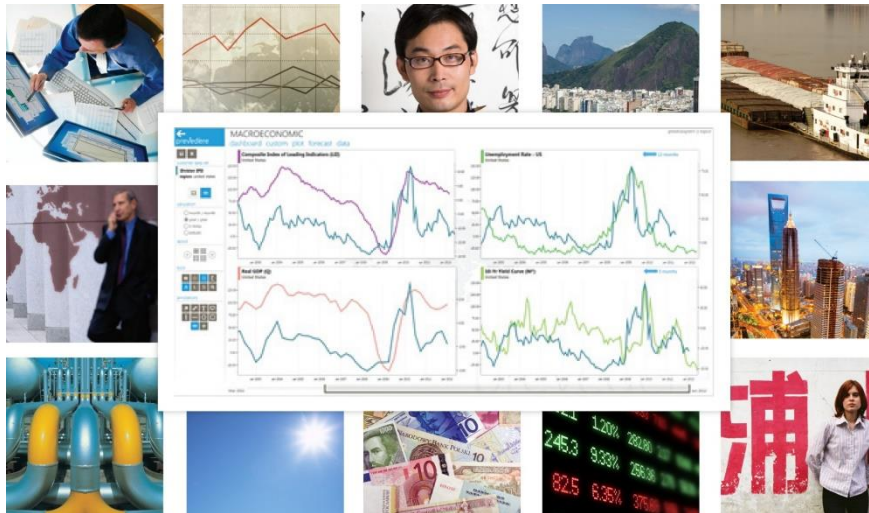


prevedére

Software that makes **sense** 



*The Ultimate Retail Bargain:
Leveraging External Data*



Seasonal shifts in consumer spending present a problem for retailers. They tend to look inward to solve the issues associated with seasonality and wonder whether they should adjust inventory, tighten up their loss prevention tactics or improve their merchandising to increase profit during the months when spending slows.

A more impactful approach is to examine the total economy to find signs of changes in consumer behavior that will give you a chance to make adjustments to your business strategy and keep you ahead of the competition.

Is it possible to use economic forecasting to solve seasonal problems?

We learned from Goldman Sachs partner leading retail analyst Joseph H. Ellis, that economic forecasting has become removed from the general economic conversation and its purpose relegated to the academic portion of the economic community using methods too obtuse and complicated for the average retail strategist to digest or make use of.

Often times, the multitude of causal factors and overwhelming number of weekly, monthly, and quarterly releases of data tend to obscure the core indicators that are the best predictors of macroeconomic direction.

Identifying and monitoring economic indicators that are relevant to the retail industry does not need to be difficult or confusing. Tracking methods employed using a consistent and systematic approach will help to give a clear picture of which economic indicators are significant to you and how to read them so that forecasting is made easier.

In the first two quarters of 2012, 71% of GDP was made up of consumer spending.

Intuitively, there is a cause and effect relationship between consumer spending and retail sales. What retail strategists *need to know* is that they can monitor trends in consumer spending by comparing their retail sales to *Real Disposable Personal Income*. This is the first indication of the direction that consumer spending will head in and a way for retailers to gain an advantage over their competition by forecasting where the economy is headed.

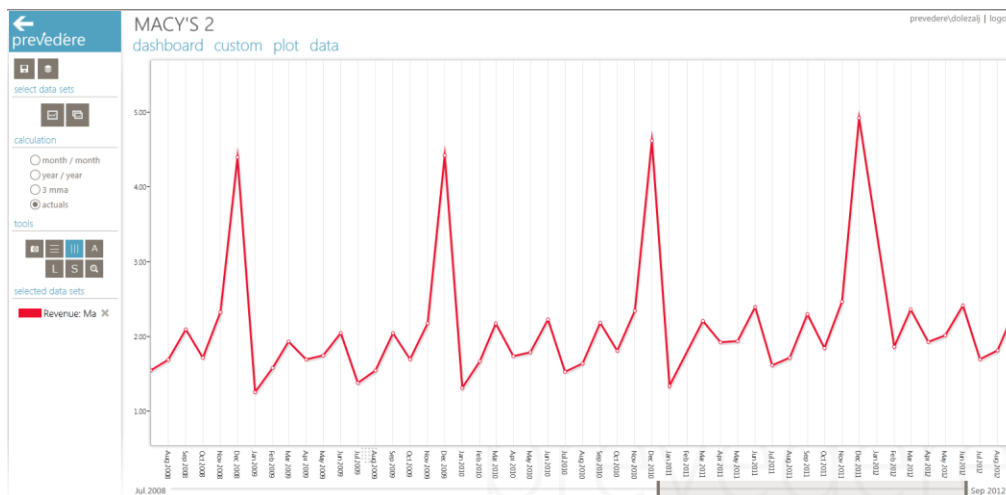
Here are the 3 steps to effective economic forecasting:

