

Manufacturing Barometer

Business outlook report
July 2015

Special topic:

The stronger US dollar



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Quarterly highlights





Chief quarterly findings

Overall, the first half of 2015 was marked by a slower US economy with GDP under 2.0 percent rate of growth, and international sales contribution more limited due in part to a stronger US dollar, leading to a slowdown in rate of growth, new spending, and new hiring among industrial manufacturing panelists.

Optimism about the US and world economies' prospects dropped to 69 percent for the US (off 7 points), and 38 percent for the global economy (off 4 points).

Own company revenue forecasts for the next 12 months dropped to a still moderate 4.9 percent pace, off from 5.1 percent in the prior quarter and a high of 5.8 percent in 4Q 2014 forecasts. A dropoff in international sales contribution to 27 percent of total revenues over the past two quarters from 30-32 percent last year is a major factor related to the stronger US dollar, now viewed as one of the three major headwinds to growth, along with lack of demand and legislative/regulatory pressures.

Of concern this quarter are prospective cutbacks in new spending for growth— particularly, a cutback in CapEx type spending – new hiring, and lack of growth in initiatives, particularly in the international sector.

In a sharp turnaround, lack of skilled workers dropped sharply as a major headwind to growth over the next 12 months, after its recent surge. Actual planned new hiring turned flat.

Optimism about the US and world economies lower

Optimism about the US economy's 12-month prospects among the industrial manufacturing panelists dropped 7 points to 69 percent from the prior quarter's 76 percent, and while above a year ago's 65 percent, reflects a softening in prospective attitudes. Looking ahead, 31 percent were on the fence or uncertain, but none were pessimistic. Currently, 76 percent viewed the US economy as growing in 2Q 2015, 9 points below the prior quarter's high 85 percent.

Optimism about the world's economic 12-month prospects among those marketing abroad also softened a bit, off 4 points from 42 percent to 38 percent— and is now in line with a year ago. Eight percent were pessimistic and 54 percent, the majority, were uncertain. However, only 26 percent viewed the world economy as growing in 2Q 2015, 12 points below the prior quarter, and 15 percent viewed it as declining. This quarterly drop-off may signal further weakness ahead.

Own company revenue growth softens further

For the second quarter in a row, own company revenue growth forecasts for the next 12 months softened to a still moderate 4.9 percent pace, off from 5.1 percent in the prior quarter and a higher 5.8 percent in 4Q 2014 forecasts. A dropoff in international sales contribution to total revenues from the 30-32 percent level last year to the 27 percent level in the last two quarters is a primary contributor to the overall softening. The impact of the stronger US dollar (the special issue this quarter) reflects an average potential impact of 3.5 percent on 75 percent of these panelists, or about 2.5 percent overall maximum impact, which directly affects the international sales contribution to total revenues. Looking ahead, 81 percent expect positive revenue growth over the next 12 months, with only 5 percent expecting double-digit growth (off 5 points) and 76 percent forecasting single-digit growth. Very few, only 2 percent, forecast negative growth and 5 percent expect zero growth, but many, 12 percent, were not reported, reflecting some uncertainty about revenues over the next 12 months. Overall, the softening revenue pace can be attributed to international sales and the stronger dollar.

International sales contribution at lower level

The projected contribution of international sales to total revenues among panelists selling abroad remained at 27 percent for the next 12 months. Yet this 27 percent contribution level is notably lower than the 30-32 percent pace of contribution last year, affected by a slight decline in demand and the stronger US dollar. Note that 2Q 2015 international sales among those marketing abroad was flat to slightly negative: with 15 percent up, 17 percent down, and the majority, 68 percent, about the same.

Spending: a sharp dropoff in CapEx spending

Overall, 34 percent of US industrial manufacturers surveyed plan major new investments of capital over the next 12 months, down 18 points from the prior quarter and a year ago (52 percent levels). The level of prospective spending is also quite low: their mean investment as a percentage of total sales remained at 3.3 percent, same as the prior quarter, but notably lower than a year ago's 5.7 percent. These findings reflect concern about new growth initiatives among these panelists, especially in the international area (although the stronger US dollar potentially buys more abroad).



Noteworthy as well is some softening in ongoing operational spending increases, cited by 75 percent, off 8 points from the prior quarter's 83 percent. Nearly all specific expenditure categories were lower, led by new products or service introductions, 44 percent (off 11 points); research and development, 34 percent (off 6 points); information technology, 22 percent (off 11 points); and business acquisitions, 20 percent (off 8 points). Geographic expansion was down to 12 percent, off from 22 percent a year ago; and facilities expansion was down to 10 percent, off from 20 percent a year ago. Only internet commerce was up slightly to 7 percent (up 4 points).

On the positive side, prospective new strategic alliances rose to 29 percent and new joint ventures held at 19 percent, both related to the stronger dollar (see special issue section). M&A activities dropped 14 points to 29 percent, split between purchases (19 percent) and sales of all/part of business (14 percent).

Expansion to new markets abroad dropped 7 points to 12 percent, and new facilities abroad dropped 3 points to 9 percent. International increases and decreases are currently planned (14 percent net level each).

New hiring flattens

While 52 percent of panelist firms are planning new hiring over the next 12 months (same as the prior quarter), composite workforce hiring dropped to a flat 0.2 percent from 0.5 percent in the prior quarter and a year ago. The need for blue collar workers (39 percent), technology/engineering professionals (29 percent), and white collar support (19 percent) was higher. However, a sharp dropoff in number of new hiring and major new spending initiatives in general appears to be on the horizon.

Three major headwinds to growth include stronger US dollar

Three leading headwinds to growth over the next 12 months cited by industrial manufacturing panelists are lack of demand, 39 percent (up 10 points); legislative/regulatory pressures, 39 percent (up 6 points); and monetary exchange rate/the stronger US dollar, 37 percent (up 16 points). Taxation was also up to 29 percent (up 5 points). In a sharp turnaround, need for qualified workers dropped 11 points to 24 percent; and pressure for increased wages was down 5 points to 12 percent, indicating less pressure for added workers.

Gross margins continue on the positive side

Gross margins in 2Q2015 were up among 32 percent and down for 15 percent, for a net 17 percent increasers (15 points higher). Costs and prices remained moderately higher: costs with 10 percent net increasers and prices with 10 percent net increasers. Concern about profitability as a barrier over the next 12 months rose slightly to 24 percent (up 3 points).

A quarter-over-quarter comparison of key indicators shows the business outlook for the next 12 months and how the views of the panel have changed each quarter (see chart 1.1). The pages that follow provide a detailed look at each question for the past five quarterly surveys.



Stronger US dollar

Over the next 12 months, the stronger US dollar is likely to have an average impact of 3.5 percent on these manufacturing companies' revenues, with 82 percent reporting any impact. Thirty-nine percent expect moderate-plus impact, and 43 percent anticipate limited impact. Eighteen percent expect not much impact at all.

Internationally, chief regional impact of the stronger US dollar over the next 12 months will be in the UK/European Union: 49 percent, with impact to a great extent (19 percent) or to a moderate extent (30 percent). In China/India/Japan, only a moderate impact was anticipated by 27 percent.

Most, 72 percent, of industrial manufacturing companies' top management believe the US dollar will either stay about the same, (47 percent) or continue even stronger (25 percent) over the next 12-18 months. Only 12 percent expect a weaker US dollar. However, 16 percent were not certain.

