

# **The Prejudices of Economic Ideology: The Exacerbation of Racial and Gender Inequalities by Economics Training for Judges**

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## **Abstract:**

This paper investigates whether economics-oriented judges contribute to racial and gender disparities in sentencing. Using over 600,000 district court cases linked to judge and defendant identities, we estimate the effect of assigning economic-oriented judges, identified by their attendance in the controversial Manne economics training program—an intensive course attended by almost half of federal judges between 1976 and 1999. The judges who attend the Manne training program are found to award 8% longer sentences for defendants of racial minority and 4% shorter sentences for female defendants. They were also found to be associated with 3.1% increase and 1.5% decrease in offense level for minority race and female defendants, respectively.

## **Introduction**

Is economics racist? In examining the discipline’s relationship to racial inequalities, scholars have long debated whether economists are racist or whether economics as a field represents a form of epistemic racism that has no need for racists. In “Covert Racism in Economics,” for example, Komlos (2022) argues that mainstream economics is replete with implications that feed into structural racism and maintains assumptions that contribute to ongoing dispossession and exploitation of racialized groups (Greenhouse, 2020; Small and Pager, 2020). Such critiques of economics reflect a growing scholarly literature that analyzes racism not on narrow terms of individual morality, statements, or beliefs but rather in its polymorphous manifestations embedded in ways of organizing groups, institutions, and government as well as in epistemology, scientific disciplines and their modes of measurement, enculturated aesthetic perception, and even ostensibly anti-racist agendas that effectively reproduce racial inequalities (Bobo, Kluegel and Ryan, 1996; Bonilla-Silva and Eduardo, 2006; )

Against this backdrop, in this paper, we study the relationship between racism, individual judgment, and economic ideology via a setting with high-stakes decision-makers with an unusual degree of power: U.S. federal judges who attended a prominent economics training program that started in the 1970s. Descriptions of the program content in its newsletters are replete with implied racism. For example, in a rationalization of disproportionately harsh sentencing for Black defendants, one newsletter reads as follows: “Professor Goetz spoke on ‘Unequal’ Punishment for ‘Equal Crime’, arguing that discrimination in punishment can be analyzed in terms of economic efficiency... leading to the conclusion that society will institute unequal

punishments for equal crimes.” *Fortune* magazine published a story about the program in which racism in its lessons was made even more explicit, quoting an instructor who stated, “Give me a capsule that will magically clean all the air in Los Angeles .. Beg me to crush it. .. I won’t crush the capsule. Because, if I do, poor blacks will have to pay \$20 a month more for land rental. .. the black in Watts, already used to living with bad air, loses his discount for doing that.”

Judges, particularly in the United States, by the inherent nature of their profession and the powers granted to them, provide an ideal set of actors through which to study and analyze the various forces operative in human decision-making. They are often given sufficient autonomy to make subjective observations within the confines of the objective evidence collected pertaining to the case. Because of the complexity and unique set of circumstances associated with each individual legal case, developing guidelines and norms that could automate the process of judicial decision-making and remove subjective discretion from the hands of judges, is all but impossible.

In light of this, the philosophy behind the U.S judiciary has been evolving over time, trying to strike a balance between legal normative commitment and judicial discretion, in order to ensure fairness and accuracy in verdicts. Notably however, the judicial system in recent years has been leaning in the direction of increasing legal normative commitments at the expense of discretion, as policymakers and the public started to become more cognizant of the deficiencies in human decision-making.

Simultaneously, in the absence of any guidelines within the discretionary space offered to them, the judges began to collectively develop their own set of norms based on the schools of thought that were gaining momentum in the judicial circles at that time. Economics thinking is one such school of thought that gained momentum during the 1980s and has continued to grow in influence since. It emphasized deterrence and cost-benefit utilitarian analysis which was quickly adopted by judges, who were attracted by the notion of being able to quantifiably justify the rationale behind their decision making, especially in lieu of the significant uncertainty often associated with subjective decision making. Economics thinking encouraged cost-efficiency over accuracy of law administration arguing that the former benefits the society over the long term.

Most importantly, these schools of thinking often functioned as heuristic crutches for the judges to pay attention to certain salient features during decision making, and thereby minimizing the cognitive load. These salient features, however, are not always rational as documented by large literature over the time. For instance, evidence shows that factors such as mood, gambler’s fallacy (i.e the decisions made during the last few cases) and voice affect decision making; Before Presidential elections, U.S. Courts of Appeals judges are twice as likely to dissent, vote, and make precedent along partisan lines. These examples demonstrate that the judicial decision

making process is often prone to influence from factors external to the legal scope or facts of a case.

