

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION**

**IN RE:
BLUE CROSS BLUE SHIELD
ANTITRUST LITIGATION
(MDL No. 2406)**

Master File No. 2:13-CV-20000-RDP

**This Document Relates to
Provider Track Cases**

DECLARATION OF DANIEL SLOTTJE AND BRENDAN ROGERS

We, Daniel Slottje and Brendan Rogers, declare as follows:

I. INTRODUCTION

1. My name is Daniel Slottje. I am a Senior Advisor at Analysis Group, Inc. (“Analysis Group”), an economic, financial, and strategy consulting firm. I have significant experience in providing litigation consulting services to clients in the healthcare industry. I have consulted and testified on healthcare litigation matters on topics such as class certification issues, the statistical reliability of the health insurance claims adjudication process with respect to under-reimbursement issues, the statistical reliability of health insurance claims databases, and antitrust issues in the healthcare industry. In April 2019, I submitted an expert report on behalf of Provider Plaintiffs in the Provider Track litigation which calculated damages using common evidence and a common methodology for all members of the Acute Care Hospital Provider Class in Alabama.¹ I have

¹ Expert Report of Daniel J. Slottje Ph.D. dated April 15, 2019.

submitted other expert reports and declarations in this litigation.² A copy of my curriculum vitae is attached as **Appendix A**.

2. My name is Brendan Rogers, and I am a Vice President at Analysis Group. I graduated *magna cum laude* with high honors and distinction from Kenyon College with a Bachelor of Arts degree in Economics. I received a Master of Business Administration degree from Georgetown University. I have more than 20 years of experience in the application of microeconomics, statistics, and finance to complex commercial litigations involving general damages issues, antitrust and competition, contractual disputes, and intellectual property. A copy of my curriculum vitae is attached as **Appendix B**.

3. On October 14, 2024, Whatley Kallas, LLP (“Provider Co-Lead Counsel”) announced a settlement of this litigation that will provide changes in the business relationship between Blue Cross Blue Shield Association member plans (i.e., all 33 independent Blues) intended to transform the BlueCard Program.³ According to Provider Co-Lead Counsel, the Blues will make system improvements that will affect “how the Blues process claims, communicate with, and make payments to healthcare providers. The new transformation parameters outlined in the settlement help alleviate and address resource-draining administrative burdens and inefficiencies currently experienced by providers.”⁴

4. Provider Co-Lead Counsel asked us to quantify the financial benefit to providers of Blue system improvements outlined in the settlement. We quantified the expected cost savings to

² (a) Declaration of Daniel J. Slottje in Support of Provider Plaintiffs’ Response in Opposition to Defendants’ Motion to Exclude Provider Plaintiffs’ Expert Dr. Daniel J. Slottje dated November 23, 2020; (b) Declaration of Daniel J. Slottje in Support of Provider Plaintiffs’ Motion to Exclude Defendants’ Expert Kevin M. Murphy dated November 23, 2020; (c) Rebuttal Class Certification Expert Report of Daniel J. Slottje Ph.D. dated December 2, 2020; and (d) Rebuttal Merits Expert Report of Daniel J. Slottje Ph.D. dated February 1, 2021.

³ Provider Plaintiffs BCBS Antitrust Settlement Announcement Press Release.

⁴ Provider Plaintiffs BCBS Antitrust Settlement Announcement Press Release.

providers from spending less time on BlueCard Program-related administrative tasks. We also quantified the expected financial benefit to providers from the BlueCard Prompt Pay Commitment outlined in the settlement. If Blue system improvements outlined in the settlement are implemented as intended, the financial benefit to providers over the first ten years after implementation is approximately \$17.36 billion, or \$12.53 billion discounted to present value in year one. (See **Table 1.**)

Table 1
Providers’ Expected Financial Benefit from Blue System Improvements⁵

Expected Financial Benefit (in \$ billions)	Value	Present Value
<i>Ten Year Administrative Cost Savings</i>	<i>\$16.31</i>	<i>\$11.64</i>
Fewer BlueCard Claims Require Follow Up	\$4.04	\$2.88
Less Time Spent on BlueCard Claim Follow Up	\$8.66	\$6.18
Less Time Spent on BlueCard Claim Pre-Submission Tasks	\$3.62	\$2.58
<i>Five Year BlueCard Prompt Pay Commitment</i>	<i>\$1.05</i>	<i>\$0.89</i>
Total	\$17.36	\$12.53

II. ADMINISTRATIVE COST SAVINGS

5. Blue system improvements outlined in the settlement help alleviate and address resource-draining administrative burdens and inefficiencies of the BlueCard Program currently experienced by providers.⁶ For example, a Blue system improvement expected to provide administrative cost savings is the “transformation of the BlueCard Program infrastructure through the development and implementation of a system-wide, cloud-based architecture that will increase access to critical information and allow Settlement Class Members to receive up-to-date, accurate

⁵ See Exhibits 1 – 4.

⁶ Declaration of Matthew C. Katz dated January 31, 2025 (“Katz Declaration”), ¶ 10.

information as if they were a contracted provider of the Control/Home Plan, directly from their Local/Host Plan. This creation of a system-wide information platform and enhanced information sharing will facilitate Settlement Class Members' access to Member benefits and eligibility verification, pre-authorization requirements, and claims status tracking."⁷

6. Another Blue system improvement expected to provide administrative cost savings to providers is the "implementation of Service Level Agreements, which commit the Settling Individual Blue Plans to respond promptly to BlueCard inquiries or pay financial penalties,"⁸ reducing provider time spent submitting BlueCard claims by incentivizing improved Blue response time on BlueCard claim electronic eligibility inquiries and electronic claim status inquiries.

7. Another Blue system improvement expected to provide administrative cost savings to providers is the Blues' definition of "minimum data requirements for certain eligibility and benefits inquiries, to promote consistency among Settling Individual Blue Plans and give certainty to Settlement Class Members that they are submitting the necessary information."⁹ The definition of minimum data requirements can reduce provider time spent on certain eligibility and benefits inquiries when submitting BlueCard claims.

8. Another Blue system improvement expected to provide administrative cost savings to providers is the Blue Plan Common Appeals Form "common to all Settling Individual Blue Plans, so [providers] do not bear the administrative expense of complying with different appeal requirements for every Settling Individual Blue Plan."¹⁰

⁷ Long Form Notice, p. 6.

⁸ Long Form Notice, p. 7.

⁹ Long Form Notice, p. 8.

¹⁰ Long Form Notice, p. 8.

9. Another Blue system improvement expected to provide administrative cost savings to providers is the appointment of a BlueCard Executive “at each Settling Individual Blue Plan, who will be accountable to Settlement Class Members for BlueCard claims payment issues.”¹¹

10. Another Blue system improvement expected to provide administrative cost savings to providers is the “implementation of a real-time Blues internal messaging system to reduce the time it takes for the Settling Individual Blue Plans to respond to Providers’ issues and disputes and enable Settling Individual Blue Plans to address Settlement Class Members’ issues in near-real time.”¹²

11. Responses to The BlueCard Customer Satisfaction Survey, Provider Office Staff Survey (“BlueCard CSS”) produced in discovery capture the BlueCard Program-related administrative burdens and inefficiencies experienced by providers.¹³ The BlueCard CSS shows that providers follow up with the Blues on a larger share of BlueCard claims in comparison to Local Plan claims. On average, providers followed up with the Blues on approximately 19.2 percent of BlueCard claims compared to 14.1 percent of Local claims from 2008 through 2011.¹⁴

12. The BlueCard CSS shows that providers also spend more time following up on BlueCard claims in comparison to Local Plan claims. On average, 58.1 percent of the BlueCard claims that required follow up were resolved with one contact with the Blues from 2008 through

¹¹ Long Form Notice, p. 7.

¹² Long Form Notice, p. 7.

¹³ The BlueCard CSSs are plan-specific reports which survey provider office staff and, among other things, are meant to provide plans with a “detailed analysis” of their performance and “identify areas needing improvement and allow [plans] to better understand [] providers’ needs.” *See, e.g.*, BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, 2011 Wave 11 Report, Blue Cross Blue Shield of Alabama (BCBSAL_0000096731 – 768, at 733). (Bracketed text added for clarification.)

¹⁴ BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, 2009 Wave 11 Report, Blue Cross Blue Shield of Alabama (BCBSAL_0001919714 – 756, at 738). *See also*, BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, 2011 Wave 11 Report, Blue Cross Blue Shield of Alabama (BCBSAL_0000096731 – 768, at 755).

2011.¹⁵ Providers spend from 20 minutes to two hours, or 1.17 hours on average, per claim in contact with the Blues on BlueCard claims that require follow up that are resolved with one contact with the Blues.¹⁶ The remaining 41.9 percent of those BlueCard claims that required follow up were resolved in more than one contact with the Blues. Providers had 3.1 contacts with the Blues, on average, to resolve BlueCard claims that required more than one contact with the Blues.¹⁷ Providers spend from 45 minutes to 2.5 hours, or 1.63 hours on average, per claim in contact with the Blues on BlueCard claims that require follow up that are resolved in three contacts with the Blues.¹⁸

13. By contrast, Providers spend from 5 minutes to 30 minutes, or 0.29 hours on average, per claim in contact with the Blues on Local Plan claims that require follow up with the Blues.¹⁹ The expected cost savings to providers from spending less time on BlueCard Program-related administrative tasks assumes that provider resource demands and administrative burdens of BlueCard claims will be the same as those of Local Plan claims if Blue system improvements outlined in the settlement are implemented as intended. We understand that this is a reasonable assumption.²⁰

14. According to BlueCard Program Network/Discount Reports (“BlueCard NDRs”)²¹ produced in discovery, nationwide annual BlueCard claims volume ranged from 208.1 million to 223.1 million claims from 2008 through 2014, averaging 215.9 million claims per year over the

¹⁵ See Exhibit 1.

¹⁶ Katz Declaration, ¶ 13.

¹⁷ See Exhibit 1.

¹⁸ Katz Declaration, ¶ 13.

¹⁹ Katz Declaration, ¶ 14.

²⁰ Katz Declaration, ¶ 10.

²¹ BlueCard NDRs are inter-plan memos prepared by the BlueCross BlueShield Association (“BCBSA”). See, e.g., Fourth Quarter 2008 BlueCard Program Network/Discount Report. (BCBSA00699350 – 351, at 350.)

seven-year period.²² The expected cost savings to providers from spending less time on BlueCard Program-related administrative tasks assumes 215.9 million BlueCard claims annually for ten years after implementation of the Blue system improvements outlined in the settlement.²³ We understand that the number of nationwide BlueCard claims in 2024 likely exceeded 215.9 million and is expected to increase in future years.²⁴ Thus, 215.9 million BlueCard claims per year for ten years after implementation of the Blue system improvements outlined in the settlement is a conservative assumption.

A. Fewer BlueCard Claims Require Provider Follow Up with the Blues

15. If Blue system improvements outlined in the settlement are implemented as intended, then the share of BlueCard claims on which providers follow up with the Blues is expected to decrease from 19.2 percent, the historical average for BlueCard claims, to 14.1 percent, the historical average for Local Plan claims. This expected decrease in share of BlueCard claims on which providers follow up with the Blues amounts to approximately 11.1 million BlueCard claims per year for which providers' administrative costs on time spent following up with the Blues are eliminated due to the Blue system improvements outlined in the settlement.²⁵

16. Based on the BlueCard CSS responses discussed above, it is assumed that 58.1 percent of the 11.1 million BlueCard claims per year (approximately 6.5 million claims per year) for which providers' administrative costs on time spent following up with the Blues are eliminated would have required one follow up contact with the Blues averaging 1.17 hours of time spent per

²² See Exhibit 1.

²³ A ten-year forecast is generally an accepted forecast period. (See, e.g., Koller, T., Goedhart, M. H., & Wessels, D. (2020). *Valuation: Measuring and Managing the Value of Companies*. John Wiley & Sons, p. 260: "In general, we recommend using an explicit forecast period of 10 to 15 years – perhaps longer for cyclical companies or those experiencing very rapid growth.")

²⁴ Katz Declaration, ¶ 6.

²⁵ See Exhibit 1.

claim by providers, in the absence of the Blue system improvements outlined in the settlement. Based on the BlueCard CSS responses discussed above, it is assumed that 41.9 percent of the 11.1 million BlueCard claims per year (approximately 4.6 million claims per year) for which providers' administrative costs on time spent following up with the Blues are eliminated would have required three follow up contacts with the Blues averaging 1.63 hours of time spent per claim by providers, in the absence of the Blue system improvements outlined in the settlement.

17. If Blue system improvements outlined in the settlement are implemented as intended, providers are expected to avoid approximately 15.1 million hours per year in time spent following up on BlueCard claims because it is expected that fewer BlueCard claims will require follow up.²⁶ The \$23.45 median hourly wage for Medical Records Specialists as of May 2023 is grown two percent per year over the ten-year forecast period.²⁷ The annual administrative cost savings to providers from fewer BlueCard claims requiring follow up with the Blues is 15.1 million hours multiplied by the expected median hourly wage for Medical Records Specialists. The formula for quantifying the administrative cost savings to providers from fewer BlueCard claims requiring follow up is:

$$\begin{array}{c}
 \textit{Expected Reduction in Number of BlueCard Claims Requiring Follow Up} \\
 \times \\
 \textit{Provider Time Spent on Follow Up (Hours per Claim)} \\
 \times \\
 \textit{Medical Records Specialist Expected Median Hourly Wage (\$ per Hour)}
 \end{array}$$

²⁶ See Exhibit 1.

²⁷ See Exhibit 1. Note, the assumed 2 percent annual growth in the median hourly wage for Medical Records Specialists is based on the average growth rate of 2.25 percent over the period 2021-2023 per the U.S. Department of Labor.

18. If Blue system improvements outlined in the settlement are implemented as intended, the total administrative cost savings to providers from fewer BlueCard claims requiring follow up over the first ten years after implementation is approximately \$4.04 billion, or \$2.88 billion discounted to present value in year one. (*See Exhibit 1.*)

B. Less Provider Time Spent on BlueCard Claim Follow Up with the Blues

19. Blue system improvements are expected to reduce providers' time spent on BlueCard claim follow up in addition to reducing the number of BlueCard claims requiring follow up. If Blue system improvements outlined in the settlement are implemented as intended, then providers will also spend less time following up with the Blues on the expected 14.1 percent share of BlueCard claims (approximately 30.4 million claims per year) on which providers follow up with the Blues even with the Blue system improvements in place.²⁸ Providers' administrative cost savings from the Blue system improvements outlined in the settlement is the difference between time spent following up on BlueCard claims and the time spent following up on Local Plan claims.

