C5- Distribution of gestational age

Euro-Peristat Meeting

Rolduc Abbey, the Netherlands

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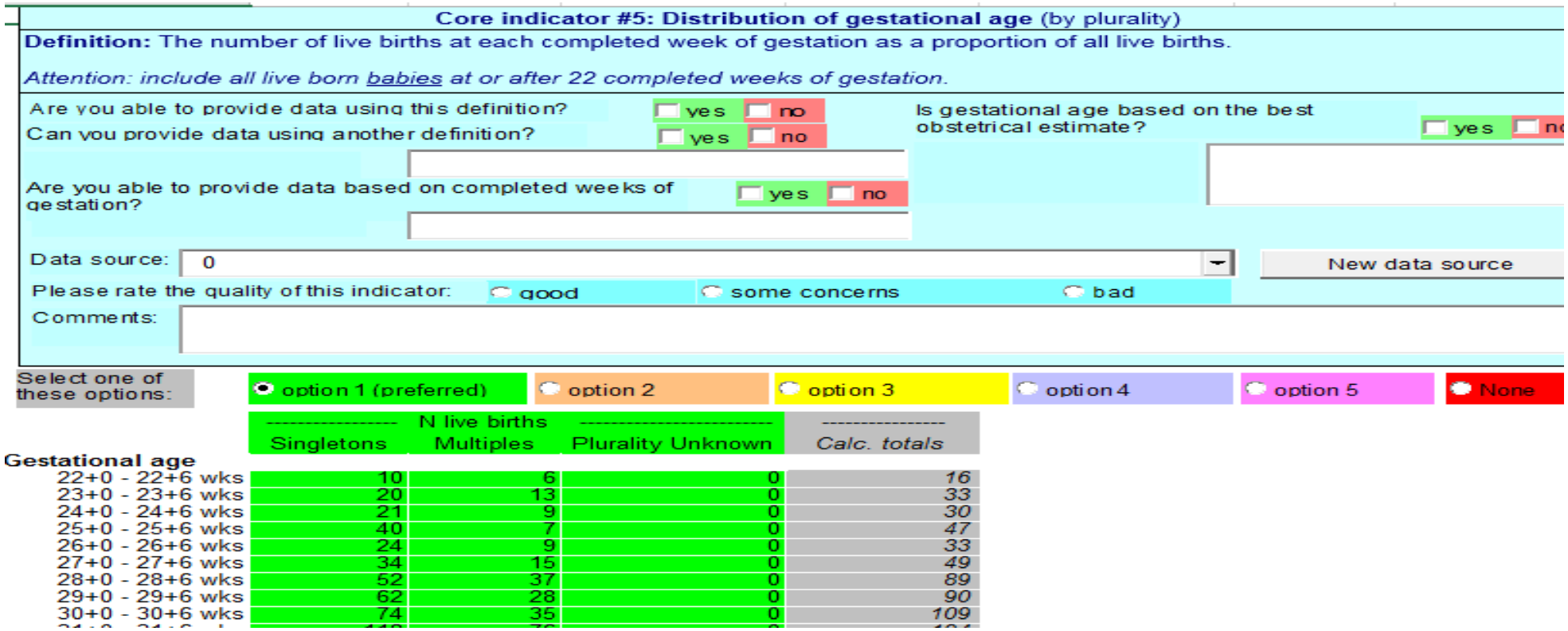
Definition and importance

- GA is an essential indicator of perinatal health but is still not currently included in international data sets.
- Number of live births and fetal deaths at each completed week of gestation (starting from 22 weeks) by vital status and plurality.
- Babies born at the extremes of gestation, <32 weeks are the most vulnerable.
- Preterm births <37 completed weeks of gestation face higher risks of mortality, morbidity compared to infants born at term 37+ weeks.
- Babies born early term at 37-38 weeks are exposed to higher risks vs. infants born full term at 39+ weeks. Need to benchmark prevention efforts for early term births in Europe.