Overall, 40 percent of panelist manufacturing companies hedged against the stronger US dollar this year; and a similar percent did not hedge (45 percent). Another 13 percent was not certain and 2 percent not reported. Hedges were regular, ongoing hedges (88 percent), with 12 percent not certain as to type or not reporting.

In view of the stronger US dollar impact on US manufacturing firms like their own, panelists believe reform of US corporate taxes might be helpful (53 percent very/extremely helpful) to their own companies' bottom line over the next 12-18 months. Three other US government actions were also cited as potentially very or extremely helpful: more sensible US regulations, including financial regulations (49 percent); repatriation of US companies' international profits at low tax rates, less than 10% (39 percent); and international trade treaties with China, India, Japan (33 percent).

Importantly, a majority (55 percent) of panelists believe the stronger dollar may lead to new or strengthened strategic alliances (47 percent), or new or strengthened joint ventures (31 percent) over the next 12-18 months. A minority, 37 percent, expect none, and 8 percent were not certain or not reported. It is noteworthy that more panelists expected strengthened strategic alliances than new ones – 37 percent and 27 percent, respectively.



Chart 1.1 Key indicators for the business outlook

A quarter-over-quarter comparison of the survey's key indicators shows how the 12-month outlook has changed each quarter. The change column indicates the movement of opinion of those surveyed over the past two quarters.

Business outlook, next 12 months among industrial manufacturers

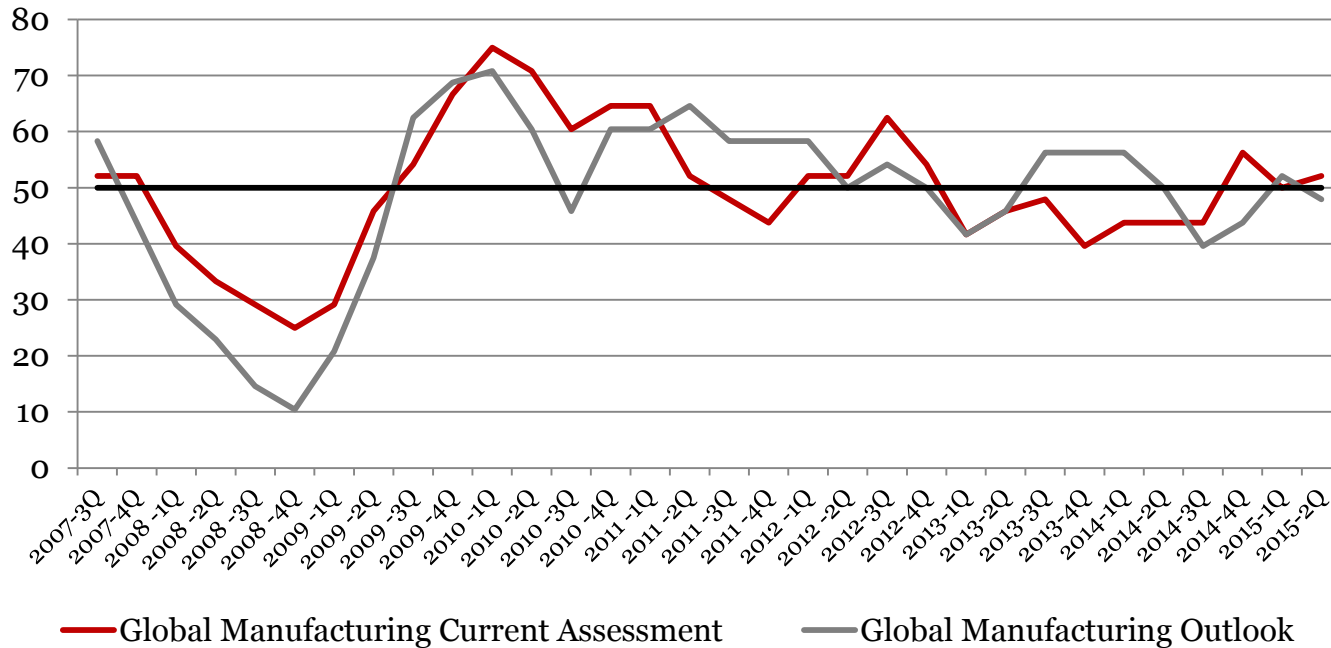
	2014			2015		Change	Page
	2Q'14	3Q'14	4Q'14	1Q'15	2Q'15	1Q'15–2Q'15	
Optimistic about US economy	65%	57%	68%	76%	69%	↓	11
Optimistic about world economy	38%	30%	38%	42%	38%	↓	12
Expect positive revenue growth	77%	86%	85%	83%	81%	=	20
Average growth rate expected	5.2%	5.6%	5.8%	5.1%	4.9%	=	20
Planning major new investments	52%	36%	43%	52%	34%	↓	22
New investments as a % of sales	5.7%	5.7%	3.3%	3.3%	3.3%	=	22
Planning to hire	48%	52%	60%	52%	52%	=	21
New workers as a % of workforce (net)	0.5%	0.4%	1.1%	0.5%	0.2%	↓	21
Expected barriers to growth:							
• Lack of demand	42%	43%	35%	29%	39%	↑	23
• Legislative/regulatory pressures	47%	59%	32%	33%	39%	↑	23
• Monetary exchange rate	15%	14%	15%	21%	37%	↑	23
• Taxation policies	25%	31%	27%	24%	29%	↑	23
• Lack of qualified workers	25%	26%	33%	35%	24%	↓	23
• Decreasing profitability	27%	22%	20%	21%	24%	↑	23
• Oil/energy prices	28%	22%	22%	26%	22%	↓	23
• Competition from foreign markets	28%	21%	15%	17%	17%	=	23
• Capital constraints	17%	16%	12%	14%	14%	=	23
• Pressure for increased wages	7%	7%	10%	17%	12%	↓	23
• Higher interest rates	3%	14%	7%	10%	7%	↓	23



The manufacturing outlook deteriorated slightly relative to first quarter results, while the current assessment showed a mild improvement. As both indices are calculated using a four-quarter moving average, these results mask some growing areas of concern. In fact, the non-smoothed outlook *Barometer* index shows a significant bifurcation between the current assessment, which stayed relatively flat, and the economic outlook, which dropped below 10 after a reading of 67 in the prior quarter. The outlook reading, which was the lowest quarterly result since early 2009, reflects a broad weakening across most major input factors. However, it does not reflect a view on the magnitude of economic growth (or decline).

While the overall indices have been weak, executives are actually highly optimistic about the current condition and outlook for the US economy over the next 12 months. In fact, both of the US surveys achieved the highest levels in five years in the first quarter before the pullback in the second quarter.

Out of the seven index constituents that calculate the outlook, only employment improved relative to the prior quarter as overall labor conditions have stabilized or improved in the United States. A smaller percentage of companies plan to raise capital investment and/or increase operational spending. Company revenue expectations have declined, likely due to the direct and indirect impact of foreign currency. On the other hand, companies appear to view the current pricing and margin environment more favorably relative to reduced expectations.





