Australia's experience with retailer choice

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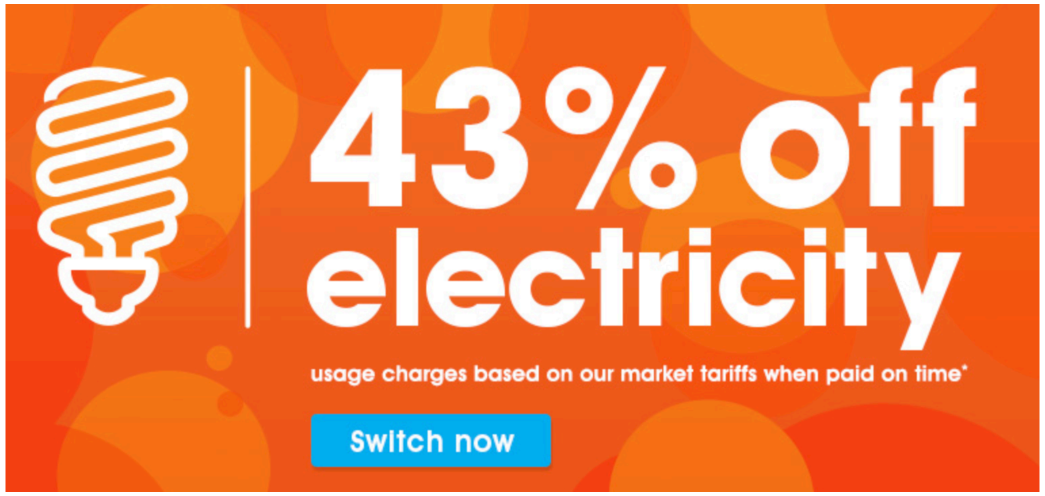

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NBER Energy Markets Workshop

Australia's retail deregulation started over 20 years ago

pre-reform: each distribution zone serviced by one retailer

1995 — Generation and retail split from network businesses

operated as regulated natural monopolies

2002 — Full Retail Contestability: other retailers can compete with incumbents

competition + regulator sets default price-to-beat

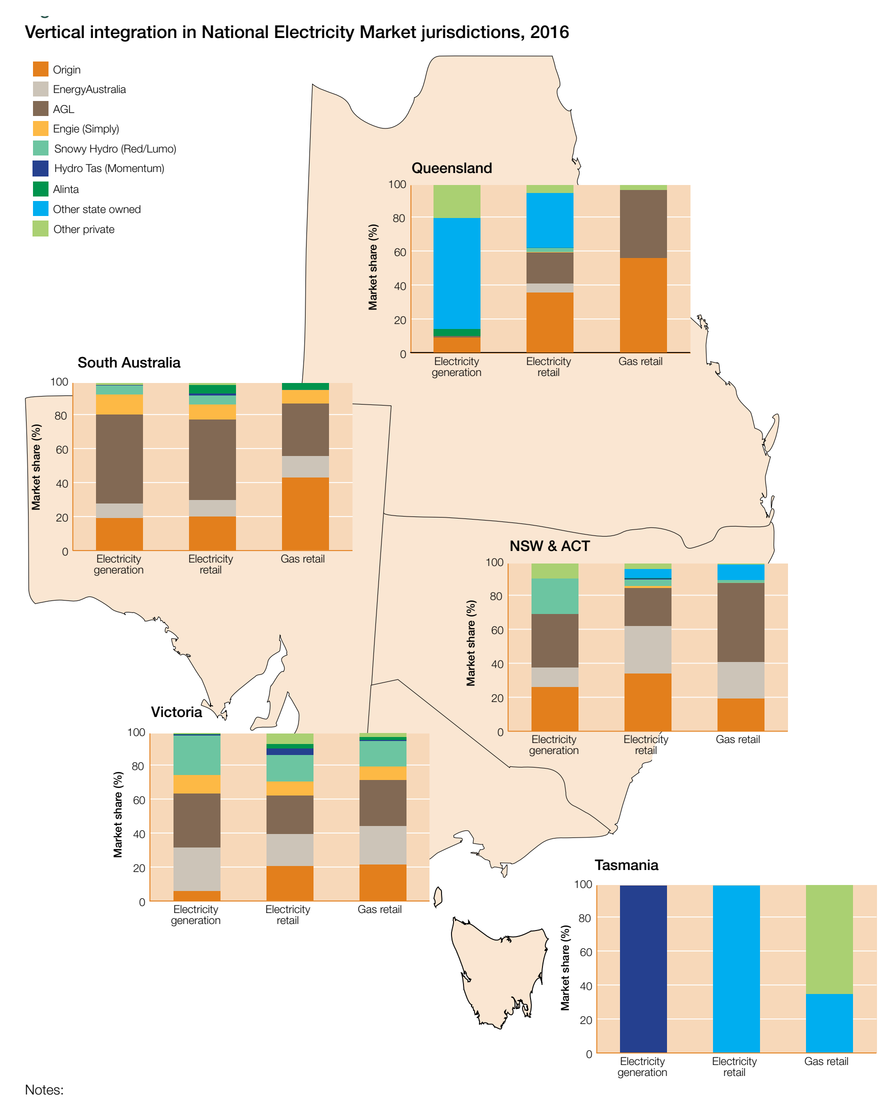
2009 — Victoria (Melbourne)

South Australia (Adelaide)

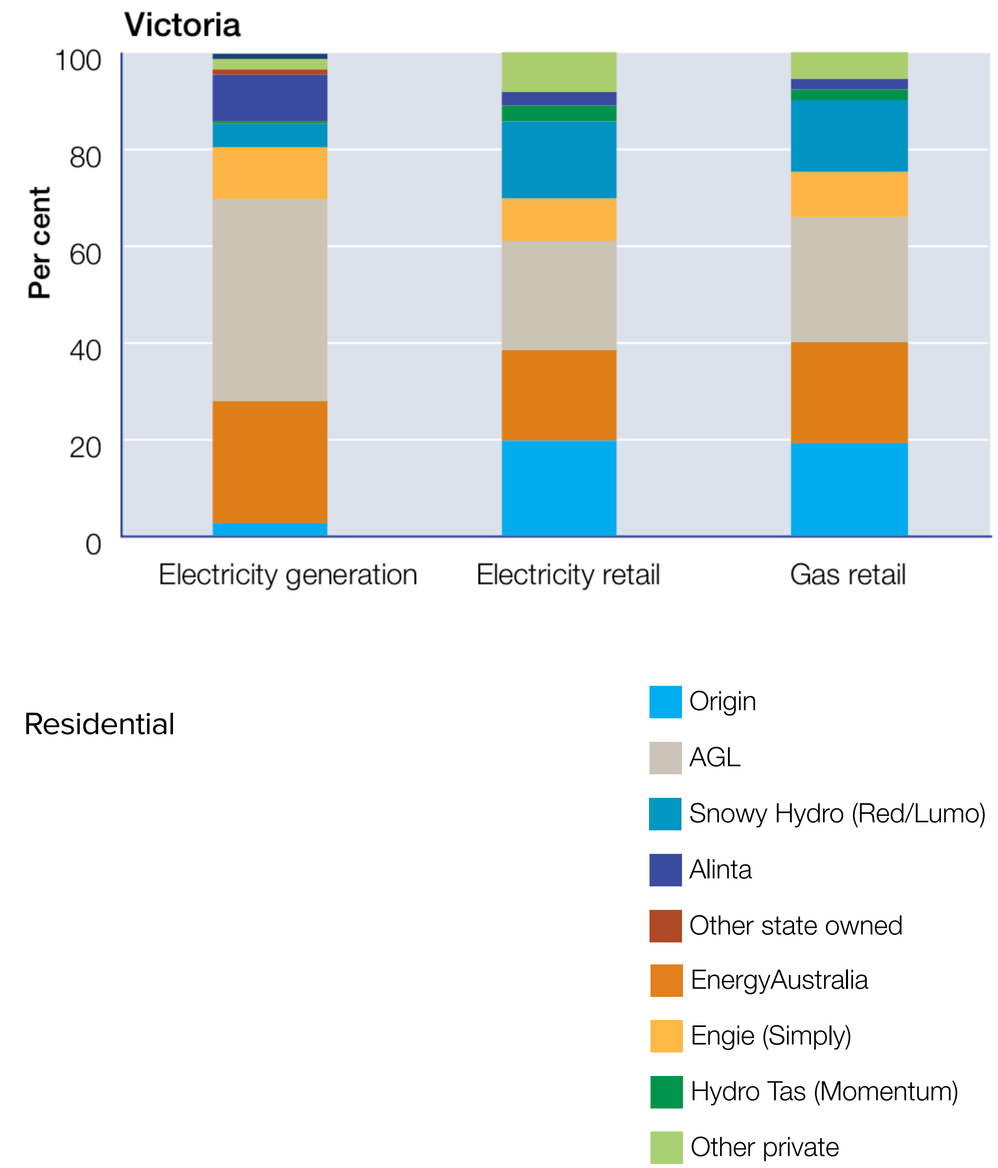
New South Wales (Sydney)

