very significantly affected by the presence of foreign subsidiaries in low tax jurisdictions. (Lowers U.S. profits and taxes and increases profits in subs abroad).

Grubert now finds this of minimal importance for explaining the low rate of return on FDI in the US, since he is able to explain almost all the differences between foreign owned and U.S. owned subs in the US by other factors.

II. Start-up Costs

Very significant effects shown by Grubert et. al., for both greenfield investments and takeovers. Start up costs for all: learning by doing, operating in new environment, diseconomies of scale. DI abroad is, on the average, older than FDI in US.

This still holds, re FDIUS -- although most of these costs may be of the amortization of good will etc. However, Grubert still shows a significant coefficient associated with a young subsidiary (less than 5 years). But this applies to domestically-owned ones as well.

III. Tax deductions Associated with Takeovers

Even if good will is not allowed as part of denominator, profits can be reduced by higher depreciation allowed on more highly valued assets (step-up basis – which apparently is somewhat harder to do now than in the 1980s.) Grubert shows that profitability increases over time even for takeovers as firm matures (could be II or III).

The depreciation of intangibles turns out to be quite important, as well as higher interest expenses for FDIUS – their debt/equity ratios tend to be higher than domestically-owned firms.

IV. Industry Composition of FDI in US

I looked up the returns on real estate investment in US and it is true that the returns were negative for many years in the 1990s – much longer than for the other parts of FDI in the US. However,

none of the empirical investigators make much of this point and the value of real estate investment isn't very large: about 5 ½ percent of total in 1994.

Industry is still important. But the industry effect applies to domestically-owned firms as well.

We don't have the nice matched samples for DI abroad and firms in the US – although they probably could be constructed. In any case, all the above reasons help explain why DI in the US has a lower rate of return than DI abroad. FDIUS is much younger, on the average, and particularly has high debt/equity ratios, as well as a high ratio of intangible assets to total assets or equity.