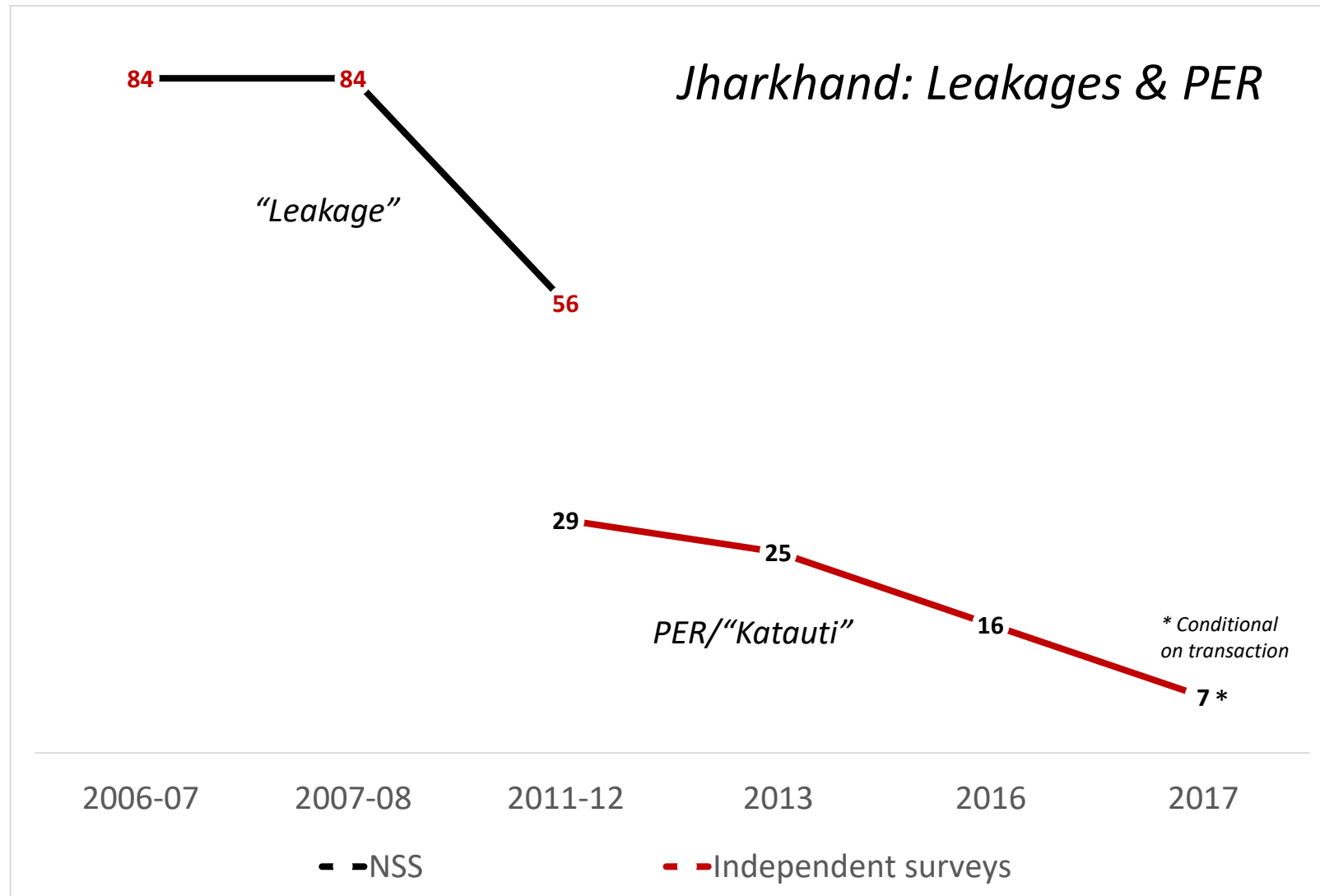# Aadhaar and Food Security: Pain without Gain

Jean Drèze, Nazar Khalid, Reetika Khera, Anmol Somanchi

Introduction

- NFSA 2013 – subsidized food grains for 'eligible' households under a *rights-based framework*.

  - o 'Priority'- 5 kg per-capita
  - o Antyodaya – 35 kg irrespective of family size

- Carried out via fair price shops of the Public Distribution System (PDS).

- 'Leakages' from PDS have been bone of contention.

  - o It is in this context that Aadhaar-based biometric authentication (ABBA) introduced by Jharkhand, Rajasthan, Andhra, Telangana etc.

PDS reforms pre-date Aadhaar by a decade

Jharkhand: Leakages & PER

84 ——— 84

"Leakage"

56

29 ——— 25

PER/"Katauti"

16

* Conditional on transaction

7 *

2006-07   2007-08   2011-12   2013   2016   2017

— — NSS   - - - Independent surveys

Demand-side factors:

- Higher subsidy
- Increased coverage
- Diversified commodities

Supply-side factors:

- Computerization
- De-privatization
- Fixed schedule
- 'Door-step' delivery
- Awareness - simplified entitlements

Source: Khera, Reetika (2011), *Trends in Diversion of Grain from the Public Distribution System*, EPW; Dreze, Khera and PEEP team (2013), *A PEEP at Another India: An evaluation of entitlement programs;* Dreze et al. (2016), *Food Security Act: How are India's poorest states faring?*, Ideas for India

Sources of corruption in the PDS

Identity fraud	Duplicate	Ghosts
Quantity fraud	Underselling	Skipping Months
Eligibility fraud	Govt employee gets rations	Owner of 4-wheel vehicle gets rations
Overcharging	Grains, sugar and kerosene	Not return change
Quality of Grains	Replace with lower quality	

Aadhaar: Little scope, exaggerated hope

Identity fraud	Duplicate	Ghosts
Quantity fraud	Underselling	Skipping Months
Eligibility fraud	Govt employee gets rations	Owner of 4-wheel vehicle gets rations
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How ABBA works: Fragile technologies

Entire process dependent upon succesful working of POS.

Biometric information collected at time of Aadhaar enrolment stored here.

Aadhaar Seeding

PoS machine

Internet Connetivity

Remote Aadhaar Servers

Fingerprint Recognition

Links Ration card number to Aadhaar database.

Verification of RC no. And biometrics rests on this.