Despite a broad sense of optimism regarding US economic growth, survey results reveal some significant concerns regarding the strength and stability of international markets as well as the potential impact of currency on non-US revenues. The strength of the US dollar has had a strong impact on the outlook for US manufacturers. Foreign currency translation can have an immediate impact on revenues and free cash flow, as local currency is converted into fewer dollars. Manufacturers are also concerned about a weaker pricing environment and an inability to pass through costs, putting margins at risk. In other words, US exporters are concerned that they will pay the price for a global stimulus package in the form of weak revenues and pricing competition.

The heightened level of concern regarding global economic volatility is evident in survey responses to questions regarding both investment and spending plans. Industrial manufacturers have shown a reduced appetite for geographic expansion, both in terms of entering new markets as well as investment in production capacity overseas. Concerns range from deteriorating demand to unfavorable monetary exchange rates and apprehension about the profitability outlook.

Executives are taking a much more cautious approach in deal markets as well, favoring strategic alliances over acquisitions. We advise clients to see through short-term economic volatility, focus on long-term growth megatrends, and avoid overpaying for growth or expansion.

Background/methodology

PwC has surveyed global manufacturing executives since 2003 with the results published in our *Manufacturing Barometer* publication. The responses to these survey questions have been used to measure the sentiment of manufacturers by creating current assessment and outlook indices. The Global Manufacturing Current Assessment Index measures current trends in pricing, margins, employment, and capital expenditures, while the Global Manufacturing Outlook Index measures expectations for revenue, employment, operational spending, and capital expenditures. These results are calculated as a four-quarter moving average of diffusion indices which measure the degree to which their equal-weighted components move in the same direction at the same time. The indices are scaled between 1 and 100 with above 50 indicating more positive sentiment and below 50 indicating more negative sentiment.

Economic views





Which best describes your view of the US economy this quarter?

In second-quarter 2015, 76 percent of US industrial manufacturers surveyed believed the US economy was growing, off 9 points from the prior quarter's high of 85 percent. Three percent believed it was declining, and 21 percent saw no change from first-quarter 2015.

Looking at the next 12 months, how do you feel about the prospects for the US economy?

Looking ahead, 69 percent of respondents expressed optimism about the 12-month outlook for the US economy, down 7 points from the prior quarter's 76 percent. None were pessimistic (3 points improved from last quarter), while 31 percent were uncertain. A year ago, 65 percent were optimistic, only 2 points lower.

Chart 2.1 View of the US economy, this quarter

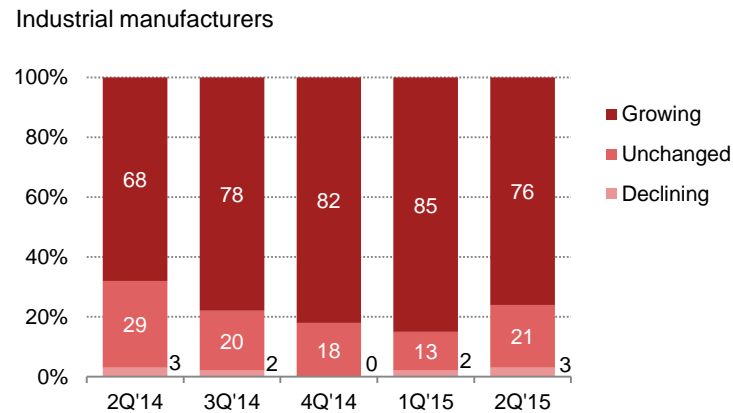
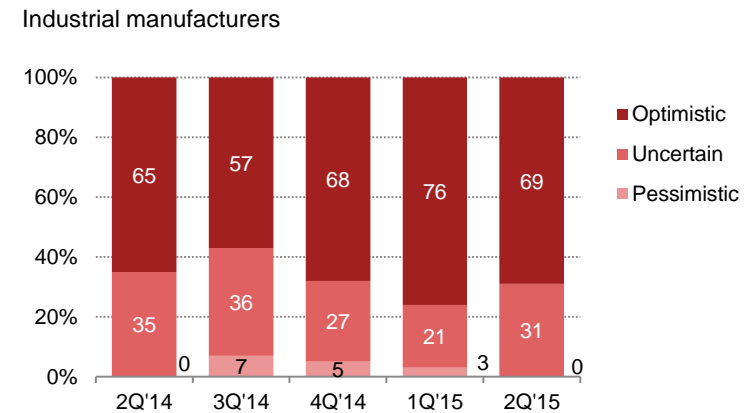


Chart 2.2 View of the US economy, next 12 months



Note: In 2Q 2015 total respondents = 59



Which best describes your view of the world economy this quarter (international marketers only)?

In second-quarter 2015, 26 percent of the panelists marketing abroad viewed the world economy as growing, a decrease of 12 points from the prior quarter's 38 percent. Fifteen percent believed it was declining (up 2 points from the prior quarter). Fifty-nine percent said they saw no change.

Looking at the next 12 months, how do you feel about the prospects for the world economy (international marketers only)?

Looking ahead, 38 percent of US-based industrial manufacturers who market abroad are optimistic about the prospects for the world economy over the next 12 months, off 4 points from the prior quarter's 42 percent. Eight percent are pessimistic (up 5 points), while 54 percent are uncertain. A year ago, 38 percent were optimistic (same).

Chart 2.3 View of the world economy, this quarter

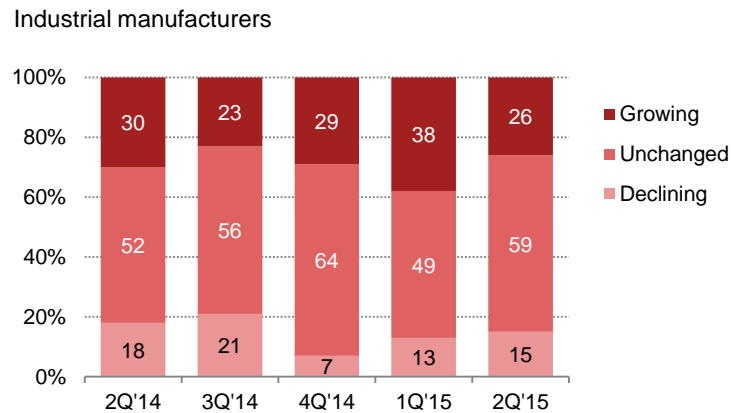
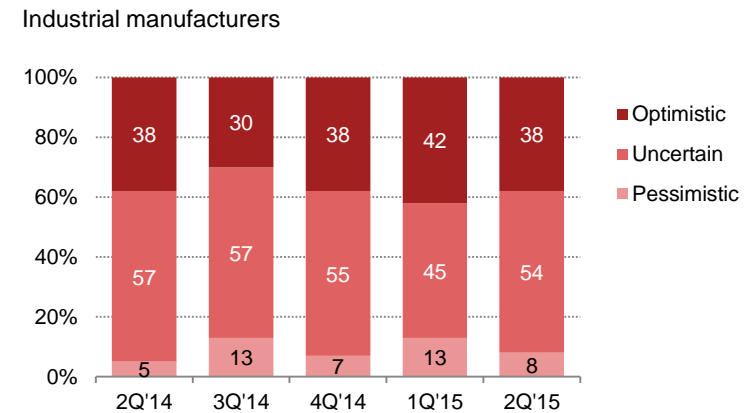


