

How Have We Done?

PISA Results from 2000, 2003, and
2006

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PISA Basics

- What it assesses:
 - Reading literacy
 - Mathematics literacy
 - Science literacy
- Whom it assesses: 15-year-old students
- How often: Every 3 years
- Areas of emphasis:
 - All 3 subjects assessed every cycle, but one subject is analyzed in depth
 - PISA 2009 will focus on reading literacy

Ways We Analyze PISA Results

- Average scores (scale of 0 to 1000)
 - OECD average
 - Subscales
 - Student characteristics: Sex and race/ethnicity
- Proficiency levels
 - Percent of students performing within score cutpoints
- Percentiles
 - Distribution of scores within countries
 - Cutpoint scores defining 90th and 10th percentiles
- Trends
 - Change in score between assessments

PISA 2000 Reading Literacy Results: Scores

Data for 42 jurisdictions (27 OECD and 15 non-OECD)

- US not measurably different from OECD average
- US scored below 9 jurisdictions
- US scored above 22 jurisdictions

<input checked="" type="checkbox"/>	Higher than US score
<input type="checkbox"/>	Not different from US score
<input type="checkbox"/>	Lower than US score

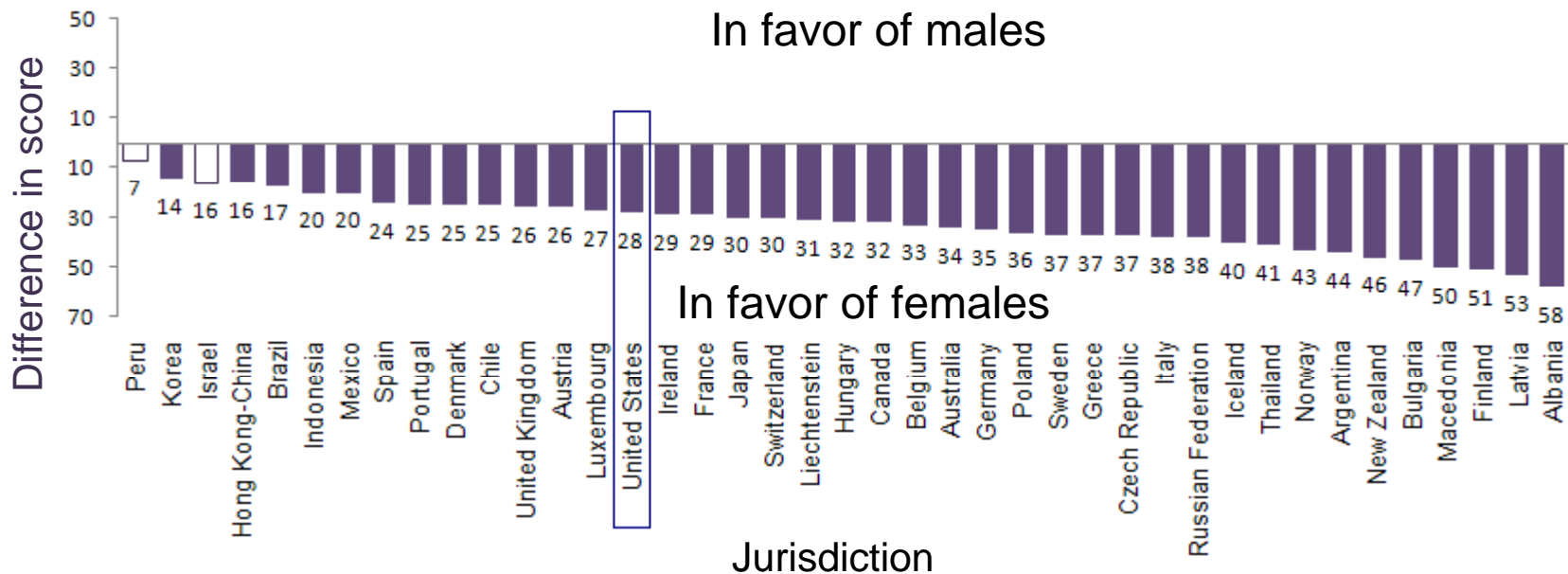
OECD Jurisdictions

Jurisdiction	Score
OECD average	500
<i>OECD jurisdictions</i>	
Finland	546
Canada	534
New Zealand	529
Australia	528
Ireland	527
Korea	525
United Kingdom	523
Japan	522
Sweden	516
Austria	507
Belgium	507
Iceland	507
Norway	505
France	505
United States	504
Denmark	497
Switzerland	494
Spain	493
Czech Republic	492
Italy	487
Germany	484
Hungary	480
Poland	479
Greece	474
Portugal	470
Luxembourg	441
Mexico	422

