Focus: Predicting Damage Awards

• Widespread concern exists about the “unpredictability” of patent damage awards and its effect on everything from litigation strategy to incentives for innovative activity.
  – 2011 FTC Report highlights “lottery ticket mentality” regarding litigation outcomes in some circles.
Focus: Predicting Damage Awards

• Widespread concern exists about the “unpredictability” of patent damage awards and its effect on everything from litigation strategy to incentives for innovative activity.
  – 2011 FTC Report highlights “lottery ticket mentality” regarding litigation outcomes in some circles.

• Our approach: assemble comprehensive data on damage awards and run straightforward regressions that use readily available, reasonable factors to predict award size.
Focus: Predicting Damage Awards

• Widespread concern exists about the “unpredictability” of patent damage awards and its effect on everything from litigation strategy to incentives for innovative activity.
  – 2011 FTC Report highlights “lottery ticket mentality” regarding litigation outcomes in some circles.

• Our approach: assemble comprehensive data on damage awards and run straightforward regressions that use readily available factors to predict award size.

• Findings: Infringement damages are highly predictable overall and are correlated with factors associated with economic value of patents, litigant size and case complexity.
Prior Literature

- Studies by Lanjouw & Schankerman (1999-2004) described the predictors of patent litigation.

- Studies by consulting firm PwC (2007-2009) described the data (and caused considerable alarm).


- Allison, Lemley & Walker (2009) – described the characteristics of the “most litigated patents.”

- Operdeck (2009) – finds no overriding patterns when trying to “explain” the size of awards statistically.
Analysis

• Dataset: comprehensive information from 340 cases decided in US federal courts between 1995 and 2008.
Evolving the PwC Dataset
Dataset: Size distribution of damage awards in patent infringement cases, 1995-2008
Almost the Entire Iceberg: the top eight cases represent 47.6 percent of collective damages.
Analysis

• Dataset: comprehensive information from 340 cases decided in US federal courts between 1995 and 2008.