Chart 2.4 View of the world economy, next 12 months



Note: In 2Q 2015 total respondents marketing abroad = 53

Company performance



Company revenue growth, calendar year

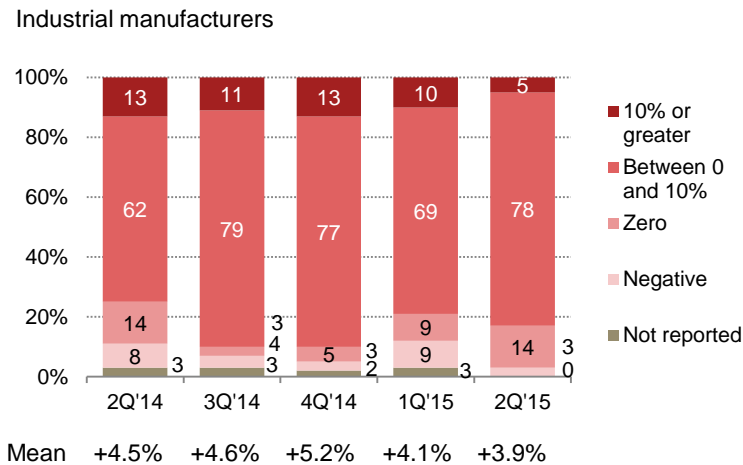


Industry growth, calendar year

What is your company's estimated revenue growth rate for the calendar year?

The composite average growth estimate for own-company revenue in the calendar year 2015 is at 3.9 percent, below the 4.1 percent in the first quarter for calendar year 2015 and 4.5 percent a year ago. Eighty-three percent of respondents said they expect positive own-company growth, with 5 percent expecting double-digit growth and 78 percent anticipating single-digit growth. Three percent were on the negative side, while 14 percent expected zero growth.

Chart 3.1 Company revenue growth, calendar year

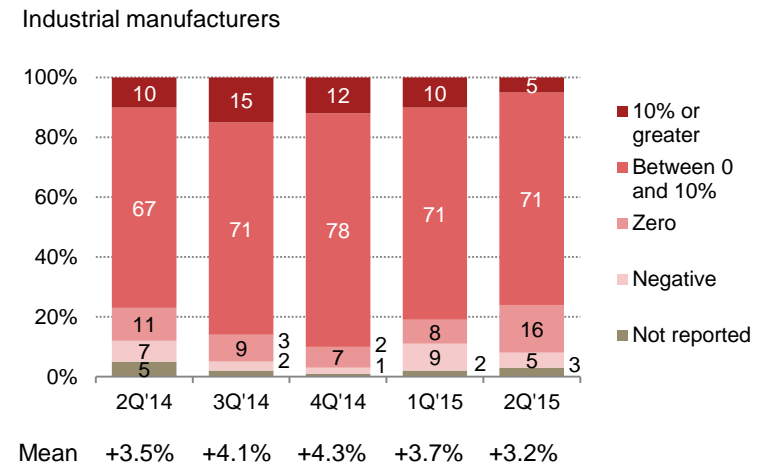


Note: In 2Q 2015 total respondents = 59

What is your industry's estimated growth rate for the calendar year?

Estimated industry growth rate for calendar-year 2015 was at 3.2 percent, a half-point below the first quarter's 3.7 percent for calendar-year 2015 and the 3.5 percent a year ago. Seventy-six percent of panelists reported positive industry growth for 2015 (5 percent double-digit growth and 71 percent single-digit growth). Five percent were on the negative side and 16 percent expected zero growth for this year. Three percent was not reported.

Chart 3.2 Industry growth, calendar year

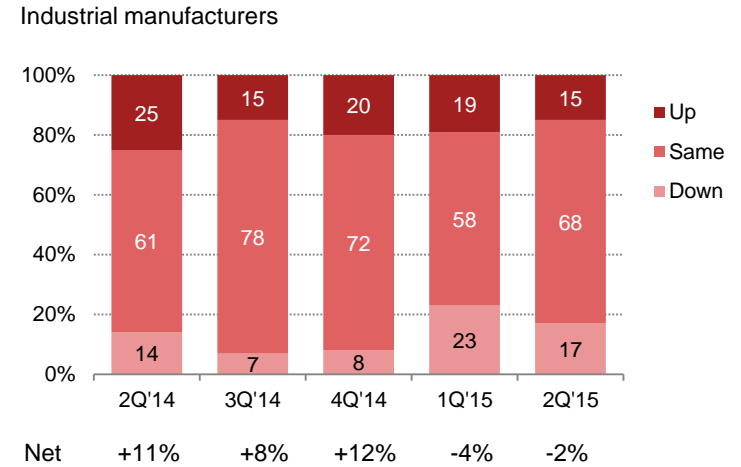




Are international sales up, down, or the same compared with three months ago (international marketers only)?

US-based industrial manufacturers that sell abroad reported slightly downward movement in international revenue in second-quarter 2015, with 15 percent reporting an increase in sales, and 17 percent reporting a decrease, for a net 2 percent decrease (two points above the previous quarter). The remaining 68 percent said sales stayed about the same quarter to quarter.

Chart 3.3 International sales



Note: In 2Q 2015 total respondents marketing abroad = 53

Changes in gross margins

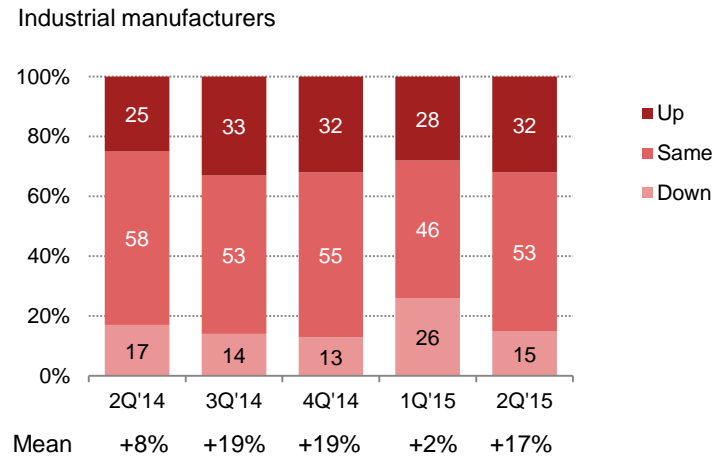


Changes in costs and prices

Are gross margins up, down, or the same compared with three months ago?

In second-quarter 2015, gross margins were up sharply. They were higher for 32 percent of panelists and lower for 15 percent, for a net plus 17 percent, 15 points above the prior quarter's plus 2 percent. Fifty-three percent stayed about the same.

