The juxtaposition of sluggish economic expansion and strong corporate profits over the last two years has brought a great deal of attention to profit margins. With margins now the widest in four decades, some investors are wondering whether margins can expand further or even remain as fat as they are for much longer. These questions have prompted wide-ranging efforts to explain why margins are so wide in the first place. However, most people are thinking about aggregate profit margins incorrectly. Without understanding the macro determinants of profits, the tendency is to use simplistic constructs or fallacious micro reasoning that can get investors into serious trouble.

Below are a few popular notions that have appeared in investment commentaries and in major financial news publications:

- “Historically, margins tend to revert to the mean.”
- “Margins cannot remain abnormally wide for long because the excess will be ‘competed away.’”
- “Margins are wide because of reduced labor costs. Firms have cut jobs and wages since the beginning of the recession, finding ways to squeeze more profit out of each worker. The outlook for margins hinges on whether labor productivity can keep increasing.”
- “The elevated level of margins is to a significant extent attributable to (1) corporations having been able to lower their tax bills and (2) the reduction in corporations’ debt service expenses due to lower interest rates.”

These notions rest partly on two faulty assumptions. First, drawing inferences about where profit margins are heading from where they stand relative to “normal” historical levels wrongly assumes that profit margins are independent of changes in the composition of production, the structure of the U.S. economy, its place in the international economy, the condition of private balance sheets, and other factors. Second, much of the conventional wisdom wrongly assumes that what drives profit margins at the aggregate level is the same as what drives margins at the firm level.

The soundest way to think about the determinants of the level and direction of profits and profit margins is to look at the profit sources, a process in which we are regularly engaged.

**Profit Margins Are Not Independent of Changes in the Economy’s Structure, Balance Sheets**

There is a popular premise that the aggregate profit margin is an independent variable that fluctuates around a stable mean. When margins drift far away from the historical average, many analysts accordingly predict a reversion to the mean. Yet, even a casual perusal of the historical record shows that (1) major swings in the aggregate profit margin reflect the broader business cycle, (2) the average profit margin in any given era can deviate substantially from the average for the entire post-war period, and (3) margins can remain greater than (or less than) the historical average for extended periods of time. These facts are visible in either the net profit margin for S&P 500 companies or the margin for all nonfinancial corporations based on NIPA data (chart 1). (Here we show margins for only nonfinancial corporations because NIPA measurements of financial sector profits and value added are highly problematic.) Thus, the historical average is a poor guide for judging where margins are headed in any given year or cycle.

Why do margins tend to be wider on average in some eras and narrower in others? The answer lies in the profit sources, which are influenced by myriad circumstances. Consider, for example, the first few decades after World War II. During the prior decade and a half of depression and war, private investment had been severely depressed. Thus, after the war net private...
fixed investment boomed for decades to make up for the dearth of adequate, up-to-date plants, equipment, and housing. Eventually, all that investment—along with other domestic and global developments—led to domestic overcapacity and, consequently, weaker net fixed investment for decades. Another secular change in the profit sources came as the country moved from large trade surpluses in the 1940s, 1950s, and 1960s to huge deficits from 1980 on. These are two reasons why profit margins were high after World War II for a few decades. In short, the profit sources are not random variables, but complex interactive parts of the economy influenced by balance sheet conditions, technology, demographics, geopolitics, global competition, resource availability, social attitudes, government policies, and other factors.

Another reason that historical comparisons of profit margins are problematic is that data quality has changed over the decades. Most notably, there has been a well-documented increase in corporate earnings overstatement over the past three decades.

The take-away: The reversion of profit margins to a historical average is not a reliable assumption for investment decisions.

Problems with Conventional Explanations for Presently Wide Margins

The profits equation shows that the drivers of profits and profit margins at the aggregate level are not the same as the drivers of margins at the firm level. Conventional approaches to forecasting profit margins often fail to recognize this distinction, falling prey to the fallacy of composition.

To begin with, the widely held belief that increased aggregate labor productivity directly and necessarily leads to wider aggregate profit margins is false. So is the closely related notion that cutting labor costs directly widens aggregate margins. An increase in labor productivity can indirectly lead to wider aggregate profit margins, but the opposite result can also occur. Changes in productivity can affect aggregate profits only by indirectly influencing the profit sources through effects that vary with circumstances.

Consider an example. If an individual firm cuts payroll expenses by reducing workers’ hours while increasing labor productivity by a proportionate amount (such that output and revenues remain the same), it will increase its profits. However, if all firms in the business sector attempt to do this, the reduction in aggregate worker pay will impact total business revenue. Less worker pay means less personal income and therefore less consumer spending on the goods and services sold by businesses. Therefore, unless personal saving declines—which is not a necessary outcome of declining personal income—cutting payroll expenses will not directly increase aggregate corporate profits. (By reducing wages, the business sector would also exert indirect influence on another profit source, the government deficit. Payroll and income tax collections would fall, increasing the government deficit, which would add to profits. However, there is no direct benefit to profits or margins from reducing wage payments. For additional discussion of productivity and profits, see the note at the end of this piece.)

