

Monitoring the growth of the UBI market



UBI dashboard presentation and sample

The first strategy consulting & research firm entirely focused on augmented mobility & automation

Strategy consulting services



Market research services



Fields of expertise

Mobility services	Car pooling Car sharing MAAS	Micro-mobility Ride hailing Roadside assistance	Shared mobility Smart parking Tax refund
Vehicle services & telematics	bCall eCall FMS SVT / SVR	Tracking VRM In-car Wi-Fi Fuel cards	Parking Navigation Speed cameras Traffic information
Usage-based charging	Car As A Service Electronic Toll Collection	In-vehicle payments Road charging	UBI / PAYD Vehicle rental Vehicle leasing
Vehicle data & analytics	AI CAN-bus Crowd-sourcing Data protection	Driving behaviour OBD Predictive analytics	Remote diagnostics xFCD
Vehicle automation	ADAS	Autonomous cars	Autonomous trucks
Enabling technologies	Positioning (GNSS / WiFi / cellular)	M2M / connectivity New energies	Smartphones Telematic devices V2X

Our clients come from across the mobility ecosystem

Analytics, maps & applications providers



Automotive manufacturers & suppliers



Telematics solution providers



Mobile telecom operators



Fleet & fuel, ITS & regulators



Device & location suppliers



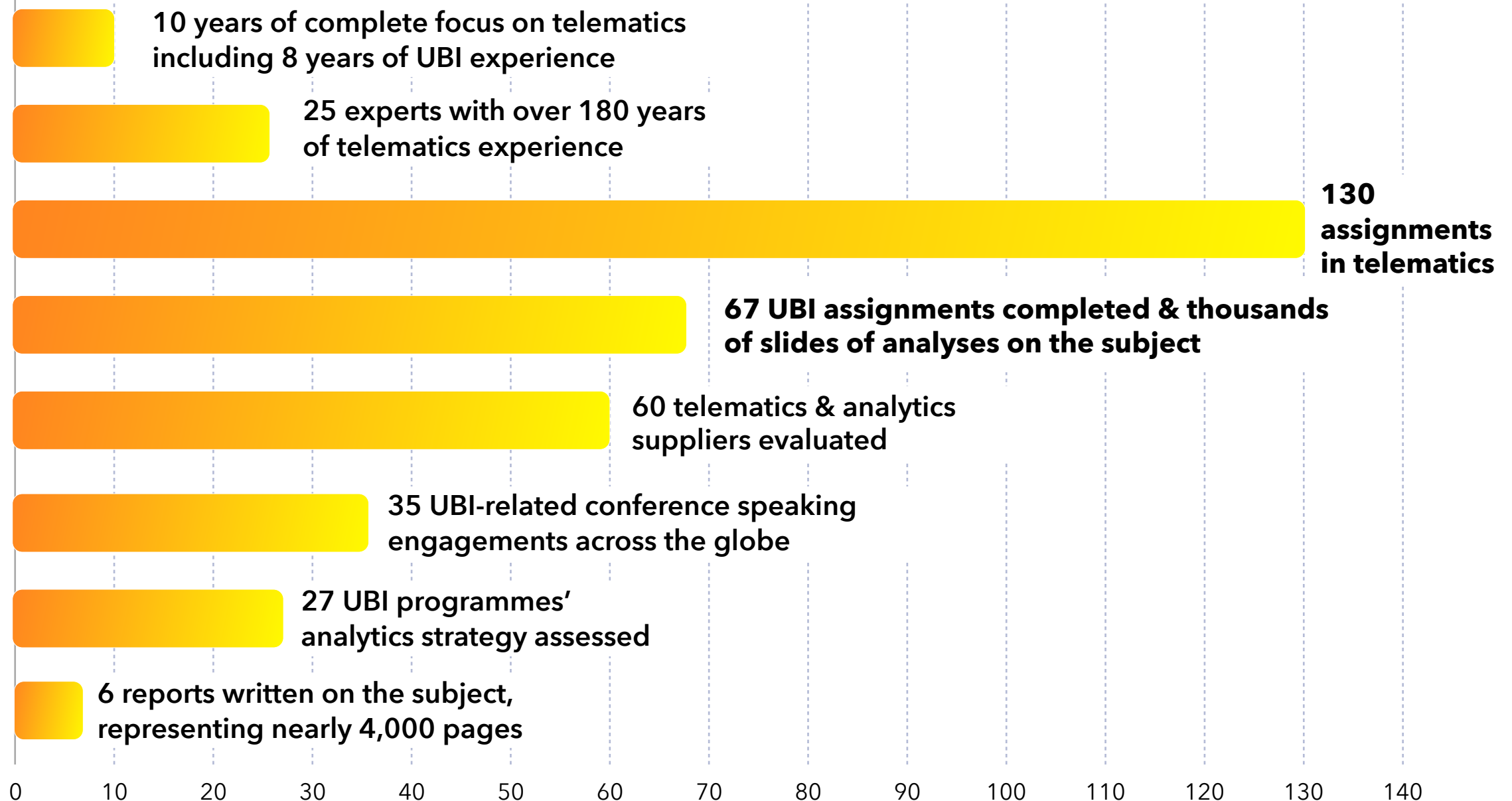
Insurers, aggregators & assistance providers



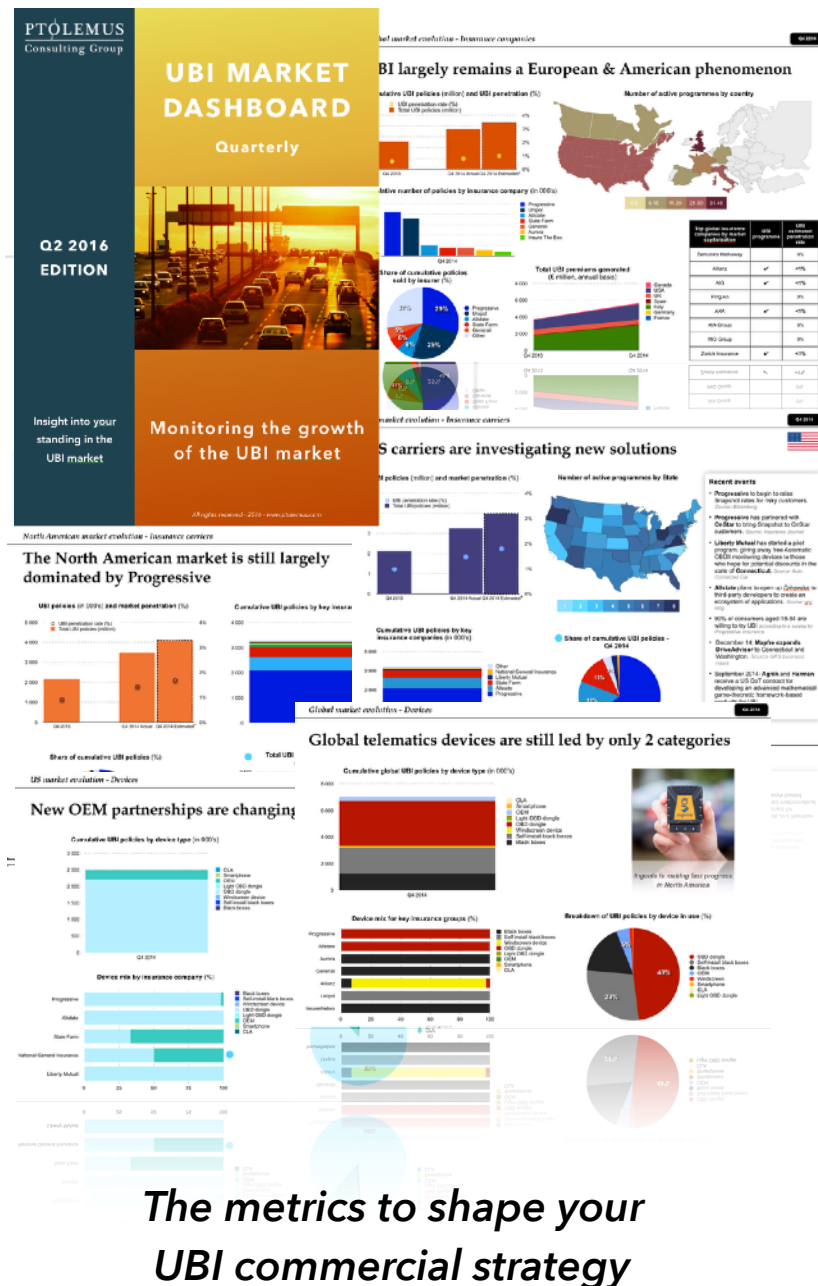
Banks & private equity investors



An extensive experience of digital insurance & telematics



Our quarterly UBI dashboard monitors the market metrics every quarter in 16 countries



- **120-page barometer of the global UBI industry**
 - Covers 360 companies
 - Issued on a quarterly basis
 - 300+ charts, tables & figures
- **A global dashboard covering**
 - Mature markets: US, Canada, France, Germany, Italy, Spain, UK & Ireland
 - Emerging markets: Australia, Benelux, China, other APAC, Latin America, Russia, other European markets
- **Leverages both public information and primary research**
 - A large set of public information collected from conferences, desk research, etc.
 - Supplemented and validated by primary research & data (Interviews, supplier questionnaires, own market forecasts, etc.)
- **Brings all key market news**
- **Estimates UBI volumes and sales for all main players**
 - Insurance companies
 - TSPs
 - Technology providers
- **Deciphers the key market trends**
 - UBI penetration
 - Number of programmes
 - Mix by business model (PAYD, PHYD, TBYYB, etc.)
 - Market share of all main insurers, TSPs and device makers
 - Technology mix (Black boxes, OBD, apps, etc.)
 - Business line mix
 - Segment mix (Young drivers, mature drivers, etc.)
 - Channel mix aftermarket / OEM

Our UBI market tracking services can be subscribed on a quarterly basis...



Service	Footprint	# pages / report	# reports / year	Company-wide licence
Quarterly dashboard - Global	Worldwide + 15 countries detailed	120 pages	4	59.900 €
Quarterly dashboard - Europe	9 countries detailed + Rest of Europe	50 pages	4	39.900 €
Quarterly dashboard - North America	USA + Canada	18 pages	4	9.900 €
Quarterly dashboard - Asia	2 countries detailed Rest of Asia Pacific	24 pages	4	9.900 €
Quarterly dashboard - Latam	South & Central America	5 pages	4	4.900 €
Quarterly UBI Business Intelligence Service	Worldwide	20 pages	4	19.000 €

... or a yearly basis



Service	Footprint	# pages / report	# reports / year	Company-wide licence
Yearly dashboard - Global	Worldwide + 15 countries detailed	120 pages	1	19.900 €
Yearly dashboard - Europe	9 countries detailed + Rest of Europe	60 pages	1	14.900 €
Yearly dashboard - North America	USA + Canada	20 pages	1	4.900 €
Yearly dashboard - Asia	2 countries detailed Rest of Asia Pacific	26 pages	1	4.900 €
Yearly dashboard - Latam	South & Central America	5 pages	1	1.900 €

Our market dashboard leverages a wide range of sources

- **A large set of public information**

- **Conferences:** Marketforce, TU Auto, Informa, SMi, etc.
- **Web:** systematic scanning of new programmes or changes in existing programmes
- **Press releases** and mailings
- **Press articles** (Paper / web)
- **Investor** communications
- **White papers**
- Other **market forecasts**
- **LinkedIn** group discussions
- **Twitter** and Facebook

- **Supplemented and validated by primary research & data**

- Interviews with **insurance companies**
- Interviews with telematics & other **suppliers**
- Interviews with **MNOs**
- Interviews with **car makers & tier-1 suppliers**
- Interviews with module / chipset / **component vendors**
- **Questionnaires** for the UBI Global Study
- **Own market forecasts**
- Downloads of UBI Global study free abstract & Supplier Ranking
- Purchases of UBI Global Study in each country