Chart 3.4 Changes in gross margins

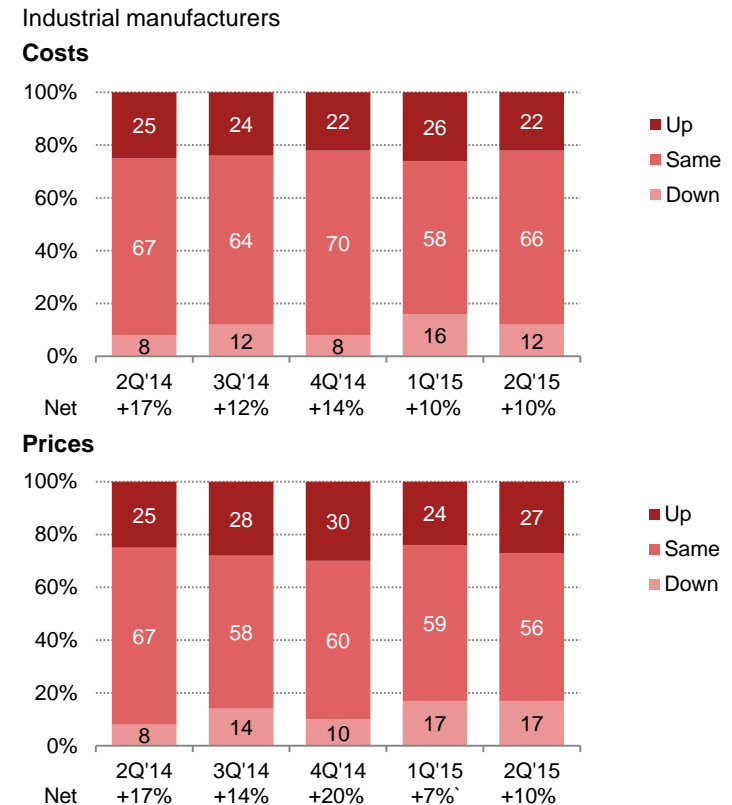


Note: In 2Q 2015 total respondents = 59

Are costs up, down, or the same compared with three months ago? prices?

In second-quarter 2015, costs and prices remained moderately higher. Twenty-two percent of US-based industrial manufacturers reported higher costs (off 4 points), and 12 percent reported lower costs (off 4 points), for a net plus 10 percent higher, same as the prior quarter's plus 10 percent. On the price side, 27 percent raised prices (up 3 points) and 17 percent lowered them (same), for a net plus 10 percent reporting higher prices (3 points above the prior quarter) as price flexibility stayed about the same.

Chart 3.5 Changes in costs and prices



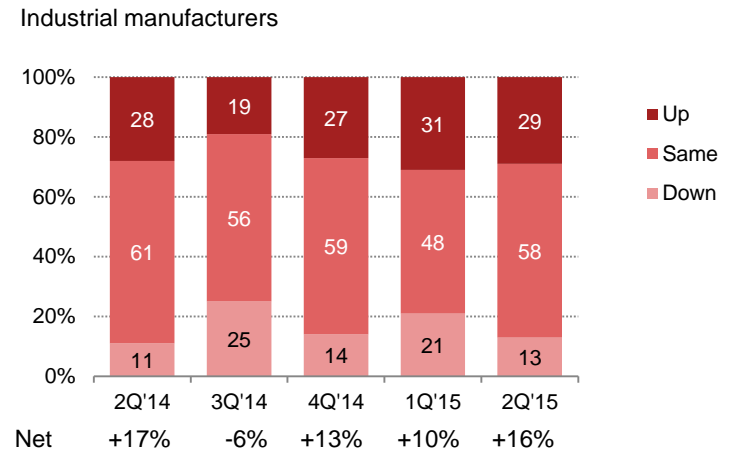
Inventory movement



Are finished inventories as a percentage of sales up, down, or the same compared with three months ago?

Inventories as a percentage of sales grew for 29 percent of US-based industrial manufacturers in the first quarter, 2 points below the prior quarter. Levels were down for 13 percent (off 8 points), for a net 16 percent higher inventory growth in second-quarter 2015, up 6 points. This is similar to the net 17 percent higher inventories in second-quarter of 2014, a year ago.

Chart 3.6 Inventory movement



Note: In 2Q 2015 total respondents = 59

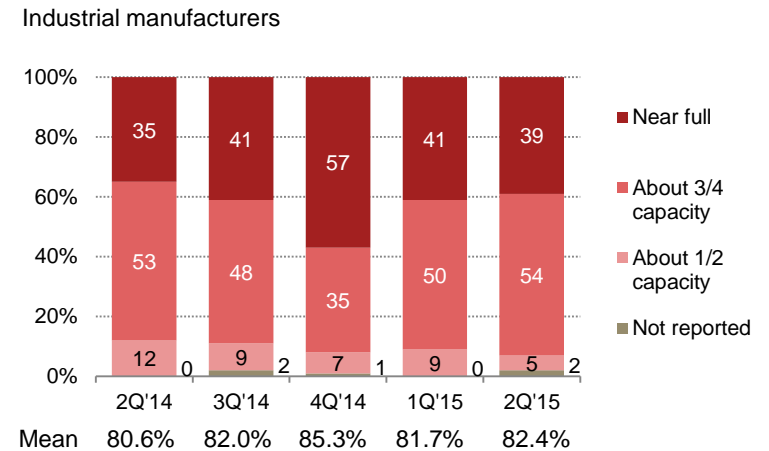
Level of operating capacity



What is your organization's current operating capacity?

Operating capacity is an estimate of the current level of permanent staffing and operations compared with what is needed for full-capacity output. In the second quarter, the mean rose to 83.2 percent of capacity, with 39 percent of industrial manufacturers surveyed claiming to be at or near full capacity (off 2 points).

Chart 3.7 Level of operating capacity



Note: In 2Q 2015 total respondents = 59

Business outlook, next 12 months



Revenue growth, next 12 months

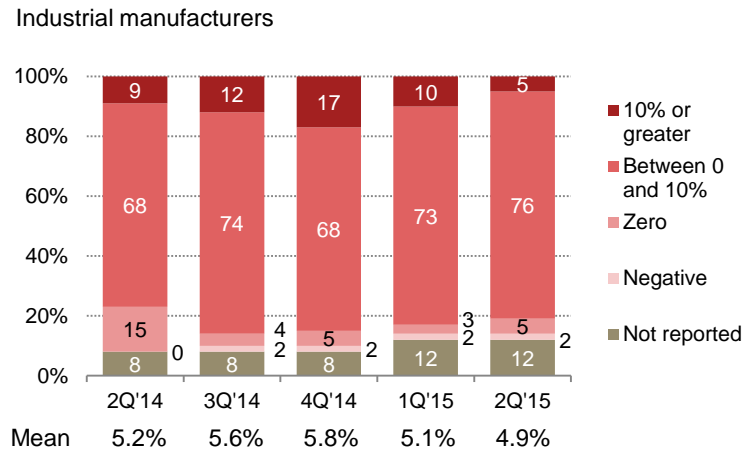


International sales, next 12 months

What is your organization's estimated revenue growth rate for the next 12 months?

The projected average revenue growth rate over the next 12 months among panelists was 4.9 percent, slightly below the prior quarter's 5.1 percent and that of a year ago (5.2 percent). Eighty-one percent expect positive revenue growth for their own companies, with 5 percent forecasting double-digit growth and 76 percent forecasting single-digit growth. Two percent forecast negative growth, 5 percent forecast zero growth, and 12 percent were not reported.

Chart 4.1 Revenue growth, next 12 months

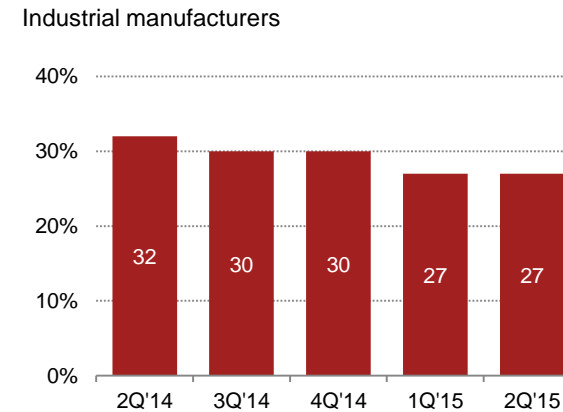


Note: In 2Q 2015 total respondents = 59

What percentage of your business's total revenue over the next 12 months do you expect to be derived from international sales (international marketers only)?

