THE ORIENTAL ECONOMIST

PUBLISHED BY JAPAN WATCHERS LLC

January 22, 2016

RAISING PROFITS WITHOUT RAISING SALES WHAT'S THE BOTTOM LINE?

Key points:

- Japan's firms, particularly its 5,000 largest firms, have mastered the art of producing growth in profits without growth in sales
- Among all 1 million corporations in the Ministry of Finance (MOF) database in the four quarters through July-Sept. 2015, operating profits were up 9% over year-earlier levels even though sales were up only 0.7%
- Firms have achieved this by cutting costs, particularly labor costs
- What firms call "structural reform" is not finding ways to become more efficient but mostly cost-cutting
- That boosts corporate profits, but does not lead to better growth for the economy as a whole; one person's costs is another person's revenue
- The new situation makes firms less financial vulnerable to downturns
- A second implication is that firms have less need to invest in capacity-expanding plant and equipment
- Profit margins (the profits:sales ratio) at the biggest 5,000 firms are at their highest level since the end of the high growth era in 1973

Overview

Japan's firms, particularly its 5,000 largest firms, have mastered the art of producing growth in profits without growth in sales. They've done this by cutting costs, particularly labor costs. We *suspect* that the largest firms have also been able to grow profits by squeezing the one million Small and Medium Enterprises (SMEs) on whom they depends for parts and materials, but we do not have the data to confirm or refute that hypothesis.

One of the implications of this is that Japanese firms are better able to remain financially solid even when sales flag and this, along with ultra-low interest rates, insulates them against both a new debt crisis as well as a repeat of a 2008-style downturn.

A second implication is that firms have less need to invest in capacity-expanding plant and equipment. If your sales are not growing, why expand your capacity to sell more? This does not obviate the need to invest in replacing worn out equipment or in modernization or labor-saving devices. However, the upshot is that a major source of growth in aggregate demand in the 2000s—business investment—is not able to play the same role this time around. Instead, firms are using their plentiful cash flow to buy overseas firms or invest in assorted financial and real estate assets at home.

Profit Growth Without Sales Growth

Figure 1 tells the tale: among all 1 million corporations in the Ministry of Finance (MOF) database in the four quarters through July-Sept. 2015, operating profits were up 9% over year-earlier levels even though profits were up only 0.7%. Among the 5,100 largest firms, profits were up 9% even though sales were *down* by 1.2% (see *Figure 2*). And, among 980,000 small corporations, profits were up 8% even though sales were up just 1% (see *Figure 3*).¹

As we can see in these charts, profits gyrate up and down far more than do sales. So, it is not entirely surprising that a small change in sales can produce a big change in profits. However, when we average sales growth across the ups and downs of the business cycle, we find a big structural change since compared to the 1980s-90s. Japanese corporations have focused on cost-cutting in ways that enable them to generate profits growth even when sales are falling.

Take a look at the scatter diagram, *Figure 4*, where the trend lines show how much sales have to increase on average across the business cycle in order to generate profits growth. During 1982-99, if sales showed zero growth, then profits would *fall* by 7.1%.² In order for profits to rise, sales had to grow by at least 3%. However, the situation was quite different in 2000-15. Even if sales showed zero growth, profits would still rise by more than 4%. In fact,

¹ We are looking at *operating* profits rather than *current* (aka recurring) profits. Operating profits are the profits made on the domestic activities of these firms and so, unlike current profits, do not include profits earned by overseas affiliates. Secondly, operating profits are the profits earned before interest payments, whereas current profits show post-interest earnings. Hence, operating profits reflect the real profitability of domestic activities by these firms, and are not distorted either by a change in interest rates or by a change in the value of the yen (e.g. a fall in the yen means that a dollar repatriated back home by Toyota's American affiliates are now counted a 118 yen rather than 78 as they were a few years ago).

The MOF database includes only firms that have incorporated themselves, rather than a mom and pop retailer or barber shop. These firms employ a bit more than of all workers in Japan.

² That is the meaning of the equation: Y = 2.4653x - 0.0714.

as long as sales didn't fall by more than 2%, profits would still rise.

In *Figure 5*, we look at the profits:sales relationship for the biggest firms. During 1982-99, if sales showed zero growth, then profits would *fall* by 2.7%. However, during 2000-15, even if sales showed zero growth, profits would still rise by than 4.3%. In fact, as long as sales didn't fall by more than 2.4%, profits still rose.

In *Figure 6*, we examine the small firms. During 1982-99, if sales showed zero growth, then profits would *fall* by 5.1%. However, during 2000-15, even if sales showed zero growth, profits would still rise by than 4.8%. In fact, as long as sales didn't fall by more than 2.8%, profits still rose.

