













Massachusetts Institute of Technology

Motivation

Tanzania

1. Tanzania's government committed to the implementation of one of the first open-access railway systems in the world in 2013 2. The government's objective is twofold: a) ensure that efficient companies can access the infrastructure and operate trains, and b) provide resources through access charges to keep the system operative in the future

International

1. In the last 15 years, the use of shared and open-access railway systems has been proposed to improve infrastructure utilization and increase efficiency in the industry 2. The use of infrastructure by multiple companies requires coordination between the infrastructure manager and the train operators

Objectives

The objective of this research is to understand the implications of capacity pricing schemes designed to recover maintenance and financial infrastructure costs and to ensure that train operators can viably operate (positive profits) for different stakeholders in Tanzania

Capacity Pricing Schemes

This research considers two main price-based capacity pricing schemes (Gibson, 2003) 1. Variable access charges (*i.e.* \$0.01 per ton-km operated on the infrastructure)

2. Fixed access charges

(i.e. \$10.5million annual lump sum to operate)

Model

We use a financial model developed following (World Bank, 2014) to determine the annual operating margin and cash flow for separated and integrated railway companies.

Business		1		>
Model	Transportation Revenues		Access Charges	N N
+ revenues	Operation Costs (train		Infrastructure Costs	Rai
– costs	lease, fuel, personnel)		(maintenance, finance	m p d
	Access Charges	/	costs)	Co

Results

Results show that train operators have incentives to operate fewer trains than integrated companies with variable access charges because infrastructure costs are perceived as variable costs

[\$ million]



*Due to the strong competition from trucks, railway companies have low control over the shipping rate and the demand that would likely shift to rail.

Generalizability

Tanzania's railway system provides a useful case to illustrate multiple important concepts to be considered when implementing a pricing scheme in more complex KENYA railway systems Tanzania's rail system characteristics: RWANDA

1. Focus on freight traffic No analysis of passenger services 2. Independent corridors No network effects 3. No capacity constraints Every operator should have access 4. Limited institutional capacity Need for simple pricing schemes Image source: (World Bank, 2014)