• Controls: assembled a detailed set of case characteristics, matched to the damage award levels, to act as potential explanatory variables.
<table>
<thead>
<tr>
<th>Variable Groups</th>
<th>Description</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1: Case Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifiers</td>
<td>Variables including a unique ID assigned by the authors, the docket number of the case, and the full names of the first listed plaintiff and defendant in the case.</td>
<td>PwC database, Google, Westlaw, and PACER</td>
</tr>
<tr>
<td>Dates</td>
<td>Variables including the year of the original award in district court, date the complaint for case was filed, the earliest start date of trial on validity, infringement, or damages, and the number of days between the trial start date and the complaint date.</td>
<td>PwC database, Google, Westlaw, and PACER</td>
</tr>
<tr>
<td>Location</td>
<td>Variables including where the case was litigated, including state, circuit, and court.</td>
<td>PwC database, Google, Westlaw, and PACER</td>
</tr>
<tr>
<td>Other Case Information</td>
<td>Variables determining if the case contained a summary judgment for the patent holder on validity and/or infringement, if the case involved an invalidated patent-at-issue, and if the patent holder was successful in its patent claims.</td>
<td>PwC database, Google, Westlaw, and PACER</td>
</tr>
<tr>
<td>Damage Awards</td>
<td>If the patent holder was successful, variables for the total award amount, lost profits, reasonable royalties, prejuclgment interest, enhanced damages, price erosion damages, and other included are whether or not the case settled before damages were awarded, whether or not the case resulted in only an injunction, and whether or not the case was an ANDA filing.</td>
<td>PwC database, Google, Westlaw, and PACER</td>
</tr>
<tr>
<td><strong>Category 2: Litigant Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Assignee</td>
<td>Includes number of patent assignees associated with the patents-at-issue in the case, the names of the assignees, if one of the assignee(s) is the first named plaintiff or defendant in the case (can be both), if the plaintiff name listed is an assignee (patent holder), and if the patent holder markets or manufactures its technology covered by the patent.</td>
<td>PwC database, Google, Westlaw, PACER, and NBER patent database</td>
</tr>
<tr>
<td>Assignee Identifiers</td>
<td>Includes the variables determining whether or not the first named plaintiff or defendant is an individual, private entity, public entity, university, part of the U.S. government, a domestic entity, foreign entity, part of the 2009 Fortune 500 list, part of the 2009 Fortune 1000 list, a subsidiary of a parent company.</td>
<td>EDGAR, Manta, Hoover's Online, Westlaw, and Fortune 1000</td>
</tr>
<tr>
<td>Assignee Parent Identifiers</td>
<td>Variables for the parent companies of the plaintiff or defendant listed if it was a subsidiary that include whether or not the parent company is a private entity, public entity, domestic entity, foreign entity, part of the 2009 Fortune 500 list, part of the 2009 Fortune 1000 list, if the first named plaintiff or defendant is owned by a joint venture (2 parents or more).</td>
<td>EDGAR, Manta, Hoover's Online, Westlaw, and Fortune 1000</td>
</tr>
<tr>
<td>SIC Codes</td>
<td>Variables identifying the 2-, 3-, and 4- digit SIC codes for the potential infringers.</td>
<td>NBER patent database, Google, and Westlaw</td>
</tr>
<tr>
<td><strong>Category 3: Patent(s)-at-Issue Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Patent</td>
<td>Variables identifying the number of patent(s) at issue in the case and their type as either utility, reissue, design, or application number.</td>
<td>NBER patent database, Google, and Westlaw</td>
</tr>
<tr>
<td>Patent Classification</td>
<td>Includes variables for all patents-at-issue such as application year calculated for minimum and maximum (minimums and maxima differ for cases with multiple patents-at-issue and are the same for cases with only one patent-at-issue); grant date year calculated for minimum and maximum; grant date calculated for minimum and maximum; age of the oldest and youngest patent-at-issue in a case calculated for minimum and maximum; number of claims calculated for minimum, maximum, average and total; number of forward citations through 2002 from the NBER 2002 data, calculated for minimum, maximum and average; number of forward citations through 2010 if the 2002 forward citations were not available, calculated for minimum, maximum and average; the IPC4 classification listed first on the patent; and the PTO main classification for each patent listed in the case.</td>
<td>NBER patent database, Google, and Westlaw</td>
</tr>
</tbody>
</table>
Analysis

• Dataset: comprehensive information from 340 cases decided in US federal courts between 1995 and 2008.

• Controls: assembled a detailed set of case characteristics, matched to the damage award levels, to act as potential explanatory variables.

• Regressions:
  1. Overall predictability of damage award amounts.
  2. Analysis of explanatory power of particular significant factors.
## Regressions (1): Overall predictability

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-Squared</td>
<td>0.6399</td>
<td>0.7340</td>
<td>0.7403</td>
<td>0.7427</td>
<td>0.7561</td>
<td>0.7702</td>
<td>0.4457</td>
</tr>
<tr>
<td>Adjusted R-Squared</td>
<td>0.5368</td>
<td>0.6566</td>
<td>0.6621</td>
<td>0.6599</td>
<td>0.6618</td>
<td>0.6696</td>
<td>0.2030</td>
</tr>
<tr>
<td>F (k-1, N-k)</td>
<td>5.88 (75, 262)</td>
<td>15.15 (76, 261)</td>
<td>14.40 (78, 259)</td>
<td>20.44 (82, 255)</td>
<td>20.12 (94, 243)</td>
<td>19.50 (95, 217)</td>
<td>2.54 (95, 217)</td>
</tr>
<tr>
<td>Sample Size (N)</td>
<td>338</td>
<td>338</td>
<td>338</td>
<td>338</td>
<td>338</td>
<td>313</td>
<td>313</td>
</tr>
<tr>
<td>Standard Errors</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
</tr>
<tr>
<td>Dependent Variable Type</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Linear</td>
</tr>
<tr>
<td>Independent Variables</td>
<td>Base Controls</td>
<td>Model (1) + ANDA Dummy</td>
<td>Model (2) + Interactions</td>
<td>Model (3) + non-parametric total patents</td>
<td>Model (4) + Year Dummies</td>
<td>Model (5) + Avg. Forward Citations</td>
<td>Model (6)</td>
</tr>
</tbody>
</table>
## Regressions (1): Overall predictability