20. As discussed above, providers spend from 5 minutes to 30 minutes, or 0.29 hours on average, per claim in contact with the Blues on Local Plan claims that require follow up with the Blues, which will be the same time spent for BlueCard claims if Blue system improvements outlined in the settlement are implemented as intended. Providers are expected to spend 0.29 hours in contact with the Blues on BlueCard claims that require follow up with the Blues, saving providers 0.88 hours of follow up on each BlueCard claim that would have required one follow up contact with the Blues and 1.33 hours of follow up on each BlueCard claim that would have required three

²⁸ *See Exhibit 2.*

follow up contacts with the Blues, in the absence of Blue system improvements outlined in the settlement.²⁹

21. Based on the BlueCard CSS responses discussed above, it is assumed that 58.1 percent of the 30.4 million BlueCard claims per year (approximately 17.7 million claims per year) on which providers follow up with the Blues even with the Blue system improvements in place would have required one follow up contact with the Blues in the absence of the Blue system improvements outlined in the settlement. Providers are expected to save 0.88 hours of follow up on each of these 17.7 million BlueCard claims per year. Based on the BlueCard CSS responses discussed above, it is assumed that 41.9 percent of the 30.4 million BlueCard claims per year (approximately 12.7 million claims per year) on which providers follow up with the Blues even with the Blue system improvements in place would have required three follow up contacts with the Blues in the absence of the Blue system improvements outlined in the settlement. Providers are expected to save 1.33 hours of follow up on each of these 12.7 million BlueCard claims per year.

22. If Blue system improvements outlined in the settlement are implemented as intended, providers are expected to avoid approximately 32.4 million hours per year in time spent following up on approximately 30.4 million BlueCard claims on which providers follow up with the Blues even with the Blue system improvements in place.³⁰ The annual administrative cost savings to providers from less time spent on BlueCard claim follow up is 32.4 million hours multiplied by the expected median hourly wage for Medical Records Specialists. The formula for quantifying providers' administrative cost savings from less time spent on expected BlueCard claim follow up is:

²⁹ See Exhibit 2.

³⁰ See Exhibit 2.

Expected Number of BlueCard Claims Requiring Follow Up

×

Provider Time Savings on Follow Up (Hours per Claim)

×

Medical Records Specialist Expected Median Hourly Wage (\$ per Hour)

23. If Blue system improvements outlined in the settlement are implemented as intended, the total administrative cost savings to providers from less time spent on expected BlueCard claim follow up over the first ten years after implementation is approximately \$8.66 billion, or \$6.18 billion discounted to present value in year one. (*See Exhibit 2.*)

C. Less Provider Time Spent on BlueCard Claim Pre-Submission Tasks

24. The expected provider cost savings from spending less time on BlueCard Program-related administrative tasks also include administrative tasks that occur before a BlueCard claim is submitted such as member eligibility verification and pre-authorization. Approximately 60 percent to 80 percent of BlueCard claims, or 70 percent on average, require member eligibility verification.³¹ Approximately 5.25 percent to 16.5 percent of BlueCard claims, or 10.9 percent on average, have pre-authorization.³²

25. Providers spend more time on member eligibility verification and pre-authorization for BlueCard claims in comparison to Local Plan claims. Providers spend from five minutes to ten minutes per BlueCard claim on member eligibility verification compared to 30 seconds to five

³¹ Katz Declaration, ¶ 19.

³² Katz Declaration, ¶ 20.

minutes per Local Plan claim.³³ Providers spend approximately 15 minutes per BlueCard claim on pre-authorization compared to eleven minutes per Local Plan claim.³⁴

26. If Blue system improvements outlined in the settlement are implemented as intended, then providers will spend less time on member eligibility verification and pre-authorization. Providers' administrative cost savings from the Blue system improvements outlined in the settlement is the difference between time spent on these pre-submission tasks for BlueCard claims and the time spent on these pre-submission tasks for Local Plan claims. Providers are expected to save 0.08 hours of time spent on member eligibility verification on each of the approximately 151.2 million BlueCard claims per year that require member eligibility verification. Providers are also expected to save 0.07 hours of time spent on pre-authorization on each of the approximately 23.5 million BlueCard claims per year that require pre-authorization.

27. If Blue system improvements outlined in the settlement are implemented as intended, providers are expected to avoid approximately 13.5 million hours per year in time spent on member eligibility verification and pre-authorization.³⁵ Expected provider time savings of 13.5 million hours per year is conservative because it does not account for a potential reduction in the number of BlueCard claims that require member eligibility verification and pre-authorization due to the Blue system improvements outlined in the settlement.³⁶ The annual administrative cost savings to providers from less time spent on member eligibility verification and pre-authorization is 13.5 million hours multiplied by the expected median hourly wage for Medical Records

³³ Katz Declaration, ¶ 19.

³⁴ Katz Declaration, ¶ 20.

³⁵ See Exhibit 3.

³⁶ Katz Declaration, ¶¶ 22 and 26.

Specialists. The formula for quantifying providers' administrative cost savings from less time spent on member eligibility verification and pre-authorization is:

$$\begin{aligned} & \textit{Number of BlueCard Claims Requiring Pre Submission Tasks} \\ & \quad \times \\ & \textit{Provider Time Savings on Pre Submission Tasks (Hours per Claim)} \\ & \quad \times \\ & \textit{Medical Records Specialist Expected Median Hourly Wage (\$ per Hour)} \end{aligned}$$

28. If Blue system improvements outlined in the settlement are implemented as intended, the total administrative cost savings to providers from less time spent on member eligibility verification and pre-authorization over the first ten years after implementation is approximately \$3.62 billion, or \$2.58 billion discounted to present value in year one. (*See Exhibit 3.*)

D. Administrative Cost Savings Per Claim

29. For the approximately 2.16 billion BlueCard claims during the ten-year forecast period, the total administrative cost savings to providers resulting from Blue system improvements outlined in the settlement aimed to help alleviate and address resource-draining administrative burdens and inefficiencies of the BlueCard Program currently experienced by providers is approximately \$16.31 billion, or \$11.64 billion discounted to present value in year one. (*See Exhibits 1 – 3.*) This equates to approximately \$7.55 per BlueCard claim, or \$5.39 per BlueCard claim discounted to present value in year one. (*See Exhibits 1 – 3.*) While this is an average and individual providers' administrative cost savings will vary, the analysis above indicates that the administrative cost savings on a per-claim basis are significant.

III. BlueCard Prompt Pay Commitment

30. To address the gap in application of state prompt pay laws to BlueCard claims, the Blues agreed to a timeliness commitment for payment of fully insured Clean BlueCard claims, with a requirement that the Settling Individual Blue Plans pay interest when payment is made later than the Prompt Pay Period, as well as timely notice of defective claims and explanation for denied claims.³⁷ The Settlement Agreement states: “For each Clean BlueCard Claim for Covered Services with respect to which Local/Host Blue Plan has directed the issuance of a check or the electronic funds transfer later than the applicable Prompt Pay Period, the Local/Host Blue Plan shall pay interest at a rate of eight percent (8%) per annum on the allowed amount owed by the Settling Individual Blue Plan on each such claim...”³⁸ The interest payments shall be paid through “the conclusion of the Monitoring Period,”³⁹ defined as “the period of five (5) years from the Effective Date.”⁴⁰

31. According to the Blues’ quarterly enrollment reports (“BCBS Enrollment Reports”)⁴¹ produced in discovery, fully insured members’ share of nationwide Blue enrollment was 48.5 percent, on average, from 2012 through 2015.⁴² Based on the BCBS Enrollment Reports, it is assumed that there will be 104.7 million fully insured member BlueCard claims annually for five years after implementation of the BlueCard Prompt Pay Commitment outlined in the settlement.⁴³

³⁷ Long Form Notice, p. 7.

³⁸ Settlement Agreement, p. 33.

³⁹ Settlement Agreement, p. 51.

⁴⁰ Settlement Agreement, p. 12.

⁴¹ *See, e.g.*, BlueCross and BlueShield Licensees, Total Members by Line of Business as of December 31, 2012 (BCBSA00166276.xlsx, at tab “QER-Table 1”). The proportion of fully-insured is calculated as 1 minus the share of self-funded enrollees divided by total enrollees.

⁴² *See* Exhibit 4.

⁴³ *See* Exhibit 4.

32. According to Blue claims data produced in discovery, facilities' share of BlueCard claims was 14.1 percent, on average, from 2008 through 2014.⁴⁴ Based on the Blue claims data, it is assumed that there will be approximately 14.8 million fully insured member facility BlueCard claims and approximately 89.9 million fully insured member professional BlueCard claims annually for five years after implementation of the BlueCard Prompt Pay Commitment outlined in the settlement.⁴⁵

33. The Blues' IPDS database produced in discovery has Blue claims data that identify the number of days to payment for facility and professional BlueCard claims. According to the IPDS database, the share of facility BlueCard claims that were paid after 30 days was 18.9 percent, on average, from 2011 through 2014.⁴⁶ The share of professional BlueCard claims that were paid after 30 days was 9.6 percent, on average, from 2011 through 2014.⁴⁷ Based on the Blue claims data from the IPDS database, it is assumed that approximately 2.8 million fully insured member facility BlueCard claims and 8.6 million fully insured member professional BlueCard claims will be paid after 30 days each year for five years after implementation of the BlueCard Prompt Pay Commitment outlined in the settlement.⁴⁸

34. According to the IPDS database, the average annual allowed amount per facility BlueCard claim paid after 30 days was \$5,144 from 2011 through 2014.⁴⁹ The average annual allowed amount per professional BlueCard claim paid after 30 days was \$353 from 2011 through 2014.⁵⁰ Based on the Blue claims data from the IPDS database, it is assumed that the dollar amount

⁴⁴ See Exhibit 4.

⁴⁵ See Exhibit 4.

⁴⁶ See Exhibit 4.

⁴⁷ See Exhibit 4.

⁴⁸ See Exhibit 4.

⁴⁹ See Exhibit 4.

⁵⁰ See Exhibit 4.

paid late for each of the 2.8 million fully insured member facility BlueCard claims and 8.6 million fully insured member professional BlueCard claims is \$5,144 and \$353, respectively.

35. According to the IPDS database, the median of the annual median number of days that a facility BlueCard claim was paid after 30 days was 54 from 2011 through 2014.⁵¹ The median of the annual median number of days that a professional BlueCard claim was paid after 30 days was 68 from 2011 through 2014.⁵² Based on the Blue claims data from the IPDS database, it is assumed that the number of days to payment greater than 30 days for each of the 2.8 million fully insured member facility BlueCard claims and 8.6 million fully insured member professional BlueCard claims is 54 and 68, respectively. The formula for quantifying providers' potential financial benefit from the BlueCard Prompt Pay Commitment is:

$$\begin{aligned} & \text{Number of Fully Insured BlueCard Claims Paid After 30 Days} \\ & \quad \times \\ & \quad \text{Allowed Amount Per BlueCard Claim Paid After 30 Days} \\ & \quad \times \\ & \quad (1 + 0.08)^{\frac{\text{Days Paid After 30 days}}{365}} - 1 \end{aligned}$$

36. The providers' potential financial benefit of the BlueCard Prompt Pay Commitment is approximately \$1.05 billion, or \$890 million discounted to present value in year one. (*See Exhibit 4.*)

IV. The Value of the Injunctive Relief Includes Significant Value to Healthcare Providers That Is Not Quantified in This Declaration

37. We understand that the injunctive relief described above will enable healthcare providers to identify, track, appeal, and reverse BlueCard claims that are denied.⁵³ The result would

⁵¹ See Exhibit 4.

⁵² See Exhibit 4.

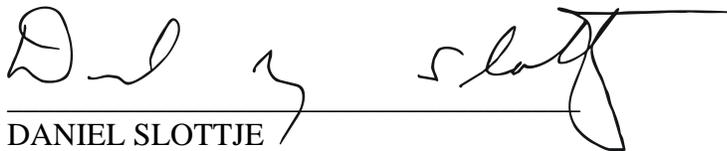
⁵³ Katz Declaration, ¶ 23.

be a significant increase in revenue for healthcare providers that is not accounted for in this declaration.⁵⁴

38. We understand that the settlement also includes several categories of injunctive relief beyond the ones whose value to providers is quantified above, including new opportunities to enter into value-based care arrangements and to provide telehealth services.⁵⁵ Quantifying the value to providers of these categories of relief was beyond the scope of our assignment.

Analysis Group is being compensated at a rate of \$1,595 per hour for Daniel Slottje's time and \$970 per hour for Brendan Rogers's time. This payment is not contingent on the outcome of this litigation.

We declare under penalty of perjury that the foregoing is true and correct. Executed on January 31, 2025.



Daniel Slottje

Declarant



Brendan Rogers

BRENDAN ROGERS

Declarant

⁵⁴ Katz Declaration, ¶ 23.

⁵⁵ Katz Declaration, ¶¶ 22 and 32.

APPENDIX A

DANIEL SLOTTJE, PH.D. Senior Advisor

Mobile: 214 732 9170
Main: 214 523 1421
daniel.slotkje@analysisgroup.com

Park Place Center
2911 Turtle Creek Boulevard
Dallas, TX 75219

Professor Slottje is an economist and statistician with deep academic and consulting experience in the area of antitrust and competition. He has frequently testified at deposition and trial in antitrust-related matters, for which he has performed price-fixing analysis, quantification of market power, analysis of claims of anticompetitive conduct, monopsonization, monopolization, and lost profit analysis, among other analyses. Professor Slottje's publications on antitrust issues have included articles in *Scientometrics*, *Econometric Reviews*, the *Journal of Econometrics*, the *Journal of Economic Surveys*, and the *Law and Business Review of the Americas*.

An emeritus professor of economics at Southern Methodist University, Professor Slottje has worked in litigation consulting for more than three decades in senior positions with several international firms. He has been ranked among the world's top three scholars in applied econometrics based on his publishing record in the field. Professor Slottje is a member of the American Economic Association, the American Statistical Association, and The Econometric Society.

EDUCATION

1983 Ph.D., economics, Texas A&M University
1979 B.A., economics, Clemson University

PROFESSIONAL EXPERIENCE

2022–Present Analysis Group, Inc.
 Senior Advisor

1984–Present Southern Methodist University
 Professor Emeritus (2013–Present)
 Professor (1984–2013)

2003–2022 FTI Consulting, Inc.
 Senior Managing Director

1995–2003 KPMG International
 Partner

SELECTED ANTITRUST ENGAGEMENT EXPERIENCE

- Analysis of price-fixing
- Quantification of market power
- Analysis of anticompetitive claims

- Analysis of monopsonization claims
- Analysis of monopolization claims
- Analysis of lost profits
- Analysis of relevant antitrust markets
- Analysis of predatory pricing
- Quantification of damages

EXPERT TESTIMONY

Professor Slottje has appeared live at trial over 100 times and given over 200 depositions from 1987 to the present. Herein is his testimony history since 2006.