On this note, we want to examine if or how economics thinking could have encouraged or reinforced biased sentencing decisions among judges. The increase in the use of economics in law over the past half-century is well-known (Teles, 2006). The influence of economics on legal thought is, in part, due to a controversial economics training program for sitting judges, organized by Henry Manne, that was funded by conservative and business interests. Ash, Chen, and Naidu (2022) investigates the profound influence of the law-and-economics movement on the U.S. judiciary, which significantly altered judicial decision-making by training nearly half of the federal judges between 1976 and 1999 in economic principles, leading to more conservative, regulatory-skeptical rulings and harsher criminal sentencing, but did not examine sentencing disparities.

By 1990, 40% of federal judges had attended this economics training program, despite “being swamped with criminal cases ... and not seeing the relevance of economics.” Ironically, we will see that economics impacted sentencing. The reason for this is likely due to what Polanyi would call, The Great Transformation of American Law, or its neo-liberalization—the consequentialist reinterpretation of duty. For instance, in the last 50 years, what used to be a duty to keep promises turned into efficient breach theory in contracts i.e. a party should be allowed to breach a contract and pay damages, if doing so would be more economically efficient than performing under the contract—an idea articulated in a 1977 law review article that Richard Posner made into law in a 1985 Circuit decision (*Lake River Corp. v. Carborundum Co.*, 769 F.2d 1284 (7th Cir. 1985)).

In tort law, the duty of care is defined economically, when the probability of loss times the size of the loss exceeds the burden of taking precautions. The principle underlying this is ‘least cost avoider theory’ i.e. is it less costly to take precautions to avoid the accident than the accident occurring in expectation. This idea also underlies the notion of expected deterrence in criminal law. According to this idea, a rational potential criminal will calculate the probability of detection times the sanction, to get the expected sanction. A judge who follows economic thinking of ‘least cost avoider theory’ might perceive the cost of detection as high, but the cost of sanction as low, and therefore might increase sanctions so that it will function as a deterrent to the potential criminal, who will be less inclined to commit a crime owing to the increased value of the expected sanction. Thus this economic theory subverts the objective of law being ethical responsibility to that of economic efficiency.

One might expect economic thinking to cause judges to be less biased since they are guided by cost-benefit analysis as opposed to a subjective interpretation based on the circumstances pertaining to the case and the defendant. However, the judges guided by economic thinking (or

by any school-of-thought thinking to be precise), because of the fact they tend to conform to norms and be less flexible in decision making despite the reduced cognitive load, are often inclined to be less attentive and more prone to their own implicit biases. Furthermore, we also hypothesize that even when making attentive decisions, economics trained judges might prefer longer sentences for a certain race or gender, if it appeared more cost-efficient to do so.

In this paper, we look at the impact of economic thinking on the US justice system specifically in the context of racial and gender disparities. We have structured this paper into four major sections. Section I provides an account of the background of the US justice system and the Manne economics training program; Section II delves into the data and empirical methodology used in our analyses; Section III includes a discussion of the results of our analyses and Section IV concludes.

## **SECTION I: BACKGROUND**

### **A. Overview of the US Justice System:**

The U.S. federal courts (the 12 regional Circuit Courts and the 94 District Courts underneath them) and judges operate under an incremental common law space—continually finding new rules and legal distinctions that future cases must follow (Gennaioli and Shleifer, 2007). Judges are appointed for life (numbering roughly 180 and 680 in these courts, respectively) by the U.S. President. These courts handle hundreds of thousands of cases per year (roughly 67,000 and 330,000 respectively), but the Supreme Court hears only 200 cases per year, so the near totality of Circuit decisions are final and they comprise the vast majority of what constitutes the law. American law makes giants of its judges. In immigration, District Court judges could single-handedly stop executive orders from the U.S. President to ban immigration from certain countries. In abortion, the 5th Circuit could invalidate a Mississippi statute requiring its abortion doctors to obtain admitting privileges at local hospitals but it allowed an identical Texas statute. The words of the statutes were the same, but the court reasoned on the potential consequences on abortion access for women. In labor, the judges shifted from a reasonable person standard to reasonable woman standard for what constitutes sexual harassment, and they waived the need to prove emotional harm in court. The Circuit Courts and the Supreme Court above it are frequently making decisions like these with potential for great scope, and they do so using consequentialist utilitarian arguments or deontological modes of reasoning.

Furthermore, the appointment of the judges in US Federal courts are made by the President as a life-time appointment, New appointments are only made upon vacancy due to promotion to higher courts, retirement or death. This usually results in the appointed judges sharing a similar

political ideology to that of the appointing President (Kuersten and Songer, 2003). And because of the lifetime appointment, these ideas tend to prevail for quite a long time in the judiciary and might even continue to impact cases several years after the judges' retirement by the way of legal precedence. Therefore the judges in US federal courts tend to wield an influential power over the ethical and behavioral systems that govern the functioning of the society.

