Evolution of private weather services in different countries: EU framework and economic results

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Photography encouraged

Session “Enabling the Weather Enterprise in Europe for the 21st century

EMS, 2020-09-09 15:00-15:30

Overview

1. Methodology – Key Performance Indicators (KPI)

KPI used for selection:	Sources:
1. Countries: EU, data available on private services 2010-2019	Various
2. National Weather Services: Employees, budget, commercial (Sales)	WMO
3. Private Weather Services: Companies, Employees, Sales, Target industries, Export	Publications, Interviews, corporate communication, Market research

Not included: Equipment suppliers, corporate departments (Insurances), niche players

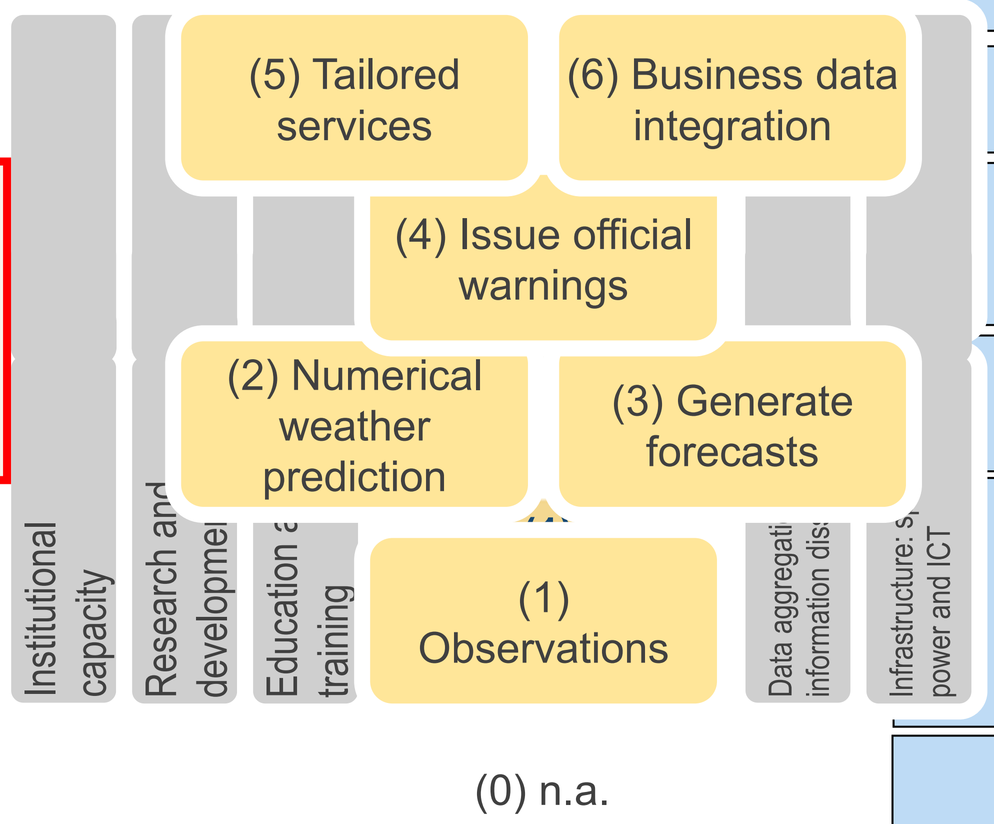
National Hydrometeorological Services (NHMS)
Private Meteorological Services (PSP)

Focus on services: value chain steps 2+3 (1= instruments)

2. Structure of national markets : value chain model

Step	Source: own	Investment (Mill. €)
Tailored services	Business data integration (energy, insurance, air traffic, climate…)	**1-1000**
Presentation (Data transfer, presentation)	Official warnings Websites and Apps Data APIs	**1-100**
Data processing	Numerical Weather Prediction, Measurement Data QC and storage	**10-100**
Networks operation Measure-ments & Observations	Measurements through Stations, Bouys, Radio-Soundings Observations through Radar, Satellite, Investment, Maintenance and Upgrade	**10-1000**
Instrument Supply	Sensors, Networks, Transmitters, Computers	**1-100**

Source: The Power of Partnership: Public and Private Engagement in Hydromet Services. / xiii, © 2019 The World Bank