illion]		0		1	1	2	1 3	3	4	4		5	(5		7	1	8	1	9	1	0	1	1	1	12	1+
0	0.0	0.0	2.1	0.0	6.6	0.0	7.3	0.0	6 .7	0.0	4.2	0.0	2	0.0	(0.0)		10.45		11.00		10.00		10.45	0.0	44.05	<u>רר '</u>	IL
_	(22.9)	(22.9)	(18.6)	(16.5)	(15.4)	(8.8)	(12.7)	(5.4)	(10.5)	(3.8)	(8.7)	(4.6)	(6	ſ	'n	ht:	sir		r a	n	1 C	20	n	ars		2)	
1	0.0	(9.8)	2.1	(9.8)	6.6	(9.8)	7.3	(9.8)	6 .7	(9.8)	4.2	(9.8)	2	U	U	ILC						JC			71	3)	
-	(21.8)	(31.6)	(17.5)	(25.2)	(14.3)	(17.5)	(11.6)	(14.1)	(9.4)	(12.5)	(7.6)	(13.3)	(1				-		•							9)	
2	0.0	(8.6)	2.1	(8.6)	6.6	(8.6)	7.3	(8.6)	6 .7	(8.6)	4.2	(8.6)	2		Ja	rg	C	l ra	ar) ()D	er	at	or	S	<u>)</u>	
_	(20.6)	(29.2)	(16.3)	(22.8)	(13.1)	(15.1)	(10.4)	(11.7)	(8.2)	(10.1)	(6.4)	(10.9)	(4			0										5)	
3	0.0	(7.4)	2.1	(7.4)	6.6	(7.4)	7.3	(7.4)	6 .7	(7.4)	4.2	(7.4)	2.3	(7.4)	(0.3)	(7.4)	(2.1)	(7.4)	(4.7)	(7.4)	(6.5)	(7.4)	(9.1)	(7.4)	(11.0)	(7.4)	
_	(19.5)	(26.9)	(15.2)	(20.5)	(12.0)	(12.8)	(9.3)	(9.4)	(7.1)	(7.8)	(5.3)	(8.6)	(3.5)	(8.6)	(1.8)	(9.4)	0.0	(9.5)	1.8	(10.3)	3.8	(10.1)	5.4	(11.2)	7.1	(11.2)	
4	0.0	(6.2)	2.1	(6.2)	6.6	(6.2)	7.3	(6.2)	<u>6.7</u>	(6.2)	4.2	(6.2)	2.3	(6.2)	(0.3)	(6.2)	(2.1)	(6.2)	(4.7)	(6.2)	(6.5)	(6.2)	(9.1)	(6.2)	(11.0)	(6.2)	
	(18.4)	(24.6)	(14.1)	(18.2)	(10.9)	(10.5)	(8.2)	(7.1)	(6.0)	(5.5)	(4.2)	(6.3)	(2.4)	(6.3)	(0.7)	(7.1)	1.1	(7.2)	2.9	(8.0)	4.9	(7.8)	6.5	(8.9)	8.2	(8.9)	(
5	0.0	(5.0)	2.1	(5.0)	6.6	(5.0)	7.3	(5.0)	6.7	(5.0)	4.2	(5.0)	2.3	(5.0)	(0.3)	(5.0)	(2.1)	(5.0)	(4.7)	(5.0)	(6.5)	(5.0)	(9.1)	(5.0)	(11.0)	(5.0)	
	(17.2)	(22.2)	(12.9)	(15.8)	(9.7)	(8.1)	(7.0)	(4.7)	(4.8)	(3.1)	(3.0)	(3.9)	(1.2)	(3.9)	0.6	(4.7)	2.3	(4.8)	4.1	(5.6)	6.1	(5.4)	7.7	(6.5)	9.4	(6.5)	
6	0.0	(3.7)	2.1	(3.7)	6.6	(3.7)	7.3	(3.7)	6.7	(3.7)	4.2	(3.7)	2.3	(3.7)	(0.3)	(3.7)	(2.1)	(3.7)	(4.7)	(3.7)	(6.)	(3.7)	(9.1)	(3.7)	(11.0)	(3.7)	
	(16.1)	(7.5)	(11.8)	(13.4)	(8.6)	(5.7)	(5.9)	(2.3)	(3.7)	(0.7)	(1.9)	(1.5)	(0.1)	(1.5)	1.7	(2.3)	3.4	(2.4)	5.2	(3.2)	7.2	(3.0)	8.8	(4.1)	10.5	(4.1)	۱۸
7	0.0	(2.5)	2.1	(2.5)	0.0	(2.5)	7.3	(2.5)	0.7	(2.5)	4.2	(2.5)	2.3	(2.5)	(0.3)	(2.5)	(2.1)	(2.5)	(4.7)	(2.5)	(0.)	(2.5)	(9.1)	(2.5)	(11.0)	(2.5)	V
	(14.9)	(17.4)	(10.6)	(11.0)	(7.4)	(3.3)	(4./)	0.1	(2.5)	1./	(0.7)	1.0	1.1	0.9	2.9	0.1	4.0	0.0	0.4	(0.8)	8.4	(0.0)	10.0	(1.7)	11.7	(1.7)	
8	(12.0)	(1.3)	2.1	(1.3)	0.0	(1.3)	1.5	(1.3)	0./	(1.3)	4.2	(1.3)	2.5	(1.3)	(0.3)	(1.3)	(2.1)	(1.3)	(4./)	(1.5)	(0.5)	(1.3)	(9.1)	(1.3)	(11.0)	(1.3)	-
	(13.8)	(10.1)	(9.5)	(0.1)	(0.3)	(1.0)	(3.0)	2.4	(1.4)	4.0	0.4	0.1	2.2	5.2	4.0	2.4	0.1	2.5	1.5	(0.1)	9.5	1.7	(0.1)	0.0	12.8	0.0	
9	(12.7)	(0.1)	2.1 (0.1)	(0.1)	0.0	(0.1)	() 5)	(0.1)	(0.2)	(0.1)	4.2	(0.1)	2.3	(0.1)	(0.3)	(0.1)	(2.1)	(0.1)	(4./)	2.0	(0.5)	(0.1)	(9.1)	(0.1)	(11.0)	2.0	
	(12.7)	0.0	(8.4)	(0.4)	(0.2)	1.5	(2.3)	4./	(0.5)	0.5	1.0	0.0	2.2	0.0	0.2	4.7	0.8	4.0	0.0 (4.7)	0.0	10.0	4.0	(0.1)	0.0	(11.0)	0.0	- -
10	(12.4)	(12.4)	(8.1)	(6.0)	(4 0)	1.7	()))	5.1	0.0		1.2	6.0	3.6	5.0	5.4	5.1	7.1	5.0	80	4.2	10.0	4.4	12.5	3.4	14.2	3.3	V
	0.0	(0.4)	21	(0.4)	66	(0.4)	73	(0.4)	67	(0 A)	4.2	(0.4)	23	(0.4)	(0.3)	(0.4)	(2.1)	(0.4)	(4.7)	(0.4)	(6.5)	(0.4)	(9.1)	(0.4)	(11.0)	(0.4)	•
11	(12.4)	(12.8)	(8,1)	(6.4)	(4.9)	1.3	(2.2)	4.7	0.0	6.3	1.8	5.6	3.6	5.5	5.4	4.7	7.1	4.6	8.9	3.8	10.9	4.0	12.5	3.0	14.2	2.9	
	0.0	(0.8)	2.1	(0.8)	6.6	(0.8)	7.3	(0.8)	6.7	(0.8)	4.2	(0.8)	2.3	(0.8)	(0.3)	(0.8)	(2.1)	(0.8)	(4.7)	(0.8)	(6.5)	(0.8)	(9.1)	(0.8)	(11.0)	(0.8)	
12	(12.4)	(13.2)	(8.1)	(6.8)	(4.9)	0.9	(2.2)	4.3	0.0	5.9	1.8	5.2	3.6	5.1	5.4	4.3	7.1	4.2	8.9	3.4	10.9	3.6	12.5	2.6	14.2	2.5	
	()	1	- (01)		11:		10.5									1			70-		4	1					U
Access Charges (\$12.4 million and \$10.5 million annual access charges for container and general-cargo TOs respectively)																											
nual b Flow								Co	ntain	er Tra	in O _l	perato	or Lev	el of	Servi	ce [Se	ervice	es/We	ek]		_						
illion]		0		1	1	2	3	3	4	4		5	(5		7		8		9	1	0	1	1	1	2	(
<u> </u>	0.0	0.0	(6.5)	0.0	1.7	0.0	5.1	0.0	6.7	0.0	5.9	0.0	5.9	0.0	5.1	0.0	5.0	0.0	4.2	0.0	4.1	0.0	3.3	0.0	3.3	0.0	
0	(22.9)	(22.9)	(10.5)	(17.0)	(10.5)	(8.8)	(10.5)	(5.4)	(10.5)	(3.8)	(10.5)	(4.6)	(10.5)	(4.6)	(10.5)	(5.4)	(10.5)	(5.5)	(10.5)	(6.3)	(10.5)	(6.4)	(10.5)	(7.2)	(10.5)	(7.2)	
