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Policy analytics: Provocations and Questions for a Research Agenda

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Introduction

Complex global challenges in uncertain times demand innovative approaches and methods for supporting public policy. Traditional technocratic and evidence-based ideals of policy making are being superseded due to rapid changes in technologies, societal values and a globally connected environment where information can be sourced almost instantaneously often with minimal quality control by individuals and groups seeking to influence decision-making processes.

In such times, termed by some as the 'Fourth Industrial Revolution', higher-order research skills including creativity and analytic capacities to manage multiple types of knowledge, values, qualities of data, and new technological constellations including artificial intelligence, are required to improve public policy and ensure sustainable development for all. This is the purpose of "policy analytics" and the multiple roles researchers and other practitioners can play in supporting more effective public policy processes, including innovative personalised or community-focussed policy designs that result in greater positive outcomes for societies and the environment.

"Business analytics" has been thriving as a research topic and profession for many years to support improved competition, customer service and profit for businesses. However, the use of policy analytics to support public decision-making processes has remained underdeveloped, despite the recent explosion of data science teams and roles in public service agencies. Policy analytics has recently emerged as a new paradigm and topic of research for considering and fostering new research-policy-society relations. Specifically, the growth in the topic has been supported through a European COST Action, which involved substantial international cooperation outside of Europe, and the French CNRS inter-disciplinary research network (GDR) program on Policy Analytics. This EU Jean Monnet-funded Europa Policy Lab project has sought to further internationalise this work and thinking, with a particular emphasis on security and the environment, which are of particular interest for Europe-Pacific bi-regional cooperation.

Themes

This policy brief discusses a set of provocative questions arising from four themed panel discussions run on 6 June 2019. Specifically, ANU academics and Australian policymakers joined forces with a number of leading European institutions – CNRS, PSL Research

University and IRSTEA – to explore the current state and future potential of policy analytics. With the rise of automation, artificial intelligence and challenges in democratic decision making, there are significant opportunities for developing novel means of supporting public policy, from agenda setting, through innovative policy design—including personalisation and dynamic policy settings based on latest sensing systems, data and algorithms—and monitoring and review of implementation. This Europa Policy Lab showcased and extended recent thinking in both Europe and Australia around applications of policy analytics, while also developing discussion, interaction and international collaboration opportunities.

Plenary speakers and panel discussions focused on four themes. From these panels and subsequent discussions, a set of key questions has been derived as an agenda for policy analytics research and practice. This question set will form the basis of future collaboration between European and Australian policy-makers and researchers in the area, and over time will likely be expanded and adapted as research and practice in policy analytics expands.

Theme 1: Human interfaces with autonomous systems;

- How can we (re)imagine responsibilities & the relationships between human and algorithmic decision-makers?
- How can we learn from past design, management, and regulation of autonomous and augmented intelligence systems?

Theme 2: Community-focused analytics for conflict identification and management;

- How can participatory analytics help communities to track and handle their conflicts?
- How can we ensure equitable rewards and efficient incentives for working across society?

Theme 3: Scaling up decision support through data and knowledge integration; and

- How can we safely accelerate integration of innovations into organisations?
- How can we make reflection on values underlying decisions a mainstream activity?

Theme 4: Developing effective and reflexive practitioners of policy analytics

- How can we ensure we recognise that behind every data point is a person?
- How can we bridge different ways of thinking?

This Europa Policy Lab has spurred a range of activities through which this agenda will be pursued, including an upcoming International conference in Paris in early December on the social responsibility of algorithms, and a new CNRS-ANU PhD cooperation scheme project on analytics for policy design.

The Contradictions of European Union Energy and Climate Policies

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Introduction

The European power industry has undergone a dynamic development in the last decade. This rapid energy landscape change was largely driven by public policies. Alongside the wide environmental issues of public health (mainly reduction of air pollution and concerns with possible negative effects of nuclear energy) and climate change mitigation, one of the major drivers of European energy transition was the aim of the European Union (EU) political establishment to reduce the energy dependency of Europe.

