

Developments of skills over time

- Adult literacy skills in the Nordic countries over two decades

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Nordic seminar on basic skills, 17 November 2016,
Eigtveds Pakhus, Copenhagen

From IALS to PIAAC

Prior to PIAAC OECD countries conducted two assessments of adult skills:

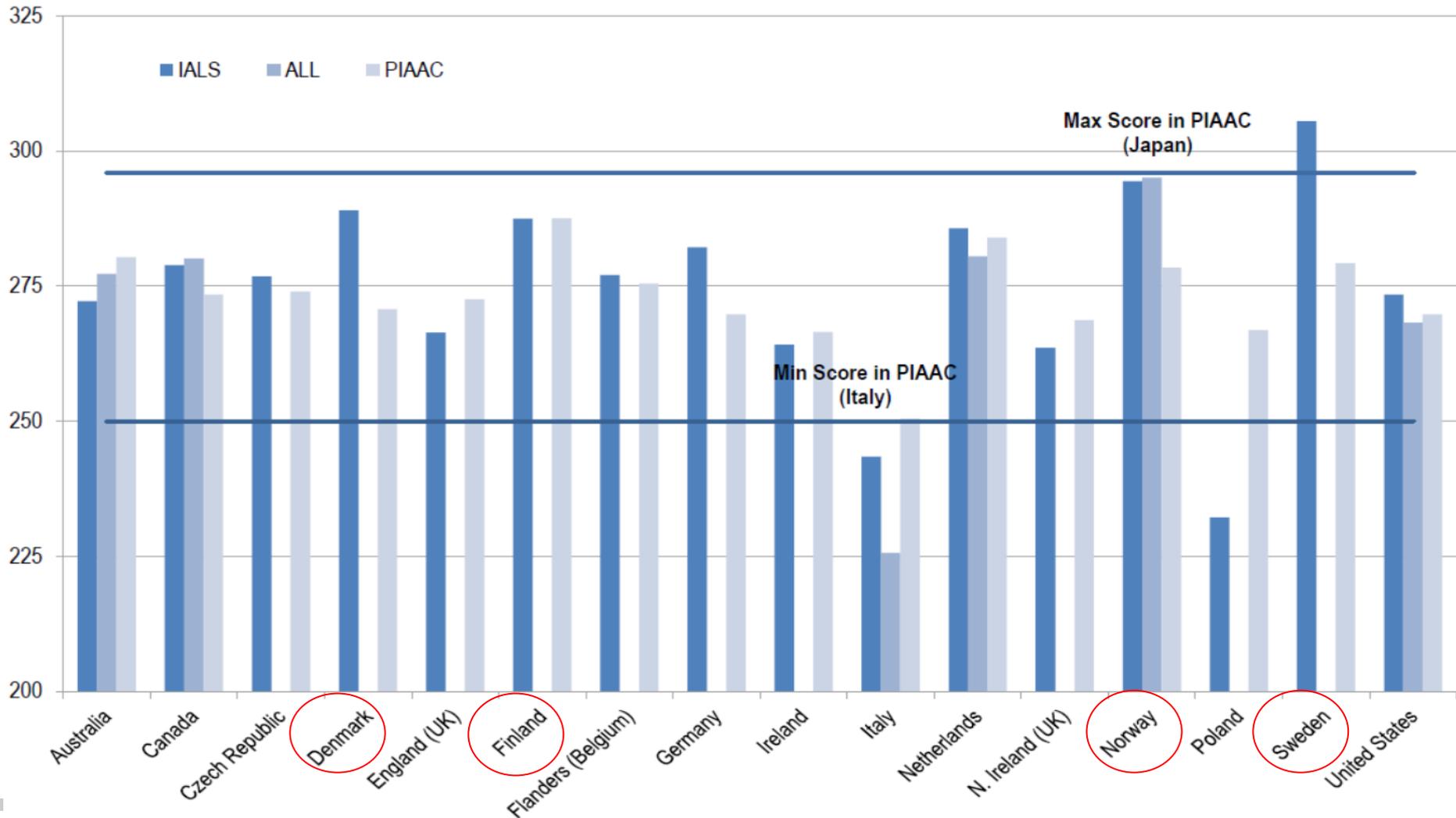
Adult Literacy Survey IALS 1994 – 1998

Adult Literacy and Life Skills Survey ALL 2003 – 2007

Survey of Adult Skills PIAAC 2012

PIAAC was designed to be linked psychometrically with IALS and ALL in literacy and with ALL in numeracy