	0.0	(19.2)	(6.5)	(19.2)	1.7	(19.2)	5.1	(19.2)	6.7	(19.2)	5.9	(19.2)	5.9	(19.2)	5.1	(19.2)	5.0	(19.2)	4.2	(19.2)	4.1	(19.2)	3.3	(19.2)	3.3	(19.2)	ſ
1	(12.4)	(31.6)	0.0	(25.7)	0.0	(17.5)	0.0	(14.1)	0.0	(12.5)	0.0	(13.3)	0.0	(13.3)	0.0	(14.1)	0.0	(14.2)	0.0	(15.0)	0.0	(15.1)	0.0	(15.9)	0.0	(15.9)	L
_	0.0	(16.8)	(6.5)	(16.0)		(16.9)	5.1	(16.0)				(16.0)	5.0		51		5.0	(16.8)	4.2	(16.9)		40.00			<u> </u>	(16.8)	
2	(12.4)			(10.8)	1.7	(10.0)	2.1	(10.8)	6.7	(16.8)	5.9	(10.0)	5.9	(16.8)	2.2	(16.8)	5.0			1(10.0)	4.1	(16.8)	3.3	(16.8)	3.3		20
2		(29.2)	0.0	(10.8)	1.7 0.0	(15.1)	0.0	(10.8)	6.7 0.0	(16.8) (10.1)	5.9 0.0	(10.8)	0.0	(16.8) (10.9)	0.0	(16.8) (11.7)	0.0	(11.8)	0.0	(12.6)	4.1 0.0	(16.8) (12.7)	3.3 0.0	(16.8) (13.5)	3.3 0.0	(13.5)	dſ
-	0.0	(29.2) (14.5)	0.0	(10.8) (23.3) (14.5)	1.7 0.0 1.7	(15.1) (14.5)	0.0	(10.8) (11.7) (14.5)	6.7 0.0 6.7	(16.8) (10.1) (14.5)	5.9 0.0 5.9	(10.8) (10.9) (14.5)	0.0 5.9	(16.8) (10.9) (14.5)	0.0	(16.8) (11.7) (14.5)	0.0 5.0	(11.8)	0.0 4.2	(10.5) (12.6) (14.5)	4.1 0.0 4.1	(16.8) (12.7) (14.5)	3.3 0.0 3.3	(16.8) (13.5) (14.5)	3.3 0.0 3.3	(13.5)	
5	0.0 (12.4)	(29.2) (14.5) (26.9)	0.0 (6.5) 0.0	(10.8) (23.3) (14.5) (21.0)	1.7 0.0 1.7 0.0	(10.8) (15.1) (14.5) (12.8)	0.0 5.1 0.0	(10.8) (11.7) (14.5) (9.4)	6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (7.8)	5.9 0.0 5.9 0.0	(10.9) (10.9) (14.5) (8.6)	0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6)	0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4)	0.0 5.0 0.0	(11.8) (14.5) (9.5)	0.0 4.2 0.0	(10.8) (12.6) (14.5) (10.3)	4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4)	3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2)	3.3 0.0 3.3 0.0	(13.5) (14.5) (11.2)	
3	0.0 (12.4) 0.0	(29.2) (14.5) (26.9) (12.1)	0.0 (6.5) 0.0 (6.5)	(10.8) (23.3) (14.5) (21.0) (12.1)	1.7 0.0 1.7 0.0 1.7	(15.1) (14.5) (12.8) (12.1)	0.0 5.1 0.0 5.1	(10.8) (11.7) (14.5) (9.4) (12.1)	6.7 0.0 6.7 0.0 6.7	(16.8) (10.1) (14.5) (7.8) (12.1)	5.9 0.0 5.9 0.0 5.9	(10.9) (14.5) (8.6) (12.1)	5.9 0.0 5.9 0.0 5.9	(16.8) (10.9) (14.5) (8.6) (12.1)	0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1)	0.0 5.0 0.0 5.0	(11.8) (14.5) (9.5) (12.1)	0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1)	4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1)	3.3 0.0 3.3 0.0 3.3	(16.8) (13.5) (14.5) (11.2) (12.1)	3.3 0.0 3.3 0.0 3.3	(13.5) (14.5) (11.2) (12.1)	
4	0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5)	0.0 (6.5) 0.0 (6.5) 0.0	(10.8) (23.3) (14.5) (21.0) (12.1) (18.6)	1.7 0.0 1.7 0.0 1.7 0.0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4)	0.0 5.1 0.0 5.1 0.0	(10.8) (11.7) (14.5) (9.4) (12.1) (7.0)	6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4)	5.9 0.0 5.9 0.0 5.9 0.0	(10.9) (14.5) (8.6) (12.1) (6.2)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2)	0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0)	0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1)	0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9)	4.1 0.0 4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0)	3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8)	3.3 0.0 3.3 0.0 3.3 0.0	(13.5) (14.5) (11.2) (12.1) (8.8)	
4	0.0 (12.4) 0.0 (12.4) 0.0	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5)	(10.8) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8)	1.7 0.0 1.7 0.0 1.7 0.0 1.7	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8)	6.7 0.0 6.7 0.0 6.7 0.0 6.7	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8)	5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8)	0.0 5.0 0.0 5.0 0.0 5.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8)	4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8)	3.3 0.0 3.3 0.0 3.3 0.0 3.3	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8)	
4	0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(10.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7)	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7)	0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8)	0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5)	