Due to the fact that European fossil-fuel base and reserves are very limited (according to the BP Statistical Review of World Energy 2015, reserves of EU countries account only for 0.3% of proved world oil reserves, 0.8% of proved gas reserves and 6.3% of coal reserves), the only way of attaining the goal of increased self-sufficiency was the redirection of the energy sector towards locally produced energy coming from renewable resources or from nuclear power plants. This led to massive public finance support of clean renewable energy resources all over Europe and in Germany in particular (Janda, 2018; Lunackova et al., 2017). The aim of this short policy paper is to highlight some key policy problems connected with massive support of renewable electricity supply in Europe.

EU energy and climate policies

Already the strategy of the European commission, called “Europe 2020” presented on 3 March 2010, set several clearly quantitatively qualified targets for European energy and environmental policies which are commonly known as 20-20-20 agenda. This strategy implied that by 2020 the EU aimed to reduce its greenhouse gas emissions by at least 20% as compared to 1990, increase the share of renewable energy to at least 20% of consumption, and achieve energy savings of 20% or more (European Commission 2009). Rapid successful progress towards the implementation of the 20-20-20 agenda, including public willingness to accept the public finance implications of these policies and the technological progress mainly in the area of wind and solar electricity generation, enabled this agenda to be updated in 2014. Even more ambitious targets, in the form of 40-27-27, were set to be reached by 2030 (European Commission 2014); and were most recently re-formulated in the Clean Energy for All Europeans Package. The 2018 adoption of this Package by the Council of the European Union fixes two new targets for the EU for 2030: a binding renewable energy target of at least 32% and an energy efficiency target of at least 32.5% - with a possible upward revision in 2023. When these policies are fully implemented, they will lead to steeper emission

reductions for the whole EU than anticipated – some 45% by 2030 relative to 1990 (compared to the existing target of a 40% reduction). These policies enable the EU to fulfil its commitments under the 2015 Paris Climate Change Agreement.

Another complex and ambitious project of the EU in the energy sector is the effort to create a European Energy Union which was officially launched in 2015 (European Commission 2015a). This policy project includes five main objectives (European Commission 2015b) concerned with energy security, energy market integration, energy efficiency, climate action, and support for low carbon and clean energy technologies which could increase the EU's global competitiveness. In the context of this paper, we pay particular attention to the objective of a "fully integrated European energy market" (European Commission 2016) and its compatibility with the other goals of European Energy Union focused on decarbonising the economy.

A fully integrated internal EU energy market means that energy should flow freely across the EU without any technical or regulatory barriers. There are some examples of market integration in the EU which can be seen as precursors of a future integrated market. One major example in the region of Central Europe was a controversial bidding zone of Germany, Austria and Luxembourg, which allowed unrestricted electricity trading in this three countries block. Similarly, a Single Electricity Market for the island of Ireland covers the whole island across the national borders.

Nevertheless, these policies and objectives are, under the current situation in the European energy sector, quite contradictory. A rapid increase of renewable energy sources has brought a wide range of challenges to the whole electricity sector. Price distortions, instability of supply or capacity of transmission networks are generally considered to embody the most serious examples of these challenges. At the same time, inappropriate delineation and integration of the market contributes further to these problems instead of eliminating them.

In the context of Central Europe, this can be demonstrated in the following way. With the development of solar and wind power plants in Germany, severe problems with transmission occurred. Excess production in the north has to be transported to the consumption centres in the south, to Austria and other energy deficient countries in southern Europe. The existing German grid is not able to accommodate such a big feed-in of intermittent renewable energy and, therefore, exhibits congestion. As a result, electricity flows through the systems of adjacent countries, Poland and the Czech Republic, and causes severe problems in their grids as well. Furthermore, these problems were exacerbated by market integration, in particular by the existence of a German-Austrian-Luxembourg bidding zone which enabled these three countries to trade electricity disregarding the physical grid constraints.

The Czech, Polish and Slovak electricity transmission system operators (TSOs) are, naturally, dissatisfied with the state of current affairs as nobody compensates the expenses that have to be incurred to tackle this problem. The whole situation has become the subject of heated debates at the highest political levels. While Czech and Polish TSOs strived for splitting up of the bidding zone or even for splitting up Germany into more zones, Austrian bodies opposed this and tried to avoid such a solution as it would significantly increase the cost of electricity there. Apart from the political measures, TSOs also attempt to solve this problem by installing phase-shifting transformers that are able to stop the physical electricity flows in case of emergency. On this example, we can see that higher amount of installed variable renewable electricity sources (VRES) capacities induces grid congestion. Therefore, simultaneously attaining the goals of both these proposed EU strategies is mutually incompatible.