Availability

- This indicator is available in most European countries.
  - Total births: 30/31 countries
  - By plurality: 29/31 countries
- All countries could provide data based on « Option 1 », of which 16 provided individual-level data on GA.



Core indicator #5: Distribution of gestational age (by plurality)

Definition: The number of live births at each completed week of gestation as a proportion of all live births.

Attention: include all live born babies at or after 22 completed weeks of gestation.

Are you able to provide data using this definition? yes no

Can you provide data using another definition? yes no

Are you able to provide data based on completed weeks of gestation? yes no

Is gestational age based on the best obstetrical estimate? yes

Data source: 0 — New data source

Please rate the quality of this indicator: good some concerns bad

Comments:

Select one of these options: option 1 (preferred) | option 2 | option 3 | option 4 | option 5 | None

Gestational age	N live births Singletons	Multiples	Plurality Unknown	*Calc. totals*
22+0 - 22+6 wks	10	6	0	*16*
23+0 - 23+6 wks	20	13	0	*33*
24+0 - 24+6 wks	21	9	0	*30*
25+0 - 25+6 wks	40	7	0	*47*
26+0 - 26+6 wks	24	9	0	*33*
27+0 - 27+6 wks	34	15	0	*49*
28+0 - 28+6 wks	52	37	0	*89*
29+0 - 29+6 wks	62	28	0	*90*
30+0 - 30+6 wks	74	35	0	*109*

Quality questions

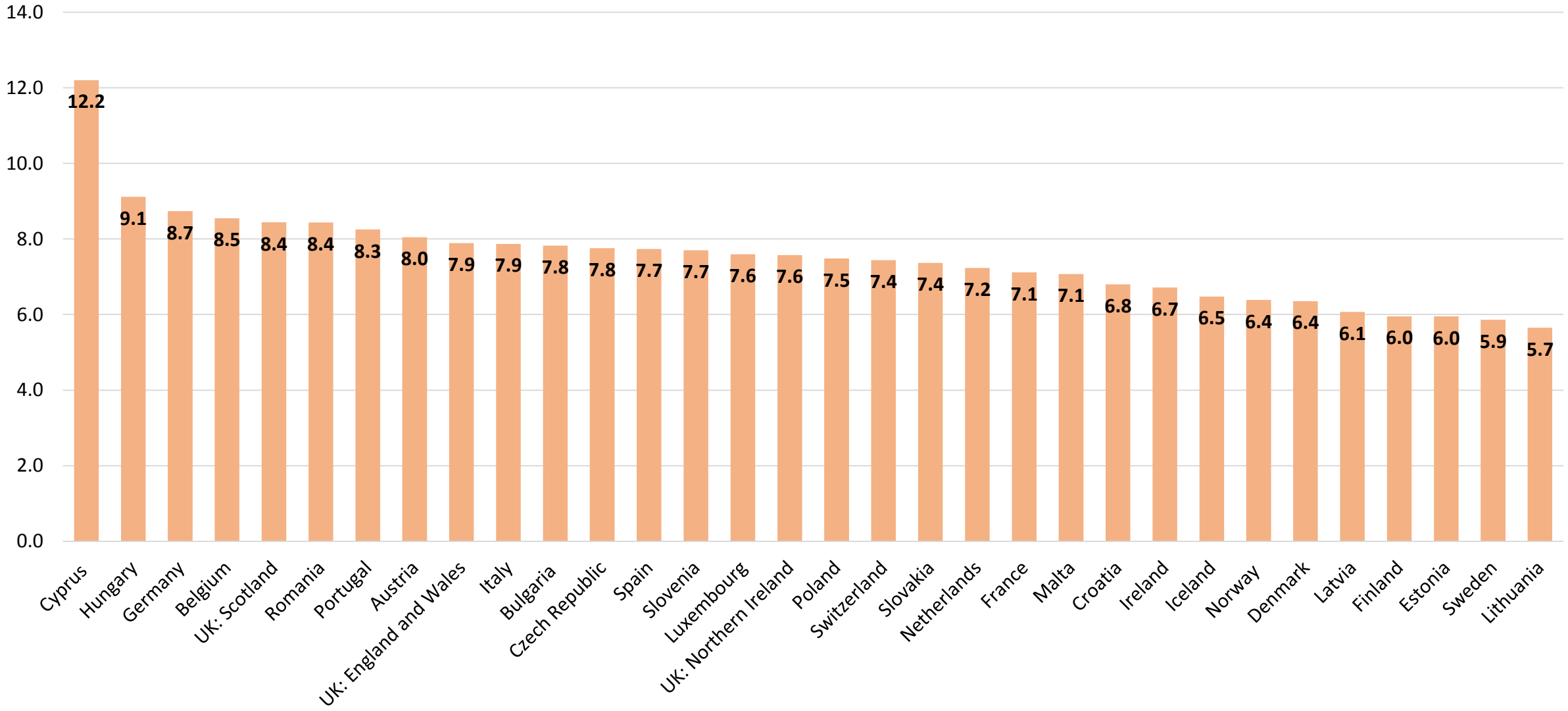
- Issues to consider:
  - EURO-PERISTAT requests data on GA based on the “best obstetrical estimate”.
  - The GA estimation method can influence the reported distribution
  - For very preterm births, we know that registration criteria for births and deaths can also have an impact on country rates and rankings.