Step#1 – Put your data in a chart using a moving average and show it in terms of year-over-year rate of change.

Retail economic data, such as monthly same-store sales, is typically presented by comparing the current period to the previous period and adjusting for seasonal differences caused by strong (eg. holiday shopping) or weak (e.g. weather related) activity. Volatility from month to month or quarter to quarter makes reading the data “noisy” and using it to make business decisions nearly impossible.

Macy’s Inc. is one of nation’s largest retailers, with 2011 sales of \$26.4 billion. Like most retailers, the seasonal swings in consumer spending make it harder to grasp the overall trends in the economy. We looked at Macy’s revenue for the last 48 months to see if we could determine what they can expect their same-store sales to be.

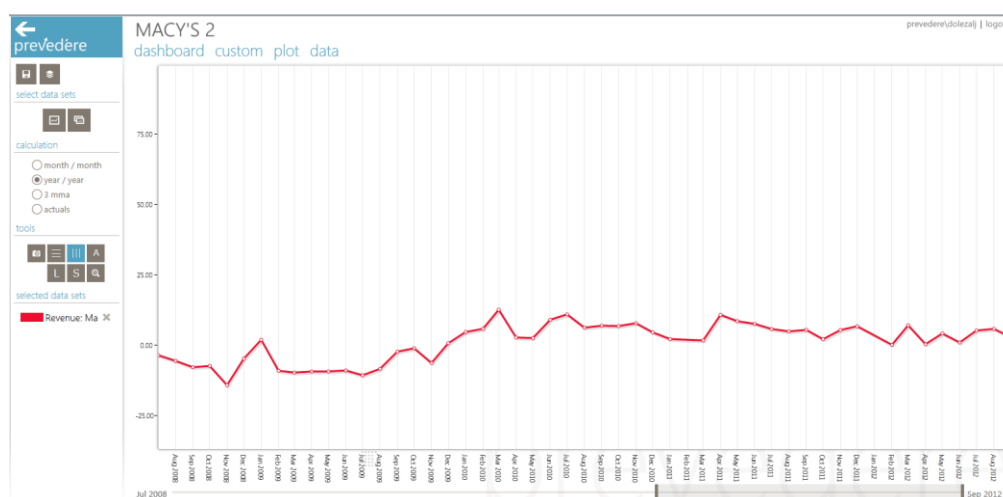
Looking at the first graph, you can see the sharp difference between the spike during the bolstering holiday season and the ups and downs that occur throughout the rest of the year. When you compare any one month to the previous month’s sales, this graph allows you to see that seasonal variance exists, but not difficult to gain a deeper understanding of the bigger picture.



At this point many retailers will seasonally adjust their data in order to capture short term changes, but this tricky process that attempts to fix everything from shifts in public mood to changes in weather patterns skews the data to the point that it eliminates its predictive effectiveness.

A better way to view the data is by looking at the same information using a moving average and comparing it to the *same period a year before*, you can turn data that is unmanageable into data where uptrends and downtrends emerge and it becomes readable.

Here you can see a smoother line begins to appear that gives you a better idea of what are the real changes in retail sales.