Literacy proficiency in IALS, ALL and PIAAC



Putting the Nordic developments in perspective

Country	IALS: score (rank)	PIAAC: score (rank)	diff: score (s.e)
<i>Sweden</i>	305.5 (1)	279.2 (4)	-26.3 (1,2)
<i>Norway</i>	294.4 (2)	278.4 (5)	-16.0 (1.3)
<i>Denmark</i>	289.1 (3)	270.8 (10)	-18.3 (1.0)
<i>Finland</i>	287.4 (4)	287.5 (1)	0.1 (1.1)
Netherlands	285.8 (5)	284.0 (2)	-1.8 (1.2)
Germany	282.6 (6)	269.8 (11)	-12.4 (1.4)
Canada	278.9 (7)	273.5 (8)	-5.4 (2.7)
Belgium (Flanders)	277.1 (8)	275.5 (6)	-1.6 (3.5)
Czech Republic	276.8 (9)	274.0 (7)	-2.8 (1.4)
USA	273.5 (10)	269.8 (12)	-3.7 (1.7)
Australia	272.3 (11)	280.4 (3)	8.1 (1.4)
UK (England,N Ireland)	266.5 (12)	272.5 (9)	6.0 (2.0)
Ireland	264.2 (13)	266.5 (14)	2.3 (3.3)
Italy	243.5 (14)	250.5 (15)	7.0 (2.1)
Poland	232.2 (15)	266.9 (13)	34.7 (1.2)

Our Approach

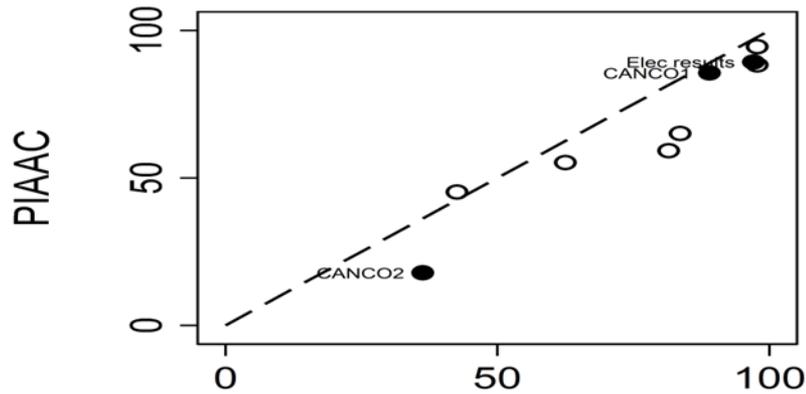
- To see if comparability issues are important, we check whether the overall changes in results from IALS to PIAAC are corroborated by the results on 9 items that were present in both IALS and PIAAC.
- We measure the outcomes on the 9 common items in the simplest possible way, as proportions of correct answers. This allows us to avoid technical measurement issues and, yet, capture proficiency; cf. Blum et al. (2001).
- To see if changes in population composition matters, we relate the changes in the proportions of correct answers to changes in demographics and education that appear to matter for the overall IALS → PIAAC changes.

