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Comment on bank liabilities channel

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The questions of how are disruptions in the credit-intermediation process transmitted to the real economy and what are the events that lead to a buildup of vulnerabilities in the financial system have been thrust to the forefront of academic research and policy discussions in the wake of the 2007–09 global financial crisis. Much of the recent literature on this topic follows the seminal work of Bernanke and Gertler (1989) and Kiyotaki and Moore (1997) and argues that financial market frictions have played a central role in propagating and amplifying a variety of shocks to the economy during this period. With its focus on borrowers who are subject to financing constraints—typically through either an exogenous debt limit or some function of endogenous borrower net worth or collateral value—this approach has been able to successfully explain many of the salient aspects of macroeconomic dynamics during the recent financial crisis.

Vincenzo's paper, in contrast, examines the role of financial factors in business cycles fluctuations in an environment where borrowers do not face such financing constraints per se. Instead of focusing on the role of the financial intermediary sector in channeling funds from savers to borrowers, the role emphasized by the traditional financial frictions literature, he analyzes the role that liabilities issued by financial institutions play as an insurance vehicle in other sectors of the economy. According to this so-called bank liabilities channel, when the stock or value of liabilities issued by the financial intermediary sector falls, the "insurance buffer" of risk-averse entrepreneurs—the primary holders of these liabilities—shrinks, and the entrepreneurs become less willing to engage in risky economic activities, which has an adverse effect on the macroeconomy. Thus the supply of financial sector liabilities, as opposed to assets (i.e., loans), plays a crucial role in economic fluctuations in his model.

The model features three sectors: risk-averse entrepreneurs exposed to undiversifiable idiosyncratic risk; risk-averse households who do not face any idiosyncratic risk; and financial intermediaries, owned by households, whose role is to channel funds between entrepreneurs and households and who because of distortions in credit markets have an incentive to lever up, creating a potential for future financial instability. To keep the things tractable and to derive a number of insightful analytic results, the model abstracts from any meaningful heterogeneity among entrepreneurs. As a result, entrepreneurs are the lenders, while the households are the borrowers in equilibrium. Of course, one should not take this stark implication of the model literally. What matters is that financial frictions affect the entrepreneurs' real decisions not because the entrepreneurs are financially constrained and thus are unable to finance their labor input, but rather because financial

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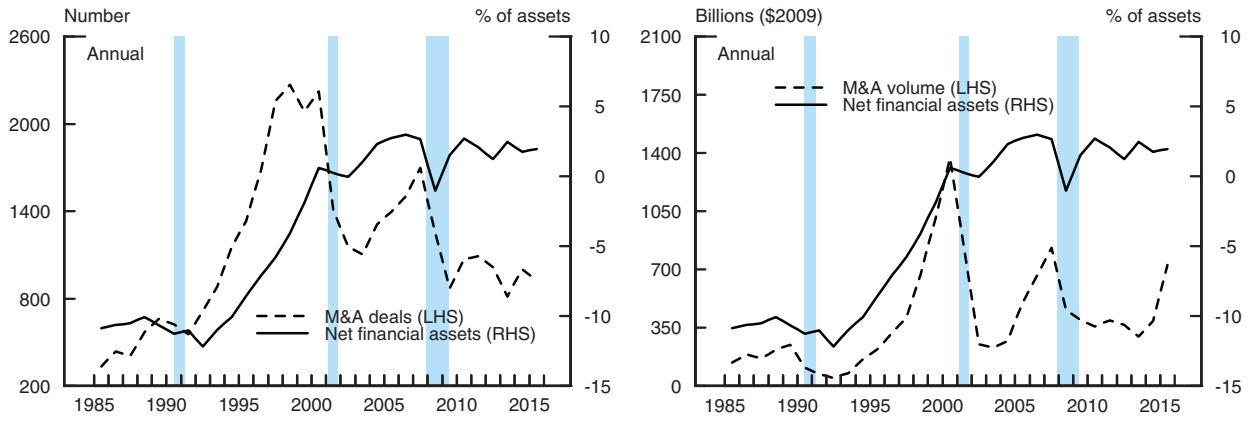