2016 — SE Queensland (Brisbane)

prices completely deregulated

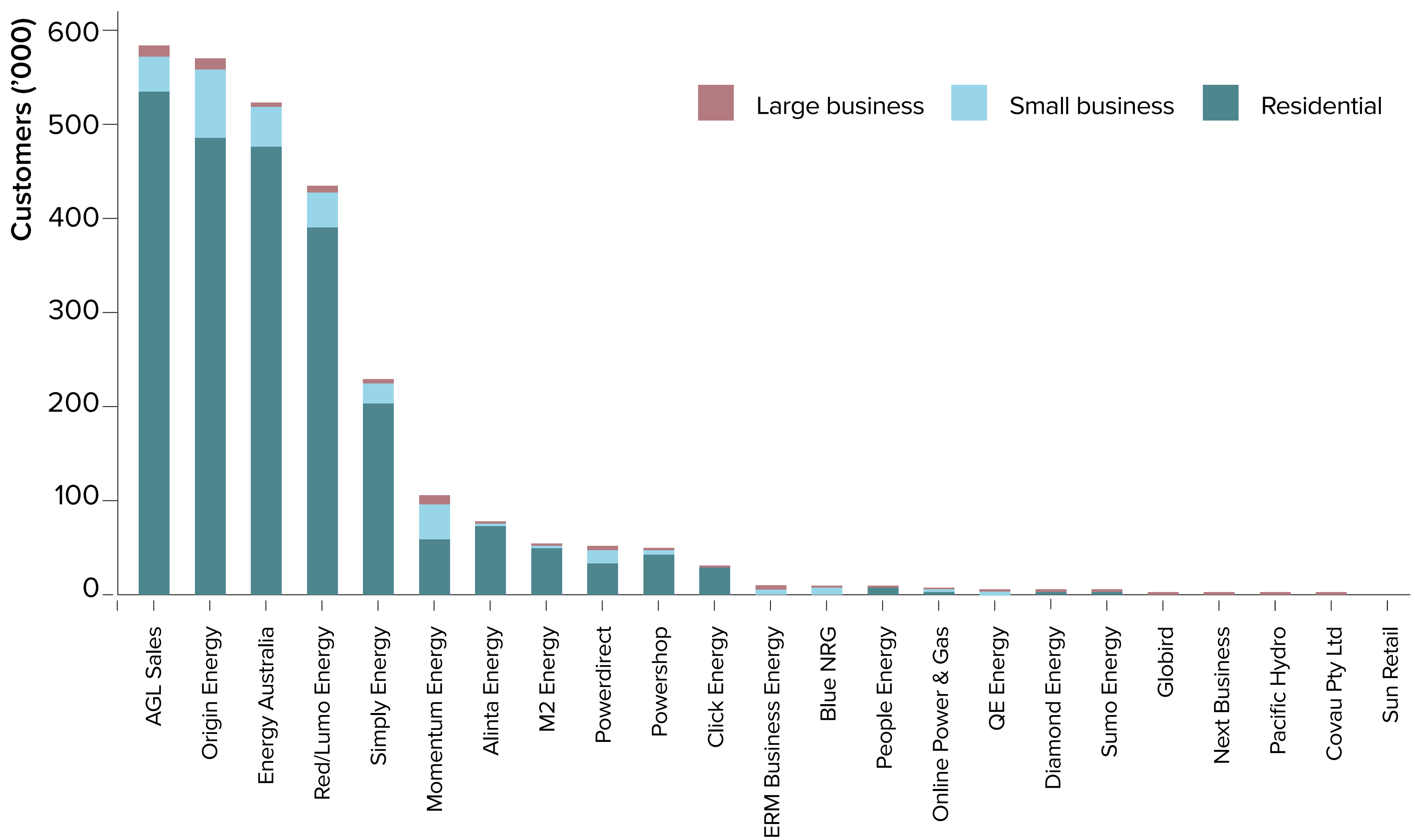


Market once allocated across 3 incumbents shared between 18-25 retailers



High rate of customer switching, but also inertia: big 3 retain 60% of market

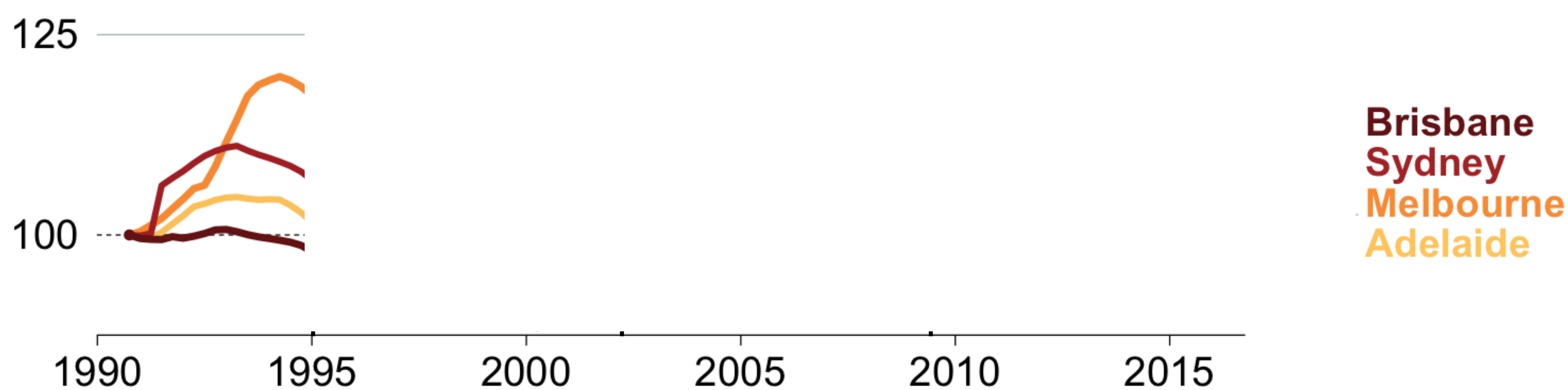
Figure 2: Market share of retailers in the Victorian electricity market, 2015–16



Source: Based on Jacobs analysis, Figure 4, p. 14 Data sourced from ESC 2016, *Victorian Energy Market Report 2015-16*, November 2016

Pre-reform: each distribution zone serviced by one retailer

Index of real retail electricity prices, rolling four-quarter average
100 = December 1990



Source: Grattan analysis of ABS (2017).

