Using International Economic Time Series Data

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In Determining Lost Profits

Forensic engagements that involve determining <u>lost profits</u> or other <u>economic damages</u> often require a â€œtime seriesâ€ of economic and market data. When the lost profits or other economic damages engagement involves comparing international companies, multi-country economic data, and international market data, the challenges in locating meaningful data become especially difficult. In this article, the authors share how a time series analysis was used in an engagement, resulting from a breach of a franchise in a European Union (EU) country. To perform the time series analysis, the authors needed to gather multi-country economic data to determine the alleged lost profits and/or failure to open stores over a five-year period with reasonable certainty.

Introduction

Forensic engagements that involve determining lost profits or other economic damages often require a â€œtime seriesâ€ of economic and market data. For example, the expert opinion could be dependent upon a sequence of numerical data points in successive order

that tracks the movement of specific selected data points over a specified period of time, with data points recorded at regular intervals. Examples that come to mind include the tracking over time of Gross Domestic Product (GDP), the London Inter-bank Offered Rate (LIBOR), the price of one ounce of gold, the Dollar/Euro exchange rate, per capita income or the price per gallon of oil or milk.

When the lost profits or other economic damages engagement involves comparing international companies, multi-country economic data, and international market data, the challenges in locating meaningful data become especially difficult. During the course of one such engagement, resulting from a breach of a franchise in a European Union (EU) country, the authors needed to gather multi-country economic data to determine the alleged lost profits and/or failure to open stores over a five-year period with reasonable certainty.

Plaintiff, franchisor, argued that the defendant, franchisees, were not making the minimum-required levels of sales and profits and had failed to open the minimum number of mandated stores. Defendant franchisees contended that they had received oral permissions to continue operating, notwithstanding the lower-than-agreed-upon levels of sales, profits, and new store openings.

Data and/or Research Needed

To complete the proper financial analyses in this litigated dispute, the authors needed to gather relevant and reliable data in the following broad categories:

- Gross Domestic Product. Because the products being sold tracked closely with Gross Domestic Product (GDP), the authors needed to find the GDP for several EU countriesâ€"the subject EU country at issue as well as other EU companies used by Plaintiffâ€™s expert as benchmarks. As Plaintiffâ€™s expert had included U.S. GDP in the financial analyses, that data additionally became necessary to make certain necessary accounting adjustments.
- Annual personal disposable income. Additionally, the authors needed to consider the annual personal disposable income of populations in several countries as this metric constituted benchmark indicators representing the amount of money that households had available for spending and saving after income taxes in the period under analysis. This data had other important impacts on the feasibility of sales revenues in the economic damages model.
- Currency exchange rates. In this engagement, all the foreign defendant franchiseesâ€™ accounting books and records were recorded in the local countryâ€™s currency. However, the accounting books and records of Plaintiff franchisor recorded all its transactions in U.S. dollars and the arbitration was based on determining lost profits and other economic damages in U.S. dollars.

- Industry/market data. In order to complete the financial analysis leading up to a reasonably certain determination of lost profits, the authors additionally needed solid specific data regarding the total amounts of purchases, shipments, and consumption of the Defendant franchisees' products in the EU—in part to deal with arguments regarding capacity in the economic damages modelling.

Finding the Data

The first question the authors asked themselves when trying to decide where to find sufficient relevant, reliable, and competent data was "who would care enough about this data to publish it?" In the case of international economic data, like GDP and personal disposable income, the first source of data that came to mind was international organizations such as:

- The International Monetary Fund (IMF)—an organization of 189 countries headquartered in Washington D.C.
- The World Bank—also in D.C., which consists of five international organizations that make loans to underlying countries and, among other data, maintains the European Union's database of statistics,
- The Organization for Economic Co-operation and Development (OECD)—an intergovernmental economic organization founded in 1961 to stimulate economic progress and world trade with 36 member countries.

When determining a data source, it is important to determine if that source is complete, relevant, and accurate. Stated another way, "can we trust the data? All three of the above-listed organizations have been around for decades and their data is used by many analysts, including global policy makers, academics, and economists.

For this project, the authors turned to the Organization for Economic Co-operation and Development (OECD)—an intergovernmental economic organization. In addition to providing data and analysis on its 36 member countries back to the 1960s, the OECD also offers content on 80 countries. The OECD iLibrary provides access to 79 databases with seven billion data points making it somewhat daunting to find what exactly what one is looking for.

When using the OECD iLibrary, the authors suggest spending some time getting to know how the site is organized and selecting one of the following options: by one of 17 "themes," by "country," by "theme and country," or by "statistics." (The OECD iLibrary "themes" are: Agriculture and Food; Development; Economics; Education; Employment; Energy; Environment; Finance and Investment; Governance; Industry and Services; Nuclear Energy; Science and Technology; Social

Issues/Migration/Health; Taxation; Trade; Transport; and Urban, Rural, and Regional development.) In most cases, the user of the OECD iLibrary can limit their search by time period and download the results into a spreadsheet.

Regarding currency exchange rates, the authors considered several sources. After checking the authority of the database, the authors asked questions such as:

- Where do the assemblers of the rates get their data?
- How current is it?
- Is historical data provided?
- How often is it updated?
- Am I looking at updated data?
- Can I download the data into Excel?
- What is the cost of the data?
- How am I going to retain the data in files so that it can be produced after the expert report is issued?