- ***Melissa Fukuchi, individually and on behalf of all other similarly situated v. Pizza Hut, Inc., a California Corporation, And Does 1 through 50, Inclusive. NO. BC302589***
Superior Court of California, County of Los Angeles Central
Deposition 01/19/2006
- ***David Jurado and Penny Schultz v. Hewlett-Packard Company. CV 025620***
Superior Court of California, County of San Joaquin
Deposition 04/10/2006
- ***Xenium S.A. de C.V. v. Regent Hotels Worldwide, Inc. 12 296/JNK***
International Court of Arbitration, Dallas
Arbitration 04/20/2006
- ***Avid Identification Systems, Inc. v. Philips Semiconductors, Inc., Philips Semiconductor Manufacturing, Inc., The Crystal Import Corporation, and Datamars, SA. 2:04-CV-183***
US District Court, Eastern District of Texas, Marshall Division
Trial 05/24/2006
- ***Nutrition 21, LLC v. General Nutrition Corporation. 6:05-CV-228(LED)***
US District Court, Eastern District of Texas, Tyler Division
Deposition 10/27/2006
- ***Ellen Schaaf, Plaintiff, v. SmithKline Beecham Corporation d/b/a/ GlaxoSmithKline; SmithKline Beecham Corporation; and GlaxoSmithKline. 1:04-CV-2346-GET***
US District Court, Northern District of Georgia, Atlanta Division
Deposition 01/17/2007
- ***In re: Apollo Group, Inc. Securities Litigation. CV 04-2147-PHX-JAT***
US District Court, District of Arizona
Deposition 02/02/2007

- ***Orion IP, LLC v. Hyundai Motor America. 6:05-CV322-LED***
US District Court, Eastern District of Texas, Tyler Division
Deposition 02/15/2007
- ***Network-1 Security Solutions, Inc. v. D-Link Corporation and D-Link Systems, Incorporated. 6:05-cv-00291***
US District Court, Eastern District of Texas, Tyler Division
Deposition 03/28/2007
- ***Orion IP, LLC v. Mercedes-Benz USA LLC, et al. 6:05-CV-322***
US District Court, Eastern District of Texas, Tyler Division
Trial 05/25/2007
- ***Miguel Garcia v. Lowe's Company, Inc.; Lowe's Home Centers, Inc.; Lowes' HIW, Inc.; Dedicated Delivery & Install Services, Inc.; Victor Manuel Montes, doing business as Cash Cow; and DOES 1-100 inclusive. GIC 841120***
Superior Court of the State of California, County of San Diego
Deposition 05/30/2007
- ***Trading Technologies International, Inc. v. eSpeed, Inc., et al. C.A. No. 03-612 (KAJ)***
US District Court, Northern District of Illinois, Eastern Division
Deposition 09/07/2007
- ***Greg Randall, Cynthia Peterson, and Terry Head, on behalf of themselves and all others similarly situated and on behalf of the general public v. Costco Wholesale Corporation, a Washington corporation doing business as Costco, and DOES 1 through 100, inclusive. BC 296369***
Superior Court of the State of California, County of Los Angeles
Deposition 09/13/2007
- ***Trading Technologies International, Inc. v. eSpeed, Inc., et al. C.A. No. 03-612 (KAJ)***
US District Court, Northern District of Illinois, Eastern Division
Trial 09/28/2007
- ***MS Perry Company, Inc. and ANISA International, Inc. v. Mary Kay Inc. 05-00857***
68th Civil District Court of Dallas County
Deposition 12/05/2007
- ***Dennis Johnson and Arnold Rosenfeld, individually and on behalf of others similarly situated v. GRUMA CORPORATION, a Nevada corporation, dba MISSION FOODS CORPORATION; and DOES 1 through 100, inclusive. 1220026252***
JAMS Arbitration Los Angeles, CA
Deposition 03/28/2008
- ***In the Matter of Mechanical and Digital Phonorecord Delivery Rate Adjustment Proceeding (Representing the Recording Industry of America). 2006-3 CRB DPRA***
Copyright Royalty Judges Library of Congress Washington, DC
Adjustment Proceeding 05/07/2008

- ***Dennis Johnson and Arnold Rosenfeld, individually and on behalf of others similarly situated v. GRUMA CORPORATION, a Nevada corporation, dba MISSION FOODS CORPORATION; and DOES 1 through 100, inclusive. 1220026252***
JAMS Arbitration Los Angeles, CA
Arbitration 05/15/2008
- ***Nelson Gonzalez, Marco Garcia, Reymundo Garcia, Aymer Avila, Julian Nunez, Luis A. Arteaga, Juan Carlos Torres, Roberto Lopez, and Nestor Alvarez, et al. v. Freedom Communications, Inc., d/b/a/ The Orange County Register. 03CCO8756***
Superior Court of the State of California County of Orange, Central Justice Center
Deposition 09/17/2008
- ***Trish Wren and Cynthia Piper et. al., individually and on behalf of others similarly situated, Plaintiffs, v. RGIS Inventory Specialists, LLC, RGIS, LLC, and Does 1-25 Inclusive, Defendants. 3:06-cv-05778 JCS***
US District Court, Northern District of California
Deposition 10/30/2008
- ***Raytheon Company, Plaintiff, v. Indigo Systems Corporation and FLIR Systems, Inc., Defendants. Case No. 4:07 cv 109***
US District Court, Eastern District of Texas, Sherman Division
Deposition 12/19/2008
- ***The American Medical Association, et al., Plaintiffs, v. United Healthcare Corporation, et al., Defendants. Master File No. 00 Civ. 2800 (LMM) (GWG)***
US District Court, Southern District of New York
Hearing 03/31/2009, 04/01/2009
- ***Franches Isaguirre, et al., Plaintiffs, v. Guess ?, Inc.; and Does 1 to 50, Inclusive, Defendants. Case No. BC357631***
Superior Court of the State of California, County of Los Angeles
Deposition 04/13/2009
- ***Centocor, Inc., and New York University, Plaintiffs, v. Abbott Laboratories, Abbott Bioresearch Center, Inc., and Abbott Biotechnology LTD., Defendants. Civil Action No. 2-07-cv-139 (TJW)***
US District Court, Eastern District of Texas, Marshall Division
Deposition 04/17/2009
- ***Eduardo Rios, et al., Plaintiffs, v. Jennie-O Turkey Store, Inc. A Minnesota corporation, West Central Turkeys, Inc. a/k/a Pelican Turkeys, Inc.), and Heartland Foods Co., Defendants. Court File No. EM 03-020489***
State of Minnesota Fourth Judicial District, Hennepin County District Court
Deposition 06/09/2009

- ***Centocor Ortho Biotech, Inc., and New York University, Plaintiffs, v. Abbott Laboratories, Abbott Bioresearch Center, Inc., and Abbott Biotechnology Ltd., Defendants. Civil Action No. 2-07-cv-139 (TJW)***
US District Court, Eastern District of Texas, Marshall Division
Trial 06/22/2009
- ***Becton Dickinson and Company, and MDC Investment Holdings, Inc., Plaintiffs, v. Retractable Technologies, Inc., Defendant. Civil Action No. 5:07-cv-137***
US District Court, Eastern District of Texas, Texarkana Division
Deposition 07/14/2009
- ***Autodesk, Inc. v. Dassault Systèmes SolidWorks Corporation. Civil Action No. 3:08-cv-4397 WHA***
US District Court, Northern District of California, San Francisco Division
Deposition 11/17/2009
- ***Marvell Semiconductor, Inc., Marvell Asia Pte., Ltd., and Marvell Intl., Ltd., Plaintiffs, v. Commonwealth Scientific and Industrial Research Organization, Defendants. Civil Action No. 6:07-CV-204***
US District Court, Eastern District of Texas, Tyler Division
Deposition 01/25/2010
- ***TRISHA WREN and CYNTHIA PIPER et. al., individually and on behalf of others similarly situated, Plaintiffs, v. RGIS Inventory Specialists, LLC, RGIS, LLC, and Does 1-25 Inclusive, Defendants. Civil Action No. 3:06-cv-05778 JCS***
US District Court, Northern District of California
Deposition 04/15/2010
- ***IN RE: AETNA UCR LITIGATION. Civil Action No. 2:07-CV-3541***
US District Court, District of New Jersey
Deposition 05/05/2010
- ***Christopher Williams, on behalf of himself and all others similarly situated, Plaintiffs, v. Allstate Insurance Company, an Illinois Corporation; and DOES 1 to 100, Inclusive, Defendants. Case No. BC 382577***
Superior Court of the State of California, County of Los Angeles, Central District
Deposition 06/24/2010
- ***IN RE: AETNA UCR LITIGATION. Civil Action No. 2:07-CV-3541 (FHS) (PS) / MDL No. 2020***
US District Court, District of New Jersey
Deposition 12/16/2010
- ***Darlery Franco, et al., Plaintiffs, v. Connecticut General Life Insurance Co., CIGNA Corporation and CIGNA Health Corporation, Defendants. Case No. 07-cv-6039 (SRC) (PS)***
US District Court, District of New Jersey
Deposition 12/16/2010

- ***Maria Hernandez, on behalf of herself and others similarly situated, Plaintiff, v. Anna's Linens, and Does 1 through 50 inclusive, Defendants. Case No. GIC 840481***
Superior Court of the State of California, County of San Diego
Deposition 01/18/2011
- ***L'Oreal USA S/D, Inc., as successor-in-interest to Matrix Essentials, Inc., Plaintiff, v. Bot Hair, L.P., Hair of Nevada, LLC; and SD Hair, Ltd., and Does 1-50, inclusive, Armstrong McCall, LP, Defendants. Case No. 37-2008-00078490-CU-BCTL***
Superior Court of the State of California, County of San Diego
Deposition 05/03/2011
- ***SD Hair, LTD., and Hair of Nevada, LLC, Cross-Complainant, v. Armstrong McCall, LP, Beauty Systems Group LLC, L'Oreal USA S/D, Inc., a Delaware Corporation and ROES 1-20, inclusive, Cross-Defendants.***
Superior Court of the State of California, County of San Diego
Deposition 05/03/2011
- ***Convolve, Inc., Plaintiff, v. Dell Inc., Western Digital Corporation, Hitachi Global Storage Technologies, Inc., and Hitachi LTD., Defendants. Civil Action No. 2:08-cv-244***
US District Court, Eastern District of Texas, Marshall Division
Deposition 05/20/2011
- ***Convolve, Inc., Plaintiff, v. Dell Inc., Western Digital Corporation, Hitachi Global Storage Technologies, Inc., and Hitachi LTD., Defendants. Civil Action No. 2:08-cv-244***
US District Court, Eastern District of Texas, Marshall Division
Trial 07/25/2011
- ***Mohit Narayan, Hanna Rahawi, Thomas Heath and Ugo Iheonu, et al. v. EGL, INC., a Texas Corporation; CEVA Freight, LLC, a Delaware Corporation, and DOES 2-10, inclusive. Case No. C 05-04181 RMW***
US District Court, Northern District of California
Deposition 08/19/2011
- ***JACK JIMENEZ; individually, and on behalf of other members of the general public similarly situated, Plaintiffs, v. ALLSTATE INSURANCE COMPANY, an Illinois corporation; and DOES 1 to 100, Inclusive, Defendants. Case No. CIV10-08486 AHM***
US District Court Central District of California
Deposition 10/25/2011
- ***GLOBAL TOTAL OFFICE LIMITED PARTNERSHIP, an Ontario, Canada limited partnership, and GLOBAL INDUSTRIES, INC., a Maryland corporation, Plaintiff, v. GLOBAL ALLIES, LLC, a California limited liability company, Defendant. Civil Action No. 10-cv-01896***
US District Court Northern District of Illinois, Eastern Division
Deposition 11/08/2011

- **Larry Lattig, Litigation Trustee for the First Magnus Litigation Trust v. Eril T. Lutz, et al. Case No. A1003885**
Court of Common Pleas, Hamilton County, Ohio
Deposition 12/21/2011
- **Keith Britto, an individual; Justin Cowan, an individual; for themselves and those similarly situated; Roes 1 through 50,000 inclusive; and the putative class, Plaintiffs, v. ZEP Manufacturing Company, a Delaware corporation; and Does 1 through 100, inclusive, Defendants. VG-10553718**
Superior Court of the State of California, County of Alameda
Deposition 02/06/2012
- **Commonwealth Scientific and Industrial Research Organisation, Plaintiff, v. Lenovo (United States) Inc., et al., Defendants (Sony Corporation, et al.). Case No. 6:09-cv-399, 6:09-cv-400, 6:09-cv-401**
US District Court, Eastern District of Texas, Tyler Division
Deposition 03/08/2012
- **Mary Pytelewski, Eric Stiller and Joseph Moro, et al., on behalf of themselves individually and all others similarly situated, Plaintiffs, v. Costco Wholesale Corporation; Wireless Advocates, LLC; and Does 1 through 25, inclusive, Defendants. Case No. 3:09-cv-02473-H-BLM**
US District Court, Southern District of California
Deposition 03/19/2012
- **Audrey Wilson, Helene Diamond, Connie Gilbert, Suing individually, and on behalf of all others Similarly Situated, Plaintiffs, v. Farmers Insurance Exchange and Defendant Does 1 through 200, Inclusive, Defendants. Case No. BC 371597**
Superior Court of the State of California, County of Los Angeles
Deposition 9/19/2012
- **Liliana Espejo, et al., Plaintiffs, v. The Copley Press Inc., a Corporation d/b/a The San Diego Union-Tribune, et al., Defendants. Case No. 37-2009-0082322**
Superior Court of the State of California, County of San Diego
Deposition 05/06/2013
- **Liliana Espejo, et al., Plaintiffs, v. The Copley Press Inc., a Corporation d/b/a The San Diego Union-Tribune, et al., Defendants. Case No. 37-2009-0082322**
Superior Court of the State of California, County of San Diego
Trial 06/12/2013
- **T.M. Patents, L.P. and T.M. Creditors LLC, Plaintiffs, v. Cisco Systems, Inc., Defendants. Case No. 1:12cv11418**
US District Court, District of Massachusetts
Deposition 10/03/2013