Short descriptions of the 9 common items

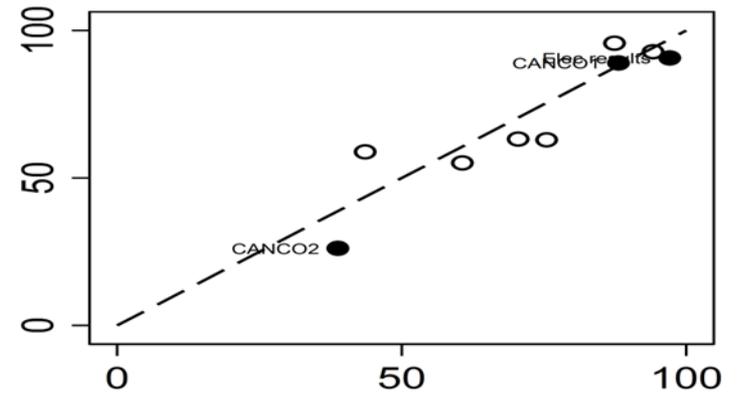
- ***Election results***: results from election of a person for a commission of trust; pick winner (very low difficulty)
- *Medco1-2*: make use of information about aspirin; use, dosage, side effects (low and medium difficulty)
- *Dutch women*: text on female teachers in Netherlands + figure showing female teacher shares in 10 countries; find the share in Greece (low/medium difficulty)
- ***CANCO1-2***: make use of information about labor market services offered by a firm (medium and very high difficulty)
- *Contact employer 1-2*: make use information about how to reply to job ad (medium and high difficulty)
- *Distance Mexican cities*: a table shows distances between six cities; pick the one closest to Guadalajara (high difficulty)