Of respondents selling abroad, the projected contribution of international sales to total revenue over the next 12 months was at the 27 percent level, same as the prior quarter, but 5 points below a year ago.

Chart 4.2 International sales, next 12 months



Note: In 2Q 2015 those marketing abroad = 53



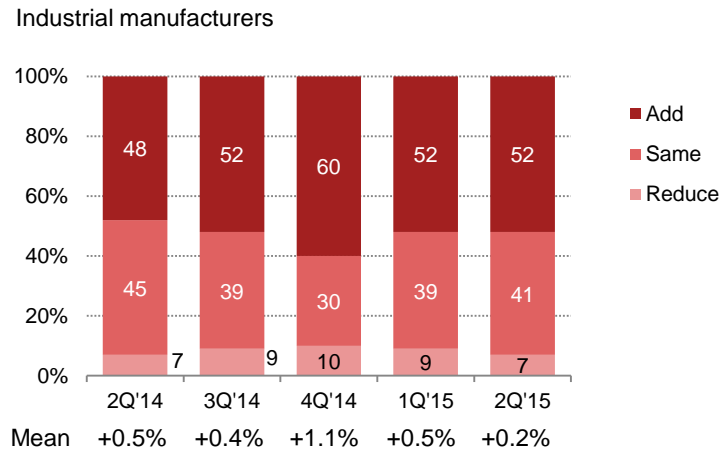
Do you plan to add or reduce the number of full-time equivalent employees over the next 12 months?

In total, 52 percent of industrial manufacturers plan to add employees to their workforce over the next 12 months, same as the 52 percent in the first-quarter 2015 estimates, and 4 points above a year ago (48 percent). Seven percent plan to reduce the number of full-time equivalent employees (off 2 points), and 41 percent will stay about the same. Total net workforce growth projection was a plus 0.2 percent, below the last quarter's plus 0.5 percent and last year's 0.5 percent, indicating continued moderation in hiring among these industrial manufacturing firms.

What types of employees do you plan to add over the next 12 months?

Among the 52 percent of respondents planning to hire within the next 12 months, the most sought-after employees will be blue collar/skilled labor (39 percent) and professionals/technicians (29 percent). Limited white collar support (19 percent) and sales/marketing hiring is planned (12 percent), along with middle management (12 percent). Note new category splits below.

Chart 4.3 Percent planning to hire



Note: In 2Q 2015 total respondents = 59

Chart 4.4 Percent planning to hire by type of employee

Industrial manufacturers	2Q '14	3Q '14	4Q '14	1Q '15	2Q '15
Planning to hire (net)	48%	52%	60%	52%	52%
• Blue collar workers	32%	33%	35%	33%	39%
• Skilled/specialized workers	-	-	-	-	29%
• Semi-skilled or unskilled workers	-	-	-	-	22%
• Professionals	20%	26%	32%	21%	29%
• Technology/engineering	-	-	-	-	29%
• Sales/marketing	7%	10%	9%	9%	12%
• Business/finance	-	-	-	-	10%
• White collar support	8%	10%	12%	10%	19%
• Middle management	-	-	-	-	12%
• Senior management	-	-	-	-	3%

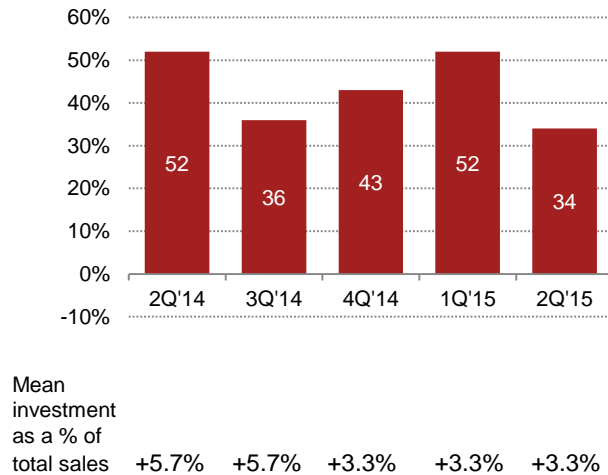


Are you actively planning any major new investments of capital over the next 12 months? If so, what percentage of total sales do you expect to invest?

Overall, 34 percent of US industrial manufacturers surveyed plan major new investments of capital during the next 12 months, down 18 points from the prior quarter's 52 percent, and last year's 52 percent. The mean investment as a percentage of total sales was a relatively low 3.3 percent, same as the last quarter's 3.3 percent but well below the 5.7 percent a year ago. These findings indicate a sharp downturn in the number of panelist firms planning CapEx spending over the next 12 months, and they are spending at more moderate levels.

Chart 4.5 Percent planning major new investments of capital

Industrial manufacturers



Note: In 2Q 2015 total respondents = 59

Over the next 12 months, where do you expect to increase spending?

Looking ahead over the next 12 months, operational spending increased: 75 percent of respondents plan to increase operational spending, down 8 points quarter-to-quarter. Leading increased expenditures were new product or service introductions (44 percent, off 11 points), research and development (34 percent, off 6 points), and information technology (22 percent, off 11 points). Business acquisition was at 20 percent (off 8 points). Plans for geographic expansion dropped to 12 percent (off 87 points). Marketing and sales promotion remained low, at 9 percent, but Internet commerce rose 4 points to 7 percent.

Chart 4.6 Percent planning to increase operational spending

Industrial manufacturers

	2Q '14	3Q '14	4Q '14	1Q '15	2Q '15
Percent planning to increase spending (net)	75%	69%	82%	83%	75%
• New product or service introduction	43%	43%	52%	55%	44%
• Research and development	45%	36%	47%	40%	34%
• Information technology	33%	29%	28%	33%	22%
• Business acquisition	27%	16%	22%	28%	20%
• Geographic expansion	22%	19%	27%	19%	12%
• Facilities expansion	20%	17%	20%	19%	10%
• Marketing and sales promotion	5%	9%	15%	9%	9%
• Internet commerce	2%	2%	5%	3%	7%
• Advertising	5%	2%	8%	1%	2%