The
Economist

**CORRIERE
DELLA SERA**

FINANCIAL TIMES

 **GPS**
Business News

THE WALL STREET JOURNAL

 **CANADIAN
UNDERWRITER**

**La Tribune
de l'assurance**

 **REUTERS**

**PROPERTY
CASUALTY 360°**
A National Underwriter Website

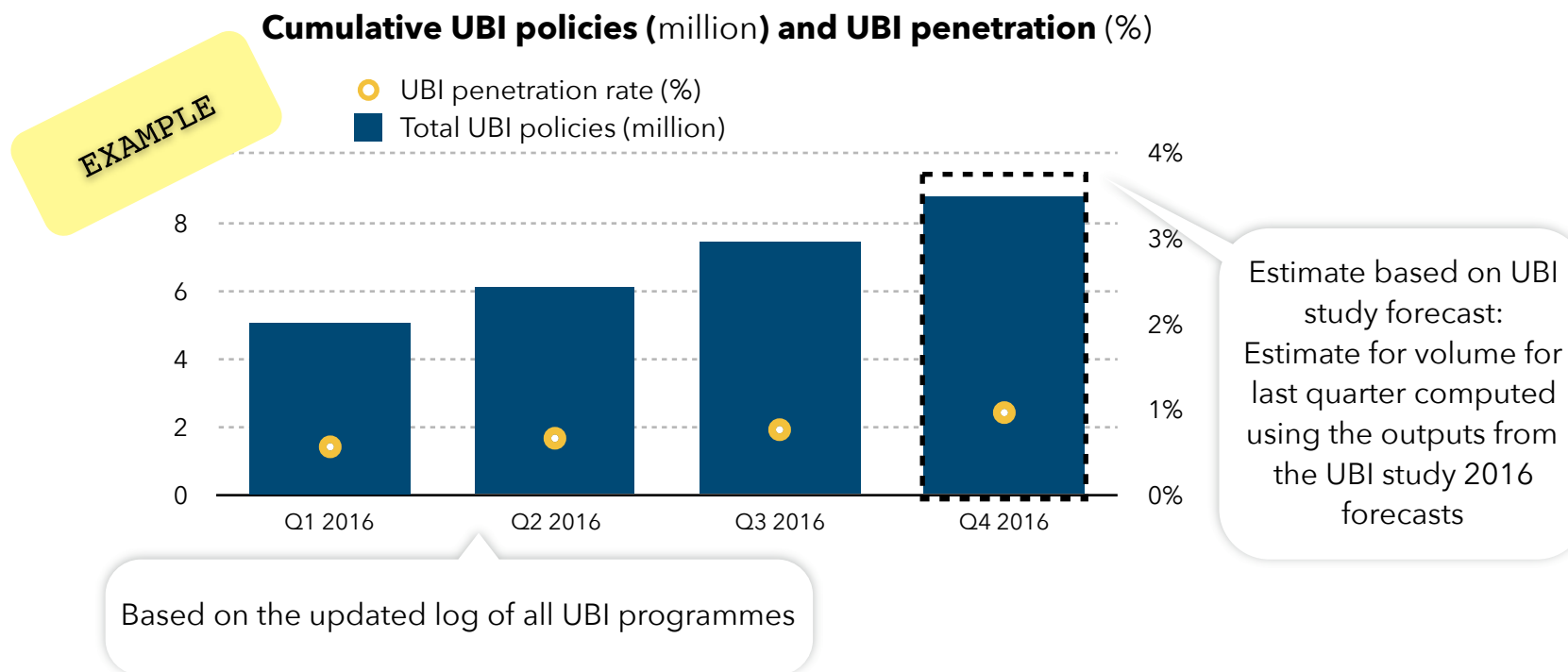
 **Il Sole
24 ORE**



We use a strict data validation process

- **The information is first compiled and organised**
 - We pull information from **all our experts** internally
 - Secondary research result is logged and tagged with its source
 - The information **quality is questioned** and evaluated
 - **Company-specific questionnaires** are built to address missing data and validation
- **More than 100 interviews have been conducted**
 - Questionnaires are sent in advance and rediscussed directly
 - Primary and secondary information is then aggregated
- **We build a bottom-up market model**
 - We record all the active and cancelled programmes by company, country, device type, etc.
 - The data is then compiled to produce each of the graphics
 - We use our global market model to estimate progression when no new data is available

How robust are our estimates?



Legend

↑↓ Trend versus previous quarter

● Significant change vs what has been communicated in the previous quarter

- Some of the data and graphs are **based on more than one type** of data source
- Our **initial forecast was based on actual data** collected through primary research in 2013
- Today's log of UBI subscriptions worldwide is based on **public information**, data that was **directly sourced from interviews** as well as **estimates**
- Most of the data presented is **the result of a synthesis** of public information and computation. We highlighted the graphs where the source was unique or where the data was purely based on estimates

We handle confidentiality issues with care for both our clients and industry stakeholders



What we can use & reveal

- ★ Publicly available information
- ★ Market data from our assignments
- ★ Insights from our assignments provided they do not represent a threat for our clients
- ★ Research made for the UBI Global Study or other reports
- ★ Interviews & questionnaires performed in that context or for client assignments

What we can use in our data but not reveal

- Key elements of stakeholders strategy that have been disclosed to us and indicated as confidential
- Business or market statistics that have been revealed to us but indicated as confidential

What we cannot use nor reveal

- ✱ Confidential information submitted to the scope of an NDA
- ✱ Insights on our clients' strategy from our assignments

We use the following definitions in this document

Devices

- **Self-install black boxes:** *Super Easy* type of device plugged to the battery
- **Windscreen devices:** self sustained or self-powered devices the dashboard or windscreen with a customer interface. ex: Allianz *SestoSenso*
- **Light OBD:** OBD dongle with reduced functionalities and small form factor, e.g. Axa *Youdrive*
- **OEM:** device or functionality embedded by the vehicle manufacturer, e.g. Onstar
- **CLA:** Cigarette lighter adapter (black box powered by the cigarette lighter plug)

Target UBI segment

- **Low risk drivers:** Programme not targeting any specifically defined group besides the self defined careful drivers
- **Pre-licence drivers:** trainee drivers using monitoring functions before obtaining their licence
- **Forgiveness:** segment identified as post-accident insurance coverage
- **Specialist cars:** segment defined as drivers of race and vintage cars

Policy models

- **Roll-over:** a Programme where the device is only kept plugged to the vehicle for a finite period of time. **We count roll-over as active UBI policies for insurers and TSPs even after the evaluation period**
- **Leave-in:** a Programme where the use / presence of the device is compulsory. Includes smartphone-based UBI programmes
- **TBYB** (Try Before You Buy): a smartphone-based Programme where the use of the smartphone is not determinant to the coverage

Our analysis now covers more than 400 companies (1/2)

Insurance companies / brokers

123.ie	Axa	Donegal	Gruppo Cattolica	Lexham Insurance	Newport	Renaissance Insurance	Tesco
21st Century	Bajaj Allianz	DTRIC	Gruppo ITAS	Liberty	Next Seguros	Rheinland Provinzial	The co-operators
24h Assistance	BavariaDirekt	Dubon Insurance	Hachsharat Hayishuv	Liberty Mutual	Nononsense	Rockingham	The Hartford
AA	BBVA	Electric Insurance	Hastings Direct	Liberty Russia	Norwich Union	Root Insurance	Tokio Marine
AAA club	Belgosstrakh	Equity Red Star	HDI	Liberty Seguro	NTUC Income	Rosgosstrakh	Tower Insurance
AAMI (SunCorp)	BKI	Erie	HDI-Gerling	Lichengbao	NYCM	RSA	Towergate
Achmea	BMW Car Insurance	e-Pol	Hellas Direct	Lloyd Latchford	Oakhurst	S-Direkt	Travelers
Acorn Insurance	Bradesco	eSure	HiRoad (Statefarm)	LV	Oerag	Sabre	Triglav
Admiral	CAA Insurance	EUREKO sigorta	Hollard Group	MAAF	OK Insurance	Santam	Turien & Co
AdmiralDirekt	Canal	Fair Pay Insurance	Huk-Coburg	MACIF	One call Insurance	Sara	UFG
AdmiralDirekt (Itzehoer)	Carige	Fairzekering	Huk24	MAIF	Opel Bank	Sara Free	Unigarant
Adrian Flux	Carrot Insurance	Farmers Insurance	IBRI	MAPFRE	ÖSA Versicherungen	Seguros Integrity	Unigard
AGEAS	Cathay Century Insurance	FBFS	IF SafeDrive	Markerstudy	OUTsurance	SGI	UnipolSai
AIG	Chebao	Fiat	IGI insurance	Marmalade	Pacific Insurance	Signal	Uniqa
AIG Europe	China Life P&C	Fidelidade	iGO4	Marsh	Panda Car Life	Signal Iduna	Univé Verzekeringen
AIG XLNT Driver	CICC	Finch Group	Industrial Alliance	MCL	Pembridge Insurance	Softbank	University of Groningen
Aioi Nissay Dowa	CPIC	Folksam	Infinity	Menora	PICC	Sogessur	Uralsib
Alfa group	Cincinnati Insurance	Foyer	Ingenie	Mercedes Benz Bank	PingAn	Solly Azar	USAA
Alka Forsikring	Clal insurance	Fresh! Insurance Services	Ingosstrakh	Metlife	Plymouth Rock	Sompo	Verti
Allianz	Confused.com	Friday	insurethebox	MetroMile	PolicyBazaar	SSP	VHV
Allsecur	Cooperative Insurance	Fude	Intact insurance	MiWay	Porto Seguro	State Auto	Vivium
Allstate	Corona Direct	Gateway Insurance	Intesa San Paolo Assicura	MMIP	Progressive	State Farm	VW Financial Services
Amaline	Coverbox	Geico	iQCasco	Motorists Mutual	Protegys Group	Sulamericana	VOOROP
American Family Insurance	Credit Agricole Pacifica	Generali	Italiana	MSIG Insurance	Provincewide Ltd	Sunshine Insurance Group	VÖV
American Tradition	CSAA Insurance Group	GNP	Itzehoer	Mua	PSA	SURA	VSK Insurance
American Transit Insurance	DBV Winterthur (Credit	Godfrey-Morrow Insurance	King Price	Muang Thai Insurance	P&V	SV Sparkassen	WGV Versicherungen
ANPAC	Desjardins	Gore Mutual Insurance	Kingsway General	Mutua madrilena	QBE	Swinton	woop cover ltd.
Asia Pacific	Direct Auto Insurance/	Grange	La Capitale	MyPolicy	RAC	Tai-An Insurance	Wüstenrot &
Auto-Owners Insurance	Direct Line Group	Groupama	La Vaudoise	National General insurance	RACC	Taiwan Fire & Marine	Zhong An
Aviva	Discovery Insure	Gruppo Caixa General	Lapersonelle	Nationwide	Reale Mutua	TATA AIG	Zurich

Our analysis now covers more than 400 companies (2/2)

TSPs				TTPs	
Ackinet	FleetBoard	Meta System	Telefonica	Altech netstar	Scope
AirMax Remote	Fleetistics	Michelin	Telefonica (O2)	Bosch	Telenav
Akquinet	Fleetmatics	Microlise	Telenav	Calamp	Teletrac
Altea	FMG Support	Mobile TeleSystems	Teletrac	Ctrack	Telic
Amodo	Ford Sync	Telefonica	Telogis	Danlaw	Telogis
Autometrix	Geotab	Telefonica (O2)	Telus	Driven Lower	TomTom
Bajaj Allianz	Geotrack - Location World	Telenav	Tencent	Ding Ran	Toyota
Baseline	Global Sky	Movitrack Viasat	The Floow	Ford Sync	Tracker SkyTrax
BIG Telematics	GLSX	MyDrive Solutions	ThinXNet	Geotab	Traffilog
Cambridge Mobile Telematics	GreenRoad	Networkcar/ Hughes	TomTom	Global Sky	Trak Global
CDL	Gtech	Next Seguros	Toyota	Great Wall Motors	Trakm8
CEABS	HiRoad	Octo Telematics	Tracker	iMetrik	Trans IoT
Cesar Satellite	HP	Onstar	Tracker UK	Infomobility	Verizon Telematics
Chainway	Hubio	Orange	TrafficMaster	Intellitrac	Vodafone Automotive
Chipin BV	IBM	Panda Car Life	Trak global	Inthinc	Xirgo Tech
Chleon	iMetrik	PayGo Systems	Tramigo	Lichengbao	
Chunghwa Telecom	IMS	PingAn	Trans IoT	Masternaut	
CMS Supatrak	Infomobility	Pingjia	Traqueur	Mercedes Benz	
Cobili	Infrasure	Qoros	Trimble	Meta System	
CSE telematics	Ingenie	Quartix	Vehicle Telematics Online Services	Mobile Devices	
Ctrack	Insurethebox	Raxel Telematics	Verilocation	Movitrack Viasat	
CTS	Intesa Sanpaolo Smart Care	Redtail Telematics	Verizon Telematics	Novatel Wireless	
Decos	Inthinc	Road Guardian	Vodafone	Onstar	
Detector	Inzura	SageQuest	Vodafone Automotive	Orion	
Ding Ran	Launch Tech	Scope	Webtech Wireless	Quartix	
Dolphin	Lexis nexis	SecuryTrack	Wunelli & Lexis Nexis	Ping An	
DriveCam	Lichengbao	Sentiance	Zebrai	QOROS	
DriveFactor	Manzalab	Snapcar		Raxel Telematics	
Driven Lower	Masternaut	Sonar AVL		Redtail Telematics	
Driveway	Matrix	Steria		SAIC Motors	

Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

Tier-3 markets

6

Regional markets

Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

Tier-3 markets

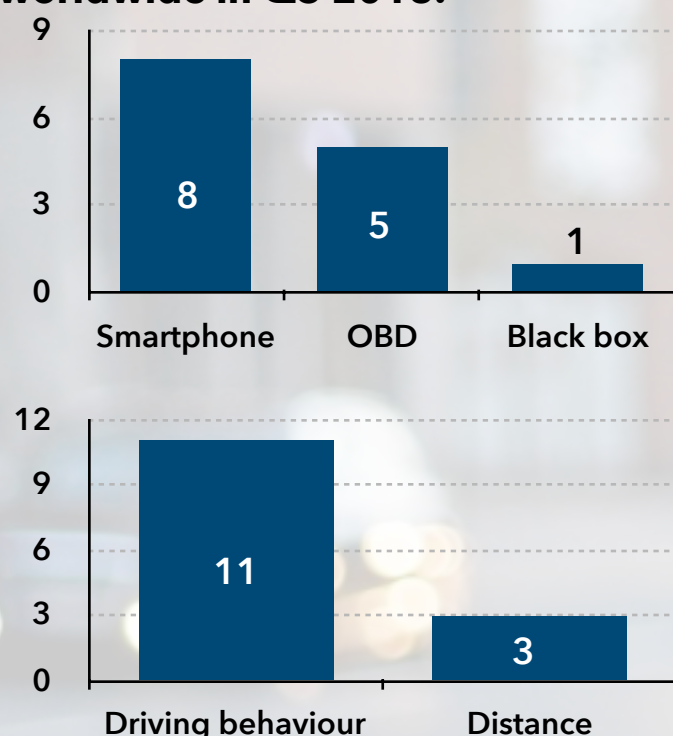
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Regional markets

The UBI market has grown by 47% in a year to 24.3 million

The number of UBI policies grew to 24.3 million, split between 403 programmes in 54 countries

14 new UBI programmes were launched worldwide in Q3 2018:



- 2 programmes emerged in relatively new markets; **Norway** and **West Indies**
- A new mobile programme was also rolled out in **Spain**

- With another programme in the pipeline, the recent development suggests that the Spanish market is slowly bouncing back. More details on page 68

Slowing growth in top-tier markets

- The growth of tier-1 and tier-2 markets in Europe is slowing down as leading programmes mature
- Top insurers are yet to move out completely of the young driver segment in Germany and the UK
- Even though insurers launch new programmes, **the opinion on UBI is still polarised**
- **BavariaDirekt** ended its 1-year trial, concluding that German market is not mature enough for telematics, as customers ask for a too high discount to give their data (€50-100)
- The insurers may face difficult quarters ahead in maintaining the momentum

The Chinese market is well advanced in both embedded and mobile insurance solutions

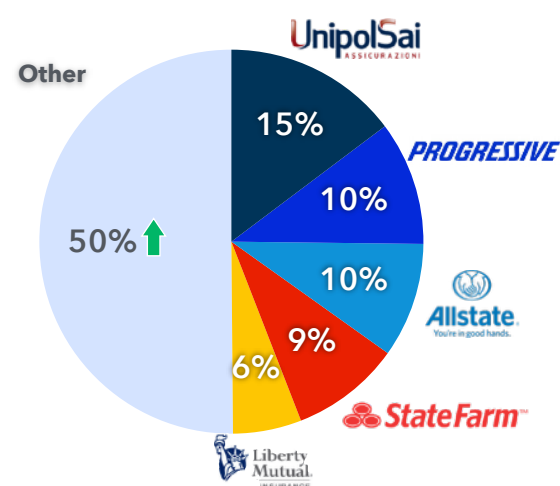
- China is currently the 3rd largest UBI market
- It accounts for 25% of global mobile policies and 75% of global embedded devices used for UBI
- The 'super app' model has been well received by local customers and gained volume fast.
- Local OEMs, **Great Wall Motors** and **SAIC Motors** in particular, are now active in exploring connected insurance opportunities

In Scandinavia, UBI is finally gaining traction

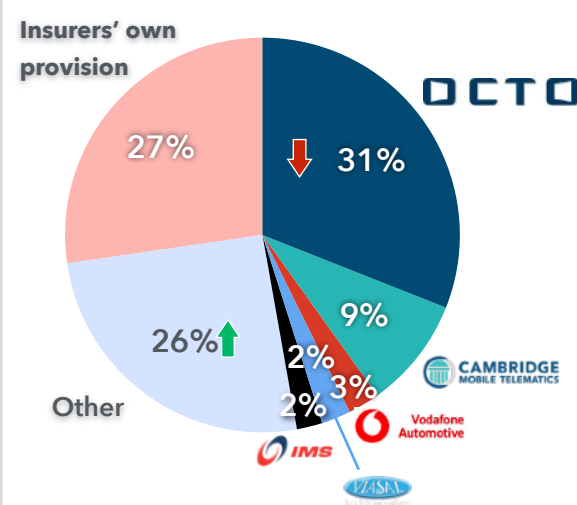
- With a new programme released in Norway, **Greater Than**, a Swedish TSP, is now present in Denmark, Norway, and Sweden
- A newly launched programme in Norway, the **Sidekick** programme by Danish insurer **Tryg Forsikring** has had a promising start

The global market reached 400 active programmes!

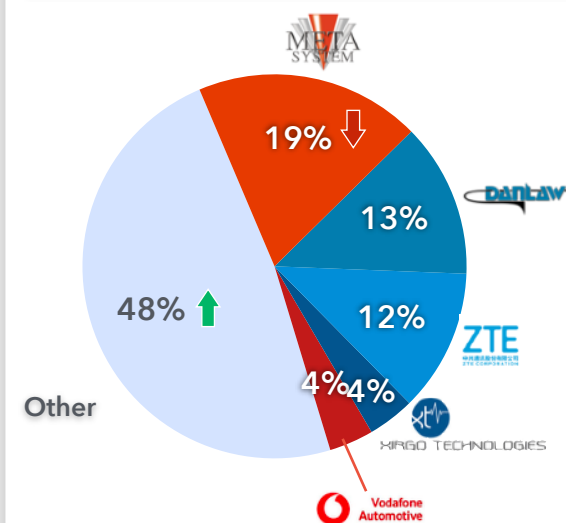
Breakdown of UBI policies by insurance group



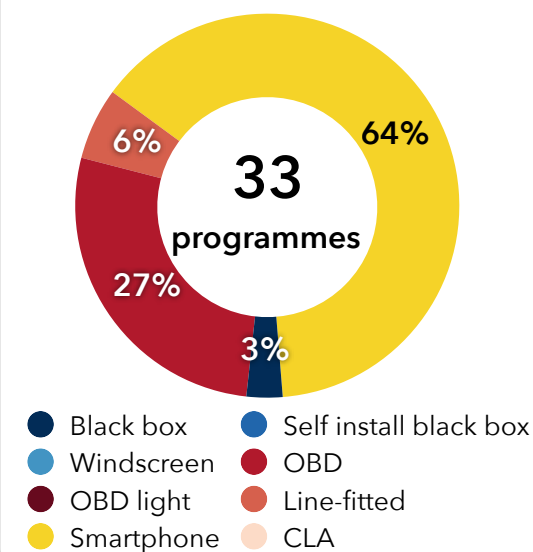
Market share of key TSPs active UBI policies



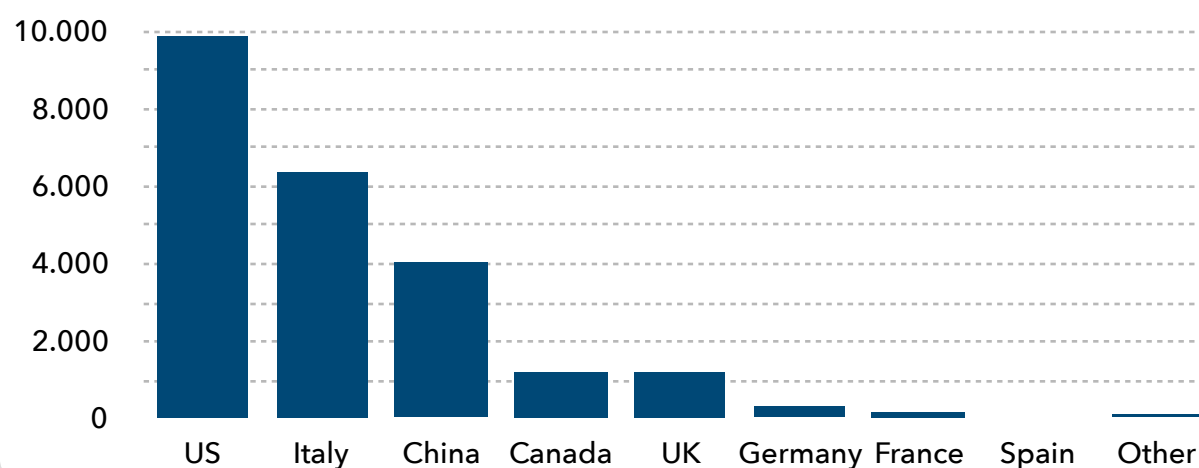
Market share of key TTPs active UBI policies



New programme launches (last 6 months)



Active UBI policies in key UBI countries ('000s)



Global UBI indicators

	Q4 2017	Q1 2018	Q2 2018	Q3 2018
UBI policies (million)	17.6	21.3	22.8	24.3
Active programmes*	374	386	390	403
Smartphone policies (million)	2.7	4.3	5.2	5.9
Smartphone programmes	101	113	122	128

Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

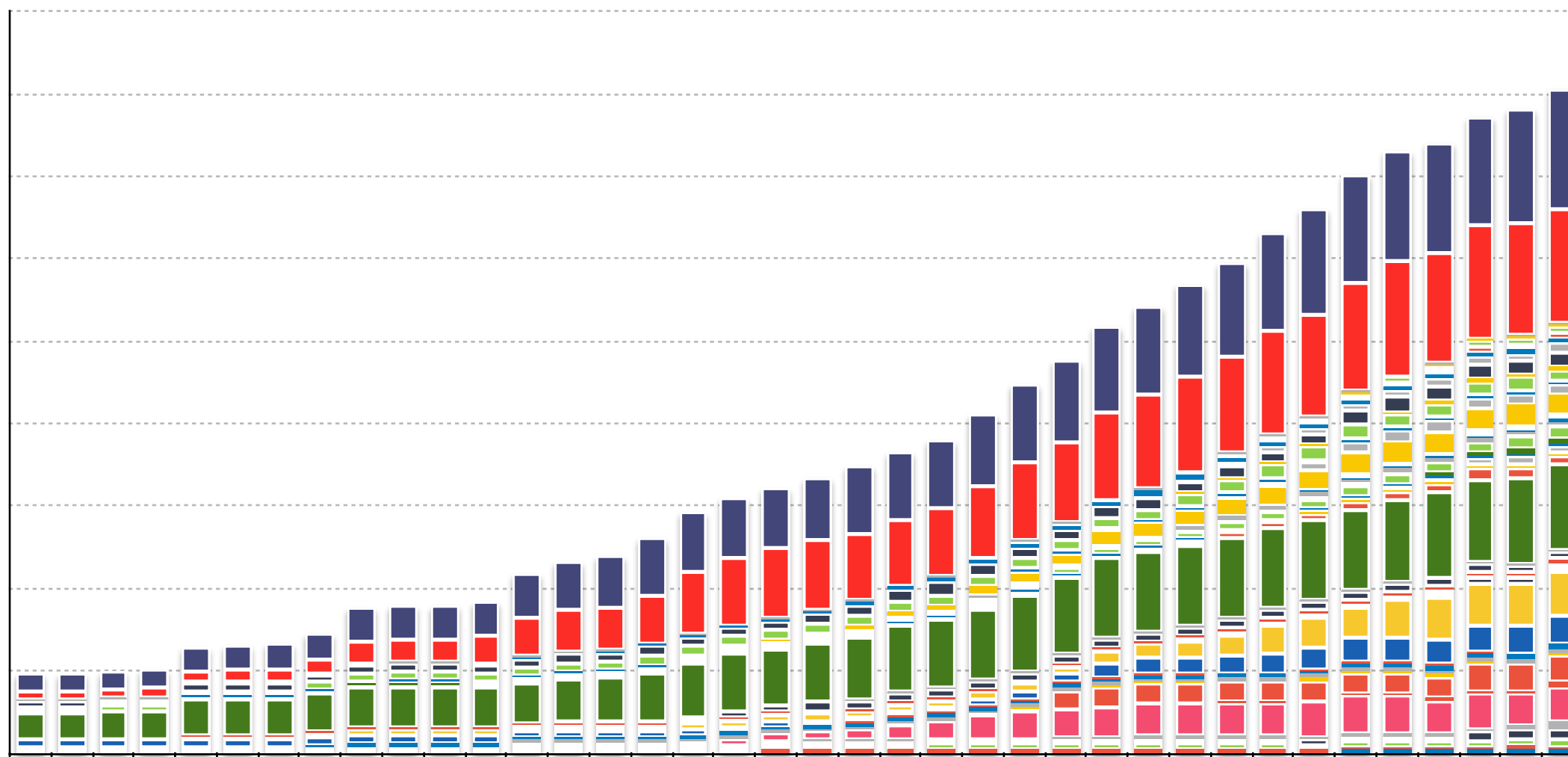
Tier-3 markets

6

Regional markets

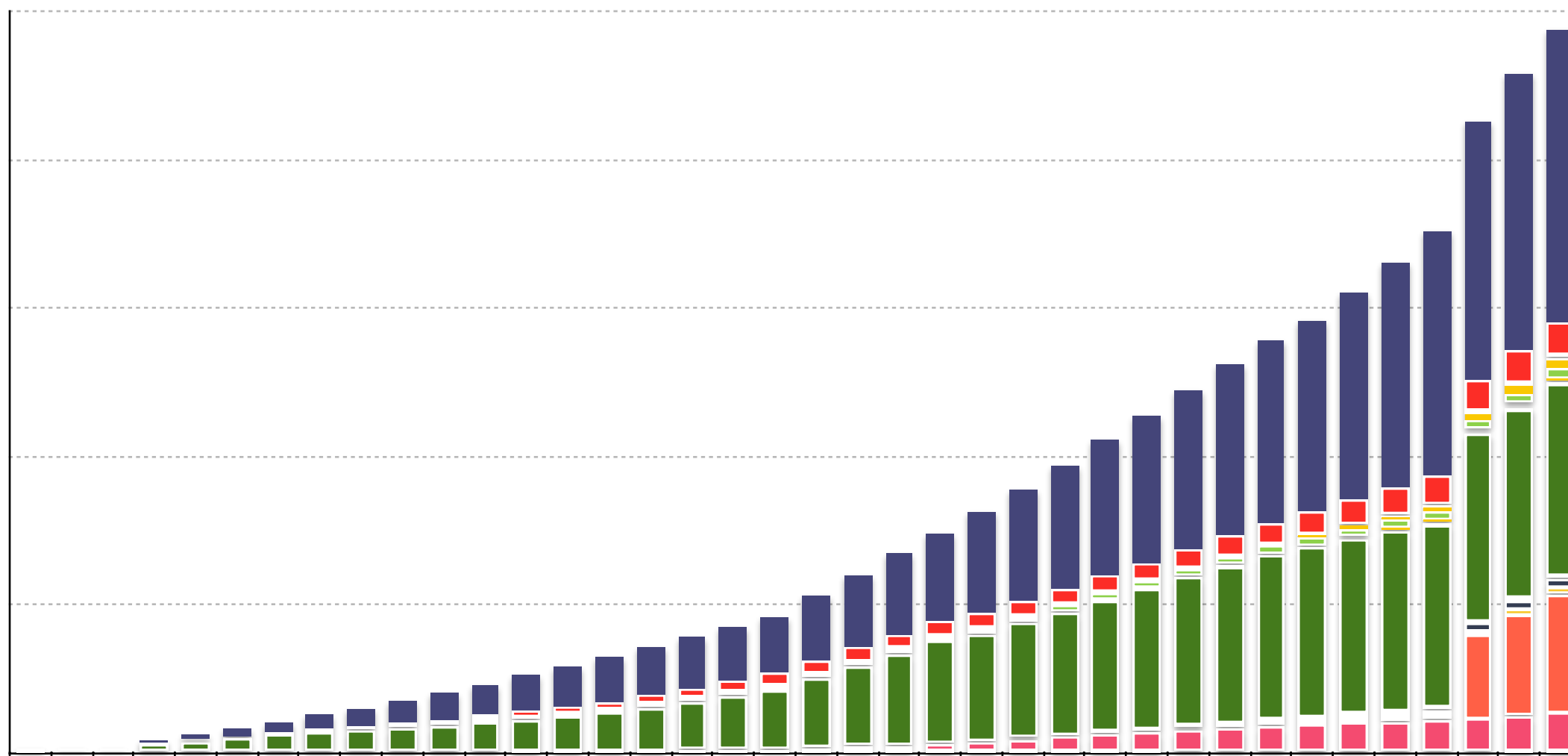
The connected insurance wave is rolling in with 403 programmes active globally

Number of active UBI programmes worldwide

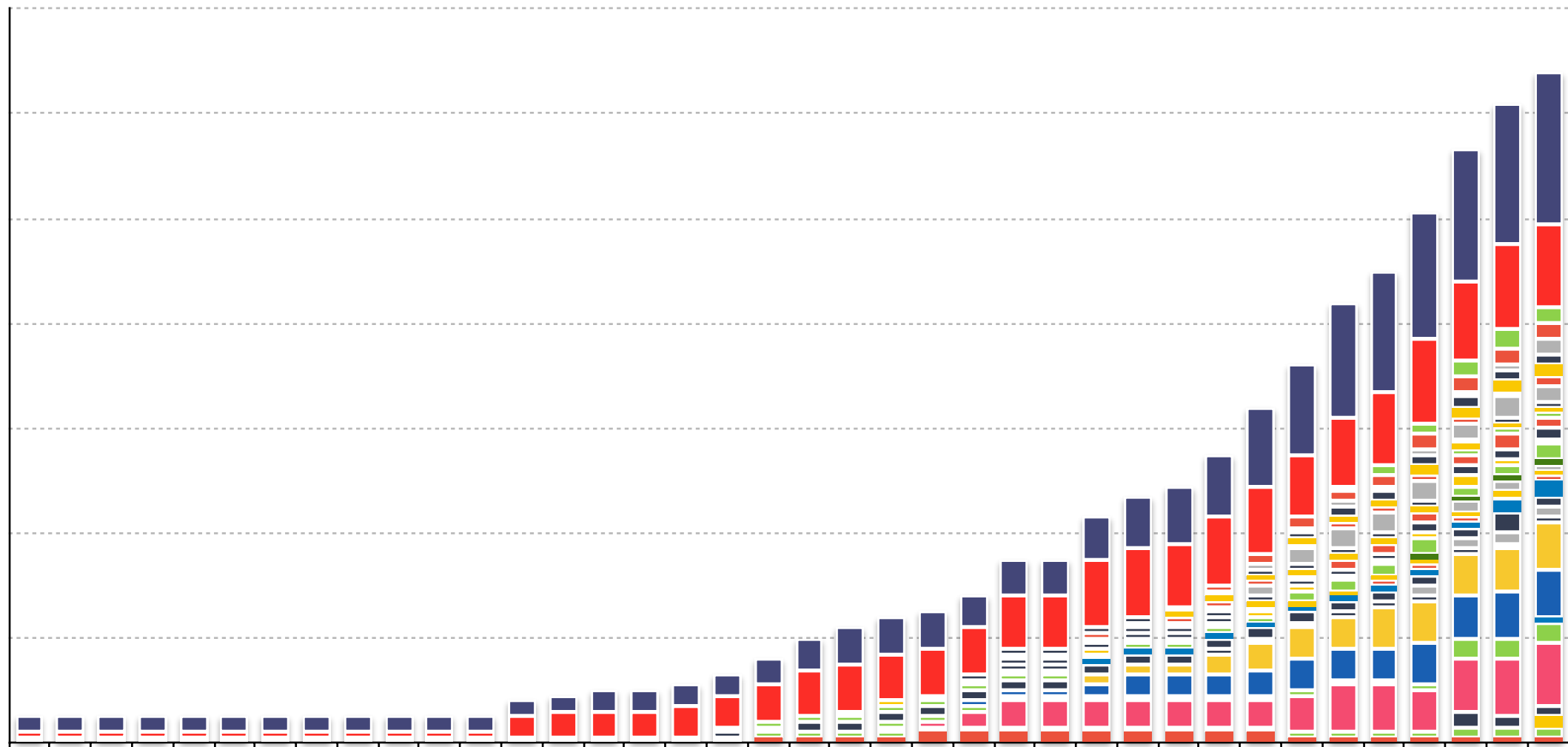


UBI policies worldwide are inching towards the 25 million mark with 1.5 million policies added in Q3

Number of active UBI policies worldwide ('000s)

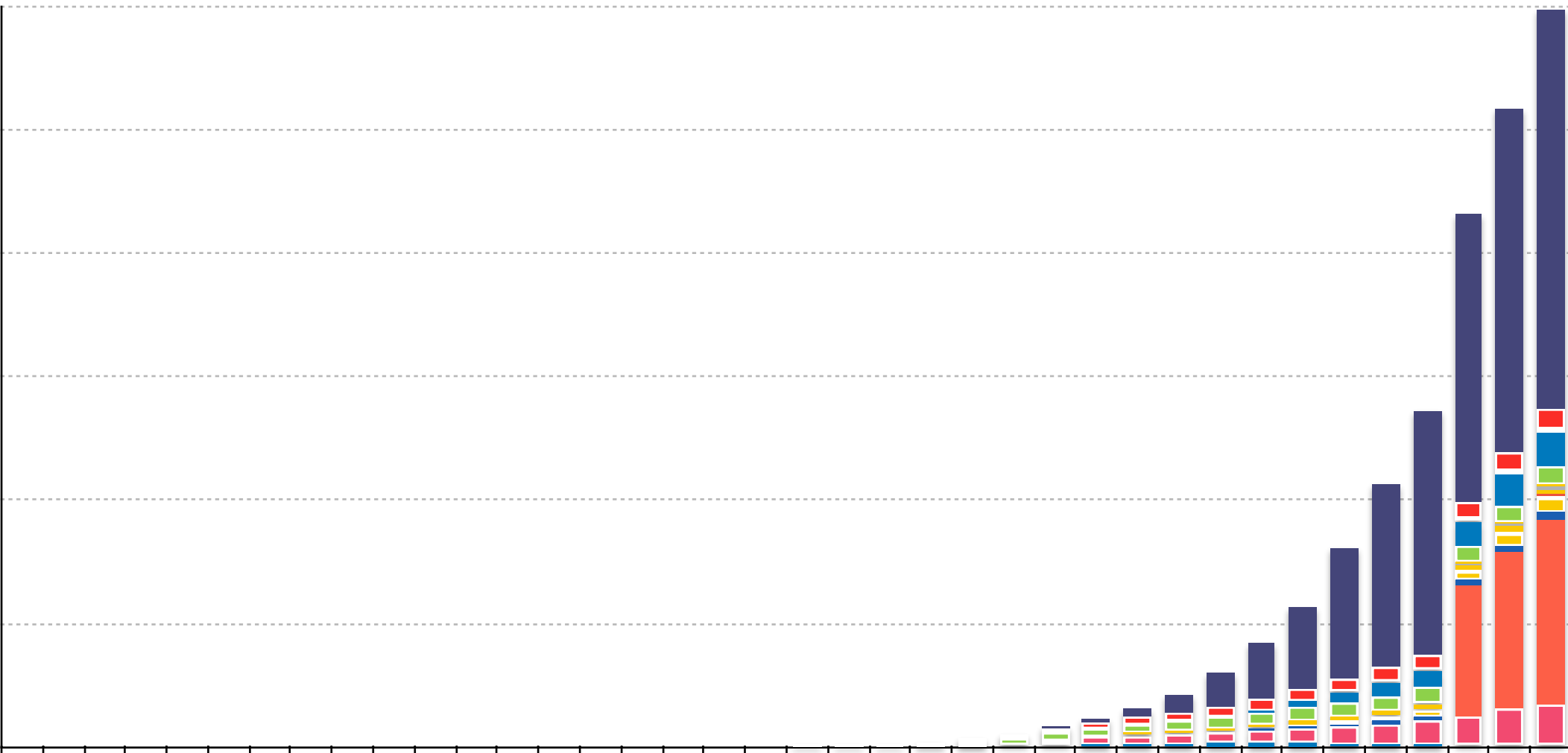


Number of active mobile UBI programmes worldwide



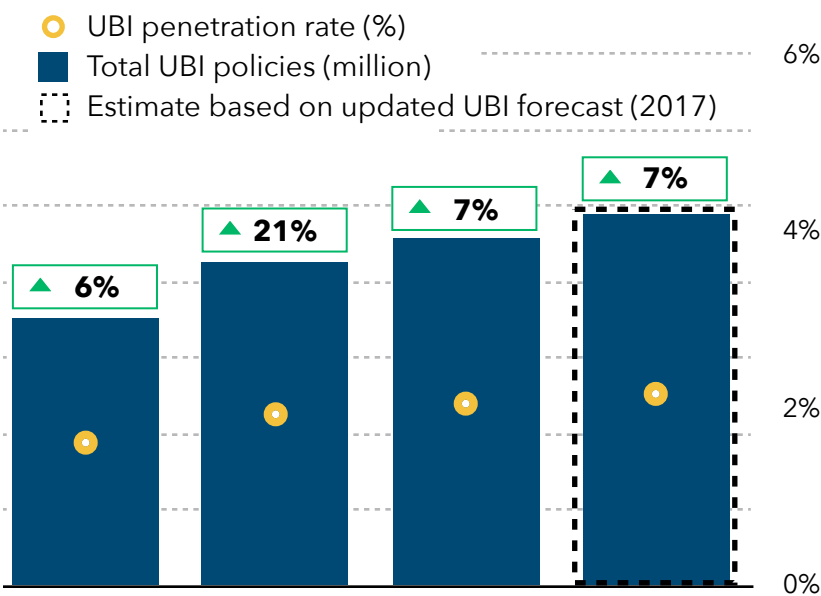
XXX and YYY account for 83% of the new addition of mobile policies over the quarter

Number of active mobile UBI policies worldwide (in '000)