- **Viasat, Inc., Plaintiff, v. Space Systems/Loral, Inc., Loral Space & Communications Inc., Defendants. Case No. 3:12-cv-00260**
US District Court, Southern District of California
Deposition 12/10/2013
- **ThinkOptics, Inc. v. Nintendo of America, Inc., et al. Civ. No. 6:11-CV-455**
US District Court, Eastern District of Texas
Deposition 12/13/2013
- **Viasat, Inc., Plaintiff, v. Space Systems/Loral, Inc., Loral Space & Communications Inc., Defendants. Case No. 3:12-cv-00260**
US District Court, Southern District of California
Trial 3/24/2014–4/5/2014
- **Jennifer Grabianski, et al., Plaintiffs, v. Bally Total Fitness Holding Corporation, L.A. Fitness International, LLC, and Fitness International, LLC, Defendants. Case No. 1:12-cv-284**
US District Court, Northern District of Illinois Eastern Division
Deposition 06/25/2014
- **Raytheon Company, Plaintiff, v. Indigo Systems Corporation, and FLIR Systems, Inc., Defendants. Case No. 4:07-cv-00109**
US District Court, Eastern District of Texas, Plano Division
Trial 11/17/2014–11/18/2014
- **Microscan Systems, Inc., Plaintiff, v. Cognex Corporation, Defendant. Case No. 1:14-cv-6952**
US District Court, Southern District of New York
Deposition 01/28/2015
- **Commonwealth Scientific and Industrial Research Organisation, Plaintiff, v. Mediatek Inc., et al. (Amazon), Defendant. Case No. 6:12-cv-578**
US District Court, Eastern District of Texas
Deposition 03/17/2015
- **Microscan Systems, Inc., Plaintiff, v. Cognex Corporation, Defendant. Case No. 1:14-cv-6952**
US District Court, Southern District of New York
Trial 04/24/2015
- **Temple-Inland, Inc., Plaintiff, v. Thomas Cook, (State of Delaware) et al., Defendants. Case No. 1:14-cv-00654**
US District Court, District of Delaware
Deposition 10/07/2015
- **Raymond Alfred, et al, Plaintiff, v. Pepperidge Farm, Inc. a Connecticut Corporation and Does 1-100, Inclusive, Defendants. Case No. 2:14-cv-07086**
US District Court, Central District of California
Deposition 11/17/2015

- **Arapahoe Surgery Center, LLC, et al, Plaintiffs and Counterclaim Defendants, and Surgical Center Development, Inc. d/b/a SurgCenter Development, Counterclaim Defendants, v. CIGNA Healthcare, Inc., et al., Defendants. Case No. 1:13-cv-03422**
US District Court, District of Colorado
Deposition 06/28/2016
- **UNITED STATES OF AMERICA, ex rel. CARLOS URQUILLA-DIAZ, Relator, Plaintiff v. KAPLAN, INC., KAPLAN UNIVERSITY a/k/a KAPLAN COLLEGE a/k/a IOWA COLLEGE ACQUISITION CORP., KAPLAN HIGHER EDUCATION CORPORATION, a division of KAPLAN, INC., formally a wholly owned subsidiary of the Washington Post Company, Defendant. Case No. 09-20756**
US District Court, Southern District of Florida
Deposition 01/14/2017
- **Timothy McCleery, et al., Plaintiffs, v. Allstate Insurance Company, Allstate Group, Inc., CIS Group, LLC, North American Compass Insurance Services Group, LLC, Capital Personnel Services, Inc., Advanced Field Services, Inc., and Does 1 through 30, inclusive, Defendants. Case No. BC 410865**
Superior Court of the State of California, County of Los Angeles
Deposition 02/28/2017
- **Wells Fargo Bank Northwest National Association, Plaintiffs, v. Airbus Helicopters Inc., Defendants. Case No. DC-16-09090**
District Court of Dallas County, Texas
Deposition 09/26/2017
- **Era Group Inc., Plaintiff, v. Airbus Helicopters, Inc., and Airbus Helicopters S.A.S., Defendants. Case No. DC-16-15017**
District Court of Dallas County, Texas
Deposition 05/25/2018
- **Darron Pederson, Plaintiff, v. Apple Inc. and DOES 1-25, inclusive, Defendants. Case No. 1:12cv235530**
Superior Court of the State of California, County of Santa Clara
Deposition 05/31/2018
- **Nathan Cozzitorto, et al., Plaintiffs, v. American Automobile Association of Northern California Nevada and Utah, et al., Defendants. Case No. MSC 13-02656**
Superior Court of the State of California, County of Contra Costa
Deposition 09/13/2018
- **Jack Jimenez, individually, and on behalf of other members of the general public similarly situated, Plaintiff, v. Allstate Insurance Company, an Illinois corporation; and DOES 1 to 100, Inclusive, Defendants. Case No. CIV10-08486 AHM (FFMx)**
US District Court, Central District of California
Deposition 09/14/2018

- ***Estella F. Hughes, as an individual and on behalf of all others similarly situated, Plaintiff, v. Lincare, Inc., a Delaware corporation; Lincare Holdings, Inc., a Delaware Corporation; Robert Fosdick; and DOES 1 through 20, inclusive, Defendants. Case No. M124764***
Superior Court of the State of California, County of Monterey
Deposition 12/12/2018
- ***Buying Power, Inc., Plaintiff, v. Graybar Electric Company, Inc. and Greg Hochheiser, Defendants. Cause No. 2017-37325***
District Court of Harris County, Texas 270th Judicial District
Deposition 01/30/2019
- ***IN RE: BLUE CROSS BLUE SHIELD ANTITRUST LITIGATION (MDL No. 2406). Case No. 2:13-cv-20000***
US District Court, Northern District of Alabama, Southern District
Deposition 05/09/2019
- ***David Deluca and Barry Francis individually and on behalf of all others similarly situated, and on behalf of the general public, and Melissa Laughlin, individually Plaintiffs, v. Farmers Insurance Exchange, Farmers Group, Inc., Farmers Insurance Company, Inc., AND Farmers Specialty Insurance Company, Inc., Defendants. Case No. 3:17-cv-00034***
US District Court, Northern District of California
Deposition 10/14/2019
- ***IN RE: BLUE CROSS BLUE SHIELD ANTITRUST LITIGATION (MDL No. 2406). Case No. 2:13-cv-20000***
US District Court, Northern District of Alabama, Southern District
Deposition 01/08/2021
- ***Alejandro Bucio, et al., Plaintiffs, v. ABM Industries Incorporated, a Delaware corporation, et al. Defendants. JCCP No. 4502***
Superior Court of the State of California
Deposition 02/25/2021
- ***IN RE: BLUE CROSS BLUE SHIELD ANTITRUST LITIGATION (MDL No. 2406). Case No. 2:13-cv-20000***
US District Court, Northern District of Alabama, Southern District
Deposition 03/12/2021
- ***Miguel Montoya; individually and on behalf of other members of the general public similarly situated; Plaintiff, v. Ameron International Corporation, an unknown business entity; Ameron Water Transmission Group, LLC, an unknown limited liability company, and DOES 2 through 100, inclusive, Defendants. Case No. CIVDS1718377***
Superior Court of the State of California, County of San Bernardino
Deposition 07/14/2021

- ***Nathaniel Morgan, an individual; Michael Bevan, an individual; individually, and on behalf of others similarly situated, Plaintiffs, v. ROHR, Inc., a corporation; Hamilton Sundstrand, d/b/a UTC Aerospace Systems d/b/a Collins Aerospace; United Technologies Corporation; Defendants. Case No. 3:20-cv-00574-GPC-AHG***
US District Court, Southern District of California
Deposition 07/22/2021
- ***Jessica Robinson, Stacey Jennings, and Priscilla McGowan; individually, and on behalf of others similarly situated, Plaintiffs, v. Jackson Hewitt Inc. and Tax Services of America, Inc., Defendants. Case No. 2:19-cv-09066***
US District Court, District of New Jersey
Deposition 06/08/2022
- ***Chevron Corporation (USA) and Texaco Petroleum Company (USA), Claimants, v. The Republic of Ecuador, Respondent. Case No. 2009-23***
Permanent Court of Arbitration
Arbitration 08/17/2022
- ***Think20 Labs LLC, Plaintiff, v. Perkinelmer Health Sciences, Inc., Defendant. Case No. 8:21-cv-00541***
US District Court, Central District of California
Deposition 02/09/2023
- ***Denver Davis, Plaintiff, v. Amazon Canada Fulfillment Services, ULC, Amazon.com, Inc. and Amazon.com.ca, Inc., Defendants. Court File No. CV-20-00642361-00CP***
Ontario Superior Court of Justice
Deposition 02/13/2023
- ***The State of Texas, Plaintiff, v. Google LLC, Defendant. Case No. 22-01-88230-D***
District Court of Victoria County, Texas, 377th Judicial District
Deposition 06/03/2024
- ***Buying Power, Inc., Plaintiff, v. Graybar Electric Company, Inc. and Greg Hochheiser, Defendants. Case No. 2017-37325***
District Court of Harris County, Texas, 270th Judicial District
Trial 06/06/2024

Underlined text denotes party (or parties) Professor Slottje assisted.

CURRICULUM VITAE

ACADEMIC EXPERIENCE

- 2014–Present Southern Methodist University, Department of Economics
Dallas, TX
Professor Emeritus
- 1996–2014 Southern Methodist University, Department of Economics
Dallas, TX
Professor
- 1995 University of Melbourne, Department of Economics
Melbourne, Australia
Visiting Professor
- 1994 UpJohn Institute for Employment Research
Research Fellow
- 1991 S.U.N.Y. Binghamton, Department of Economics
Binghamton, NY
Visiting Professor
- 1989–1995 Southern Methodist University, Department of Economics
Dallas, TX
Associate Professor
- 1988 Luxembourg Income Study Summer Workshop Series
Walferdange, Luxembourg
Faculty Member
- 1984–1988 Southern Methodist University, Department of Economics
Dallas, TX
Assistant Professor
- 1983 University of North Texas, Department of Economics
Denton, TX
Assistant Professor

TEACHING EXPERIENCE

- Law and Economics
- Econometric Theory and Applications
- Labor Economics
- Human Resource Economics
- Intermediate Microeconomic Theory
- Applied Demand Analysis
- Mathematical Economics

- Industrial Organization
- Regulation and Antitrust
- History of Thought
- Microeconomic and Macroeconomic Principles

PROFESSIONAL MEMBERSHIPS

American Economic Association

American Statistical Association

The Econometric Society

OTHER PROFESSIONAL ACTIVITIES

United Nations Development Programme
Consultant

Econometric Theory
Referee

National Science Foundation
Reviewer

Economica
Referee

Social Science and Humanities Research
Council of Canada
Reviewer

Economic Journal
Referee

Cambridge University Press
Reviewer

Journal of the American Statistical Association
Referee

Oxford University Press
Reviewer

Journal of Applied Econometrics
Referee

Scientific Committee for International
Conference on Gini and Lorenz, May 2005,
Siena, Italy
Member

Journal of Business and Economic Statistics
Referee

International Program Committee for
International Conference on Time Series
Econometrics, Finance and Risk, July 2006,
Perth, Australia
Member

Journal of Econometrics
Referee

Journal of Econometrics
Fellow

Journal of Economic Surveys
Referee

International Engineering and Technology
Institute
Fellow

Journal of Public Economics
Referee

American Economic Review
Referee

The Review of Economics and Statistics
Referee

Communications in Statistics
Referee

The Review of Economic Studies
Referee

And many others.

Research on Economic Inequality
Founding editor

The Journal of Economic Inequality
Founding coeditor

NAFTA: The Business and Law Review of the Americas

Past associate editor

Journal of Economic Surveys

Past associate editor

Journal of Income Distribution

Past associate editor

Empirical Economics

Past associate editor

Health and Medical Economics

Past editorial board

Informatics and Data Mining

Past editorial board

Review of Income and Wealth

Past editorial board

RESEARCH INTERESTS

Statistics, applied economics

PUBLICATIONS

“Ten Ways to Specify a Gini Coefficient Using Entropy,” with Hang Ryu, *Annals of Financial Economics*, Vol. 16, pp. 1–19 (2022)

“Does Political Dominance Impact Economic Inequality?” with Hang Ryu, *Advances in Decision Sciences*, Vol. 24, pp. 118–146 (2020)

“A New Logit-Based Gini Coefficient,” with Hang Ryu, *Entropy*, Vol. 21, pp. 488–515 (2019)

“A New Inequality Measure that is Sensitive to Extreme Values and Asymmetries,” with M. McAleer and Hang Ryu, *Advances in Decision Sciences*, Vol. 23, pp. 1–35 (2019)

“A New Perspective on the Diffusion of Global Democracy,” with H. Kwan and Hang Ryu, *Advances in Decision Sciences*, Vol. 22, pp. 112–133 (2018)

“Maximum Entropy Estimation of Income Distributions from Basmann’s Weighted Geometric Mean Measure,” with Hang Ryu, *Journal of Econometrics*, Vol. 199(2), pp. 221–321 (2017)

“Income Inequality versus Utility Inequality,” with Hang Ryu, *Communications in Statistics - Theory and Methods*, Vol. 46, pp. 3631–3640 (2017)

“The Creative Mind in Econometrics: Studies in Celebration of Robert Basmann’s 90th Year on Causation, identification and structural equation estimation,” *Journal of Econometrics*, Vol. 199(2), pp. 93–95 (2017)

“A Utilitarian Perspective on Rawl’s Difference Principle,” with Kwon, H.Y. and H. Ryu. *Journal of Management Information and Decision Sciences*, Vol. 20, pp. 1–16 (2017)

“Modeling income distributions and Lorenz curves,” *The Journal of Economic Inequality*, Vol. 8, pp. 525–526 (2010)

“Measuring Human Capital: Theory and Practice,” *Journal of Economic Surveys*, Vol. 24, pp. 201–205 (2010)