To ensure equal distribution of caseload and prevent judges from picking their own cases, many courts assign the cases randomly to the judges once the charges are filed. Therefore we can leverage this random assignment of judges to cases by controlling for court- and case-level factors. This randomness has been used in a growing set of economics papers (Kling, 2006; Maestas, 2011; Belloni, Chen, Chernozhukov, Hansen 2012). We will discuss the importance of random assignment in further detail in Section II of this paper.

## **B. The Manne Economics Training Program**

The public perception of the Manne Program was a beach on the south of Miami for a few weeks funded by large corporate donors. The "105 corporate contributors are almost always before a federal judge somewhere, often in antitrust, regulatory, or affirmative-action cases... probably all federal judges face some possibility [of having a contributor as litigant]."

The perception put forward by the program from its annual reports is a collection of photographs of judges diligently taking notes and receiving reading assignments. "For three weeks, 19 Federal judges from around the country took a grueling, six-day-a-week course in economics.. With classes starting at 9 A.M. and sometimes ending at 10 P.M. or later, the judges received the equivalent of a full semester at the college level. ... From the beginning, the judges, some of them 60 years or over, behaved like students, deferring to their teachers.." according to a New York Times reporter.

The Manne Law and Economics Program for Judges was founded in 1976 as a 2-3 week economics course for federal judges. Lectures were by eminent economists including Milton Friedman, Paul Samuelson, Armen Alchian, Harold Demsetz, Martin Feldstein, and Orley Ashenfelter. Topics covered Coase Theorem, demand/supply theory, consumer/producer/price theory, bargaining, externalities, expected value/utility, property rights, torts, contracts, monopoly theory, regulation, and statistics, and basic regression. The main reading materials were the textbooks, *Law and Economics* by Robert Cooter and Thomas Ulen, and *Exchange and Production* by Armen Alchian and William Allen.

By 1990, forty percent of federal judges had attended this program. The program is still ongoing and now also funded by the Koch Brothers. Henry Manne, a prominent law and economics scholar, conceived and founded the Law and Economics Center, the first academic research center devoted to law and economics. This center began at the University of Miami in 1974, then moved to Emory University, prior to its current location at George Mason University. An excellent summary of the program is provided by Butler (1999), written by a former director. The article includes quotations from the author and judges' reaction to the program. Butler wrote, "... [academic attention to the role of economics in law] could actually be the most lasting contribution of the judges' program to the development of law and economics" and:

"As I always told the judges in my session-closing remarks, 'If you are doing your job right, *there really should not be many different results in your cases*. But you will have a better understanding of the law because of the insights economics offers, and that will help you be better judges.'" (p. 321, emphasis added)

However, we find that the program actually did lead to different results, consistent with the testimony of participants as well as LEC promotional materials.

The 1982 LEC annual report writes: "For those interested in the impact of our programs, one sentence out of a recent letter from a distinguished U.S. Court of Appeals judge says it all. "In reviewing the cases I have sat upon in the last six months, I thought you might be interested to know that in fully 50 percent of them a portion of the case or the whole case turned on an issue I felt I was better able to decide because of my opportunity to study in your program". Who could ask for stronger testimony?"

The seminar made a lasting impression. Justice Ruth Bader Ginsburg wrote: "*the instruction was far more intense than the Florida sun*. For lifting the veil on such mysteries as regression analyses, and for advancing both learning and collegial relationships among federal judges across the country, *my enduring appreciation*." Circuit Judge Michel wrote "[it] helped to provide a *principled basis* for deciding close cases" and Circuit Judge Jolly appreciated "a sound *theoretical and rational structure* for my decisions.. the *potential effects* and foreseeable impact of imposing a duty."

District Judge Carter said, "*I regard myself as a social progressive* and all the economists in attendance, from my perspective, had Neanderthal views on race and social policy. The basic lesson I learned .. is that social good comes at a price, a social and economic cost. I had never thought that through before being exposed to Henry's teachings. .. has *led me to measure the cost of the social good being furthered against the gain to be achieved*." District Judge Alaimo said, "there is a wide area of decision entrusted to us where the result can go either way, depending on how we view the evidence. *That area is called 'judicial discretion.'* This is the area that is *most affected by these seminars* .. as a result of what I have learned at these seminars, *I have become a much better judge*." District Judge Griesa wrote, "Henry and his LEC colleagues were of a

*conservative persuasion. . . the class wanted to express our gratitude on the final day. The person who rose to speak was Judge Hall from West Virginia, who was from the Fourth Circuit. Without doubt he was a Democrat going back to New Deal days. He was fervent in his appreciation.”*

Additional quotes from judges who enthused about the program are in the appendix. The quotes testify to how much the judges appreciated the program, how demanding were the lessons, and how the judges learned to think about their rulings through cost-benefit analysis rather than more traditional legal reasoning. This further highlights how the judges who attend the Manne program seem to exhibit a tendency to gravitate towards and imbibe the methods and attitudes espoused by economics thinking. Building on this premise, we intend to examine how the disposition to economic thinking among judges evidenced by their attendance to the Manne program impacts their sentencing decisions, with regards to minority defendants.

