

Department of International Development and Department of Statistics
public lecture

Fraud at polls: can journalists and statisticians check? The Mozambican experience

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Hashtag for Twitter users: **#LSEMozambique**

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LSE Public Lecture
16 March 2016

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Chair: Dr Wendy Willems



Citizen Kane, 1941

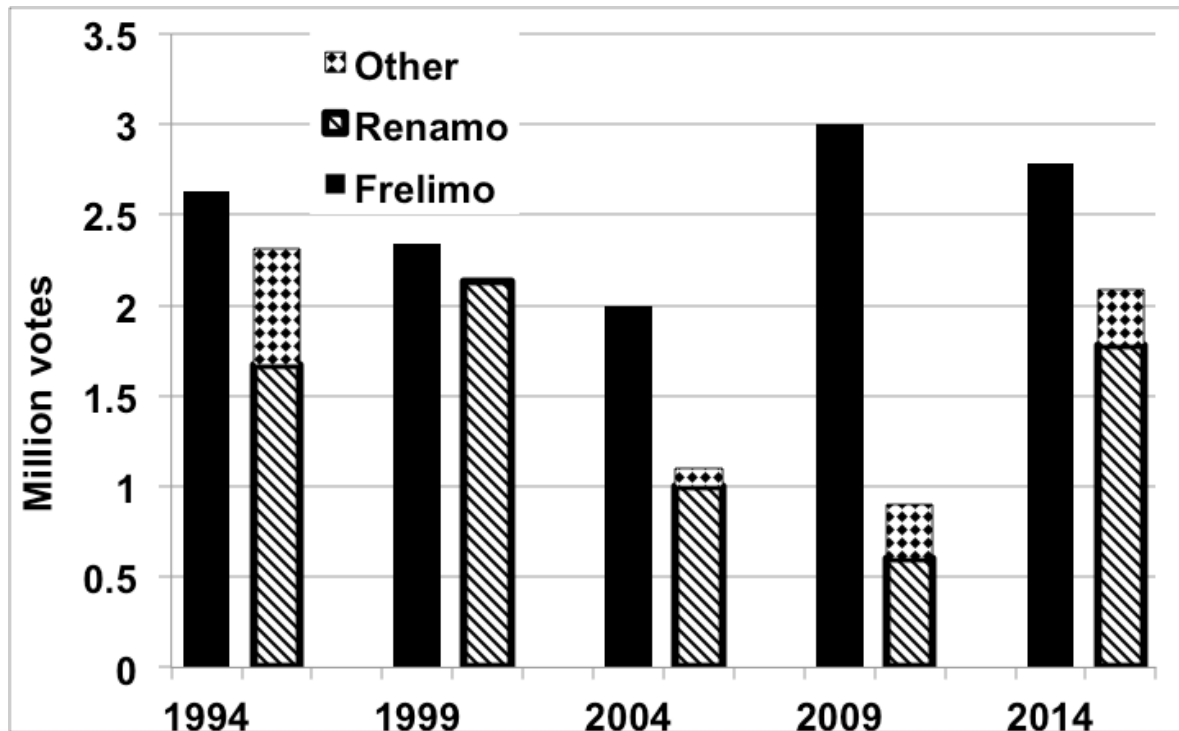
1975 – Mozambique Independence; one party state

1980-92 – War (Cold war proxy war; apartheid backed)

1992 peace accord – Multi-party elections;

Renamo guerrillas become main opposition party

Presidential votes in 5 elections



2 term limit = 3 different Frelimo presidents

Renamo guerrilla leader Afonso Dhlakama candidate in all 5 elections

Electoral process

- New registration each election
- Register & vote same place – school
- Register book =
polling station = classroom (700 or 1000 voters)
- Paper ballots; 3 votes: president, national parliament, provincial parliament
- Count in polling station; post results on door
- Media, observers, party poll watchers present



Eleições Autárquicas 2013



Boletim sobre o processo político em Moçambique
Número EA 4 - 26 de Maio de 2013



Editor: Joseph Hanlon
Editor Adjunto: Adriano Nuvunga
Chefe de redação: Fatima Mimbire
Repórter: Anchieta Maquilela

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Para assinar em Português: <http://tinyurl.com/mz-pt-sub> To subscribe in English: <http://tinyurl.com/mz-en-sub>

Recenseamento aberto com muitos problemas

Muitos postos de recenseamento não conseguiram abrir no sábado por causa da chegada tardia dos equipamentos, e houve relatos generalizados de falhas de equipamentos onde os postos abriram. Uma mulher em Maputo *tweetou* "fomos muito bem atendidos apenas as máquinas não estão a funcionar, amanhã tentaremos!"