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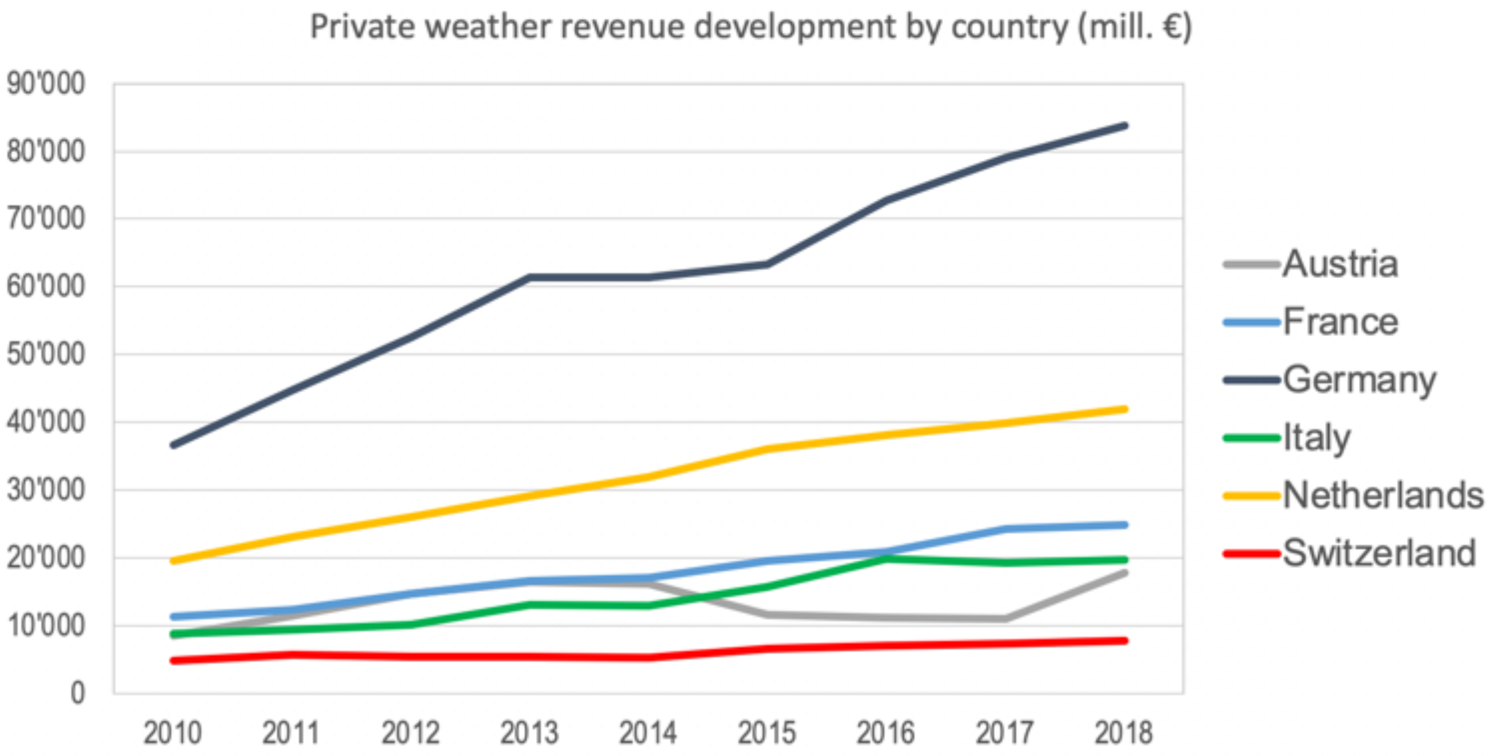
1. Methodology
2. Private services development
3. National services profiling
4. Country differences and influencing factors
5. Conclusions and recommendations