General Obstetrics | Free Access

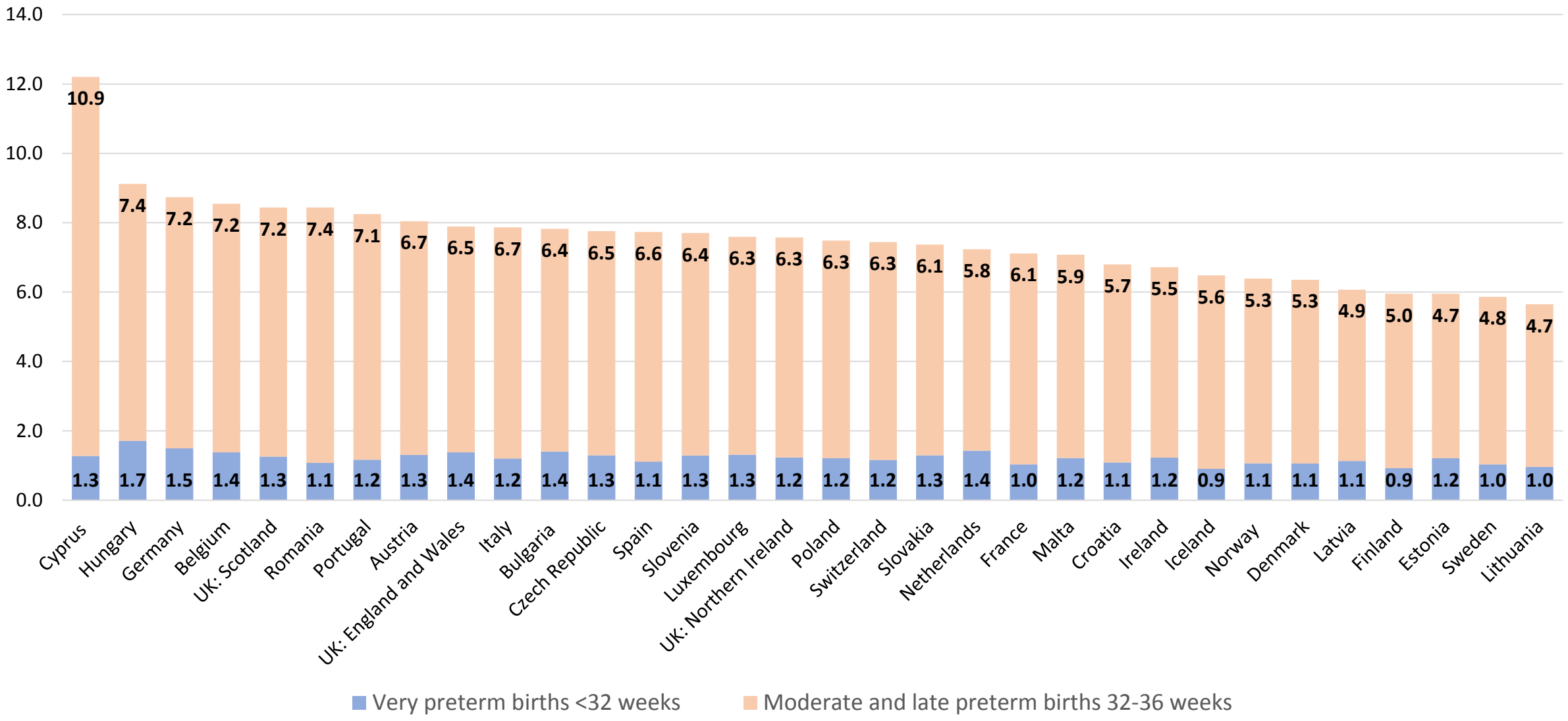
Variations in very preterm birth rates in 30 high-income countries: are valid international comparisons possible using routine data?