## **SECTION II: DATA AND METHODOLOGY**

This paper utilizes a data set on one million criminal sentencing decisions in the U.S. District Courts from USSC (United States Sentencing Commission) linked to judge identity via data from TRAC (Transactional Records Access ClearingHouse) and FOIA requests to determine whether or not they had participated in the Manne training program; the vast majority of Manne judges attended before 1999. The merged dataset consists of around 600k cases heard in US district courts during 1998-2018 and comprehensively covered wide categories of defendant, case and judge characteristics. Table 1 provides the summary statistics of all the variables related to the judge, defendant and case characteristics available in the merged dataset that we use in our subsequent analyses. Roughly 13% of the cases were heard by Manne judges; 68% of the cases where defendants were from minority race or ethnicity and 14% of the cases had female defendants.

Our study aims to test the effects of economics-oriented judges (identified by a judge’s attendance in the Manne training program) on disparities in judicial sentencing outcomes with respect to race or gender of the defendant. To ensure that there is no selection of judges in our analytical sample, we test for random assignment of judges across defendant characteristics. The results are displayed in Table 2. As seen from the high value for the F-tests and negligible coefficients for defendant characteristics in column (1) specifically, we can conclude that there is no evidence of selection and any disparity observed in sentencing for defendant race or gender, is attributable to the judge’s affiliation with economics thinking rather than from case selection within the data sample.

We use the following empirical specification to test our hypothesis:

$$Y_{ijct} = \alpha_{ijct} + \beta^0 \text{Manne}_j + \beta^1 X_i + \beta (\text{Manne}_j * X_i) + \mu Z_{ic} + \alpha_{jt} + c + \varepsilon_{ijct} \quad (\text{eq. 1})$$

$Y_{ijct}$  is our dependent variable and refers to the total sentence length in months for defendant  $i$  given by judge  $j$  at court  $c$  and at time  $t$ .  $\alpha_{jt}$  refers to Judge by sentencing year fixed effect;  $c$  is the constant term and  $\varepsilon_{ijct}$  refers to the regression error term.  $\text{Manne}_j$  is a dummy variable indicating whether the judge  $j$  had Manne training or not; It should be noted that this variable identifies a judge as a Manne judge if they (ever) attended the Manne training program at any point in their career in the past or future. Since the Manne training program emphasized economic thought, we thus identify and classify these judges who attended the program in the past or the future as being inclined towards or motivated by economics thinking and associated ideologies.

$X_i$  is a dummy variable indicating whether the defendant  $i$  is from minority race (or gender); specifically, minority race refers to black, hispanic or other non-white racial or ethnic groups in the US, while minority gender refers to female individuals.  $Z_{ic}$  refers to the vector of individual- and case-level controls. We are interested in the interaction effect between  $\text{Manne}_j$  and  $X_i$ . A statistically significant value of  $\beta$  will indicate positive or negative bias amongst judges motivated by economics thinking towards the defendants who are of minority race (or gender).

### SECTION III: RESULTS

#### Deviation from Sentencing Guidelines:

While filing charges, the prosecutor includes the criminal history of the defendant to compute the final offense level of the crime from the base offense level that was determined based on the case-related information. However the judges are provided with discretionary powers to recommend changes to the assigned offense levels if they deemed it necessary based on the circumstances of the case (Cohen and Yang, 2019). In this context, it would be interesting to note if the Manne judges displayed a differential attitude towards offense level assigned to the defendants of minority race or gender.

Table 3 presents the results on the effect of economics thinking on offense level assignment to defendants. It can be seen from columns (2) and (3) that the Manne judges appear to manipulate the offense levels for minority defendants leading to an increase of around 0.61 points for final offense level which corresponds to about a 3.1% increase over the sample mean. As for the female defendants, they received 0.26 point decrease in their final offense level corresponding to roughly 1.5% below the sample mean.



For this reason we do not include offense levels as controls in our main specification as they would lead to underestimation in the measurement of the effect of economics thinking on sentencing disparities. This is demonstrated in Appendix table A1 where the effects are diminished and statistically insignificant in comparison to the results in Table 4 (which excluded the offense level control). The manipulation of offense levels would be consistent with economics-oriented judges exercising some degree of motivated reasoning.