Here's the bottom line (to coin a phrase): among big firms, profits today stand match the record first set in mid-2007, even though sales have decline 13% from their record high, and are basically at the same level that has prevailed since the early 1990s (see *Figure 7*). Among small firms, while profits have not recovered their record highs of the bubble era, they are up 20% from 1996 even though their *sales are down by 20%* (see *Figure 8*). Figure 5: Big Firms: Since 2000, Profits Can Grow Even If Sales Fall

Profits From Cost-Cutting Rather Than Growth or Efficiency Improvements

This sea change in the relationship between profits and sales came about as a result of a long period of what Japanese firms called "structural reform" or, sometimes, "rationalization." By this, such firms meant, not "reengineering the firm" to focus on their strengths or to find better ways of functioning, but rather cutting costs, particularly wage costs, in ways that let them earn more money just by doing what they had always done. Real productivity means getting more output from the same amount of inputs. Cost-cutting just means paying less for the same inputs, e.g. hours of labor or parts/materials from suppliers.

The problem with this approach is this: if every firm is cutting wages, who is going to buy their products? And if big firms are paying SMEs less for their products, that forces the SMEs to squeeze their own workers and suppliers.

A real increase in productivity would mean an increase in "asset turnover," i.e., in the amount of sales produced by each yen of assets (the latter range from plant and equipment and land to financial assets). And yet, among the big firms, the sales:asset ratio steadily halved from 1.4 in 198s to 0.7 in 2015. Among small firms, the sales:asset ratio fell from 1.8 to 1.0 during the same period. In neither case is there any sign of a rebound; in fact, the numbers keep falling even though prices have been rising a bit in the last few years (see *Figure 9*).

A real increase in productivity would also mean in increase in sales per worker. And yet, among big, firms we see flatness in sales per worker since around 2000 and today the level of sales per worker remains far below the peak achieved in 2007 just before the global slump.

Among small firms, we see flatness since around 2000. Only a fraction of this can be explained by deflation (see *Figure 10*).

Despite anemic productivity growth, Japan's biggest firms in 2015 enjoy a profit margin, i.e., the ratio of operating profits to sales, of 5.6%. That is the highest profit margin for big firms since the end of the high-growth era in 1973 (see *Figure 11*). The profit margin at small firms stands today at 3.5%, which is the highest level since the end of the 1980s bubble in 1991.

If this profit margin resulted from greater efficiency, we would all be popping the cork. Instead, as we stated above, it came mostly from cost-cutting. Let's look at the details.

First, let's look at the non-labor costs. These include the Cost of Goods Sold (COGS) and Sales, General and Administrative (SGA) costs. COGS mostly includes variable costs that are proportionate to the amount of goods (or services) made. Aside from labor costs, they would include parts, materials and capital goods. SGA is mostly the fixed overhead costs, e.g., costs of maintaining facilities, equipment used in sales, marketing, accounting, etc. Non-labor COGS and SGA expenses are payments from one firm to another. So, without productivity hikes, a cut in one firm's non-labor COGS/SGA costs can be a cut in another firm's income.

In *Figure 12*, we can see that big firms cut their non-labor COGS & SGA costs by 1.5 percentage points of sales, from 87% of sales to 86.5%. Small firms cut their non-labor COGS & SGA by 3.5 percentage points of sales, from 83% to 79.5%.

Unfortunately, personnel expenses are not broken down into the COGS and SGA segments, e.g., assembly line workers vs. accountants. However, in terms of overall labor costs, big firms cuts their labor costs from a non-recession year peak of 10.3% of sales in 1994 to 8.8% in 2015. The latter is a smidgeon above the 1990 share (see *Figure 13*). Among small firms, labor costs rose by 4 percentage points from 13% of sales in 1990 to 17% this year.

Taking all of these costs into consideration, big firms cut their costs enough to raise their profits from 4.3% of sales in 1990 to 5.6% this year, the highest share since the end of the high-growth era in 1973. Small firms showed a small drop in profit margins from 4.2% in 1990 to 3.5% this year. However, the latter is highest profit margin since 1992; indeed, from 1993 through 2011, the profit margin at small firms averaged just 2.4% (see again *Figure 11*).

The Wage Squeeze

Labor costs can drop for three reasons: 1) firms cut the size of their staff; 2) they cut wages; or, 3) they raise productivity (sales per worker).

At big firms, the number of workers peaked in 1994 at 7.4 million and has since fallen by 4% to 7.1 million. At small firms, the number of workers peaked in early 2000 at 27 million and has since fallen by a whopping 20% to 21 million (see *Figure 14*).

Both big and small firms have cut wages, but neither segment has shown an increase in productivity. In *Figure 15* (data for big firms) and *Figure 16* (data for small firms), we construct an index taking 1996 as 100. 1996, the year before the 1997 recession, marked a big turning point in the economy.

From 1996 through the current year, big firms cut wages per worker by about 5% (see *Figure 15*), whereas small firms cut them by 6% (see *Figure 16*).

At big firms, sales per worker are up 7% from 1996, but down 15% from the peak reached at the end of the 2002-07 recovery (see *Figure 15*). At small firms, sales per worker are down by a whopping 20% from 1996 (*Figure 16*).

