

Discussion of

Returns on FDI: Does the U.S. Really Do Better?

By Barry Bosworth, Susan Collins and Gabriel Chodorow-Reich

Cédric Tille

*Federal Reserve Bank of New York*¹

Introduction

The U.S external account show a striking disconnect between the stock of external liabilities and the stream of associated dividends and interest payments. At the end of 2005 net U.S liabilities to foreign investors amounted to 20.4 percent of GDP, while the U.S. earned a net capital income *surplus* equal to 0.3 percent to GDP in 2006.² This discrepancy primarily reflects a yield gap in FDI holdings, with U.S. investors earning a better return on their FDI holdings abroad than foreign investors earn in the U.S.

The paper by Bosworth et al. reviews possible explanation for the yield gap, and focuses on the role of different corporate tax rates between the U.S. and the rest of the world. If the tax rate is relatively high in the U.S., multinational firms can shift their profits to their foreign affiliates through the pricing of intra-firms transactions and the allocation of expenses such as research and developments. The authors find that differential taxation can account for a sizable share of the yield gap.

My comments are structured as follows. First, I show that the yield gap is also observed for overall returns. I then discuss another potential explanation, and present additional evidence on the relevance of taxation issues. The final section discusses the implications for the sustainability of the current account.

Yield and total returns

The evidence presented by the authors focuses on the yields on FDI, that is the streams of earnings (retained and distributed) divided by the corresponding stocks. Such flows are not the only source of return however, and capital gains also play a sizable role.³ Including the valuation gains nonetheless does not change the pattern of a large gap between FDI assets and liabilities, with a limited gap in other categories (table 1). Over the last twenty years the yield on FDI assets exceeded that on FDI liabilities by between 5.7 and 7.1 percentage points, depending on the exact measure, with essentially no such gap outside FDI. The pattern is the same for overall returns, with FDI assets earnings

¹ The views presented are those of the author and do not represent the views of the Federal Reserve Bank of New York or the Federal Reserve System

² The net capital income is from the revised balance of payments data released on June 15, 2007, which show a substantially larger surplus than in the preliminary data.

³ See for instance Gourinchas and Rey (2007), Lane and Milesi-Ferretti (2006), Tille (2005).

between 7.4 and 8.7 percentage points more than FDI liabilities. While a gap is also observed outside FDI, its magnitude is much smaller.⁴

Table 1: Average gaps in yield and total returns
(1983-2006, percent)

	Yield gap	Return gap
FDI (current cost)	7.1	8.7
FDI (market value)	5.7	7.4
Non FDI	-0.5	2.0

Source: Bureau of Economic Analysis, and author's computations. Yields are computed as the stream of earnings and interest in a year divided by holdings at the end of the previous year. Total returns also include the valuation change (change in holdings net of financial flows). The gaps are the differences between the yield (return) on asset and that on liabilities.

Another potential explanation: the vintage of FDI liabilities

The paper provides an extensive review of factors, other than differential taxation, that could account for the yield gap. These factors include the possibility that foreign FDI holdings in the United States have only been recently established, while U.S. FDI assets have been established decades ago. This raises the possibility that U.S. affiliates of foreign multinationals are still getting established in their market, leading to a temporarily low profitability.

This vintage channel is especially noteworthy as the yield gap reflects a very low yield on foreign FDI holdings in the United States. Furthermore, the yield on FDI liabilities shows sizable fluctuations (figure 1). Over the last twenty years the yields were especially low in the early 1990's and the early 2000's. An obvious factor for this is the U.S. business cycle, as these periods were recessions. However, low yields also followed waves of foreign FDI in the U.S. (figure 2).⁵ FDI flows in the U.S. were especially large in the late 1980's and the late 1990's.

A simple regression analysis suggests that large FDI inflows are followed by low yields, even accounting for the business cycle (table 2). The yield on FDI liabilities in a given year is well explained by GDP growth in that year and FDI inflows in earlier years. The first regression shows the results with FDI inflows for the current and the last four years, while the second regression only considers the inflows three years before, which are the only ones with a statistically significant impact.

The second regression in table 2 shows that one percentage point of GDP growth boosts the yield by 39 basis points, while additional inflows of one percent of holdings lower the yield three years hence by 16 basis points. FDI inflows also play a substantial role in driving the fluctuations of yields, accounting for 56 percent of the variance of the fitted yield in the second regression, with GDP accounting for 26 percent.