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-Squared</td>
<td>0.6399</td>
<td>0.7340</td>
<td>0.7403</td>
<td>0.7427</td>
<td>0.7561</td>
<td>0.7702</td>
<td>0.4457</td>
</tr>
<tr>
<td>Adjusted R-Squared</td>
<td>0.5368</td>
<td>0.6566</td>
<td>0.6621</td>
<td>0.6599</td>
<td>0.6618</td>
<td>0.6696</td>
<td>0.2030</td>
</tr>
<tr>
<td>F (k-1, N-k)</td>
<td>5.88 (75, 262)</td>
<td>15.15 (76, 261)</td>
<td>14.40 (78, 259)</td>
<td>20.44 (82, 255)</td>
<td>20.12 (94, 243)</td>
<td>19.50 (95, 217)</td>
<td>2.54 (95, 217)</td>
</tr>
<tr>
<td>Sample Size (N)</td>
<td>338</td>
<td>338</td>
<td>338</td>
<td>338</td>
<td>338</td>
<td>313</td>
<td>313</td>
</tr>
<tr>
<td>Standard Errors</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
</tr>
<tr>
<td>Dependent Variable Type</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Log</td>
<td>Linear</td>
</tr>
<tr>
<td>Independent Variables</td>
<td>Base Controls</td>
<td>Model (1) + ANDA Dummy</td>
<td>Model (2) + Interactions</td>
<td>Model (3) + non-parametric total patents</td>
<td>Model (4) + Year Dummies</td>
<td>Model (5) + Avg. Forward Citations</td>
<td>Model (6)</td>
</tr>
</tbody>
</table>
Regressions (2): What matters?

- Focus the analysis on exactly which critical factors help to explain the size of awarded damages:
  - Underlying “value” of the patents in the case:
    - Number of patents
    - Number of claims
    - Forward citations
    - Patent Age
  - Litigant information:
    - Status of patent holders as practicing entities
    - Proxies for size/income of defendants
  - Case strategy information:
    - Judge vs. Jury
    - Time-to-trial
Regressions (2): What matters?

<table>
<thead>
<tr>
<th>Dependent =</th>
<th>Log of patent damage awards in 2008 dollars</th>
<th>Coef.</th>
<th>Robust Std. Error</th>
<th>t</th>
<th>P&gt;t</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Number of Patent Claims</td>
<td>0.00418</td>
<td>0.00169</td>
<td>2.47</td>
<td>0.014</td>
<td>0.00849</td>
<td>0.00751</td>
</tr>
<tr>
<td>Number of Patents</td>
<td>0.07319</td>
<td>0.01466</td>
<td>4.99</td>
<td>0.000</td>
<td>0.04431</td>
<td>0.10208</td>
</tr>
<tr>
<td>Average Number of Forward Citations</td>
<td>0.00526</td>
<td>0.00182</td>
<td>2.89</td>
<td>0.004</td>
<td>0.00168</td>
<td>0.00884</td>
</tr>
<tr>
<td>Average Age of Patent</td>
<td>0.00009</td>
<td>0.00004</td>
<td>2.31</td>
<td>0.022</td>
<td>0.00001</td>
<td>0.00016</td>
</tr>
<tr>
<td>Dummy for “Practicing” Patent Holder</td>
<td>0.18153</td>
<td>0.13329</td>
<td>1.36</td>
<td>0.175</td>
<td>0.08111</td>
<td>0.44417</td>
</tr>
<tr>
<td>Defendant is a Fortune 500 Comp. (or sub)</td>
<td>0.25912</td>
<td>0.18626</td>
<td>1.39</td>
<td>0.166</td>
<td>0.10788</td>
<td>0.62613</td>
</tr>
<tr>
<td>Defendant is a Public Comp. (or sub)</td>
<td>0.63925</td>
<td>0.13479</td>
<td>4.74</td>
<td>0.000</td>
<td>0.37367</td>
<td>0.90482</td>
</tr>
<tr>
<td>Dummy for Trial by Jury</td>
<td>0.77575</td>
<td>0.15008</td>
<td>5.17</td>
<td>0.000</td>
<td>0.48003</td>
<td>1.07146</td>
</tr>
<tr>
<td>Time-to-Trial (days)</td>
<td>0.00032</td>
<td>0.00008</td>
<td>4.06</td>
<td>0.000</td>
<td>0.00017</td>
<td>0.00048</td>
</tr>
<tr>
<td>Year of Decision (time trend)</td>
<td>-0.05784</td>
<td>0.01557</td>
<td>-3.72</td>
<td>0.000</td>
<td>0.08851</td>
<td>0.02717</td>
</tr>
<tr>
<td>Constant</td>
<td>120.59220</td>
<td>31.11397</td>
<td>3.88</td>
<td>0.000</td>
<td>59.28595</td>
<td>181.89850</td>
</tr>
</tbody>
</table>