Market design description and cooperation setup

An electricity market has one major feature in comparison to other commodity markets. With current technology, possibilities of storing electricity are extremely limited as well as expensive. Hence, the condition of equality of supply and demand at particular time and place has to be satisfied. Various forms of electricity trading on long-term markets (forward), short-term markets (day-ahead, intraday markets) and balancing markets are used as a tool to assure the overall equilibrium. The results of this trading are called commercial or scheduled flows.

Nonetheless, it is important to have in mind that the nature of physical electricity flows does not have to, and actually mostly does not, correspond to the planned commercial flows. In fact, the flows are subject to physical laws which determine the flows based on the current situation in the network. The differences between the actual and scheduled flows of electricity are called unplanned flows. Practically, they present the deviation of expectations in the form of traded contracts from the real flows of electricity. Maintenance of unplanned flows is the main task in securing the safe functioning of the system with respect to the necessary condition of balancing demand and supply of electricity in the grid.

The responsibility for the maintenance of stability is most frequently in the hands of TSOs. All of TSOs in Central European countries covered in this paper are legally obliged to assure such stability (Source: web pages of TSOs). TSOs supervise their particular territory and monitor and manage cross-border electricity flows by means of trade as well as by means of physical controls, including congestion management. Kunz (2013) gives the following definition of congestion and congestion management: Congestion represents the situation when technical constraints (e.g. line current, thermal stability, voltage stability, etc.) or economic restrictions (e.g. priority feed-in, contract enforcement, etc.) are violated and thus restrict the power transmission between regions. Therefore, congestion management is aimed at obtaining a cost optimal power dispatch while accounting for those constraints.

Cross-border problems

From the international perspective, electricity generation as well as transmission systems were historically maintained primarily on a local, mostly national, level by domestic highly-controllable production. Trading was limited and cross-border transmission interactions took place only in case of emergency grid balancing. Transmission grid and power system infrastructure reflected this setup fully throughout Europe. However, real efforts of integrating the European electricity market into one area as well as promoting renewable energy led to a transition that came in 1996 and onwards. In this time, three legislative packages and other legislature were passed by the European Parliament aimed at transparency, regulation, consumer protection and overall integration.

These packages, combined with the packages on promotion of renewable policies, started to change the structure of European energy markets completely without having considered the side-effects of these policies on cross-border congestion, volatility and unpredictability of VRES production resulting from such a setup.

These concerns are confirmed by an IEA publication on EU energy policy which states the following: “The investment and large-scale additions of variable non-dispatchable renewable energies in Central and South Europe have brought about a number of new challenges for the wholesale electricity markets, the merit-order dispatch, system operation and grid management, as electricity trade flows across borders and at the distribution network level increased” (IEA 2014).

Eventually, to illustrate briefly the interconnections problems in more depth, we can have a look at the interregional interconnection level. The x% EU interconnection means that each EU member state should have in place electricity cables and transmission lines that allow at least x% of the electricity that is produced by its power plants to be transported across its borders to its neighbouring countries. Even though a 10% interconnection level was set in 2002 and reassessed in 2014 (confirmed in November 2017) to reach 15% by 2030, it is quite clear that with the increasing amount of trade and growing production from VRES, such a target is insufficient. According to the IEA, the capacity should be increased by at least 40% (IEA 2014).

In order to quantify an influence of renewable energy sources on cross-border profiles in transmission networks in Central Europe, Janda et al. (2017) use the direct current load flow simulation model ELMOD. They evaluate two development scenarios for the year 2025 on the basis of four representative weeks. They use two simulation scenarios, where the first scenario focuses on the effect of Energiewende on the transmission networks and the second one drops out nuclear phase-out and thus assesses the isolated effect of increased feed-in. The results of Janda et al. (2017) indicate that higher feed-in of solar and wind power increases the exchange balance and total transport of electricity between

transmission system operator areas as well as the average load of lines and volatility of flows. Solar power is identified as a key contributor to the volatility increase, wind power is identified as a key loop-flow contributor. Eventually, they conclude that German nuclear phase-out does not significantly exacerbate the above mentioned problems.