Authenticate identity
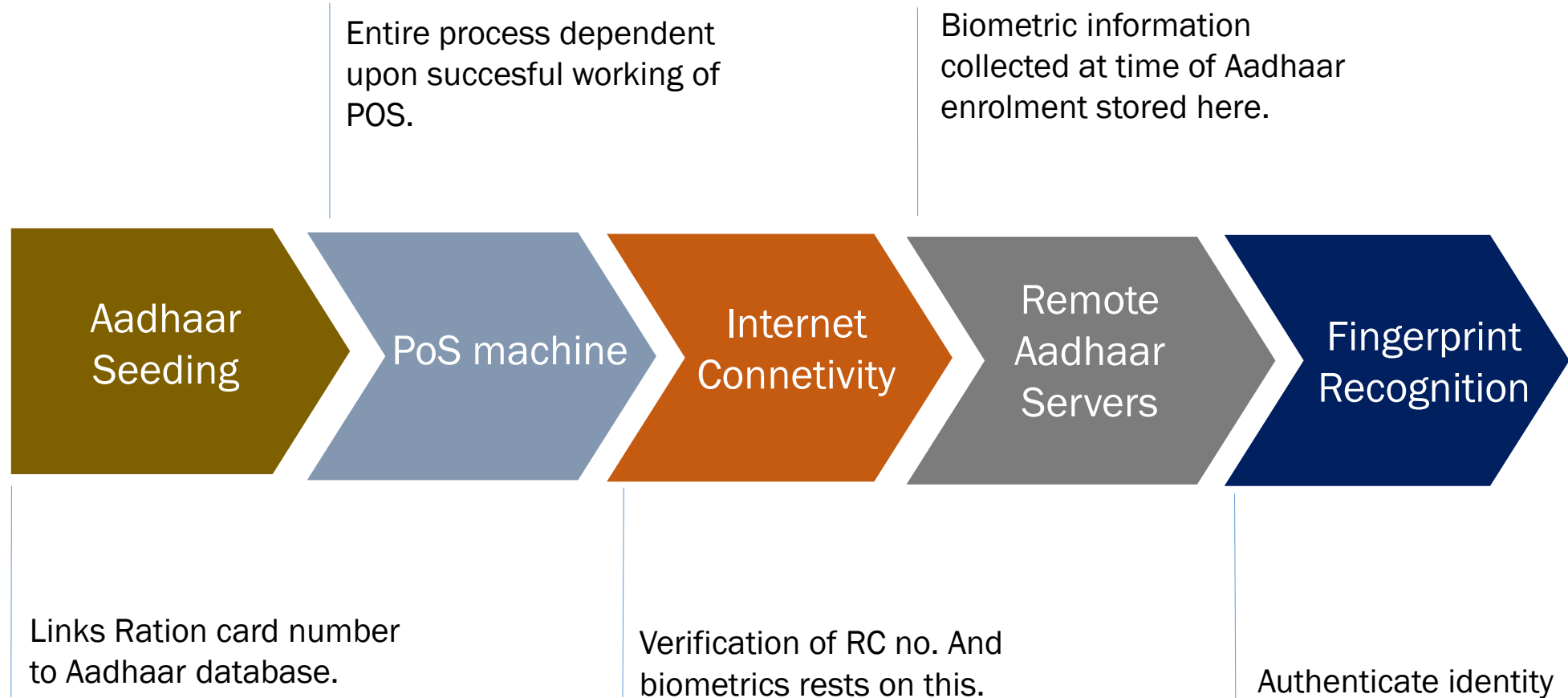
Three useful safeguards (Jharkhand)

Any 'seeded' household member can collect grains for entire family if they pass biometric test.

OTP facility
  Need mobile, seeding, connectivity

Ration doesn't lapse until end of *following* month

Despite these safeguards, the system often fails

Aadhaar enrolment *mandatory.*

Credits: Vikas Choudhary

Rahil Dungdung

- Widow living alone – AAY card.

- No ration since Nov 2016.

- Why? No Aadhaar card. Has all docs; tried but failed.

Belkula, Bolba (Simdega)

No "seeding"? No rations.

Santoshi Kumari

- 11 year old girl died on 28 Sept '17 of starvation.

- Family not receiving rations for last 6 months.

- Why? No Aadhaar "seeding".

Karimatti, Jaldega, Simdega

Credits -
Photo: Taramani Sahu
Source: RTF Jharkhand and Aarefa Johari (Scroll.in)

Fingerprints don't match? Go home empty-handed.

Biometrics failures especially common for two groups: elderly and manual laborers.

Rooplal Marandi

- Aged man, 65-75 yrs., living with daughter, died on 23 Oct '17.

- No rations for last two months.

- Why? Biometrics didn't work for *both* him and daughter .

Bhagwanpur, Deoghar

Jharkhand PDS Survey 2017

4 of 5 Divisions (except Palamu)

▼

8 Districts [2 per division]

▼

16 Blocks [2 per districts]

▼

32 villages [2 per block]

▼

890 Households

Field work: June 2017

Reference period: May 2017

Targets per village:

20 transacting HH
+
20 non-transacting HH

890 HH; ~ 5000 persons

32 PDS dealers

Sample villages

Type	Total	Aadhaar seeding	ABBA	Internet	Monthly transaction upload
Online	18	Y	Y	Y	Y
Offline	7	Y	N	N	Y
Other *	7	N	N	N	N