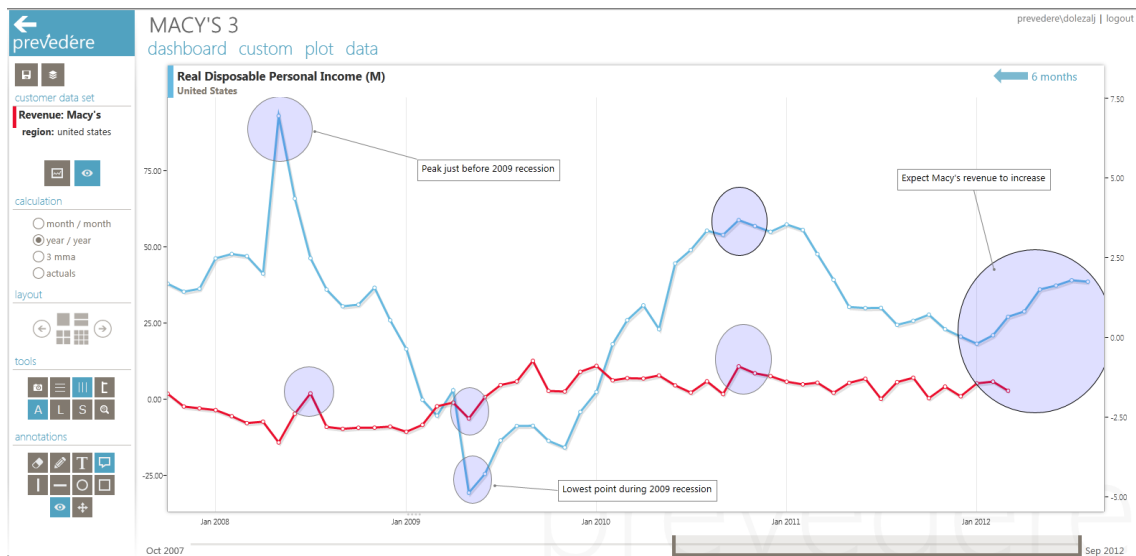


Step #2 – Find an economic indicator you want to compare to your internal series forecast and put it on the same chart.

To gain predictive value from your chart, you must plot it with a series you think may lead your internal data series. This is going to tell you if the relationship between the two sets of information has predictive value.

For example, if you are looking at your monthly same-store sales, and have an intuition that the *Real Disposable Personal Income* is a leading indicator of your business, the answer will be in the data when we present it in the right way.

Take a look at the way that the peaks and valleys begin to align when Macy's same-store sales is trailing *Real Disposable Personal Income* by six months. That's about how long it takes Macy's to feel the changes in the amount of money people have to spend and so by watching this indicator retailers can make more informed decisions about how to change their business model accordingly.

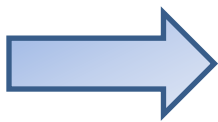
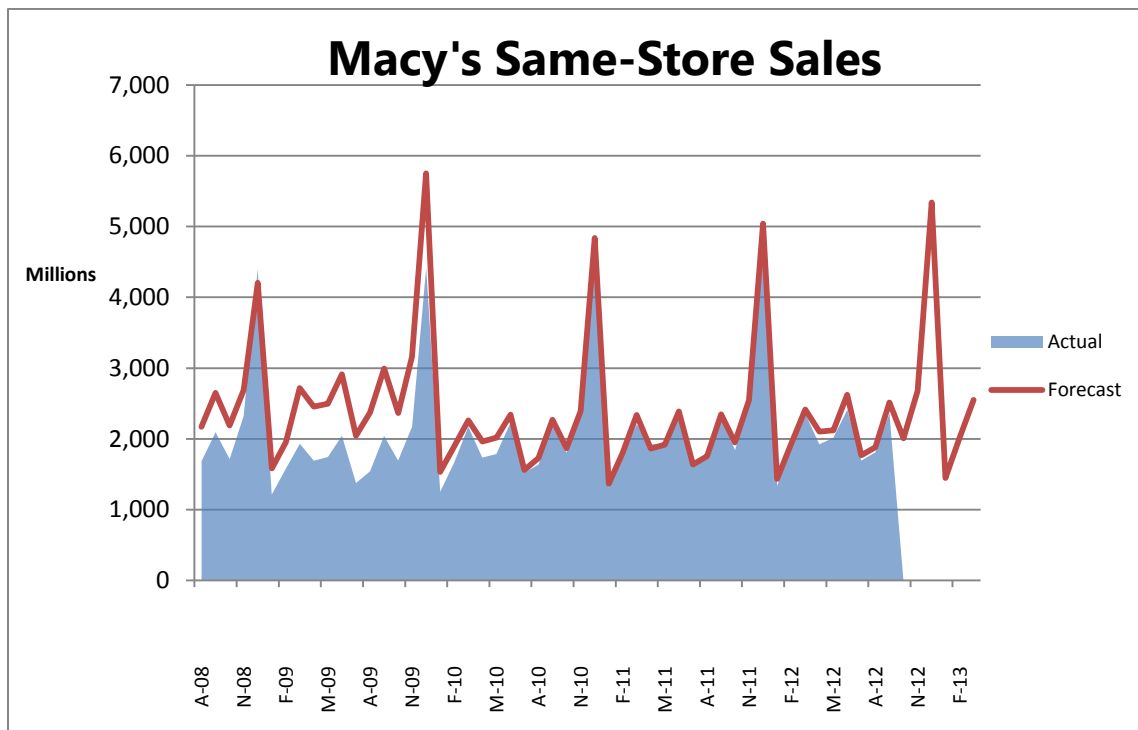


