# The power of cause and effect

## What does 2009 hold for an electronic components manufacturer?

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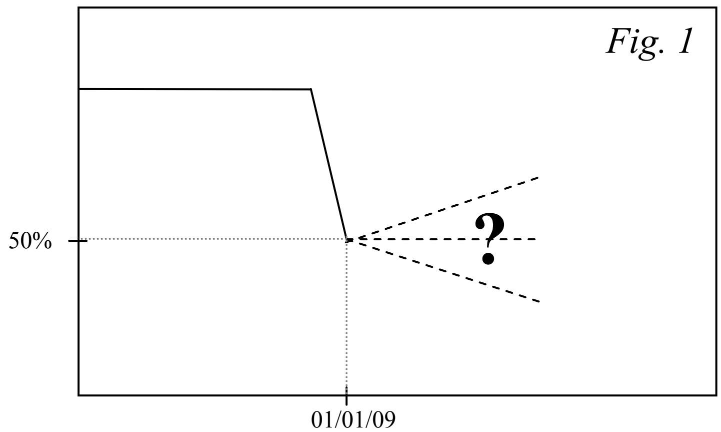
Last week, we spent time with a group of top managers of a Japanese company, a large electronic components manufacturer. Right from the start, it became apparent to them that they have to answer the biggest business question they ever faced. Can it be that almost everyone is grossly misreading the current situation; the newspapers, the investors, and even the most practical and experienced people – the top managers of the large companies? Is it possible that they are all mistaken, even though the relevant facts are readily accessible and all the causalities are well known? One does not expect to analyze a situation that the prevailing consensus regards as a major crisis, actually as the biggest crisis of the last 50 years, only to realize that it is just a relatively small downturn and, provided that the proper actions are taken, can be the best opportunity for growth. After four days, they reached the conclusion that, as incredible as it is, and provided the proper actions are implemented, 2009 is likely to be the best year in their company's long history, and they are going to do their best to convince their company to act accordingly. Here is the analysis that was exposed to them. Would you reach a different conclusion than the one they arrived to?

Let's start by describing their situation. In November 2008, the media was filled with warnings that the huge financial crisis – the collapse, of so many pillars of the financial world, which was triggered by the scandal of the subprime – is quickly developing into an economic crisis. In line with the media warnings, the company started to feel the impact at home. Their sales started to decline in November, and in December they registered the biggest meltdown in sales they had ever seen – incoming orders dropped by 50%. It's not a secret that, not just them but all their competitors, are now contemplating (some started) a massive cut in capacity, including stopping the employment of many thousands of people. The question that every company in their situation is asking (and around the world there are many companies in their situation) is: what forecast should guide their actions in the coming year?

After experiencing such a drastic fall in sales, and when the consensus is that the world economy started a major downturn, it is clear to the company's management that urgent steps must be taken to adapt to the new reality. To make things even worse, their pre-crisis forecast for 2009 predicted a continued increase in sales, and accordingly capacity was increased. As much as they would wish to avoid it, they realize they too will have to cut capacity and let go many workers. But in order to make a responsible decision, they should figure out to what extent capacity reduction is needed: how low are their sales expected to be in the following year? Will it continue falling, or stabilize around the new low figures? Or maybe, hopefully, begin to climb up soon? Figure 1 is a graphic representation of the uncertainty they are facing.




It is very difficult to operate under such huge uncertainty, but in order to reduce the uncertainty more relevant data is needed. Is there any additional data that can be used to provide a better forecast? Data that will reduce the uncertainly they are facing?

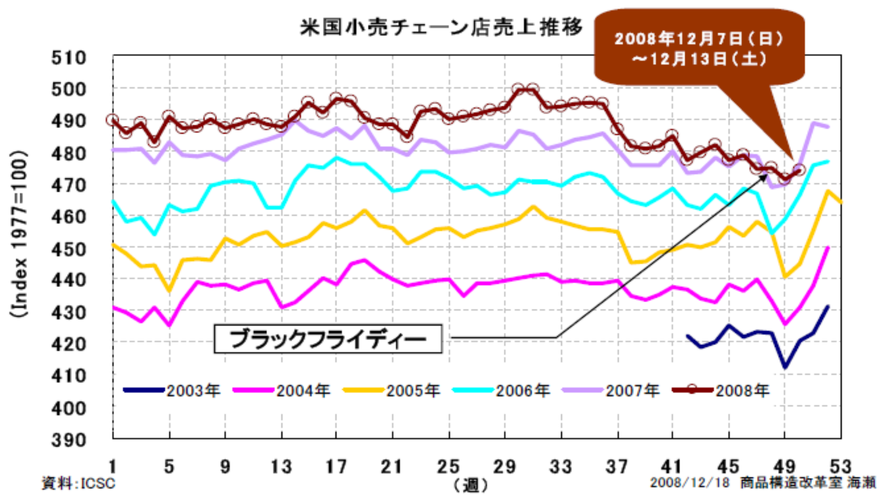
Of course there is. This company, like most companies, is a part of a supply chain. They sell their products (mainly) to consumer electronics manufacturers (OEMs) that in turn sell their products to retailers that sell to the end consumer. Overall, what the retailers sell has to be manufactured by the component producers. So, to get a good view into the future, one has to examine what happened recently to the sales of retail to the consumer. To get some hard data, we called our friends in Nikkei magazine and asked “What happened to retail sales of electronic consumer goods in December?” The surprising answer was “Relative to last year, it increased by 14%”.