2.1 Private services provider (PSP): revenue development

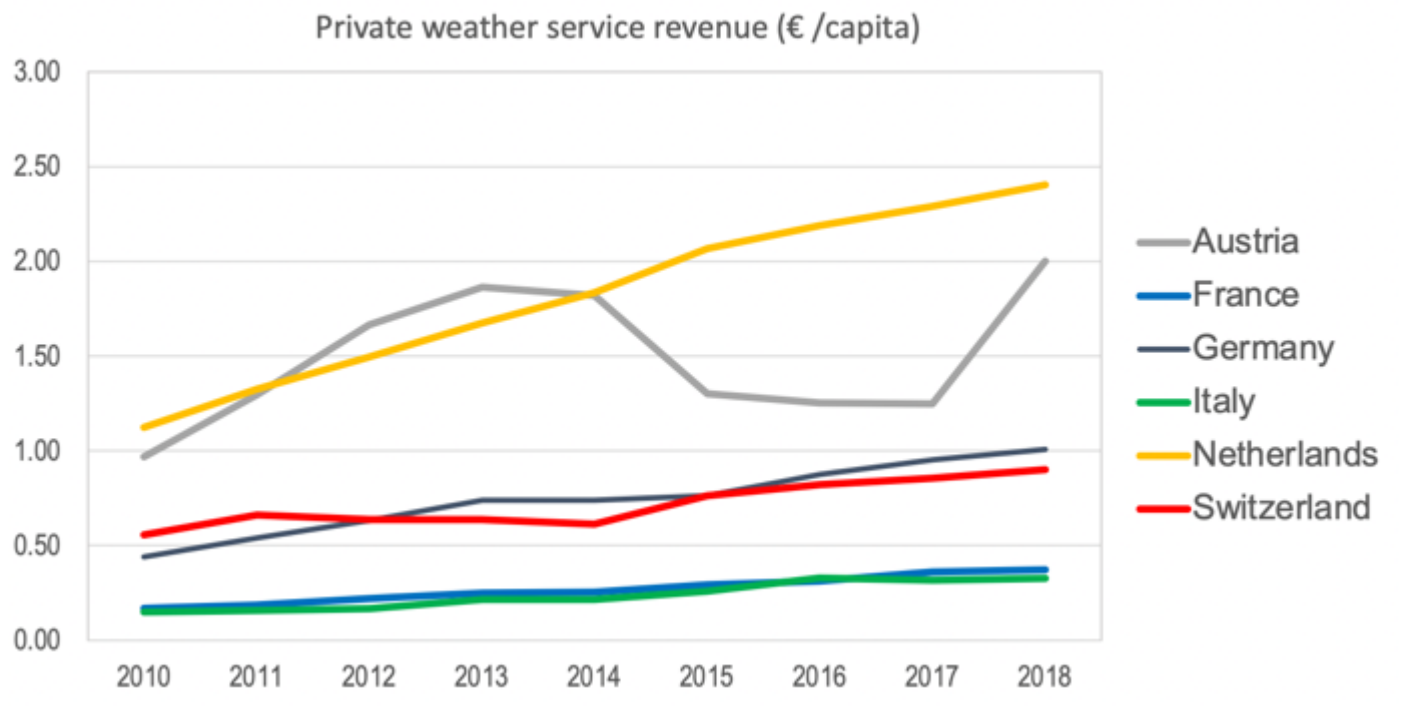


2010-2019 developments:

- Strong PSP growth : >2x
- Country growth not uniform
  - DE large
  - FR, IT much smaller
  - Small countries can perform (NL)
- Size and populations may differ, as well as purchasing power