Non-OECD Jurisdictions

Jurisdiction	Score
Hong Kong-China	525
Liechtenstein	483
Russian Federation	462
Latvia	458
Israel	452
Thailand	431
Bulgaria	430
Romania	428
Argentina	418
Chile	410
Brazil	396
Macedonia, FYR	373
Indonesia	371
Albania	349
Peru	327

PISA 2000 Reading Literacy Results: Differences in Score by Sex



Difference is significant at .05 level
 Difference is not significant at .05 level

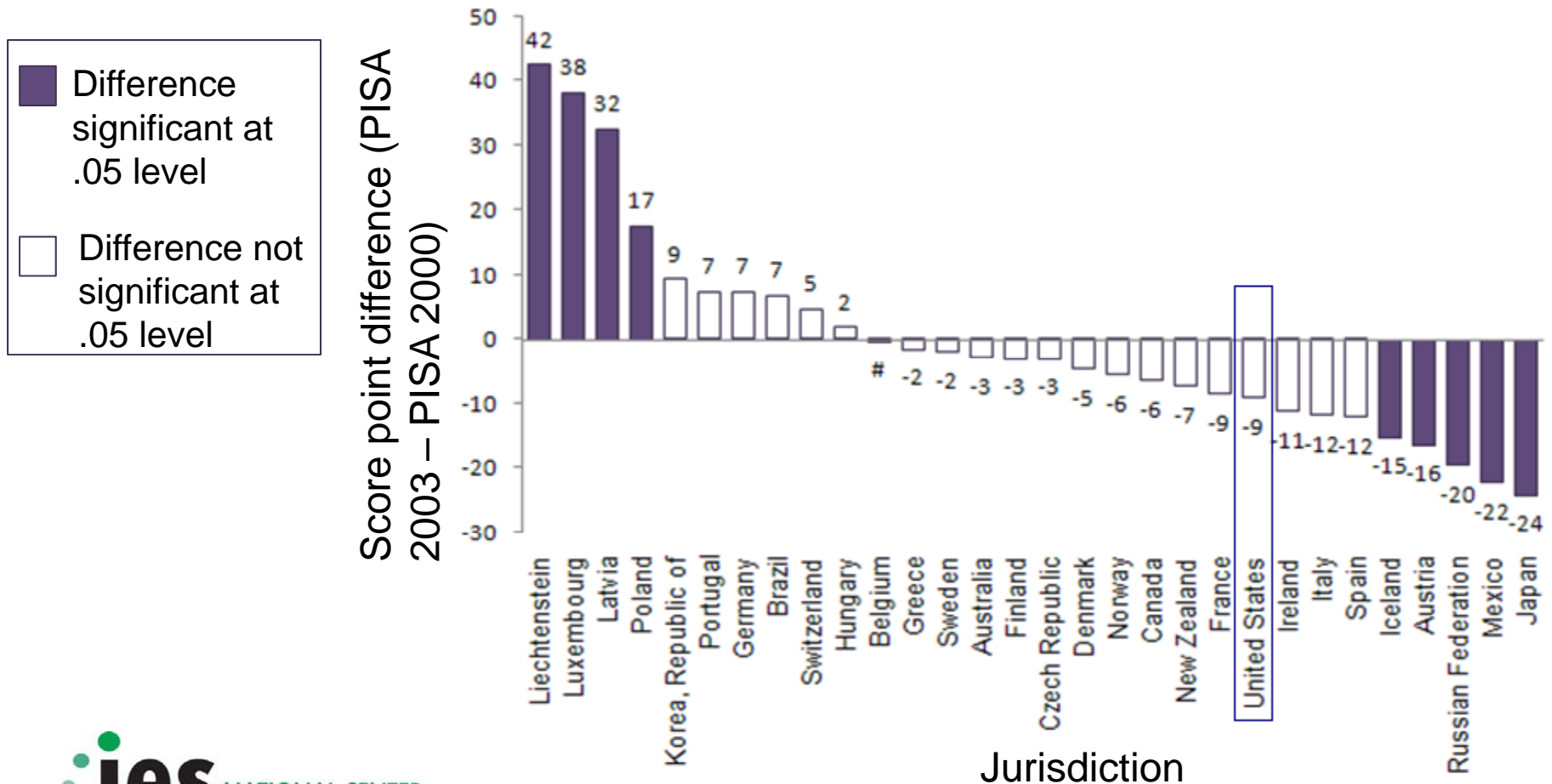
Females outperformed males in every jurisdiction except for Israel and Peru