Most probably, you are as surprised as they were. Why? Because we all read that sales to consumers went down. Dramatically. The first examples that jump into everybody’s mind are cars and real estate.

Cars and real estate are unique in the sense that almost nobody buys them with cash; they are credit-dependent purchases. So, no wonder that when the financial system became paralyzed, when it became much more difficult to finance a new house or a new car, the sales of these credit-dependent products took a nose dive. Unfortunately, we extrapolated from those very visible products to the market in general which is not credit-dependent; we erroneously took those two unique cases as representative examples.

Relying only on the information that we received from our friend in Nikkei magazine, aren’t we facing the danger of doing the same mistake, the mistake of extrapolating from one data point? Relying only on the sales in one country, Japan? Their company is selling over 80% of its products outside Japan.

We were looking for data about the situation in the US, the country of origin of the financial crisis, and therefore the country one expects that the initial impact is the biggest. And, just to be on the safe side, we were looking for the global retail picture and not just consumer electronics sales. Before long, the answer was provided by their head office, the encompassing reliable data we were looking for. Figure 2 presents all retail sales in the US for the past few years, published by the International Council of Shopping Centers (ICSC)[1].




Looking at this graph, no evidence of "a huge economic crisis" is showing. Instead, it seems that retail sales stay boringly stable during the relevant period (the last few months of 2008). Even at its lowest, sales level doesn't drop below 2007's figure. If one insists on being meticulous, the small decrease in the last 5 months (weeks 30-50), from almost 500* to about 475*, constitutes a drop of 5%; needless to mention, this is a far cry from the 50% scare. So, after all, Japan is not an exception – this graph provides a solid proof that the market consumption is not experiencing any meltdown.

This is a far from anything the company's management had expected. If no crisis occurred in retail, they are facing a big mystery: how come they and their competitors, actually all the electronic components manufacturers, are experiencing a huge drop in sales? What can explain the sharp drop in sales they are experiencing, while the demand, as reflected by retail's sales, is so stable?

The answer is that retailers also read newspapers. The alarming headlines created the impression of an economic crisis, and retailers are especially sensitive to such developments. Typically, a significant part of the inventory they hold has a finite market life and the nightmare of a retailer is to get stuck with obsolete merchandise. For this reason, the recession warnings brought retailers to almost instinctively take immediate precautions to reduce their inventories.

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[1] Founded in 1957, the International Council of Shopping Centers (ICSC) is the global trade association of the shopping center industry. Its 70,000 members in the U.S., Canada and more than 80 other countries include shopping center owners, developers, managers, marketing specialists, investors, lenders, retailers and other professionals as well as academics and public officials. As the global industry trade association, ICSC links with more than 25 national and regional shopping center councils throughout the world.

To lower inventories, many retailers gave substantial price reductions in December[2] to encourage sales, while cutting down on incoming inventories; ordering less from their suppliers.

This started a rolling snowball effect. Due to the retailers' decision to reduce inventories, the OEMs now experienced a substantial decrease in orders. For the OEM, this significant sales reduction was interpreted as a clear indication that the warnings about an economic crisis are materializing. Like the retailers, they too reacted by lowering their inventory levels. Lowering inventory meant that they lowered their purchases from their suppliers above the level their sales had dropped. No wonder that the electronic components manufacturers suffer a dramatic 50% decrease in sales even though consumer demand stayed about the same. The same amplifying effect took place when the components manufacturers, in turn, dried up their orders from their material suppliers – which experience an alarming sales drop. The media don't have any lack of "stories" to now further fuel the impression of an economic crisis.

So, when will the internal orders of the supply chains be again aligned with the real market demand? This is not a big mystery: when the surplus inventories will be flushed out. Since retail typically holds 3-4 months of inventory, probably as this article is written, retail starts to increase its orders from The OEMs. It stands to reason that retail is still cautious, and therefore will order in smaller quantities than it is used to, albeit more frequently. The OEM's, once experiencing this increase in demand, will follow in their footsteps and increase their purchasing level – yet they will not act immediately, but rather wait to make sure it is not a fluke. Since OEMs hold about 1.5-2 months inventory, the component manufacturers should start to see a pickup of their sales already in February, and at around April the orders-drop crisis that they experienced will come to an end. But on what level will orders stabilize? In other words, since order levels will be again in-line with consumer demand, what is the market demand expected to be?