Strong growth; need to normalise countries by GDP, pop…

2.1 Private weather services : revenue per capita

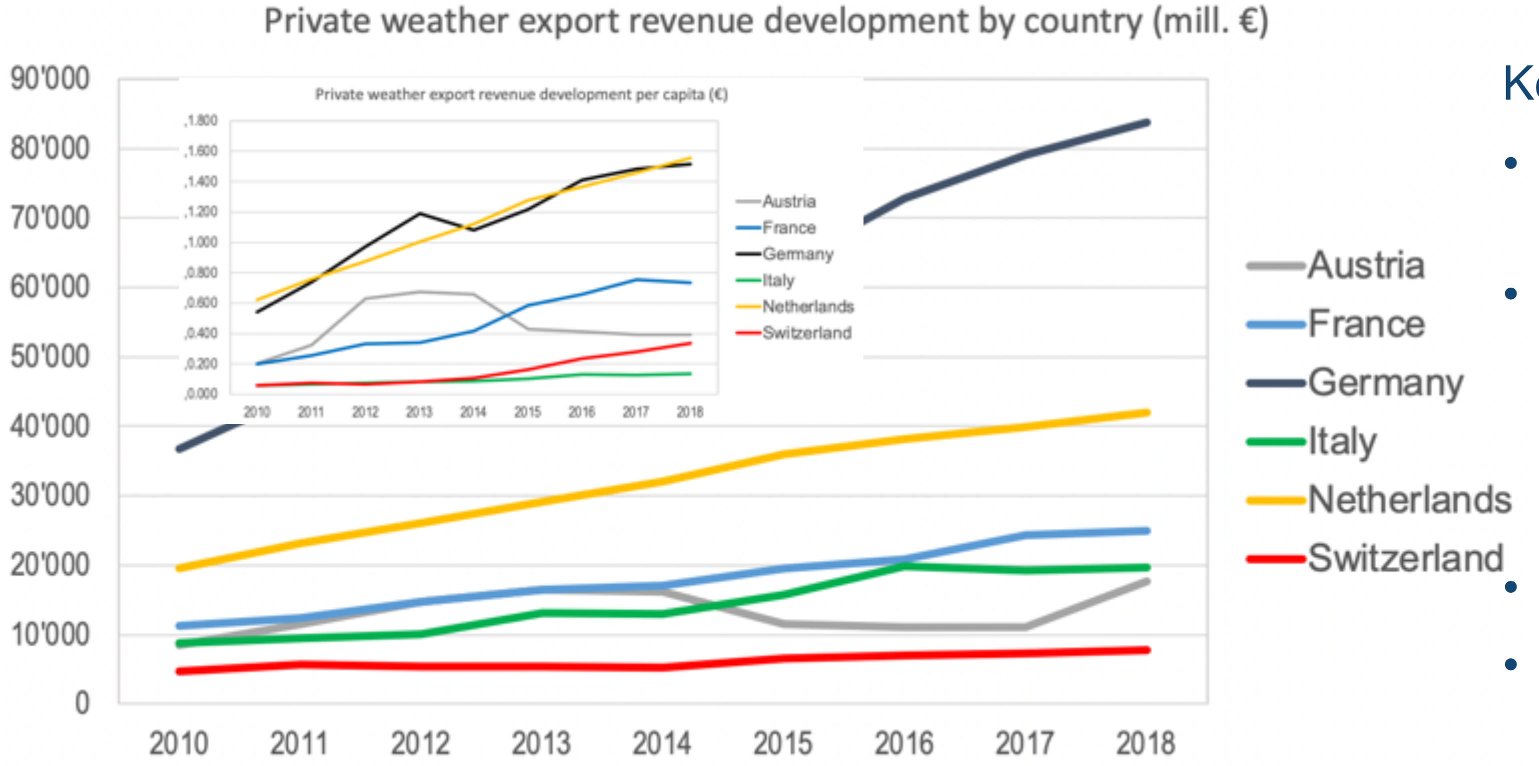


Some effects:

- Highest per capita revenue and growth in NL
- Medium in DE, CH
- Lower in FR, IT
- Special case: AT
- Country size and Climate differences do not explain the differences