* Register system; J-PAL control blocks

Transaction rates in Ranchi district, Jan - July '17
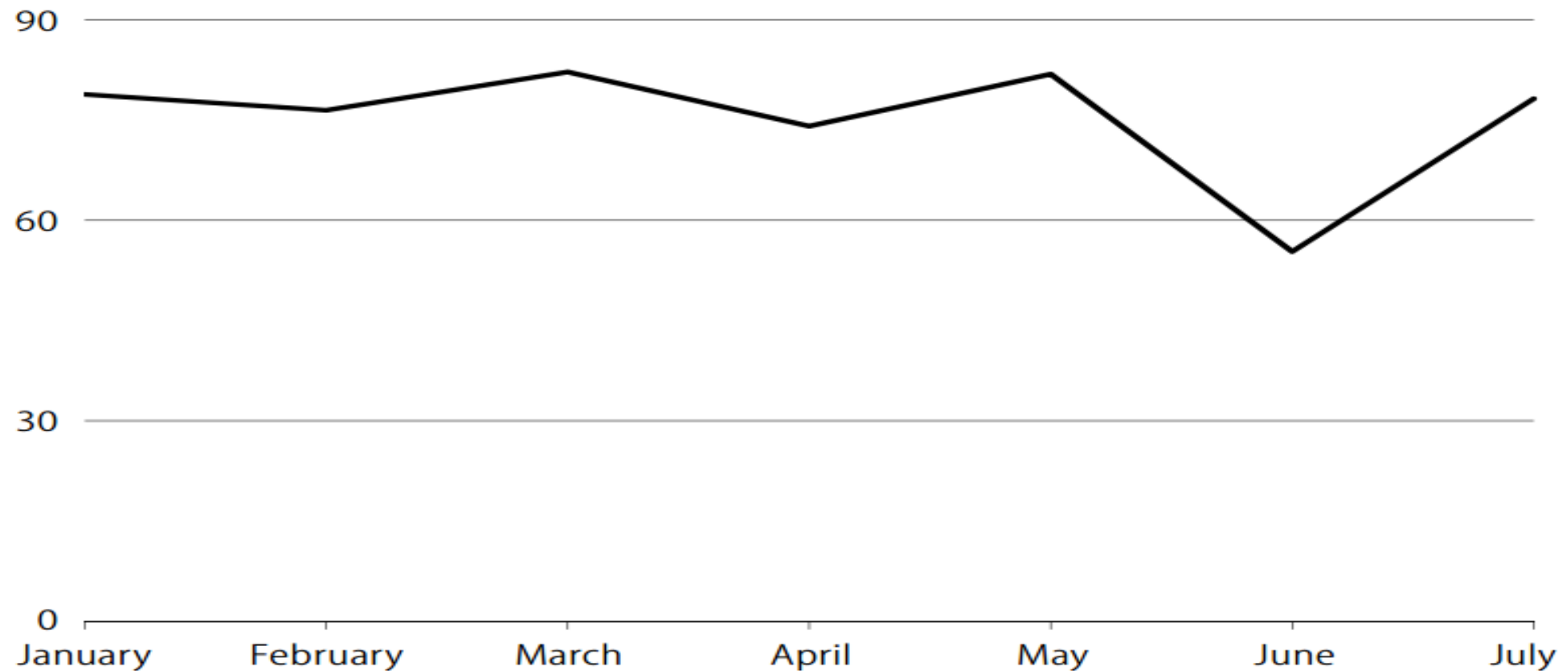
Source: Calculated from official records (http://aahar.jharkhand.gov.in/). For further details, see Khalid (forthcoming).

Transaction failure rates* in sample, May '17
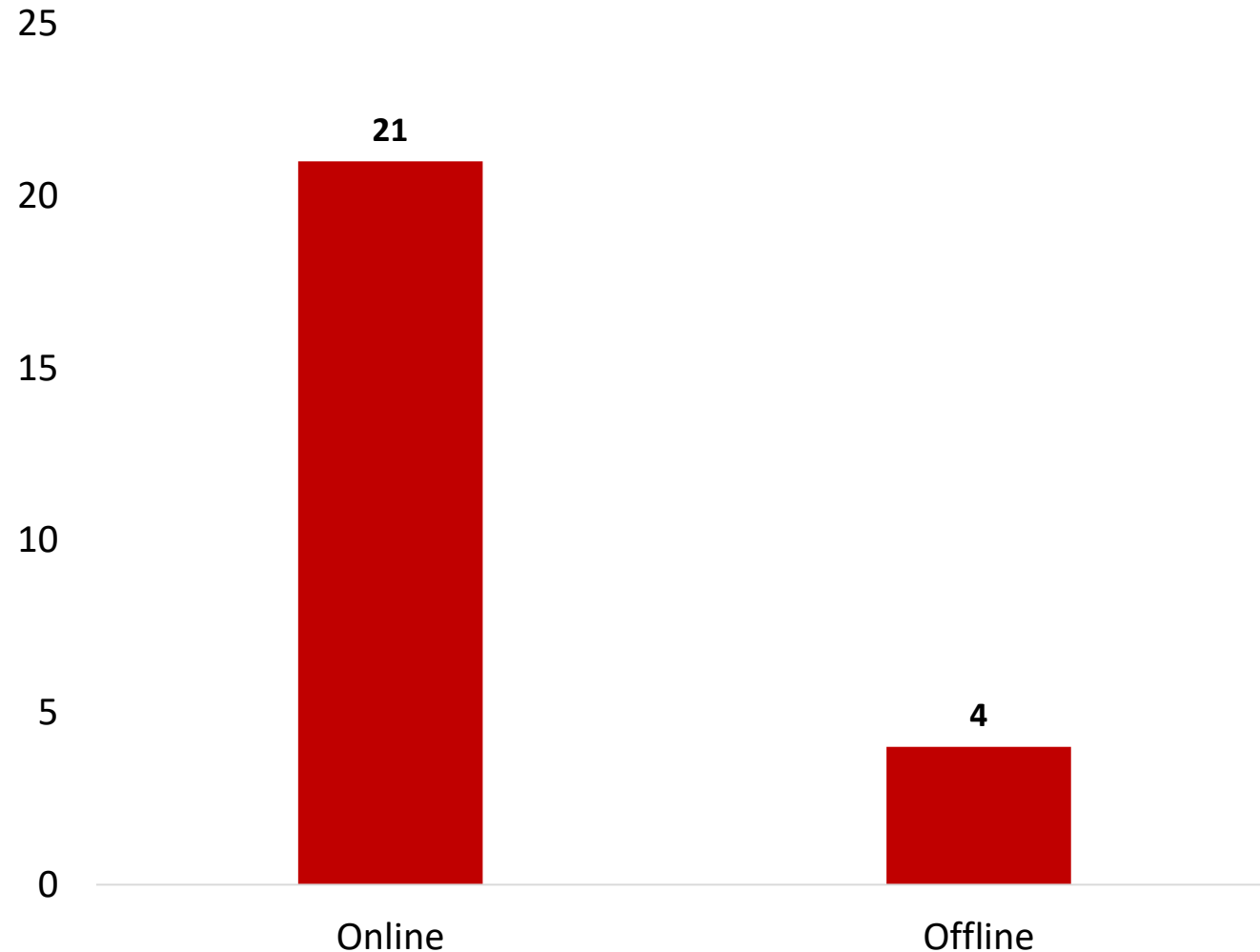
* Defined as the proportion of households not transacting grains in a particular month.