1995-2002: Generation and retail separate regulated natural monopolies

Index of real retail electricity prices, rolling four-quarter average
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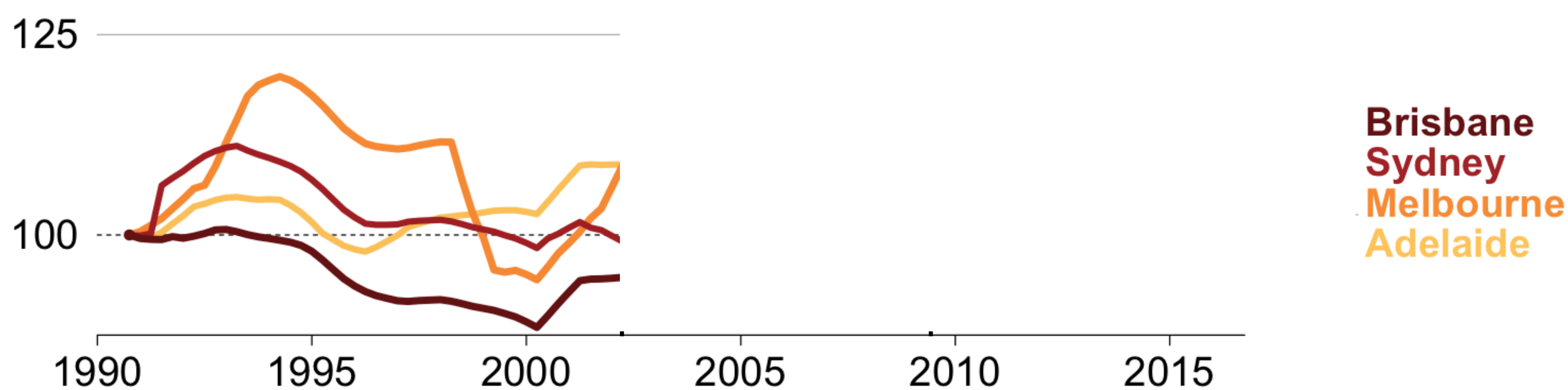

Source: Grattan analysis of ABS (2017).

2002-2009 Other retailers can compete, regulator sets default price-to-beat

Index of real retail electricity prices, rolling four-quarter average
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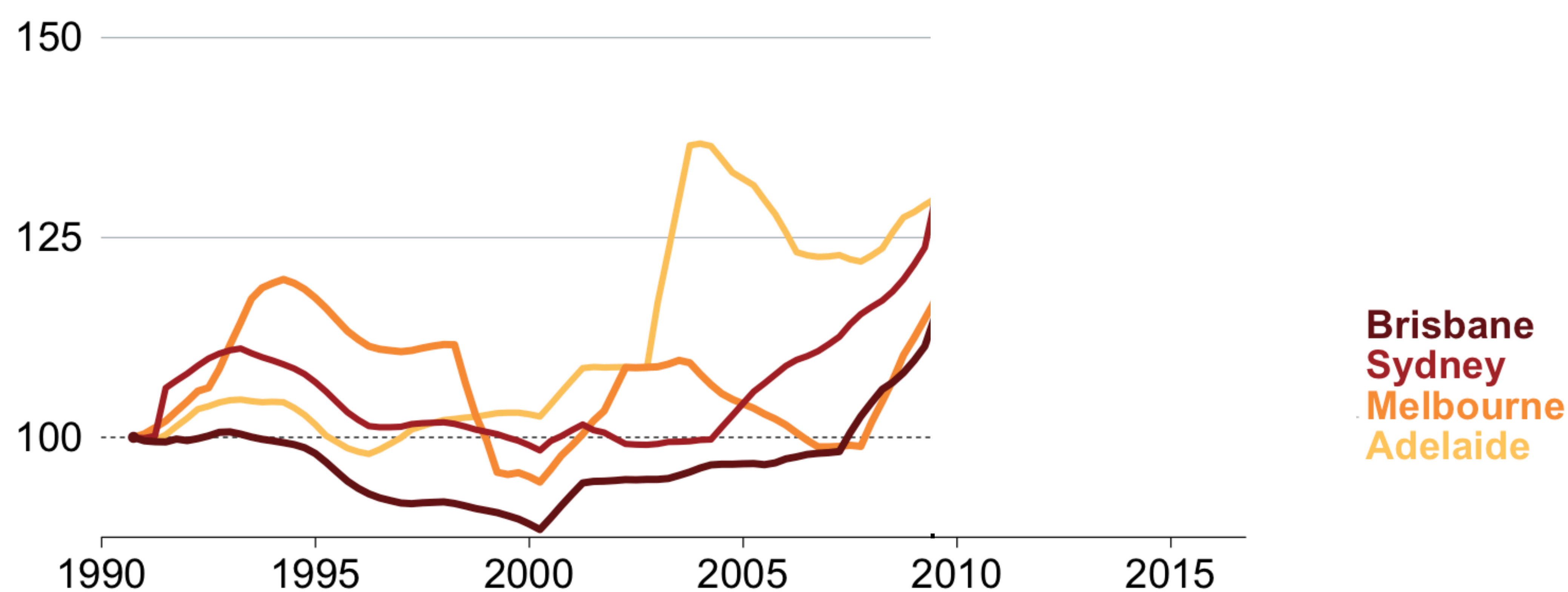
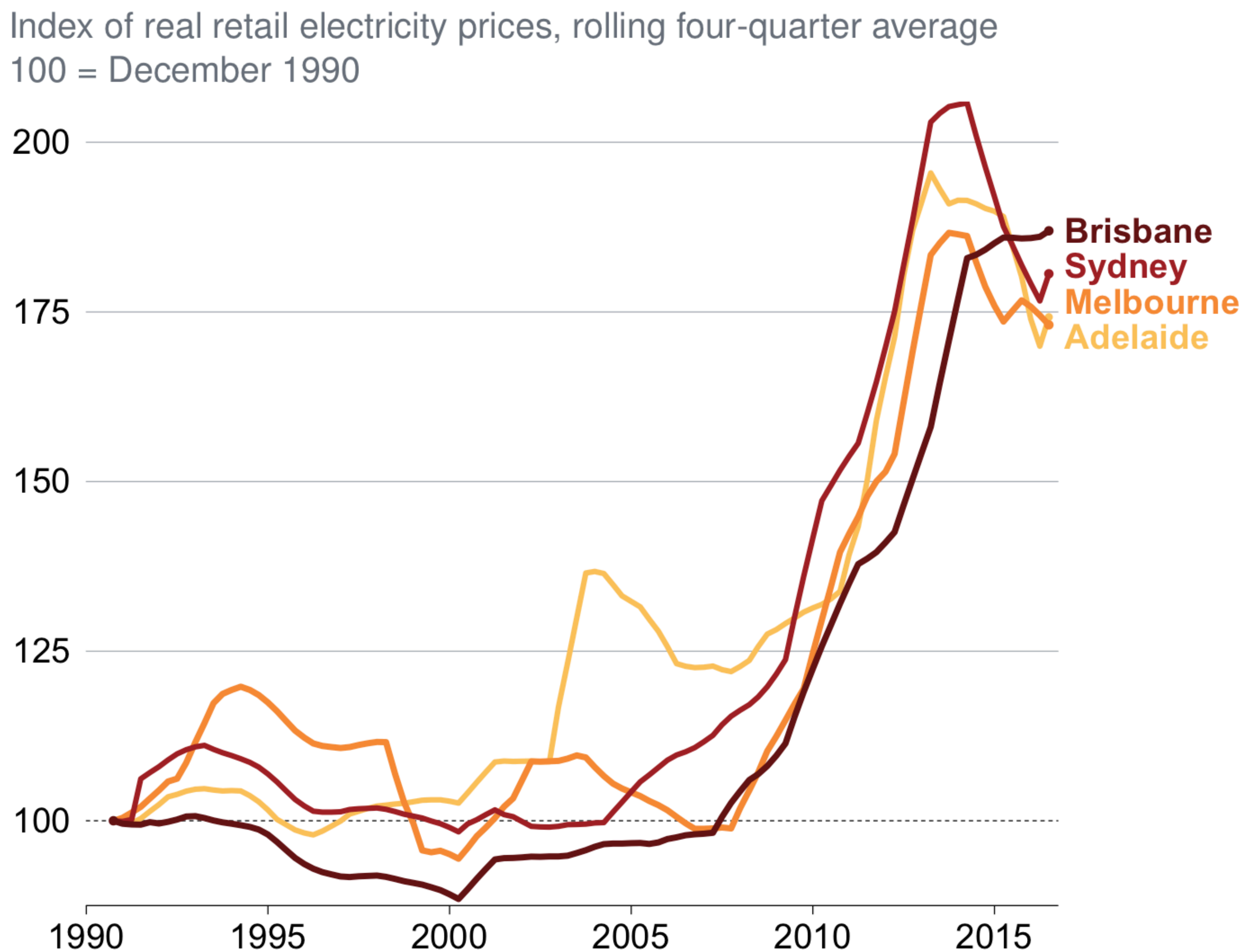


Source: Grattan analysis of ABS (2017).