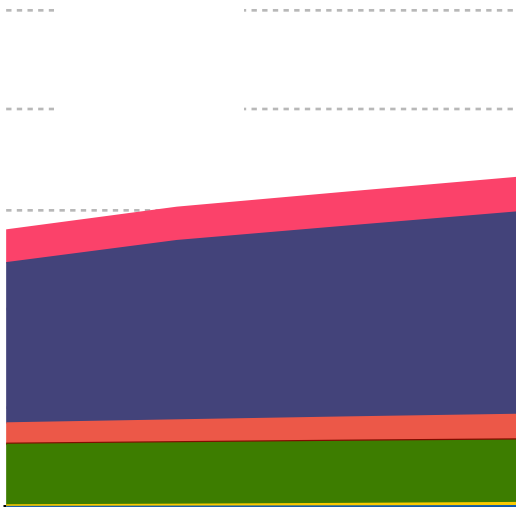


The global market produced an impressive 47% YoY growth rate

UBI policies (million), quarterly growth & penetration (%)

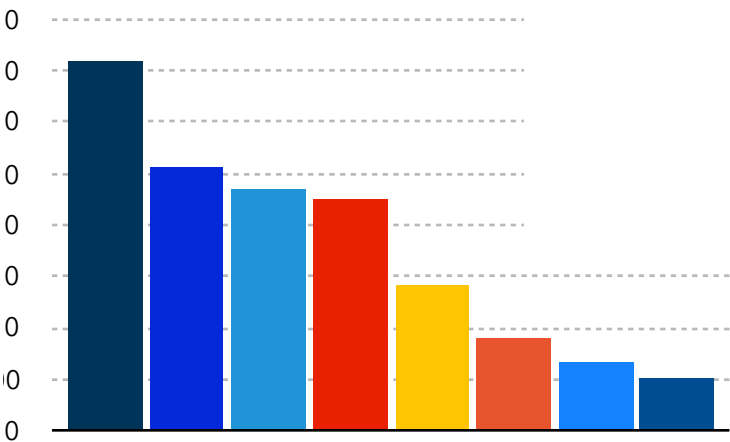


Total UBI premiums generated (€ million, annual basis)

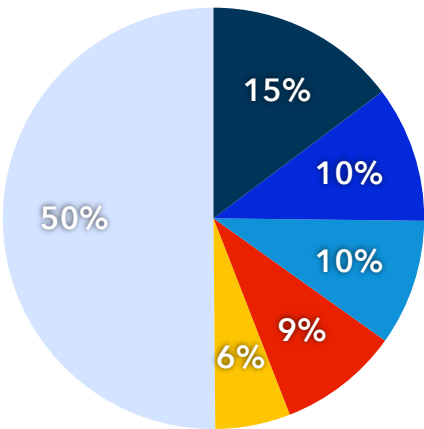


Top global insurance companies by market capitalisation	UBI programme	UBI estimated penetration rate
Berkshire Hathaway	Trial	
Allianz	✓	
AIG	✓	
Ping An	✓	
AXA	✓	
AIA Group		
ING Group		
Zurich Insurance	✓	

Number of active UBI policies by insurance company ('000s)



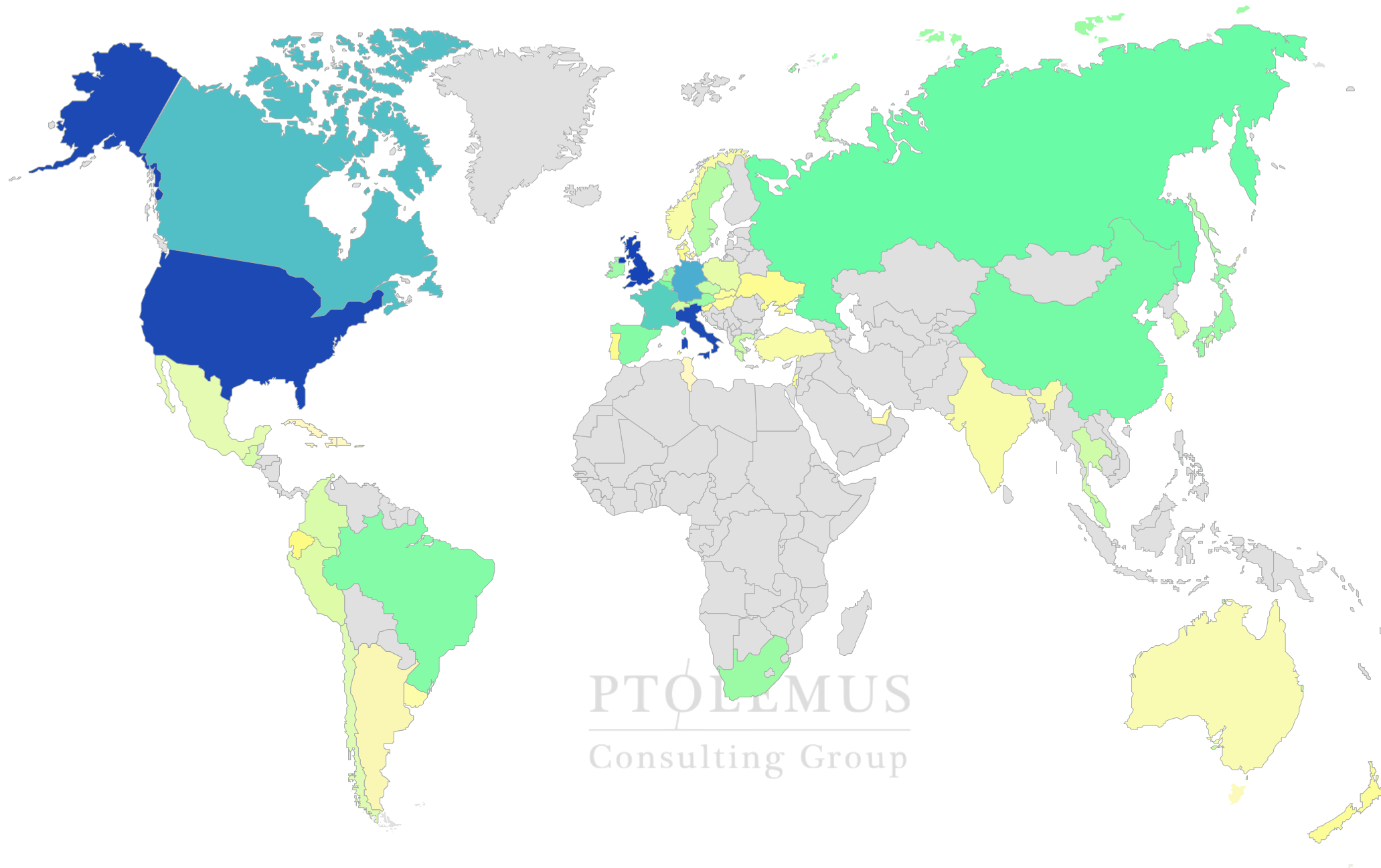
Share of active UBI policies by insurer (% personal line)



Leading telematics insurers	Country	Estimated UBI penetration rate
Progressive	US	
UnipolSai	Italy	
Allstate	US	

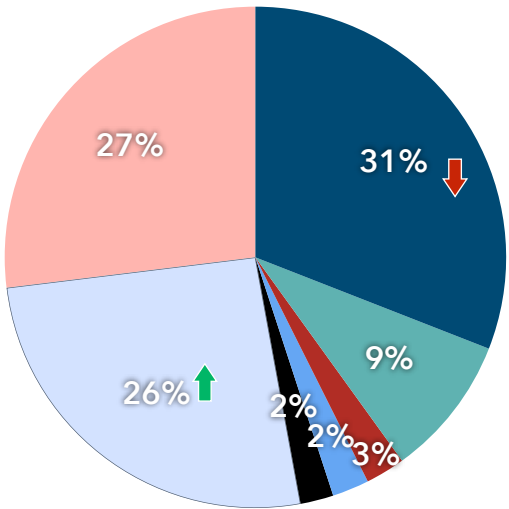
UBI is growing steadily across the globe with China making the biggest advances

Active UBI programmes by country

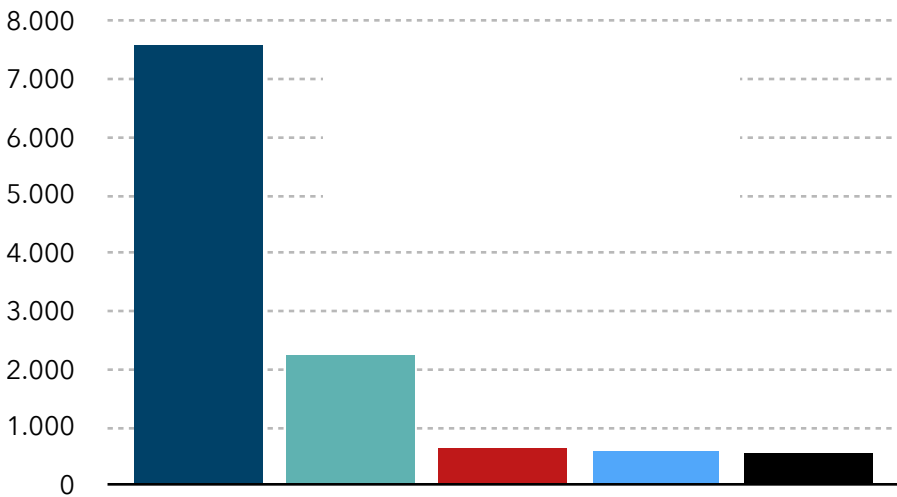


XXX continues to scale faster than any TSPs, adding over 200,000 policies across the globe this quarter

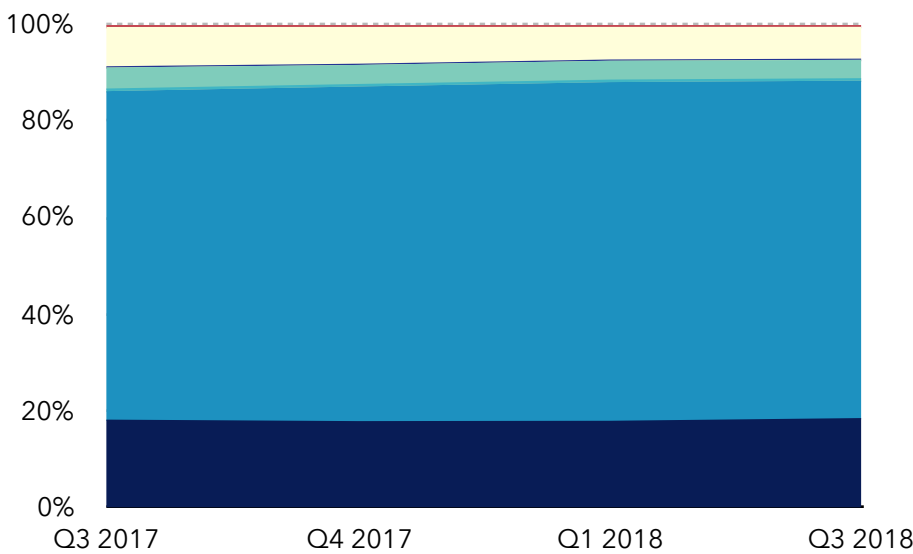
Share of active UBI policies by TSP (%)



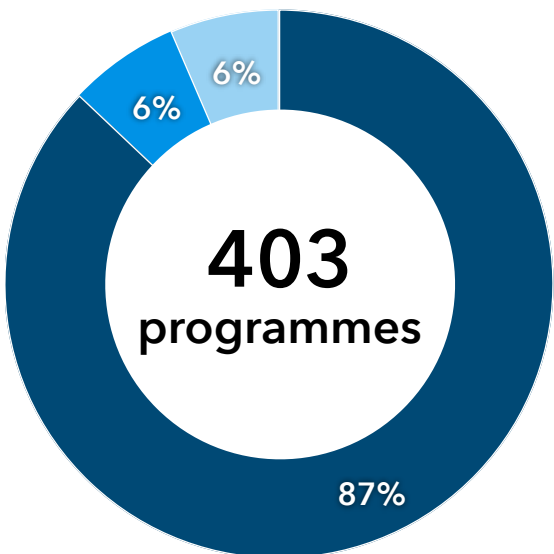
Number of active UBI policies by TSP ('000s)



UBI programmes by target segment (%)

