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The Scottish Free-to-Use ATM Network

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The Scottish Free-to-Use ATM Network

This brief report provides an overview of the Scottish free-to-use (FtU) ATM network following a request from the PSR. Specifically, we were asked to look at:

1. Characteristics of FtU ATMs (location, concentration etc.).
2. Characteristics of at-risk FtU ATMs.¹
3. ATM presence by size of settlement.
4. Share of population with nearby access to an FtU ATM.

Comparisons are made between the Scottish FtU ATM network and the rest of the UK FtU ATM network (i.e. FtU ATMs in England, Northern Ireland and Wales).

The quantitative analysis in this report is based on: ATM characteristics and location data from LINK; ATM annual volume data from LINK (for July 2016 to June 2017); settlement data from the National Records of Scotland, Office for National Statistics (for England & Wales) and Northern Ireland Statistics and Research Agency; and population data from the most recent Census in 2011.

¹ This is based on those FtU ATMs identified as 'at-risk' in a recent Europe Economics' report, which analysed the profitability (revenues less costs) of individual ATMs. A summary of that study is available here: <https://www.psr.org.uk/sites/default/files/media/PDF/EE-ATM-Impact-Study-Standalone-Executive-Summary-15012018.pdf>

1) Characteristics of the Scottish FtU ATM network

Key characteristics:

- There are a higher number of FtU ATMs per 1,000 inhabitants in Scotland (1.00) than there are in the rest of the UK (0.80).
- The split of FtU ATMs in urban and rural locations is approximately the same in Scotland as the rest of the UK. There is a slightly higher percentage of non-branch FtU ATMs in Scotland, than in the rest of the UK.
- Average withdrawal volumes in Scotland are lower than the rest of the UK.

Table 1: Comparison of Scottish and the rest of the UK FtU ATM networks.

	Total FtU ATMs	FtU ATMs per 1,000 ²	Rural	Urban	Branch	Non-branch	Average Volume
Scotland	5,416	1.00	9%	91%	28%	72%	32,721
Rest of the UK	48,209	0.80	10%	90%	33%	67%	34,005

Concentration of FtU ATMs:

- The concentration (or density) of FtU ATMs is captured by the percentage of FtU ATMs which have another FtU ATM located within a given walking distance. In this analysis three distances have been considered: 100m; 300m; and 1,000m.
- Compared to the rest of the UK, Scotland has a lower proportion of FtU ATMs located close to another FtU ATM. Specifically, 63 per cent of Scottish FtU ATMs are located within 100m of another FtU ATM, compared with 68 per cent for the rest of the UK.
- Approximately 5 per cent of Scottish FtU ATMs are located more than 1km away from another FtU ATM, equating to just over 250 FtU ATMs.

Table 2: Comparison of Scottish and the rest of the UK FtU ATM network concentration.

	Total FtU ATMs	% within 100m of another FtU ATM	% within 300m of another FtU ATM	% within 1,000m of another FtU ATM
Scotland	5,416	63%	80%	95%
Rest of the UK	48,209	68%	82%	96%

² Estimates based on mid-2016 population estimates from the Office of National Statistics. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesandnorthernireland>

2) Characteristics of the ‘at-risk’ FtU ATMs in Scotland in future scenario

At any given time a number of FtU ATMs will be unprofitable for their owners and will therefore be at risk of closure. Here we identify the FtU ATMs that would become unprofitable - and therefore be at risk of closure - as a result of a 20 per cent fall in interchange fees and a 10 per cent fall in transaction volumes. We term these FtU ATMs ‘at-risk’. The assessment of which FtU ATMs are at-risk in this scenario again relies on analysis Europe Economics conducted for PSR in 2017.³ In this scenario an FtU ATM is considered at-risk if it cannot cover its occupancy and cash costs.

Additional at-risk ATMs given falls in interchange fees and transaction volumes:

- Analysis suggests that the proportion of Scottish FtU ATMs at-risk in this future scenario would be lower, with 1.1 per cent being at-risk in the scenario, compared to 1.7 per cent for the rest of the UK.
- The likelihood of FtU ATMs being at-risk in this scenario is lower in Scotland than the rest of the UK for both rural and urban located FtU ATMs.

Table 3: Comparison of Scottish and the rest of the UK at-risk FtU ATMs in future scenario.

	Number at-risk	% of total FtU ATMs	% of at-risk ATMs located in rural areas*	% of at-risk ATMs located in urban areas	Likelihood of ATM being at-risk if in rural area**	Likelihood of ATM being at-risk if in urban area
Scotland	59	1.1%	19%	81%	2.3%	1.0%
Rest of the UK	818	1.7%	20%	80%	3.6%	1.5%

* Defined as the proportion of at-risk ATMs that are located in rural areas (i.e. the number of at-risk ATMs in rural areas divided by the total number of at-risk ATMs in the scenario).

