Reforming the speed of justice: Evidence from an event study in Senegal

Florence Kondylis & Mattea Stein

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Motivation (1)

- The speed of legal resolution is among the key markers of the investment climate
  - “Doing Business” [World Bank]
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- Stronger institutions are associated with high levels of investments (Pande and Udry 2006; Le 2004; Rodrik 2000)
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- The speed of legal resolution is among the key markers of the investment climate
  - “Doing Business” [World Bank]
- Stronger institutions are associated with high levels of investments (Pande and Udry 2006; Le 2004; Rodrik 2000)
- Slow justice imposes large welfare costs (Chemin 2009; Visaria 2009; Lichand and Soares 2014; Ponticelli 2013)
Lack of evidence on the effectiveness of justice reforms prevents formulation of actionable policy recommendations (Aboala et al 2014)

- poor identification, lack of high-frequency data
- few court-level studies (Coviello et al 2015; Chang and Schoar 2006)
- none in developing countries
Can simple legal reforms affect the speed of civil and commercial justice in a developing country context?
Question

- Can simple legal reforms affect the speed of civil and commercial justice in a developing country context?
- Can we isolate speed vs. quality tradeoffs?
This paper

- Collect high-frequency, case-level data on the Civil and Commercial court of Dakar
  - retrace the full historic of cases, with bi-monthly frequency
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- Construct an event study to examine the impact of a legal reform that imposed new procedural deadlines
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- Collect high-frequency, case-level data on the Civil and Commercial court of Dakar
  - retrace the full historic of cases, with bi-monthly frequency
- Construct an event study to examine the impact of a legal reform that imposed new procedural deadlines
- Use rich caseload data to document mechanisms and shed light on judges’ incentives
  - say something about the nature of delays (*idle* vs. *strategic*)
We find that imposing a deadline has a large effect (72 days; 0.5 SD) on pre-trial duration.
Preview of the results

- We find that imposing a deadline has a large effect (72 days; 0.5 SD) on pre-trial duration.
- Higher speed is achieved through increased *decisiveness*
  - number of fast-tracked decisions increase (15 pp.)
  - number of pre-trial hearings reduced (0.4 SD)
  - judges 57% more likely to set firm deadlines
Preview of the results

- We find that imposing a deadline has a large effect (72 days; 0.5 SD) on pre-trial duration.
- Higher speed is achieved through increased *decisiveness*:
  - number of fast-tracked decisions increase (15 pp.)
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  - judges 57% more likely to set firm deadlines
- Evidence supports the idea that delays are largely *idle*.
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Higher speed is achieved through increased *decisiveness*:
- number of fast-tracked decisions increase (15 pp.)
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Evidence supports the idea that delays are largely *idle*.

We document no effect on the precision of the evidence, and no effect on duration of the decision stage.
- Overall, efficiency gains dominate.
Procedure

- Split across two main stages
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  - **Pre-trial**
    - Parties build their case under *supervision* of a pre-trial judge
    - judge’s input is purely administrative (schedule and attend hearings)
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  - *Pre-trial*
    - Parties build their case under *supervision* of a pre-trial judge
    - Judge’s input is purely administrative (schedule and attend hearings)
  - *Decision*
    - Judges deliberate in closed session, announce decision in public hearing
    - Judges’ inputs influence quality (review evidence, argument, decide)
Decree n°2013-1071

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- Allows judges to reject cases as “irrecevable” at the first pre-trial hearing
- Staggered roll out across 7 civil and commercial chambers, over a 6-month period
  - first introduced in November 2013, reached full coverage by April 2014
Theoretical framework

- judges are career bureaucrats who expend effort to convince peers and superiors of their talent
  - *at pre-trial*, their speed is the only signal; speed influences the precision of the evidence
  - *at decision*, the quality of the decision is the main signal, and is a function of precision
  - allow multi-dimensional cases may send a stronger signal than uni-dimensional cases
    - we allow the number of hearings on a given case to be a function of judges’ effort
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- incoming caseload is a function of existing caseload
- Result 1: judges have no incentive to deviate from an implicit threshold of pre-trial speed

