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A Preliminary Evaluation of “Self-Declared” Terminal Dues

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What are “terminal dues”?

- International postal services are governed by the **Universal Postal Convention**.
- **Terminal dues (TDs)** are fees that postal operators charge each other for delivery of inbound international “letter post” — documents and goods less than 2 kg.
 - TDs are fixed at **specific linear rates** by the Convention: X per item + Y per kg.
- Normal TDs primarily affect **economically advanced countries** because —
 - TDs are below equivalent domestic postage for similar delivery services.
 - Most e-commerce goods are sent to economically advanced countries.
- Normal **TDs distort international e-commerce** —
 - Net exporting postal operators benefit at the expense of net importers.
 - Foreign online sellers benefit at the expense of domestic merchants.
 - Competition from non-postal carriers is restrained.

“Self-declared” terminal dues rates for E-format items

- **In 2018 the United States demanded reform of TDs for e-commerce goods —**
 - TDs for delivery of inbound goods should “fully reimburse for costs to the same extent as domestic rates for comparable services”.
 - TDs should not favor “foreign mailers over domestic mailers” or “postal operators over private-sector entities providing transportation services”.
- **In 2019 the UPU amended the UPU Convention to allow a compromise version of “self-declared rates” as an optional alternative to normal TDs for E-format items.**
 - E-format items: all goods and “bulky” documents in packages < 2 kg.
- **Basic premises of self-declared rates**
 - Countries should be able to set delivery rates for inbound e-commerce packages so that foreign and domestic mailers pay similar rates for similar services.
 - 70% of retail domestic postage is assumed to provide compensation for delivery of inbound mail that is equivalent to the delivery portion of domestic postage.

Countries adopting self-declared rates

The UPU assigns member countries to four Groups (I through IV) in descending order of economic and postal development.

- Group I: 28 economically advanced countries
 - 20 of 22 Group I countries with population > 1 mil. have adopted self-declared rates.
 - Exceptions: Israel and Spain .
- Groups II to IV: 162 developing countries
 - 18 countries tried with self-declared rates.
 - 13 countries apply self-declared rates in 2023.
- Countries in current study
 - “Group I*” — 20 Group I countries with pop. > 1 million applying self-declared rates in 2020-2023.

Group I* study countries

AU	Australia
AT	Austria
BE	Belgium
CA	Canada
DK	Denmark
FI	Finland
FR	France
DE	Germany
GR	Greece
IE	Ireland
IT	Italy
JP	Japan
NL	Netherlands
NZ	New Zealand
NO	Norway
PT	Portugal
SE	Sweden
CH	Switzerland
GB	United Kingdom
US	United States

Domestic postage is defined by weight steps

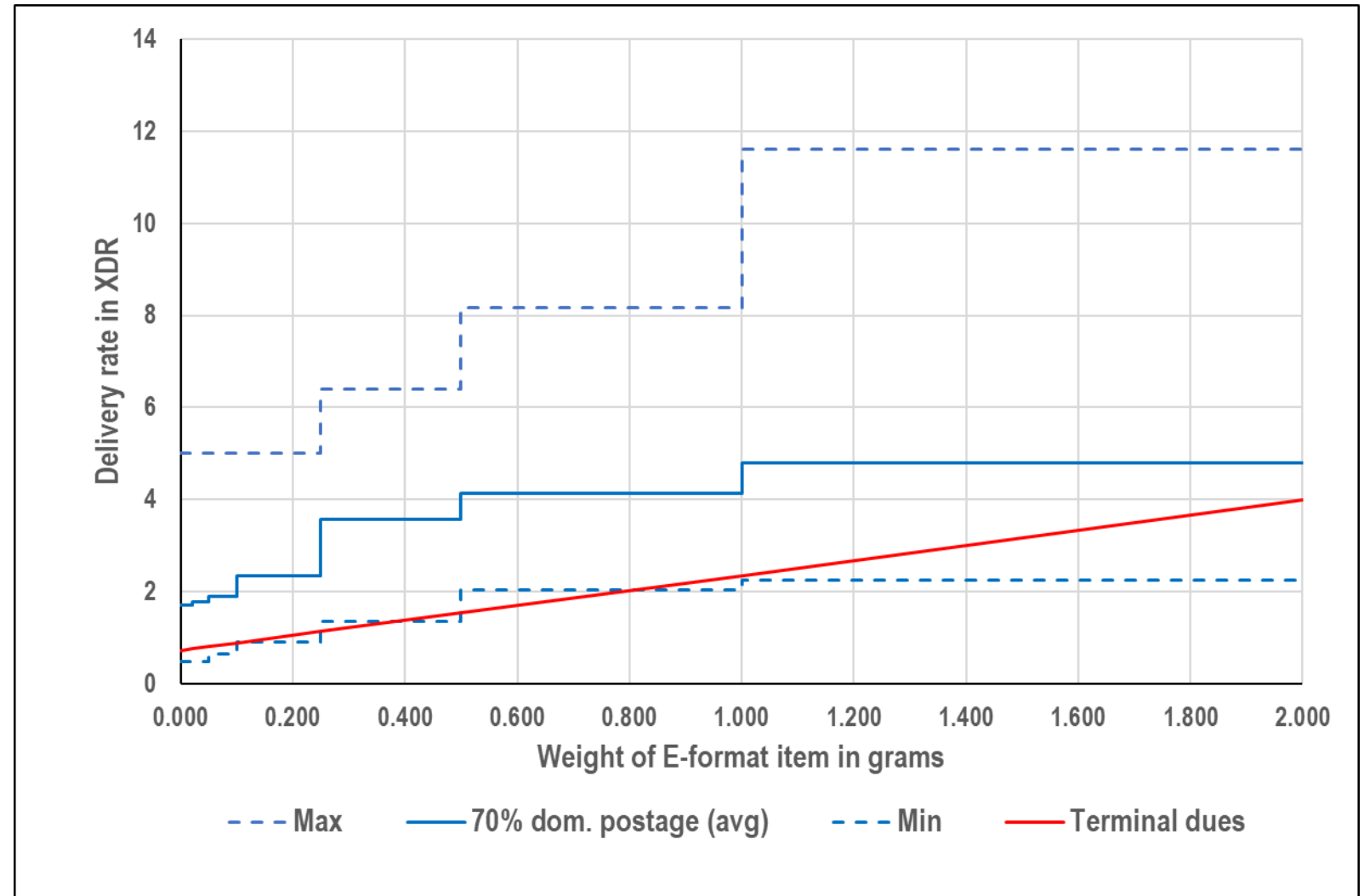
UPU uses 7 standard weight steps to define domestic postage

Approximate distribution
of E-format items
among domestic weight
steps, 2018

Items weighing more than (grams)	Items weighing up to (grams)	Average wt. of items in step (grams)	Percent of E-format items by volume	Percent of E-format items by weight
0	20	14	12%	1%
20	50	36	29%	8%
50	100	71	28%	16%
100	250	150	20%	24%
250	500	343	6%	17%
500	1000	700	3%	17%
1000	2000	1446	1%	16%

DP70E levels varied widely among Group I* countries in 2019

- Average, maximum, and minimum DP70E rates varied widely among Group I* countries in 2019, the year before full self-declared rates.
- Normal TDs for E-format items were substantially below DP70E in all weight steps in almost all countries.