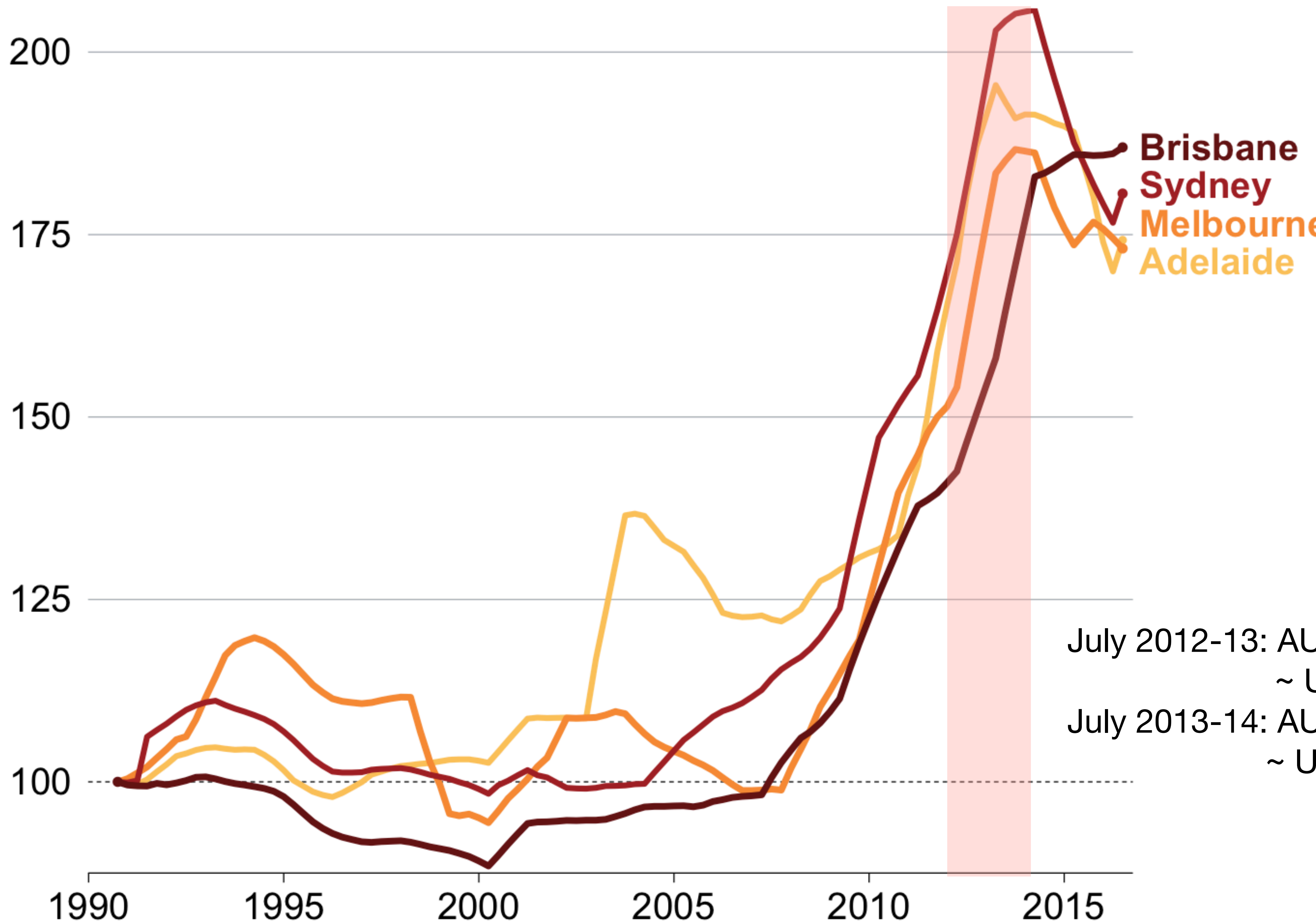
2009-2016 Each NEM state adopts complete retail prices deregulation



Source: Grattan analysis of ABS (2017).

Increase not about carbon: carbon price only 8% of average customer's bill

Index of real retail electricity prices, rolling four-quarter average
100 = December 1990

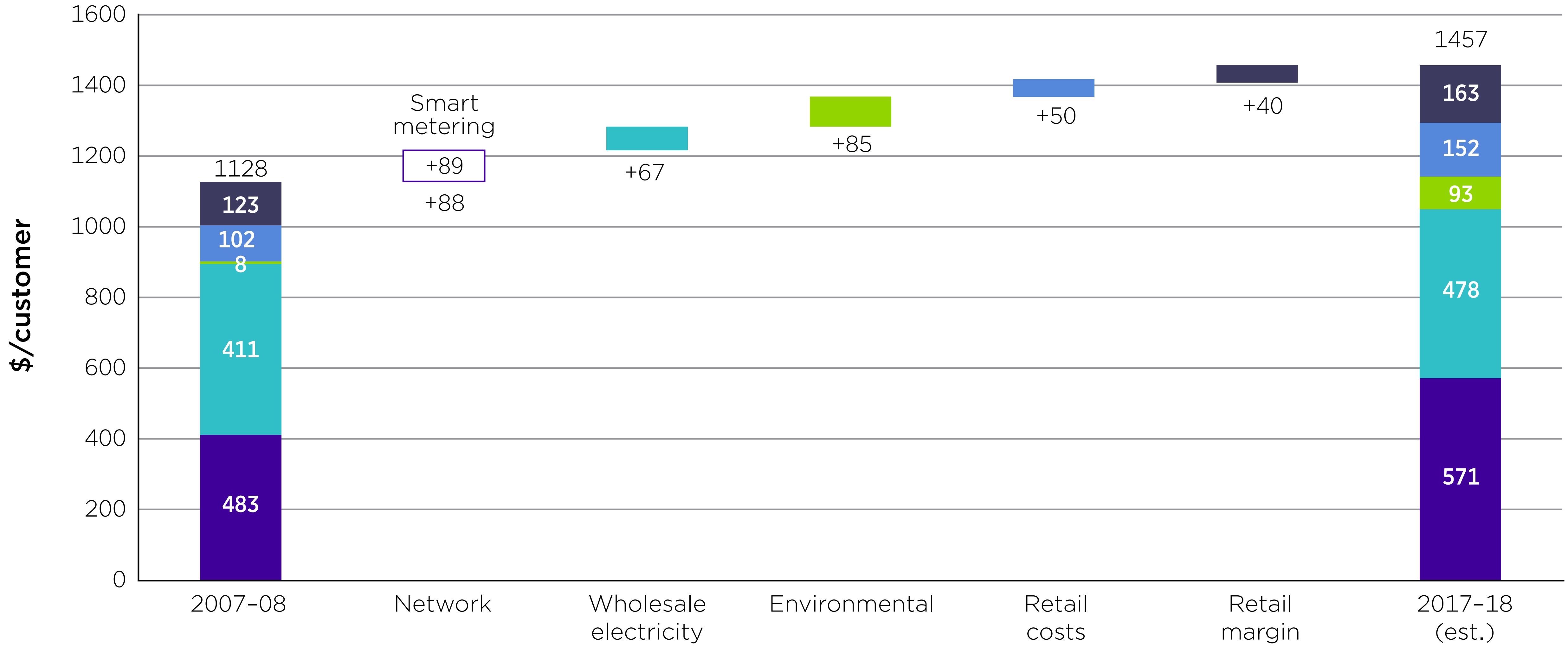


Source: Grattan analysis of ABS (2017).

