test

Table 1: Summary statistics grouped by country

		Frequ	iency		N					
	Male		Female		Male		Female			
Cohort	Population Sample		Population	Sample	Population	Sample	Population	Sample		
Countr	y 1									
one	0.62	0.50	0.38	0.50	20	14	12	14		
two	0.66	0.54	0.34	0.46	21	15	11	13		
Country 2										
one	0.62	0.50	0.38	0.50	20	14	12	14		
two	0.66	0.54	0.34	0.46	21	15	11	13		

A tibble: 7,200 x 8

	id	$.{ t model}$	series	h	MSE	Tevel	base_MSE	pct_change
	<chr>></chr>	<chr></chr>	<chr></chr>	<int></int>	<dbl></dbl>	<int></int>	<dbl></dbl>	<dbl></dbl>
1	1	base	D1	1	246.	1	246.	246.
2	1	base	C1	1	113.	2	113.	113.
3	1	base	C2	1	115.	2	115.	115.
4	1	base	B1	1	31.1	3	31.1	31.1
5	1	base	B2	1	76.5	3	76.5	76.5
6	1	base	В3	1	31.9	3	31.9	31.9
7	1	base	B4	1	33.4	3	33.4	33.4
8	1	base	B5	1	35.5	3	35.5	35.5
9	1	base	B6	1	29.3	3	29.3	29.3
10	1	base	A11	1	5.69	4	5.69	5.69
	- 40							

i 7,190 more rows

Table 2: Mean Squared Errors by Model, Level, and Forecast Horizon

	T = 100			T = 300			
Model	h=1	h=1-8	h=1-16	h=1	h=1-8	h=1-16	
Level 1							
base	246.0	1276.9	888.8	213.0	1150.6	799.7	
mint _n	180.1	1007.0	603.2	164.0	796.0	538.7	
$mint_sample$	190.5	1120.1	668.7	163.6	815.4	547.6	
$\operatorname{mint}_\operatorname{shr}$	178.8	995.7	602.8	164.5	783.3	532.0	
Level 2							
base	114.4	608.2	407.7	97.8	489.2	350.6	
$mint_n$	93.2	491.9	300.9	84.2	399.5	271.4	
$mint_sample$	96.8	547.3	331.6	84.4	409.3	278.2	
$\operatorname{mint}_\operatorname{shr}$	92.6	490.5	301.2	84.2	395.3	268.5	
Level 3							
base	39.6	175.5	121.0	31.9	136.2	94.0	
$mint_n$	31.6	164.6	104.1	30.1	128.4	88.3	
$mint_sample$	33.3	182.6	114.1	30.4	131.6	90.3	
$\operatorname{mint}_\operatorname{shr}$	31.5	163.7	104.0	30.1	127.9	87.8	
Level 4							
base	5.8	30.4	19.5	5.4	23.7	16.3	
$mint_n$	5.4	29.3	18.5	5.1	23.4	15.6	
$mint_sample$	5.7	32.3	20.4	5.2	24.1	16.1	
mint_shr	5.4	29.2	18.4	5.1	23.2	15.6	

Table 3: Mean Squared Errors by Model, Level, and Forecast Horizon

		T = 10	0	T = 300			
Model	h=1	h=1-8	h=1-16	h=1	h=1-8	h=1-16	
Top level							
MinT(Sample)	-22.6	-12.3	-24.8	-23.2	-29.1	-31.5	
MinT(Shrink)	-27.3	-22.0	-32.2	-22.8	-31.9	-33.5	
MinT(N)	-26.8	-21.1	-32.1	-23.0	-30.8	-32.6	
Base	246.0	1276.9	888.8	213.0	1150.6	799.7	
Level 1							
MinT(Sample)	-15.4	-10.0	-18.7	-13.6	-16.3	-20.6	
MinT(Shrink)	-19.1	-19.4	-26.1	-13.8	-19.2	-23.4	
MinT(N)	-18.5	-19.1	-26.2	-13.9	-18.3	-22.6	
Base	114.4	608.2	407.7	97.8	489.2	350.6	

Level 2								
MinT(Sample)	-16.0	4.0	-5.7	-4.7	-3.4	-3.9		
MinT(Shrink)	-20.5	-6.7	-14.1	-5.6	-6.1	-6.6		
MinT(N)	-20.3	-6.2	-14.0	-5.7	-5.7	-6.1		
Base	39.6	175.5	121.0	31.9	136.2	94.0		
Bottom level								
MinT(Sample)	-0.9	6.2	4.6	-3.5	1.9	-1.1		
MinT(Shrink)	-6.6	-4.0	-5.7	-4.6	-2.0	-4.4		
MinT(N)	-6.5	-3.5	-5.4	-4.6	-1.5	-3.9		
Base	5.8	30.4	19.5	5.4	23.7	16.3		