While Janda et al. (2017) focus on cross-border profiles as a key issue in international policy discussions related to energy transmission, Malek et al. (2018) use the same simulation model ELMOD to investigate transmission load on the electricity transmission lines in Germany and its Eastern neighbouring states. They evaluate two development scenarios for the year 2025 using 3 representative weeks. The results of Malek et al. (2018) illustrate the electricity transmission issue from three different perspectives. Firstly, they simulate the distribution of loads in the grids. Secondly, they analyse hourly patterns during particular weeks. Thirdly, they provide a geographical decomposition and identify problematic regions in each of the Central European countries. They show that high solar or wind power generation decreases the periods of very low transmission load and increases the mid- and high load on the transmission lines. They also find out that high solar feed-in has less detrimental impact on the transmission grid than high wind feed-in. Another of their policy relevant results is that high wind feed-in burdens the transmission lines in the north-south direction in Germany and water-pump-storage areas in Austria.

Conclusions

In the context of the Central European region, all the aforementioned is represented by the following major policy issues:

- Grid bottlenecks between southern and northern Germany.
- German Energiewende leading to unprecedented growth of VRES production and nuclear phase-out.
- Market setup: German-Austrian-Luxembourg electricity bidding zone.

The international dimension of this problem is represented by the fact that, in accordance with the physical nature of electricity, in the absence of particular capacities, electricity flows through free capacity in the grid elsewhere which creates unscheduled flows affecting all neighbouring countries (predominantly the Czech Republic and Poland). Here, several problems in national transmission grids are caused (Misik, 2015). These unplanned power flows can be split into external flows created by internal commercial transactions in one country (traditionally called “loop flows”) and external power flows created by commercial transactions between two countries (traditionally called “transit flows”) (CEPS et al., 2012). In the Central European context, loop flows in particular, exemplify a substantial threat to the stability of the grid as these flows over particular interconnections are mostly unplanned and are thus unexpected by the TSO. Unpredictable production from VRES, mainly wind parks, is the main determinant of these flows as this production is gusty both in amount and time (CEPS, 2010).

A conceptually simple solution to the contradiction between supporting renewables and promoting energy markets integration would be to eliminate cross border electricity transmission congestion by building sufficient high-voltage transmission lines across Europe. Obviously, this would imply huge financial expenditures, which would be partly covered by public finance, partly passed to consumers in the increase of electricity prices. However, the direct financial costs are not the only impediment to this conceptually simple solution. There is an important public policy problem in securing the agreement of concerned individuals and communities in the vicinity of such newly built power lines with their construction. Partly this again reverts to the financial side of the problem, since significantly more expensive underground cable lines are usually more publicly acceptable than cheaper overland lines.

While the higher integration of electricity markets and transmission systems is the mainstream of European policy and technology, there also exist different conceptual approaches both in Europe and globally. One of them is the concept of growing local production and consumption. This is closely connected with local decentralised production of electricity, mainly solar. However, no small local energy island is able to cope with the fundamental technological constraint of geographically located wind generated electricity capacity in northern Europe. Therefore, the need for the North-South high voltage connection is difficult to avoid, the remaining issue to decide being mainly the size of the additional transmission capacity to be constructed.

An interesting positive aspect of this energy transmission infrastructure problem is the fact that actually these required high-voltage lines, which would help to alleviate cross border congestion problems, would be fully internal lines inside a country (mainly inside Germany). So as opposed to for example gas and oil pipelines which require intensive international cooperation, the problem of electricity transmission is solvable internally, mainly by the construction of high-voltage power lines between north and south Germany, which may be technologically efficiently fully located in Germany. Such power lines would automatically remove the congestion on border crossing of neighbouring states. Instead of costly installation of phase shifting transformers which close country borders to electricity flows or instead of building new inter-country connecting power lines, the enhancement of intra-country transmission capacities in major renewable electricity producing countries may provide a socially more efficient solution to the contradiction between energy market integration and climate change mitigation EU policies.

