WASHINGTON — Judges appointed by Republican presidents gave longer sentences to black defendants and shorter ones to women than judges appointed by Democrats, according to a new study that analyzed data on more than half a million defendants.

“Republican-appointed judges sentence black defendants to three more months than similar nonblacks and female defendants to two fewer months than similar males compared with Democratic-appointed judges,” the study found, adding, “These differences cannot be explained by other judge characteristics and grow substantially larger when judges are granted more discretion.”

The study was conducted by two professors at Harvard Law School, Alma Cohen and Crystal S. Yang. They examined the sentencing practices of about 1,400 federal trial judges over more than 15 years, relying on information from the Federal Judicial Center, the United States Sentencing Commission and the Transactional Records Access Clearinghouse at Syracuse University.

Douglas A. Berman, an authority on sentencing law at Ohio State University, said the study contained “amazing new empirical research.”

“It’s an extraordinarily important contribution to our statistical understanding of sentencing decision making in federal courts over the last two decades,” he said.

It has long been known that there is an overall racial sentencing gap, with judges of all political affiliations meting out longer sentences to black offenders. The new study confirmed this, finding that black defendants are sentenced to 4.8 months more than similar offenders of other races.

It was also well known, and perhaps not terribly surprising, that Republican appointees are tougher on crime over all, imposing sentences an average of 2.4 months longer than Democratic appointees.

But the study’s findings on how judges’ partisan affiliations affected the racial and gender gaps were new and startling.

“The racial gap by political affiliation is three months, approximately 65 percent of the baseline racial sentence gap,” the authors wrote. “We also find that Republican-appointed judges give female defendants two months less in prison than similar male defendants compared to Democratic-appointed judges, 17 percent of the baseline gender sentence gap.”
The two kinds of gaps appear to have slightly different explanations. “We find evidence that gender disparities by political affiliation are largely driven by violent offenses and drug offenses,” the study said. “We also find that racial disparities by political affiliation are largely driven by drug offenses.”

The authors of the study sounded a note of caution. “The precise reasons why these disparities by political affiliation exist remain unknown and we caution that our results cannot speak to whether the sentences imposed by Republican- or Democratic-appointed judges are warranted or ‘right,’” the authors wrote. “Our results, however, do suggest that Republican- and Democratic-appointed judges treat defendants differently on the basis of their race and gender given that we observe robust disparities despite the random assignment of cases to judges within the same court.”

The study is studded with fascinating tidbits. Black judges treat male and female offenders more equally than white judges do. Black judges appointed by Republicans treat black offenders more leniently than do other Republican appointees.

More experienced judges are less apt to treat black and female defendants differently. Judges in states with higher levels of racism, as measured by popular support for laws against interracial marriage, are more likely to treat black defendants more harshly than white ones.

The Trump administration has been quite successful in stocking the federal bench with its appointees, and by some estimates the share of Republican appointees on the federal district courts could rise to 50 percent in 2020, from 34 percent in early 2017.

The study said these trends were likely to widen the sentencing gaps.

“Our estimates suggest that a 10 percentage point increase in the share of Republican-appointed judges in each court would increase the racial sentencing gap by approximately 5 percent and the gender sentencing gap by roughly 2 percent,” the authors wrote. “During an average four-year term, a Republican president has the potential to alter the partisan composition of the district courts by over 15 percentage points, potentially increasing the racial and gender sentencing gap by 7.5 and 3 percent, respectively.”

There are a couple of reasons to question that prediction. The Trump administration has been more energetic in appointing appeals court judges than trial judges. And in recent years many conservatives have started to shift positions on sentencing policy. The very scope of the study, which considered sentences imposed from 1999 to 2015, could mask trends in the later years.

Supreme Court justices like to say that partisan affiliation plays no role in judicial decision making.

“There’s no such thing as a Republican judge or a Democratic judge,” Justice Neil M. Gorsuch, President Trump’s Supreme Court appointee, said at his confirmation hearing last year. “We just have judges in this country.”
Political scientists have disagreed, finding that Republican appointees are markedly more likely to vote in a conservative direction than Democratic ones. Senate Republicans, by refusing to hold hearings for Judge Merrick B. Garland, President Barack Obama’s Supreme Court nominee, seemed to agree.

So has Mr. Trump. “We need more Republicans in 2018 and must ALWAYS hold the Supreme Court!” he tweeted in March.

But judicial ideology is one thing. The race and gender gaps identified by the new study present a different and difficult set of questions.

Professor Berman said the study should prompt both research and reflection. “It only begins a conversation,” he said, “about what sets of factors really influence judges at sentencing in modern times.”