- “The Impact of Worklife Expectancy on Measuring Human Capital,” with D. Millimet and M. Nieswiadomy, *Journal of Economic Surveys*, Vol. 24, pp. 339–361 (2010)
- “The GFT Utility Function,” in *Quantifying Consumer Preferences*, edited by D. Slottje, London: Emerald Group Publishing, pp. 119–147 with R. Basmann, et al. (2009)
- “Estimating International Tourism Demand and Volatility: An Application to Taiwan,” with C. Chang and M. McAleer, in *Quantifying Consumer Preferences*, edited by D. Slottje, London: Emerald Group Publishing, pp. 299–315 (2009)
- “Measuring the Volatility in U.S. Treasury Benchmarks and Debt Instruments,” with S. Hoti, E. Maasoumi, and M. McAleer, *Econometric Reviews*, Vol. 28, pp. 522–554 (2009)
- “The Use of Restricted Regressions in Estimating Demand Systems,” with J. Lye and J. Hirschberg in *Quantifying Consumer Preferences*, edited by D. Slottje, London: Emerald Group Publishing, pp. 363–381 (2009)
- “Estimating Demand Systems and Measuring Consumer Preferences,” *Journal of Econometrics*, Vol. 147, pp. 207–209 (2008)
- “Inferential Methods for Demand Elasticity Estimates,” with J. Hirschberg and J. Lye, *Journal of Econometrics*, Vol. 147, pp. 299–315 (2008)
- “An Alternative Approach to Estimating Demand: Neural Network Regression with Conditional Volatility,” with Michael McAleer, et al., *Journal of Econometrics*, Vol. 147, pp. 372–383 (2008)
- “A Neural Network Demand System with Heteroskedastic Errors,” with Michael McAleer and Marcelo Medeiros, *Journal of Econometrics*, Vol. 147, pp. 359–371 (2008)
- “Exchange-Rate Volatility in Latin America and its Impact on Foreign Trade,” with A. Arize and T. Osang, *International Review of Economics and Finance*, Vol. 17, pp. 33–44 (2008)
- “Inequality Aversion, Income Inequality and Social Policy in the U.S.: 1947 – 1998, with D. Millimet and P. Lambert, in *Advances in Income Inequality and Concentration Measures: In Memory of Corrado Gini and Max Lorenz*, London: Routledge, pp. 295–323 (2008)
- “Patent Activity and Technical Change,” with R. Basmann and M. McAleer, *Journal of Econometrics*, Vol. 139, pp. 355–375 (2007)
- “Econometric Analysis of Copyrights,” with D. Millimet and M. Buchanan, *Journal of Econometrics*, Vol. 139, pp. 303–317 (2007)
- “Changing Poverty or Changing Poverty Aversion?” with D. Millimet and M. Buchanan, *Research on Economic Inequality*, Vol. 15, pp. 251–288 (2007)

“Intellectual Property Litigation Activity in the USA,” with S. Hoti and M. McAleer, *Journal of Economic Surveys*, Vol. 20, pp. 715–729 (2006)

“A Review of *The Social Construction of Free Trade* by Francesco Duina and *Social and Labour Market Aspects of North American Linkages* edited by Richard Harris and Thomas Lemieux,” *Journal of Economic Literature*, Vol. 44, pp. 1035–1039 (2006)

“US Case Law and Economic Damages in Patent Litigation,” with C. Perry and B. Whitaker, in *Economic Damages in IP Matters*, edited by Daniel Slottje, New York: John Wiley & Son Publishing, pp. 3–13 (2006)

“The Law of Demand and Lost Profits Analysis,” with RL Basmann, M. Buchanan, and E. Maasoumi, in *Economic Damages in IP Matters*, edited by Daniel Slottje, New York: John Wiley & Son Publishing, pp. 113–132 (2006)

“Using Statistics in Copyright Cases,” with D. Millimet and M. Nieswiadomy, in *Economic Damages in IP Matters*, edited by Daniel Slottje, New York: John Wiley & Son Publishing, pp. 215–229 (2006)

“A Realistic Look at the Cost of Litigation,” with B. Whitaker, *Executive Counsel*, Vol. 2, pp. 38–40 (2005)

“Antitrust Environment and Innovation,” with D. Marinova and M. McAleer, *Scientometrics*, Vol. 64, pp. 301–311 (2005)

“A New Measure of Innovation: The Patent Success Ratio,” with M. McAleer, *Scientometrics*, Vol. 63, pp. 421–429 (2005)

“Bounding Estimates of Wage Discrimination,” with J. Hirschberg, *Research in Labor Economics*, Vol. 23, pp. 215–233 (2004)

“Why do People Violate the Transfer Principle? Evidence from Educational Sample Surveys,” with F. Cowell and Y. Amiel, *Inequality, Welfare and Income Distribution: Experimental Approaches*, *Research on Economic Inequality*, Vol. 11, pp. 1–16 (2004)

“Antitrust Enforcement and Economic Growth,” in *Essays in Honor of John Formby*, Vol. 12, edited by John Bishop, New York: Elsevier Publishing (2004)

“Copyright Damages and Statistics,” with R. Basmann, *International Statistical Review*, Vol. 71, pp. 557–564 (2003)

“Dynamics of Market Power and Concentration Profiles,” with E. Maasoumi, *Econometric Reviews*, Vol. 22, pp. 155–178 (2003)

“Economics, Damages Analysis and Georgia-Pacific,” with Chase Perry, in *High Technology Litigation Course book*, Austin: State Bar of Texas, Ch. 4 (2003)

“Inequality Aversion and the Natural Rate of Subjective Inequality,” with P. Lambert and D. Millimet, *Journal of Public Economics*, Vol. 87, pp. 1061–1090 (2003)

“Educational Impacts and Rising Inequality in the US,” with D. Millimet, S. Yitzhaki, and S. Zandvakili, *Estadica*, Vol. 55, pp. 221–245 (2003)

“Univariate Distribution Functions and Summarizing Measures: Income Distributions from a Given Gini Measure?” with H. Ryu, *Estadica*, Vol. 55, pp. 1–23 (2003)

“Bounding Lifetime Income Using a Cross Section of Data,” *Review of Income and Wealth*, Vol. 49 (2003) pp. 209–223 with D. Millimet, Nripesh Podder, and S. Zandvakili.

“Industrial and Environmental Specialization,” with D. Millimet, *Applied Economics Letters*, Vol. 10, pp. 123–129 (2003)

“Estimating Worklife Expectancies: An Econometric Approach,” with M. Nieswiadomy, H. Ryu, and D. Millimet, *Journal of Econometrics*, Vol. 113, pp. 83–114 (2003)

“Antitrust Issues in International Comparisons of Market Structure,” with J. Hirschberg, E. Maasoumi, and A. Arize, *Journal of Econometrics*, Vol. 113, pp. 129–158 (2003)

“Measuring Market Power in the Steel Industry,” with E. Maasoumi and S. Prowse, *Measuring Market Power*, edited by Daniel Slottje, Amsterdam: North-Holland Publishing Co., pp. 115–134 (2002)

“Lorenz Orderings for McDonald’s Generalized Functions of the Income Distribution,” with J. Sarabia and E. Castillo, *Economics Letters*, pp. 265–270 (2002)

“Environmental Compliance Costs and the Distribution of Emissions in the U.S.,” with D. Millimet, *Journal of Regional Science*, Vol. 42, pp. 87–105 (2002)

“An Environmental Paglin-Gini,” with D. Millimet, *Applied Economics Letters*, Vol. 9, pp. 271–274 (2002)

“Approximating Unanimity Orderings: An Application to Lorenz Dominance,” with AF Shorrocks, *Zeitschrift fur Nationalokonomie*, Sup 9: pp. 1–27 (2002)

“Antitrust Policy in Mexico,” with S. Prowse, *NAFTA: Law & Business Review of the Americas*, Vol. 9, pp. 405–415 (2001)

“The Environment and the Quality of Life in the U.S. Over Time,” *Environmental Modelling and Software*, with J. Hirschberg and E. Maasoumi, Vol. 16, pp. 525–532 (2001)

“Clusters of Attributes and Well-Being in the USA,” with J. Hirschberg and E. Maasoumi, *Journal of Applied Econometrics*, Vol. 16, pp. 445–460 (2001)

“Economic Inequality and the Environment,” with Mike Nieswiadomy and Mike Redfearn, *Environmental Modelling and Software*, pp. 183–194 (2001)

“The Exponential Family of Lorenz Curves,” with J. Sarabia and E. Castillo, *Southern Economic Journal*, pp. 748–756 (2001)

“A Review of the U.S. Antitrust System and Recent Trends,” with P. Lin, B. Raj, and M. Sandfort, *Journal of Economic Surveys*, Vol. 14, pp. 255–306 (2000)

“Measuring Human Capital and Its Distribution,” with C. Dagum, *Journal of Structural Change and Economic Dynamics*, Vol. 11, pp. 67–94 (2000)

“Employee Benefits and the Distribution of Income and Wealth,” with S. Woodbury and R. Anderson, *Employee Benefits, Labor Costs, and Labor Markets in Canada and the United States*, William Alpert and Stephen Woodbury (eds.), W.E. Upjohn Institute, pp. 349–378 (2000)

“Estimating the Density of Unemployment Duration Based on Contaminated Samples or Small Samples,” with H. Ryu, *Journal of Econometrics*, Vol. 95, pp. 131–156 (2000)

“Exchange Rate Volatility and Foreign Trade,” with C. Arize and T. Osang, *Journal of Business and Economic Statistics*, Vol. 18, pp. 10–17 (2000)

“Parametric Approximations of the Lorenz Curve,” with H. Ryu, *Handbook on Income Inequality Measurement Theory to Practice*, Jacques Silber (ed.), Amsterdam: Kluwer, pp. 291–314 (1999)

“Analyzing Perceived Hunger Across States in the U.S.,” with H. Ryu, *Empirical Economics*, Vol. 24, pp. 323–329 (1999)

“An Ordered Family of Lorenz Curves,” with J. Sarabia and E. Castillo, *Journal of Econometrics*, Vol. 91, pp. 43–60 (1999)

“Productivity Slowdown in the United States: Some New Evidence from the Level Shift Hypothesis,” with B. Raj and J. Dolmas, *Economic Inquiry*, Vol. 37, pp. 226–241 (1999)

“Income Inequality and Changes in Family Size,” with S. Yitzhaki, *Research in Labor Economics*, Vol. 17, pp. 383–397 (1998)

“Yankee Generosity and the Japanese Miracle,” with R. Batra, *Research on Economic Inequality*, Vol. 8, pp. 95–119 (1998)

“Trade Liberalization and the U.S. Living Standard,” with R. Batra, *Research on Economic Inequality*, Vol. 8, pp. 57–72 (1998)

“Another Perspective on Recent Changes in the U.S. Income Distribution: An Index Space Representation,” with H. Ryu, *Advances in Econometrics*, Vol. 12, pp. 319–340 (1997)

“The Uncertain Unit Root in the U.S. Poverty Rate,” with B. Raj, *Empirical Economics*, Vol. 22, pp. 555–570 (1997)

“Two Flexible Functional Form Approaches for Approximating the Lorenz Curve,” with H. Ryu, *Journal of Econometrics*, Vol. 72, pp. 251–274 (1996)

“The Sensitivity of Functional Forms of Earnings Functions to Specification,” with J. Hirschberg, *Journal of Income Distribution*, Vol. 6, pp. 53–66 (1996)

“Modelling Aggregate Work Stoppage Behavior in the U.S. in an Open Economy: NAFTA and Beyond,” with M. Nieswiadomy and B. Raj, *NAFTA: Business and Law Review of the Americas*, Vol. 3, pp. 16–38 (1995)

“Evaluating Effective Income Tax Progression,” with K. Hayes and P. Lambert, *Journal of Public Economics*, Vol. 56, pp. 461–474 (1995)

“Cyclical Fluctuations, Macroeconomic Policy and the Size Distribution of Income: Some Preliminary Evidence,” with J. Haslag, *Journal of Income Distribution*, Vol. 4, pp. 3–23 (1994)

“The Relationship between Productivity Changes and Poverty in the U.S.,” with K. Hayes, M. Nieswiadomy, and E. Wolff, *Journal of Income Distribution*, Vol. 4, pp. 107–119 (1994)

“The Effects of Relative Price Changes and Cost of Living Adjustments on Some Welfare Indices,” with C. Diamond, E. Maasoumi, and N. Nieswiadomy, in *Models and Measurement of Welfare and Inequality*, W. Eichhorn (ed.), Berlin: Springer-Verlag, pp. 593–617 (1994)

“Are Net Discount Rates Stationary?: Some Further Evidence,” with M. Nieswiadomy and J. Haslag, *Journal of Risk and Insurance*, Vol. 61, pp. 513–518 (1994)

“The Trend Behavior of Alternative Inequality Measures in the U.S. 1947-1990 and the Structural Break,” with B. Raj, *Journal of Business and Economic Statistics*, Vol. 12, pp. 479–488 (1994)

“Coordinate Space vs. Index Space Representations as Estimation Methods,” with H. Ryu, *Journal of Business and Economic Statistics*, Vol. 12, pp. 243–251 (1994)

“A Macroeconometric Model of Income Inequality in the U.S.,” with N. Balke, in *The Changing Distribution of Income in an Open U.S. Economy*, J. Bergstrand, T. Cosimano, J. W. Houck, and R. Sheehan (eds.), Amsterdam: North-Holland, pp. 243–275 (1994)

“Productivity Changes and Income Inequality in the U.S.,” with K. Hayes, M. Nieswiadomy, M. Redfean, and E. Wolff, in *The Changing Distribution of Income in an Open U.S. Economy*, J. Bergstrand, T. Cosimano, and R. Sheehan (eds.), Amsterdam: North-Holland, pp. 299–328 (1994)

“Estimating the Impact of Capabilities on the Size Distribution of Earnings,” with H. Ryu, in *Poverty Taxation and Income Distribution*, J. Creedy (ed.), London: Elgar Publishing, pp. 175–192 (1994)

“Testing an Alternative Habit Persistence Model,” with R. L. Basmann and K. Hayes, *Southern Economic Journal*, Vol. 60, pp. 739–753 (1994)

“A New Method for Detecting Discrimination in Labor Markets,” with K. Hayes and G. Scully, *Journal of Econometrics*, Vol. 61, pp. 23–42 (1994)

“An Empirical Bayes Approach to Analyzing Wage Differentials Across Occupations and Industries,” with J. Hirschberg, *Journal of Econometrics*, Vol. 61, pp. 65–80 (1994)

“Trade Policy and Poverty in the U.S.: Theory and Evidence, 1947-1990,” with R. Batra, *Review of International Economics*, Vol. 1(3), pp. 189–208 (1993)

“Equity in Distributing Educational Funds: The Case of Texas,” with K. Hayes and Lori Taylor, *Economics of Education Review*, Vol. 12, pp. 171–176 (1993)

“Consumer Behavior and Changes in the Prices of Monetary Aggregates,” with J. Johnson, *Journal of Economic and Social Measurement*, Vol. 19, pp. 1–19 (1993)

“Poverty and Change in the Macroeconomy: A Dynamic Macro-econometric Model,” with N. Balke, *The Review of Economics and Statistics*, Vol. 75, pp. 117–122 (1993)

“Is There Conspicuous Consumption in Japan?” *Japan and the World Economy*, Vol. 4, pp. 333–342 (1992)

“Analyzing Functional Forms of Stock Returns Distributions,” with J. Hirschberg, S. Mazumdar, and G. Zhang, *Applied Financial Economics*, Vol. 2, pp. 221–227 (1992)

“Tariff Behavior in Five European Countries,” with G. Gardner and K. Kimbrough, *Economics Letters*, Vol. 39, pp. 73–78 (1992)