### **Effect on Race and Gender Disparities:**

Table 4 shows the results from regressions based on the specification described in eq(1) in section II. The columns (1), (2) and (3) use court by sentencing year fixed effects while (4), (5) and (6) use judge by sentencing year fixed effects. We see that the results are consistent across both the experimental designs. Columns (1) and (4) indicate that the Manne judges tend to give harsher sentences to minority defendants by about 4 months longer which is equal to 8% over the sample mean of 50 months. Columns (2) and (5) show that the Manne judges tend to give lenient sentences to female defendants by about 2 months shorter which is about 4% under the sample mean. These effects are also consistent in the specifications including both sets of disparities investigations in columns (3) and (6).

The rationale behind awarding harsher sentences for minority defendants and lenient sentencing for female defendants could be considered to be consistent with the ideologies of economic thought. The idea of deterrence being a more cost-effective approach for minority defendants who have reportedly higher arrest rates and the female defendants being relatively more economically productive in the society could have been the driving forces behind the implicit or explicit bias observed in the sentencing decisions among the Manne judges. Furthermore, from a cognitive perspective, it could also be argued that the judges were motivated by the economic aspects of the case leading to them paying lesser attention to implicit biases in their decision making (Clair and Winter, 2016).

### **Robustness check: Interaction effects with Republican Judges**

Since the founding of the Manne training program, it was known to have been widely favored by the judges who tend to uphold conservative ideologies. This was reflected from a higher proportion of Republican judges participating in the training program. A similar study in the past by Cohen and Yang in 2019 reported sentencing disparities among Republican judges. Motivated by their findings, we wanted to determine if the effects observed due to Manne judges could be at least partly explained by them being Republicans instead.

Table 5 presents the results of a robustness check upon controlling for interaction effects of Republican judges on minority race/gender. We see that the coefficients for Manne judges are robust and consistent with that of table 4 and that the Republican judges do not seem to be driving the sentencing disparities compared to the judges who motivate economics thinking.

#### **Heterogeneity test: Sentencing disparities across offense types:**

We repeat our specification by filtering the sample by various offense types viz. Violent, Drugs, Firearms, Theft, Immigration, Sex Offense and White Collar. Drug related offenses comprise the majority of our sample (nearly 40% of our sample) and from column (2) of Appendix Table A2, can be seen to be the major contributor to the sentencing disparities. This is consistent with the economic thought where drug-related crimes can be viewed as expensive due to its reach and implications within the society and therefore spurring a more intensive deterrent mechanism targeting minority defendants in such cases. Likewise it also explains the more lenient sentencing for the female defendants in such crimes since it is relatively less harmful or more beneficial to the society or dependants at home if they were to be incarcerated for a shorter time period.

#### **Heterogeneity test: Sentencing disparities by judge experience**

In the context of judicial sentencing and economics thinking, it would be interesting to understand how their interaction is affected by heterogeneity in judge experience. We split the sample across the sample median of judge experience and study the interaction between Manne judges and the defendants of minority race and gender. As shown in Appendix Table A3, the results indicate that the Manne judges tend to be relatively less disparate with experience. This could be explained by experienced judges are more attentive to implicit biases thereby mitigating the disparate effects of economic thinking on their sentencing decisions,

### **SECTION IV: CONCLUSION**

The relationship between economics training and judicial decisions, particularly in the context of the U.S. justice system, has often been overlooked. Our study examines this relationship, specifically the repercussions it holds for racial and gender inequalities in sentencing. Through our analyses, we found compelling evidence that economic thinking, championed by the Manne economics training program, influenced judicial decisions in ways that exacerbated existing racial biases, especially in sentencing decisions concerning minority defendants. This was predominantly evident in drug-related offenses, which constitute a significant proportion of our sample.

It might be surprising that economics training, which fundamentally emphasizes the utilitarian principles of cost-benefit analysis, did not necessarily reduce biases in judicial decisions. On the

contrary, our results suggest that judges trained in economic thinking exhibited a higher inclination towards their inherent biases. While the promise of economic thinking in the judiciary was to bring about more objective, quantifiable justifications in verdicts, it inadvertently played a role in reinforcing racial and gender disparities. This raises significant concerns, especially considering the implications these biases have on the lives of defendants, their families, and communities.

As society grapples with structural racism, this study underscores the need to scrutinize and re-evaluate the paradigms we adopt, even in seemingly unrelated domains such as economics. The promulgation of any school of thought should be approached with caution, ensuring that the promise of objectivity does not come at the expense of equity and justice. For a justice system that genuinely aspires to be just, it's essential to continually reflect on its practices, ensuring that they align with the principles of fairness and equity for all.