UPU rules for self-declared rates

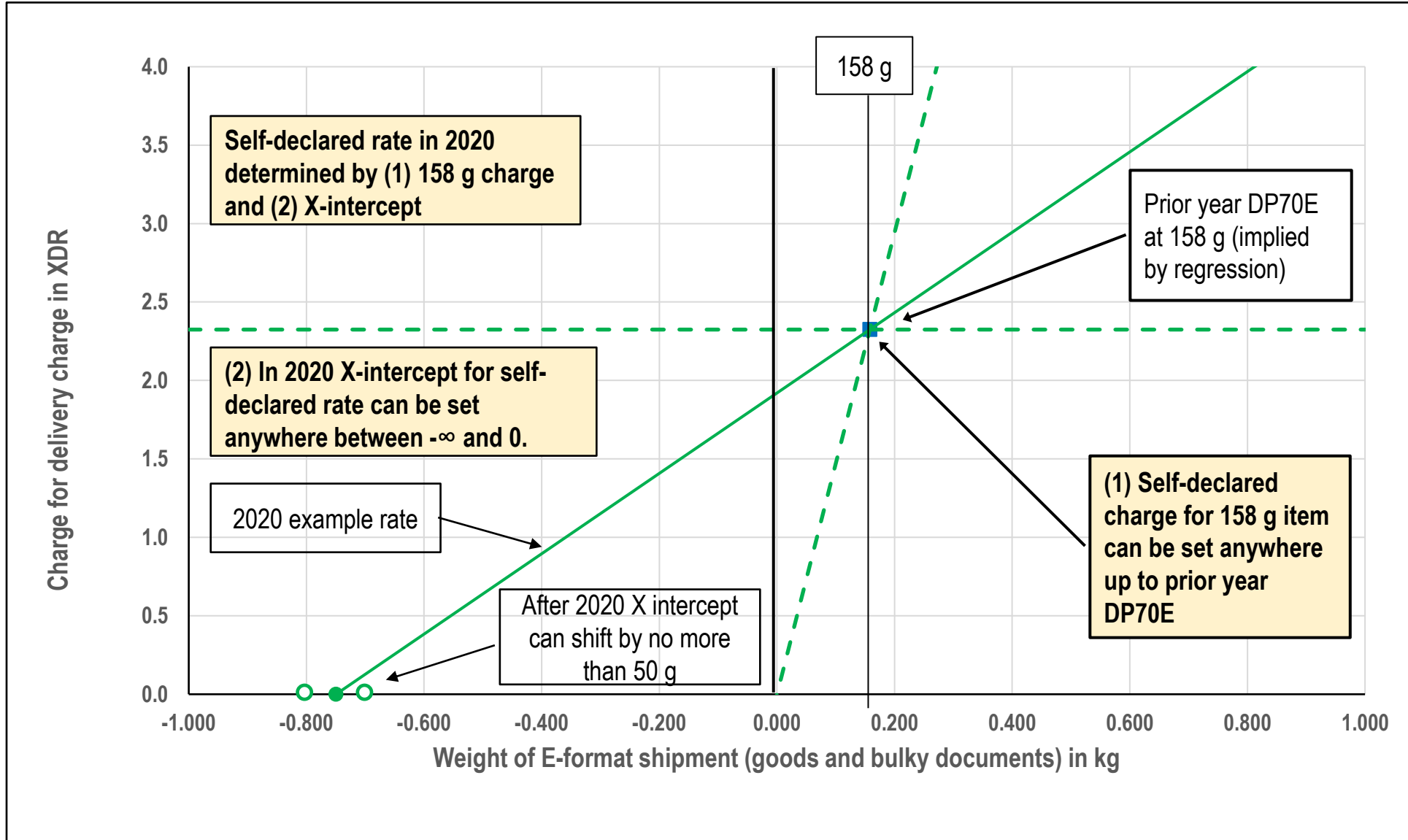
Two versions of self-declared rates: “full” and “limited”

Self-declared rates are linear rates (X per item + Y per kg) determined by fixing —

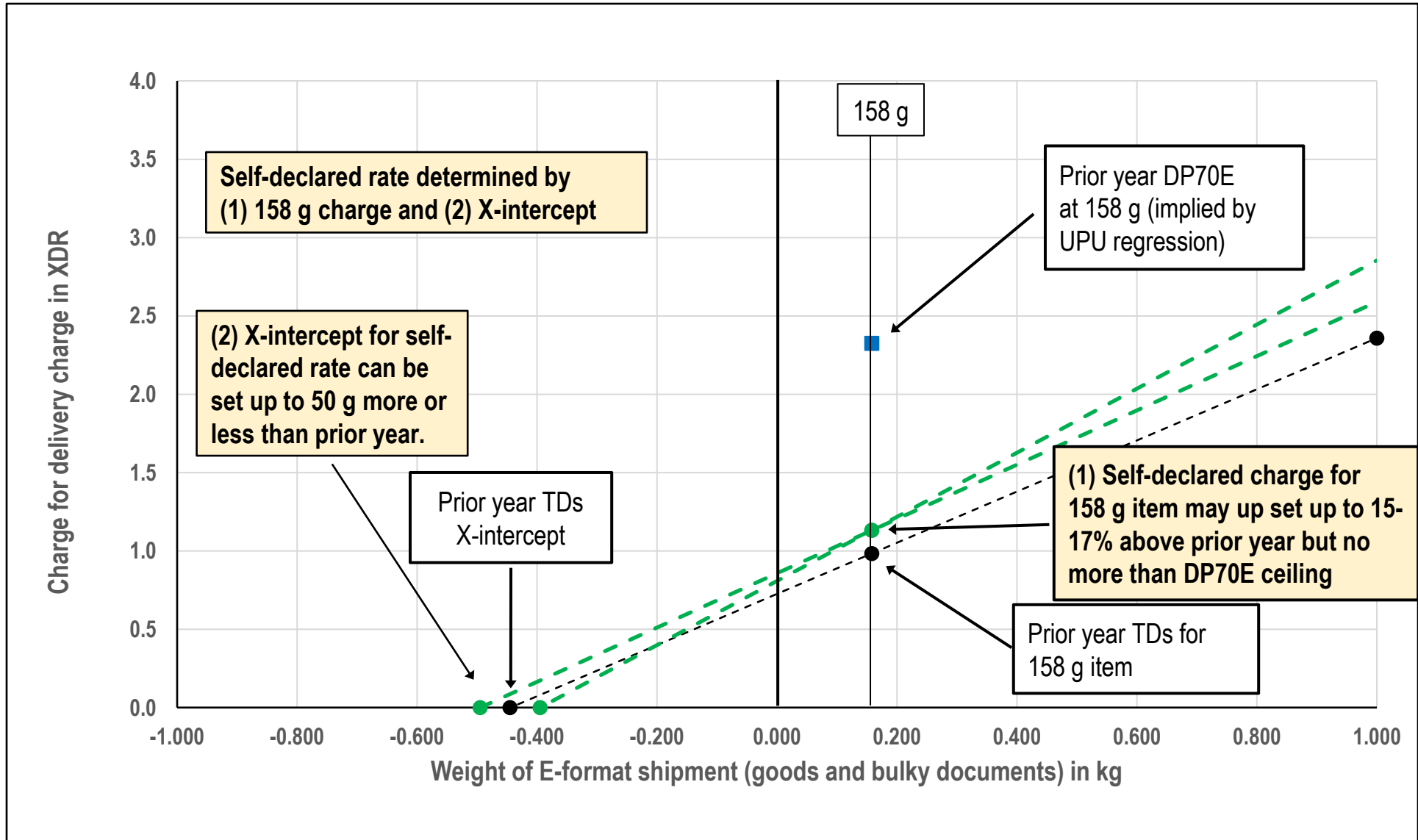
- (1) rate for 158-gram E-format items and
- (2) X-intercept for the linear rate.

Limits	Full self-declared rates	Limited self-declared rates
Format	Single linear rate 0-2 kg	Single linear rate 0-2 kg
Rate at 158 g	Ceiling: rate implied by adjusted regression of domestic DP70E rates	Ceiling: rate implied by adjusted regression of domestic DP70E rates No more 15-17% above prior year (2021-25)
X-intercept	In 2021 and after , no more than ± 50 grams from prior year	No more than ± 50 grams from prior year
Flows (Origin → Dest.)	Flows to/from US only	All inbound flows except from US
Begin	1 July 2020	1 January 2021
Exemption	Annual letter post flows < 25 t from Groups II-III; 100 t from Group IV. $\approx 120-140$ countries	