“Labor Force Participation and Human Capital: Influence on Earnings Distributions Across States,” with K. Hayes and J. Shackett-McMahon, *Review of Income and Wealth*, Vol. 38, pp. 27–37 (1992)

“Veblen Effects and Their Impact on the New European Community and Some of Their Trading Partners,” with K. J. Hayes, M. J. Ferrantino, and J. Wagner, *European Economic Review*, Vol. 36, pp. 51–70 (1992)

“Efficiency Aspects of the Major League Baseball Players’ Market,” with J. Hirschberg and G. Scully, *Advances in the Economics of Sports*, Vol. 1, pp. 115–134 (1992)

“A Theoretical Analysis of the Beneficial Effects of the Brain-Drain Phenomenon,” with J. Abu-Rashed, *Canadian Journal of Development Studies*, Vol. 12, pp. 357–366 (1991)

“Measuring the Quality of Life Across Countries,” *The Review of Economics and Statistics*, Vol. 73, pp. 684–693 (1991)

“Are Net Discount Ratios Stationary?” with J. Haslag and M. Nieswiadomy, *Journal of Risk and Insurance*, Vol. 18, pp. 505–512 (1991)

“Cluster Analysis and the Quality of Life Across Countries,” with J. Hirschberg and Essie Maasoumi, *Journal of Econometrics*, Vol. 50, pp. 131–150 (1991)

“The Lorenz Curve and the Mobility Function,” with R. L. Basmann and K. J. Hayes, *Economics Letters*, Vol. 35, pp. 105–111 (1991)

“U.S. Federal Redistributive Income Policies,” with K. Hayes and S. Porter-Hudak, *Applied Economics*, Vol. 23, pp. 1193–1200 (1991)

“Ranking Economic Liberty Across Countries,” with G. Scully, *Public Choice*, Vol. 69, pp. 121–152 (1991)

“The Impact of Unionization and Right-to-Work Laws on Earnings Inequality Across States,” with K. Hayes and M. Nieswiadomy, *Journal of Labor Research*, Vol. 12, pp. 185–195 (1991)

“An Analysis of the Relationship Between Various Redistributive Programs and Poverty,” with K. Hayes and M. Nieswiadomy, *Public Choice*, Vol. 68, pp. 175–184 (1991)

“The Equality-Efficiency Trade-Off: An Approach to Measurement and Some Estimates for the U.S. Economy,” with K. J. Hayes, P. J. Lambert, and G. W. Scully, *Journal of Economic and Social Measurement*, Vol. 16, pp. 231–239 (1990)

“Measuring Price-Dependent Preferences in West Germany,” with K. Hayes and J. Wagner, *European Journal of Political Economy*, Vol. 6, pp. 353–361 (1990)

“Multivariate Exogeneity Tests and Poverty: Some Evidence on the Perception of Poverty,” with K. Hayes and M. Nieswiadomy, *Economics Letters*, Vol. 33, pp. 395–399 (1990)

“Change in the U.S. Income Distribution from 1970-1980: Assessing State and Regional Impacts,” *The Journal of Human Resources*, Vol. 25, pp. 267–274 (1990)

“Using Grouped Data for Constructing Inequality Indices: Parametric vs. Nonparametric Methods,” *Economics Letters*, Vol. 32, pp. 193–197 (1990)

“A General Functional Form for Approximating the Lorenz Curve,” with R. L. Basmann, K. J. Hayes, and J. Johnson, *Journal of Econometrics*, Vol. 43, pp. 77–90 (1990)

“Is the Size Distribution of Income a Random Walk?,” with K. Hayes, S. Porter-Hudak, and G. Scully, *Journal of Econometrics*, Vol. 43, pp. 213–226 (1990)

“The Political Market for Real Income Redistribution Through Choice of Weights in COLAS,” with R. L. Basmann, C. Diamond, and G. Scully, *Public Choice*, Vol. 64, pp. 103–120 (1990)

“Demographic Change and Inequality in the Size Distributions of Labor and Non-labor Income,” with D. Black and K. Hayes, *Review of Income and Wealth*, Vol. 35, pp. 283–296 (1989)

“On the Empirical Relationship Between Several Well-Known Inequality Measures,” with M. Nieswiadomy and R. L. Basmann, *Journal of Econometrics*, Vol. 42, pp. 49–66 (1989)

“Remembrance of Things Past: The k Criterion and Earnings Distributions, Across Occupations,” with J. Hirschberg, *Journal of Econometrics*, Vol. 42, pp. 121–130 (1989)

“The Efficacy of State and Local Governments’ Redistributive Policies,” with K. Hayes, *Public Finance Quarterly*, Vol. 17, pp. 304–322 (1989)

“A Selection Criterion for Choosing Between Functional Forms of Income Distributions,” with J. Hirschberg and D. Molina, *Econometric Reviews*, Vol. 7, pp. 183–197 (1988–1989)

“The Paradox of Politics and Policy in Redistributing Income,” with G. Scully, *Public Choice*, Vol. 60, pp. 55–70 (1989)

“Alternatives to Unemployment-Based Funding Formulas in the Allocations of Federal Grants,” with J. Ragan, *Growth and Change*, Vol. 20, pp. 17–33 (1989)

“Preference Variation Across North America,” with K. J. Hayes and D. J. Molina, *Economica*, Vol. 55, pp. 525–539 (1988)

“Estimating Future Earnings Using the New Worklife Tables,” with Mike Nieswiadomy, *Journal of Risk and Insurance*, Vol. 15, pp. 539–544 (1988)

“A Note on Measuring Veblen’s Theory of Conspicuous Consumption,” with R. L. Basmann and D. J. Molina, *The Review of Economics and Statistics*, Vol. 70, pp. 531–535 (1988)

“Errata: The EL Index of Inequality,” *Economics Letters*, Vol. 26, pp. 295–297 (1988)

“A Study of the Relationships Between Economic Growth and Inequality: The Case of Mexico,” with J. Haslag and T. Fomby, *Economic Review: Federal Reserve Bank of Dallas*, pp. 13–25 (1988)

“A New Method for Measuring Technological Change,” with R. L. Basmann, K. J. Hayes, and D. J. Molina, *Economics Letters*, Vol. 25, pp. 329–333 (1987)

“Price Dependent Preferences and the Generalized Fechner-Thurstone Direct Utility Function: An Exposition,” with R. L. Basmann and D. J. Molina, *Journal of Institutional and Theoretical Economics*, Vol. 143, pp. 568–594 (1987)

“A New Index of Income Inequality: The B Measure,” with R. L. Basmann, *Economics Letters*, Vol. 24, pp. 385–389 (1987)

“Computer Algebra Systems: Some Economic and Econometric Applications,” with K. Hayes and J. Hirschberg, *Advances in Econometrics*, Vol. 6, pp. 51–89 (1987)

“Measures of Publicness Based on Demographic Scaling,” with K. J. Hayes, *The Review of Economics and Statistics*, Vol. 69, pp. 713–718 (1987)

“The Sensitivity of True-Cost-of-Living Indexes to Price-and Income-Induced Changes in Aggregate Consumers’ Tastes,” with R. L. Basmann, *Journal of Business and Economic Statistics*, Vol. 5, pp. 483–498 (1987)

“Income Inequality and Urban/Rural Migration,” with K. Hayes, *Review of Regional Studies*, Vol. 17, pp. 53–58 (1987)

“Some Further Examples of the Uses of Computer Algebra Systems in Econometric Applications,” with K. J. Hayes and J. Hirschberg, *Proceedings of the American Statistical Association*, pp. 659–664 (1987)

“The Gamma Distribution and the Size Distribution of Income Reconsidered,” with D. J. Molina, *Atlantic Economic Journal*, Vol. 15, p. 86 (1987)

“Labor Supply Decisions, Human Capital Attributes and Inequality in the Size Distribution of Earnings in the U.S.: 1952-81,” with Joyce R. Shackett, *The Journal of Human Resources*, Vol. 22, pp. 82–100 (1987)

“Relative Price Changes and Inequality in the Size Distribution of Various Components of Income: A Multidimensional Approach,” *Journal of Business and Economic Statistics*, Vol. 5, pp. 19–26 (1987)

“Industrial Policy and the Nature of the Firm,” with P. K. Porter and G. W. Scully, *Journal of Institutional and Theoretical Economics*, Vol. 142, pp. 79–100 (1986)

“Variable Preferences, Demand Elasticities and the True Cost-of-Living Index: The Case of Mexico,” with K. Hayes, D. J. Molina, and M. Nieswiadomy, *Advances in Econometrics*, Vol. 5, pp. 327–341 (1986)

“A Sensitivity Analysis of the Effect of Fiscal and Monetary Policy on the Size Distribution of Income in the U.S.,” with W.R. Russell and Joe Haslag, *Advances in Econometrics*, Vol. 5, pp. 97–122 (1986)

“A Comprehensive Analysis of Economic Inequality in the U.S. for the years 1952-1981,” with P. K. Porter, *Southern Economic Journal*, Vol. 52, pp. 412–422 (1985)

“A New Measure of Income Inequality Based Upon the Beta Distribution of the Second Kind,” *Economics Letters*, Vol. 15, pp. 369–375 (1984)

“A Note on Aggregation of Fechner-Thurstone Direct Utility Functions,” with R. L. Basmann and D. J. Molina, *Economics Letters*, Vol. 14, pp. 117–122 (1984)

“Variable Consumer Preferences, Economic Inequality and the Cost of Living Index,” with R. L. Basmann and D. J. Molina, *Advances in Econometrics*, Vol. 3, pp. 1–69 (1984)

“Some New Methods of Predicting Changes in Economic Inequality Associated with Trends in Growth and Development,” with R. L. Basmann, D. J. Molina, and M. Rodarte, in *Issues in 3rd World Development*, Westview Publishing Company: Boulder, pp. 71–141 (1984)

“Budget-Constraint Prices as Preference Changing Parameters of the Generalized Fechner-Thurstone Direct Utility Function,” with R. L. Basmann and D. J. Molina, *American Economic Review*, Vol. 73, pp. 411–413 (1983)

“The Importance of Relative Prices in Analyzing Veblen Effects,” with R. Phillips, *Journal of Economic Issues*, Vol. 13, pp. 197–207 (1983)

Books:

Current Issues in Health (eds.), Emerald Publishing Group, with Rusty Tchernis (2010)

Quantifying Consumer Preferences (ed.), Emerald Group Publishing (2009)

Economic Damages in IP Matters (ed.), John Wiley & Son Publishing (2006)

Patent Activity and Technical Change in U.S. Industries, with Mike McAleer, North-Holland (2005)

Measuring Market Power (ed.), North-Holland (2002)

The Role of the Academic Economist in Litigation Support (ed.), North-Holland (1999)

Income Inequality, Poverty and Economic Welfare (eds.), with B. Raj, Springer-Verlag (1998)

Measuring Trends in U.S. Income Inequality, with H. Ryu, Springer-Verlag (1998)

Pay and Performance in the NBA, with M. Buchanan, JAI Press (1997)

Crisis on the Rio Grande: Economic Development on the Mexico-Texas Border, with D. Betts, Westview Press (1994)

Some New Methods for Measuring and Describing Economic Inequality, with R. L. Basmann and K. J. Hayes, JAI Press (1994)

Measuring the Quality of Life Across Countries, with G. Scully, J. Hirschberg, and K. Hayes, Westview Press (1991)

Case Studies in Finance Using Lotus 123, with J. D. Johnson, McGraw-Hill (1990)

Case Studies in Finance Using Microsoft Excel, with J. D. Johnson, McGraw-Hill (1989)

Macroeconomic Activity and Income Inequality in the U.S., with J. Haslag and W. Russell, JAI Press (1989)

The Structure of Earnings and the Measurement of Income Inequality, North-Holland (1989)

The Generalized Fechner-Thurstone Direct Utility Function and Some Applications, with R. L. Basmann, K. J. Hayes, and D. J. Molina, Springer-Verlag Publishing Co. (1988)

Book Reviews:

Top Heavy, by Ed Wolff, for the *Journal of Comparative Economics* (1996)

A Theory of Earnings Distributions, by R. Von Weizacker, for the *Journal of Income Distribution* (1995)

Lifetime Income Distributions and Redistribution, by Ann Harding, for the *Journal of Economic Literature* (1995)

The Standard of Living, by A. Sen, for *Economic Development and Cultural Change* (1990)

Dynamics of Income Distribution, by John Creedy, for the *Journal of the American Statistical Association* (1987)

Papers Given:

University of California Law School, San Francisco, CA (December 2017)

Seyfarth Shaw, Seminar, Los Angeles, CA (September 2016)

American Conference Institute, Los Angeles, CA (July 2014)

American Conference Institute, New York, NY (May 2014)

InsideCounsel.com, Webinar, with J. Baron and J. Looby, New York, NY (October 2012)

Law Seminars International, Philadelphia, PA (October 2006)

Southern Economic Association, with T. Fomby, New Orleans, LA (November 2004)

General Electric Co., Litigation Counsel Meeting, with C. Gerardi, and B. Imburgia, Southbury, CT (October 2004)

State Bar of Texas Intellectual Property Section, Austin, TX (February 2003)

Econometric Society Australasian Meeting (July 2002)

American Law Firm Association, Labor and Employment Section, Dallas, TX (October 2001)

State Bar of Texas Asian Pacific Interest Section, Austin, TX (April 2001)

Swiss Competition Commission, Geneva, Switzerland (January 2001)

World Congress of the Econometric Society, with H. Ryu, Seattle, WA (August 2000)

American Statistical Association, with C. Dagum, Baltimore, MD (August 1999)

Southern Economic Association, with J. Hirschberg, Baltimore, MD (November 1998)

American Statistical Association, with E. Castillo and J. Sarabia, Dallas, TX (August 1998)

Texas Econometrics Camp, with B. Raj, Corpus Christi, TX (February 1997)

American Economic Association Meetings, with S. Yitzhaki, New Orleans, LA (January 1997)

Biannual Conference of International Association of Income and Wealth, with S. Yitzhaki and S. Zandvakili, Lillehammer, Norway (August 1996)

Asian Meetings of Econometric Society, with B. Raj, Perth, Australia (July 1996)

Asian Meetings of Econometric Society, with E. Maasoumi and J. Hirschberg, Perth, Australia (July 1996)

Texas Econometrics Camp, with H. Ryu, San Antonio, TX (February 1996)

Southern Economics Association Meetings, with Shlomo Yitzhaki and S. Zandvakili, New Orleans, LA (November 1995)

World Congress of The Econometric Society, with H. Ryu, Tokyo, Japan (August 1995)

Southern Economics Association Meetings, with J. Hirschberg, J. Lye and V. Martin, Orlando, FL (November 1994)