No entanto, em outros locais de registo correu sem problemas. A afluência foi misturada com longas filas em alguns lugares, filas curtas em outros lugares, e ninguém a registar em outros.

Em Marromeu, Milange, Massinga, Pemba e Manica os postos de recenseamento abriram na hora e estavam funcionando, com filas de até 75 pessoas.

Eleições Autárquicas 2013



Boletim sobre o processo político em Moçambique
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FIR dispara gás lacrimogénico num *showmício* do MDM na Beira e cria pânico

A Força de Intervenção Rápida (FIR) disparou gás lacrimogénico, sábado (16) durante um *showmício* de encerramento de campanha eleitoral de Daviz Simango, no campo da Munhava na Beira, e criou pânico. Logo em seguida, a população atacou a polícia e a sede do partido Frelimo ao lado, em forma de retaliação.

Citando o porta-voz da polícia em Sofala, Feliciano Dique, a TVM noticiou que há 46 feridos que deram entrada no Hospital Central da Beira e 21 detidos. A TVM e o Hospital Central de Beira afirmam não haver mortes em resultado dos tumultos, enquanto a STV e

Eleições Autárquicas 2013



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Número EA 42 - 14 de Novembro de 2013



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Continua uso de viaturas do Estado

A campanha eleitoral do partido Frelimo continua a usar viaturas do Estado um pouco por todas as autarquias.

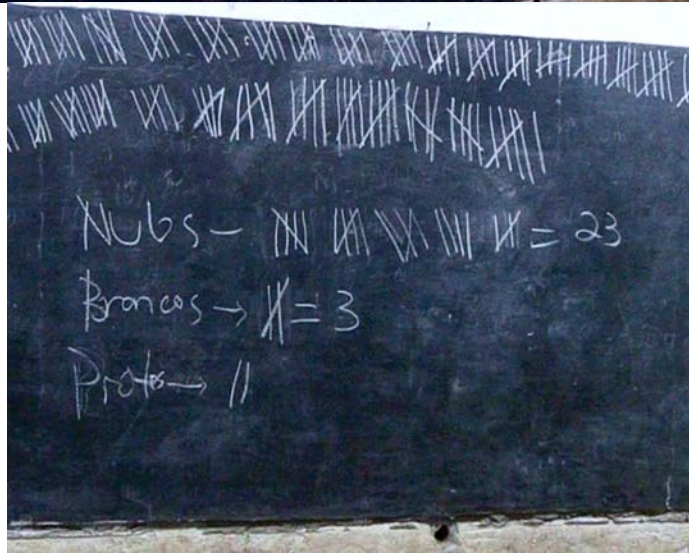
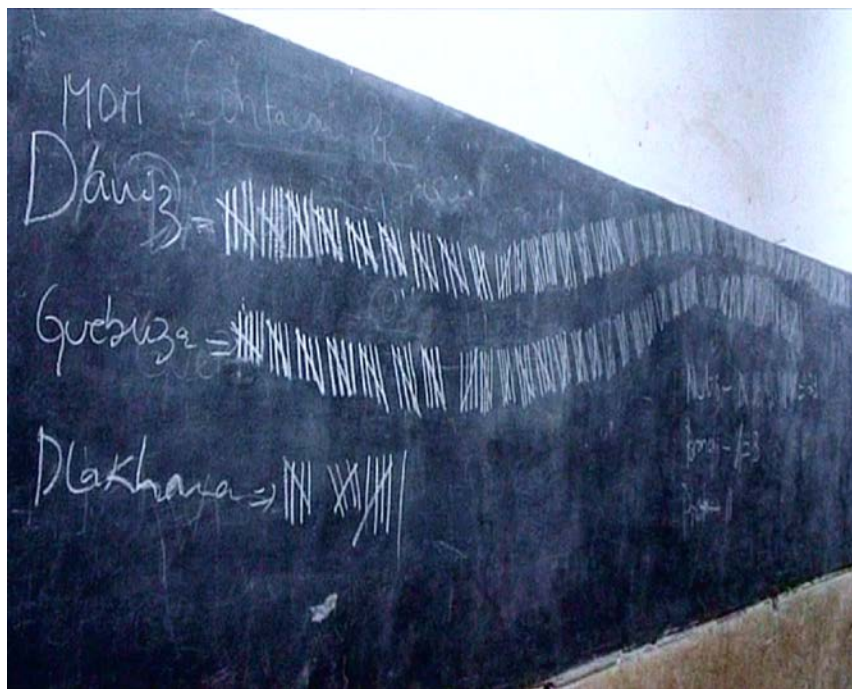
No município de Nacala-Porto (Nampula) circulava esta quarta-feira uma viatura Ford Ranger, ADI 698 MP, pertencente o a Administradora do Distrito de Erati, que desde o princípio da campanha encontra-se a fazer campanha para o candidato da Frelimo em Nacala, Rui Shong Saw.