4 5 6	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5)	(10.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3) (7.4)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4)	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4)	0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (12.1) (12.1) (12.1) (9.8) (5.6) (7.4)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4)	
4 5 6	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3) (7.4) (14.0)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0	(15.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3)	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3)	0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (12.1) (12.1) (12.1) (12.1) (12.3) (13.3) (5.6) (7.4) (3.2)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1)	
3 4 5 6 7	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5)	(16.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3) (7.4) (14.0) (5.1)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1)	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1)	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1)	5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (3.2) (5.1)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1)	
4 5 6 7	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3) (7.4) (14.0) (5.1) (11.6)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (3.4)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (7.4) (1.5) (5.1) 0.8	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) 0.8	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (3.2) (5.1) (0.9)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(13.5) (14.5) (11.2) (12.1) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8)	
4 5 6 7 8	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (18.6) (9.8) (16.3) (7.4) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (5.1) (3.4) (2.7)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7)	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) 0.8 (2.7)	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) 0.8 (2.7)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7)	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0	(11.8) (14.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (12.1) (7.9) (9.8) (5.6) (7.4) (5.6) (7.4) (3.2) (5.1) (0.9) (2.7)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7)	Se
4 5 6 7 8	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (2.7)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (18.6) (9.8) (16.3) (7.4) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (5.7) (5.1) (3.4) (2.7) (1.0)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) 0.8 (2.7) 3.2	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) 0.8 (2.7) 3.2	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) 2.3	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (5.1) (0.9) (2.7) 1.5	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6	Se
4 5 6 7 8 9	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (16.3) (7.4) (16.3) (7.4) (16.3) (7.4) (16.3) (7.4) (16.3) (7.4) (11.6) (2.7) (9.2) (0.3)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (5.7) (5.1) (3.4) (2.7) (1.0) (0.3)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4 (0.3)	6.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (5.1) 0.8 (2.7) 3.2 (0.3)	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) 0.8 (2.7) 3.2 (0.3)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4 (0.3)	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) 2.3 (0.3)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (12.1) (12.1) (9.8) (5.6) (7.4) (5.6) (7.4) (5.1) (0.9) (2.7) 1.5 (0.3)	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 2.2	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3)	Se
3 4 5 6 7 8 9	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (16.3) (7.4) (14.0) (5.1) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8)	1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.7) (5.1) (3.4) (2.7) (1.0) (0.3) 1.4	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (5.1) 0.0 (2.7) 2.4 (0.3) 4.8	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4 (0.3) 4.8 0.0	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) 2.3 (0.3) 4.7	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (5.6) (7.4) (5.1) (0.9) (2.7) 1.5 (0.3) 3.9	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.2	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0	Se