M Delnord, AD Hindori-Mohangoo, LK Smith, K Szamotulska, JL Richards, P Deb-Rinker, J Rouleau, P Velebil, I Zile, L Sakkeus, M Gissler, N Morisaki, SM Dolan, MR Kramer, ... See all authors

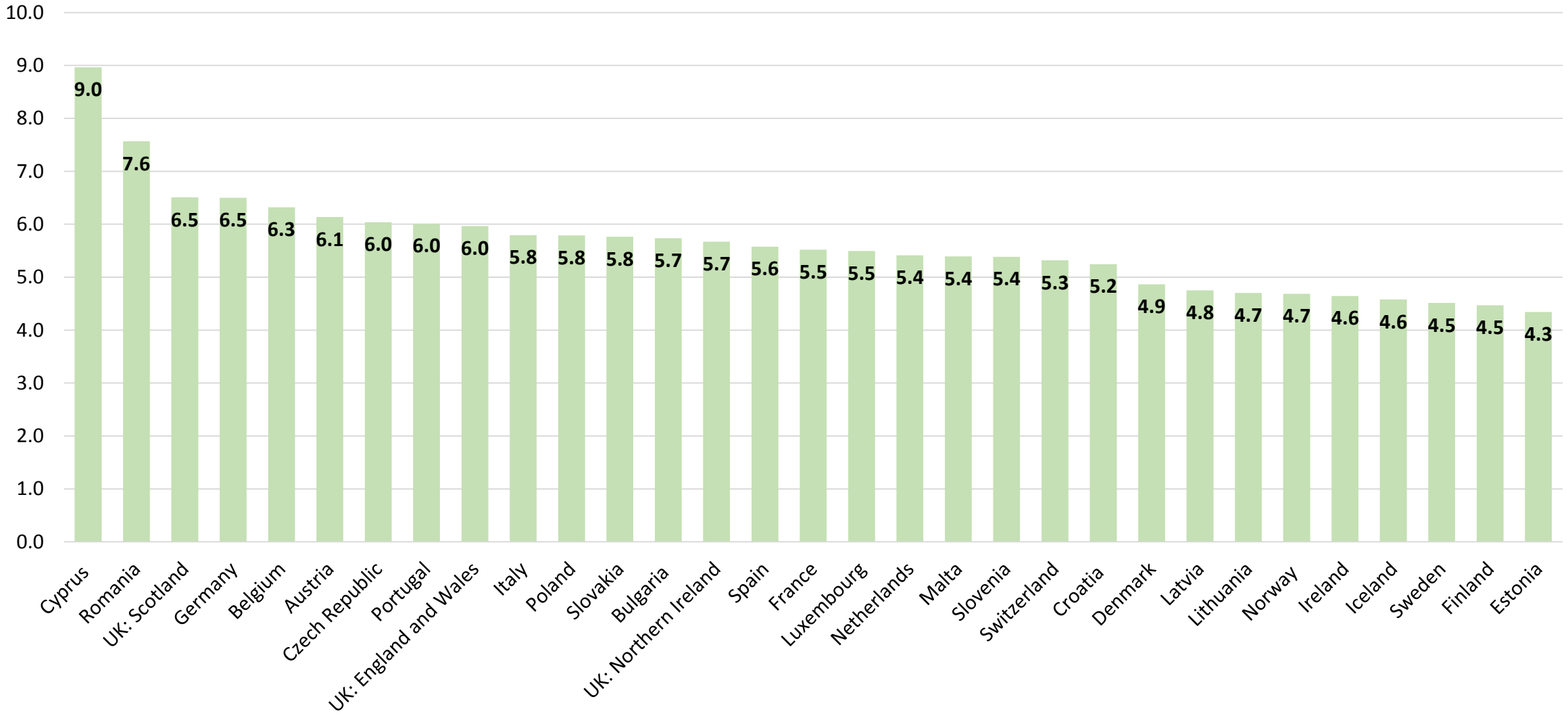
% Preterm births <37 weeks among all births in 2015