Para além da viatura, mobilizou-se ainda um motorista da Direcção Distrital de Saúde de Erati para conduzir a viatura.

Ainda em Nacala, outra viatura de dupla cabine, de cor branca ACT 230 MP, pertencente ao município, estava na campanha do partido Frelimo esta quarta-feira a ser conduzida pelo Presidente da Assembleia Municipal de Nacala Porto, António Sandiconda.



Eleições Autárquicas 2013, Boletim sobre o processo político em Moçambique- Número EA 42 - 14 de Novembro 1



Invalid
votes



AP

Mozambique Presidential Elections 1994 - 2009

Study of potential
election irregularities

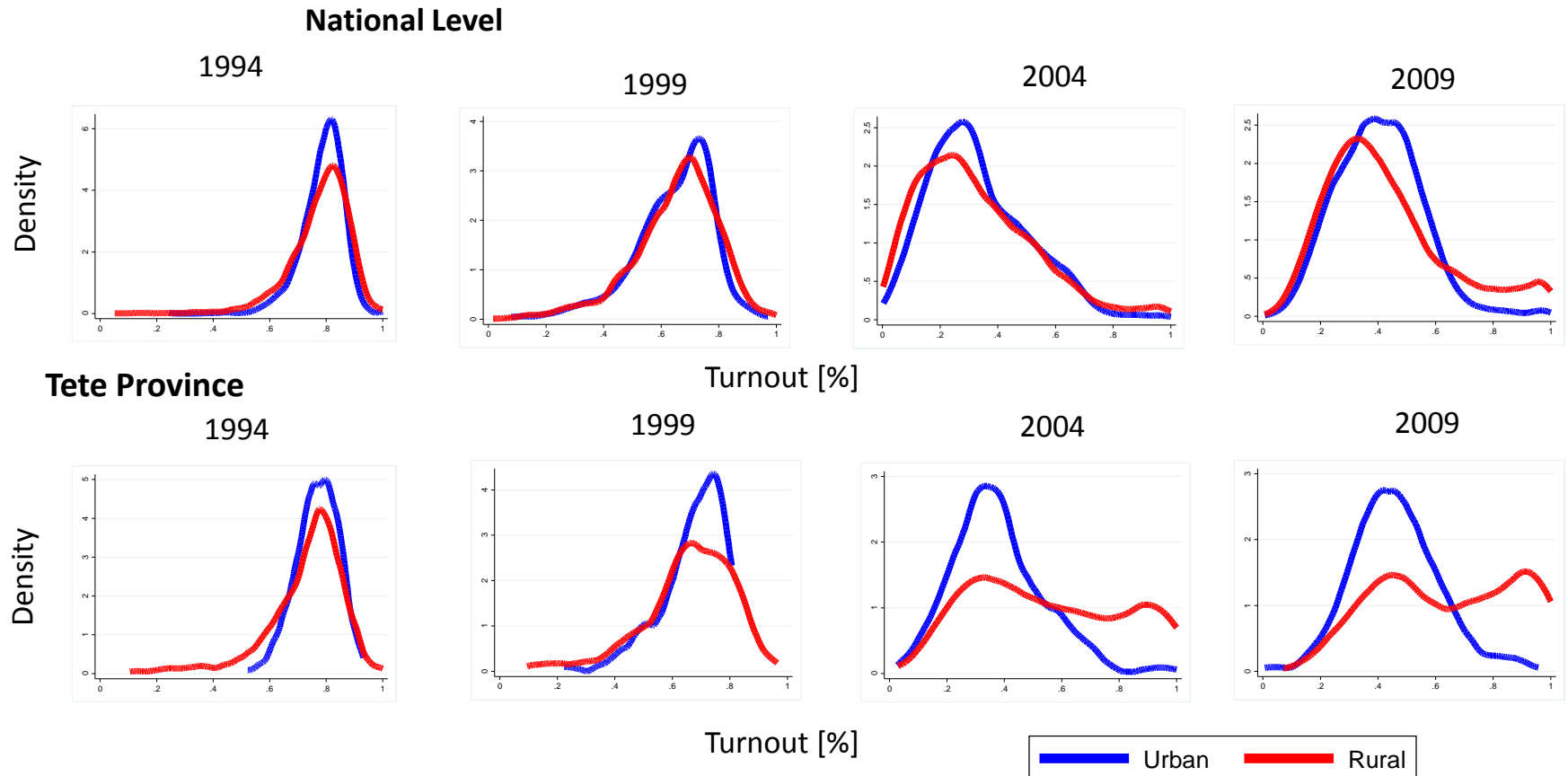
Election Forensics



'We do not trust Churov, we trust Gauss'

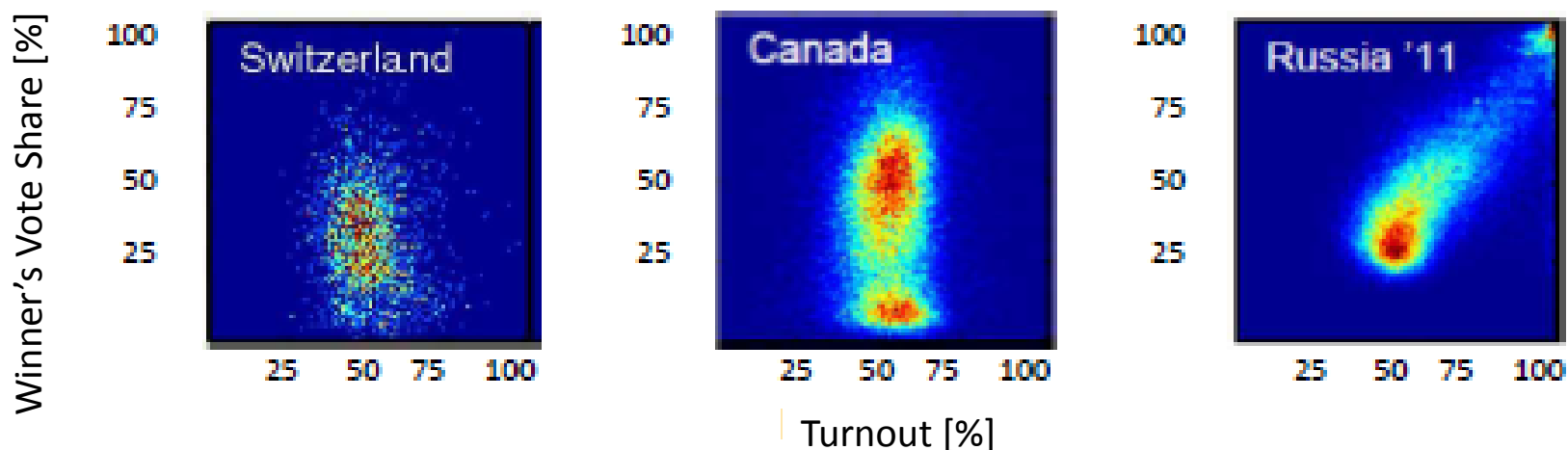
Picture is from a presentation provided by Peter Klimek (26.2.2013).
See <http://www.complex-systems.meduniwien.ac.uk>. Origin unknown.

Turnout Distribution in Mozambique 1994-2009



Note: Graphs represent k-density plots of turnout distribution in Mozambican presidential elections 1994-2004, split between urban (blue) and rural (red) ballot stations. The upper graph is for the national level, while the lower graph is for Tete Province.