** Defined as the proportion of rural ATMs that are at-risk in this scenario (i.e. the number of at-risk ATMs in rural areas in the scenario divided by the total number of ATMs in rural areas).

Concentration of at-risk FtU ATMs in the scenario:

- The at-risk ATMs in Scotland are typically more isolated than in the rest of the UK (e.g. 46 per cent in Scotland are within 100m of another FtU ATM, compared with 58 per cent in the rest of the UK).

Table 4: Comparison of network concentration for at-risk FtU ATMs in future scenario.

	Number at-risk	% within 100m of another FtU ATM	% within 300m of another FtU ATM	% within 1,000m of another FtU ATM
Scotland	59	46%	59%	81%
Rest of the UK	818	58%	74%	89%

³ Europe Economics (2018) “ATM Impact Study: Summary Findings” available at: <https://www.psr.org.uk/sites/default/files/media/PDF/EE-ATM-Impact-Study-Standalone-Executive-Summary-15012018.pdf>

3) ATM presence by size of settlement

This section looks at how Scottish settlements are served by the FtU ATM network, and how this compares with the rest of the UK. The analysis is based on latest available population estimates.⁴ In this analysis we have sought to define a settlement as any area with a population of more than 500.⁵ Thus settlements range in size from just 500 inhabitants to large cities with several hundred thousand or million inhabitants.

Key findings:

- There are no settlements in Scotland with a population exceeding 5,000 without an FtU ATM.
- 79 per cent of Scottish settlements with a population between 1,000 and 5,000 have an FtU ATM, compared with 51 per cent of settlements in the rest of the UK.

Table 5: Prevalence of ATMs by different settlement sizes in Scotland

Settlement Size	No. of settlements	No. of settlements with no FtU ATM	Average number of ATMs
500 to 1,000	136	94	0.5
1,001 to 5,000	259	55	1.9
5,001 to 10,000	57	0	6.9
10,001 to 50,000	49	0	20
50,001 to 100,000	12	0	76
More than 100,000	6	0	405

Table 6: Prevalence of ATMs by different settlement sizes in the rest of the UK

Settlement Size	No. of settlements	No. of settlements with no FtU ATM	Average number of ATMs
500 to 1,000	1,663	1,495	0.1
1,001 to 5,000	1,843	908	1.0
5,001 to 10,000	341	1	5.0
10,001 to 50,000	387	0	20
50,001 to 100,000	62	0	66
More than 100,000	71	0	442

⁴ For Scotland, mid-2016 population estimates available from the National Records of Scotland: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/special-area-population-estimates/settlements-and-localities>

For England & Wales and Northern Ireland, population estimates are based on 2011 census data.

⁵ For Scotland, the National Records of Scotland define settlements in this way. The relevant authorities in other parts of the UK do not provide such data, so slightly different approaches are necessary for England & Wales and Northern Ireland:

In England and Wales, we use data on built-up areas (BUAs) defined as a minimum built-up area of 20 hectares (where any BUAs within 200metres of each other are combined), for which we then restrict the sample to BUAs with a population exceeding 500. BUAs data is taken from the Office for National Statistics:

<https://www.ons.gov.uk/methodology/geography/ukgeographies/censusgeography>

In Northern Ireland, we use 'Settlement Development Limits' (SDLs) defined as settlements exceeding the thresholds of 20 or more households and 50 or more usual residents. Again we impose the additional restriction that the population must exceed 500. SDL data is available from the Northern Ireland Statistics and Research Agency: <https://www.nisra.gov.uk/support/geography/urban-rural-classification>

4) Population with nearby access to an FtU ATM

This section compares the relative population shares living within 1km of an FtU ATM in Scotland and the rest of the UK.⁶

Key finding:

- The share of the total Scottish population living within 1km of an FtU ATM is very similar to that of the rest of the UK (approximately 86 per cent).

Table 7: Population living within 1km of an FtU ATM in Scotland and the rest of the UK

	Residential population living within 1km of an FtU ATM	Total residential population	% of population living within 1km of an FtU ATM
Scotland	4,553,578	5,295,403	85.99
Rest of the UK	49,634,801	57,886,775	85.74

NB. Population statistics are taken from 2011 Census data.

⁶ To estimate the residential population living within 1km of a given FtU ATM, we summed the population of all Census Output Areas (OAs) for which the OA's centroid fell within a 1km catchment area of that ATM. Where no OA centroids fell within a 1km catchment area, the population of the OA in which the ATM is located was used to estimate the population living within 1km.

NB. Census Output Areas (OAs) are neighbourhood areas with approximately 125 households, where the centroid represents the 'centre point' of a given OA.