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**Table 1: Summary Statistics**

	<b>count</b>	<b>mean</b>	<b>sd</b>	<b>min</b>	<b>max</b>
Total Sentence in Months	646377	50.26	61.87	0.00	984.00
Manne Judge	646377	0.13	0.34	0.00	1.00
Minority Defendant	631664	0.68	0.47	0.00	1.00
Female Defendant	641564	0.14	0.34	0.00	1.00
Defendant Age	644371	35.55	11.03	16.00	98.00
Guilty Plea	646087	0.96	0.19	0.00	1.00
Number of Dependents	608534	1.54	1.71	0.00	58.00
Defendant New Citizen	637102	0.31	0.46	0.00	1.00
Education = High School	646377	0.31	0.46	0.00	1.00
Education = Some College	646377	0.17	0.37	0.00	1.00
Education = College Graduate	646377	0.06	0.24	0.00	1.00
Judge Age	629381	61.06	8.84	36.00	112.00
Judge South Birth	619306	0.39	0.49	0.00	1.00
White Judge	629381	0.78	0.41	0.00	1.00
Female Judge	629381	0.23	0.42	0.00	1.00
Republican Judge	644103	0.56	0.50	0.00	1.00
Judge Experience	646377	12.03	7.85	0.00	51.00
Defendant Criminal History Rating	640344	2.47	1.73	1.00	6.00
Final Offense Level	637244	19.36	8.60	1.00	49.00

The table shows the summary statistics for the defendant, judge and case characteristics in the data sample used in our analysis

**Table 2: Random Assignment of Judges by Defendant Characteristics**

	(1)	(2)	(3)	(4)
	Judge Manne	Judge Republican	Judge White	Judge Female
Minority Defendant	0.004 (0.004)	-0.009 (0.005)	-0.013* (0.006)	0.010* (0.005)
Female Defendant	-0.000 (0.002)	-0.002 (0.003)	-0.010* (0.004)	0.002 (0.003)
Defendant Age	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Guilty Plea	-0.003 (0.003)	-0.002 (0.005)	-0.009 (0.005)	0.002 (0.005)
Number of Dependents	0.000 (0.000)	0.000 (0.001)	0.001 (0.000)	0.000 (0.000)
Defendant New Citizen	-0.004 (0.003)	-0.010 (0.005)	-0.015 (0.010)	0.008 (0.008)
Education = High School	0.001 (0.002)	0.001 (0.002)	0.003 (0.003)	0.002 (0.005)
Education = Some College	0.001 (0.003)	-0.001 (0.004)	0.002 (0.003)	0.004 (0.006)
Education = College Graduate	-0.003 (0.005)	-0.003 (0.005)	-0.000 (0.004)	0.013* (0.006)
Court x Sentencing Year FE	Yes	Yes	Yes	Yes
Observations	605684	603512	589619	589619
Adjusted R-squared	0.244	0.196	0.289	0.151
F	1.409	0.887	1.152	1.682
Joint Significance	0.196	0.540	0.335	0.105

Standard errors were clustered at the court level and are specified within parentheses. The dependent variables are dummy variables for judge characteristics viz. whether the judge attended the Manne economics training program, whether the judge was appointed by a republican president, whether the judge was white and whether the judge was female. (\* p<0.05, \*\* p<0.01. \*\*\* p<0.001)

**Table 3: Offense Level Manipulation by Judges**

	(1)	(2)	(3)
	Criminal History Rating	Base Offense Level	Final Offense Level
Manne Judge x Minority Defendant	0.094*	0.473***	0.610***
	(0.036)	(0.110)	(0.116)
Manne Judge x Female Defendant	0.006	-0.267*	-0.280**
	(0.024)	(0.103)	(0.100)
Judge x Sentencing Year FE	Yes	Yes	Yes
Defendant Controls	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes
N	603702	599608	600757
Adjusted R-squared	0.260	0.759	0.492
Mean Dependant Variable	2.471	18.14	19.36

The Standard errors clustered by court are shown within parentheses. The dependent variables are the defendant's criminal history rating, base offense level assigned according to the criminal charges and the final offense level computed by the prosecutor using the base offense level and the criminal history rating for the defendant in columns (1), (2) and (3) respectively. The defendant controls include the defendant's age, no. of dependents in the household, education level, citizenship status and whether they plead guilty or not. The case controls include the offense type classification. (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001)

**Table 4 : Race and Gender Disparities due to Economics Training**

	(1)	(2)	(3)	(4)	(5)	(6)
	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)
Manne Judge	-2.990** (0.912)	-0.023 (0.977)	-2.661** (0.906)			
Minority Defendant	6.355*** (0.537)	6.951*** (0.524)	6.368*** (0.537)	6.545*** (0.521)	7.153*** (0.524)	6.559*** (0.522)
Manne Judge x Minority Defendant	4.074*** (0.979)		3.982*** (0.960)	4.268*** (0.968)		4.169*** (0.954)
Female Defendant	-12.048*** (0.453)	-11.734*** (0.486)	-11.790*** (0.481)	-11.919*** (0.472)	-11.590*** (0.504)	-11.643*** (0.501)
Manne Judge x Female Defendant		-2.262* (0.887)	-1.911* (0.842)		-2.435** (0.916)	-2.100* (0.885)
Court and Sentencing Year FE	Yes	Yes	Yes	No	No	No
Judge X Sentencing Year FE	No	No	No	Yes	Yes	Yes
Defendant Controls	Yes	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	No	No	No
N	578171	578171	578171	603702	603702	603702
Adjusted R-squared	0.403	0.403	0.403	0.418	0.418	0.418