Full self-declared rates, 2020



Limited self-declared rates, 2021



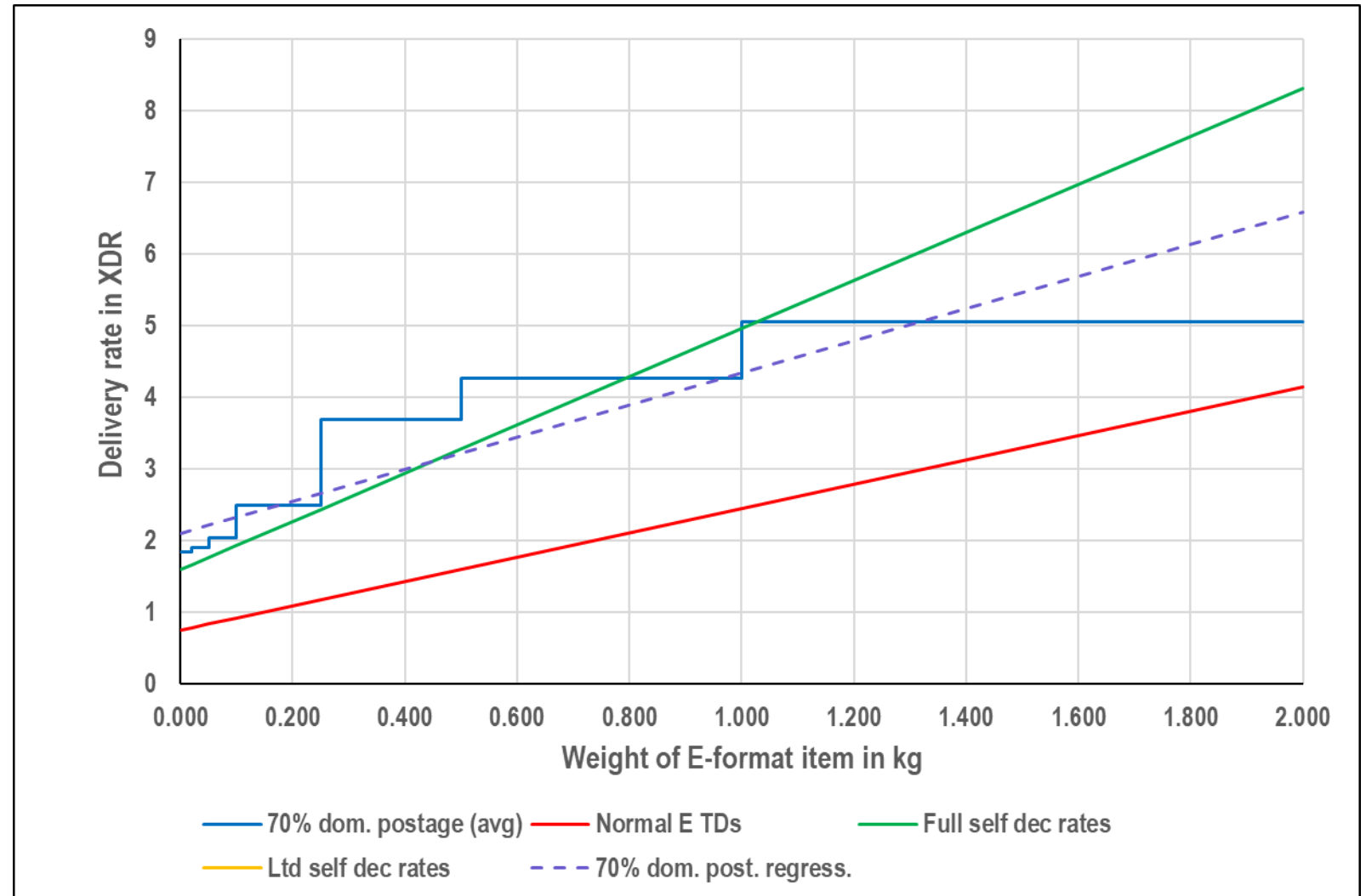
How well have full self-declared rates been aligned with 70% of domestic postage (DP70E)?

Full self-declared rates, Group I* average, 2020

- Full self-declared rates adopted 1 July 2020.
- To/from United States only.

Observations –

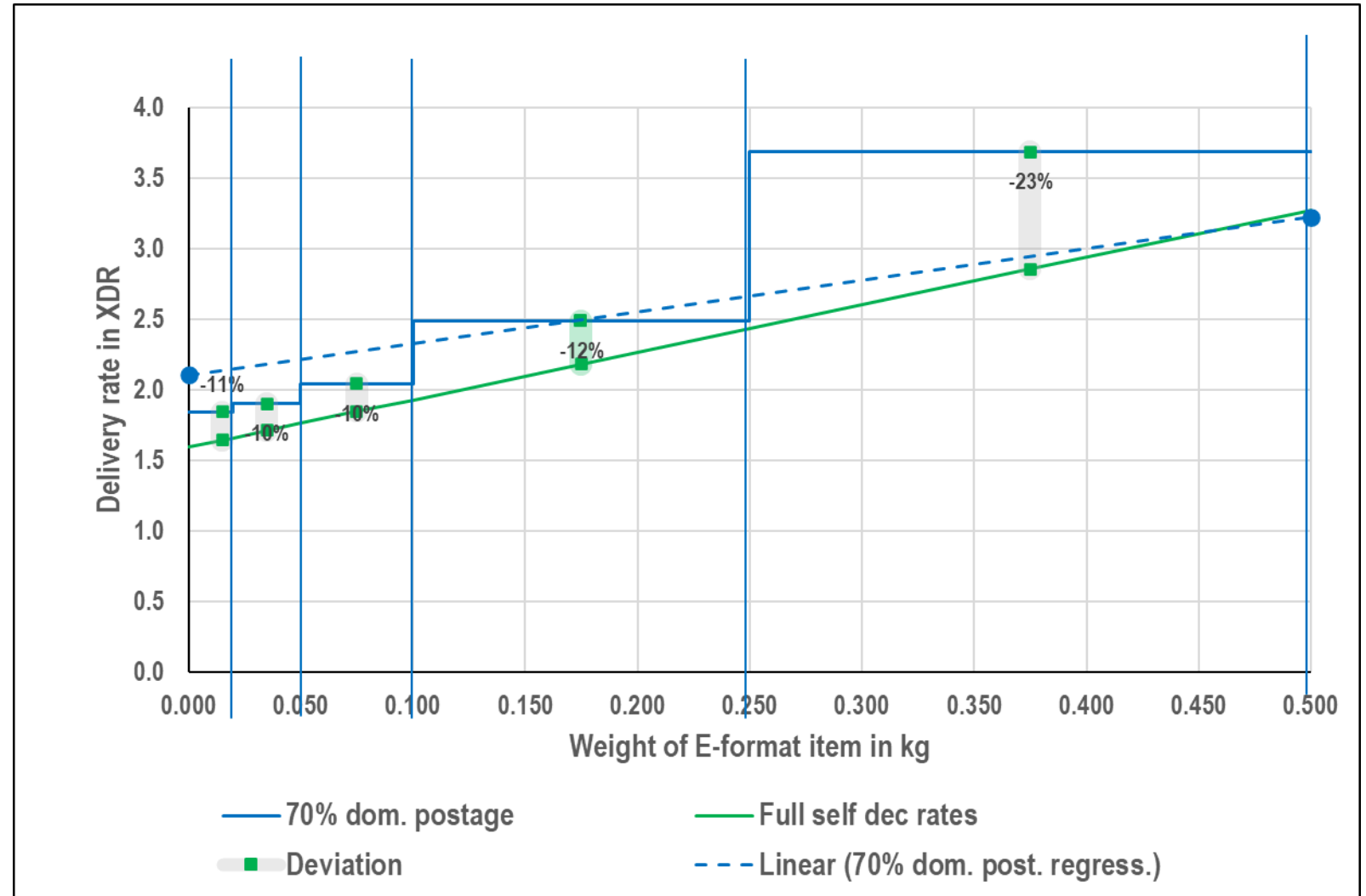
- Rate level:
 - < DP70E below 800 g.
(includes almost all e-commerce).
 - >DP70E above 800 g.
- Rate slope: Slope (per kilogram rate) is significantly steeper than for DP70E.



Summarizing national deviations between self-declared rates and DP70E

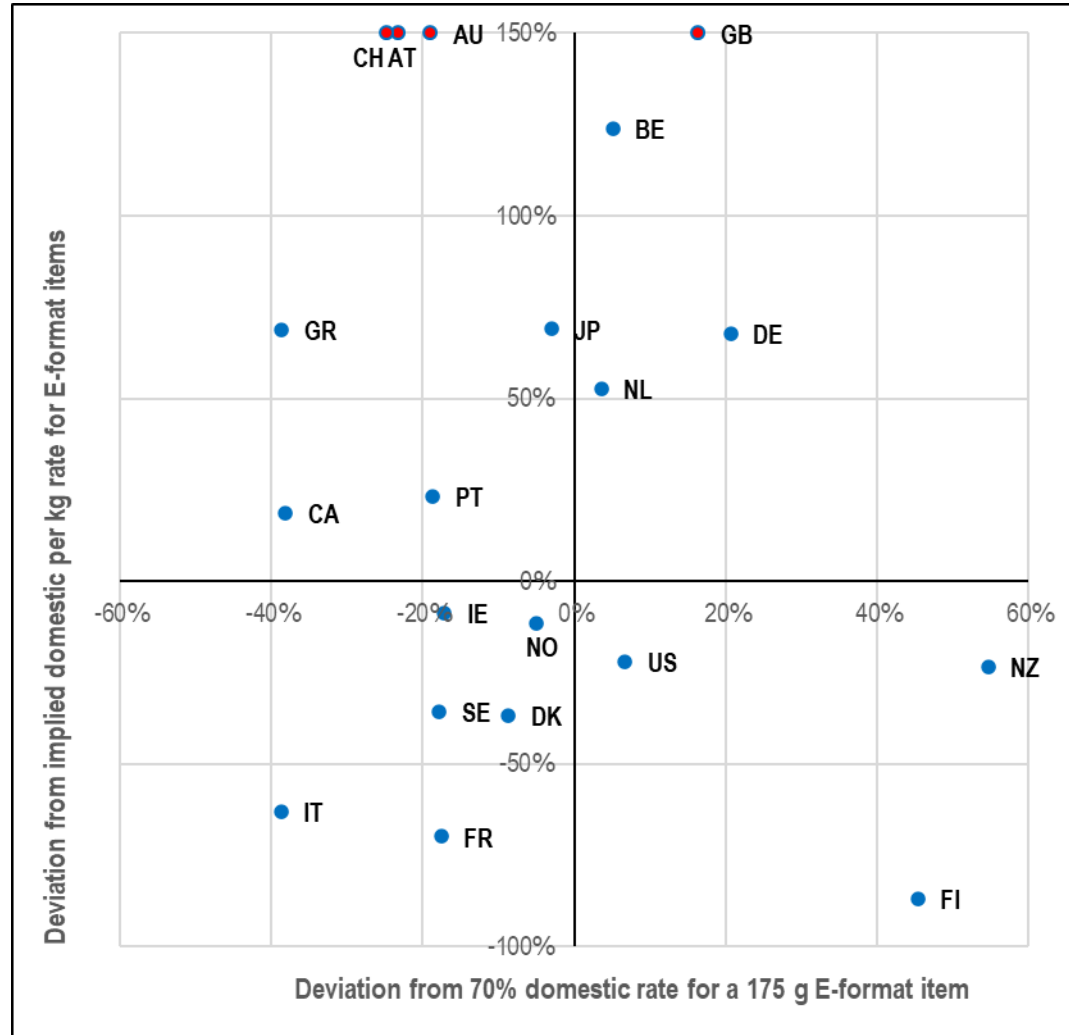
Method 1: 175 g rate & slope deviations		
	175 g	Per kg
Self-declared rate	2.184	3.362
Current domestic postage	2.489	2.238
Rate level deviation at 175 g	-12%	50%