Significant differences in private service development

2.1 Private weather services : export revenue

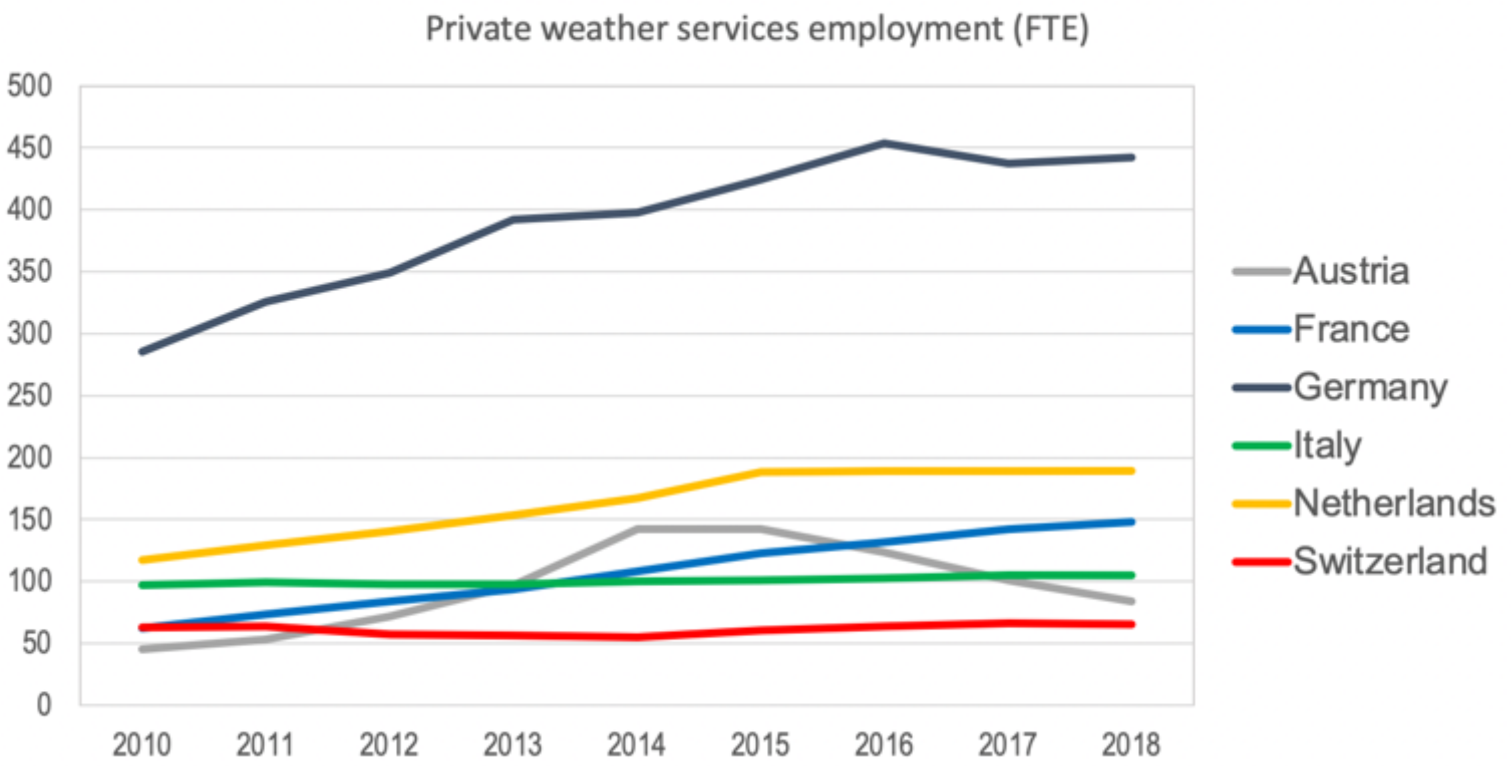


Key findings

- Strong export growth (3x): sign of globalisation
- 3 export intensity groups:
  - Strong : NL, DE
  - Medium: AT. FR
  - Weaker: CH, IT
  - But CH growing
- Highest export profits: NL DE
- Export activity in FR, IT, AT, CH is “secondary”.

Internationally competitive private services in few countries

2.1 Private weather services : job creation

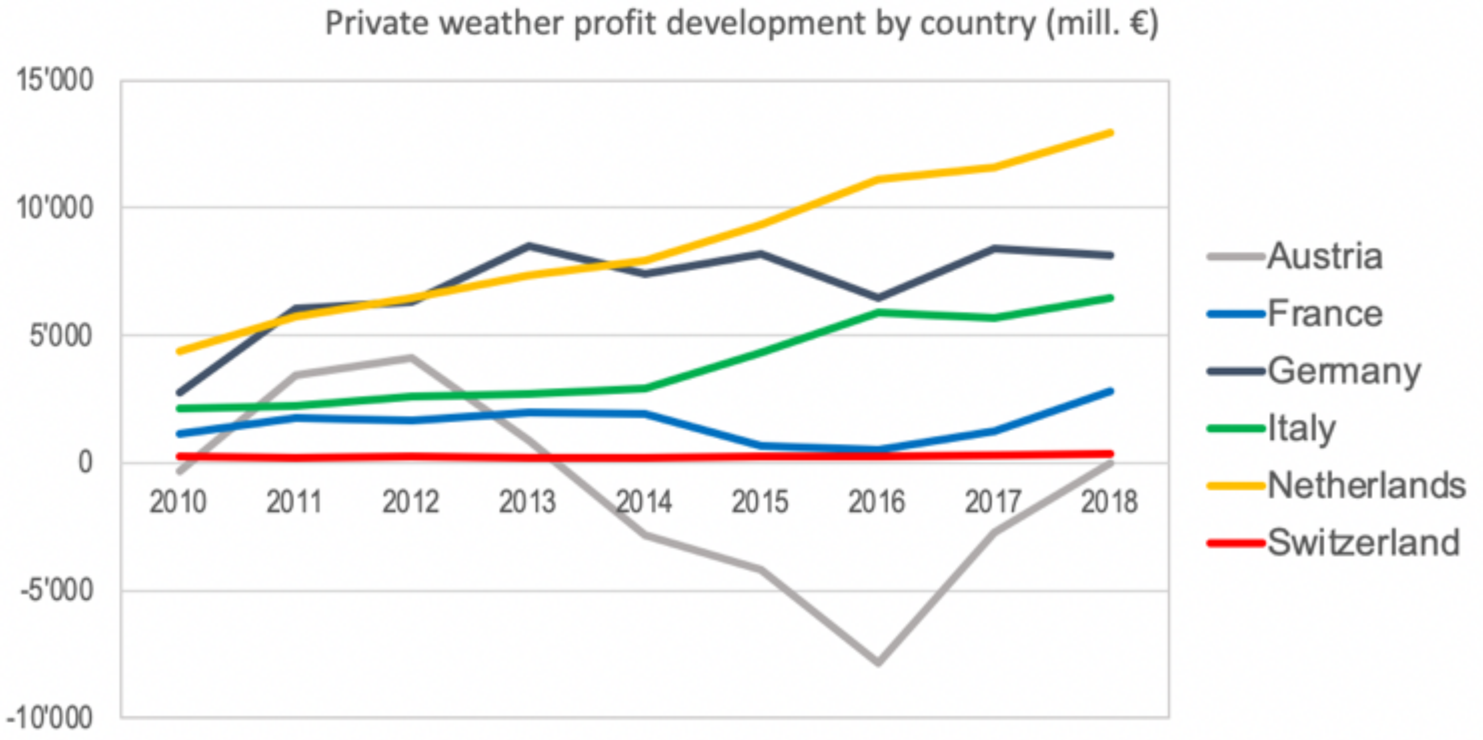


10-year development:

