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Can Repatriation Taxes Explain the Recent Increase in Cash Holdings?

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Cash holdings by U.S. firms have increased significantly since the early 1990s. In particular, total cash holdings by publicly traded U.S. firms have increased from around $800 billion in 1990 to around $5 trillion in 2011. Identifying the underlying mechanisms that led to such a large increase in cash holdings has been the focus of recent economic discussion. The so-called repatriation tax is one of the leading explanations for this type of cash hoarding. This essay analyzes this argument.[1]

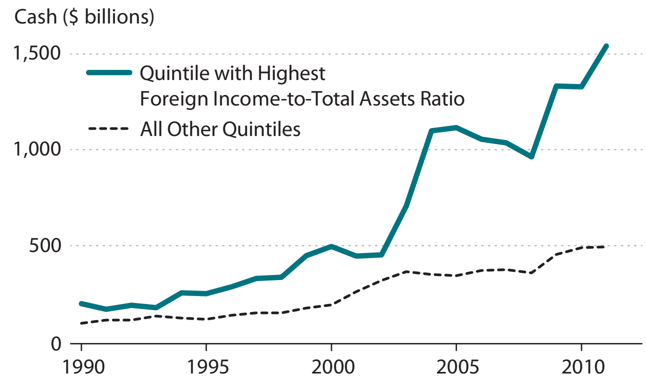
The repatriation tax is the tax U.S. firms must pay if they bring back the income generated abroad that was taxed by a foreign government at rates lower than U.S. tax rates. The key point is that this tax is exercised only when the earnings are repatriated, which provides incentives for firms to keep the earnings abroad. As a consequence, many have argued that this incentive explains why firms accumulate large cash holdings abroad, thereby creating the aforementioned increase in aggregate cash holdings.

The repatriation tax may be particularly relevant to cash holdings now because during the recent recession the income generated abroad by U.S. corporations increased sharply, in contrast to declines in such holdings in previous recessions. Specifically, the income generated abroad by U.S. firms increased 18 percent during the 2007-09 period compared with decreases of 34 percent and 16 percent, respectively, during the recessions of 1990-91 and 2001.[2]

Repatriation taxes are unlikely to explain the rise in cash holdings of U.S. firms.

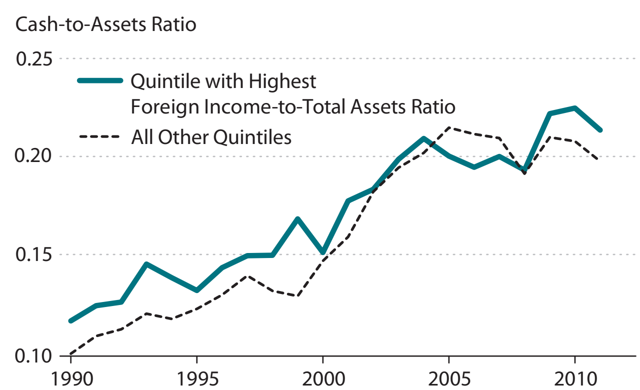
The validity of this argument is tested here by analyzing the behavior of publicly traded U.S. corporations, focusing on a comparison of the cash-holding behavior by firms that are more active abroad with the behavior of other

Average Cash Holdings by Quintile of Foreign Income-to-Total Assets Ratio



SOURCE: Compustat.

Average Cash Ratio by Foreign Income-to-Total Assets Ratio (by quintile)



SOURCE: Compustat.

firms. Firms are divided into five quintiles sorted according to a firm's share of pretax foreign income relative to its total assets (the foreign income-to-total assets ratio). Thus, the highest quintile consists of the 20 percent of U.S. firms with the highest pretax foreign income-to-total assets ratio. The accompanying charts show the behavior of firms in the highest quintile versus all other firms.

The first chart shows that the cash holdings of firms with the most sales abroad (the quintile with the highest foreign income-to-total assets ratio) have increased much more rapidly than the cash holdings of firms in the other four quintiles. In particular, cash holdings for the first quintile increased by $1.3 trillion from 1990 to 2011, while those for the remaining quintiles increased by $400 billion. These changes correspond to annual growth rates of 21 percent and 16 percent, respectively.

While this difference is substantial, other factors could be at work. For example, the relative sizes of these two groups are subject to change. So, if the firms that generate more income abroad are also growing faster than the rest of the firms, then all types of assets—including cash and equivalents—are bound to increase faster as well. In other words, the sharp difference in the two patterns in the first chart may simply indicate that sizes of the two groups of firms have changed.

The second chart shows the trends of the cash-to-asset ratio (cash ratio) during the same period for the two groups of firms. Surprisingly, their patterns are quite similar. From 1990 to 2011, the cash ratio for the quintile with the highest foreign income-to-assets ratio increased from 12 percent to 21 percent, while the cash ratio for all other quintiles increased from 10 percent to 20 percent. The similarity of these trends indicates that repatriation taxes are unlikely to explain the rise in cash holdings of U.S. firms.[3] ■

Notes

[1] See Rubin (2012).

[2] We use Compustat for the analysis here and exclude (i) financial and utility firms and (ii) firms with a negative value of total assets. Statistics on foreign income are measured by the pretax foreign income of U.S. firms. The changes corresponding to the three most recent recessions are derived as the log differences in foreign income from 1989 to 1992, 2000 to 2002, and 2006 to 2009, respectively.

[3] This trend is in line with a recent study by economists Pinkovitz, Stulz, and Williamson (2012), who conclude that firms' behavior is not altered by how countries tax foreign-generated income.

References

Pinkowitz, Lee; Stulz, René M. and Williamson, Rohan. "Multinationals and the High Cash Holdings Puzzle." NBER Working Paper No. 18120, National Bureau of Economic Research, June 2012; www.nber.org/papers/w18120.pdf?new_window=1.

Rubin, Richard. "Cash Hoard Grows by $187 Billion in Untaxed Overseas Profits." Bloomberg, March 2, 2012, www.bloomberg.com/news/2012-03-02/cash-horde-expands-by-187-billion-in-untaxed-offshore-accounts.html.

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