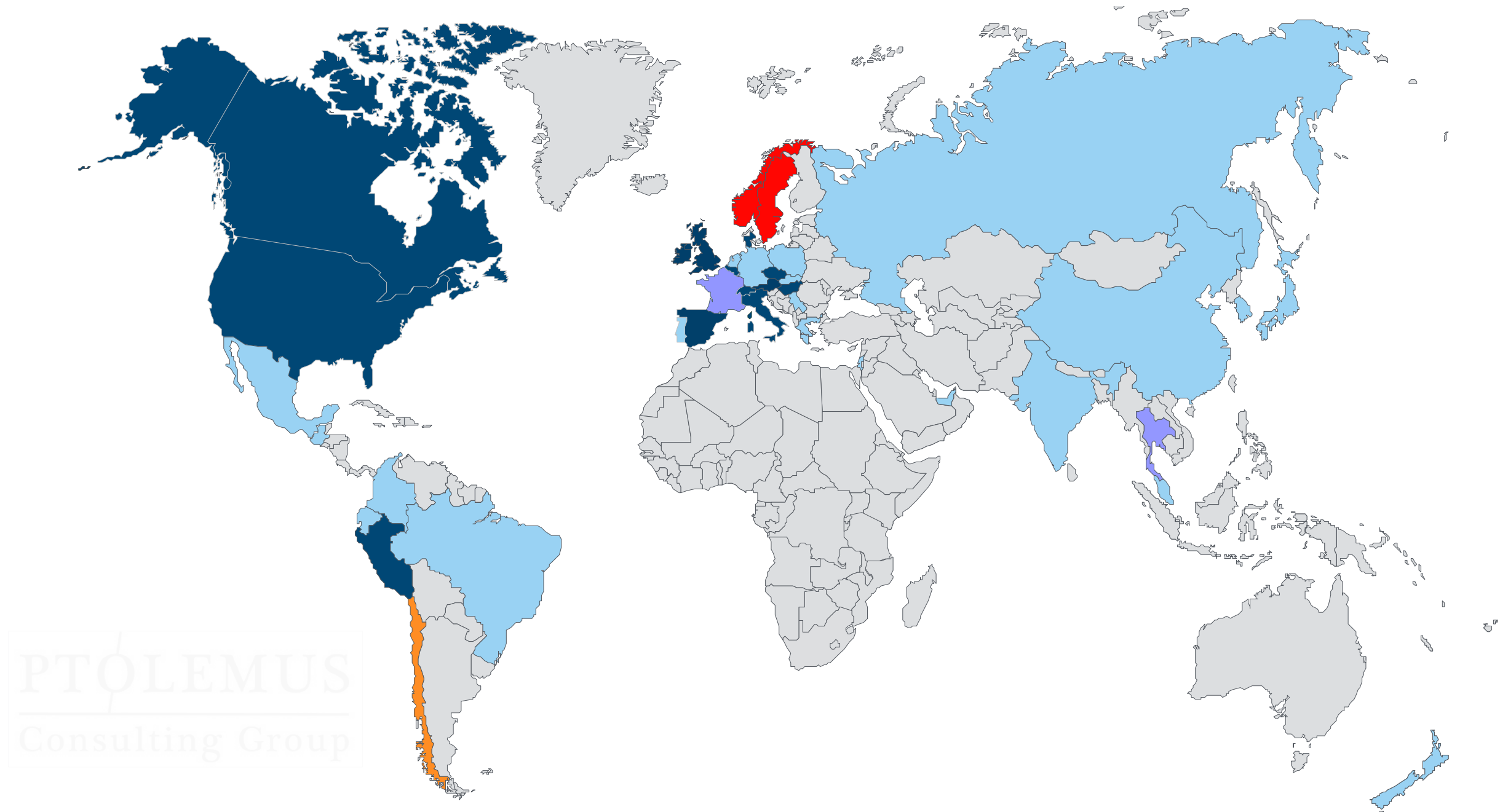


Global UBI programmes by model (%)



Leading TSPs are emerging in regional clusters*

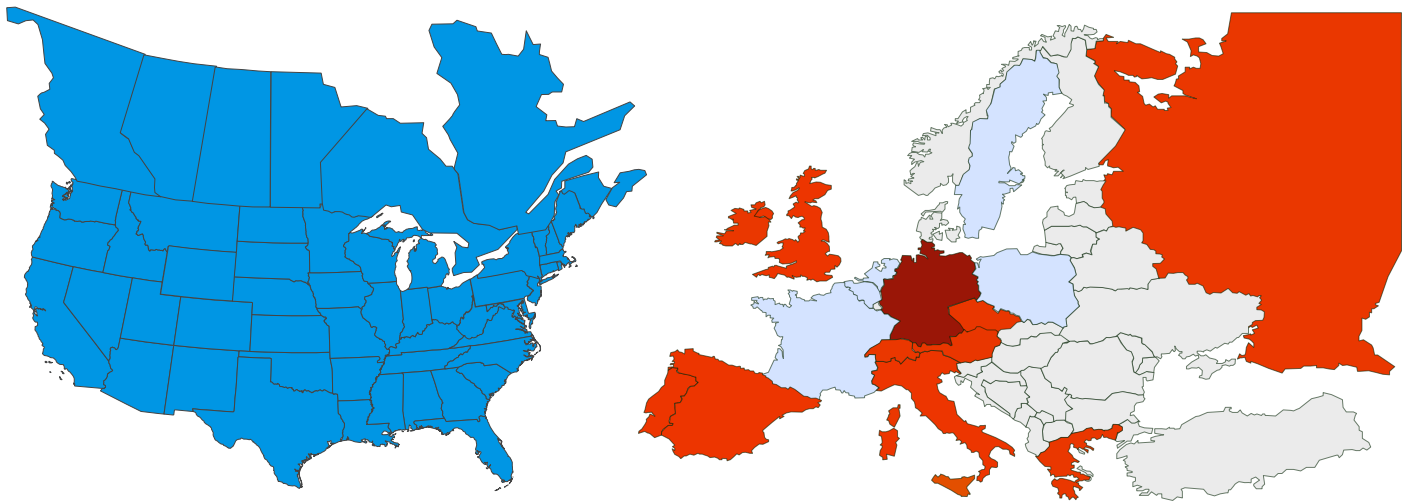
TSPs with largest market share in each country*



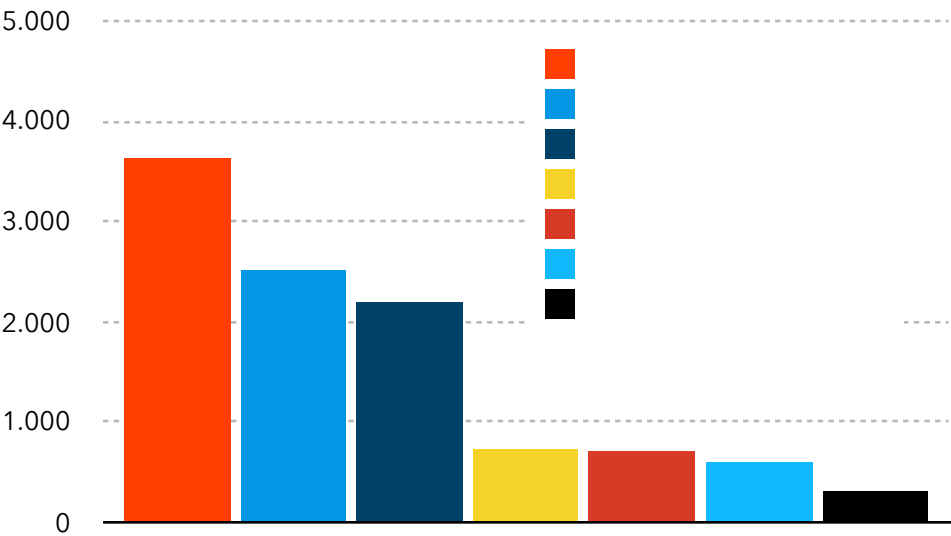
PTOLEMUS
Consulting Group

XXX dominates the European markets while YYY holds on in the US

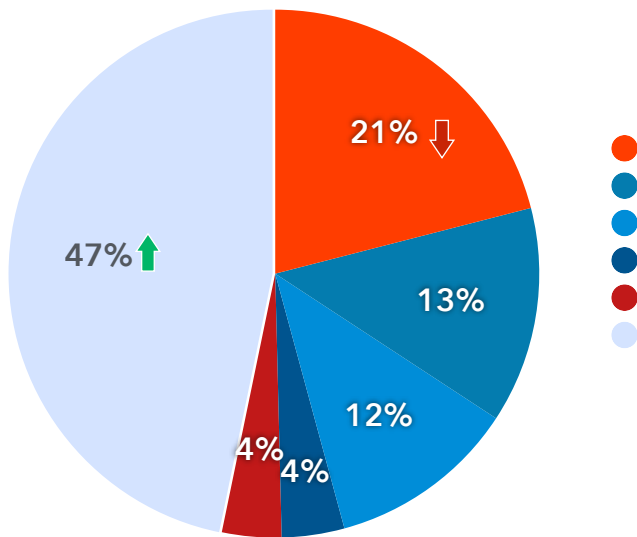
Top TTP market share holder in each country



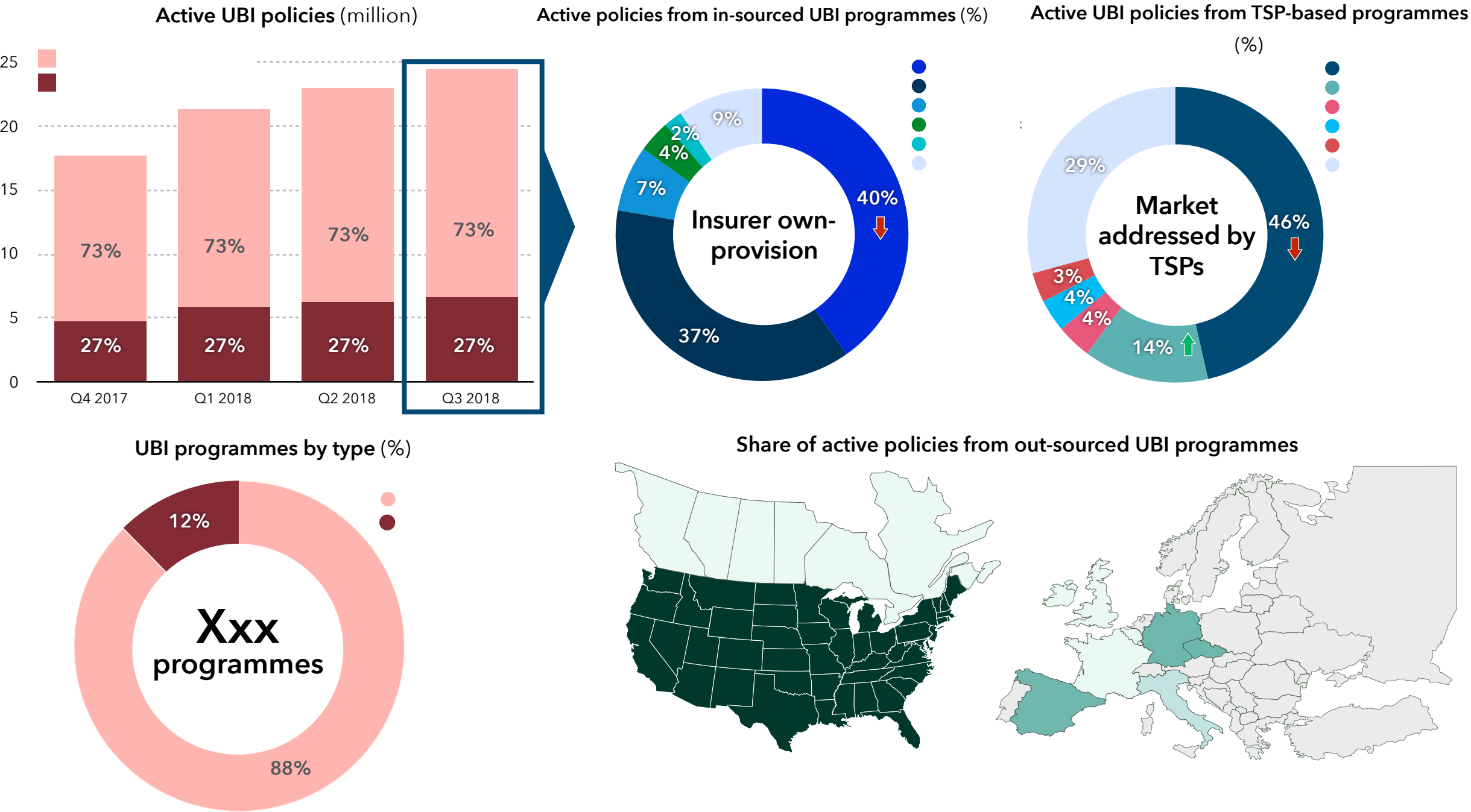
Number of active UBI devices by TTP ('000s)