Number of obs 240
F( 10, 229) 15.710
Prob > F 0.000
R-squared 0.362
Root MSE 88629.000
Regressions (2): What matters?

<table>
<thead>
<tr>
<th>Dependent =</th>
<th>Log of patent damage awards in 2008 dollars</th>
<th>Coef.</th>
<th>Robust Std. Error</th>
<th>t</th>
<th>P&gt;t</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Number of Patent Claims</td>
<td>0.00418</td>
<td>0.00169</td>
<td>2.47</td>
<td>0.014</td>
<td>0.00849</td>
<td>0.00751</td>
</tr>
<tr>
<td>Number of Patents</td>
<td>0.07319</td>
<td>0.01466</td>
<td>4.99</td>
<td>0.000</td>
<td>0.04431</td>
<td>0.10208</td>
</tr>
<tr>
<td>Average Number of Forward Citations</td>
<td>0.00526</td>
<td>0.00182</td>
<td>2.89</td>
<td>0.004</td>
<td>0.00168</td>
<td>0.00884</td>
</tr>
<tr>
<td>Average Age of Patent</td>
<td>0.00009</td>
<td>0.00004</td>
<td>2.31</td>
<td>0.022</td>
<td>0.00001</td>
<td>0.00016</td>
</tr>
<tr>
<td>Dummy for “Practicing” Patent Holder</td>
<td>0.18153</td>
<td>0.13329</td>
<td>1.36</td>
<td>0.175</td>
<td>0.08111</td>
<td>0.44417</td>
</tr>
<tr>
<td>Defendant is a Fortune 500 Comp. (or sub)</td>
<td>0.25912</td>
<td>0.18626</td>
<td>1.39</td>
<td>0.166</td>
<td>0.10788</td>
<td>0.62613</td>
</tr>
<tr>
<td>Defendant is a Public Comp. (or sub)</td>
<td>0.63925</td>
<td>0.13479</td>
<td>4.74</td>
<td>0.000</td>
<td>0.37367</td>
<td>0.90482</td>
</tr>
<tr>
<td>Dummy for Trial by Jury</td>
<td>0.77575</td>
<td>0.15008</td>
<td>5.17</td>
<td>0.000</td>
<td>0.48003</td>
<td>1.07146</td>
</tr>
<tr>
<td>Time-to-Trial (days)</td>
<td>0.00032</td>
<td>0.00008</td>
<td>4.06</td>
<td>0.000</td>
<td>0.00017</td>
<td>0.00048</td>
</tr>
<tr>
<td>Year of Decision (time trend)</td>
<td>-0.05784</td>
<td>0.01557</td>
<td>-3.72</td>
<td>0.000</td>
<td>0.08851</td>
<td>0.02717</td>
</tr>
<tr>
<td>Constant</td>
<td>120.59220</td>
<td>31.11397</td>
<td>3.88</td>
<td>0.000</td>
<td>59.28595</td>
<td>181.89850</td>
</tr>
</tbody>
</table>

Number of obs: 240
F(10, 229) = 15.710
Prob > F = 0.000
R-squared = 0.362
Root MSE = 88629.000
### Regressions (2): What matters?