Method 2: Average deviation across wt steps		
	Avg wt.	Deviation
0-20 grams	15	-11%
20-50 grams	35	-10%
50-100 grams	75	-10%
100-250 grams	175	-12%
250-500 grams	375	-23%
500-1000 grams	750	-4%
1000-2000 grams	1500	31%
Avg absolute deviation		14%
% deviation from DP70E		10%
% deviation from DP70E		4%



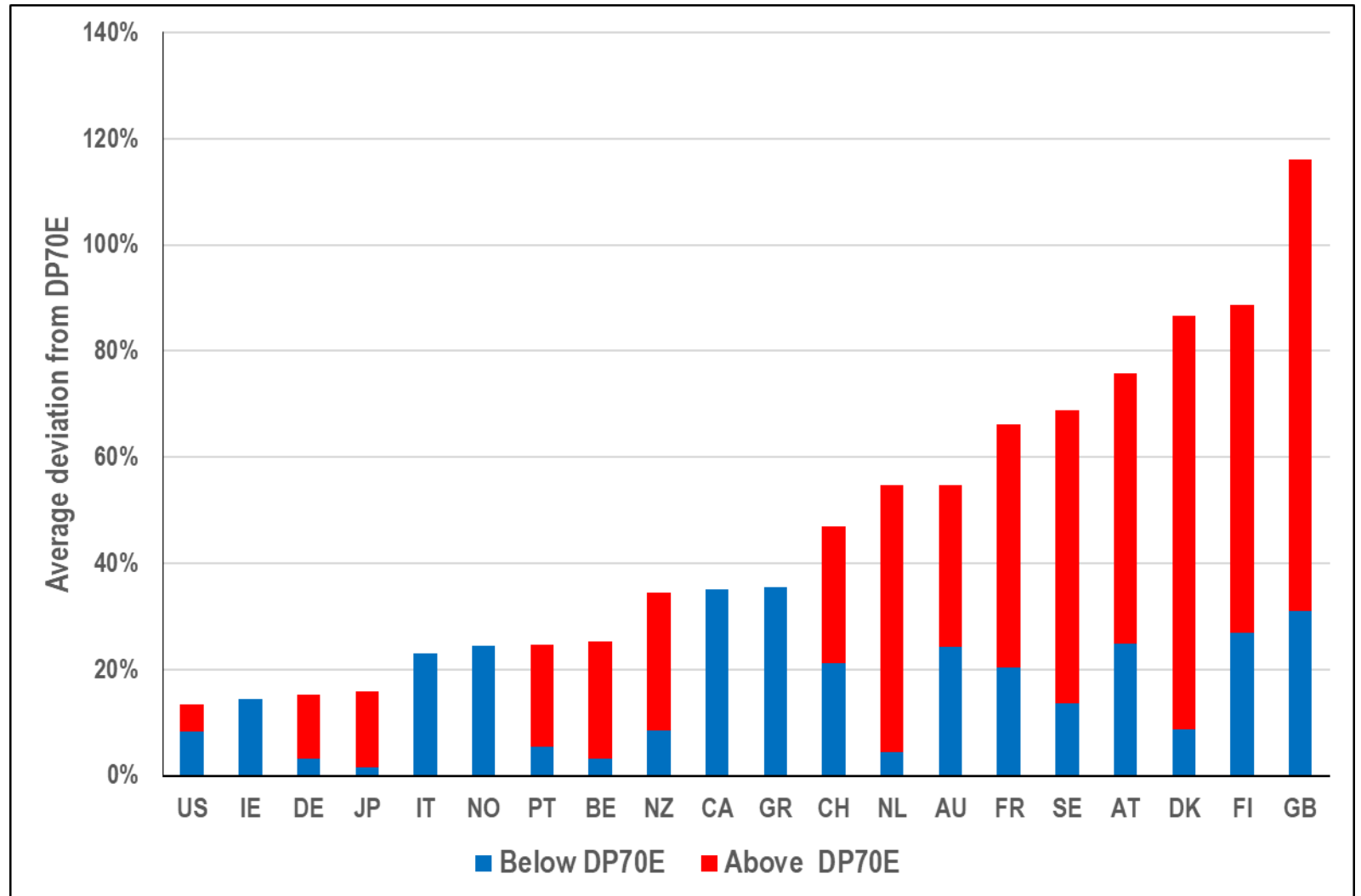
Full SDR: national deviations from DP70E: 175 g rate level & slope, 2020

- Countries closest to the origin are most closely aligned with DP70E
- Rate level deviation (at 175 g)
High: 55% (NZ)
Low: -39% (IT)
- Rate slope deviation
High: 581% (GB); ∞ (AT, CH)
Low: -87% (FI)
- *Note: countries shown in red have deviations in slope greater than 150%.*