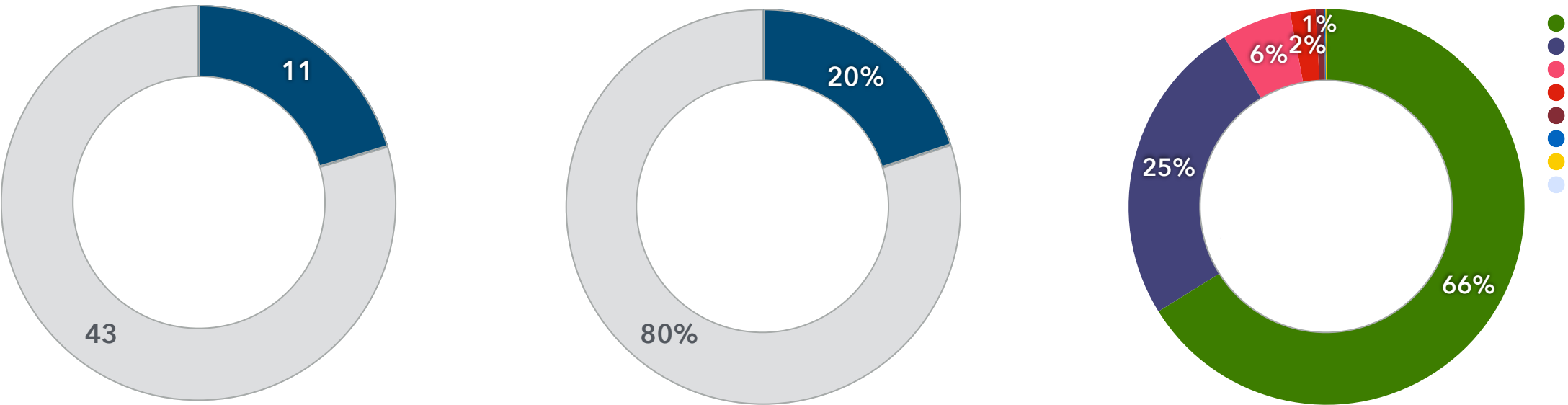
Share of active UBI devices by TTP (%)



Sharp growth in mobile UBI ensures increase in the market share of outsourced policies in Europe and North America

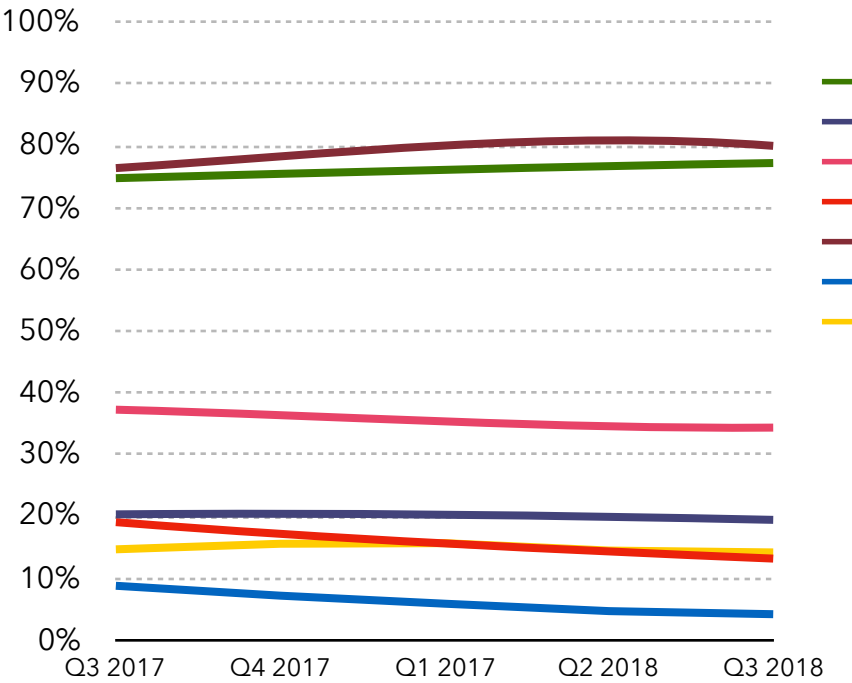


The highest growth rates are seen with the mobile insurance service providers



Quarterly growth rate of leading TSPs in key markets (%)

US	4%	11%	-5%	38%
UK*	-3%	12%	4%	9%
Canada	5%	3%	10%	3%
Italy	1%	-2%	-3%	0%

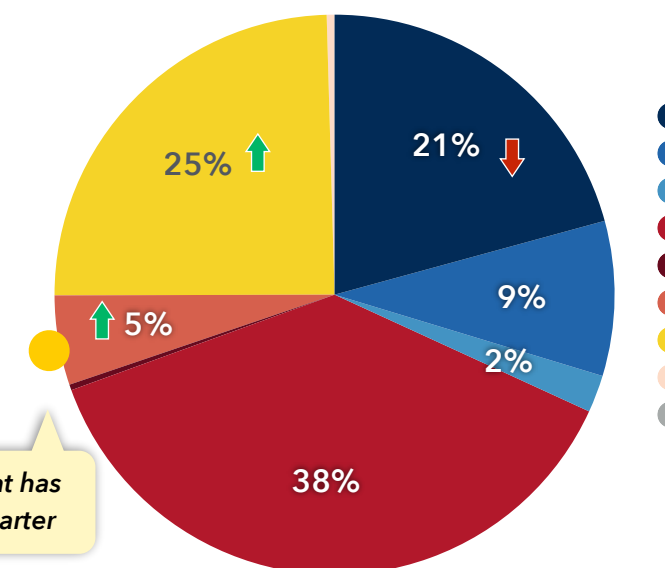


Embedded devices are making great progress with major OEMs expanding their offerings*

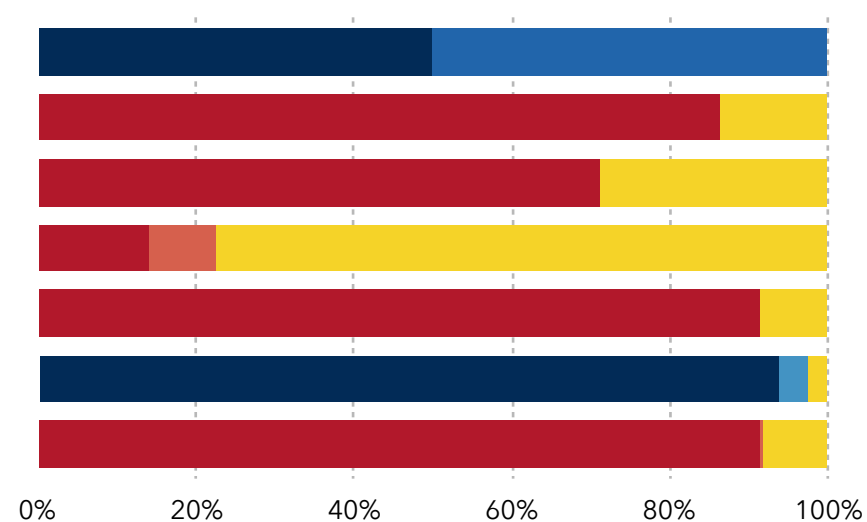
Active global UBI policies by device type ('000s)



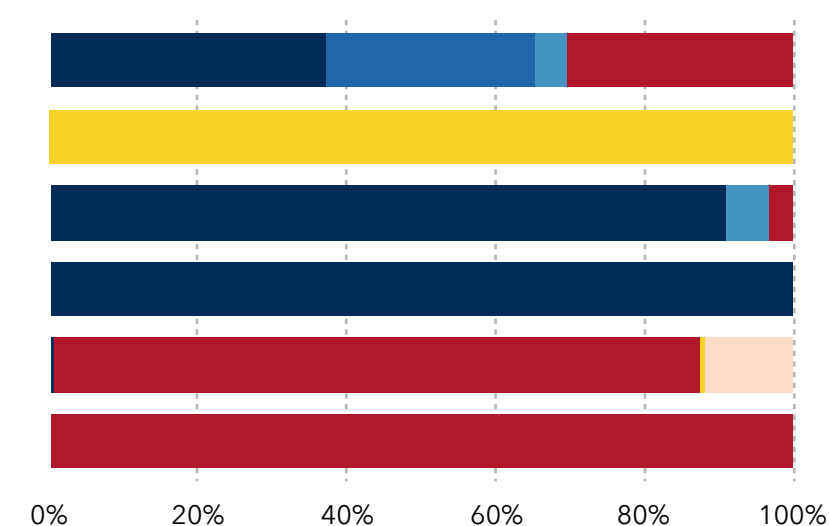
Breakdown of UBI policies by device in use (%)



Device mix for the world's largest insurance groups (%)



Device mix for key TSPs (%)



Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

Tier-3 markets

6

Regional markets

Tier-1 markets

1

Italian market evolution

2

UK market evolution

3

US market evolution

4

Canadian market evolution

Tier-1 markets

1

Italian market evolution

2

UK market evolution

3

US market evolution

4

Canadian market evolution

Tier-1 markets

1

Italian market evolution

2

UK market evolution

3

US market evolution

4

Canadian market evolution

Tier-1 markets

1

Italian market evolution

2

UK market evolution

3

US market evolution

4

Canadian market evolution

Tier-1 markets

1

Italian market evolution

2

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3

US market evolution

4

Canadian market evolution

Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

Tier-3 markets

6

Regional markets

Tier-2 markets

1

French market evolution

2

German market evolution

3

Spanish market evolution

Tier-2 markets

1

French market evolution

2

German market evolution

3

Spanish market evolution

Tier-2 markets

1

French market evolution

2

German market evolution

3

Spanish market evolution

Tier-2 markets

1

French market evolution

2

German market evolution

3

Spanish market evolution

Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

Tier-3 markets

6

Regional markets

Tier-3 markets

1

Benelux market evolution

2

Chinese market evolution

3

Russian market evolution

4

Nordic market evolution

Tier-3 markets

1

Benelux market evolution

2

Chinese market evolution

3

Russian market evolution

4

Nordic market evolution

Tier-3 markets

1

Benelux market evolution

2

Chinese market evolution

3

Russian market evolution

4

Nordic market evolution

Tier-3 markets

1

Benelux market evolution

2

Chinese market evolution

3

Russian market evolution

4

Nordic market evolution

Tier-3 markets

1

Benelux market evolution

2

Chinese market evolution

3

Russian market evolution

4

Nordic market evolution

Monitoring the growth of the UBI market

1

Executive summary

2

Global market evolution

3

Tier-1 markets

4

Tier-2 markets

5

Tier-3 markets

6

Regional markets

Regional markets

1

Rest of Europe market evolution

2

Asia Pacific market evolution

3

Latin American market evolution

Regional markets

1

Rest of Europe market evolution

2

Asia Pacific market evolution

3

Latin American market evolution

Regional markets

1

Rest of Europe market evolution

2

Asia Pacific market evolution

3

Latin American market evolution

Regional markets

1

Rest of Europe market evolution

2

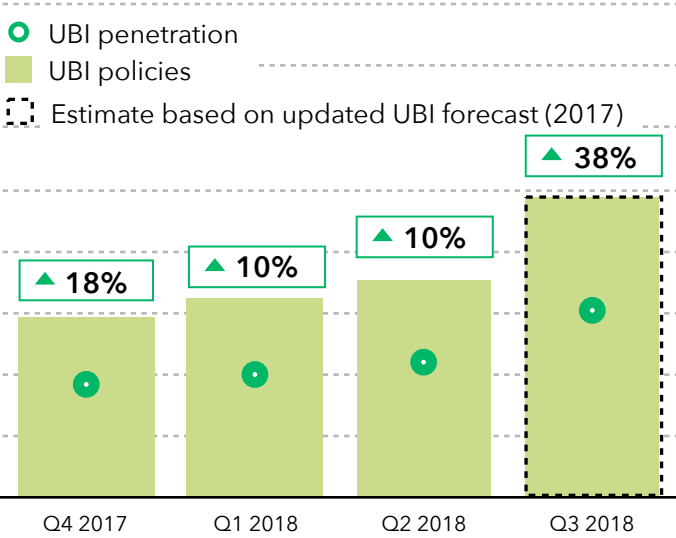
Asia Pacific market evolution

3

Latin American market evolution

AAA's recently launched mobile solution spiked the regional growth

UBI policies (000s), quarterly growth and market penetration (%)



