

Exhibit 15.7: Differences in Parameter Estimates for Common Items on the TIMSS 2011 Logit Metric, *Students Confident in Mathematics* Scale, Fourth Grade

TIMSS 2015 Variable	TIMSS 2011 Variable	Difference in delta	Difference in tau_1	Difference in tau_2	Difference in tau_3
ASBM03A	ASBM03A	0.01907	-0.01847	-0.08334	0.10181
ASBM03B*	ASBM03B*	0.07164	0.00355	-0.07789	0.07434
ASBM03C*	ASBM03C*	-0.05559	-0.00555	-0.03665	0.04220
ASBM03D	ASBM03D	0.02644	0.07476	-0.07052	-0.00424
ASBM03F	ASBM03E	0.05700	0.08382	-0.02372	-0.06010
ASBM03G	ASBM03F	-0.08982	0.04175	-0.03405	-0.00770
ASBM03H*	ASBM03G*	-0.02875	-0.01985	-0.03125	0.05110

* Reverse coded