Southern Economics Association Meetings, with S. Woodbury, Orlando, FL (November 1994)

UpJohn Institute/Donner Foundation Conference on Fringe Benefits and Labor Costs, with Steve Woodbury, Kalamazoo, MI (November 1994)

Biannual Conference of International Association of Income and Wealth, with B. Raj, New Brunswick, Canada (August 1994)

NSF Conference on Equity, Distribution and Growth, with H. Ryu, Honolulu, HI (August 1994)

ASSA Meetings, with R. L. Basmann, Boston, MA (January 1994)

Southern Economics Association Meetings, with J. Hirschberg, New Orleans, LA (November 1993)

Southern Economics Association Meetings, with J. Hirschberg, Washington, DC (November 1992)

Southern Economics Association Meetings, with H. Ryu, Washington, DC (November 1992)

Sesquicentennial Conference on Inequality, with K. Hayes, M. Nieswiadomy, and E. Wolff, University of Notre Dame (September 1992)

Sesquicentennial Conference on Inequality, with N. Balke, University of Notre Dame (September 1992)

International Meeting on Income Inequality and Poverty, with K. Hayes, M. Nieswiadomy, and E. Wolff, Siena, Italy (October 1991)

Western Economics Association, with K. Hayes and Peter Lambert, Seattle, WA (July 1991)

International Workshop on Discrimination and Segregation, with K. Hayes and J. G. Hirschberg, Ramat Gan, Israel (June 1991)

Southern Economics Association Meetings, with Charlie Diamond, E. Maasoumi, and M. Nieswiadomy, New Orleans, LA (November 1990)

Southern Economics Association Meetings, New Orleans, LA, with K. Hayes, M. Nieswiadomy and E. Wolff (November 1990)

American Public Policy Association Meetings, with K. Hayes and P. Byrnes, San Francisco, CA (October 1990)

World Congress of The Econometric Society, with R. Basmann and K. Hayes, Barcelona, Spain (August 1990) Southwest Finance and Amalgamated Disciplines, with J. Haslag and M. Nieswiadomy, Dallas, TX (March 1990)

American Statistical Association Meetings, with K. Hayes and J. Hirschberg, San Diego, CA (January 1989)

Southern Economics Association Meetings, with M. Nieswiadomy, San Antonio, TX (November 1988)

Southern Economics Association Meetings, with K. Hayes and J. Hirschberg, San Antonio, TX (November 1988)

Econometric Society Meetings, Chicago, IL, with D. Black and K. Hayes (December 1987)

American Statistical Association Meetings, with K. J. Hayes and J. G. Hirschberg, San Francisco, CA (August 1987)

Southern Economics Association Meetings, with K. Hayes, New Orleans, LA (November 1986)

Southern Economics Association Meetings, with R. Batra, New Orleans, LA (November 1986)

Summer North American Econometric Society Meetings, with R. L. Basmann, Durham, NC (June 1986)

Summer North American Econometric Society Meetings, with D. J. Molina, Durham, NC (June 1986)

Southwest Economics Association Meetings, with R. L. Basmann, San Antonio, TX (March 1986)

Southwest Economics Association Meetings, with K. Hayes, San Antonio, TX (March 1986)

Southwest Economics Association Meetings, with J. Haslag and T. Fomby, San Antonio, TX (March 1986)

Southwest Economics Association Meetings, with B. B. Reagan, San Antonio, TX (March 1986)

Southern Economic Association Meetings, with Ravi Batra, Dallas, TX (November 1985)

World Congress of The Econometric Society, with Ravi Batra, Boston, MA (August 1985)

Southern Economic Association Meetings, with Joyce Shackett, Atlanta, GA (November 1984)

Southwest Economics Association Meetings, with M. Nieswiadomy, Fort Worth, TX (March 1984)

Mid-South Economics Association Meetings, with Don MacDonald, Little Rock, AR (February 1984)

Association for Evolutionary Economics Meetings, San Francisco, CA (December 1983)

Joint Session of American Economic Association and Econometric Society Meetings, with R. L. Basmann and D. J. Molina, San Francisco, CA (December 1983)

Latin American Econometric Society Meetings, Mexico City, Mexico, with R. L. Basmann and D. J. Molina (July 1982)

APPENDIX B

BRENDAN ROGERS
Vice President

Direct: 212 492 9381
Mobile: 516 724 4291
brendan.rogers@analysisgroup.com

151 West 42nd Street
23rd Floor
New York, NY 10036

Mr. Rogers specializes in applying economic and statistical analysis to complex business disputes, including those involving the assessment of economic damages claims and the design and critique of statistical samples. He has served as an expert witness and testified at arbitration. Mr. Rogers' litigation experience has included class and collective actions in labor and employment, health care, breach of contract, fraud, deceptive business practice, and false advertising matters. He has also processed and analyzed large datasets related to class-wide liability and damages claims. In addition, Mr. Rogers has assessed economic damages in patent infringement litigation and provided economic analysis in International Trade Commission ("ITC") Section 337 investigations. He has led teams and advised clients across all phases of the litigation process, including fact discovery, preparation of expert analysis and testimony, and settlement analysis.

EDUCATION

2007 M.B.A., Georgetown University McDonough School of Business
2001 B.A., economics (*with high honors and distinction, magna cum laude, Phi Beta Kappa*),
Kenyon College

PROFESSIONAL EXPERIENCE

2022–Present Analysis Group, Inc.
Vice President
2007–2021 FTI Consulting
Managing Director (2013–2021)
Senior Director (2011–2013)
Director (2009–2011)
Senior Consultant (2007–2008)
2001–2005 Analysis Group, Inc.
Senior Analyst (2003–2005)
Analyst (2001–2002)

TESTIFYING EXPERIENCE

Labor and Employment

- ***Ford, et al. v. CEC Entertainment, Inc.***
Superior Court of California, San Francisco County

Retained by counsel for defendant CEC Entertainment, Inc., to quantify alleged waiting time penalties, missed meal and rest breaks, Private Attorneys General Act (“PAGA”) penalties, and wage statement penalties for a putative class of over 8,000 non-exempt employees. Issued an expert declaration in May 2014.

General Commercial Damages

- ***2B Trading, Inc. v. GoPro Hong Kong, Ltd. v. United World Brands***
International Chamber of Commerce, International Court of Arbitration

Retained by counsel for claimant GoPro Hong Kong, Ltd., to quantify United World Brands’ and 2B Trading’s diverted sales and profits due to their alleged gray marketing of cameras and accessories outside of authorized distribution channels. Issued expert reports in November 2015 and December 2015 and provided testimony to the arbitration tribunal in March 2016.

SELECTED CASE WORK IN SUPPORT OF OTHER EXPERT WITNESSES

Assisted the expert in providing an expert report, declaration, and/or deposition or trial testimony.

Health Care

- ***In Re: Lipitor Antitrust Litigation***
Circuit Court of Mason County, West Virginia, Civil Action No. 13-C-1-N
Supported defendants’ expert Dr. Bruce Stangle’s analysis of economic damages related to allegations that generic versions of Lipitor were improperly delayed resulting in overcharges to end payor purchasers for Pfizer’s branded and generic versions of the statin.
- ***In Re: Lipitor Antitrust Litigation***
USDC District of New Jersey, Case No. 3:12-cv-2389 (PGS/JBD), (MDL No. 2332)
Supported defendants’ expert Dr. James Hughes’s analysis of class certification issues related to end payor purchasers’ allegations that generic versions of Lipitor were improperly delayed resulting in overcharges for Pfizer’s branded and generic versions of the statin.
- ***In Re: Blue Cross Blue Shield Antitrust Litigation***
USDC Northern District of Alabama Southern Division, Case No. 2:13-cv-20000, (MDL No. 2406)
Supported provider plaintiffs’ expert Dr. Daniel Slottje’s analysis of economic damages in an antitrust class action involving allegations of horizontal market allocation, price fixing, and monopsonization.
- ***Arapahoe Surgery Ctr., LLC, v. CIGNA Healthcare, Inc.***
USDC District of Colorado, Case No. 1:13-cv-03422
Supported plaintiffs’ and counterclaim defendants’ expert Dr. Daniel Slottje’s analysis of economic damages in an antitrust and ERISA suit involving allegations of group boycott, breach of contract, and ERISA violations.
- ***Franco v. Connecticut Gen. Life Ins. Co.***
USDC District of New Jersey, Case No. 07-cv-6039 (SRC) (PS)

Supported defendants' expert Dr. Daniel Slottje's statistical analyses related to class action allegations that a health insurer violated its contractual obligation to pay for out-of-network services at the "usual, customary and reasonable" ("UCR") amount resulting in the underpayment of health plan members' out-of-network benefits.

▪ ***In Re: Aetna UCR Litigation***

USDC District of New Jersey, Case No. 2:07-CV-3541 (FHS) (PS) / MDL No.2020

Supported defendants' expert Dr. Daniel Slottje's statistical analyses related to class action allegations that a health insurer violated its contractual obligation to pay for out-of-network services at the "usual, customary and reasonable" ("UCR") amount resulting in the underpayment of health plan members' out-of-network benefits.

ARTICLES AND PUBLICATIONS

"Role of Financial Experts in ITC Section 337 Investigations," with R.N. Herrington, *Litigation Services Handbook: The Role of the Financial Expert, 5th edition*, 2016 Cumulative Supplement.

"Shock and Awe: The Increasing Popularity and Intrinsic Value of an ITC Investigation," with R.N. Herrington, *IP Litigator*, Volume 16 (No. 1), January/February 2010, pp. 8-13.

Exhibit 1

**Providers' Reduced Administrative Costs After BlueCard Claims Submission:
Cost Savings from Fewer BlueCard Claims Requiring Provider Follow Up with the Blues (1)**

	Notes and Sources	Historical	Forecast										
		Average	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Total BlueCard claims (000s)	(2)	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947
BlueCard claims that require follow up (000s)	(3)	5.2%	11,121	11,121	11,121	11,121	11,121	11,121	11,121	11,121	11,121	11,121	11,121
Resolved in 1 contact with the Blues (000s)	(4)	58.1%	6,464	6,464	6,464	6,464	6,464	6,464	6,464	6,464	6,464	6,464	6,464
Resolved in 3 contacts with the Blues (000s)	(5) = 100% - (4)	41.9%	4,657	4,657	4,657	4,657	4,657	4,657	4,657	4,657	4,657	4,657	4,657
Excess hours on BlueCard claims (000s)		<u>Hrs. / Claim</u>											
Resolved in 1 contact with the Blues	(6)	1.17	7,542	7,542	7,542	7,542	7,542	7,542	7,542	7,542	7,542	7,542	7,542
Resolved in 3 contacts with the Blues	(7)	1.63	7,568	7,568	7,568	7,568	7,568	7,568	7,568	7,568	7,568	7,568	7,568
Compensation on excess hours on BlueCard claims (\$000s)		<u>\$/ Hr.</u>											
Hourly compensation (\$)	(8)	\$23.45	\$24.40	\$24.89	\$25.38	\$25.89	\$26.41	\$26.94	\$27.48	\$28.02	\$28.59	\$29.16	
Resolved in 1 contact with the Blues (\$000s)	(9) = (6) x (8)		\$183,996	\$187,676	\$191,429	\$195,258	\$199,163	\$203,146	\$207,209	\$211,353	\$215,580	\$219,892	
Resolved in 3 contacts with the Blues (\$000s)	(10) = (7) x (8)		\$184,632	\$188,324	\$192,091	\$195,933	\$199,851	\$203,848	\$207,925	\$212,084	\$216,326	\$220,652	
Total compensation on excess hours (\$000s)	(11) = (9) + (10)		\$368,628	\$376,000	\$383,520	\$391,191	\$399,014	\$406,995	\$415,135	\$423,437	\$431,906	\$440,544	
Total Cost Savings (\$000s)	(12) = Sum (11)		\$4,036,370										
Discount rate	(13)		7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
Years since start of Year 1 (mid-year convention)	(14)		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	
Present Value (\$000s)	(15) = (11) / ((1 + (13)) ^ (14))		\$356,100	\$338,953	\$322,631	\$307,096	\$292,308	\$278,233	\$264,836	\$252,083	\$239,945	\$228,391	
PV of Cost Savings (\$000s) (10-Year Forecast)	(16) = Sum (15)		\$2,880,575										

Notes and Sources:

- (1) This valuation quantifies the estimated future cost savings from providers following up with the Blues on fewer BlueCard claims after submission.
- (2) Assumes the average annual number of BlueCard claims. (BCBSA Network Discount Reports, 2008-2014: 2008 BlueCard NDR (Ark BCBS - 0008181.xlsx, at tab "Table 2 - Host"). See also, 2009 BlueCard NDR (BCBSA0040443 - 448, at 446). See also, 2010 BlueCard NDR (BCBSA00398265 - 270, at 268). See also, 2011 BlueCard NDR (BCBSA00686828.xlsx, at tab "Table 2 - Host"). See also, 2012 BlueCard NDR (BCBSA00459093 - 098, at 096). See also, 2013 BlueCard NDR (BCBSA-CID-023881.xlsx, at tab "Table 2 - Host"). See also, 2014 BlueCard NDR (WLP-05282701.xlsx, at tab "Table 2 - Host").).
- (3) Assumes the average annual percentage of BlueCard claims in excess of Local claims that require follow-up once submitted. (BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, Wave II Results, 2008-2011: BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, 2009 Wave 11 Report, Blue Cross Blue Shield of Alabama (BCBSAL_0001919714 - 756). See also, BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, 2011 Wave 11 Report, Blue Cross Blue Shield of Alabama (BCBSAL_000096731 - 768).)
- (4) Assumes the average percentage of BlueCard claims requiring follow-up that were resolved with one contact. (BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, Wave II Results, 2008-2011.)
- (5) The average number of contacts it takes to resolve BlueCard claims that are not resolved in one contact is 3.1. (BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, Wave II Results, 2008-2009: BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, 2009 Wave 11 Report, Blue Cross Blue Shield of Alabama (BCBSAL_0001919714 - 756)).
- (6) Ranges from 20 minutes to 2 hours per BlueCard claim. (Katz Declaration, ¶ 13).
- (7) Ranges from 45 minutes to 2.5 hours per BlueCard claim. (Katz Declaration, ¶ 13).
- (8) In May 2023, the median hourly wage for medical records specialists was \$23.45. Assumes 2% growth per year based on average growth rate of 2.25% over the period 2021-2023. (U.S. Department of Labor).
- (13) 7.2% is the average WACC for a list of healthcare companies obtained by applying the following filters on S&P Capital IQ: (a) U.S. incorporated companies, (b) public companies, (c) companies within the "Hospitals and Healthcare Centers," "Mental Care Facilities," "Medical Doctor Specialist Services," "Chiropractor Services," and "Healthcare Providers Specialist Services," industries, (d) companies that have WACC reported on S&P Capital IQ.