While some public policies and public finances devoted to renewable energy sources did not achieve general public acceptance and do not seem to further expand, others are expanding and are considered as highly promising. An example of renewables which did not fully

deliver on initially high expectations are biofuels (Filip et al., 2016, 2019). However, renewable electricity policies, mainly concerned with supporting wind and solar electricity, which led to the energy transmission problems described in this paper, met in general with a high level of public acceptance. Also, after correction for initially too high public finance support of photovoltaic electricity generation (Prusa et al., 2013), new renewable electricity financing mechanisms were introduced which alleviated the initial high public finance dependence of these energy policies.

References

CEPS (2010): PS v CR a stredni Evrope v roce 2013/2015. https://www.ceps.cz/CZE/Media/Studie-analyzy/Documents/PS%20v%20%C4%8CR%20a%20st%C5%99edn%C3%AD%20Evrop%C4%9B%20v%20roce%202013-2015%20v%20kontextu%20v%C3%BDsledk%C5%AF%20EWIS,%20pl%C3%A1novan%C3%BDch%20s.pdf. [Online; accessed 22-April-2016].

CEPS, MAVIR, PSE Operator, & SEPS (2012): *Position of CEPS, MAVIR, PSE Operator and SEPS regarding the issue of Bidding Zones Definition*. http://www.ceps.cz/ENG/Media/Tiskove-zpravy/Documents/120326_Position_of_CEPS_MAVIR_PSEO_SEPS-Bidding_Zones_Definition.pdf [Online; accessed 22-April-2016]

European Commission (2009): *Directive 2009-28-EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001-77-EC and 2003-30.* Official Journal of the EU, European Commission 5: pp. 16-62.

European Commission (2014): *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A policy framework for climate and energy in the period from 2020 to 2030.* http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2014%3A15%3AFIN. [Online; accessed 22-April-2016].

European Commission (2015a): *European Commission - Energy Union Fact*- sheet http://europa.eu/rapid/press-release_MEMO-15-4485_en.htm. [Online; accessed 22-April-2016].

European Commission (2015b): *European Council Conclusions on the Energy Union.* http://www.consilium.europa.eu/en/press/press-releases/2015/03/conclusions-energy-european-council-march-2015/. [Online; accessed 22-April-2016].

European Commission (2016): *Energy Union and Climate - Making energy more secure, affordable and sustainable.* http://ec.europa.eu/priorities/energy-union-and-climate_en. [Online; accessed 22-April-2016].

Filip, Ondrej, JANDA, Karel, KRISTOUFEK, Ladislav and ZILBERMAN, David (2016). *Dynamics and evolution of the role of biofuels in global commodity and financial markets.* Nature Energy. Vol. 1, no. 1, article 16169.

Filip, Ondrej, JANDA, Karel, KRISTOUFEK, Ladislav and ZILBERMAN, David (2019). *Food versus fuel: An updated and expanded evidence*. Energy Economics, forthcoming. DOI10.1016/j.eneco.2017.10.033

IEA (2014): Energy Policies of IEA Countries - EU. Technical report. [Online; accessed 22-April-2016].

Janda, Karel (2018). *Slovak electricity market and the price merit order effect of photovoltaics.* Energy Policy. Vol. 122, p. 551-562.

Janda, Karel, MALEK, Jan and RECKA, Lukas (2017). *Influence of renewable energy sources on transmission networks in Central Europe.* Energy Policy. Vol. 108, p. 524-537.

Kunz, Friedrich (2013): *Improving congestion management: how to facilitate the integration of renewable generation in Germany.* The Energy Journal 34(4): pp. 55-79.

Lunackova, Petra, PRUSA, Jan and JANDA, Karel (2017). *The merit order effect of Czech photovoltaic plants.* Energy Policy. Vol. 106, p. 138-147.

Malek, Jan, RECKA, Lukas and JANDA, Karel (2018). *Impact of German Energiewende on transmission lines in the central European region.* Energy Efficiency. Vol. 11, no. 3, p. 683-700.

Misik, Matus (2015): *Three countries, three views? Loop and transit flows in electricity grids form Austrian, Czech and Slovak point of view.* Panorama of global security environment 2014. pp. 545-556.

Prusa, Jan, KLIMESOVA, Andrea and JANDA, Karel (2013). *Consumer loss in Czech photovoltaic power plants in 2010–2011.* Energy Policy. Vol. 63, p. 747-755.