Full SDR: national deviations from DP70E: average across wt. steps, 2020

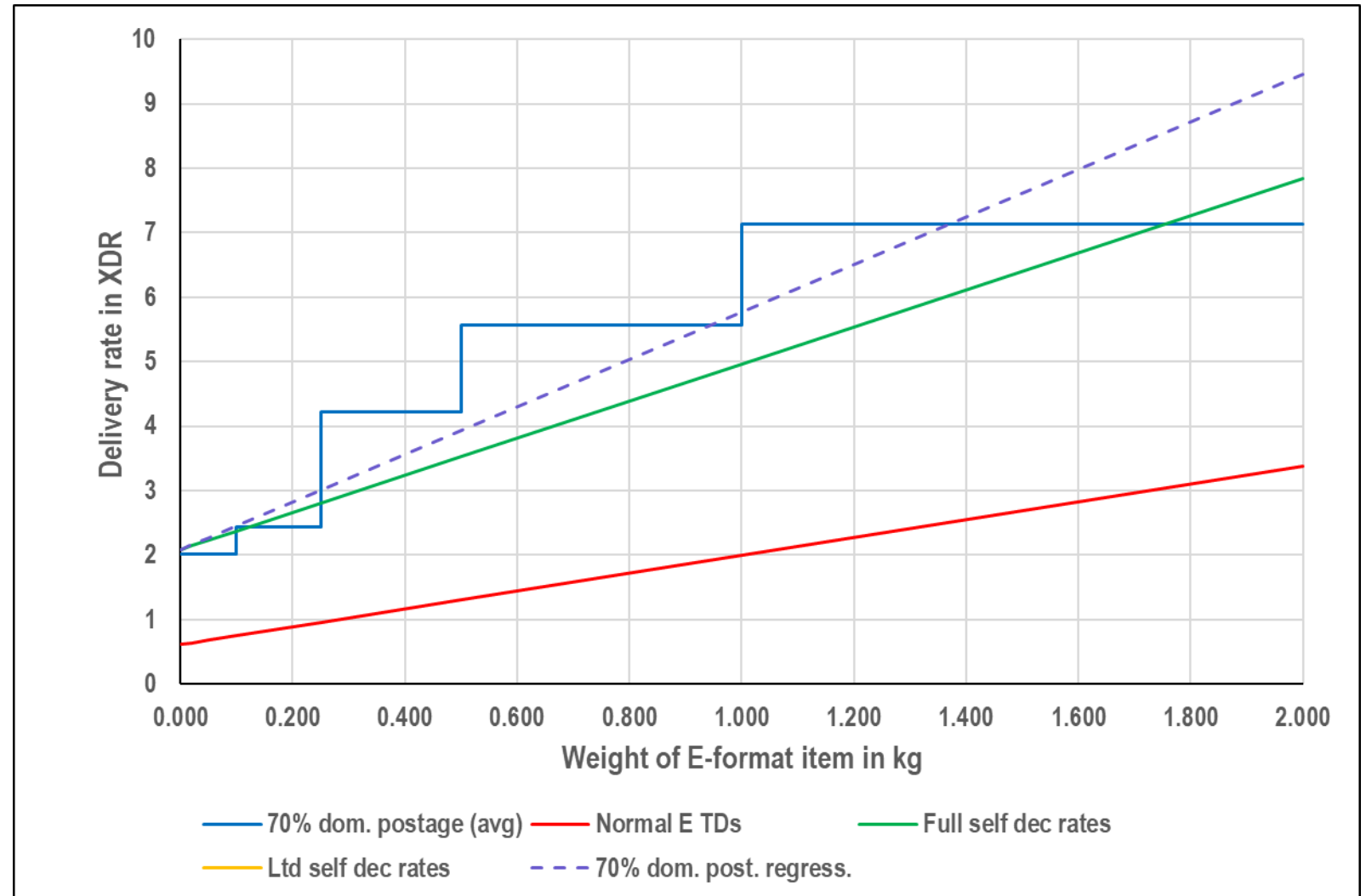
- Average deviation across wt. steps is the average of the absolute (positive or negative) deviations from actual current year DP70E rates for the 7 standard UPU weight steps at:
 - 15 g for 0 to 20 g wt. step
 - Midpoint in other wt. steps.
- % of average absolute deviation due to positive (red) or negative (blue) deviations.
- Low: US 13%
- High: GB 116%
- Average for Group I*: 45%



United States: full self-declared rates compared to DP70E, 2020

Average absolute deviation between full self-declared rates and current year DP70E rates across all weight steps =

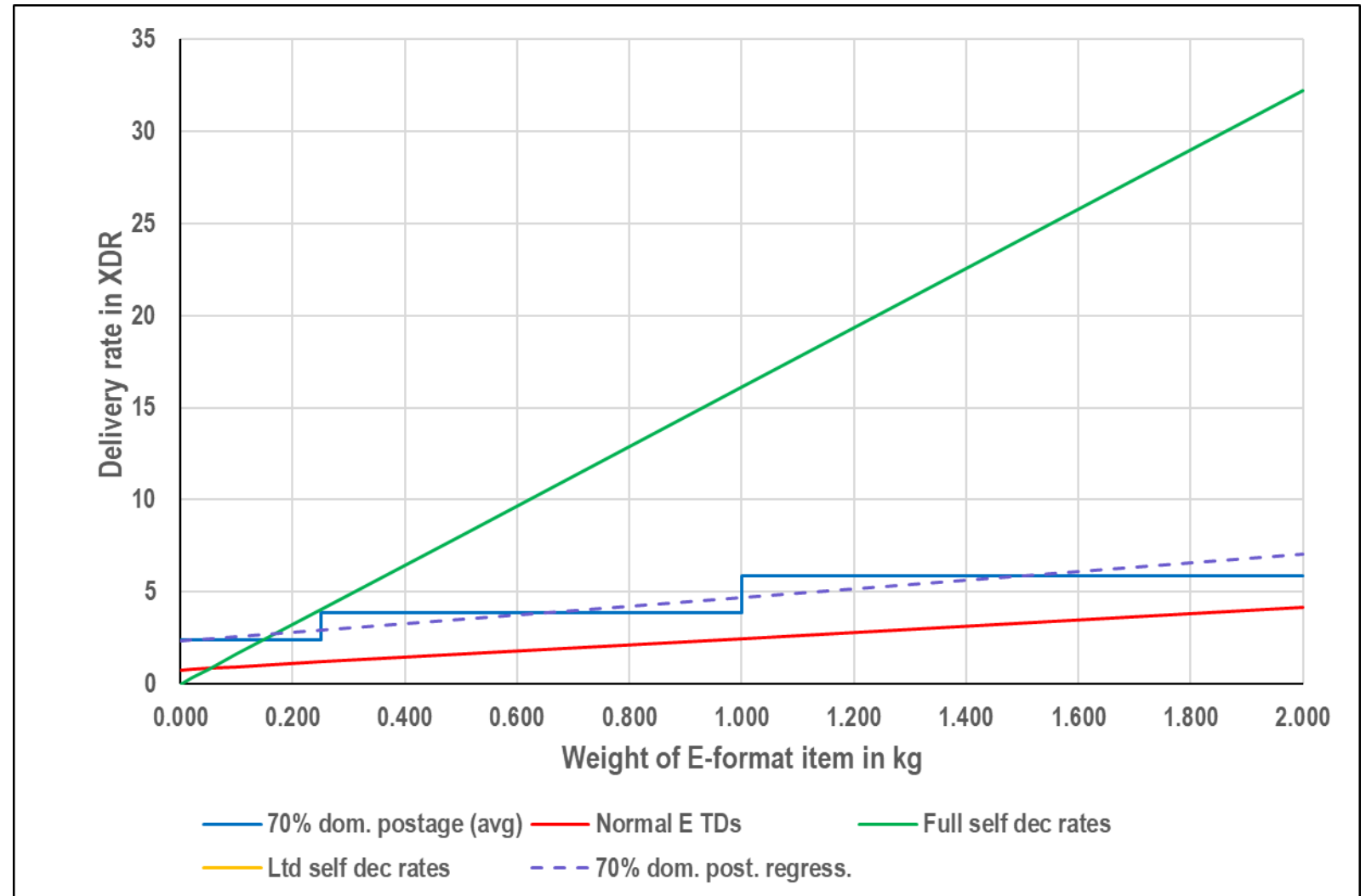
- 13% overall
- 8% due to rates below DP70E
- 5% due to rates above DP70E



United Kingdom: full self-declared rates compared to DP70E, 2020

Average absolute deviation between full self-declared rates and current year DP70E rates across all weight steps =

- 116% overall
- 31% due to rates below DP70E
- 85% due to rates above DP70E



Full self-declared rates: 2020-2023

Average absolute deviations across weight steps

	UPU member country	2020	2021	2022	2023E
AU	Australia	55%	48%	54%	60%
AT	Austria	76%	86%	109%	126%
BE	Belgium	25%	30%	37%	37%
CA	Canada	35%	41%	39%	28%
DK	Denmark	87%	76%	74%	72%
FI	Finland	89%	77%	89%	90%
FR	France	66%	63%	63%	79%
DE	Germany	15%	15%	21%	19%
GR	Greece	35%	11%	13%	12%
IE	Ireland	14%	11%	15%	14%
IT	Italy	23%	20%	21%	21%
JP	Japan	16%	19%	26%	52%
NL	Netherlands	55%	50%	63%	53%
NZ	New Zealand	35%	27%	12%	24%
NO	Norway	24%	18%	14%	14%
PT	Portugal	25%	21%	18%	21%
SE	Sweden	69%	62%	68%	58%
CH	Switzerland	47%	47%	48%	47%
GB	United Kingdom	116%	119%	136%	126%
US	United States	13%	16%	11%	11%
	Group I* average absolute	46%	43%	46%	48%