⁴ The absence of a return gap outside FDI is consistent with Curcuro, Dvorak and Warnock (2007).

⁵ The FDI inflows are scaled by the stock of FDI liabilities at the end of the previous year, at market value.

Table 2: Impact of FDI inflows on subsequent yield

Dependent variable: Yield on FDI liabilities in time t (market value)				
	Coefficient	t-stat	Coefficient	t-stat
Constant	0.035	2.81	0.030	3.25
GDP growth in year t	0.231	0.73	0.390	2.02
FDI inflows in year s / FDI holdings at the end of year $s-1$				
Contemporaneous ($s=t$)	0.036	0.37		
One lag ($s=t-1$)	0.018	0.14		
Two lags ($s=t-2$)	-0.036	-0.28		
Three lags ($s=t-3$)	-0.142	-1.52	-0.164	-3.73
Four lags ($s=t-4$)	-0.039	-0.55		
Sample: 1983-2006				
Adjusted R squared:	0.51		0.60	

The above evidence is clearly limited as we only consider aggregate yields and flows with no breakdown by sectors. Nonetheless, it indicates that unusually large FDI inflows in the U.S. tend to be followed by unusually low yields.

The sensitivity of earnings to taxes

The authors focus on the impact of different tax rates on the yield on U.S. FDI assets. They document that the U.S. effective corporate tax rate exceeds that of other countries. U.S. multinational can take advantage of this differential and shift their profits to their foreign affiliates by setting the transfer prices for goods and service traded between the parent and the affiliates accordingly. A similar effect can be obtained through the allocation of intangible assets. For instance, research and development expenses can be allocated to the parent, while the resulting intangible capital is used in affiliates. If the royalties for the use of intangible capital are set below market rates, profits will be shifted from the parent to the affiliates. The authors present evidence of such transfers for the cases of Puerto Rico and Ireland. A regression analysis confirms that the yield on U.S. FDI assets abroad is affected by tax differentials.

Developments in FDI outflows through 2005 provide a clear illustration of the relevance of tax issues. In 2005 U.S. multinational companies benefited from a temporary tax break on earnings in foreign affiliates that were repatriated in the U.S. This led to a sharp swing in the allocation of FDI earnings between reinvested and distributed earnings (figure 3). Reinvested earnings usually account for the bulk of the total. Starting in the first quarter of 2005, reinvested earnings decreased, and sharply fell in the last two quarters of 2005, before surging back to more usual levels in the first quarter of 2006. The pattern was mirrored in distributed earnings, with little impact on the overall receipts.

Implications for external sustainability

The paper makes a strong case for a role in tax differentials in accounting for the yield gap in FDI. The magnitude, while sizable, is however limited relative to the overall gap. The authors point that the differential taxation can account for between 1 and 1.5

percentage point of the yield gap, which represents between a fifth and a third of the overall gap.⁶

The sizable yield gap observed between FDI assets and liabilities is then likely to be driven by several factors, of which tax considerations are a relevant one. Ultimately understanding the drivers of the yield is relevant to a sustainability analysis. If the yield is likely to persist, the U.S. can keep earning more on its external assets than it pays on its liabilities, allowing it to sustain a relatively large current account deficit. If on the other hand the yield is likely to narrow soon, the U.S. could be faced with a substantial deterioration on its capital income balance, requiring a prompt adjustment in the trade balance to prevent a widening of the current account deficit.

The sustainability of a yield differential stemming from different tax rates across countries ultimately reflects the persistence of these tax gaps. Should the U.S. bring its corporate tax rate in line with foreign ones, U.S. multinationals would lose their incentive to report profit abroad and the yield gap would narrow. It is important however to bear in mind that profits shifting would primarily alter the split of the current account between the trade and capital income balance, as opposed to the current account itself. Consider the case of a U.S. firm that charges royalties to its affiliates that are below market rates. If the firm decides to raise these royalties, its affiliate's profits would be reduced. However, the higher royalties would represent a service export that would boost the trade balance, largely offsetting the reduction in the capital income.

Other possible explanations for the yield gap have different implications. In particular, if the low yield on U.S. affiliates of foreign firms represents a vintage effect as these firms are still building up their profitability, the yield gap is likely to narrow in the future. Higher profitability of the affiliates in the U.S. domestic market would then translate into a deterioration of the capital income balance.

References

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⁶ The yield gap in FDI currently stands at 3.9 percentage point when using holdings at market value, and 5.4 percentage points when holdings are assessed at current cost.