- Data only on 'transacted' or not. No breakdown/reasons.

- Website data suggest 12% for offline. But survey finds 2/3rd such households had transacted in-fact in May '17.

Reasons for non-transaction
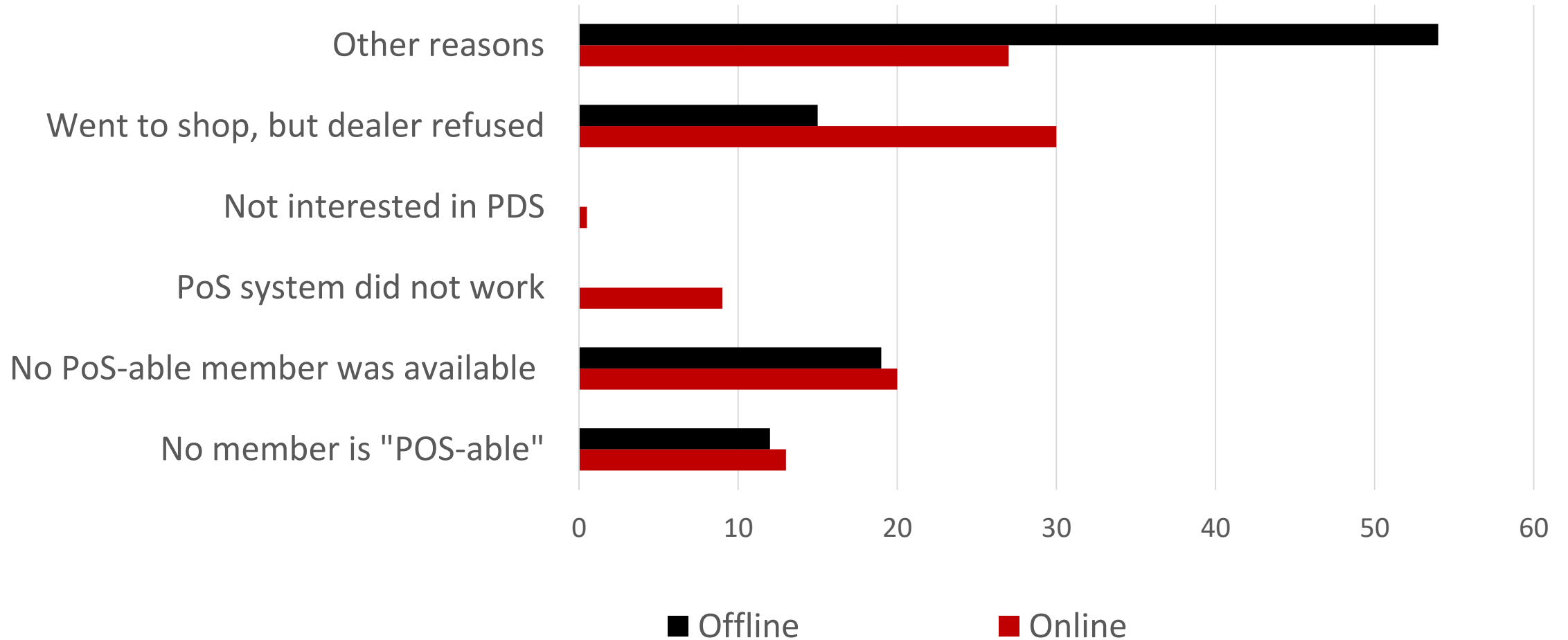
Non-transacting households

Transaction failures higher among smaller HH

	Single-menber (%)	Single member on RC (%)
Transacting	1.7	2.3
Non-transacting	3.9	5.1

■ Transacting   ■ Non-transacting
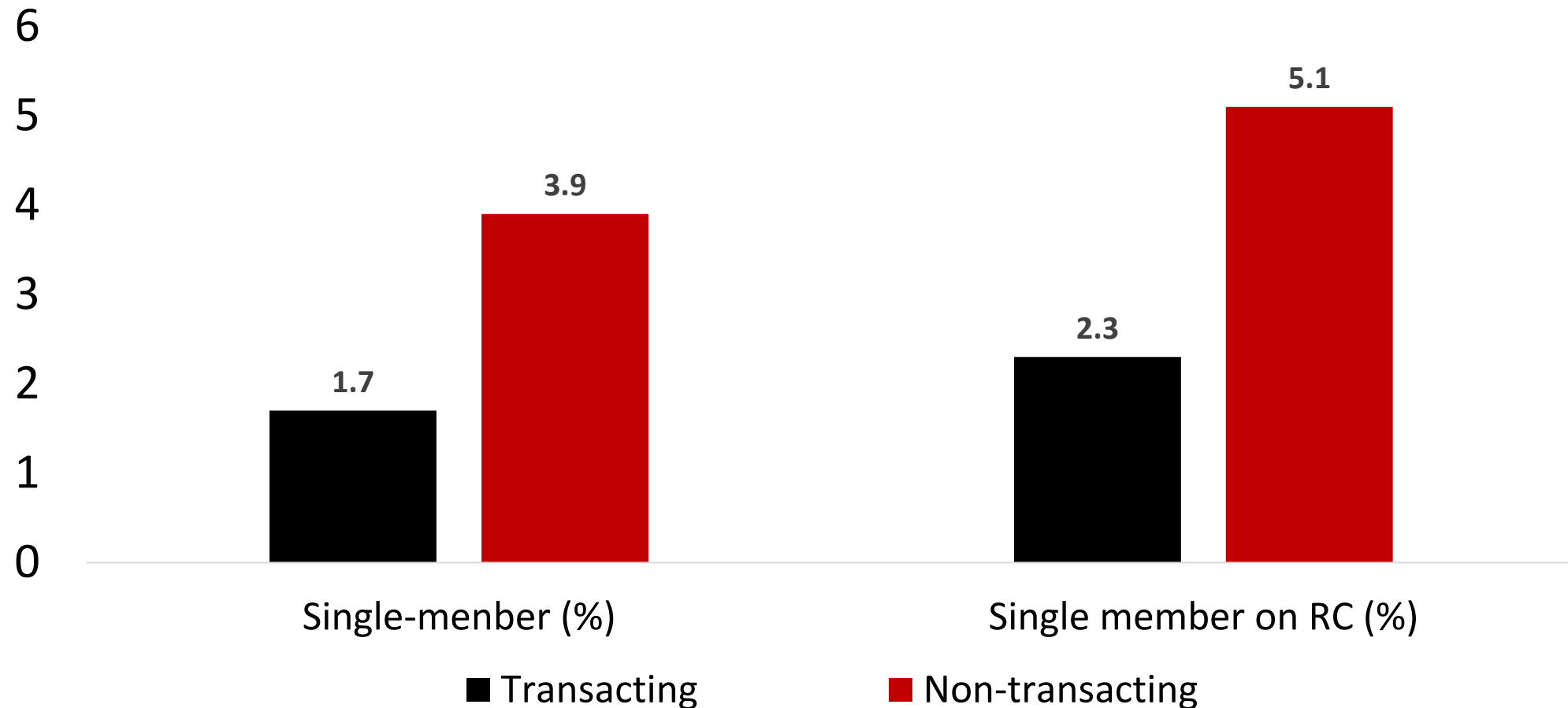
Non-transacting households