Exhibit 2

**Providers' Reduced Administrative Costs After BlueCard Claims Submission:
Cost Savings from BlueCard Claims Requiring Less Provider Time to Follow Up with the Blues (1)**

	Notes and Sources	Historical	Forecast										
		Average	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Total BlueCard claims (000s)	(2)	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947
BlueCard claims that require follow up (000s)	(3)	14.1%	30,395	30,395	30,395	30,395	30,395	30,395	30,395	30,395	30,395	30,395	30,395
Resolved in 1 contact with the Blues (000s)	(4)	58.1%	17,667	17,667	17,667	17,667	17,667	17,667	17,667	17,667	17,667	17,667	17,667
Resolved in 3 contacts with the Blues (000s)	(5) = 100% - (4)	41.9%	12,728	12,728	12,728	12,728	12,728	12,728	12,728	12,728	12,728	12,728	12,728
Excess hours on BlueCard claims (000s)		<u>Hrs. / Claim</u>											
Resolved in 1 contact with the Blues	(6)	0.88	15,458	15,458	15,458	15,458	15,458	15,458	15,458	15,458	15,458	15,458	15,458
Resolved in 3 contacts with the Blues	(7)	1.33	16,970	16,970	16,970	16,970	16,970	16,970	16,970	16,970	16,970	16,970	16,970
Compensation on excess hours on BlueCard claims (\$000s)		<u>\$ / Hr.</u>											
Hourly compensation (\$)	(8)	\$23.45	\$24.40	\$24.89	\$25.38	\$25.89	\$26.41	\$26.94	\$27.48	\$28.02	\$28.59	\$29.16	\$29.16
Resolved in 1 contact with the Blues (\$000s)	(9) = (6) x (8)		\$377,147	\$384,690	\$392,384	\$400,231	\$408,236	\$416,401	\$424,729	\$433,223	\$441,888	\$450,725	\$450,725
Resolved in 3 contacts with the Blues (\$000s)	(10) = (7) x (8)		\$414,031	\$422,312	\$430,758	\$439,373	\$448,161	\$457,124	\$466,266	\$475,592	\$485,103	\$494,806	\$494,806
Total compensation on excess hours (\$000s)	(11) = (9) + (10)		\$791,178	\$807,002	\$823,142	\$839,604	\$856,396	\$873,524	\$890,995	\$908,815	\$926,991	\$945,531	\$945,531
Total Cost Savings (\$000s)	(12) = Sum (11)		<u>\$8,663,178</u>										
Discount rate	(13)		7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
Years since start of Year 1 (mid-year convention)	(14)		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	9.5
Present Value (\$000s)	(15) = (11) / ((1 + (13)) ^ (14))		\$764,289	\$727,487	\$692,457	\$659,114	\$627,376	\$597,166	\$568,411	\$541,041	\$514,989	\$490,191	\$490,191
PV of Cost Savings (\$000s) (10-Year Forecast)	(16) = Sum (15)		<u>\$6,182,520</u>										

Notes and Sources:

- (1) This valuation quantifies the estimated future cost savings from providers spending less time on BlueCard claims that require follow up with the Blues after submission.
- (2) Assumes the average annual number of BlueCard claims. (BCBSA Network Discount Reports, 2008-2014).
- (3) Assumes the average annual percentage of Local claims that require follow-up once submitted. (BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, Wave II Results, 2008-2011.)
- (4) Assumes the average percentage of BlueCard claims requiring follow-up that were resolved with one contact. (BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, Wave II Results, 2008-2011.)
- (5) The average number of contacts it takes to resolve BlueCard claims that are not resolved in one contact is 3.1. (BlueCard Customer Satisfaction Survey, Provider Office Staff Survey Results, Wave II Results, 2008-2009).
- (6) Ranges from 20 minutes to 2 hours per BlueCard claim. Ranges from 5 minutes to 30 minutes per Local claim. (Katz Declaration, ¶¶ 13-14).
- (7) Ranges from 45 minutes to 2.5 hours per BlueCard claim. Ranges from 5 minutes to 30 minutes per Local claim. (Katz Declaration, ¶¶ 13-14).
- (8) In May 2023, the median hourly wage for medical records specialists was \$23.45. Assumes 2% growth per year based on average growth rate of 2.25% over the period 2021-2023. (U.S. Department of Labor).
- (13) 7.2% is the average WACC for a list of healthcare companies obtained by applying the following filters on S&P Capital IQ: (a) U.S. incorporated companies, (b) public companies, (c) companies within the "Hospitals and Healthcare Centers," "Mental Care Facilities," "Medical Doctor Specialist Services," "Chiropractor Services," and "Healthcare Providers Specialist Services," industries, (d) companies that have WACC reported on S&P Capital IQ.

Exhibit 3

Providers' Reduced Administrative Costs Before BlueCard Claims Submission:

Cost Savings from BlueCard Claims Requiring Less Provider Time to Verify Member Eligibility and for Pre-Authorization (1)

	Notes and Sources	Historical	Forecast									
		Average	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total BlueCard claims (000s)	(2)	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947	215,947
BlueCard claims with pre-submission tasks (000s)												
Member eligibility verification	(3)	70.0%	151,163	151,163	151,163	151,163	151,163	151,163	151,163	151,163	151,163	151,163
Pre-authorization	(4)	10.9%	23,484	23,484	23,484	23,484	23,484	23,484	23,484	23,484	23,484	23,484
Excess hours on BlueCard claims (000s)		<u>Hrs. / Claim</u>										
Member eligibility verification	(5)	0.08	11,967	11,967	11,967	11,967	11,967	11,967	11,967	11,967	11,967	11,967
Pre-authorization	(6)	0.07	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566
Compensation on excess hours on BlueCard claims (\$000s)		<u>\$/ Hr.</u>										
Hourly compensation (\$)	(7)	\$23.45	\$24.40	\$24.89	\$25.38	\$25.89	\$26.41	\$26.94	\$27.48	\$28.02	\$28.59	\$29.16
Member eligibility verification (\$000s)	(8) = (5) x (7)		\$291,965	\$297,805	\$303,761	\$309,836	\$316,033	\$322,353	\$328,801	\$335,377	\$342,084	\$348,926
Pre-authorization (\$000s)	(9) = (6) x (7)		\$38,197	\$38,961	\$39,740	\$40,535	\$41,346	\$42,173	\$43,016	\$43,876	\$44,754	\$45,649
Total compensation on excess hours (\$000s)	(10) = (8) + (9)		\$330,162	\$336,766	\$343,501	\$350,371	\$357,378	\$364,526	\$371,817	\$379,253	\$386,838	\$394,575
Total Cost Savings (\$000s)	(11) = Sum (12)		\$3,615,186									
Discount rate	(12)		7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
Years since start of Year 1 (mid-year convention)	(13)		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Present Value (\$000s)	(14) = (10) / ((1 + (12)) ^ (13))		\$318,942	\$303,584	\$288,966	\$275,051	\$261,807	\$249,200	\$237,201	\$225,779	\$214,907	\$204,559
PV of Cost Savings (\$000s) (10-Year Forecast)	(15) = Sum (14)		\$2,579,996									

Notes and Sources:

- (1) This valuation quantifies the estimated future cost savings from providers spending less time on BlueCard claims that require verification of member eligibility and pre-authorization before submission.
- (2) Assumes the average annual number of BlueCard claims. (BCBSA Network Discount Reports, 2008-2014).
- (3) 60% to 80% of BlueCard claims require member eligibility verification. (Katz Declaration, ¶ 19).
- (4) 5.25% to 16.5% of BlueCard claims have pre-authorization. (Katz Declaration, ¶ 20).
- (5) Ranges from 5 minutes to 10 minutes per BlueCard claim. Ranges from 30 seconds to 5 minutes per Local claim. (Katz Declaration, ¶ 19).
- (6) 15 minutes per BlueCard claim. Approximately 11 minutes per Local claim. (Katz Declaration, ¶ 20).
- (7) In May 2023, the median hourly wage for medical records specialists was \$23.45. Assumes 2% growth per year based on average growth rate of 2.25% over the period 2021-2023. (U.S. Department of Labor).
- (12) 7.2% is the average WACC for a list of healthcare companies obtained by applying the following filters on S&P Capital IQ: (a) U.S. incorporated companies, (b) public companies, (c) companies within the "Hospitals and Healthcare Centers," "Mental Care Facilities," "Medical Doctor Specialist Services," "Chiropractor Services," and "Healthcare Providers Specialist Services," industries, (d) companies that have WACC reported on S&P Capital IQ.

Exhibit 4
Valuation of Prompt Pay Commitment to Participating Providers

	Notes and Sources	Forecast				
		Year 1	Year 2	Year 3	Year 4	Year 5
BlueCard claims (volume)	(1)	215,947,339	215,947,339	215,947,339	215,947,339	215,947,339
Fully-insured enrollee share	(2)	48.5%	48.5%	48.5%	48.5%	48.5%
Fully-insured BlueCard claims (volume)	(3) = (1) x (2)	104,703,960	104,703,960	104,703,960	104,703,960	104,703,960
Facility share of BlueCard claims	(4)	14.1%	14.1%	14.1%	14.1%	14.1%
Professional share of BlueCard claims	(5) = 100% - (4)	85.9%	85.9%	85.9%	85.9%	85.9%
Facility BlueCard claims (volume)	(6) = (3) x (4)	14,790,731	14,790,731	14,790,731	14,790,731	14,790,731
Claims paid after 30 days (%)	(7)	18.9%	18.9%	18.9%	18.9%	18.9%
Claims paid after 30 days (volume)	(8) = (6) x (7)	2,800,232	2,800,232	2,800,232	2,800,232	2,800,232
Dollars per claim paid after 30 days	(9)	\$5,144	\$5,144	\$5,144	\$5,144	\$5,144
Amount paid after 30 days	(10) = (8) x (9)	\$14,403,547,783	\$14,403,547,783	\$14,403,547,783	\$14,403,547,783	\$14,403,547,783
Days paid after 30 days	(11)	54	54	54	54	54
Interest (at 8% per year)	(12)	\$164,936,242	\$164,936,242	\$164,936,242	\$164,936,242	\$164,936,242
Professional BlueCard claims (volume)	(13) = (3) x (5)	89,913,229	89,913,229	89,913,229	89,913,229	89,913,229
Claims paid after 30 days (%)	(14)	9.6%	9.6%	9.6%	9.6%	9.6%
Claims paid after 30 days (volume)	(15) = (13) x (14)	8,639,361	8,639,361	8,639,361	8,639,361	8,639,361
Dollars per claim paid after 30 days	(16)	\$353	\$353	\$353	\$353	\$353
Amount paid after 30 days	(17) = (15) x (16)	\$3,053,258,126	\$3,053,258,126	\$3,053,258,126	\$3,053,258,126	\$3,053,258,126
Days paid after 30 days	(18)	68	68	68	68	68
Interest (at 8% per year)	(19)	\$44,092,799	\$44,092,799	\$44,092,799	\$44,092,799	\$44,092,799
Total interest on BlueCard Claims	(20) = Sum ((12), (19))	\$1,045,145,206				
PV of interest on BlueCard claims - Facilities						
Discount Rate	(21)	6.1%	6.1%	6.1%	6.1%	6.1%
Years since start of Year 1 (mid-year convention)	(22)	0.5	1.5	2.5	3.5	4.5
Present Value	(23) = (12) / ((1+(21)) ^ (22))	\$160,132,274	\$150,940,026	\$142,275,451	\$134,108,258	\$126,409,896
PV of interest on BlueCard claims - Professionals						
Discount Rate	(24)	9.9%	9.9%	9.9%	9.9%	9.9%
Years since start of Year 1 (mid-year convention)	(25)	0.5	1.5	2.5	3.5	4.5
Present Value	(26) = (19) / ((1+(24)) ^ (25))	\$42,057,770	\$38,265,147	\$34,814,530	\$31,675,077	\$28,818,730
PV of total interest on BlueCard claims	(27) = (23) + (26)	\$202,190,044	\$189,205,174	\$177,089,981	\$165,783,336	\$155,228,625
PV of total interest on BlueCard claims	(28) = Sum (27)	\$889,497,161				

Notes and Sources:

(1) Forecast assumes the average annual Blue systemwide BlueCard claim volume from 2008-2014 (BlueCard Network Discount Reports, 2008-2014).

(2) Forecast assumes the average annual Blue systemwide share of enrollees with fully-insured health plans from 2012-2015 (BCBS Enrollment Reports, 2012-2015: BlueCross and BlueShield Licensees, Total Members by Line of Business as of December 31, 2012 (BCBSA00166276.xlsx, at tab "QER-Table 1"). See also, BlueCross and BlueShield Licensees, Total Members by Line of Business as of December 31, 2013 (BCBSA00166281.xlsx, at tab "QER-Table 1"). See also, BlueCross and BlueShield Licensees, Total Members by Line of Business as of December 31, 2014 (BCBSA00166259.xlsx, at tab "Table 1"). See also, BlueCross and BlueShield Licensees, Total Members by Line of Business as of December 31, 2015 (BCBSA-DOJSUB-00003979.xls, at tab "Table 1").

(4) Forecast assumes the average annual split between facility and professional BlueCard claims from 2008-2014 (Blue claims data).

(7) and (14) Forecast assumes the average annual systemwide percentage of facility or professional BlueCard claims paid after 30 days from 2011-2014 (IPDS data).

(9) and (16) Forecast assumes the average annual allowed amount per facility or professional BlueCard claim paid after 30 days from 2011-2014 (IPDS data).

(11) and (18) Forecast assumes the median annual number of days a facility or professional BlueCard claim is paid after 30 days from 2011-2014 (IPDS data).

(12) and (19) 8% annual interest rate (Settlement Agreement, p. 33).

(21) 6.1% is the average WACC for a list of healthcare companies obtained by applying the following filters on S&P Capital IQ: (a) U.S. incorporated companies, (b) public companies, (c) companies within the "Hospitals and Healthcare Centers," and "Mental Care Facilities," industries, (d) companies that have WACC reported on S&P Capital IQ.

(24) 9.9% is the average WACC for a list of healthcare companies obtained by applying the following filters on S&P Capital IQ: (a) U.S. incorporated companies, (b) public companies, (c) companies within the "Medical Doctor Specialist Services," and "Chiropractor Services," and "Healthcare Providers Specialist Services," industries, (d) companies that have WACC reported on S&P Capital IQ.

(27) Total present value of interest on BlueCard claims paid after 30 days over the five-year forecast period.