Curriculum Vitae

DAVID G. CAMPBELL
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SUMMARY

David Campbell has more than 20 years of experience performing statistical and econometric analysis for clients in business and litigation consulting. His consulting practice focuses on healthcare, antitrust, and intellectual property matters. He has broad experience in a range of industries, including healthcare, biotechnology, pharmaceuticals, computer equipment, software, automobile parts and assembly, railroads, motion picture production and distribution, aerospace, telecommunications, metals, petrochemicals, natural gas pipelines, food processing, and real estate.

Mr. Campbell has been a visiting professor of economics at Pitzer College and Whittier College, where he taught econometrics, industrial organization, finance, and economic theory. He has also taught courses in antitrust economics, statistics, macroeconomics, and managerial economics at Loyola Marymount University, the University of Maryland, and Pepperdine University's MBA program.

EDUCATION

Ph.D., Economics	University of Maryland, 1993
B.A., Economics	UCLA, 1980

PRESENT EMPLOYMENT

Director, Berkeley Research Group, Washington, DC and Los Angeles, CA

PREVIOUS POSITIONS

Wicomico Analytics Group LLC, Pasadena, CA
President, 2006-2015

Pitzer College, Claremont, CA
Visiting Assistant Professor, Economics, 2010-2011

Center for Public Policy, Indian Inst. of Management, Bangalore, IN
Visiting Professor, 2007-2008

Whittier College
Visiting Assistant Professor, Department of Economics, 2003-2006

Analysis Group/Economics, Los Angeles, CA
Vice President, 2000-2003

Capital Economics, Los Angeles, CA
Director, 1998-2000

KPMG Peat Marwick, Los Angeles, CA
Senior Manager, Litigation Services, 1995-1998

Arthur Andersen Economic Consulting, Los Angeles, CA
Manager, 1993-1995

The Brookings Institution, Washington, DC
Research Associate, 1990-1992

University of Maryland, College Park
Adjunct Instructor, Economics, 1988-1990

Antitrust Division, U.S. Dept. of Justice, Washington, DC
Research Analyst, 1982-1986

COURSES TAUGHT

Principles of Economics, Intermediate Microeconomics, Intermediate Macroeconomics, Econometrics, Statistics, Industrial Organization, Finance, Game Theory, Women in the Labor Force, and an MBA Seminar in Antitrust Economics.

PROFESSIONAL AFFILIATIONS

Research Associate, Center for Economic Studies, U.S. Census Bureau 1992-2002

Contributor, M.I.T. International Motor Vehicle Program, 1991-1993

Member, American Economics Association

Member, Antitrust and Intellectual Property Sections, American and Los Angeles Bar Associations

Member, Western Economics Association International

HONORS AND AWARDS

Teaching Excellence Award, Dept. of Economics, University of Maryland, 1988 and 1989.

Outstanding Service Award, U.S. Dept. of Justice, 1986.

Byron Holland Scholarship, Dean's List, UCLA

PUBLICATIONS/PRESENTATIONS

"Measuring Pollution from Space: Using Remote Sensing Data to Answer Some Questions About Industrialization, Globalization and the Environment," Paper presented at the Indian Inst. of Management – Bangalore, Summer Public Policy Conference, June 2008. With Yang Liu and Brian Rheingans.

"Revenge on the Nerds: Disproving the 'Moneyball' Hypothesis in Baseball," Paper presented at the Western Economic Association International meetings, July 2006. With Baylor Love.

"Money Does Matter: Simultaneous Equations Bias and the Educational Production Function," Paper presented at the Western Economic Association International meetings, July 2006. With Fatos Radoniqi.

"Catch-up or Creation: Productivity Growth in U.S. Manufacturing," Paper presented at the Western Economic Association International meetings, July 2001.

"Productivity Growth in U.S. Auto Parts Suppliers." MIT International Motor Vehicle Program, December 1993, with Stephen Herzenberg.

"Productivity Dynamics in Manufacturing Plants," Brookings Papers on Economic Activity: Microeconomics, pp. 187-267, 1992, with Martin Baily and Charles Hulten.

"The Distribution of Productivity in Five Manufacturing Industries," paper presented at the NBER Summer Institute's Program on Productivity, July 1991, with Martin Baily and Charles Hulten.

REPRESENTATIVE CONSULTING ENGAGEMENTS

Antitrust

- Worked on behalf of the plaintiff, a shipping consultant, in a restraint of trade case against two airfreight carriers. Analyzed evidence of a group boycott by the carriers in refusing to deal with third-party shipping consultants. Wrote an expert report and gave deposition testimony.

- In a monopolization case against a software developer, analyzed how the existence of a proprietary industry standard affects competition and innovation in the software market. Wrote a "white paper" examining how standards develop in network industries and the tradeoff between open standards and market failure, which can lead to "path dependency," "excess inertia," and other problems associated with the failure to achieve an efficient standard.