The standard errors clustered by courts are shown within parentheses. The dependent variable is the length of the sentence received by the defendant in months. The defendant controls include the defendant's age, no. of dependents in the household, education level, citizenship status and whether they plead guilty or not. The case controls include the offense type classification and criminal history rating. Judge controls include judge's age, race, gender, experience, whether they were born in southern states and whether they were appointed by republican presidents. (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001)



**Table 5: Republican Judge Interactions with Defendant Race and Gender**

	(1)	(2)	(3)	(4)	(5)	(6)
	Total Sentence in Months	Total Sentence in Months	Total Sentence in Months	Total Sentence in Months	Total Sentence in Months	Total Sentence in Months
Manne Judge	-3.081** (0.923)	-0.022 (0.978)	-2.755** (0.912)			
Republican Judge	2.273*** (0.654)	1.845** (0.613)	2.286*** (0.666)			
Manne Judge x Minority Defendant	4.209*** (1.021)		4.118*** (1.001)	4.258*** (0.961)		4.165*** (0.946)
Republican x Minority Defendant	-0.610 (0.636)		-0.617 (0.626)	-0.292 (0.631)		-0.306 (0.619)
Manne Judge x Female Defendant		-2.254* (0.923)	-1.900* (0.877)		-2.316* (0.946)	-1.988* (0.917)
Republican x Female Defendant		-0.040 (0.624)	-0.075 (0.606)		-0.206 (0.676)	-0.215 (0.658)
District x Sentencing Year FE	Yes	Yes	Yes	No	No	No
Judge x Sentencing Year FE	No	No	No	Yes	Yes	Yes
Defendant Controls	Yes	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	No	No	No
N	578171	578171	578171	601839	601839	601839
Adjusted R-squared	0.403	0.403	0.403	0.407	0.407	0.407

The standard errors clustered by courts are shown within parentheses. The dependent variable is the length of the sentence received by the defendant in months. The defendant controls include the defendant's age, no. of dependents in the household, education level, citizenship status and whether they plead guilty or not. The case controls include the offense type classification and criminal history rating. Judge controls include judge's age, race, gender, experience and whether they were born in southern states. Republican is a dummy variable indicating whether the judges were appointed by a Republican President. (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001)

## APPENDIX

**Table A1: Race and Gender Disparities with Offense Level control**

	(1)	(2)	(3)	(4)	(5)	(6)
	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)
Manne Judge	-0.829 (0.507)	-0.239 (0.453)	-0.754 (0.501)			
Minority Defendant	3.775*** (0.310)	3.892*** (0.285)	3.778*** (0.309)	3.833*** (0.301)	3.949*** (0.283)	3.836*** (0.301)
Manne Judge x Minority Defendant	0.799 (0.495)		0.779 (0.487)	0.816 (0.469)		0.794 (0.462)
Female Defendant	-4.963*** (0.332)	-4.893*** (0.369)	-4.905*** (0.369)	-5.029*** (0.326)	-4.958*** (0.358)	-4.968*** (0.358)
Manne Judge x Female Defendant		-0.502 (0.593)	-0.434 (0.580)		-0.531 (0.611)	-0.467 (0.601)
Court and Sentencing Year FE	Yes	Yes	Yes	No	No	No
Judge X Sentencing Year FE	No	No	No	Yes	Yes	Yes
Defendant Controls	Yes	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	No	No	No
N	575304	575304	575304	600661	600661	600661
Adjusted R-squared	0.734	0.734	0.734	0.740	0.740	0.740

The standard errors clustered by courts are shown within parentheses. The dependent variable is the length of the sentence received by the defendant in months. The defendant controls include the defendant's age, no. of dependents in the household, education level, citizenship status and whether they plead guilty or not. The case controls include the offense type classification, criminal history rating and final offense level rating for the case. Judge controls include judge's age, race, gender, experience, whether they were born in southern states and whether they were appointed by republican presidents. ( \* p<0.05, \*\* p<0.01. \*\*\* p<0.001).