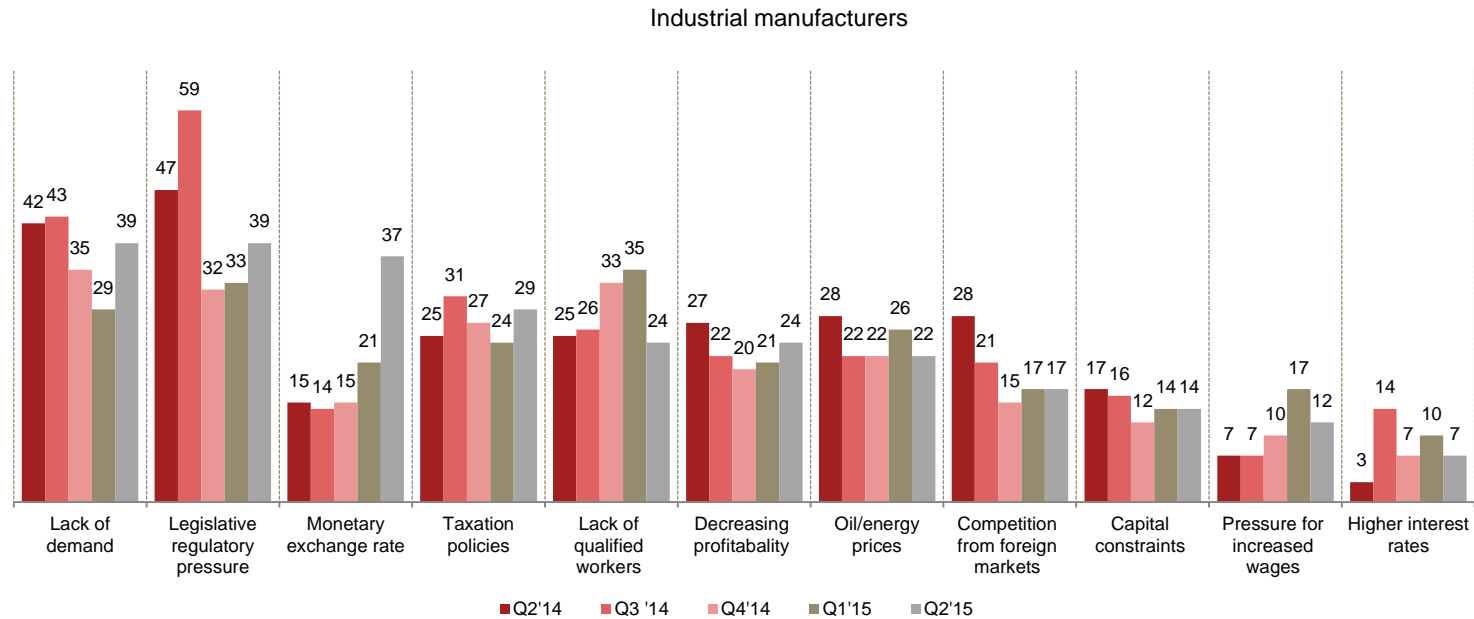
Expected barriers to business growth



Over the next 12 months, will any of the following represent barriers to business growth?

Overall, three chief barriers rose sharply in second-quarter 2015: lack of demand, 39 percent (up 10 points), legislative/regulatory pressures, 39 percent (up 6 points); and monetary exchange rate, 37 percent (up 16 points). Also high is taxation policies, 29 percent (up 5 points). Sharply on the downside this quarter was lack of qualified workers, 24 percent (down 11 points), and pressure for increased wages was also down to 12 percent (off 5 points).

Chart 4.7 Expected barriers to business growth



Note: In 2Q 2015 total respondents = 59



Over the next 12 months, do you expect to participate in any of the following new business initiatives?

More panelists are planning new strategic alliances, 29 percent (up 12 points), and 19 percent are planning joint ventures (same). Fewer panelists are planning M&A activity over the next 12 months, 29 percent (off 14 points from last quarter's high). They are split between purchasing another business (19 percent) and planning to sell part or all of their own business (14 percent). Plans for expansion to new markets abroad decreased 7 points to 12 percent, with 9 percent planning new facilities abroad. Reductions abroad were reported by a net 14 percent, with closing/reduction of facilities abroad cited by 10 percent and reduced activities abroad by 7 percent. Overall, the net number expanding activity abroad appear to offset the net number reducing their activity abroad.

Chart 4.8 Plans for M&A and other business initiatives

Industrial manufacturers					
	2Q '14	3Q '14	4Q '14	1Q '15	2Q '15
New business initiatives (net)	47%	48%	53%	57%	54%
• M&A activities (net)	38%	26%	33%	43%	29%
• Purchase another business	35%	19%	25%	29%	19%
• Sell part/all own business	8%	7%	8%	16%	14%
• Equity carve-out/spin-off	3%	4%	5%	3%	---
• New strategic alliance	17%	21%	23%	17%	29%
• New joint venture	15%	21%	25%	19%	19%
• Expand to new markets abroad	12%	14%	22%	19%	12%
• Close/reduce facilities abroad	8%	9%	7%	3%	10%
• New facilities abroad	10%	9%	18%	12%	9%
• Reduce activity in markets abroad	3%	9%	5%	3%	7%

Note: In 2Q 2015 total respondents = 59

*Special topic:
Stronger US dollar*



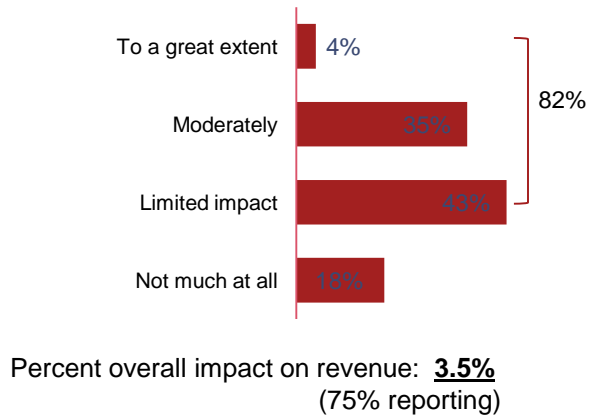


Looking ahead over the next 12 months, will the stronger US dollar impact your company's revenue growth to a great extent, moderately, limited impact or not much at all?

Approximately what percentage overall impact will the stronger US dollar have on your company's revenue growth?

Over the next 12 months, the stronger US dollar is likely to have an average impact of 3.5 percent on these manufacturing companies' revenues, with 82 percent reporting any impact. Thirty-nine percent expect moderate-plus impact, and 43 percent limited impact. Eighteen percent expect not much impact at all.

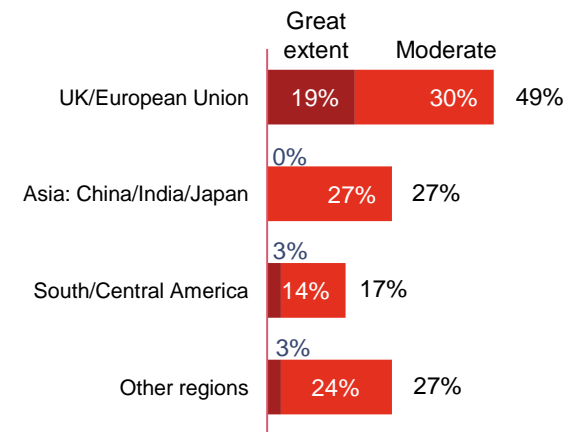
Chart 5.1 Impact of a stronger US dollar on revenue growth



What will be the impact of the stronger US dollar on the following regions over the next 12 months? Will it impact your company's sales to a great extent, moderately, a limited impact, or not much at all?

Internationally, chief regional impact of the stronger US dollar over the next 12 months will be in the UK/European Union: 49 percent, with impact to a great extent (19 percent) or to a moderate extent (30 percent). In China/India/Japan, only a moderate impact was anticipated by 27 percent.

Chart 5.2 Impact of stronger US dollar on regions



Note: In 2Q 2015 total respondents = 49

The stronger US dollar: Continue?