If a company business is rice, it should not expect that even a big economic change will have a big impact on the market demand for its product. The opposite is true for a company that deals with relatively expensive jewelry. But for most products, the Gross-Domestic-Product is an excellent representation of the market demand, unless your industry has a specific characteristic that was impacted (like the real estate industry is strongly impacted by the credit crisis). So to get a reasonable forecast, we were looking for what the economists are now predicting for next year. Figure 3 is a typical forecast.

[2] Substantial price reduction means that a report of a few percents drop in dollar sales of retail, actually means that the number of units sold had gone up.

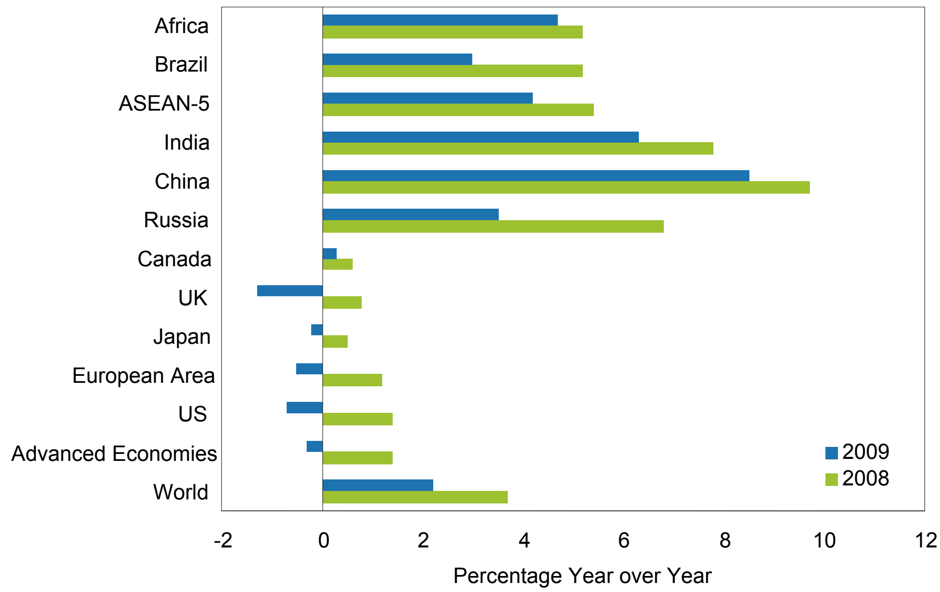



**Fig. 3 - Projected GDP**

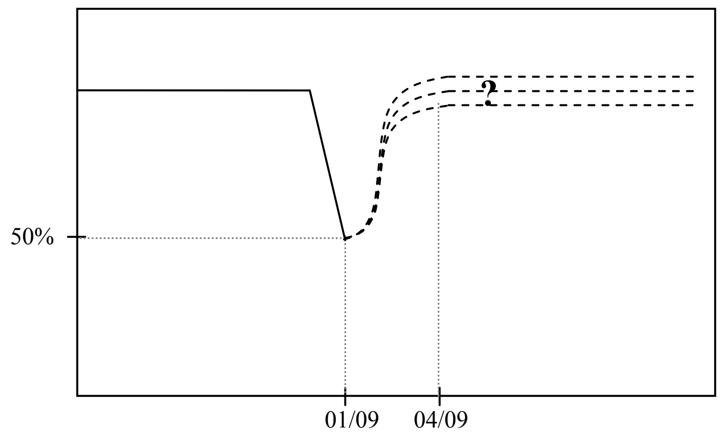
Economists also read newspapers, and being human they are also impacted, but their statistical tools force them to evaluate all data sources. So even though the title attached to most such graphs is somewhat panicky, as you yourself can see the forecast of GDP is actually quite comforting. Yes, every single country will be affected for the worse, but the impact is very modest relative to the impression that their current drop in sales gave. No matter in which market you operate, the expected change is just few percent.

Now we have a pretty good idea of how the company sales will be next year; the sales level is expected to stabilize around last year's figure, give or take few percentage points. To capitalize on these sales, the company has to take two types of actions. Actually, the first type is a non-action, do not cut the capacity. Cutting manpower is painful, and hiring many times involves the long process of training. Companies that lay people off now will most likely be slow to respond to the sales picking up shortly thereafter.

The other type of action that is required is to help the material suppliers. As we already noted, those companies were hit the most, and they will see the recovery the last. If the material supplier is a small company, it might not last the transition period. The component manufacturer might not be able to fully capitalize on the increase in sales due to material shortages. Provided that these two types of actions are taken, Figure 4 is a schematic presentation of the expectations for 2009. Compare it to Figure 1 to get a better grasp of the title of this article.

Fig. 4 - Revised forecast for 2009




Unfortunately, most companies will not follow the above clear path; rather they will act in panic and trim their work force. Many have already done so. That implies, that for a while, until the capacity will be restored, retail will be struggling to get merchandise and the OEM will be struggling to get components. For the companies that will act sensibly, a window of opportunity to increase market share is opening.