- As part of settlement discussions in a class action against a software development company, evaluated and critiqued several measures of monopoly "overcharges" proposed by plaintiffs' experts.

- Investigated potential anticompetitive concerns associated with an acquisition of an asphalt cement company by a competitor. Examined the relationship between distance from the terminal facility and contract prices to assess the effect of the transaction on local competition in the liquid asphalt market.

- Assisted defense counsel in a case alleging a retail price fixing conspiracy involving a flashlight manufacturer and its distributors. Reviewed empirical evidence showing how rare instances of retailer cartels have been among FTC and DOJ enforcement actions. Statistical analysis of actual price data also showed no evidence of price fixing. The case was defeated on summary judgment.

- In a Justice Department investigation following settlement of a private antitrust case, assisted a developer of optical disc technology in responding to inquiries regarding allegations of patent misuse and Walker Process violations. Our evidence on plaintiff's improper market definition contributed to Justice's decision to terminate the investigation.

- Conducted an econometric analysis of the anticompetitive effects of a proposed acquisition by a major feed producer of the feed mills of one of its largest competitors. Analyzed the effect of competition on margins being charged across several local markets, using several potential geographic market definitions.

- Analyzed the antitrust risks associated with a potential divestiture of a manufacturer of liquid-propellant satellite engines to one of its two competitors. Our finding that neither of the proposed deals would have a good chance of obtaining clearance from the Federal antitrust authorities enabled the client to find another buyer, a manufacturer of complementary products.

- Evaluated the proposed United-USAir merger on behalf of a competing air carrier. Assisted client in preparing a report submitted to the Department of Transportation describing the economic effects of the merger on city-pair markets served by both United and USAir.

- Analyzed the proposed Burlington Northern Santa Fe-Canadian National rail merger on behalf of another Class I railroad not party to the merger. Assisted counsel in preparing comments to the Surface Transportation Board prior to the Board's decision to call a moratorium on major rail consolidations.

- Conducted computer simulations and market analyses of several railroad mergers, including: Norfolk Southern-Conrail, Santa Fe-Southern Pacific, and Union Pacific-Missouri Kansas Texas. Evaluated the effectiveness of proposed structural remedies.

- Investigated possible anticompetitive problems associated with LTV's Republic Steel acquisition. Evaluated post-merger efficiency claims using a linear programming model based on several hundred thousand actual transactions.

- Wrote testimony on the definition of the relevant product market in the attempted acquisition of ARCO's aluminum smelting operations by Alcan (Aluminum Corp. of Canada). Key evidence brought forward involved an economic model of the substitutability of bottles for aluminum cans in consumer purchases of soft drinks.

- Investigated allegations of illegal price-fixing by gasoline retailers using data from the Lundberg Survey. Evidence from estimated price-cost margins corroborated “smoking-gun” statements attributed to the alleged co-conspirators.

- Evaluated spatial competition in the asphalt aggregate industry as part of a merger investigation. Invoked the DOJ Merger Guidelines to draw geographic market boundaries based on transportation costs.

Health Care

- Testified at trial in a dispute between Kern Health Systems and a consultant tasked with analyzing the extent of Medicaid fraud committed by an emergency room service provider. Assessed the ability of the consultant to provide findings for each claim –rather than an extrapolation of population totals – based on a sample of medical record files.

- In a dispute with provider groups over alleged down-coding of claims, assisted health insurer in verifying that no statistical bias could be shown to exist regarding underpayment of providers’ claims. From a sample of claims files, assessed actual reimbursement practices to determine the frequency of inappropriate down-coding and the causes of delayed or denied payments.

- Assisted the Centers for Medicare and Medicaid, in its evaluation of the Physician Quality Reporting System and the Electronic Prescribing Incentive Program. Analyzed survey results and wrote a report gauging the experience of both doctors and their patients with these two programs designed to improve reporting of quality measures and to encourage electronic prescribing.

- For a large hospital chain, designed a stratified random sample to quantify the extent of Medicare billing errors. Sampled 1200 records out of a total population of 1.5 million patients at 81 facilities so as to minimize stratum standard deviations. Estimated a two-stage model predicting the size of overcharges, undercharges, and net errors at each facility.

- Assisted the California Bureau of State Audits in its assessment of the restructuring efforts of the Los Angeles County Department of Health Services. Wrote report to California State Legislature describing the status of various proposals to solve the department’s budgetary shortfall, included a comparison of the costs at county hospitals versus benchmark facilities across the state.

- Advised a pharmaceutical company in how to take full advantage of the internet's ability to transform the delivery of health care. Collected data and analyzed trends in health care to assist management in selecting market opportunities in e-commerce in order to leverage the company’s existing strengths.