July 2012-13: AU$23/ton
~ US$ 24
July 2013-14: AU$24.15/ton
~ US$ 22

Why have prices increased so much?

Figure 1.6: Change in average Victorian residential customer bill from 2007–08 to 2017–18, $ per customer, real $2016–17, excluding GST



Not just about level of prices, also about distribution

Search frictions:

- Prices expressed as discounts relative to retailer-specific reference
- Prices sometimes contingent on paying on time
- 12 month contract replaced by rates of retailer choosing, limited notice
- Anecdotal (up until now) evidence of negotiated prices

Price dispersion can undermine policy

State government pays 17.5% of total bill for low-income customers

- but subsidy recipients are on higher base rates
- incomplete pass-through: 24% of subsidy is captured by retailers in form of higher prices

Are retailers directly targeting subsidy recipients with higher prices?

- Or are they simply more costly to serve, or less likely to search for a good deal?

Disentangling sources of price dispersion is difficult

Measurement:

- Researchers and policymakers usually don't see negotiated prices, only posted
- Search is unobserved

Identification:

- In case of subsidy, likelihood of search can be correlated with — or driven by — subsidy itself

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Audit studies to the rescue!

- Modeled on Bertrand and Mullainathan 2004 AER "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination" and List 2004 QJE
- Provide access to highly-sensitive data (individually-negotiated consumer-firm prices)
- Identify contribution of each randomly-assigned characteristic in distribution of prices

We created a call center to call the call centers

THE UNIVERSITY OF MELBOURNE

Simplyenergy by ENGIE

agl

EnergyAustralia

dodo

Actors negotiated on behalf of fictitious customers

- Our callers recruited from StarNow.com.au
- Randomly-generated last names
- Residential addresses from online rental listings
- Actors own phones, our SIM cards, disabled caller ID
- Speakerphone with RA taking duplicate notes
- Human ethics approval for study involving deceit

Many customer characteristics common across all calls:

- Same distributor (network charges)
- Same overall level of kWh/year
- Same meter type (no TOU, no solar)
- One year contract
- Collected rates with and without pay-on-time, direct debit