PISA 2000 Reading Literacy Results: Proficiency Levels

- ❑ Level 1 or below (lowest level)
 - ❑ US: 18% of 15-year-olds performed at this level
 - ❑ OECD average: 18%; not different from US percentage

- ❑ Level 5 (highest level)
 - ❑ US: 12% of 15-year-olds
 - ❑ OECD average: 9%; lower than US percentage

Reading Literacy Trends: Change in Score between PISA 2000 and PISA 2003



Rounds to zero.

PISA 2003 Mathematics Literacy Results: Scores

Data for 40 jurisdictions (29 OECD and 11 non-OECD)

- US scored below OECD average
- US scored below 23 jurisdictions
- US scored above 12 jurisdictions

<input type="checkbox"/>	Higher than US score
<input type="checkbox"/>	Not different from US score
<input type="checkbox"/>	Lower than US score

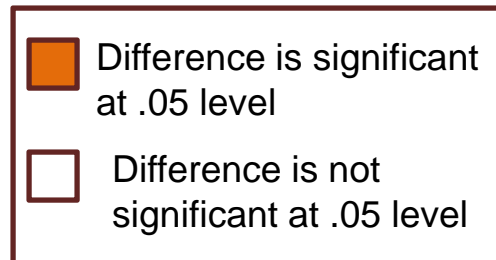
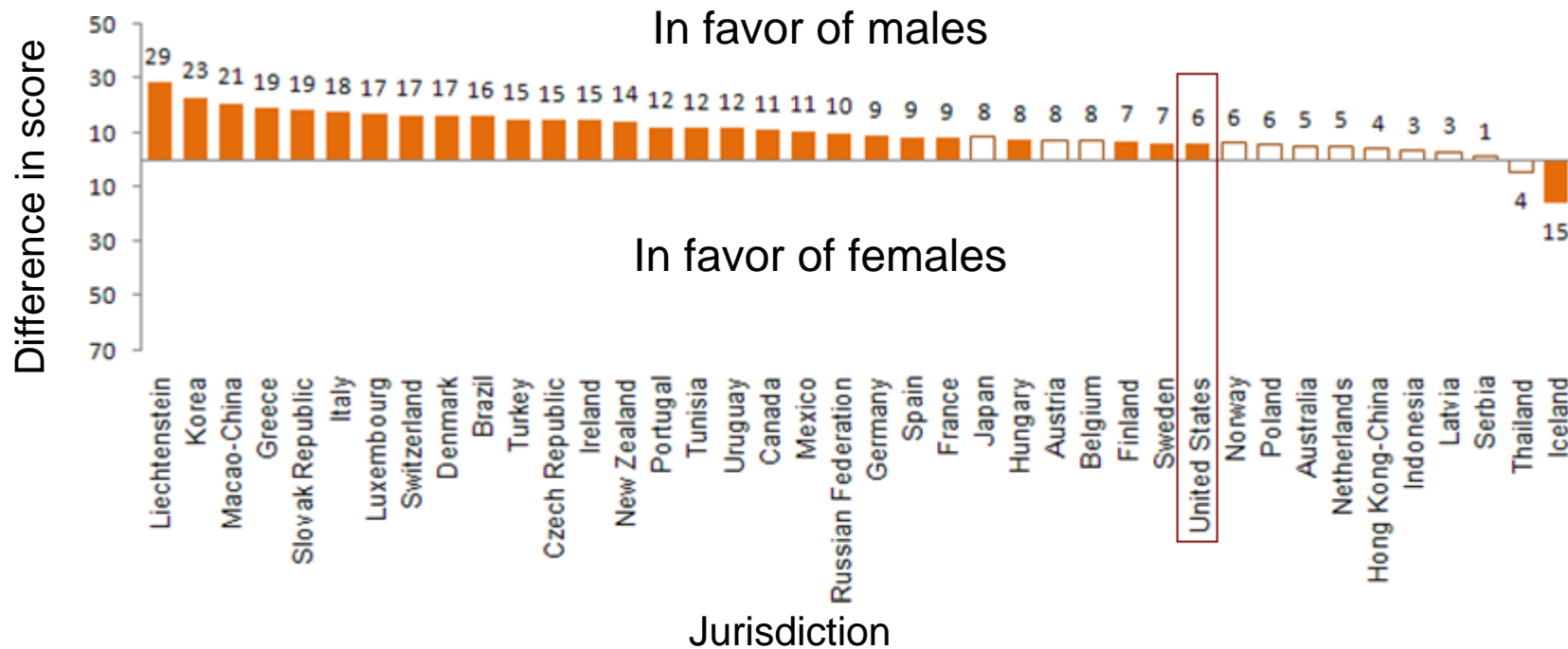
OECD Jurisdictions