**Table A2: Heterogeneity by Offense Type**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)	Sentence Length (in months)
Manne Judge x Minority Defendant	4.593	5.138**	3.076	-1.374	-1.808	-6.280	0.412
	(4.132)	(1.780)	(1.909)	(1.333)	(1.076)	(14.302)	(0.641)
Manne Judge x Female Defendant	5.790	-4.063*	-4.073	-0.247	-1.702	-2.166	1.238
	(4.389)	(2.011)	(3.718)	(1.806)	(2.001)	(19.735)	(0.720)
Offense Type	violent	drugs	firearms	theft	immigration	sex offense	white collar
Judge x Sentencing Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Defendant Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	23248.	230143	73917	13082	97369.	1408	102573
Adjusted R-sq.	0.424	0.424	0.314	0.426	0.442	0.280	0.266

The standard errors clustered by courts are shown within parentheses. The dependent variable is the length of the sentence received by the defendant in months. The defendant controls include the defendant's age, no. of dependents in the household, education level, citizenship status and whether they plead guilty or not. The case controls include the offense type classification and criminal history rating. Judge controls include judge's age, race, gender, experience, whether they were born in southern states and whether they were appointed by republican presidents. (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001)

**Table A3: Heterogeneity by Judge Experience**

Sample	(1)	(2)
	Sentence Length (in months)	
	Above Median Judge Experience	Below Median Judge Experience
Manne Judge x Minority Defendant	4.243*** (1.014)	6.653*** (1.755)
Manne Judge x Female Defendant	-1.952* (0.927)	-3.188 (1.859)
Judge x Sentencing Year FE	Yes	Yes
Defendant Controls	Yes	Yes
Case Controls	Yes	Yes
Judge Controls	Yes	Yes
Observations	309326	294376
Adjusted R-squared	0.414	0.423

The standard errors clustered by courts are shown within parentheses. The dependent variable is the length of the sentence received by the defendant in months. The defendant controls include the defendant's age, no. of dependents in the household, education level, citizenship status and whether they plead guilty or not. The case controls include the offense type classification and criminal history rating. Judge controls include judge's age, race, gender, experience, whether they were born in southern states and whether they were appointed by republican presidents. The column (1) uses the sample where the judge experience at the time of hearing is above the sample median, while column (2) uses the sample of cases where the judge experience was below the sample median at the time of hearing. (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001)

### **Testimonial Quotes on the Manne Training program:**

The perception put forward by the program from its annual reports is a collection of photographs of judges diligently taking notes and receiving reading assignments. In contrast to the Washington Post, a New York Times reporter writes:

“For three weeks, 19 Federal judges from around the country took a grueling, six-day-a-week course in economics.. With classes starting at 9 A.M. and sometimes ending at 10 P.M. or later, the judges received the equivalent of a full semester at the college level. ... From the beginning, the judges, some of them 60 years or over, behaved like students, deferring to their teachers.<sup>27</sup> While the courses were later shortened from three weeks, they were never shorter than two weeks.”

Butler (1999) includes quotations from the author and judges' reaction to the program. Butler wrote that academic attention to the role of economics in law

“could actually be the most lasting contribution of the judges' program to the development of law and economics . . . As I always told the judges in my session-closing remarks, ‘If you are doing your job right, there really should not be many different results in your cases. But you will have a better understanding of the law because of the insights economics offers, and that will help you be better judges.’ ” (p. 321, emphasis added).

So at least in principle, the program was billed as a non-partisan tool to help judges understand their decisions.

The seminar made a lasting impression. Circuit Judge Paul Michel wrote that “[it] helped to provide a principled basis for deciding close cases”, while Circuit Judge E.Grady Jolly appreciated “a sound theoretical and rational structure for my decisions...the potential effects and foreseeable impact of imposing a duty”. Justice Ruth Bader Ginsburg wrote: “the instruction was far more intense than the Florida sun. For lifting the veil on such mysteries as regression analyses, and for advancing both learning and collegial relationships among federal judges across the country, my enduring appreciation.”

A few more choice quotes:

District Judge David Carter: “I regard myself as a social progressive and all the economists in attendance, from my perspective, had Neanderthal views on race and social policy. The basic lesson I learned .. is that social good comes at a price, a social and economic cost. I had never

thought that through before being exposed to Henry's teachings. .... [It] has led me to measure the cost of the social good being furthered against the gain to be achieved.”

District Judge Anthony Alaimo: “There is a wide area of decision entrusted to us where the result can go either way, depending on how we view the evidence. That area is called 'judicial discretion.' This is the area that is most affected by these seminars .. as a result of what I have learned at these seminars, I have become a much better judge.”

District Judge Thomas Griesa: “Henry and his LEC colleagues were of a conservative persuasion. .. the class wanted to express our gratitude on the nal day. The person who rose to speak was Judge Hall from West Virginia, who was from the Fourth Circuit. Without doubt he was a Democrat going back to New Deal days. He was fervent in his appreciation”