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Predictions

- Prediction 1: if judges *strategically* delay pre-trial hearings, decree should
  - increase duration for unidimensional (faster) cases & decrease intensity of hearings
  - reduce duration for multi-dimensional (slower) cases & increase the intensity of hearings

- Prediction 2: if judges idly delay pre-trial hearings, decree should
  - (weakly) decrease duration of all cases & reduce the number of hearings
  - increase decisiveness of pre-trial hearings

The effect on quality is a priori ambiguous
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Data

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Data

- Digitized data on all 2010/14 civil and commercial ongoing and completed caseload
  - collection still ongoing, adding data up to Dec 2015
- High-frequency data on 5,300 cases
  - 7 civil and commercial chambers
  - 21 hearings per year over three years
  - retrace the full history of each case from entry into court and across pre-trial phase → judgement
- Adding appeal data
Model: Case-level

- run a flexible functional form with one treatment effect per case entry period

\[ y_{ij} = \alpha + \sum_{\tau = -38}^{7} \beta_\tau 11(tApplicationSinceEntry_i == \tau) + D_m + D_j + \varepsilon_{ij} \]

- \( y_{ij} \) outcome of case \( i \) in chamber \( j \)
- \( tApplicationSinceEntry_{ij} \) indicates the number of hearings (half-month periods) between entry of case \( i \) in court and the application of the decree in chamber \( j \) (centered at 0)
- \( D_j \) are chamber FE
- \( D_m \) are calendar month FE
- \( \varepsilon_{ij} \) is an error term
Model: Case-level

- average the effect across the cutoff, allowing for an adjustment period

\[ y_{ij} = \alpha + \beta_1 (t\text{ApplicationSinceEntry}_i > 2) \]
\[ + \gamma_{\text{interim}} 11 (t\text{ApplicationSinceEntry}_i \epsilon [-3; 2]) \]
\[ \psi \tau + D_m + D_j + \varepsilon_{ij} \]

- Identification

\[ E(\varepsilon_{ij} | D_m, D_j, \tau) = 0 \]
Robustness

- Verify existence of a structural break on main outcomes at cutoff (*event study*)
- Check for structural break in chamber-level incoming caseload across all cutoffs [here](#)
- Check for structural break in jurisdiction-wide incoming caseload [here](#)
- Other types of structural changes are unlikely to be chamber-specific
Pre-trial duration (days)
Pre-trial duration: Distribution

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## Duration of pre-trial procedure

<table>
<thead>
<tr>
<th></th>
<th>(1) Duration of pre-trial hearings (in days)</th>
<th>(2) Likelihood of pre-trial completion in 4 months</th>
<th>(3) Duration of pre-trial hearings (in days)</th>
<th>(4) Likelihood of pre-trial completion in 4 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entered after interim</td>
<td>-124.774*** (8.518)</td>
<td>0.268*** (0.029)</td>
<td>-72.040*** (10.943)</td>
<td>0.194*** (0.039)</td>
</tr>
<tr>
<td>Entered during interim</td>
<td>-86.306*** (8.250)</td>
<td>0.178*** (0.029)</td>
<td>-49.559*** (8.676)</td>
<td>0.127*** (0.035)</td>
</tr>
<tr>
<td>Constant</td>
<td>156.000*** (18.231)</td>
<td>0.493*** (0.042)</td>
<td>175.177*** (16.014)</td>
<td>0.689*** (0.053)</td>
</tr>
<tr>
<td>Chamber FEs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Calendar month FEs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Trend</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pre-mean</td>
<td>164.018</td>
<td>0.461</td>
<td>164.018</td>
<td>0.461</td>
</tr>
<tr>
<td>Pre-sd</td>
<td>143.860</td>
<td>0.499</td>
<td>143.860</td>
<td>0.499</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.213</td>
<td>0.140</td>
<td>0.227</td>
<td>0.142</td>
</tr>
<tr>
<td>Observations</td>
<td>3384</td>
<td>3515</td>
<td>3384</td>
<td>3515</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1. All models estimated by OLS. Standard errors in parentheses, clustered by chamber-entry-t. Window includes cases entering between 38 audiences before and 8 audiences after decree application.
**Number of pre-trial hearings**