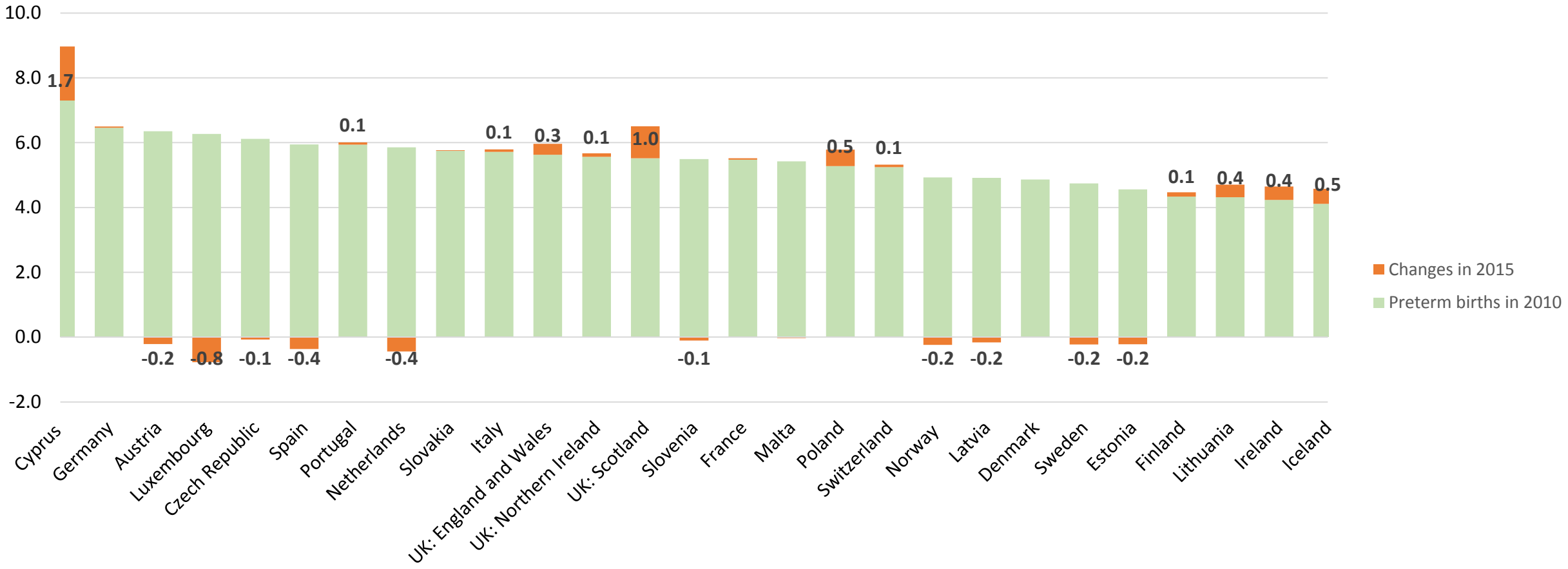
% Preterm births by GA subgroups: <32 weeks, 32-36 weeks in 2015