Fixed many characteristics, varied others randomly

across-call variation

Reveal stage 1

subsidy status

- yes
- no

×

motive for call

- moving in
- rival's customer

×

Reveal stage 2

reference price

- low
- very low

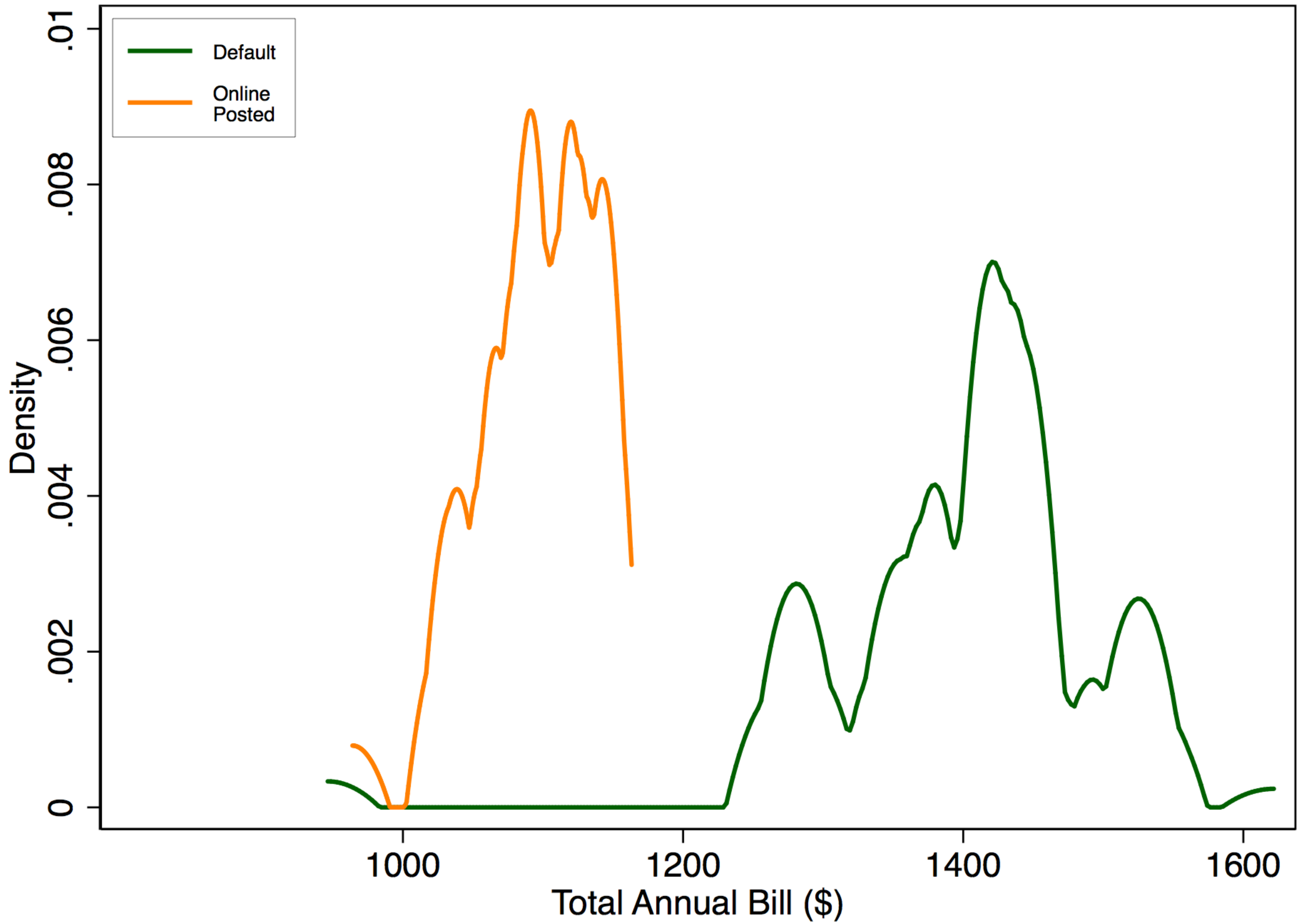
×

source

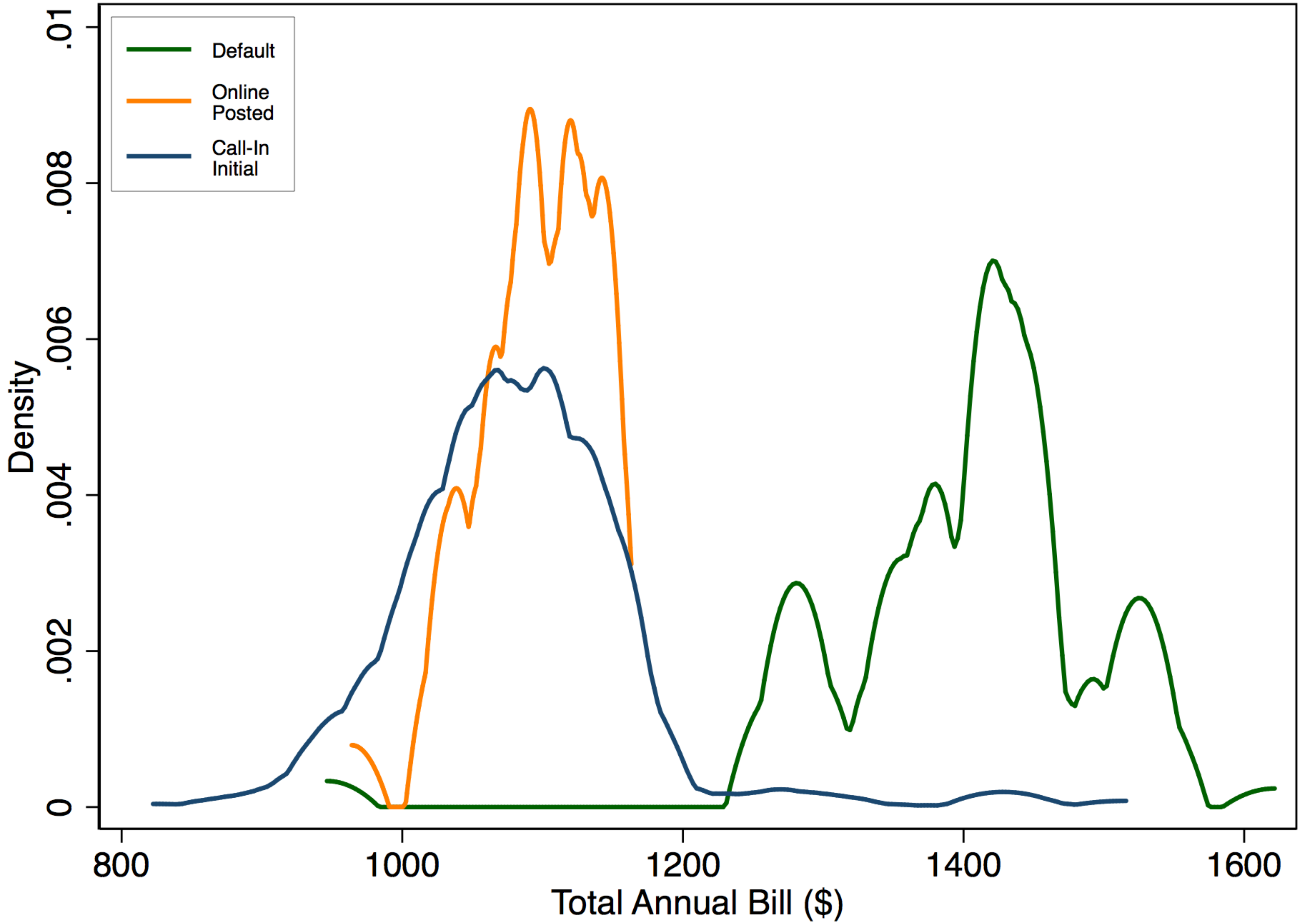
- phone
- internet
- friend

within-call variation

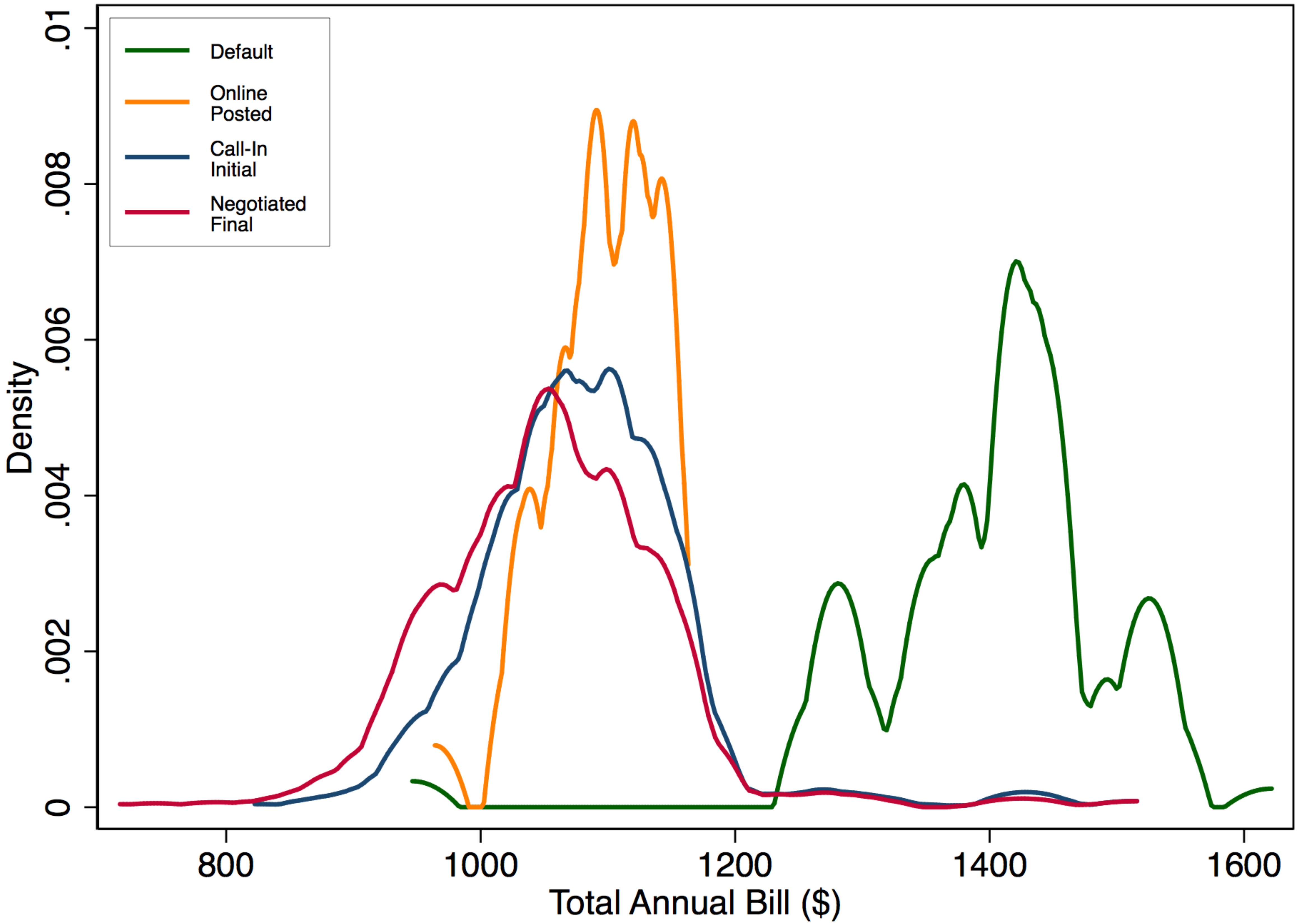
Web scraping: prices advertised by retailers 27% lower than own default prices