The wage cuts handed out workers enabled both big and small firms to hike profits. At the big firms, profits per staffer are up a huge 70% from 1996 (see *Figure 15*). At the small firms, profits per staffer are up 20% from 1996 (*Figure 16*).

A Note On ROE And ROA

The Abe administrations' efforts regarding corporate governance and corporate reform focus on, among other things, a goal of achieving 8% Return-on-Equity (ROE), i.e., the ratio of recurring profits to shareholders equity.

It is clear why this would of interest to shareholders, but not at all clear how this would be helpful to the overall macroeconomy. First of all, as noted in Footnote 1, recurring profits include earnings from overseas affiliates and these can be elevate simply by a depreciation of the yen. This is also an after-interest measure and could be improved simply by lowering interest rates. Hence, it is not a good measure of corporate efficiency. In addition, both recurring and operating profits can be raised by cutting wages; that is not of benefit to the macroeconomy since it also cuts consumer purchasing power, not to mention living standards, which is the ultimate purpose of an economy.

One could use an alternative measure, Return-On-Assets (ROA), the ratio of operating profits to assets. In theory, this could be a measure of how efficiently firms use their assets. But this, too, suffers from the same flaw: profits can be raised by cutting wages. This is not a sustainable path to good growth.³

³ ROA is, in essence, a fraction, i.e. R/A. However, we can break this down into two components: 1) the profit margin, i.e., the ratio of profits to sales, or R/S; and 2) the "total assets turnover," which is the ratio of sales to assets, or S/A. If we divide R/S by S/A, we get R/A, or ROA. Even if efficiency is dropping, as shown by a decline in S/A, ROA can still rise if R/S improves enough, even if it does so simply by wage

We need a more comprehensive set of measures to tell us whether firms are really becoming more efficiency and thus a vehicle for better growth rates and rising living standards.

Richard Katz The Oriental Economist Report 212-868-4380 rbkatz@orientaleconomist.com http://www.orientaleconomist.com/id1.html

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cuts, as we have seen in Japan. So, if ROA improves, we have to ask whether this is because of an improvement in S/A or in R/S, and, if the latter, is that caused by genuine efficiencies or by wage cuts, or cuts in prices firms with greater bargaining power pay their suppliers.



Figure 1: All Firms: Profits Up 9% Even Though Sales Up Just 0.9%

Note: Profits equal operating profits; boundaries of growth put between + and -30% due to huge drop and rebound from late 2008 to early 2011; 4-qtr moving average in this and the following charts



Figure 2: Big Firms: Profits Up 9% Even Though Sales Down 1.2%

Note: Profits equal operating profits; boundaries of growth put between + and -30% due to huge drop and rebound from late 2008 to early 2011; 4-qtr moving average in this and the following charts



Figure 3: Small Firms: Profits Up 8% Even Though Sales Up Just 1.1%

Note: Profits equal operating profits; boundaries of growth put between + and -30% due to huge drop and rebound from late 2008 to early 2011; 4-qtr moving average in this and the following charts



Figure 4: All Firms: Since 2000, Profits Can Grow Even If Sales Fall

Note: In 2000-15 segment, data for 2009 through the first quarter of 2011 are omitted because they are huge outliers



Figure 5: Big Firms: Since 2000, Profits Can Grow Even If Sales Fall

Source: MOF

Note: In 2000-15 segment, data for 2009 through the first quarter of 2011 are omitted because they are huge outliers



Figure 6: Small Firms: Since 2000, Profits Can Grow Even If Sales Fall

Source: MOF

Note: In 2000-15 segment, data for 2009 through the first quarter of 2011 are omitted because they are huge outliers



Figure 7: Big Firm Profits Near Record High Even Though Sales Flat

Index, small firms (1996 = 100) Profits Sales 12 14 Source: MOF

Figure 8: Small Firms: Profits Down Amidst Flat Sales



Figure 9: Fewer Yen In Sales For Every Yen In Assets Deployed





Note: The scale for small firms (right scale) is 40% of the scale for big firms (left) at every point on the scale. In the early 1990s, the government lowered the minimum level of capital a firm had to have in order to become a private corporations; as a result, the number of small corporations grew. There was a big leap at the beginning of 1997, which caused a decline in the average size of sales per worker. That combined with the 1997-98 recession to produce the decline noted in the circle for small firms during 1997-98



Figure 11: Profit Margins For Big Firms At Four-Decade High



Figure 12: Big Firms Trim Non-Personnel Costs; Small Firms Cut More



Figure 13: Big Firms Cut Personnel Costs; Small Firms Raise Them

Figure 14: Big Firm Staff Flat; Small Firms Tumble From 2007 Peak



Source: MOF



Figure 15: Big Firms: Profits Per Worker Soar As Wages Slide



Figure 16: Small Firms: Profits Up Somewhat; Wages Slide

Source: MOF