The Fingerprints of Fraud

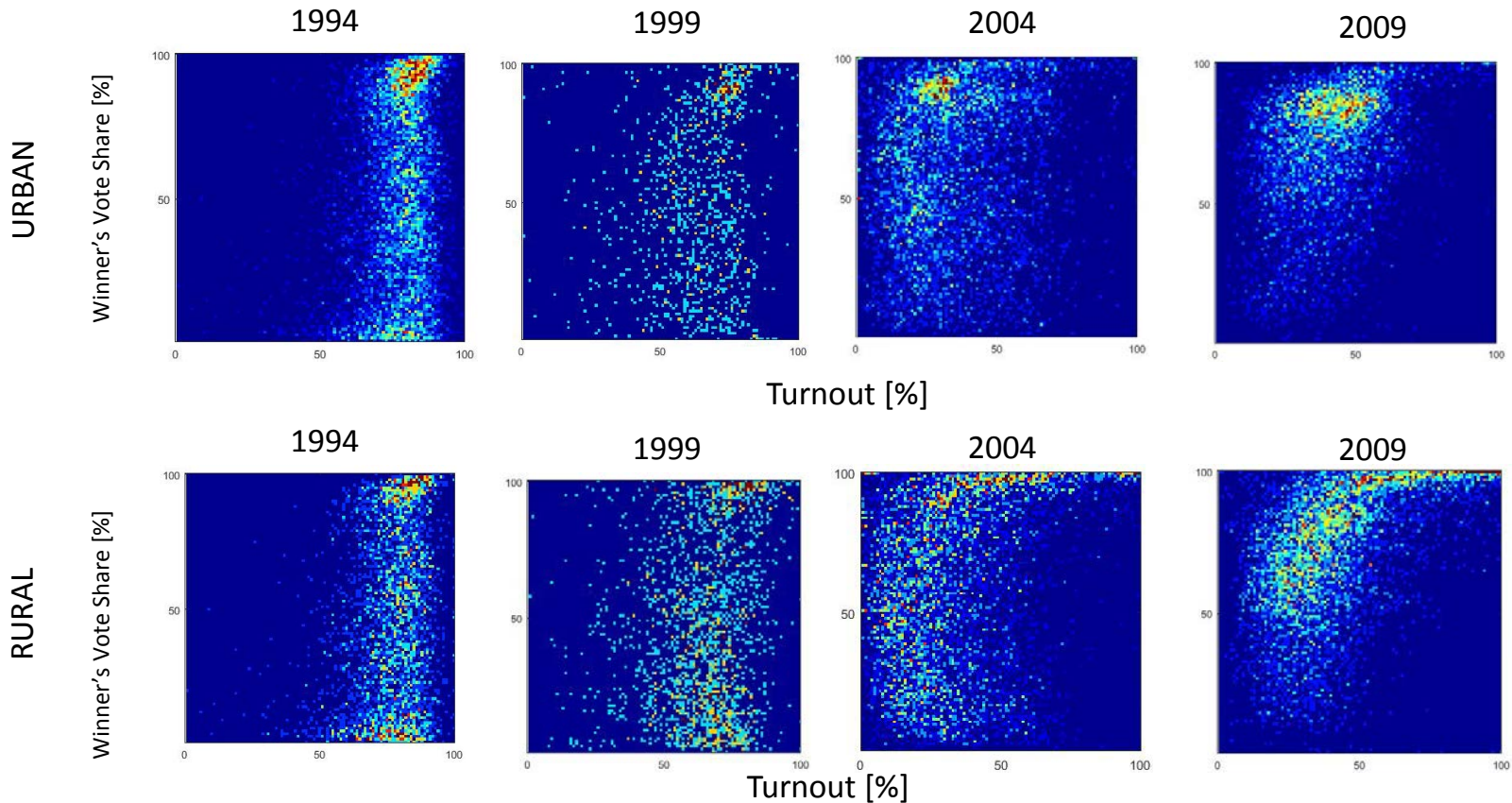


Note: the graphs represent three-dimensional scatter plots of turnout and the winner's vote share in Switzerland, Canada and Russia. Source: Klimek, et.al. 2012

The redder the colour in respective clusters indicate more observations.

On the graph of Russia, the smear to the upper right is usually taken to show a group of polling stations with unusually high turnout.