- Job number grew 1.5x
- Strongest growth: DE, NL;
- CH IT with less growth and more restructuring
- AT changes driven by over-investments
- Most job growth in new segments (media, energy)
- Not all business shown

Private weather service create higher value jobs

2.1 Private weather services : value creation

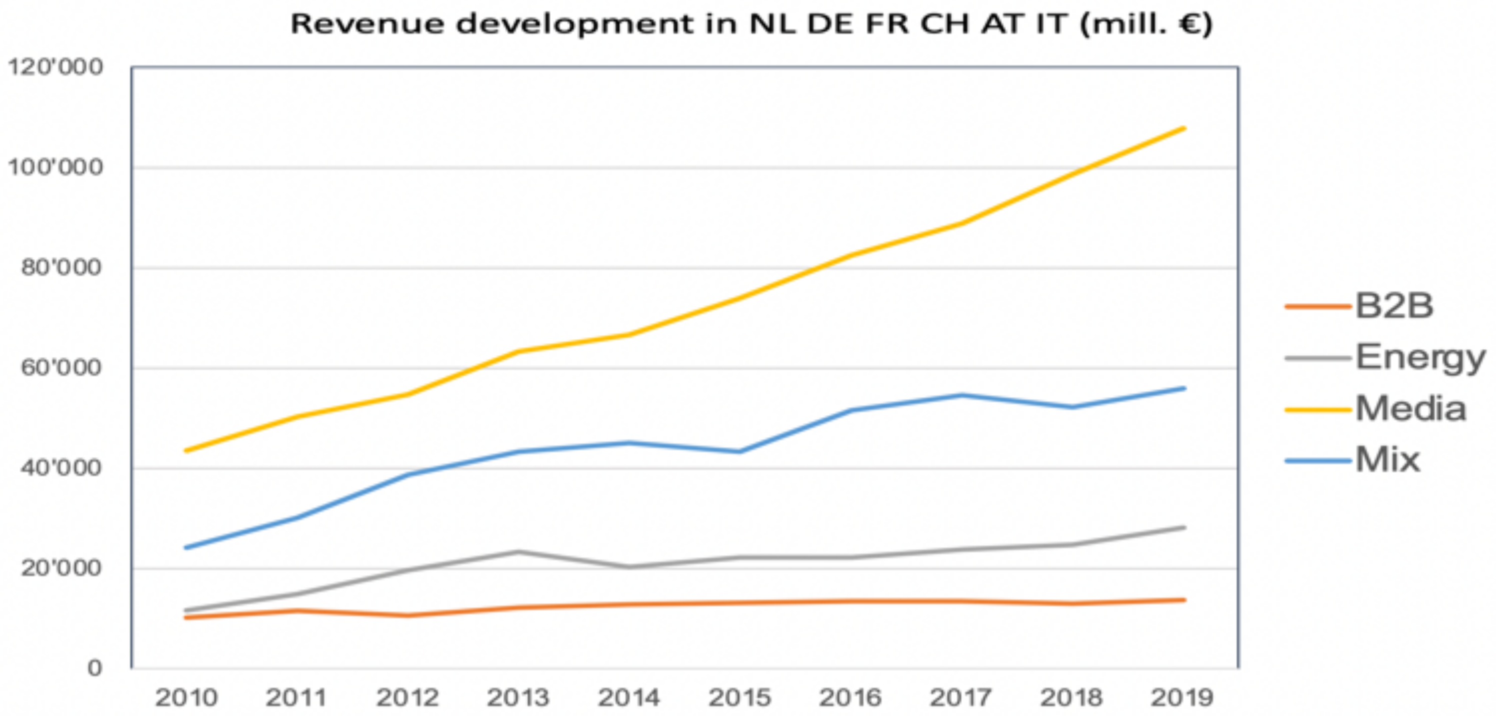


Three 10-year development:

- Profitable growth: DE, NL, IT;
- Steady profits: IT, CH
- Unstable: AT
- Most job growth in new segments (energy, B2B)
- Profits not driven by technology alone