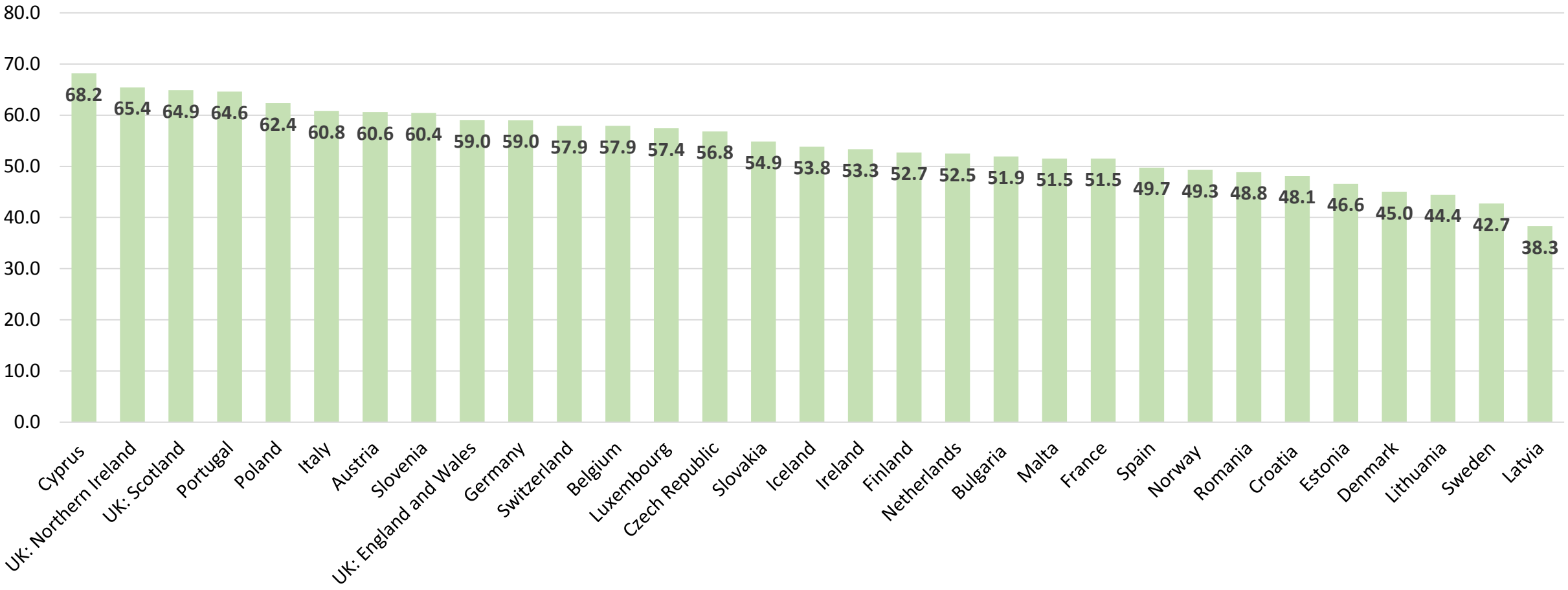
% Live singleton preterm births in 2015



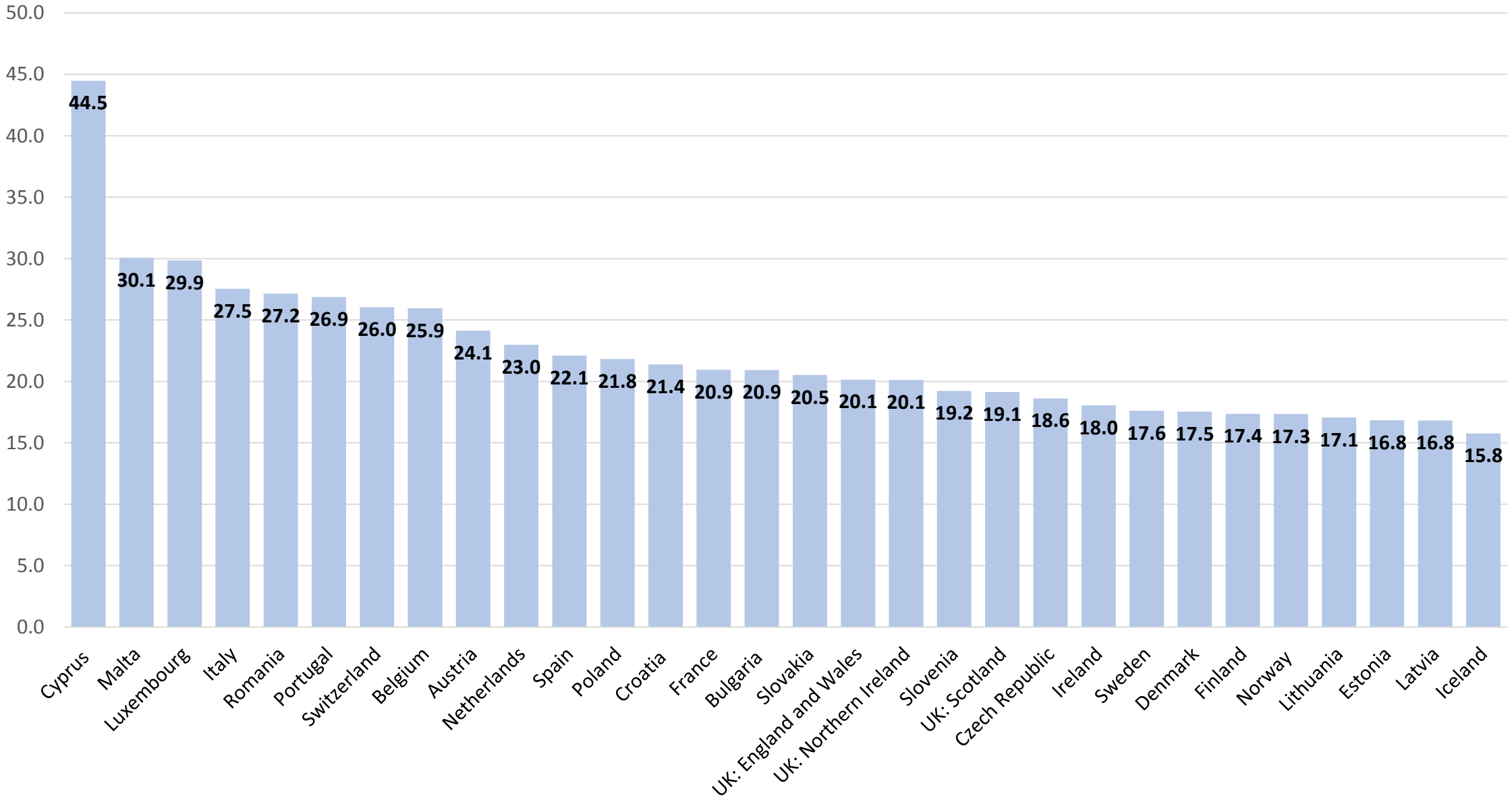
Changes in live singleton preterm birth rates since 2010



% Live multiple births <37 weeks in 2015



Live singleton early term births in 2015



Summary of findings

- Gestational age data are available almost everywhere.
- There are wide differences in the GA distribution of births across countries overall and by sugbgroups.
- Key messages
  - Preterm births varied between 6-12% of all births
  - Live singleton preterm 4-9.0%
  - Live multiple births varied between 38-68%
  - Live early term singleton births varied between 16-45%
  - Heterogenous trends in preterm, early term birth rates raise questions about policies and practices associated with these trends
  - Next steps to finalize work on this indicator -> links with C10 in countries that provided MVAT.