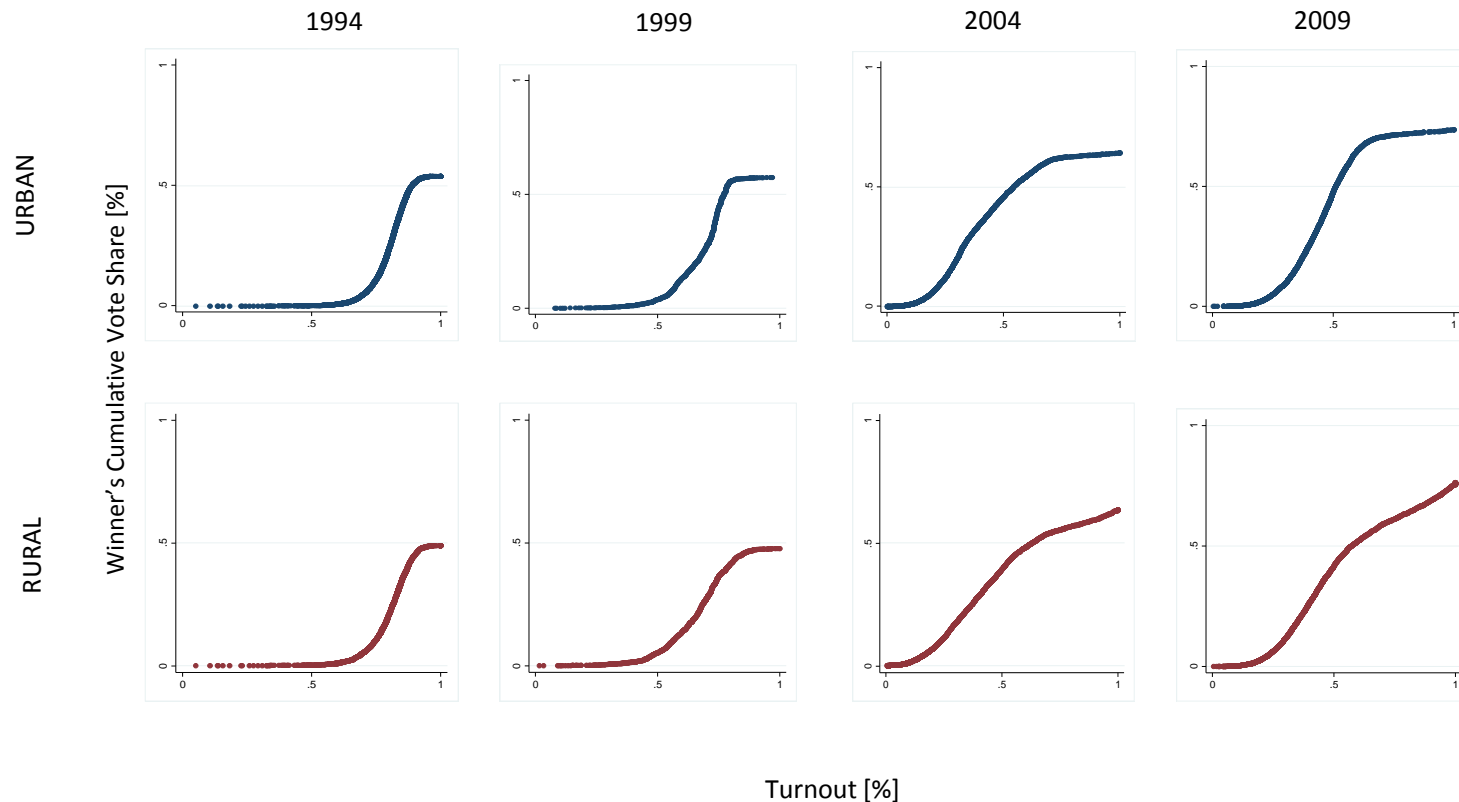
Turnout and Winner's vote share in Mozambique



Note: the graphs represent three-dimensional scatter plots of turnout and the winner's vote share in Mozambican presidential elections 1994-2009.

The data is split between urban (upper row) and rural (lower row) ballot stations.