Variable environment, need focus on employment and profits

2.1 Private weather services : revenue by sector



Three 10-year development:

- Strongest growth:
  - Media 25% p.a.
  - Energy 24% p.a.
  - Mix 23% p.a.
- Classic consulting and services (B2B) slower
- "Mix" provide specialised services - more difficult to track
- Trends likely to continue

Media, energy and special services drive growth

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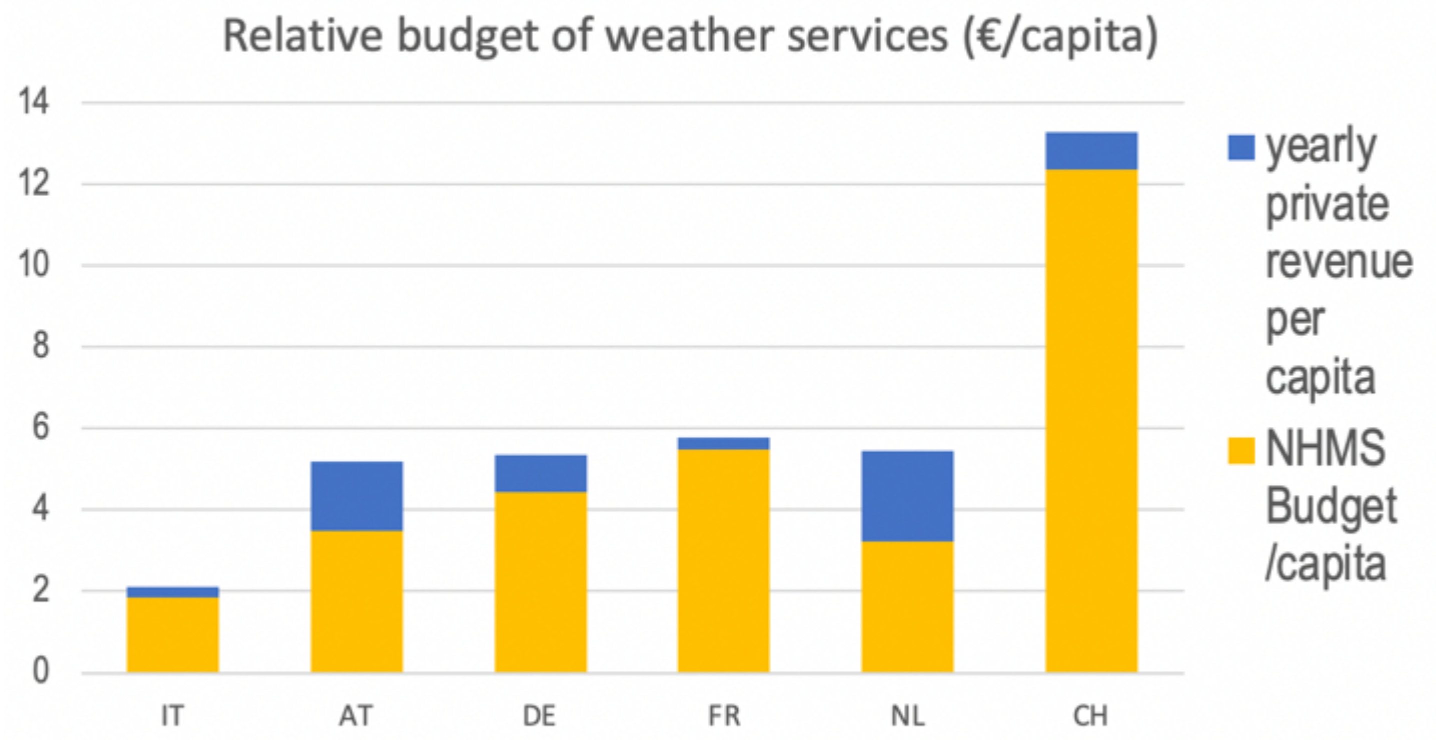
3.3. National services vs. private: yearly revenue