4 5 6 7 8 9 10	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) 0.0	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5)	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (16.3) (7.4) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) 0.0	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (3.4) (2.7) (1.0) (0.3) 1.4 0.0	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4 (0.3) 4.8 0.0	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 (0.3)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (7.4) (1.5) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6 0.0	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6 0.0	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) 0.0 (2.7) 2.4 (0.3) 4.8 0.0	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) 2.3 (0.3) 4.7 0.0	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (5.1) (0.9) (2.7) (5.1) (0.9) (2.7) (1.5) (0.3) 3.9 0.0	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(13.3) (14.5) (11.2) (12.1) (12.1) (12.1) (12.1) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0	Se
4 5 6 7 8 9 10	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.0) (12.4)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5)	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (9.8) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) 0.0 (6.5) (0.4)	1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (5.1) (3.4) (2.7) (1.0) (0.3) 1.4 0.0 1.7	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4)	6.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 8.8 (0.4)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6 0.0 5.9 (0.4)	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6 0.0 5.9 (0.4)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4)	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (14.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) 2.3 (0.3) 4.7 0.0 5.0	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (12.1) (7.9) (9.8) (5.6) (7.4) (5.6) (7.4) (5.1) (6.2) (5.1) (0.9) (2.7) 1.5 (0.3) 3.9 0.0 4.2 (0.1)	4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4)	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.1)	Se
3 4 5 6 7 8 9 10 11	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.0) (12.4) (0.4)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) 0.0 (6.5) (0.4)	1.7 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(10.3) (15.1) (14.5) (12.8) (12.1) (10.4) (9.8) (8.1) (7.4) (5.7) (5.1) (5.7) (5.1) (3.4) (2.7) (1.0) (0.3) 1.4 0.0 1.7 (0.4) 1.2	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7	6.7 0.0 0.0 6.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 (0.3) 6.4	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (5.1) (5.1) (5.1) (5.1) (5.1) (5.3) (5.4) (0.3) (5.6) (0.0) (5.9) (0.4)	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (5.1) (5.1) (5.1) (5.1) (5.1) (5.2) (0.3) 5.6 (0.0) 5.9 (0.4) 5.5	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) (2.3) (0.3) 4.7 0.0 5.0 (0.4)	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (5.1) (0.9) (2.7) 1.5 (0.3) 3.9 0.0 4.2 (0.4) 2.8	4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 2.7	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4)	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.0	Se
4 5 6 7 8 9 10 11	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.3) (12.7) (0.4) (12.4) (0.4) (12.8) (0.7)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(10.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (0.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) (0.3) (6.5) (0.4) (6.9) (0.7)	1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7 0.0 1.7	(10.3) (11.1) (112.8) (112.8) (112.1) (112.8) (112.1)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7)	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) (1.6 (2.7) (0.3) (6.4 (0.3) (0.3) (6.4 (0.4) (6.3 (0.7)	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 0.0 5.9 (0.4) 5.5 (0.7)	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 0.0 5.9 (0.4) 5.5 (0.7)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7)	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) (2.3) (0.3) 4.7 0.0 5.0 (0.4) 4.6	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (5.1) (0.9) (2.7) (5.1) (0.9) (2.7) 1.5 (0.3) 3.9 0.0 4.2 (0.4) 3.8 (0.7)	4.1 0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 3.7 (0.7)	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7)	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7)	se va er