Cumulative Percentage of Votes and Turnout in Mozambique

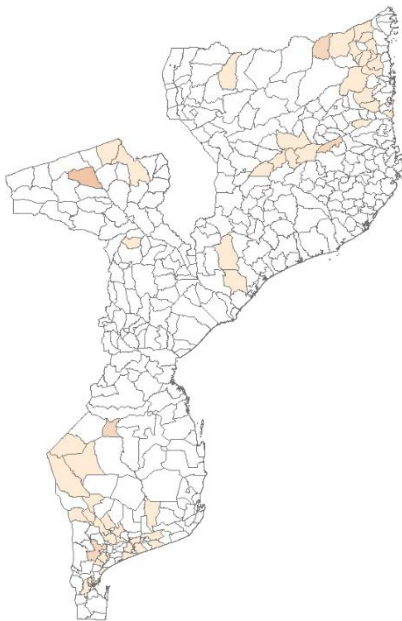
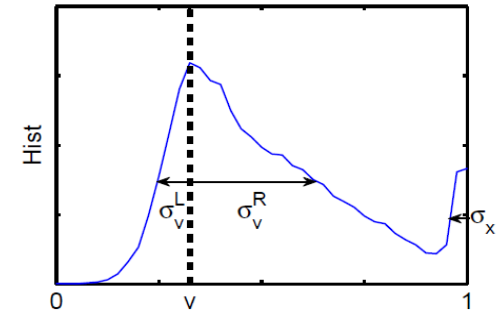


Note: the graphs represent the cumulative percentages of votes for the winning party as a function of turnout for Mozambican presidential elections 1994-2009.

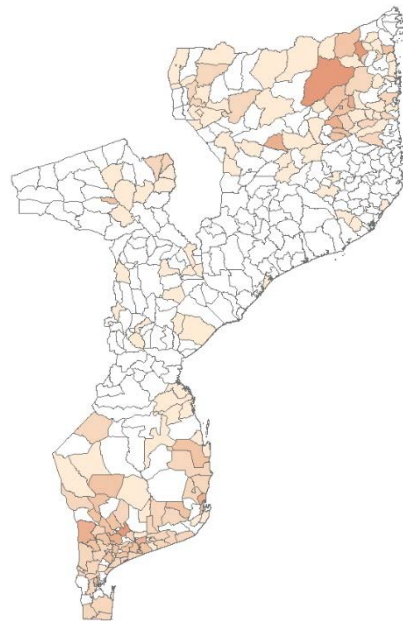
The data is split between urban (upper row) and rural (lower row) ballot stations.

Finite Mixture Model

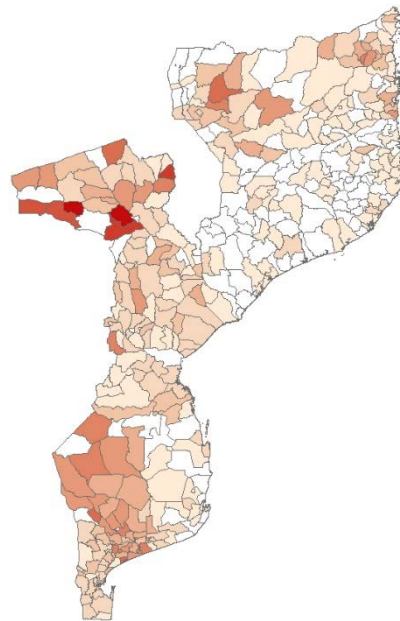
Incremental Fraud Probabilities by Post-district