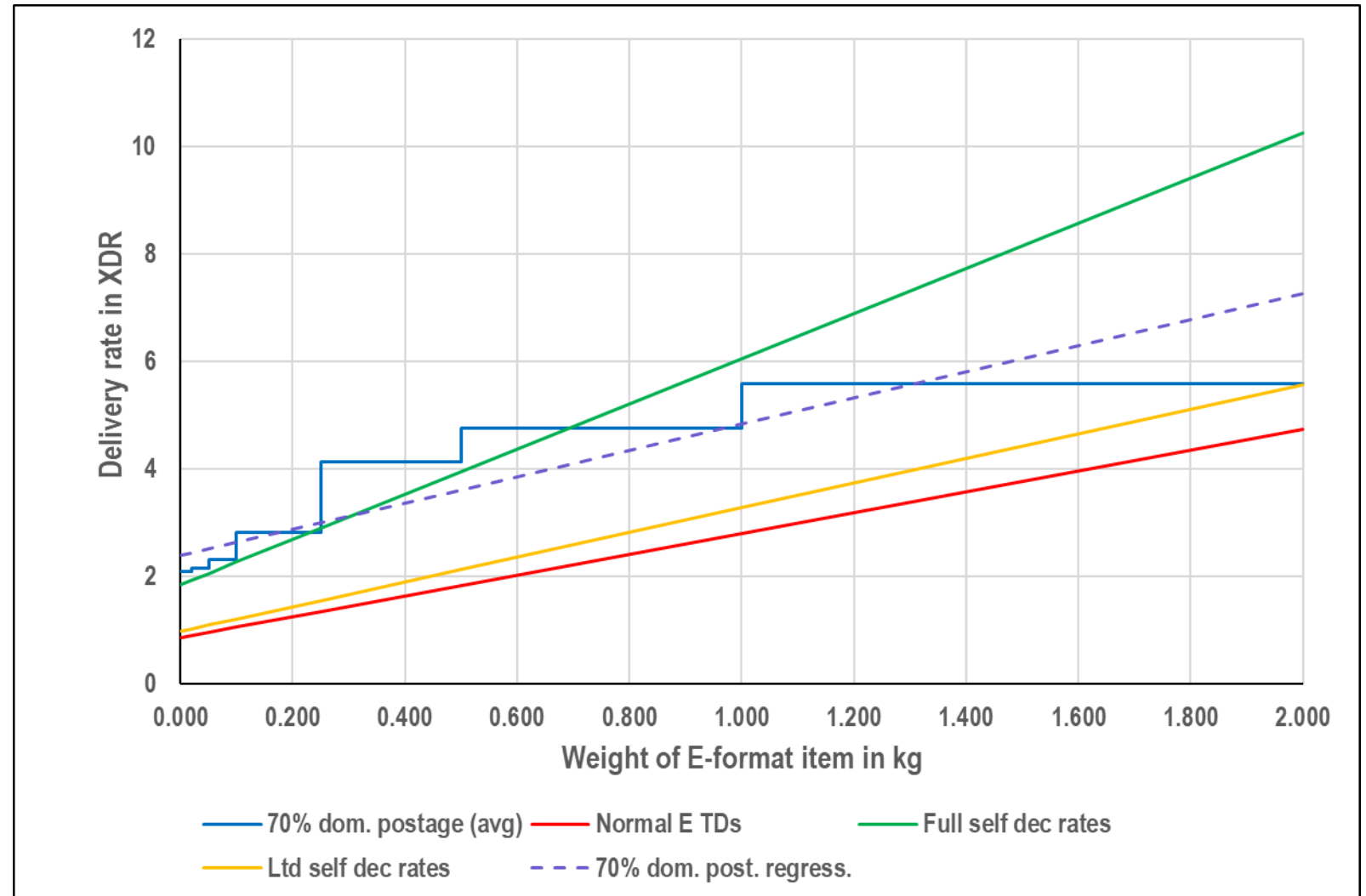
How well have limited self-declared rates been aligned with 70% of domestic postage (DP70E)?

Limited self-declared rates, Group I* average, 2022

- Limited self-declared rates adopted 1 January 2020.
- 2022 is second year of limited self-declared rates.
- In principle, limited self-declared rates were intended to allow a transition to full self-declared rates in about 2025.

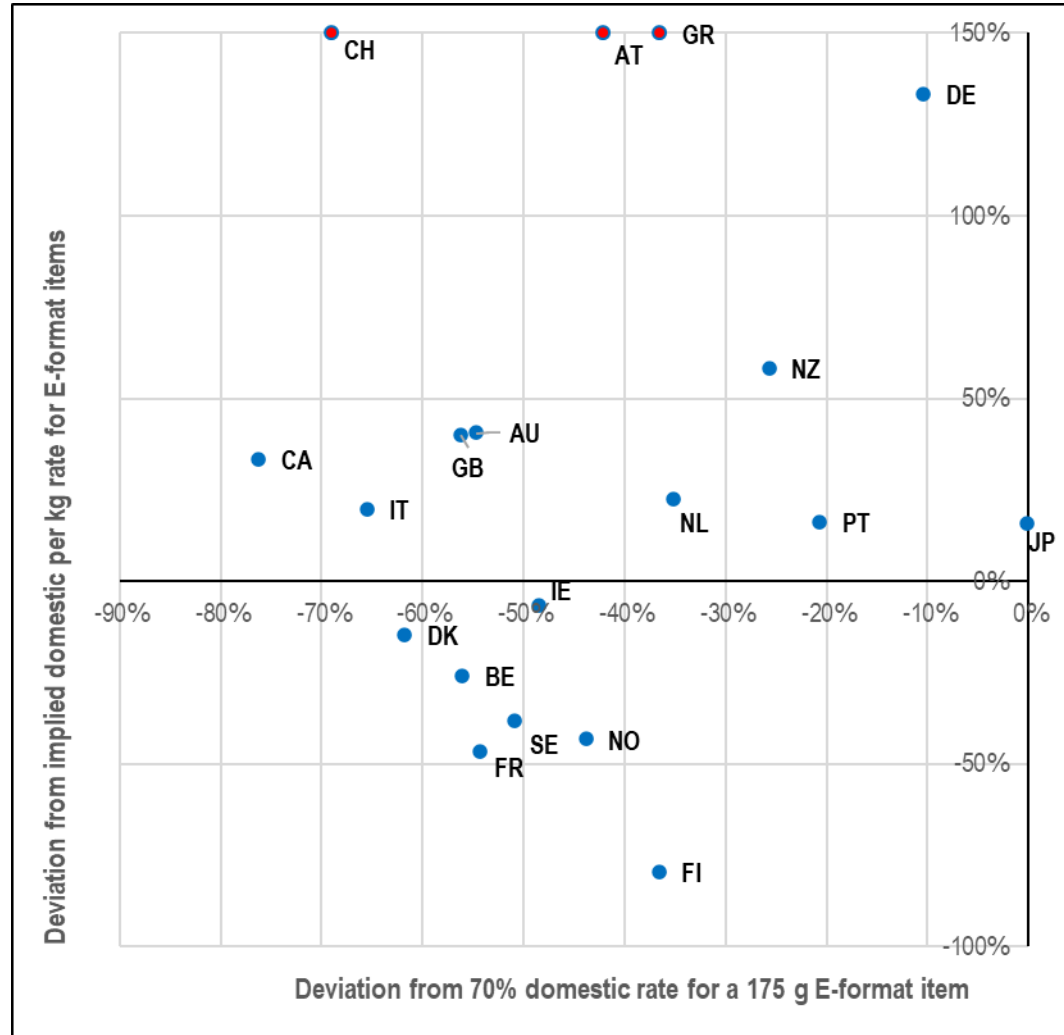
Observations —

- Rate level: on average limited self-declared rates in 2022 remain well below DP70E.
- Rate slope. Slope for limited self-declared rates is much closer to slope of DP70E rates.