Jurisdiction	Score
OECD average	500
<i>OECD jurisdictions</i>	
Finland	544
Korea	542
Netherlands	538
Japan	534
Canada	532
Belgium	529
Switzerland	527
Australia	524
New Zealand	523
Czech Republic	516
Iceland	515
Denmark	514
France	511
Sweden	509
Austria	506
Germany	503
Ireland	503
Slovak Republic	498
Norway	495
Luxembourg	493
Poland	490
Hungary	490
Spain	485
United States	483
Portugal	466
Italy	466
Greece	445
Turkey	423
Mexico	385

Non-OECD Jurisdictions

Jurisdiction	Score
Hong Kong-China	550
Liechtenstein	536
Macao-China	527
Latvia	483
Russian Federation	468
Serbia	437
Uruguay	422
Thailand	417
Indonesia	360
Tunisia	359
Brazil	356

PISA 2003 Mathematics Literacy Results: Difference in Score by Sex

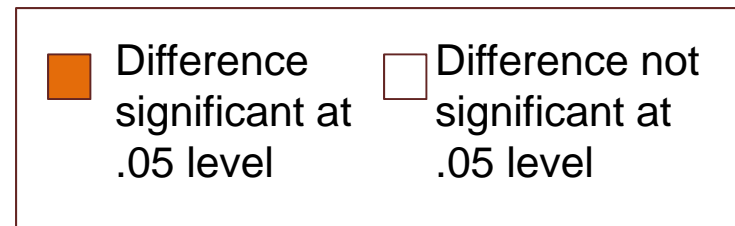
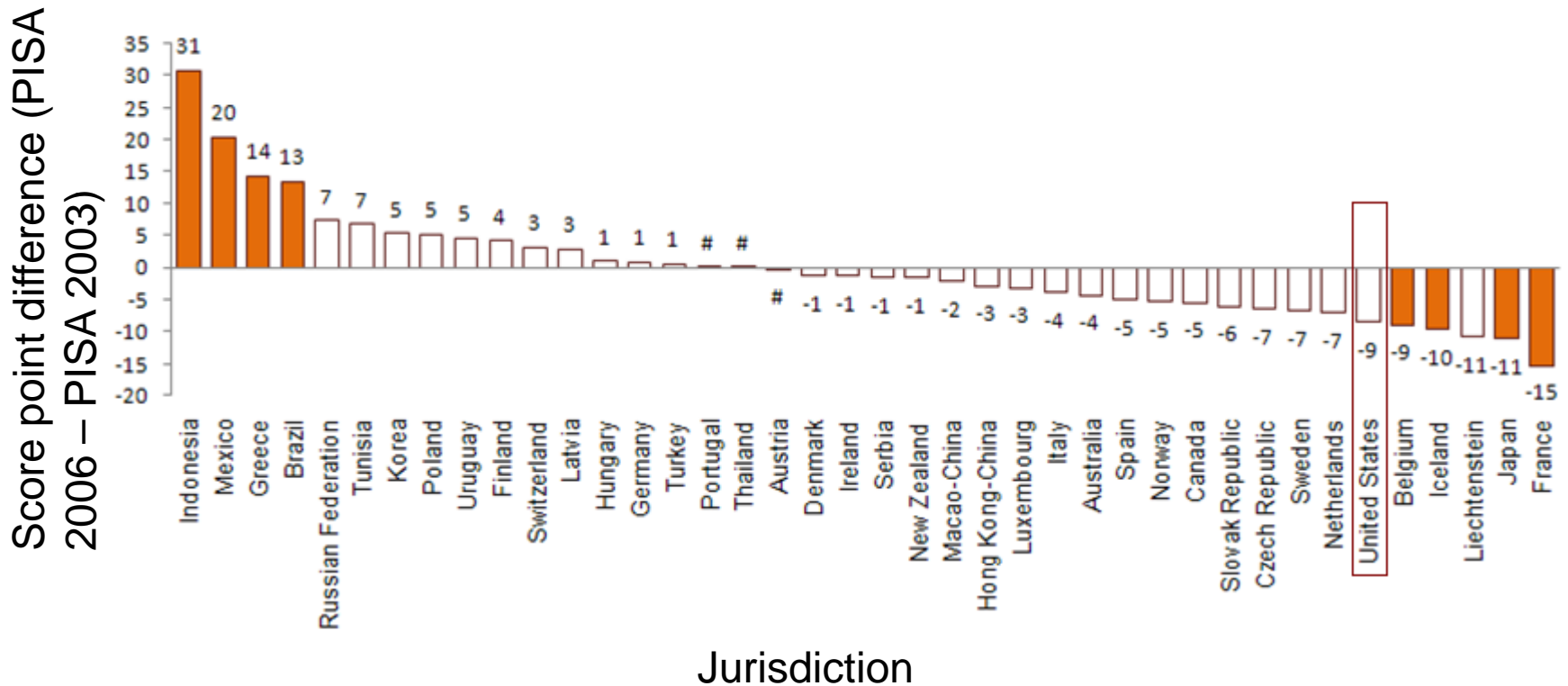