3 4 5 6 7 8 9 10 11 12	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4)	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.4) (12.8) (0.7) (13.1)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (16.3) (7.4) (14.0) (5.1) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) (0.4) (6.9) (0.7) (7.3)	1.7 0.0 0.0 1.7 0.0 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(10.3) (11.1) (11.2) (112.8) (112.1) (112.1) (112.1) (112.1) (112.1) (112.1) (112.1) (113.1) (0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 (0.4) 6.3 (0.7) 6.0	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) (0.8) (2.7) (3.2) (0.3) 5.6 0.0 5.9 (0.4) 5.5 (0.7) 5.5	3.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (5.1) 0.8 (2.7) 3.2 (0.3) 5.6 (0.0) 5.9 (0.4) 5.5 (0.7) 5.2	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) (2.3) (0.3) 4.7 0.0 5.0 (0.4) 4.6 (0.7) 4.3	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (5.6) (7.4) (5.6) (7.4) (5.6) (7.4) (5.1) (0.9) (2.7) 1.5 (0.3) 3.9 0.0 4.2 (0.4) 3.8 (0.7) 3.5	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 3.7 (0.7) 3.4	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	se va er
3 4 5 6 7 8 9 10 11 12	0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0 (12.4) 0.0	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (17.5) (17.5) (2.7) (15.1) (0.3) (12.7) (0.3) (12.4) (0.4) (12.8) (0.7) (13.1)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (6.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) (0.3) (6.5) (0.4) (6.5) (0.4) (6.9) (0.7) (7.3)	1.7 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0	(10.3) (11.1) (14.5) (12.1) (12.1) (12.1) (12.1) (9.8) (8.1) (7.4) (5.7) (5.1) (3.4) (2.7) (1.0) (0.3) 1.4 (0.3) 1.4 (0.0) 1.7 (0.4) 1.3 (0.7) 1.0	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 (0.3) 6.4 (0.4) 6.3 (0.7) 6.0	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (7.4) (1.5) (7.4) (1.5) (5.1) (0.8 (2.7) 3.2 (0.3) 5.6 (0.7) 5.5 (0.7) 5.2	3.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 0.0 5.9 (0.4) 5.5 (0.7) 5.2	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) 2.3 (0.3) 4.7 0.0 5.0 (0.4) 4.6 (0.7) 4.3	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (3.2) (5.1) (0.9) (2.7) 1.5 (0.3) 3.9 0.0 4.2 (0.4) 3.8 (0.7) 3.5	4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0 4.1 0.0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 3.7 (0.7) 3.4	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	se va er
4 5 6 7 8 9 10 11 12 Leg	0.0 (12.4) (12.4) (12.	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.3) (12.1) (0.4) (12.8) (0.7) (13.1)	0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0 (6.5) 0.0	(16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (9.8) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7) (9.2) (0.3) (6.8) (0.4) (6.5) (0.4) (6.9) (0.7) (7.3)	1.7 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(10.3) (11.1) (11.2) (112.8) (112.1) (112.1) (112.1) (112.1) (112.1) (112.1) (113.1) (1.2) (1.3) (1.4) (1.7) (1.3) (1.7) (1.0) (1.3) (1.7) (1.0) (1.3) (1.7) (1.0)	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0 6.7 0.0	(16.8) (10.1) (14.5) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 9.8 (0.4) 6.3 (0.7) 6.0	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) (0.8) (2.7) (3.2) (0.3) 5.6 (0.3) 5.6 (0.0) 5.5 (0.7) 5.2	3.9 0.0 5.9 0.0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (3.9) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 0.0 5.9 (0.4) 5.5 (0.7) 5.2	0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0 5.1 0.0	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (14.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (2.4) (5.1) (0.1) (2.7) 2.3 (0.3) 4.7 0.0 5.0 (0.4) 4.6 (0.7) 4.3	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (3.2) (5.1) (0.9) (2.7) (5.1) (0.9) (2.7) (1.5 (0.3) 3.9 0.0 4.2 (0.4) 3.8 (0.7) 3.5 Equil	4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 3.7 (0.7) 3.4	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	se va er