The Changed Architecture of the EU's Agricultural Policy in Comparative Perspective: Implications for a Free Trade Agreement with Australia

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Introduction

The developed countries have long supported and protected their agricultural sectors, using an array of policy instruments such as tariffs, export and input subsidies and mechanisms to increase prices paid to farmers. Justifications for this support have included ensuring food security, supporting a sector seen as integral to national development and culture and offsetting the distortions from the agricultural policies of competitor exporters. With increasing concerns about low growth rates, the cost and inefficiencies of industry support and increasing demands from other sectors (such as manufacturing) for international market access, pressure to 'normalise' agricultural policy increased during the late 1970s and 1980s. Normalisation denotes exposing agriculture to market forces, as opposed to treating the sector as 'exceptional' and therefore outside the expectation of market competition imposed on other sectors.

From the mid-1980s, the GATT and then WTO trade negotiation rounds agreements appeared to have established a framework for normalisation, with three key reform goals to reduce:

- the levels of state support directly related to agricultural production;
- the levels of protection from agricultural imports;
- and subsidies of agricultural exports.

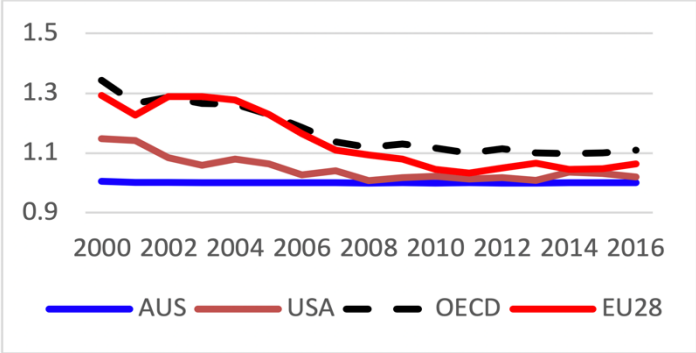
European and neo-European countries generally, though often reluctantly, responded to this agenda. They reduced tariff and non-tariff barriers (Table 1A)[i] and 'decoupled' farm support from production (Table 1B)[ii], though approaches and commitments to normalisation have diverged.

[i] Producer protection, shown in Figure 1A, is defined as the ratio between the average price received by producers (measured at the farm gate), including net payments per unit of current output, and the border price (measured at the farm gate).

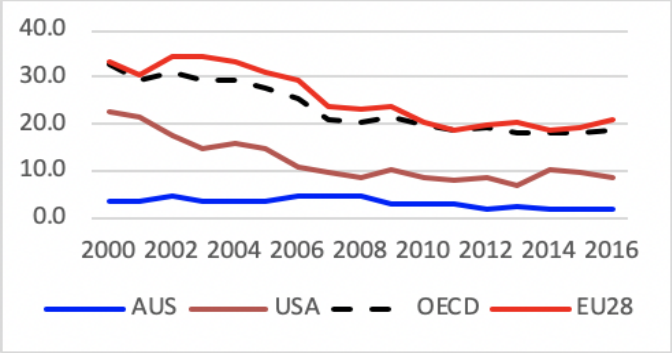
[ii] Producer support estimate transfers to agricultural producers, shown in Figure 1B, are measured at the farm gate level and comprise market price support, budgetary payments and the cost of revenue foregone.

Figure 1: OECD Trends in producer protection and agricultural support levels: 2000-2016

A. Producer Production Level



B. **Producer support estimate (PSE)**, % of gross



Source: OECD https://data.oecd.org/agrpolicy/producer-protection.htm#indicator-chart and OECD https://data.oecd.org/agrpolicy/agricultural-support.htm#indicator-chart

Australia and New Zealand are mostly holding the line on expecting farmers to be largely self-reliant; the US and Canada have adapted or introduced programs that indirectly link support to production; while the EU is most heavily focused on income diversification, especially payments for landscape services.