Initial call-in prices sometimes lower, occasionally higher



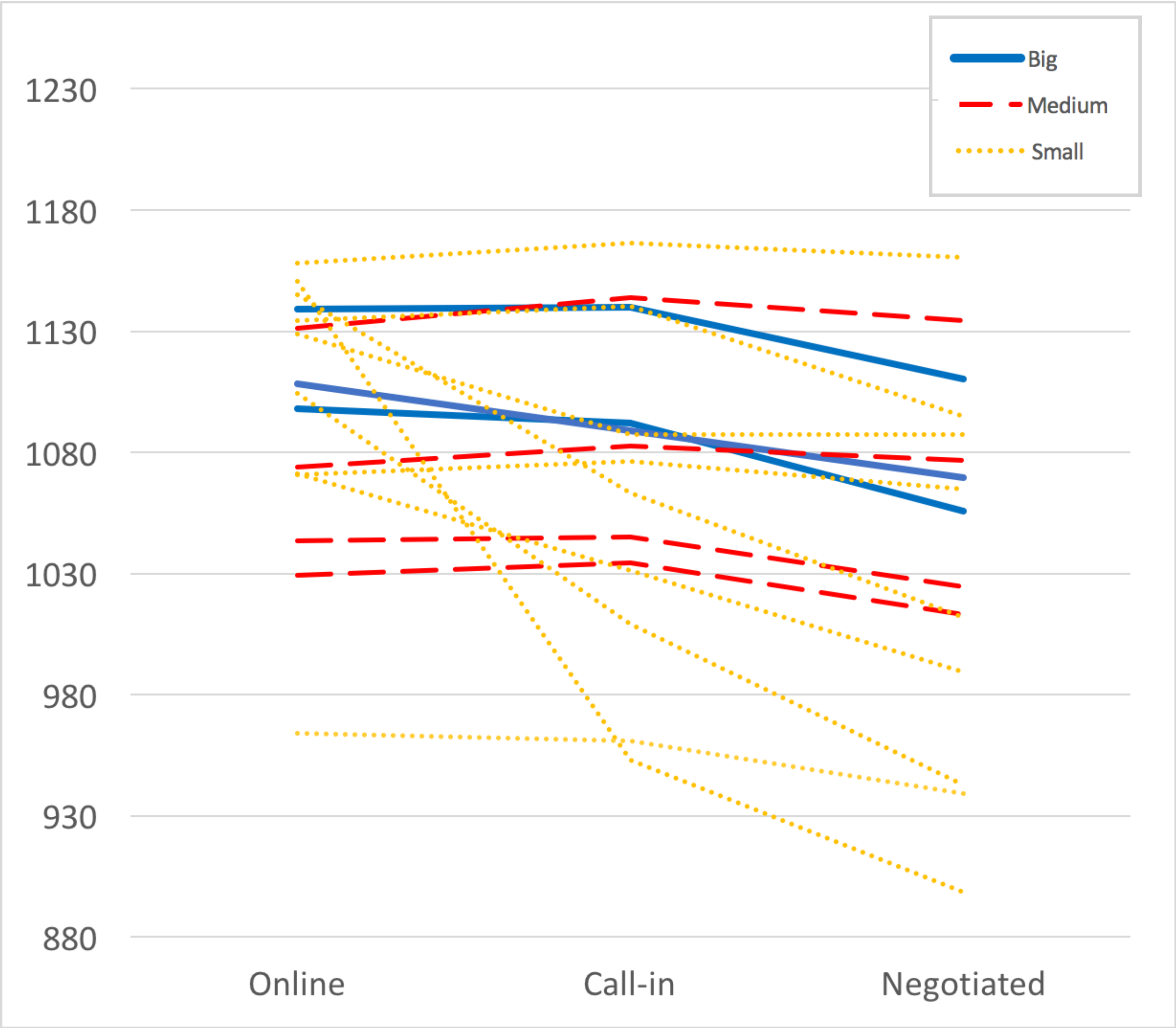
Best negotiated rate 35% lower than own-retailer posted price