- Estimated a multinomial logit model to predict whether non-physician medical expenditures would be approved under various Blue Cross/Blue Shield plans. Levels of competition in local markets were a key explanatory variable in the model, as well as the number of physicians sitting on Blue Cross Boards. Results were used to estimate the competitive effects of mergers among health insurers, following the DOJ Merger Guidelines.

Regulated Industries

- Analyzed market concentration and prepared testimony given in natural gas storage deregulation filings before the Federal Energy Regulatory Commission (FERC).

- Developed a model analyzing the competitiveness of various market segments and wrote testimony given in gas pipeline restructuring filings under FERC Order 636a.

- On behalf of a potential entrant into the local telephone service market, performed a study to evaluate Total System Long-Run Incremental Cost (TSLRIC) as defined by the Telecommunications Act of 1996. Our study showed that use of the Benchmark 2 Model, as proposed by the local exchange carrier, would have resulted in loop lengths fifty percent too high and total unbundled loop charges exceeding TSLRIC by over $4 per customer. Work resulted in a Public Utilities Commission ruling in favor of the client.

- Constructed simulations of the demand for natural gas as part of an amicus brief filed before the California State Public Utilities Commission seeking approval for construction of a private pipeline to circumvent the local distribution company monopoly. Led to the eventual approval and installation of an independent pipeline.

Intellectual Property

- In a patent dispute between a software developer and a telecommunications company, performed a statistical analysis of the relative speed of alleged infringing software with and without the patented processes. Showed that use of the patented software resulted in significantly shorter computing times. Wrote an expert report and gave trial testimony.

- Assisted Amazon.com in a trademark case in which the maker of a popular hair styling product alleged that Amazon had not acted quickly enough to remove counterfeit sales from its website. Plaintiff's expert attempted to show that low ratings (one-star and two-star) on the Amazon site by customers who had purchased a counterfeit product translated into lower sales both online and at brick-and-mortar retailers. Wrote a rebuttal damages report that led to a favorable settlement of the case.

- In a patent infringement case involving gene "chips" for analysis of differential genetic expression, assisted counsel for the defense in its opposition to a preliminary injunction motion. Motion was successfully defeated largely based on the economic arguments that the parties' technologies were not in the same relevant market and that the defendant's customers were not likely to become users of the plaintiff's technology.

- Assisted a developer of medical laser systems in defending itself against claims of trade secret misappropriation by a dentist involved in clinical trials and testing of the new technology. Calculated damages under two possible remedies: profit disgorgement and quantum meruit.

- In a trade secret theft case with allegations of fraud on the patent office and patent misuse, assisted the plaintiff, a specialty oven manufacturer, in delineating relevant product and technology markets. Estimated "but-for" revenues and calculated damages under several theories of liability.

- Assisted the defendant in a patent infringement case involving a secure technology for electronically distributing postage for use on laser printers. Prepared a damage model that estimated lost first-mover advantages in the electronic postage metering market due to the patent claims. Also calculated increased cost of equity and debt financing due to delays in getting product to market.

- In a patent infringement case involving the sale of motorized window blinds, assisted the plaintiff in establishing what reasonable royalties might have been under various rules-of-thumb. Performed a decision-tree analysis of probable result at trial to assist the client in settlement negotiations.

Environmental and Toxic Torts

- In a natural resources defense action against several major oil companies alleging MTBE contamination of drinking water supply wells, assisted defense counsel in assessing the economic viability of alternative oxygenates, such as ethanol.

- In an insurance coverage case, evaluated the costs incurred and future risk associated with a former shipbuilding site. Probabilistic cost estimates of future clean-up costs were used as a tool in settlement negotiations.

- For a major aerospace firm named as a Potentially Responsible Party (PRP) at more than a dozen Superfund sites, used decision tree analysis to develop a probabilistic forecast of future cleanup costs. Results were used in settlement negotiations with insurance carriers.

- In a class-action suit by neighboring property owners against the PRPs at a Superfund site, developed a statistical model of the “stigma” associated with proximity to toxic waste sites. Estimated a hedonic price index to calculate damages as measured by changes in residential property values.

- In an insurance coverage dispute between a group of insurers and a Fortune 500 telecommunications company, worked on behalf of the defense to separate historical cleanup costs into various coverage categories. Worked with engineering experts to allocate costs between “duty to defend” and indemnification.

- For a landfill operator, evaluated environmental cleanup costs in connection with an insurance coverage dispute. Built a database that was used to separate cleanup costs into two categories: “duty to defend” costs and remediation costs. Work led to a favorable settlement with insurance carriers.

- In a Superfund cost recovery action, evaluated government claims against a potentially responsible party (PRP). Research identified incineration costs that should have been allocated to PRPs at another cleanup site. Allocation of these costs to other PRPs resulted in a significantly reduced settlement for the client.