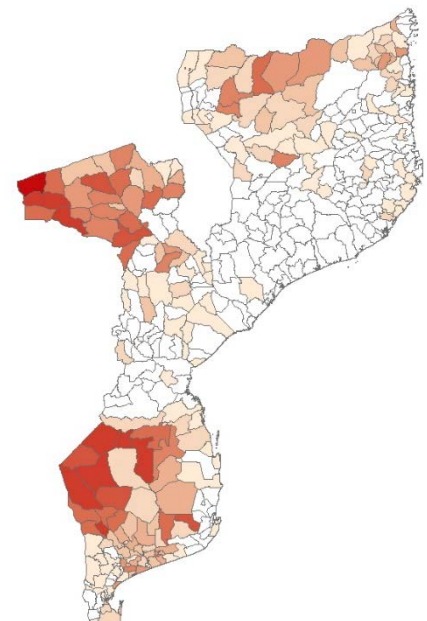
1994



1999



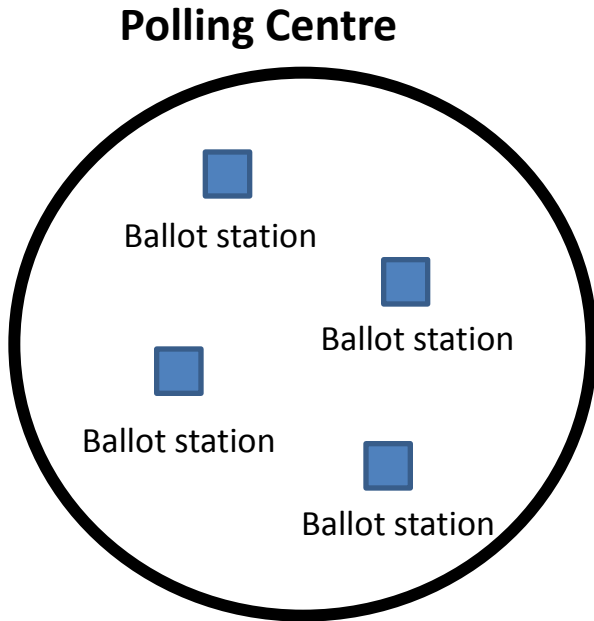
2004



2009

Note: The maps show the results of a finite mixture model (based Klimek et.al. 2012; Mebane 2014) for the Mozambican presidential elections 1994-2009. The maps provide average incremental fraud probabilities by post-district. The “redder” the colour, the higher the average incremental fraud probability.

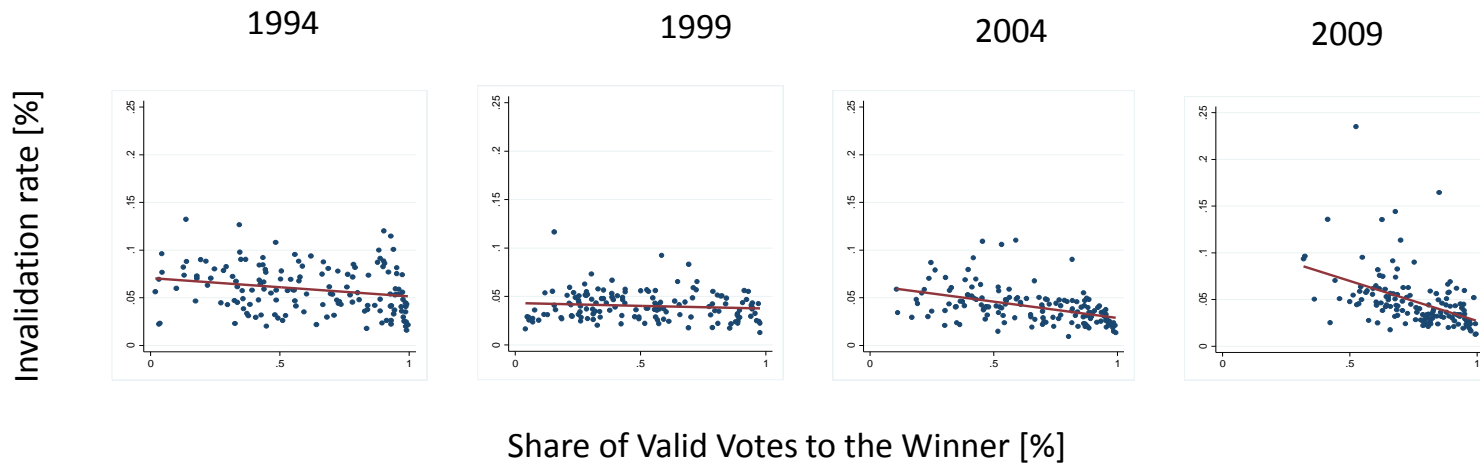
Polling Centre Deviations



Polling centre – usually school
Polling station – classroom

- Test whether considerable deviations within polling centres are random, or if there is a systematic bias.
- No bias detected for 1994; deviant ballot stations are essentially random.
- 1999: no data on ballot station level.
- In 2004 and 2009 there is a systematic and statistically significant bias; deviant ballot stations have on average 10-15% higher vote shares for Frelimo.

Intentional Invalidation of Votes in Mozambique



Note: The graphs represent scatter plots of the proportion invalid votes of all cast ballots and the share of valid votes awarded to the winner on district level.
The red line represents the regression line between the two variables.

Summary

- The findings were largely in line with journalists and election observer reports
 - Overall, the 1994 and 1999 elections showed limited signs of irregularities
 - The 2004 and 2009 elections showed patterns consistent with both vote inflation and intentionally invalidated votes
 - These patterns were particularly visible in Tete and Gaza Provinces.
- Indicators, not evidence
 - Further research should seek to connect deviant ballot stations with other evidence of election irregularities.

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