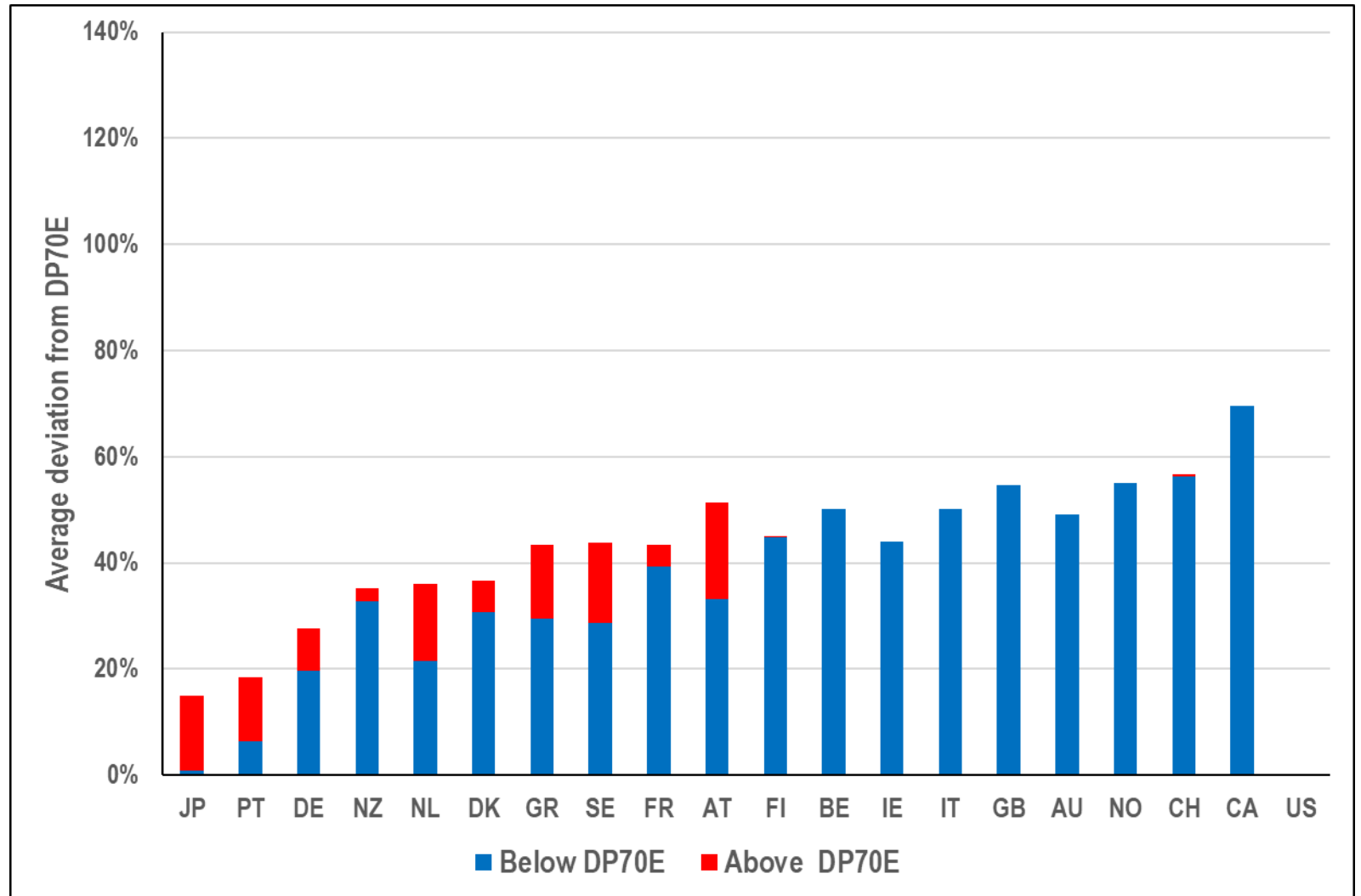
Limited SDR: national deviations from DP70E: 175 g rate level & slope, 2022

- Countries closest to the origin are most closely aligned with DP70E.
- **Rate level deviation (at 175 g)**
High: 0% (JP)
Low: -76% (CA)
- **Rate slope deviation**
High: 572% (GR); ∞ (AT, CH)
Low: 7% (IE)
- *Note: countries shown in red have deviations in slope greater than 150%.*



Limited SDR: national deviations from DP70E: average across wt. steps, 2020

- Average deviation across wt. steps is the average of the absolute (positive or negative) deviations from actual current year DP70E rates for the 7 standard UPU weight steps at:
 - 15 g for 0 to 20 g wt. step
 - Midpoint in other wt. steps.
- Graph shows % of average absolute deviation due to positive (red) or negative (blue) deviations.
- Low: 15% (JP)
- High: 70% (CA)
- Average for Group I*: 43%



Limited self-declared rates: 2020-2023

Average absolute deviations across weight steps

	UPU member country	2020	2021	2022	2023E
AU	Australia	#N/A	56%	49%	36%
AT	Austria	#N/A	48%	51%	56%
BE	Belgium	#N/A	51%	50%	49%
CA	Canada	#N/A	72%	70%	60%
DK	Denmark	#N/A	40%	37%	37%
FI	Finland	#N/A	50%	45%	43%
FR	France	#N/A	44%	43%	31%
DE	Germany	#N/A	33%	28%	22%
GR	Greece	#N/A	43%	43%	49%
IE	Ireland	#N/A	53%	44%	34%
IT	Italy	#N/A	54%	50%	50%
JP	Japan	#N/A	13%	15%	33%
NL	Netherlands	#N/A	38%	36%	37%
NZ	New Zealand	#N/A	34%	35%	35%
NO	Norway	#N/A	61%	55%	46%
PT	Portugal	#N/A	21%	18%	21%
SE	Sweden	#N/A	45%	44%	38%
CH	Switzerland	#N/A	61%	57%	54%
GB	United Kingdom	#N/A	55%	55%	43%
US	United States	#N/A	#N/A	#N/A	#N/A
	Group I* average absolute	#N/A	46%	43%	41%

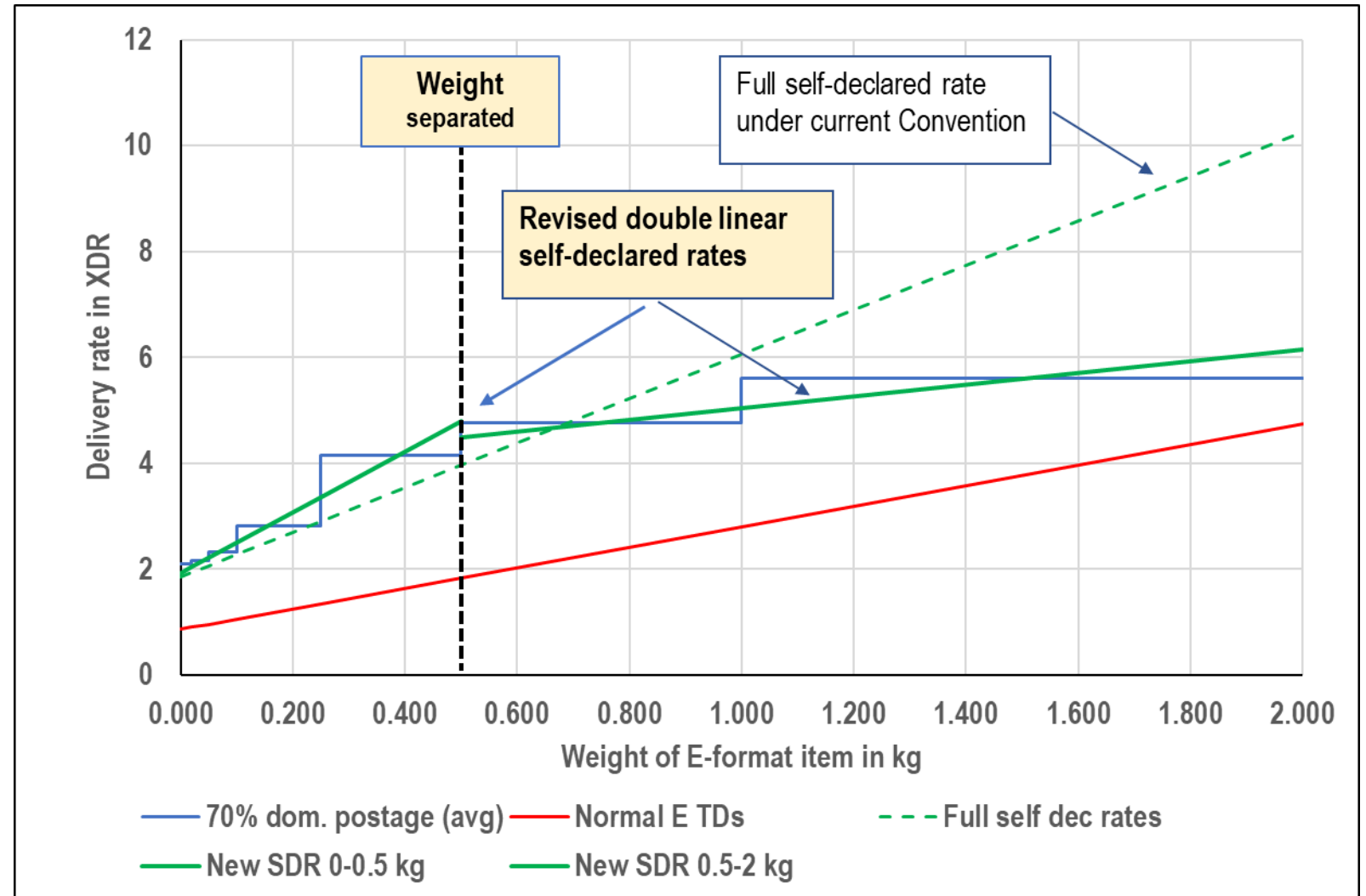
Possible adjustments to self-declared rates

To improve alignment between self-declared rates and DP70E

- 1. Align rate slope (as well as rate level) with domestic postage.**
- 2. Base self-declared rates on current rather than prior year domestic postage.**
- 3. Adopt a double linear rate format**
 - Separate linear rates for 0 to 0.5 kg and 0.5 to 2 kg weights
 - Implies need for separate E-format items by weight.