3 4 5 6 7 8 9 10 11 12 Leg	0.0 (12.4) (12.4) (1	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.3) (12.7) (0.4) (12.8) (0.7) (13.1)	0.0 (6.5) (6.5) (6.5	(16.3) (23.3) (14.5) (21.0) (12.1) (18.6) (9.8) (16.3) (7.4) (14.0) (5.1) (11.6) (2.7) (0.3) (6.8) (0.0) (6.5) (0.4) (6.9) (0.7) (7.3)	1.7 0.0 0.0 1	(10.3) (11.5) (12.1) (12.1) (12.1) (12.1) (12.1) (9.8) (8.1) (7.4) (5.7) (5.1) (5.1) (5.7) (5.1) (3.4) (2.7) (1.0) (0.3) 1.4 0.0 1.7 (0.4) 1.3 (0.7) 1.0	0.0 5.1 0.0 5	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	6.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 (0.3) 6.4 (0.4) 6.3 (0.7) 6.0	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 (0.3) 5.6 (0.3) 5.5 (0.7) 5.2	3.9 0.0 5.9 0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 (0.0) 5.5 (0.7) 5.5 (0.7) 5.2	0.0 5.1 0.0 5	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0 (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (9.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (2.7) (2.3) (0.1) (2.7) (2.3) (0.1) (2.7) (2.3) (0.3) 4.7 0.0 5.0 (0.4) 4.6 (0.7) 4.3	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (3.2) (5.1) (0.9) (2.7) (5.1) (0.9) (2.7) (1.5 (0.3) (0.9) (2.7) (1.5 (0.3) (3.9) (0.0) 4.2 (0.4) 3.8 (0.7) 3.5 Equil Socia	4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 3.7 (0.7) 3.4 n mum	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	se va er
4 5 6 7 8 9 10 11 12 12 Leg IM	0.0 (12.4) (12.4) (12	(29.2) (14.5) (26.9) (12.1) (24.5) (9.8) (22.2) (7.4) (19.8) (5.1) (17.5) (2.7) (15.1) (0.3) (12.7) (0.3) (12.4) (0.4) (12.8) (0.7) (12.8) (0.7) (13.1) CTO IM -	0.0 (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5)((16.3) (23.3) (14.5) (21.0) (12.1) (12.1) (12.1) (9.8) (16.3) (7.4) (16.3) (16.3) (7.4) (16.3) (17.3) (17.3) (17.3) (17.3) (17.3) (17.3) (17.3) (17.3) (10.3)	1.7 0.0 1.7 1	(10.3) (11.1) (112.8) (112.8) (112.1) (112.8) (112.1) (112.8) (9.8) (8.1) (7.4) (5.7) (5.1) (3.4) (7.4) (5.7) (5.7) (5.7) (5.1) (3.4) (7.4) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (5.7) (1.0) (0.3) (1.4) (0.3) (1.4) (0.3) (1.7) (1.3) (0.7) (1.3) (1.3) (0.7) (1.3	0.0 5.1 0.0 0	(10.3) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4 KC - 2	6.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (10.1) (14.5) (7.8) (12.1) (5.4) (9.8) (3.1) (7.4) (0.7) (5.1) 1.6 (2.7) 4.0 (0.3) 6.4 8.8 (0.4) 6.3 (0.7) 6.0 8.8 (0.7) 6.0	5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0 5.9 0.0	(10.3) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (0.8) (2.7) (3.2) (0.3) (5.6) (0.3) (5.6) (0.3) (5.6) (0.3) (5.5) (0.7) (5.2) (0.7) (5.2)	3.9 0.0 5.9 0	(16.8) (10.9) (14.5) (8.6) (12.1) (6.2) (9.8) (7.4) (1.5) (5.1) (0.8) (2.7) 3.2 (0.3) 5.6 (0.7) 5.5 (0.7) 5.2	0.0 5.1 0.0 5	(16.8) (11.7) (14.5) (9.4) (12.1) (7.0) (9.8) (4.7) (7.4) (2.3) (5.1) (0.0) (2.7) 2.4 (0.3) 4.8 0.0 5.1 (0.4) 4.7 (0.7) 4.4	3.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0 5.0 0.0	(11.8) (14.5) (14.5) (12.1) (7.1) (9.8) (4.8) (7.4) (2.4) (5.1) (0.1) (2.7) (2.3) (0.3) 4.7 0.0 5.0 (0.4) 4.6 (0.7) 4.3	0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0 4.2 0.0	(10.3) (12.6) (14.5) (10.3) (12.1) (7.9) (9.8) (5.6) (7.4) (3.2) (5.1) (0.9) (2.7) (5.1) (0.9) (2.7) (1.5 (0.3) 3.9 0.0 4.2 (0.4) 3.8 (0.7) 3.5 Equil Socia Infea	4.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	(16.8) (12.7) (14.5) (10.4) (12.1) (8.0) (9.8) (5.7) (7.4) (3.3) (5.1) (1.0) (2.7) 1.4 (0.3) 3.8 0.0 4.1 (0.4) 3.7 (0.7) 3.4 n imum	3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0 3.3 0.0	(16.8) (13.5) (14.5) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	3.3 0.0 0.0	(13.3) (14.5) (11.2) (12.1) (8.8) (9.8) (6.5) (7.4) (4.1) (5.1) (1.8) (2.7) 0.6 (0.3) 3.0 0.0 3.3 (0.4) 2.9 (0.7) 2.6	se va er