Often most vulnerable: elderly, widows, destitute.

Credits: Anmol Somanchi

Olasi Hansda

- 75 year old girl widow, lives alone.

- No rations since Jan 2017

- Why? She cannot walk and hence cannot 'authenticate' herself.

Durirta, Saraikela

Non-transacting households

Credits : Reetika Khera

Tilo Kumari

- Single woman living alone. Hard of hearing.

- No rations since Sept ' 16.

- Why? Fingerprints don't match Aadhaar biometrics.
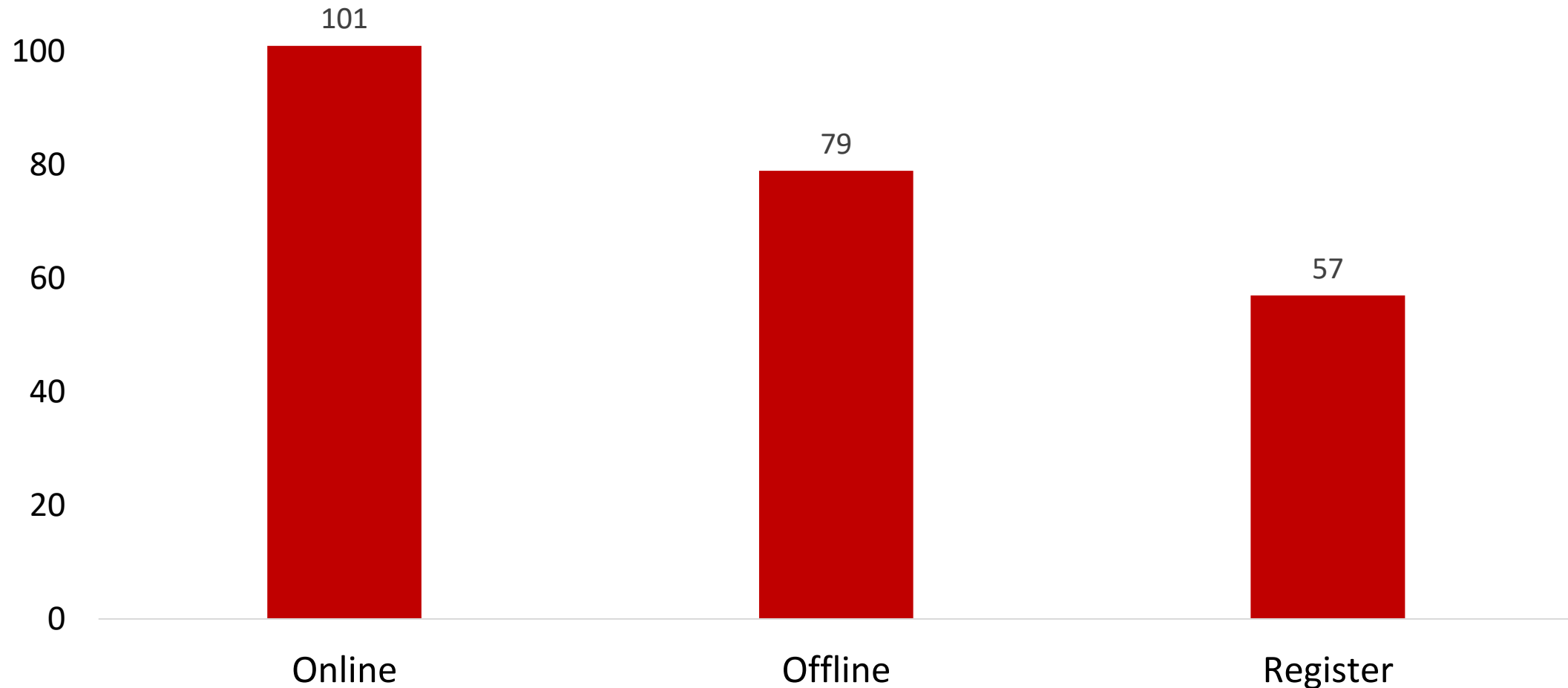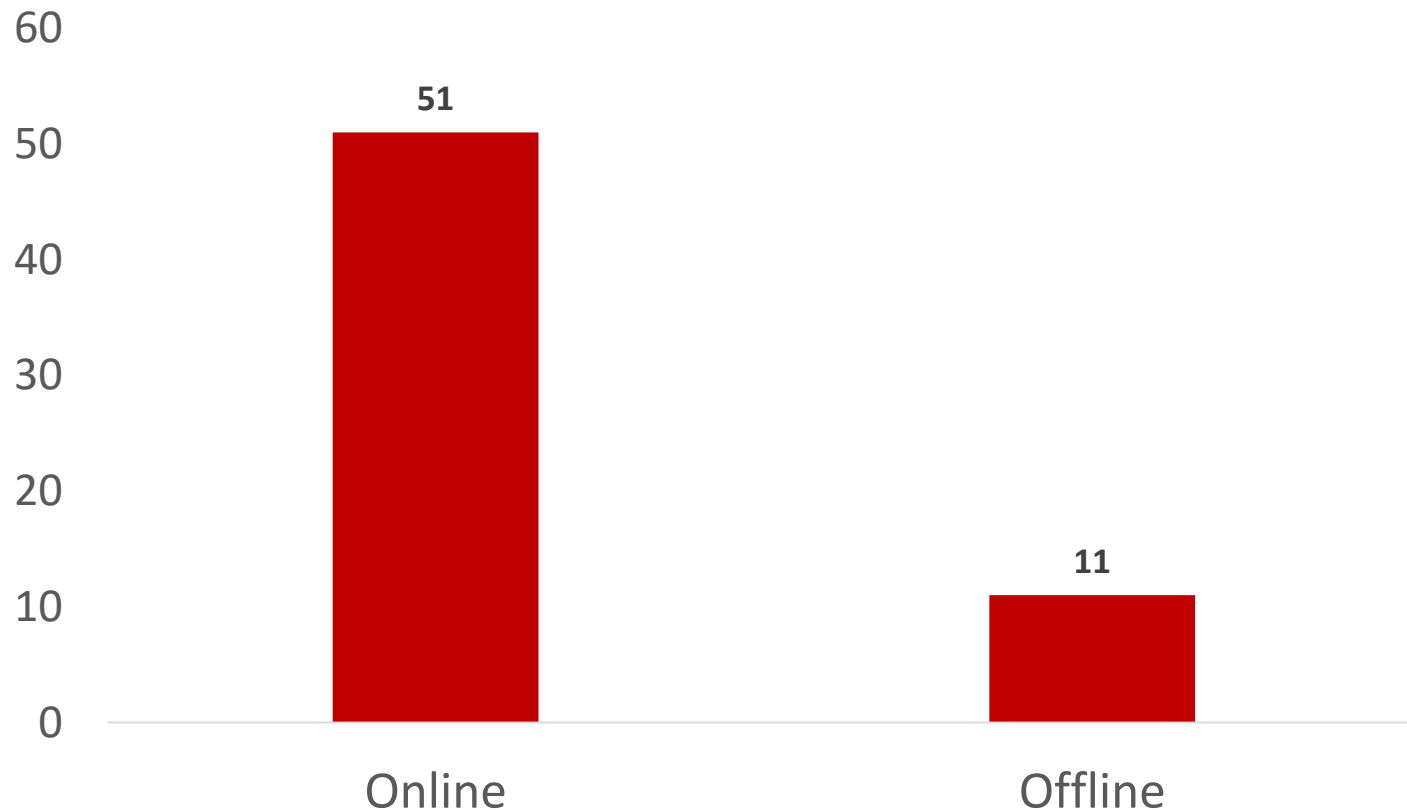
Sosotoli, Khunti
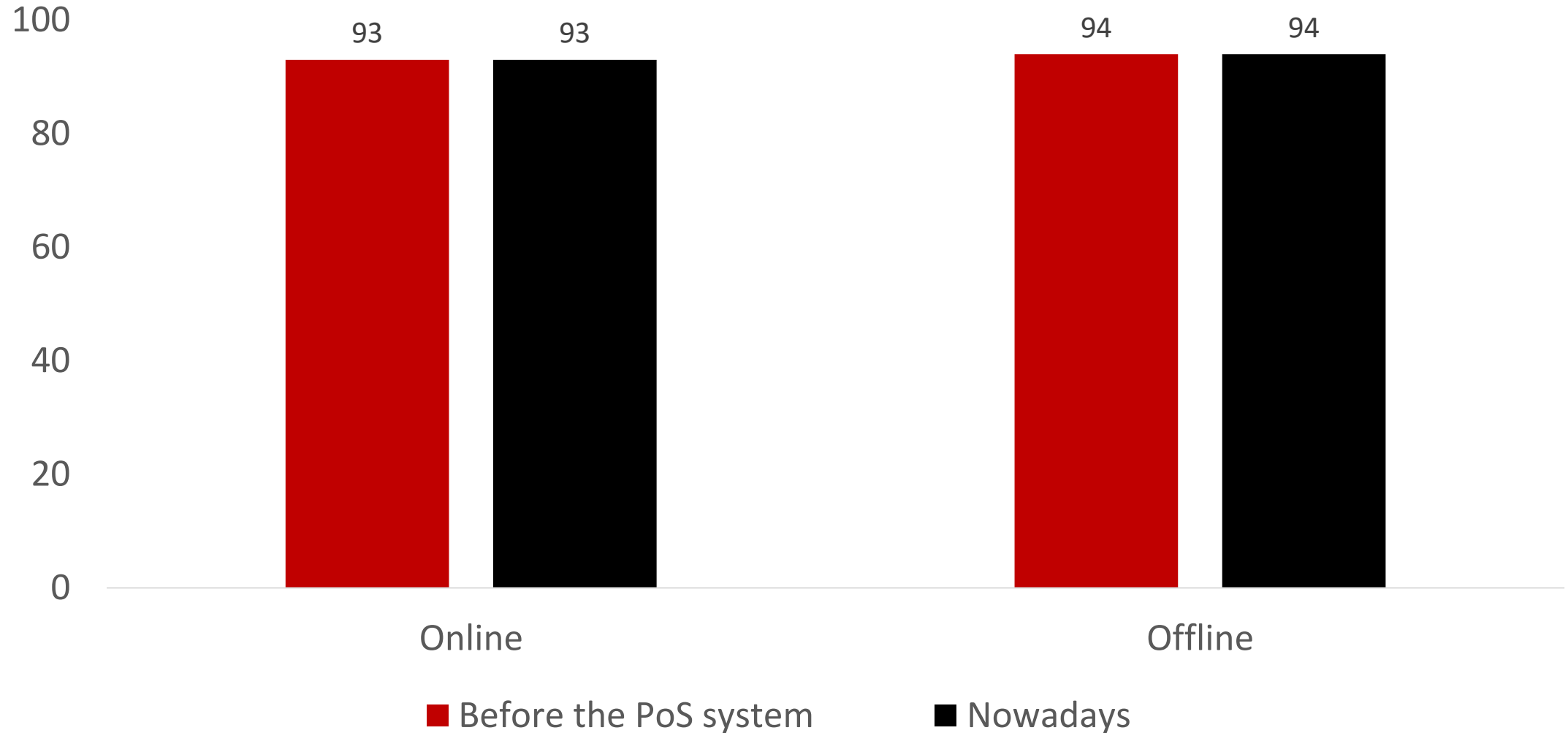
ABBA: Transaction costs are up