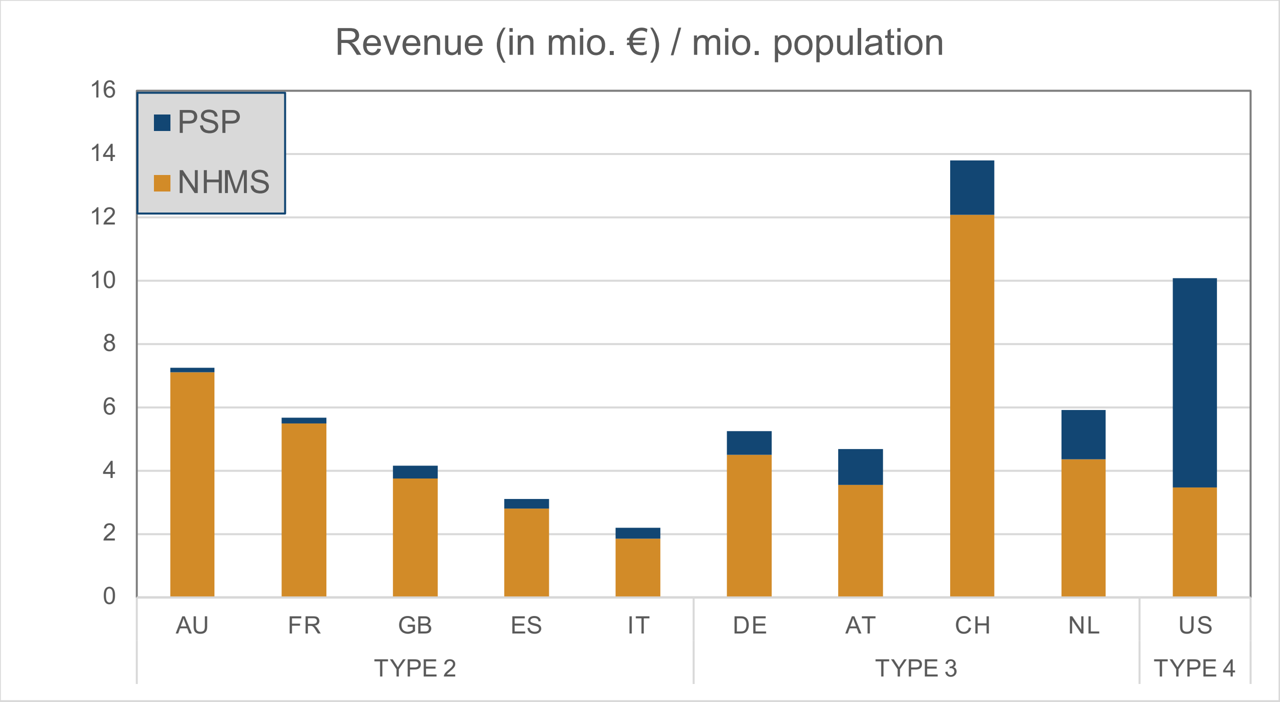


Some effects:

- Private weather services only significant in few (CH, NL, DE; AT)
- AT private services not typical (negative profit)
- Always strong NHMS basis
- Split NHMS/PSP varies more than expense per GDP

Expenses per capita widely different : driven by policy

3.2 National services profiling: revenue/pop. (2016)



Some effects:

- Population size is not a major driver
- Other distinctions appear, e.g. 2 levels for high population density (CH, NL) = High wage effect (?)
- Low population density (AU, US): similar levels, but different split NHMS/PSP)
- Mix of effects…

Expenses per population not strongly linked to population and size

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3.3. National and private player segments

	IT	AT	FR	DE	NL	CH
Number of players ..						
• Independent 2010-2019	6 (+0)	6 (+0)	7 (+2)	9 (-4)	2 (-3)	6 (+0)
• New players	2	0	2	1	0	2
• Profit Growth 2010-2019	33%	<0%	29%	32%	33%	14%
Expense (€/capita[1])						
• Private Services	0.3	1.70	0.9	0.9	. 2.2	0.9
• NHMS	5.49	3.50	12.4	4.5	3.2	12.4
Market conditions						
• Export ratio	6%	17%	22%	15%	30%	22%
• NHMS external funds[2])	2%	40%	35%	0%?	30%?	45%?
• Open data (2018)	-	-	++	+++	+++	-
• Commercial services[3])	*	****	***	**	*	*

[1]) Revenue/Population
[2]) Source : WMO
[1]) Own assessment

Open data and low NHMS commercial activity drive growth

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Conclusions

- Strong PSP growth (23% p.a.) 2010-2019, with some country differences
- Need to normalise sales and employment country data by GDP, pop…
- Very competitive PSP in few countries
- Growth in media, energy, specialities (mix)
- Growth not always equal to profit
- Best development in countries with open data and less commercial NHMS

Recommendations

- ➢ Engage PSP more in creating meteorological value
- ➢ More country comparisons for finding best practice
- ➢ Opportunity to strengthen service delivery
- ➢ Focus on employment, profits, downstream value (media, energy, special services)
- ➢ Strengthen strategies towards open markets and level playing field

Continued PSP growth likely, can be enhanced by policies