- ☐ Males outperformed females in 27 jurisdictions
- ☐ Females outperformed males in Iceland

PISA 2003 Mathematics Literacy Results: Proficiency Levels

- ❑ Level 1 or below (lowest level)
 - ❑ US: 26% of 15-year-olds performed at this level
 - ❑ OECD average: 21%; lower than US percentage
- ❑ Level 6 (highest level)
 - ❑ US: 2% of 15-year-olds
 - ❑ OECD average: 4%; higher than US percentage

Mathematics Literacy Trends: Change in Score between PISA 2003 and PISA 2006



PISA 2006 Science Literacy Results: Scores

Data for 57 jurisdictions (30 OECD and 27 non-OECD)

- US scored below OECD average
- US scored below 22 jurisdictions
- US scored above 22 jurisdictions

 Higher than US score
 Not different from US score
 Lower than US score

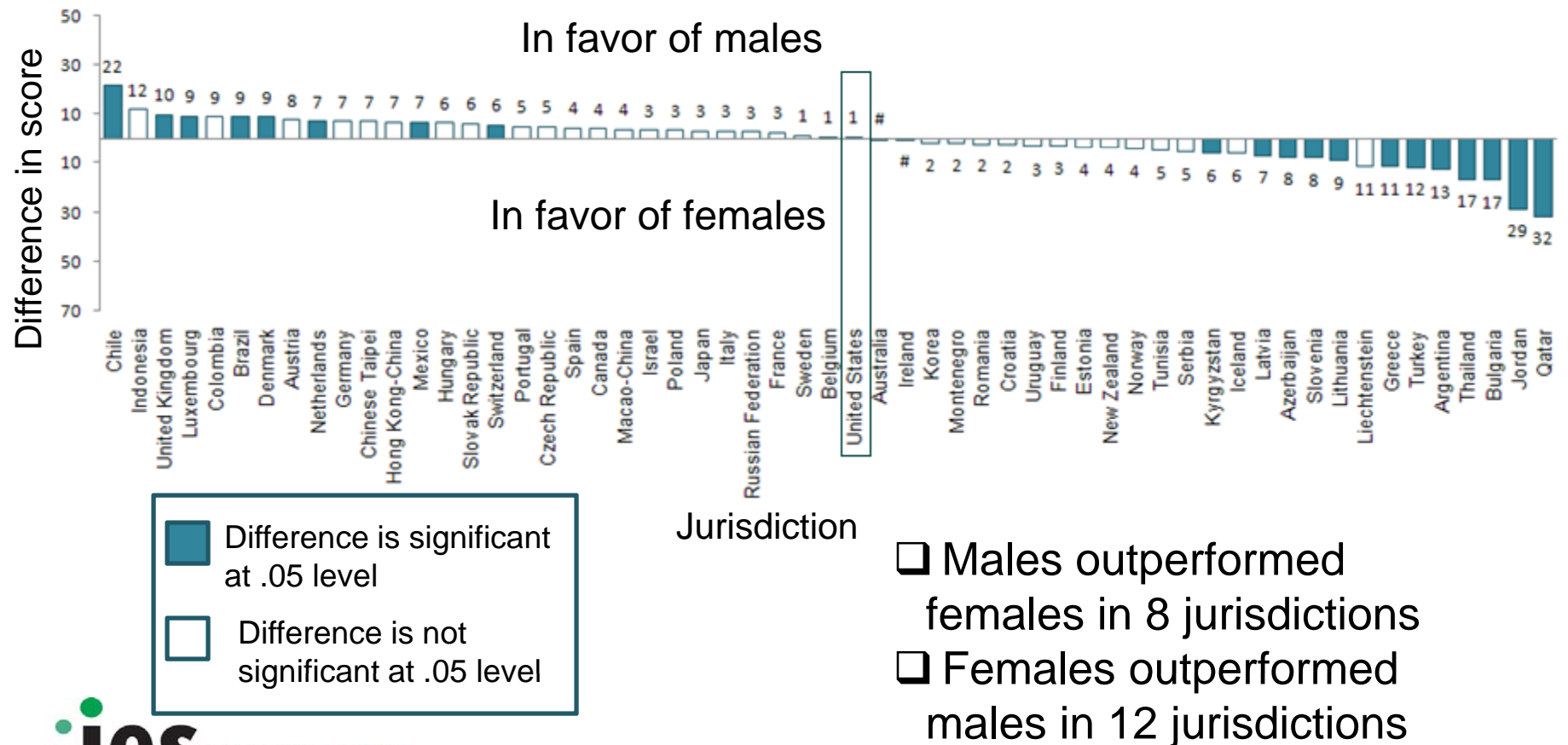
OECD Jurisdictions

Jurisdiction	Score
OECD average	500
<i>OECD jurisdictions</i>	
Finland	563
Canada	534
Japan	531
New Zealand	530
Australia	527
Netherlands	525
Korea	522
Germany	516
United Kingdom	515
Czech Republic	513
Switzerland	512
Austria	511
Belgium	510
Ireland	508
Hungary	504
Sweden	503
Poland	498
Denmark	496
France	495
Iceland	491
United States	489
Slovak Republic	488
Spain	488