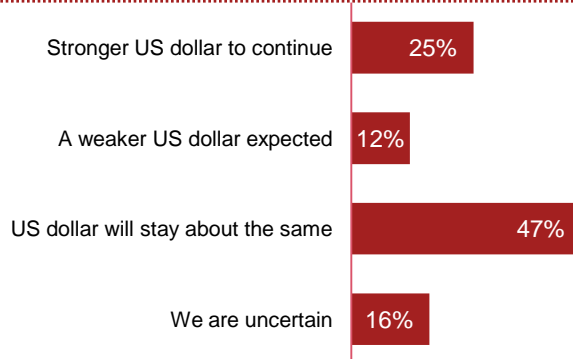


The stronger US dollar: Hedging

Over the next 12-18 months, does your company's top management expect a stronger US dollar to continue, a weaker US dollar, or the US dollar will stay about the same?

Most, 72 percent, of industrial manufacturing companies' top management surveyed believe the US dollar will either stay about the same (47 percent) or continue even stronger (25 percent) over the next 12-18 months. Only 12 percent expect a weaker US dollar. However, 16 percent were not certain.

Chart 5.3 Will the stronger US dollar continue over the next 12-18 months?

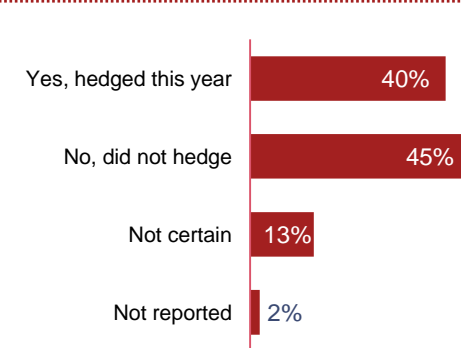


Has your company adequately hedged against the stronger US dollar this year? Was this a regular, ongoing hedge or a special, current hedge?

Overall, 40 percent of panelist manufacturing companies hedged against the stronger US dollar this year, and a similar percentage did not hedge (45 percent). Another 13 percent was not certain and 2 percent not reported.

Hedges were regular, ongoing hedges (88 percent), with 12 percent not certain as to type or not reporting.

Chart 5.4 Have panelist companies hedged against the stronger dollar this year?



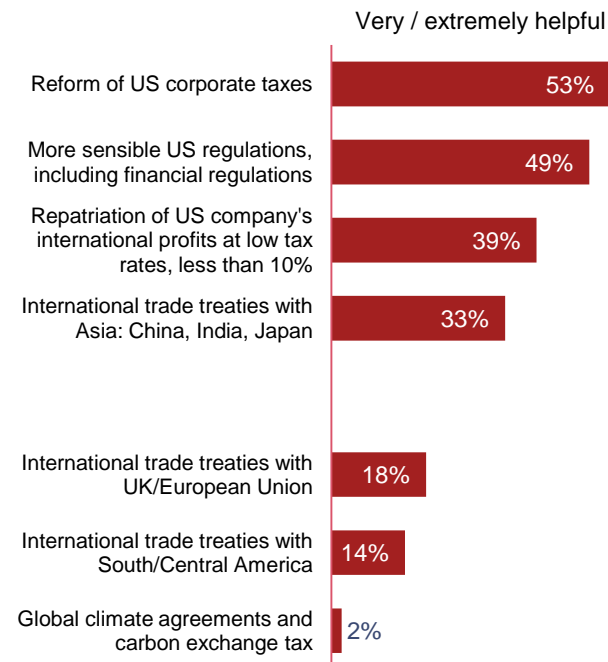
Note: In 2Q 2015 total respondents = 49



In view of the stronger US dollar’s impact on US manufacturing, do you believe the following US government actions would be helpful to firms like your own? Will that be extremely helpful, very helpful, somewhat helpful, or not particularly helpful to your own company’s bottom line over the next 12-18 months?

In view of the stronger US dollar impact on US manufacturing firms like their own, panelists believe reform of US corporate taxes might be helpful (53 percent very/extremely helpful) to their own companies’ bottom line over the next 12-18 months. Three other US government actions were also cited as potentially very/extremely helpful: more sensible US regulations, including financial regulations (49 percent); repatriation of US companies’ international profits at low tax rates, less than 10% (39 percent); and international trade treaties with China/India/Japan (33 percent).

Chart 5.5 US government actions helpful to panelist firms over next 12-18 months



Note: In 2Q 2015 total respondents = 49

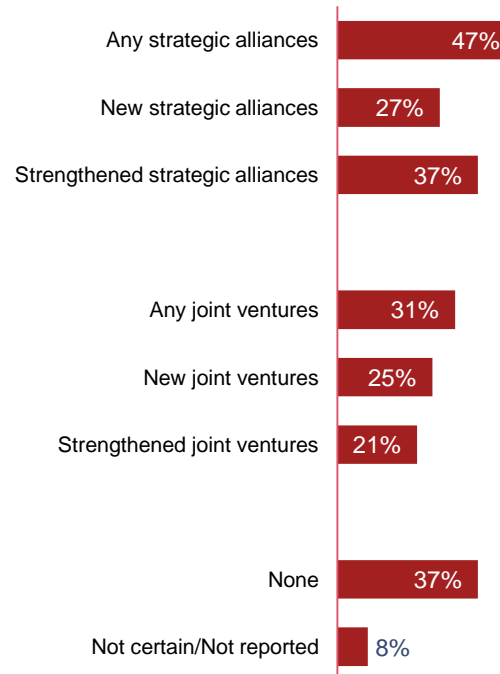


Over the next 12-18 months, will the stronger US dollar cause your own company to make new strategic alliances with international firms, or strengthen the alliances that already exist? What about joint ventures?

Importantly, a majority of panelists (55 percent) believe the stronger US dollar may lead to new or strengthened strategic alliances (47 percent), or new or strengthened joint ventures (31 percent) over the next 12-18 months. A minority, 37 percent, expect none, and 8 percent were not certain or not reported.

It is noteworthy that more panelists expected strengthened strategic alliances than new ones: 37 percent and 27 percent, respectively.

Chart 5.6 Will stronger US dollar cause your company to make new or strengthened strategic alliances and joint ventures?



Note: In 2Q 2015 total respondents = 49



Demographics

Who	Senior executives of US-based industrial manufacturing organizations
Interview dates	March 23, 2015 to June 24, 2015
	Industrial manufacturers (59)
Average number of employees at location	7,988
Average business unit revenue	\$3.29 billion
Average enterprise revenue	\$9.46 billion
Market capitalization	\$11.94 billion
Industry sectors	Products 100% Manufacturing 100%

Methodology

PwC's *Manufacturing Barometer* is a quarterly telephone survey conducted by the independent research firm BSI Global Research Inc. Our regular survey panel consists of senior executives from a geographically balanced sample of large companies in the United States. Ninety-five percent of the panelists hold titles such as president, CEO, CFO, VP of finance, treasurer, controller, internal audit director, or other related title.

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About the research:

The *Manufacturing Barometer* is one in a series of quarterly business outlook surveys from PwC. The survey provides a view on the 12-month outlook for revenue growth, new investments, new hiring plans, emerging business barriers and more. In addition to the business outlook, we hear from our panelists about special issues they face as the business climate changes. Results of the quarterly business outlook surveys and special issue surveys are available at www.barometersurveys.com.

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