Fig. 1. Net financial assets and M&A activity (1985–2015).
Note. The solid line in each panel depicts net financial assets (as a percent of total assets) for the U.S. nonfinancial corporate sector. The dashed line in the left panel shows the number of M&A deals in the nonfinancial sector, while the dashed line in the right panel shows the corresponding dollar amount, deflated by the implicit nonfarm business sector GDP price deflator (2009 = 100). The vertical shaded bars represent the NBER-dated recessions.

frictions impinge on the ability of financial intermediaries to issue liabilities, which are purchased by the entrepreneurs for insurance purposes.

Implicit in this argument, however, is the notion that financial constraints have somehow become less important over time. As evidence that credit constraints faced by firms may have become less binding, Vincenzo points to a dramatic rise in the holdings of financial assets by U.S. nonfinancial corporations. According to the Financial Accounts of the United States, the source of his data, *net* financial assets in the U.S. nonfinancial corporate sector, after starting to increase rapidly in the early 1990s, remained for the most part in the positive territory over the past 15 years, suggesting that nonfinancial corporations are no longer a net borrower in aggregate. What is particularly striking about this fact is just how quickly the net financial position of the nonfinancial corporate sector swung from red to black: After trending down steadily since the early 1950s, liabilities exceeded financial assets to the tune of about 12 percent of the sector's total assets by the early 1990s. Then over the subsequent seven or eight years, net financial assets shot up, breaking into a positive territory in 2000 and peaking at almost 4 percent of total assets by the end of 2007.

Fig. 1 offers a potential explanation behind the striking rise in net financial assets during the second half of the 1990s. The left panel plots net financial assets for the U.S. nonfinancial corporate sector against the number of M&A deals in that sector, while the right panel plots net financial assets against the dollar volume of those deals. To understand why the surge in M&A activity during this period correlates so closely with the increase in net financial assets, it is instructive to examine how net financial assets in the Financial Accounts of the United States are calculated. First, financial assets, which are not directly reported, are inferred by subtracting the value of nonfinancial assets from total assets, where the former consist primarily of real estate, equipment, and inventories, items that firms report explicitly on their balance sheets.[2] Net financial assets are then calculated as financial assets less total liabilities, another item that is reported directly on the firms' balance sheets.

To see how M&A activity can affect this calculation, recall that when a firm acquires another company for a premium—that is, over the target company's book value—the acquiring firm books the excess of the purchase amount as goodwill. Because goodwill is classified as an intangible asset on the acquiring firm's balance sheet, M&A activity, a vast majority of which involves a significant premium, mechanically boosts the book value of total assets. As a result, a surge of M&A activity such as the one seen during the 1990s can cause a dramatic increase in net financial assets, which likely has nothing to do with a relaxation of credit constraints.

To provide an estimate of this accounting effect, I use the Standard & Poor's firm-level Compustat data to calculate net financial assets adjusted for goodwill, an item that firms started to report separately in 1988.[3] The panels of Fig. 2 report the results of this exercise for various (sales-weighted) cross-sectional moments of the distribution of U.S. nonfinancial corporations. The solid lines show net financial assets calculated the standard way, while the dotted lines show the corresponding net financial assets adjusted for goodwill.

Focusing first on the center of the distribution (the top two panels), it is clear that this adjustment makes a material difference: For both the average and median firm, net financial assets adjusted for goodwill have been roughly constant over the past 20 years, whereas net financial assets that include goodwill have increased markedly. The bottom two panels, by contrast, focus on firms at the upper end of the distribution. Even in this case, the rise in adjusted net financial assets

[2] According to the Financial Accounts of the United States, nonfinancial assets also include a relatively small amount of intellectual property products.
[3] In this exercise, financial assets adjusted for goodwill are defined as total assets less the book value of net property, plant, and equipment, inventories, and goodwill, whereas the standard measure of financial assets includes goodwill.

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