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### Pre-trial mechanisms

<table>
<thead>
<tr>
<th></th>
<th>(1) Number of pretrial hearings</th>
<th>(2) No pre-trial</th>
<th>(3) Pre-trial likelihood of being heard</th>
<th>(4) Judge more strict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entered after interim</td>
<td>-2.625***</td>
<td>0.149***</td>
<td>0.039**</td>
<td>0.080***</td>
</tr>
<tr>
<td></td>
<td>(0.426)</td>
<td>(0.037)</td>
<td>(0.017)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Entered during interim</td>
<td>-2.147***</td>
<td>0.161***</td>
<td>0.024</td>
<td>0.027*</td>
</tr>
<tr>
<td></td>
<td>(0.377)</td>
<td>(0.030)</td>
<td>(0.015)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Constant</td>
<td>5.587***</td>
<td>0.174***</td>
<td>0.779***</td>
<td>0.160***</td>
</tr>
<tr>
<td></td>
<td>(0.742)</td>
<td>(0.036)</td>
<td>(0.019)</td>
<td>(0.022)</td>
</tr>
</tbody>
</table>

- Chamber FEs: Yes
- Calendar month FEs: Yes
- Trend: Yes
- Pre-mean: 8.551
- Pre-sd: 6.335
- R-Squared: 0.163
- Observations: 3515

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Duration of the decision phase

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## Decision mechanisms

<table>
<thead>
<tr>
<th></th>
<th>(1) Number of decision stage hearings</th>
<th>(2) Decision stage likelihood of being heard</th>
<th>(3) Pre-trial insufficient</th>
<th>(4) Decision postponed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entered after</td>
<td>-0.822***</td>
<td>-0.029</td>
<td>0.021</td>
<td>-0.081**</td>
</tr>
<tr>
<td>interim</td>
<td>(0.238)</td>
<td>(0.036)</td>
<td>(0.032)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Entered during</td>
<td>-0.645***</td>
<td>-0.015</td>
<td>0.048*</td>
<td>-0.091***</td>
</tr>
<tr>
<td>interim</td>
<td>(0.217)</td>
<td>(0.024)</td>
<td>(0.027)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.235***</td>
<td>0.534***</td>
<td>0.143***</td>
<td>0.184***</td>
</tr>
<tr>
<td></td>
<td>(0.343)</td>
<td>(0.036)</td>
<td>(0.034)</td>
<td>(0.047)</td>
</tr>
</tbody>
</table>

- **Chamber FEs**: Yes
- **Calendar month FEs**: Yes
- **Trend**: Yes
- **Pre-mean**: 2.310
- **Pre-sd**: 3.156
- **R-Squared**: 0.027
- **Observations**: 3515

### Model

- All models estimated by OLS.
- Standard errors in parentheses, clustered by chamber-entry-t.
- Window includes cases entering between 38 audiences before and 8 audiences after decree application.
Conclusion

- Simple legal reform can have large impacts on the speed of justice
  - can help combat high-level of procedural complexity (*large number of hearings*)
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- Results support predictions from a model where delays are mostly *idly induced*
Conclusion

- Simple legal reform can have large impacts on the speed of justice
  - can help combat high-level of procedural complexity (large number of hearings)
- Results support predictions from a model where delays are mostly idly induced
- Lack of meaningful effect on quality does not corroborate the idea of a speed vs. quality tradeoff in our setting

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Reforming the speed of justice: Evidence from an event study in Senegal
Likelihood of pre-trial phase <4 months

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Reforming the speed of justice: Evidence from an event study in Senegal
Structural break in chamber-level incoming caseload
Structural break in jurisdiction-wide incoming caseload

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