Now you know the answer to whether the *Real Disposable Personal Income* is a leading indicator of Macy's same-store sales – it is! You can do the same for your retail same-store sales using economic indicators that you think are driving your business.

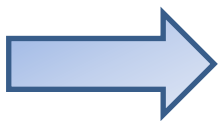
Step #3 – Check the accuracy of your results.

Now that you know you have an indicator that has predictive value, find its accuracy. You will want to know how reliable the particular economic indicator you have chosen is, since you will be basing business decisions on it. Forecast its accuracy, along with other indicators you think are potentially valuable and then create charts to determine which are the most influential on your retail business.

When we looked at Macy's same-store sales using a year-over-year moving average and forecasted the data for a six month lead, we were able to predict the Macy's same-store sales figures with an average accuracy rate of 88.72% of actual sales using data going back 10 years.



Using a year-over-year moving average method to look at your data, you can remove seasonal shifts that distorts the big picture.



Simple cause and effect charting can help you identify leading macro and microeconomic leading drivers of retail sales.



Changes in *Real Disposable Personal Income* appear to effect retail sales and can be used as a predictor for trends in retails sales forecasting.

According to studies by the Harvard Business Review 85% of a company's performance is the result of external factors and according to Wharton Research companies that truly identify and verify leading external drivers earn greater than 5% higher return on equity over competitors.

Leading External Drivers are the most important predictor of a retail company's financial results.

About Prevedére

Our software makes external driver identification and analysis an automated and repeatable process.

Prevedére combines external economic data expertise with years of software development experience to create a true breakthrough in analytics and reporting. At Prevedére we have learned what kind of information decision makers expect and need to make the right fact-based decisions to maximize their shareholder's value. Our software application is designed to quickly provide answers in a clear and easy manner for all your C-Level Executives and Board Members.

Prevedére's external data expertise ensures your company has the right information and our software is designed to automatically collect, identify and report on your external drivers. The key to our software is our ability to identify what impacts your bottom line then leverage it to forecast your upcoming results and long term growth opportunities.

Just assuming external drivers are affecting your results and simply copying and pasting them into presentations for executives is not enough in today's fast changing global economy. Prevedére partners with you to provide the upfront services and software to get your company up and running with Retail Analysis on the most important external drivers affecting company results.



References:

Smith, Michael, The Gartner Business Value Model: A Framework for Measuring Business Performance, March 2010.

Ellis, Joseph H., Ahead of the Curve, A Commonsense Guide to Forecasting Business and Market Cycles, Harvard Business Review, , October 2005.

Ellis, Joseph H., Seeing the Economy: An Accessible Approach to Economic Forecasting.

Ittner, Christopher D. and Larcker, David F., Coming up Short on Nonfinancial Performance Measurement Harvard Business Review, November 2003.