Norway	487
Luxembourg	486
Italy	475
Portugal	474
Greece	473
Turkey	424
Mexico	410

Non-OECD Jurisdictions

Jurisdiction	Score
Hong Kong-China	542
Chinese Taipei	532
Estonia	531
Liechtenstein	522
Slovenia	519
Macao-China	511
Croatia	493
Latvia	490
Lithuania	488
Russian Federation	479
Israel	454
Chile	438
Serbia	436
Bulgaria	434
Uruguay	428
Jordan	422
Thailand	421
Romania	418
Montenegro	412
Indonesia	393
Argentina	391
Brazil	390
Colombia	388
Tunisia	386
Azerbaijan	382
Qatar	349
Kyrgyzstan	322

PISA 2006 Science Literacy Results: Difference in Score by Sex



PISA 2006 Science Literacy Results: Proficiency Levels

- Level 1 or below (lowest level)
 - US: 25% of 15-year-olds performed at this level
 - OECD average: 19%; lower than US percentage

- Level 6 (highest level)
 - US: 2% of 15-year-olds
 - OECD average: 1%; not measurably different from US percentage

Science Literacy Trends

- Science literacy framework altered for PISA 2006, so results cannot be compared with past assessments.
- PISA 2009 will be comparable with PISA 2006.

Questions?

For more details see:

US PISA reports at <http://nces.ed.gov/surveys/pisa/>

OECD PISA reports at <http://www.pisa.oecd.org>