Pricing by firm

Mid-sized firms advertise lower prices

-$44/year

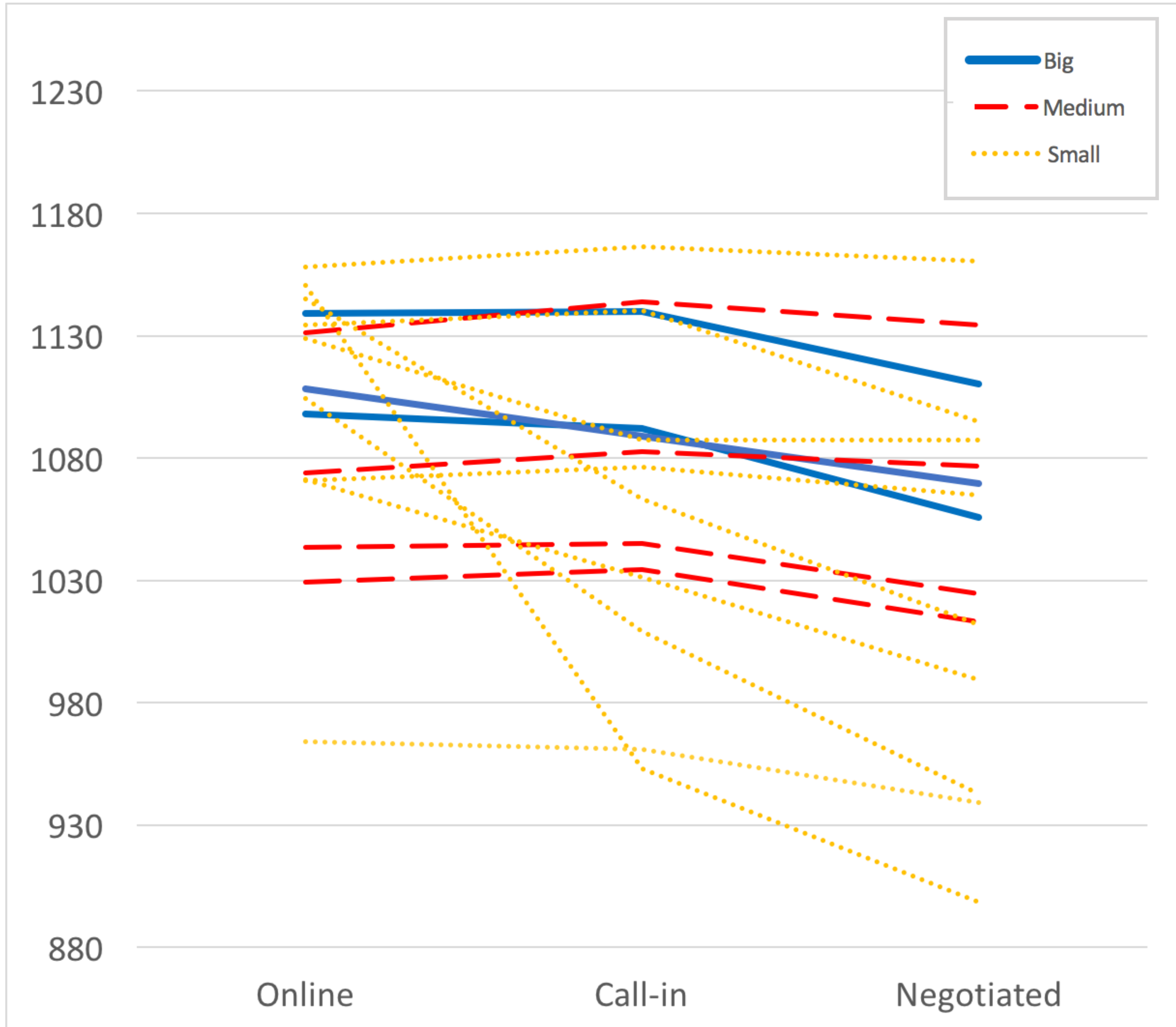


Pricing by firm

Mid-sized firms advertise lower prices

But do less negotiating

-$12/year

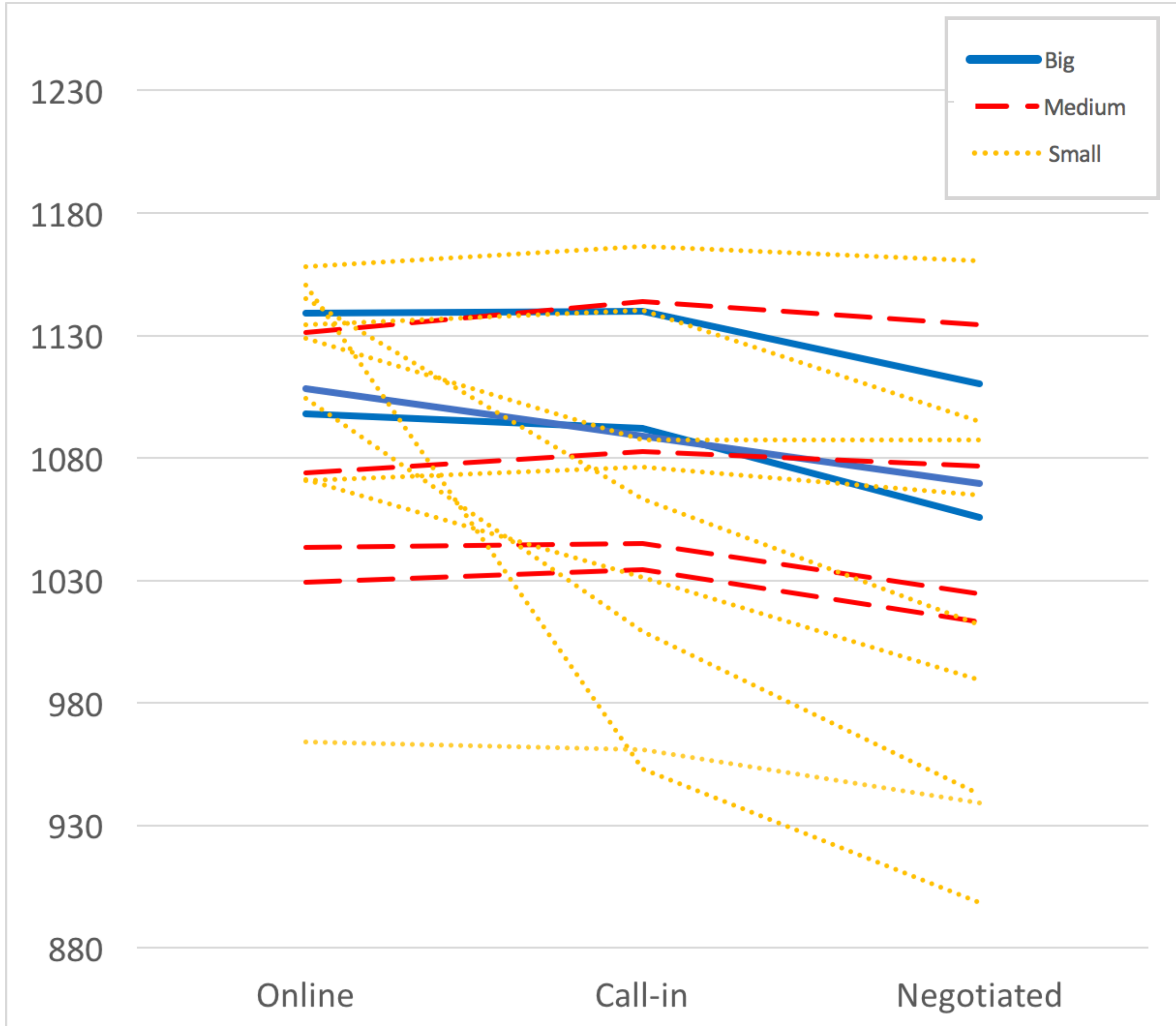


Evidence of asymmetric pricing strategies

Mid-sized firms advertise lower prices

But do less negotiating

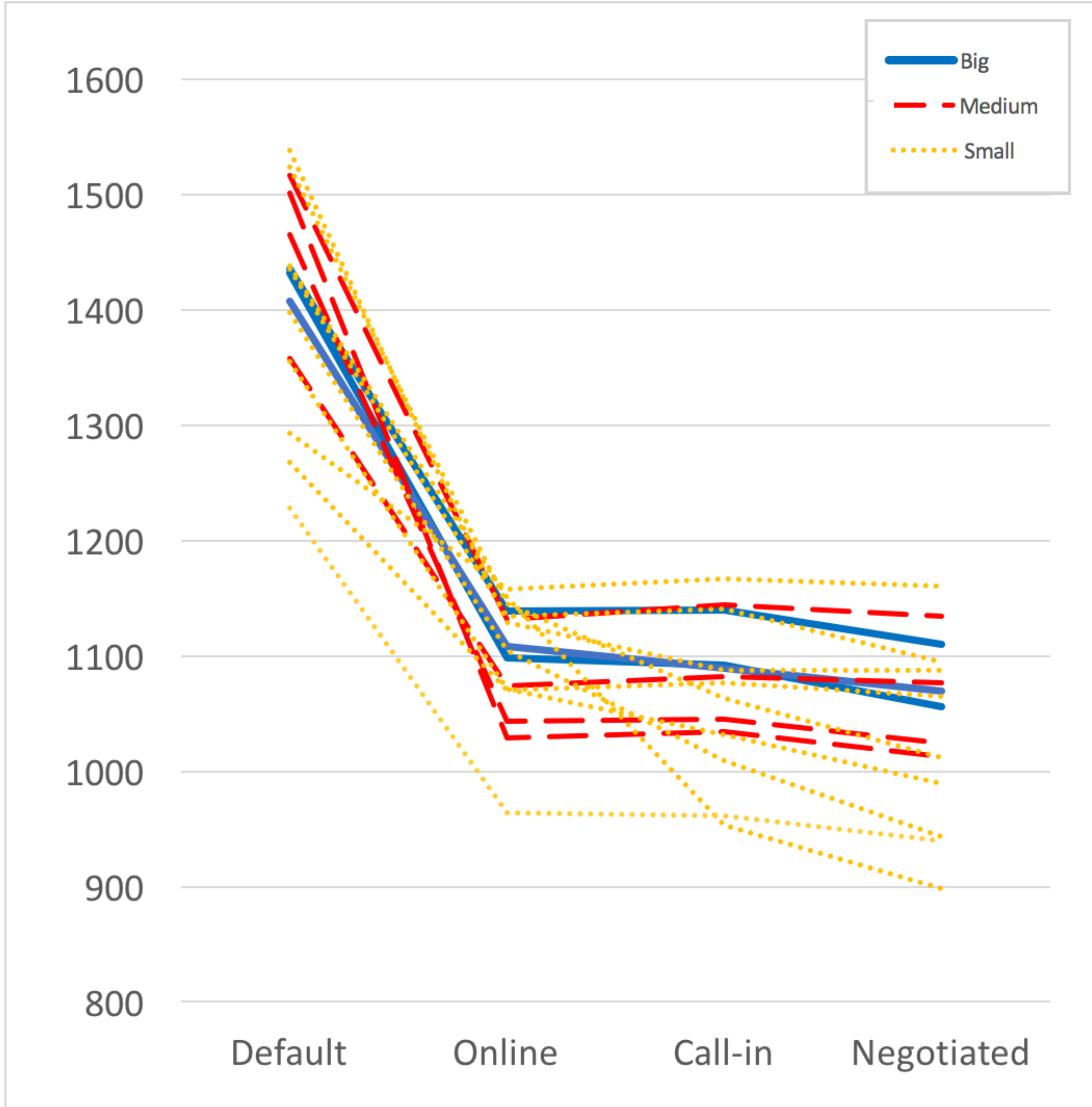
Incumbents post higher prices publicly, lower prices privately



Asymmetric pricing strategies

Midsize
advertise low
and profit most
+$31/year
from customers
who don't update
their contracts or
pay on time

Small are
heterogeneous,
some large
discounts,
offered at any
stage



Lessons from our audit study

In many important markets with search frictions, prices are negotiated: banking, healthcare, telecommunications, energy, schooling, retirement, online marketplaces

Negotiation:

- alternative (additional? higher?) search cost, facilitates price discrimination
- simultaneously reveal and conceal prices

We find:

- Price dispersion greater than previously documented
- Large discounts available for proactive customers — search pays off
- Negotiation most effective with a low reference price, source doesn't matter
- Subsidy-recipients who search get same prices

Has the experience with retail competition been positive?

Retail deregulation creates new costs and provides gains that not all customers access equally

Market segmentation on:

- Unwilling to be bothered?
- Confused, low tech skills, uncomfortable haggling over prices?

Recent threat of re-regulation may be leading to improved transparency and some innovation in service provision