Shares of correct answers on common items

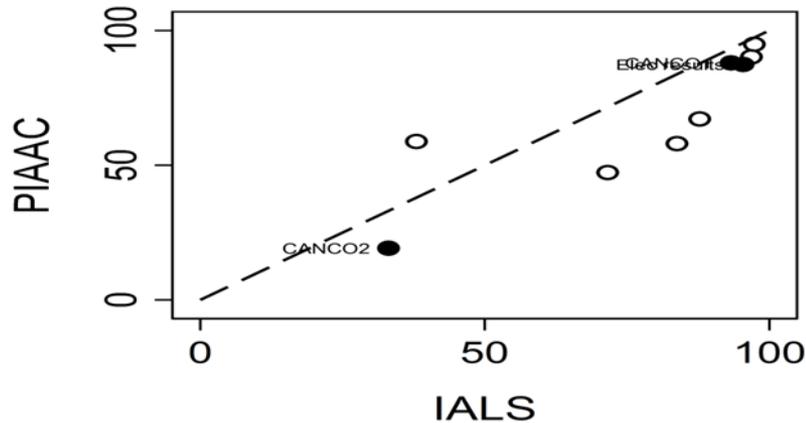
Denmark



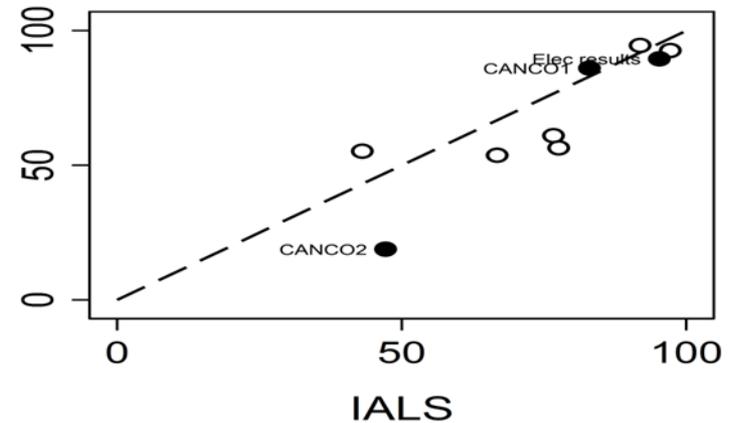
Finland



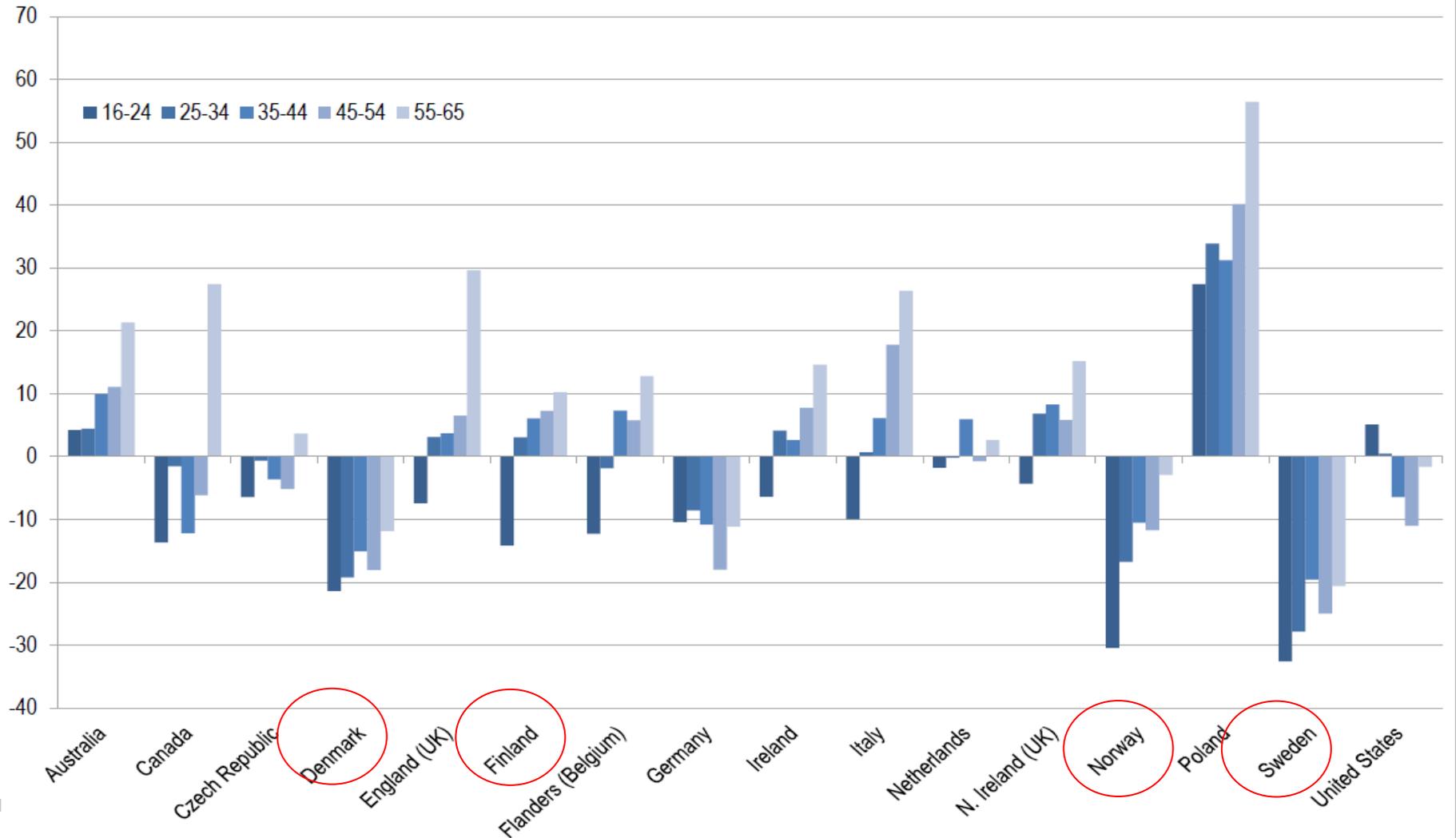
Norway



Sweden



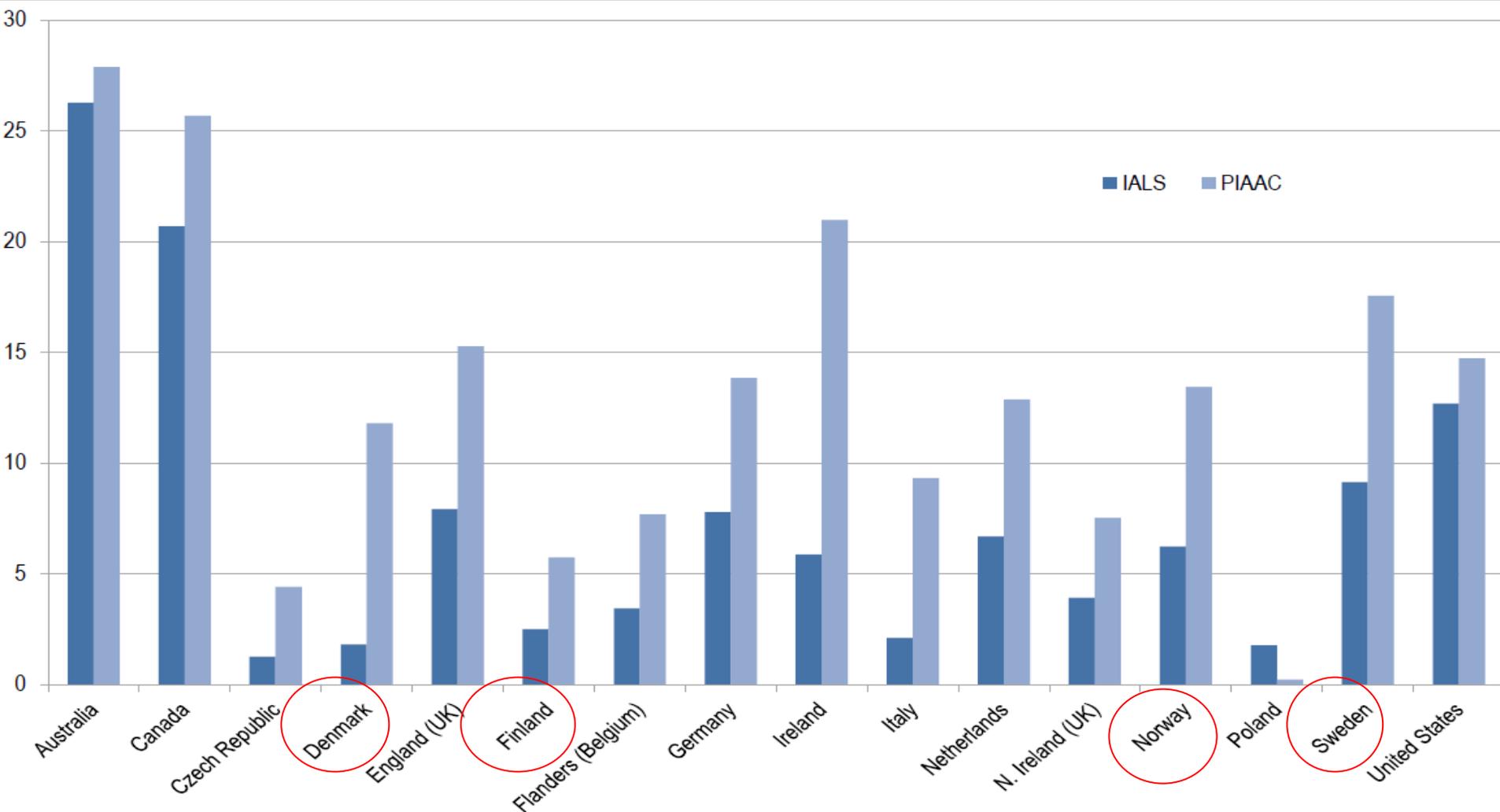
Literacy proficiency in IALS and PIAAC, by age



Nordic observations regarding literacy proficiency in IALS and PIAAC, by age

- In Finland literacy proficiency increased in all age groups except among 16-24 year olds.
- In Denmark, Norway, and Sweden proficiency *decreased in all age groups.*

Share of foreign-born in IALS and PIAAC



Nordic observations regarding shares of foreign-born in IALS and PIAAC

- Denmark had the smallest share of foreign-born in IALS, below 2 %; Finland had the next to smallest, around 2.5 %.
- In PIAAC, Finland had, by far, the smallest share of foreign-born, just below 6 %. Denmark, Norway, and Sweden had 12, 13.5, and 17.5%, respectively.
- Denmark and Sweden witnessed the largest increases in the shares of foreign-born; more than 6-fold and 3-fold, respectively.

Explained in Denmark

	IALS 1998	PIAAC 2012	diff
All	289.0	270.8	-18.3
All born in country	289.3	275.2	-14.1
Age standardised /born in country	289.3	277.8	-11.6

Conclusions

- The analyses of the 9 common items corroborates the decreases in the overall literacy results for Denmark, Norway and Sweden, *and* the constant Finnish results.
- An (overly) simple regression analysis identifies one development over time that matters for the changes in the proportions of correct answers: the increase in immigration, which impacts negatively. This is consistent with the Finnish vs Danish, Norwegian and Swedish experiences; the Finnish immigration increase has been much smaller.
- Thus, above two findings indicate that the fall in literacy in Denmark, Norway and Sweden is for real, not an artefact.