Average time (mins) to collect rations

ABBA: Transaction costs are up

Experienced PoS-related issue (%) – Transacting households*
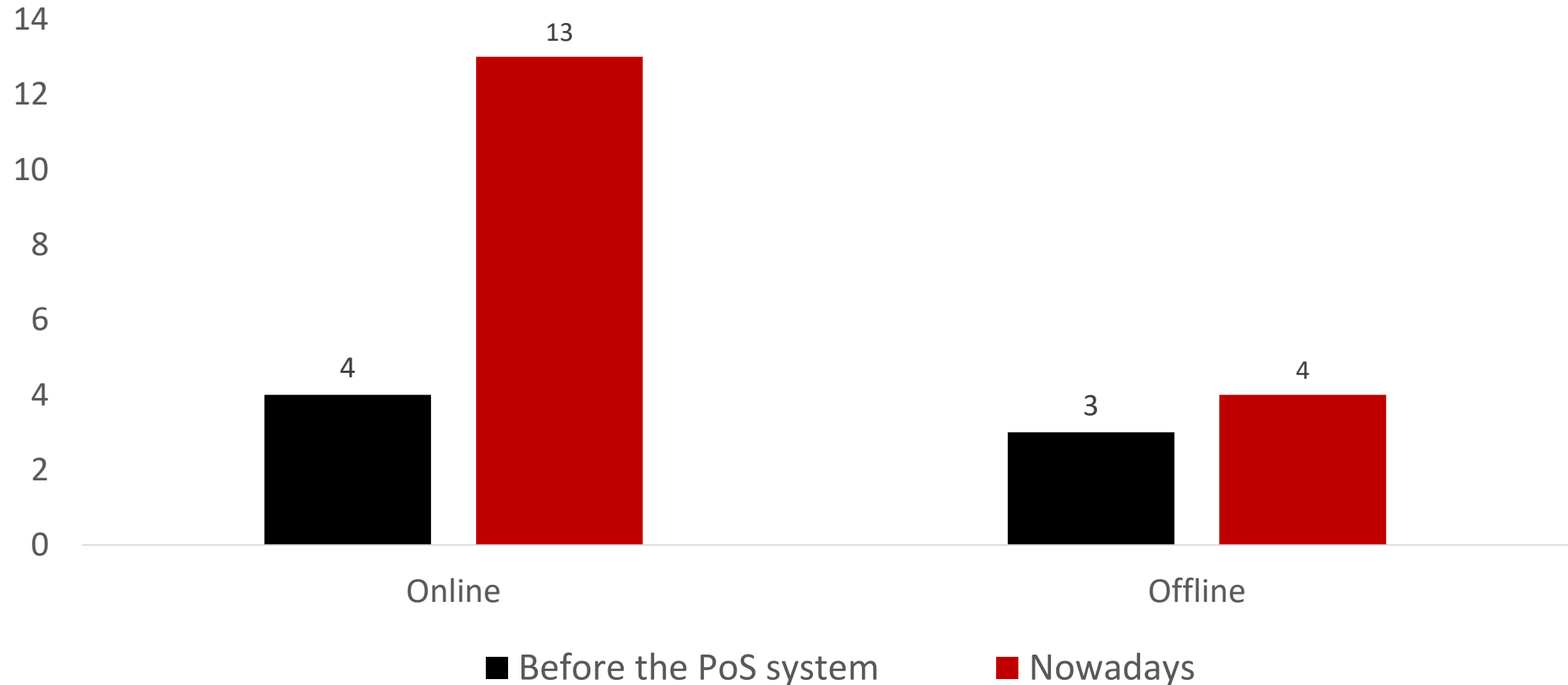

* PoS-related issues include:

- "Seeding" issues
- Connectivity problems
- Broken machine
- Biometric failure
- Error message
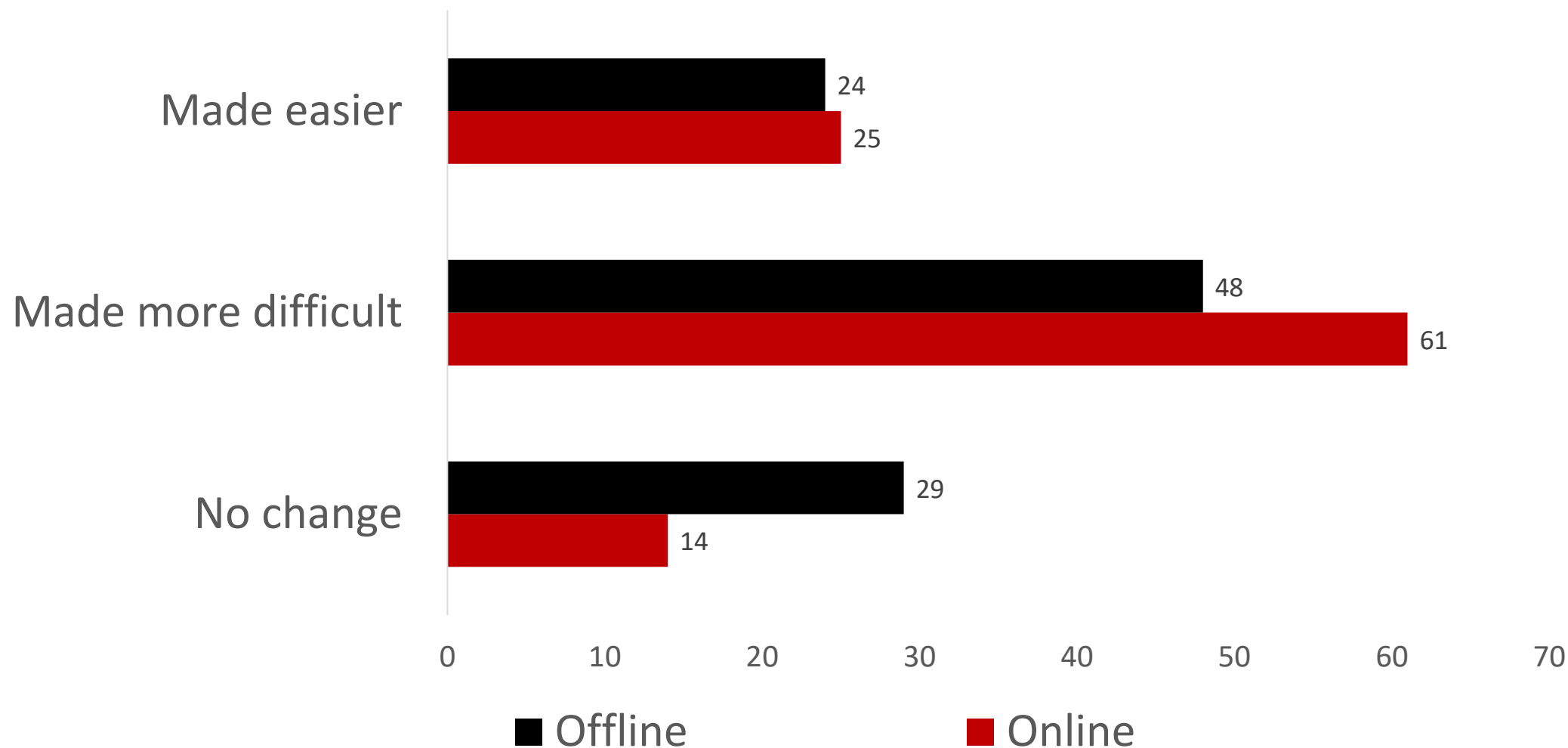
Only 3% used OTP in Online, May'17