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Coef.</th>
<th>Robust Std. Error</th>
<th>t</th>
<th>P&gt;t</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Number of Patent Claims</td>
<td>0.00418</td>
<td>0.00169</td>
<td>2.47</td>
<td>0.014</td>
<td>0.00849 - 0.00751</td>
</tr>
<tr>
<td>Number of Patents</td>
<td>0.07319</td>
<td>0.01466</td>
<td>4.99</td>
<td>0.000</td>
<td>0.04431 - 0.10208</td>
</tr>
<tr>
<td>Average Number of Forward Citations</td>
<td>0.00526</td>
<td>0.00182</td>
<td>2.89</td>
<td>0.004</td>
<td>0.00168 - 0.00884</td>
</tr>
<tr>
<td>Average Age of Patent</td>
<td>0.00009</td>
<td>0.00004</td>
<td>2.31</td>
<td>0.022</td>
<td>0.00001 - 0.00016</td>
</tr>
<tr>
<td>Dummy for “Practicing” Patent Holder</td>
<td>0.18153</td>
<td>0.13329</td>
<td>1.36</td>
<td>0.175</td>
<td>0.08111 - 0.44417</td>
</tr>
<tr>
<td>Defendant is a Fortune 500 Comp. (or sub)</td>
<td>0.25912</td>
<td>0.18626</td>
<td>1.39</td>
<td>0.166</td>
<td>0.10788 - 0.62613</td>
</tr>
<tr>
<td>Defendant is a Public Comp. (or sub)</td>
<td>0.63925</td>
<td>0.13479</td>
<td>4.74</td>
<td>0.000</td>
<td>0.37367 - 0.90482</td>
</tr>
<tr>
<td>Dummy for Trial by Jury</td>
<td>0.77575</td>
<td>0.15008</td>
<td>5.17</td>
<td>0.000</td>
<td>0.48003 - 1.07146</td>
</tr>
<tr>
<td>Time-to-Trial (days)</td>
<td>0.00032</td>
<td>0.00008</td>
<td>4.06</td>
<td>0.000</td>
<td>0.00017 - 0.00048</td>
</tr>
<tr>
<td>Year of Decision (time trend)</td>
<td>-0.05784</td>
<td>0.01557</td>
<td>-3.72</td>
<td>0.000</td>
<td>0.08851 - 0.02717</td>
</tr>
<tr>
<td>Constant</td>
<td>120.59220</td>
<td>31.11397</td>
<td>3.88</td>
<td>0.000</td>
<td>59.28595 - 181.89850</td>
</tr>
</tbody>
</table>

Number of obs: 240
F(10, 229): 15.710
Prob > F: 0.000
R-squared: 0.362
Root MSE: 88629.000
## Regressions (2): What matters?