- For a group of seven major oil companies, developed a model to project the number of claims expected to be filed in connection with occupational exposure to asbestos. Incorporated current medical and epidemiological research into a micro-simulation model which linked the number of

exposed workers over time to incidence of asbestos-related diseases. Liability estimates were used to facilitate settlement negotiations and to quantify contingent liabilities.

Entertainment Industry

- For a motion picture company, developed a nonparametric statistical method to generate "random draws" of film budgets and sales used to predict profits for a "representative" film. Analysis was used to value a portfolio of yet-to-be-made motion pictures in order to raise outside financing.

- In connection with the movie Boxing Helena, analyzed the profit contribution both in foreign and domestic distribution markets of the presence of a well-known celebrity star. Results led to an $8 million verdict against the actress Kim Basinger.

- Prepared expert witness testimony in connection with the acquisition of a chain of movie theaters by a motion picture distributor in Las Vegas, NV. Analysis made use of data on pre-merger vs. post-merger contract terms to conclude that the merger had detrimental effects on competition.

Applied Statistical Analysis

- In the first-ever audit of the U.S. Navy, assisted auditors in designing a sampling plan and drawing a sample of transactions from the Navy's Statement of Budgetary Activity. Based on audit staff review of the sampled records, we estimated the total number of records that were misstated and extrapolated the total dollar value of misstatements.

- Assisted counsel for a food processor against allegations by the California Attorney General that underweight bottles of ketchup were being manufactured and sold. Evaluated a sample of bottles that had been taken by State investigators, showing that the sample collected was biased because measured moisture loss in "older" bottles was less than would have been observed from a true, random sample. Investigation was dropped.

- In a trade secrets dispute alleging theft of customer lists, performed a computer matching of the companies' customer lists to assess the likelihood that theft had occurred. High number of matches led to favorable settlement for the client.

- For cost segregation clients, developed a statistical model to estimate the fixed assets that could be reclassified from 39-year real property to tangible personal property (depreciated over five years instead.) Model extrapolates from a small sample to the client's entire population of properties. A stratified sample design enabled us to select as small a sample as possible, which minimized the amount of work that had to be performed by construction engineers in completing the cost segregation study. Model has been used to generate significant tax benefits for over two dozen clients.

- In repairs and maintenance studies, assisted cost segregation specialists estimating deductible repairs and maintenance expenses for several tax clients. If a capital expense can be shown to be a repair and not a capital improvement, the costs can be expensed immediately. We sampled from a population of expenses to determine the probability that a given expense was a repair and not a "betterment." Extrapolated the sample results to a population of several thousand maintenance invoices. Model has been used to generate large tax benefits for several clients.

- In several R&D tax credit engagements, sampled from a population of employee hours to determine the amount of qualified research expenses in a year. Samples were drawn from two types of populations: project-based populations, and employee-based populations. Used a stratified sample design to select as small a sample as possible, minimizing the analysis performed by R&D tax specialists. Applied the "substantially all" test and extrapolated the results to populations of several million employee hours.

- In a dispute between the purchaser and the seller of a non-interruptible power supply company, evaluated the purchasers' claim that failure rates for power supplies were higher than represented in the terms of the acquisition agreement. Projected the number of failures expected to occur over the next five years, by fitting actual failures to a Weibull distribution, as is commonly done in the analysis of product failures. Results of analysis played a part in settlement discussions between parties.

Finance and Real Estate

- For a special litigation committee appointed by the board of directors of a Fortune 500 health insurance company, wrote a report analyzing litigation strategies related to stock options backdating practices by management. Conducted an event study to determine the extent to which the firm earned abnormally low returns in the period following release of adverse information related to its practice of backdating stock option grants. Constructed a "value line" using three market benchmarks – the Capital Asset Pricing Model, the Fama-French model, and an index of comparable firms. Estimated potential damages under several trading models, such as: proportional trading, inventory-based trading, accelerated trading, and a general trading model.

- Calculated a risk adjustment for captive IT service companies in a transfer pricing study for an Indian client. Estimated a model based on Arbitrage Pricing Theory to isolate independent effects for currency risk, county risk and single-customer risk. Results were presented to the High Commissioner, Indian Revenue Department (Bangalore Region.)

- Performed an analysis of risk-adjusted rates of return for a high-tech Fortune 500 defendant accused of attempted monopolization and illegal tying. Calculated beta coefficients for divisional returns under the Capital Asset Pricing Model using both a full-information approach and a pure-play approach. Results led to a significantly reduced settlement in the class-action suit.

- Designed a forecasting model to project sales prices and absorption rates associated with residential real estate developments. Model was used to support a builder's breach of contract claim against its lender.

- Prepared a study of the extent of competition among real estate brokers. Report found evidence that lack of competition led to increased time on the market for residential properties.