Similarly, it can be problematic to assert that lower corporate tax payments and debt service expenses lead to higher profits; again, this is true at the firm level but not necessarily at the aggregate business sector level. A reduction in total corporate tax payments will help aggregate after-tax profits only if associated with an expansion of the government deficit. If instead policymakers decide to cut spending or raise other taxes to make up for the impact of this revenue decline, after-tax aggregate profits will not be boosted. As for business debt service payments, a reduction in aggregate interest payments will also mean a decline in financial corporate sector revenues and a decline in interest income for households that—barring a reduction in personal saving—will reduce consumer spending, eroding nonfinancial corporate sector revenues. The direct net effect on aggregate profits will be zero; the indirect effects could go either way.

Finally, there are also problems with the notion that margins cannot remain abnormally wide for long because they will necessarily be “competed away.” This logic can apply at the product or industry level, but it does not apply to the aggregate business sector. If margins are wide in a particular industry, production may increase and new firms may enter, lowering prices and causing margins to narrow. However, the
result of the increased production—and any accompanying increase in hiring and investment—at the aggregate level is not necessarily a decline in margins; aggregate margins may well increase or remain unchanged. Indeed, increased production is often associated with an increase in aggregate profits and margins because it brings about additional capital spending and inventory investment (which are profit sources).

Still, many people observe margins being reduced by competition in many industries and intuitively feel that what they are seeing applies to the entire economy. To see the fallacy of composition here, consider this illustration. Take a case in which increased competition among producers of a certain good reduces prices, profits, and profit margins for that good. However, if the product is used as an input by other businesses, then the price decline will result in higher profit margins for those businesses. Alternatively, if the product is used by households, then (unless households increase their saving rate) the money saved will be spent on other products, driving up prices and profit margins in those sectors.

Overall, the changes in economic activity that result from wide profit margins can impact the profit sources and the composition of final demand in many ways, and the net impact will depend greatly on the circumstances.

The Profit Sources
Returning to the question of why margins are so wide in spite of a lackluster economic expansion, a look at the profit sources provides clarity. In brief, two aspects of the current mix of profit sources stand out as highly unusual. The first is extraordinarily weak net private fixed investment. As we have explained in detail elsewhere, this is a consequence of still overbuilt private sector balance sheets and of highly cautious business attitudes that reflect the ongoing process of aggregate balance sheet repair. Normally, such extraordinarily weak investment would not only dampen economic growth but also cause profits to be negligible or negative. However, the second unusual aspect is the enormous federal deficit, which is pumping a huge amount of wealth into the economy in the form of government IOUs, much of which is becoming corporate profits. (For a fuller exposition of how the mix of profit sources has evolved over the course of this recovery, see the July 2011 Levy Forecast.)

To learn about how the team of economists at the Jerome Levy Forecasting Center analyzes and forecasts the profit sources to create monthly profits forecasts, call Douglas Williams at 914-666-0641.

Note: An Explanation of the Connection Between Productivity and Profits
Historically, profits and productivity trends can be observed to move together not because productivity directly affects aggregate profits but because both are tied to the business cycle and to secular changes in net investment trends. When profits weaken and output slows, diseconomies of scale and delays in adjusting employment reduce productivity. During recoveries, profits and output surge, making workers scramble before employment catches up.

Productivity gains are typically associated with strong net fixed nonresidential investment, and strong investment does raise profits. (As in the example above, in the two decades following World War II, after 15 years of depression and war, there was a tremendous amount of net investment, which resulted in both strong profits and robust productivity growth.) Productivity may affect domestic firms’ competitiveness against foreign firms, affecting the trade balance and thereby affecting profits. Changes in relative costs and prices may lead to changes in personal saving, inventory building, or investment, all of which affect aggregate profits. However, productivity itself does not have a direct effect on profits.

To see why productivity has no direct effect on aggregate profits, consider this example. Suppose every worker suddenly creates twice as much product per hour, and all workers keep the same hours and pay (in dollars). Nominal personal income does not change, and, assuming no change in the personal saving rate, neither does nominal consumer spending. In order to sell the additional output, business must cut prices drastically. If business cuts prices in half, it will sell twice as much at the same cost while consumers buy twice as much for the same dollar outlay. Although real GDP (output) doubles, revenue, expenses, and profits are unchanged, as deflation is 50%.
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