Selecting the Data

In the specific case at issue, the authors opted for XE Currency Data, a company that provides rates for every world currency gathered from 160 global sources. The authors were able to pull monthly average exchange rates by specific date for the Dollar, the Euro, and other currencies needed during the engagement. The authors compared that data with data from other sources before determining the data was dependable and reliable. Plus, its functionality made it easy to download the time series quickly and efficiently.

Finding information on the Defendant franchisees' specific and unique industry was far more challenging than finding economic indicators and exchange rates. The authors searched several sources, including Eurostat, the OECD, the World Bank, Profound, and MarketResearch.com for reports. Additional searches were performed using Factiva, Lexis/Nexis, and ProQuest ABI Inform for trade journal articles and news.

MarketResearch.com, referred to above, is an aggregator for market research reports from over 720 publishers. The authors found it helpful to register (free) with the database for better search capabilities. For many of these reports it is possible to purchase individual sections. A good thing, as these reports typically run from $800 to thousands of dollars. The authors found it useful and even harvested information by reading each report's table of contents and description. The amount and depth of these sections depend on what the publisher is willing to share to convince the reader to buy the report. The ProQuest's ABI Inform database provided access to thousands of full-text journals, key business and economics periodicals, market reports, and dissertations.

The most relevant research found in the specific engagement circumstances was ultimately

found to be in various *Retail Reports* by Business Monitor International Ltd. BMI Research (owned by the Fitch Group) is a reputable research firm that provides macroeconomic, industry, and financial market analysis, covering 24 industries and 200 global markets. It was founded in 1984 as Business Monitor International. The BMI retail reports provide consumer and retail spending by sector.

Many local public, academic, and government libraries provide access to ABI/Inform that is a highly regarded source of U.S. and international business, industry, and market news. In addition to the BMI reports mentioned above, researchers can find within the database, for example:

- Over 50 million company records.
- 50 years' worth of actual and forecasted economic data for the G20 countries from Economist Intelligence Unit.
- Over 10,000 business cases and case studies.
- Full text of *The Wall Street Journal*, *The Economist*, *Financial Times*, and *Australian Financial Review*, among hundreds of smaller newspapers.
- Expert market insights from Euromonitor, Dun & Bradstreet, Plunkett Research, Barnes Reports, Oxford Analytica, Oxford Economics, and others.

If your local library does not have ABI/Inform, consider a subscription to the Mechanics Institute because it has the ABI/Inform database within its collection. As the Mechanics Institute, located in San Francisco, is available virtually, it represents an economic way to gain access to many valuable and useful databases.

How the Data was Used in the Expert Report

After gathering relevant and reliable data, and listing the data sources relied upon in the information and/or documentation section of the expert report, the data was used to demonstrate that sales of the defendant franchisees' declined for external macroeconomic reasons other than noncompliance with the oral modifications of the agreements with the plaintiff franchisor. Additionally, the expert report was able to use the data to demonstrate that the opposing <u>expert witness</u> had not performed analyses of key trends, notwithstanding that the data did exist to perform those analyses.

The primary basis for opposing expert witness' lost profits analysis hinged on the assertion (but was in fact only an assumption) that defendant franchisees' sales had declined as a proximate cause of defendant franchisees wrongly diverting sales to related parties at a particular key date. However, correlation does not prove causation and the assertion/assumption of opposing expert witness was wrong for many reasons, including that the data gathered demonstrated that sales of all market participants significantly declined as a result of factors beyond anyone's control at the particular key date.

The data assembled was well used in other aspects of the expert report. The currency exchange rate data clearly demonstrated that opposing expert witness had used year end vs. average currency exchange rates (sales and associated expenses were earned evenly during the year) during periods of declining currency exchange rates, materially inflating the ending lost profits opinion. The data assembled regarding demographics and the annual personal disposable income of the populations in the U.S. and the EU was used to disprove opposing expert witnessâ€™ assertion that average same store sales in the U.S. could be used as a benchmark for average same store sales in the EU.

Conclusion

Business valuation, lost profits, and/or other economic damages engagements involving international companies are becoming more common. In fact, because of the current COVID-19 pandemic, the authors contemplate that business valuation and economic damages experts may see more litigation or arbitration involving franchisees and franchisors. As such, the authors suggest that you should consider obtaining an additional understanding of the various industry, economic and financial data research resources available internationally as well as building your own online â€œfavoritesâ€ library of reputable sources, such as the OECD, XE Currency Data, and your local libraryâ€™s business database collection.

At some point, however, the business valuation and/or economic damages expert likely will need to turn for help to those who daily provide fee-based accurate, relevant, and customized research. That step may ultimately reduce total engagement time while improving the reasonable certainty requirement necessary for submitting expert reports in litigated or arbitrated proceedings. Â

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Michael D. Pakter has more than 40 years of experience in accounting and forensic accounting, business economics, and investigations in numerous industries and diverse engagements, including more than 20 years of experience in economic damages and business valuations. He has submitted expert reports in several jurisdictions and testified

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