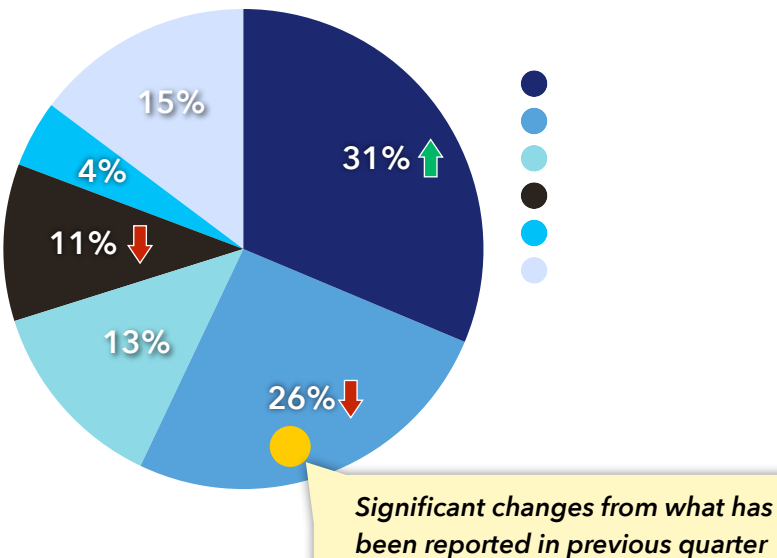
Active programmes & trials by country



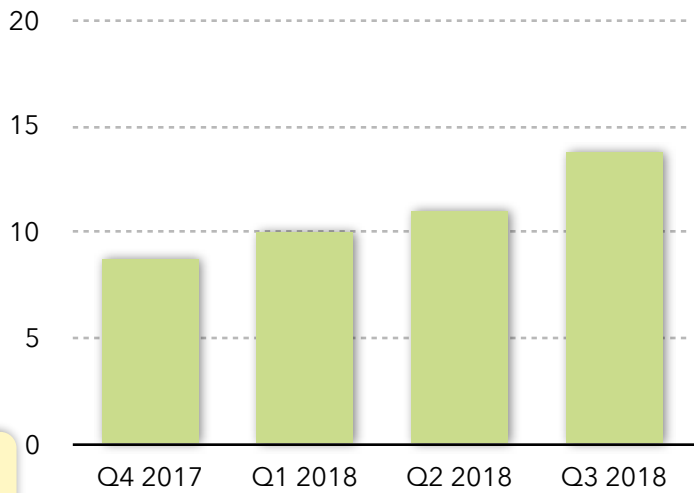
Recent events

-
-
-

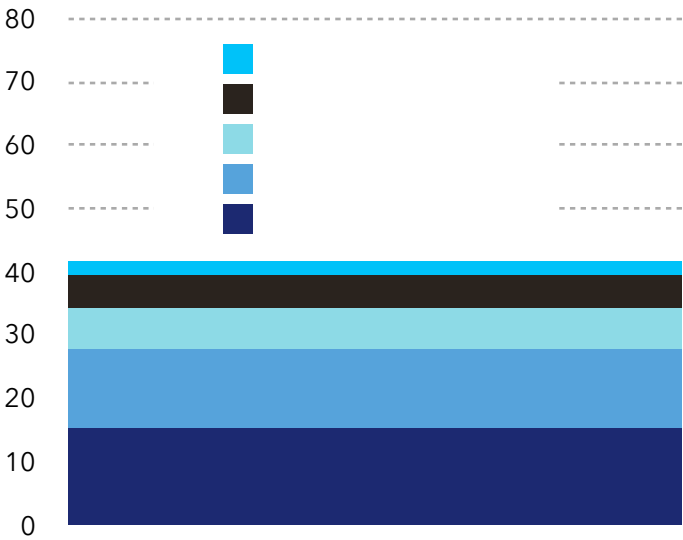
Share of active UBI policies (%)



UBI premiums generated by carrier (€ million, annual basis)



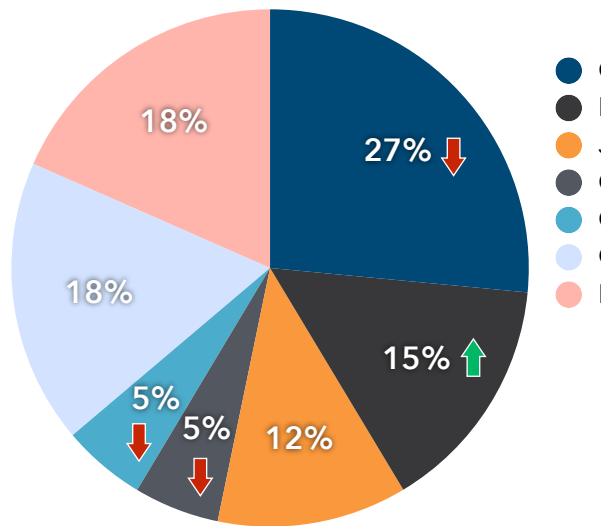
Active UBI policies by insurance company ('000s)



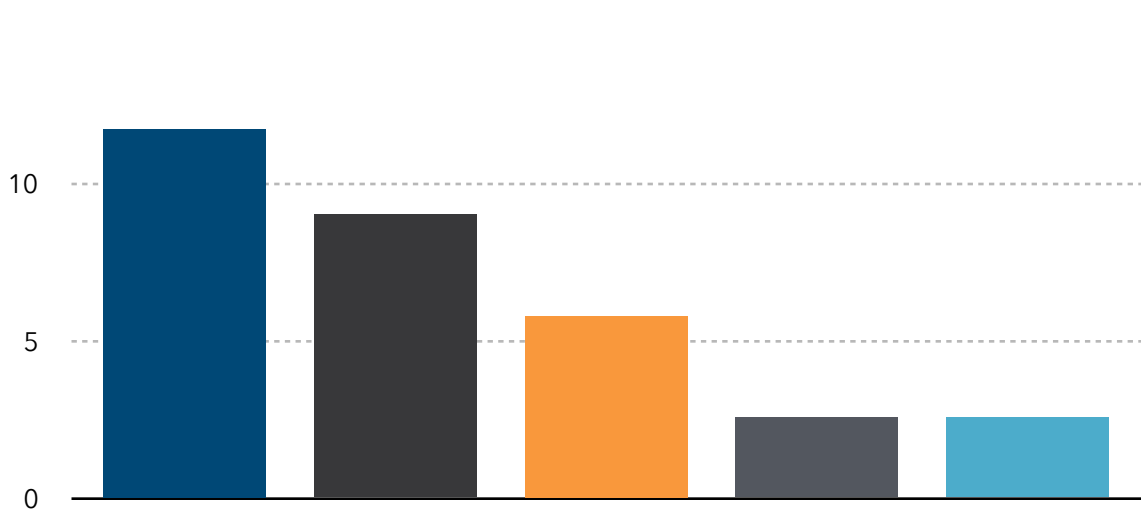


XXX's fast surge shook the regional TSP market*

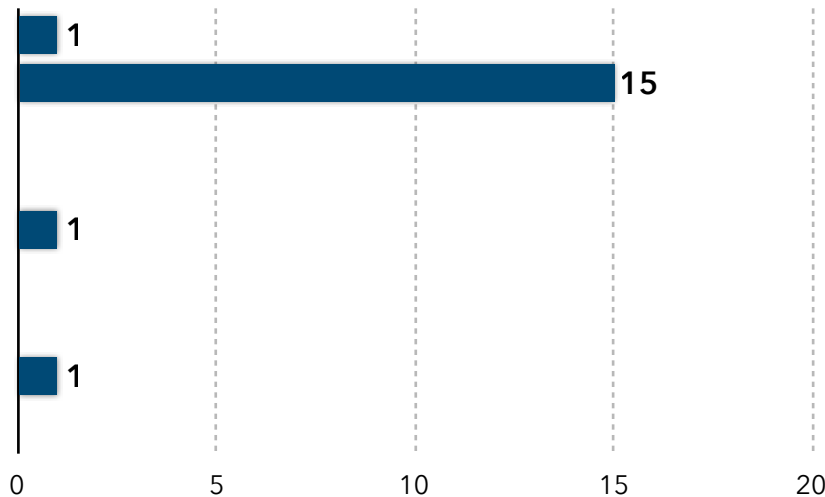
Share of active UBI policies by TSP (%)



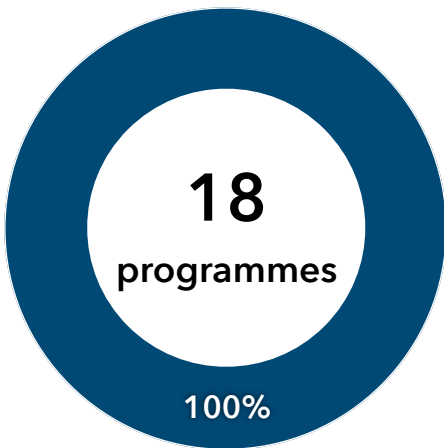
Number of active UBI policies by TSP (000s)



UBI programmes by target segment



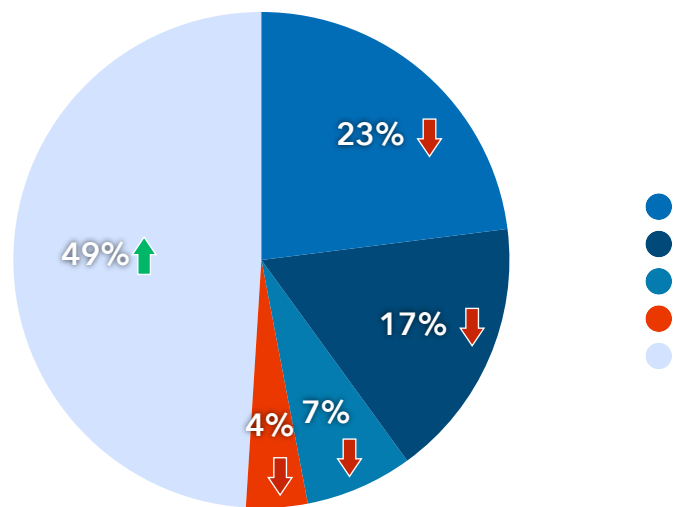
UBI programmes by model (%)



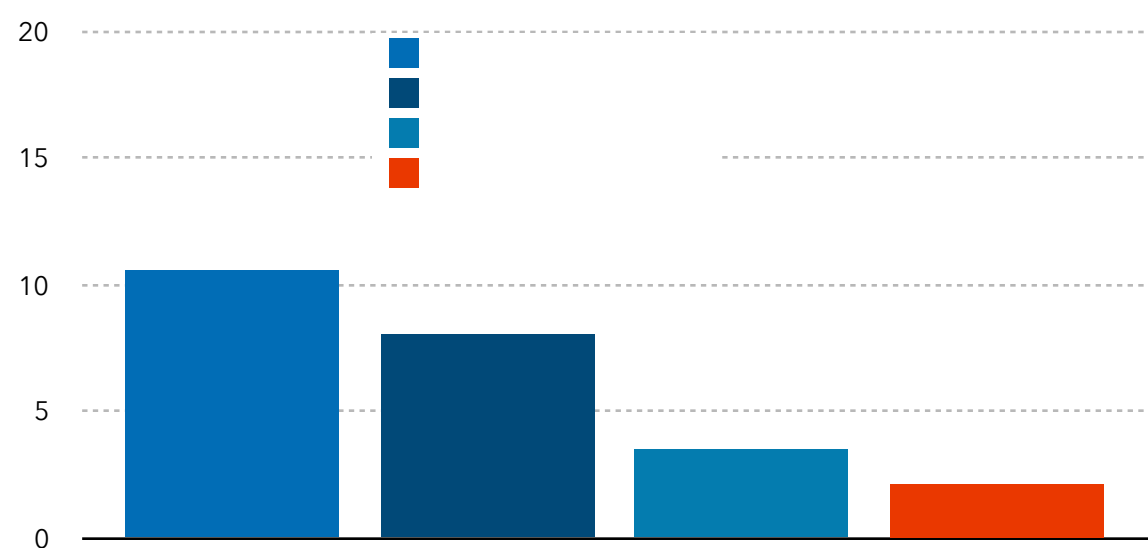


All TTPs lost market share to smartphone apps

Share of active UBI devices by TTP (%)



Number of active UBI devices by TTP ('000s)



Breakdown of YYY devices ('000s)



Breakdown of XXX devices ('000s)



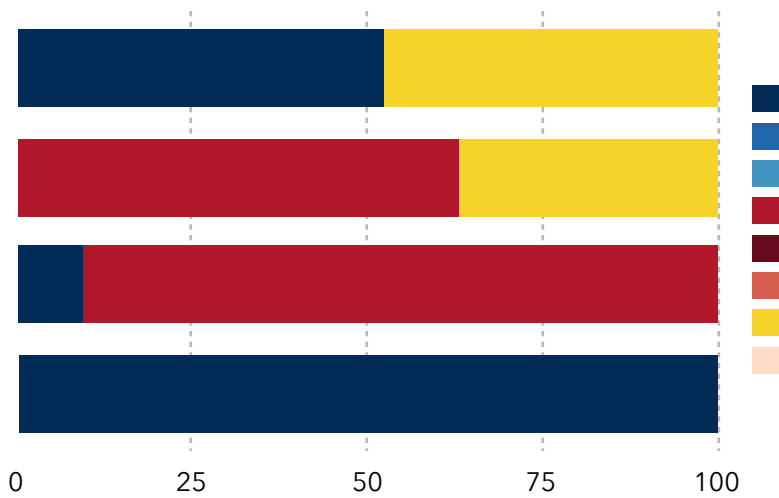
XXX and YYY demonstrate early success of mobile UBI in Brazil



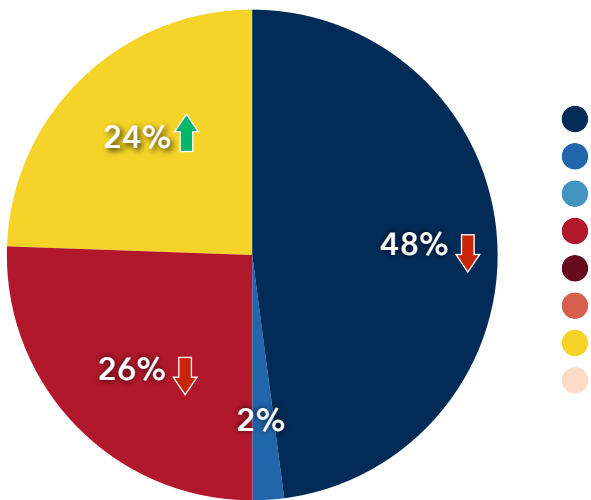
Active UBI policies by device type ('000s)



Device mix by insurance company (%)



Share of UBI device technology in use (%)



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