Revised self-declared rates, Group I* average, 2022

- Revised self-declared rates derived from linear regression of current year DP70E rate at the average weights for UPU standard weight steps in:
 - 0 to 0.5 kg range
 - 0.5 to 2 kg range



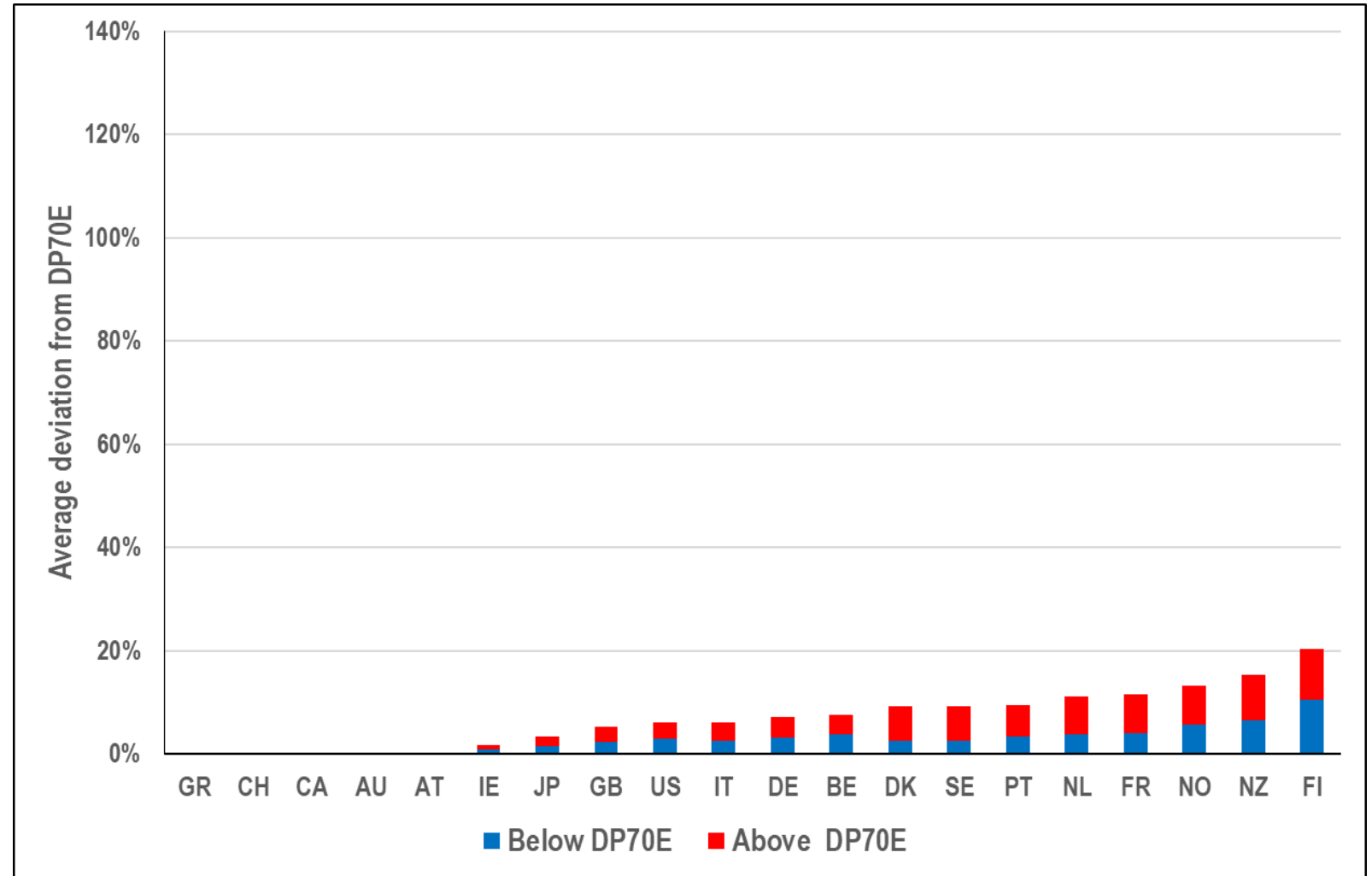
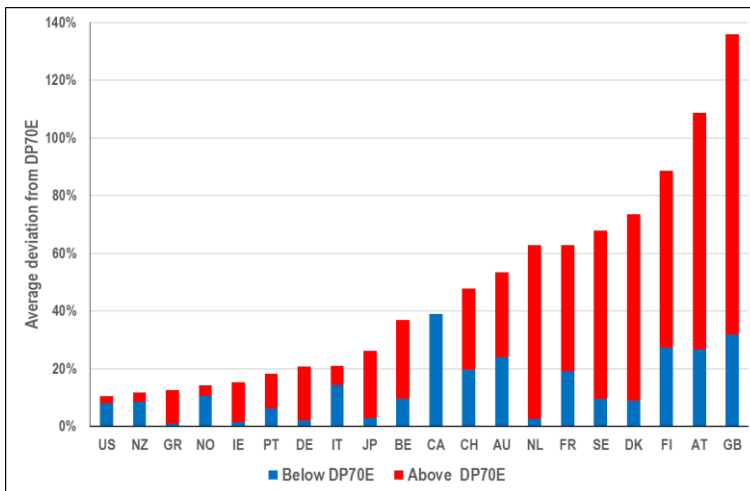
Revised SDR: national deviations from DP70E: average across wt. steps, 2022

Revised self-declared rates

- Low: 0% (AT, AU, CA, CH, GR)
- High: 20% (FI)
- Average for Group I*: 7%

Full self-decl. rates, 2022 (below)

- Low: 11% (US)
- High: 136% (GB)
- Average for Group I*: 46%



Revised self-declared rates: 2020-2023

Average absolute deviations across weight steps

ISO	UPU member country	2020	2021	2022	2023E
AU	Australia	0%	0%	0%	0%
AT	Austria	0%	0%	0%	0%
BE	Belgium	8%	5%	5%	5%
CA	Canada	0%	0%	0%	0%
DK	Denmark	9%	9%	14%	14%
FI	Finland	20%	17%	21%	16%
FR	France	12%	11%	11%	11%
DE	Germany	7%	7%	7%	7%
GR	Greece	0%	0%	0%	0%
IE	Ireland	2%	2%	2%	2%
IT	Italy	6%	6%	6%	6%
JP	Japan	4%	4%	4%	4%
NL	Netherlands	11%	11%	11%	11%
NZ	New Zealand	15%	10%	9%	6%
NO	Norway	13%	13%	13%	13%
PT	Portugal	9%	8%	8%	8%
SE	Sweden	9%	9%	9%	13%
CH	Switzerland	0%	0%	0%	0%
GB	United Kingdom	5%	5%	5%	5%
US	United States	6%	6%	8%	8%
Group I* average absolute		7%	6%	7%	6%

To improve alignment between SDRs and equivalent domestic postage

1. Allow countries flexibility to set self-declared rates based on reasonable percentage of retail domestic postage.

- There is no persuasive evidence that 70% of retail domestic postage (DP70E) provides compensation for delivery of inbound mail that is equivalent to the delivery portion of domestic postage.
- Self-declared should be presumptively valid — i.e., presumptively equal to equivalent domestic postage — if based on a reasonable percentage of retail domestic postage. A reasonable range should be —
 - Broad enough to accommodate the economics of postal delivery in a diversity of countries;
 - Narrow enough to ensure that a destination designated operator cannot adopt self-declared rates that are so high or low as to be abusive or anticompetitive..

2. Allow direct entry and remail from which countries pay self-declared rates.

- To provide incentives to discourage setting self-declared rates too high (direct entry) or too low (remail).

Conclusions

Conclusions (1)

- **Full self-declared rates**

- Inbound TDs in US are broadly aligned with DP70E.
- Inbound TDs in non-US countries exhibit often large deviations from DP70E.
- Average deviations between SDRs and current DP70E across all weights steps: about 45%.
- There has been no significant improvement in alignment with DP70E, 2020-2023.

- **Limited self-declared rates (as of 2022)**

- Inbound TDs in non-US countries remain well below DP70E in most countries and most weight steps.
- Average deviations between SDRs and current DP70E across all weights steps: about 43%.
- Alignment with DP70E may be improving marginally in 2023 – 2023.

Conclusions (2)

- **Self-declared rates can be much better aligned with equivalent domestic postage with relatively small and sensible refinements.**
 - Self-declared rates should be derived from (1) current domestic postage (2) in the format of two linear rates, one for 0 to 500 g items and one for 500 g to 2 kg items.
 - Self-declared should be presumptively valid — i.e., equal to equivalent domestic postage — if e based on a percentage of retail domestic postage that falls within a reasonable range.
- **Self-declared rates should continue to be default rates only, allowing designated operators to conclude alternative bilateral or multilateral commercial contracts.**