ABBA: Transaction costs are up, even for dealers
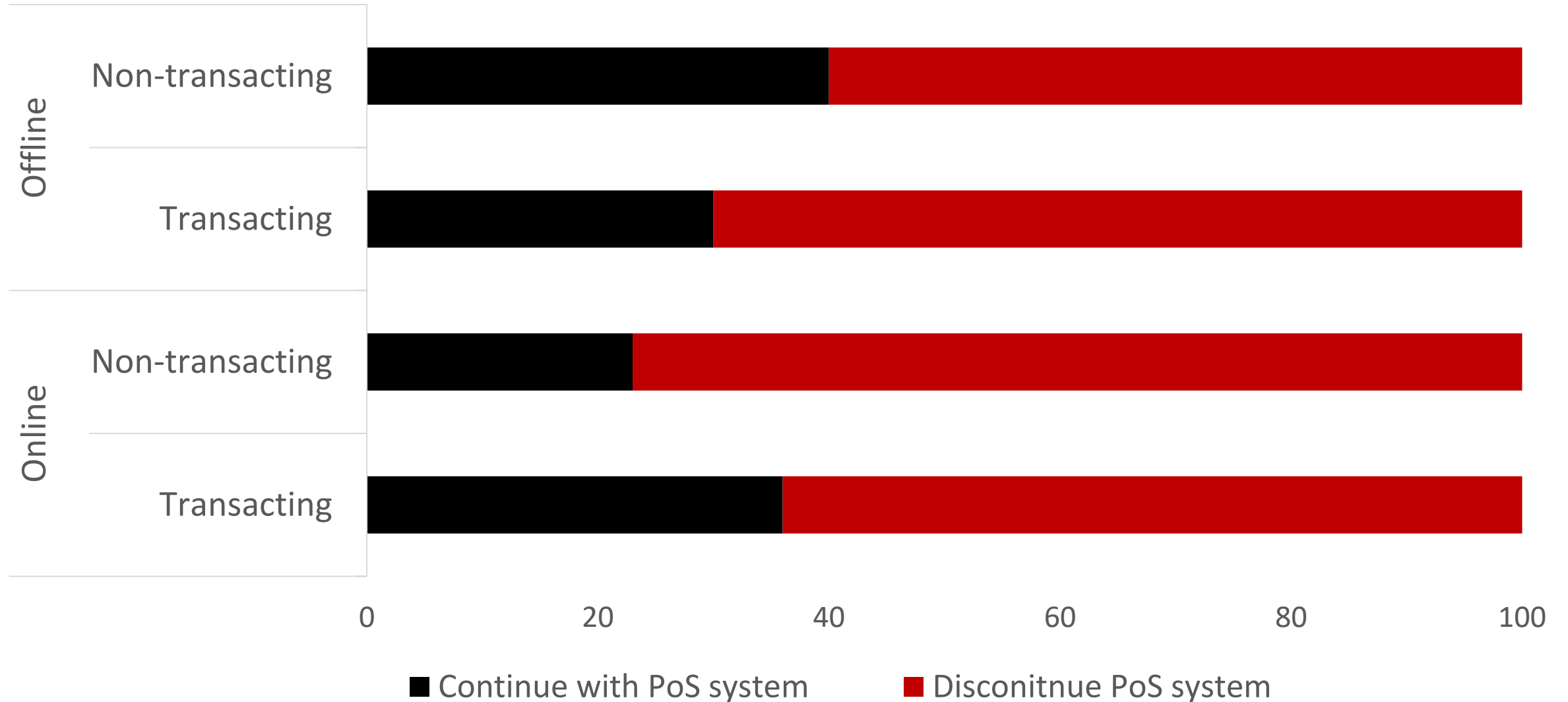
Average days for distribution

Online: Before the PoS system 4, Nowadays 13
Offline: Before the PoS system 3, Nowadays 4

Before the PoS system — Nowadays

Perception of users: Impact of ABBA on PDS purchases

Transacting households

Perception of users: Continue vs. Discontinue

Continue with PoS system   Disconitnue PoS system

Aadhaar - enabled corruption in the PDS

- Cross-seeding of Aadhaar numbers
- Even when fingerprint works, claim that it has failed
- Authenticate for two months, give only one month
- Has 'katauti' increased (because dealers have to spend more time)?
- Separating authentication and distribution of grain.
- Authenticate for all commodities, but give only some
- What happens to all the 'leftover' grain each month? Not adjusted against next months allocation

Aadhaar savings estimates

- Exclusion as 'savings' – string of RTIs

- World Development Report, Digital Dividends

- Ineligibility/revamp of PDS lists as savings – Parliament questions

Source: Khera, Reetika (2017), *The Impact of Aadhaar on Welfare Programmes*, EPW

In a nutshell,

- A lot of pain, for little gain

- What is good about the system is achievable by other technologies, without the pain

- Ultimately, greater awareness and strong grievance redressal and action is what will fix the system

- Depending on fragile technologies for crucial social security nets is grave injustice