

Exhibit 13.10: TIMSS Advanced 2015 Conditioning Models for Physics Proficiency Estimation

Country	2015				2008			
	Number of Primary Conditioning Variables	Number of Principal Components Available	Number of Principal Components Retained	Percentage of Variance Explained	Number of Primary Conditioning Variables	Number of Principal Components Available	Number of Principal Components Retained	Percentage of Variance Explained
Armenia	—	—	—	—	2	275	44	53
France	2	347	177	90	—	—	—	—
Iran, Islamic Rep. of	—	—	—	—	2	282	121	79
Italy	2	355	171	87	2	206	93	78
Lebanon	3	355	57	56	3	281	79	63
Netherlands	—	—	—	—	2	272	75	64
Norway	2	354	123	76	2	272	82	68
Portugal	2	353	89	69	—	—	—	—
Russian Federation	2	354	178	90	2	283	158	90
Slovenia	2	355	55	56	2	272	54	53
Sweden	2	351	180	90	2	268	114	79
United States	10	350	146	86	—	—	—	—