<table>
<thead>
<tr>
<th>Dependent =</th>
<th>Log of patent damage awards in 2008 dollars</th>
<th>Coef.</th>
<th>Robust Std. Error</th>
<th>t</th>
<th>P&gt;t</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Number of Patent Claims</td>
<td>0.00418</td>
<td>0.00169</td>
<td>2.47</td>
<td>0.014</td>
<td>0.00849, 0.00751</td>
<td></td>
</tr>
<tr>
<td>Number of Patents</td>
<td>0.07319</td>
<td>0.01466</td>
<td>4.99</td>
<td>0.000</td>
<td>0.04431, 0.10208</td>
<td></td>
</tr>
<tr>
<td>Average Number of Forward Citations</td>
<td>0.00526</td>
<td>0.00182</td>
<td>2.89</td>
<td>0.004</td>
<td>0.00168, 0.00884</td>
<td></td>
</tr>
<tr>
<td>Average Age of Patent</td>
<td>0.00009</td>
<td>0.00004</td>
<td>2.31</td>
<td>0.022</td>
<td>0.00001, 0.00016</td>
<td></td>
</tr>
<tr>
<td>Dummy for “Practicing” Patent Holder</td>
<td>0.18153</td>
<td>0.13329</td>
<td>1.36</td>
<td>0.175</td>
<td>0.08111, 0.44417</td>
<td></td>
</tr>
<tr>
<td>Defendant is a Fortune 500 Comp. (or sub)</td>
<td>0.25912</td>
<td>0.18626</td>
<td>1.39</td>
<td>0.166</td>
<td>0.10788, 0.62613</td>
<td></td>
</tr>
<tr>
<td>Defendant is a Public Comp. (or sub)</td>
<td>0.63925</td>
<td>0.13479</td>
<td>4.74</td>
<td>0.000</td>
<td>0.37367, 0.90482</td>
<td></td>
</tr>
<tr>
<td>Dummy for Trial by Jury</td>
<td>0.77575</td>
<td>0.15008</td>
<td>5.17</td>
<td>0.000</td>
<td>0.48003, 1.07146</td>
<td></td>
</tr>
<tr>
<td>Time-to-Trial (days)</td>
<td>0.00032</td>
<td>0.00008</td>
<td>4.06</td>
<td>0.000</td>
<td>0.00017, 0.00048</td>
<td></td>
</tr>
<tr>
<td>Year of Decision (time trend)</td>
<td>-0.05784</td>
<td>0.01557</td>
<td>-3.72</td>
<td>0.000</td>
<td>0.08851, 0.02717</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>120.59220</td>
<td>31.11397</td>
<td>3.88</td>
<td>0.000</td>
<td>59.28595, 181.89850</td>
<td></td>
</tr>
</tbody>
</table>
### Regressions (2): What matters?

#### Summary Statistics

- Number of observations: 240
- $F(10, 229) = 15.710$
- $\text{Prob} > F = 0.000$
- $R^2 = 0.362$
- $\text{Root MSE} = 88629.000$

#### Dependent Variable

Log of patent damage awards in 2008 dollars

| Dependent                                  | Coef.   | Robust Std. Error | t      | P>|t| | [95% Conf. Interval] |
|--------------------------------------------|---------|-------------------|--------|-----|---------------------|
| Average Number of Patent Claims            | 0.00418 | 0.00169           | 2.47   | 0.014 | 0.00849, 0.00751    |
| Number of Patents                          | 0.07319 | 0.01466           | 4.99   | 0.000 | 0.04431, 0.10208    |
| Average Number of Forward Citations       | 0.00526 | 0.00182           | 2.89   | 0.004 | 0.00168, 0.00884    |
| Average Age of Patent                      | 0.00009 | 0.00004           | 2.31   | 0.022 | 0.00001, 0.00016    |
| Dummy for “Practicing” Patent Holder       | 0.18153 | 0.13329           | 1.36   | 0.175 | 0.08111, 0.44417    |
| Defendant is a Fortune 500 Comp. (or sub) | 0.25912 | 0.18626           | 1.39   | 0.166 | 0.10788, 0.62613    |
| Defendant is a Public Comp. (or sub)       | 0.63925 | 0.13479           | 4.74   | 0.000 | 0.37367, 0.90482    |
| Dummy for Trial by Jury                    | 0.77575 | 0.15008           | 5.17   | 0.000 | 0.48003, 1.07146    |
| Time-to-Trial (days)                       | 0.00032 | 0.00008           | 4.06   | 0.000 | 0.00017, 0.00048    |
| Year of Decision (time trend)              | -0.05784| 0.01557           | -3.72  | 0.000 | 0.08851, 0.02717    |
| Constant                                  | 120.59220| 31.11397         | 3.88   | 0.000 | 59.28595, 181.89850 |
Applications & Extensions

• Model that “explains” awards can also be used to “predict” damage award levels based on available data (case, litigant and patent-at-issue information).

• Expand dataset to include information about:
  – More nuanced details regarding potential non-practicing entities
  – Cases lost at trial
  – Cases settled between infringement decision and damage awards
Summary

• Systematic empirical evidence suggests that the well-publicized, very large patent infringement damage awards are infrequent.

• Constructed regression model with detailed control variables explains considerable portion of the variation in observed damage awards.

• More targeted regressions suggest that patent “value,” litigant size and case strategy affect the level of damage awards (in predictable ways).

• Future research: expanding the dataset on damage awards and exploring other datasets on patent value.