It is also shown that in Tanzania it is not possible to recover infrastructure costs with only one type of train operators and viable access charges ifferent combinations of fixed track access charges for container nd general cargo train operators would improve level of ervice with respect to ariable charges while nabling infrastructure cost recovery

Conclusions

1. The use of variable access charges widely used in the railway industry	4. The use of fixed access charges aligns the behavior of
may create incentives for rational train operators to operate fewer trains	vertically separated firms with the behavior of an integrated
than an integrated railway company (social planner).	railway company
2. Regulators need considerable information about the sector to determine	5. The level of service offered by TOs is robust for a wide range
adequate access charge levels that train operators can viably pay	of fixed access fees, thus relaxing the regulator needs of
3. Discriminate pricing may be needed to be able to recover infrastructure	information
costs when different types of train operators face very different levels of	6. Different fixed access charges can be designed by the
cost and revenues	regulator with different objectives.
References	Acknowledgements
Gibson S. (2003), Allocation of capacity in the railway industry, Utilities Policy, 11	The authors gratefully acknowledge support from Rafael del Pino

World Bank (2014), Project Appraisal Document for Intermodal and Rail Development *Project,* (U.S.: The World Bank Group)

Foundation. The authors also acknowledge Alexandre Jacquillat for his valuable comments to improve this work.



Stevens Institute of Technology- School of Systems and Enterprises