The new and evolving programs have allowed the US, Canada and the EU to seemingly settle into levels of support that are politically and fiscally manageable. Furthermore, pressure to make deeper policy retrenchments appears to have receded. There are at least three reasons for this. First, nationalist and mercantilist sentiment is more evident in many nations, including the US. Second, the balance of power within the WTO has shifted from the 1980s when US and EU conflict was a key driver of policy change. Now emerging powers such as Brazil, India and China are more assertive as their economies grow. In particular India and China want to protect and support their agricultural sectors too. Third, bi-lateral and 'regional' trade agreements have displaced negotiations on multi-lateral (WTO) agreements. Hence, WTO negotiations on further agricultural reforms have effectively stalled, leaving nations and blocs considerable latitude in policy development.

The Transformation of the EU's Common Agricultural Policy

In the farm trade negotiations under the GATT's Uruguay Round, running from 1986 to 1994, the EU was under immense pressure to reform its agricultural policy. Eventually, the farm ministers in the EU realised that the Common Agricultural Policy (CAP) had to be reformed to avoid a collapse of the Uruguay Round which included other trade areas in which the EU could potentially achieve significant gains.

Price support was originally the main tool in the CAP to ensure a fair standard of living for the agricultural community. Prices were maintained at a relatively high level within the internal EU market by applying high variable import levies. In combination with the high farm gate prices, significant productivity gains in the European farm sector led to surplus production in the 1970s and 1980s. Therefore, produce had to be removed from the internal market to maintain the politically established minimum prices. This was done by stocking surplus products and exporting with subsidies. The EU's extensive use of export subsidies contributed to driving down world market prices and was the direct cause of trade conflicts.

After a dramatic halt in the Uruguay Round negotiations in late 1990, the EU partially replaced price support with direct farm payments in 1992. Minimum prices were reduced by a third in the arable and red meat sectors. Farmers were compensated for the income loss by direct payments linked to farmed area (on the condition that certain crops were grown and land set aside) and livestock numbers. In the GATT negotiations in the early 1980s, this enabled the EU to commit to reducing export subsidy expenditure by a third and subsidised export volumes by a fifth. The EU variable import levies were transformed into tariffs and on average reduced by 36 per cent and bound.

During the WTO's Doha Round, which commenced in 2001, the EU was again under pressure to reform the CAP and in 2003, most of the direct farm payments were decoupled from the requirement to grow certain crops or keep certain types and numbers of livestock. This meant that the payments no longer required production of certain crops or livestock and would not influence what the farmer would decide to grow. Instead, payments were linked to what became known as cross-compliance, i.e. the farmer is required to comply with environmental, animal health and welfare and food safety regulations to remain eligible for support. The mini-reform of 2008 further decoupled direct payments. The 2013 mini-reform rolled back some of the decoupling adopted in 2008 but the signature change was the introduction of additional environmental measures as a condition for receiving direct farm payments ('greening').

This series of reform means that the CAP is now much less trade distorting than previously. The EU's use of export subsidies has been minimal since 2008, and farm support drives up or maintains production to a much lesser extent. This has lessened the international pressures on the CAP, but tariffs in the red meat, dairy and sugar sectors remain high. Within the EU, these products are considered sensitive. Support measures for these commodities have not fully been aligned with the changes in the arable sectors. The tariffs applied effectively prohibit imports; imports take place only on preferential terms.

Prospects of an FTA between Australia and the EU

As a competitive supplier of sugar, beef and dairy, Australia might aspire to the inclusion of these products in a FTA with the EU. Yet, given the political sensitivity of these commodities within the EU, EU producers can be expected to object to more market access for these commodities. Consequently, one can expect pressure on EU negotiators to maintain high tariffs for these three sectors. According to WTO rules, it is not required that a FTA eliminate *all* trade restrictions; it is sufficient that they are eliminated for 'substantially all' trade.

However, the FTA that the EU agreed with Canada (CETA) indicates that the EU may be willing to give concessions for limited market access for sensitive agricultural commodities. CETA granted increased access for Canadian (hormone free) beef to the EU market in return for protection of EU Geographical Indications (GI) in Canada and increased market access for European cheese. However, with the EU beef sector highly dependent on direct payments and tariffs protection, there is a political limit to such market opening. As former EU Farm Commissioner Cioloş acknowledged shortly after the negotiations with Canada had been concluded, "the EU capacity to absorb additional concessions in the beef sector is limited". He also highlighted the importance of obtaining protection of GIs in return for agricultural market opening in the EU (European Parliament, 2019).

One may wonder why the EU gave the protection of GIs high priority in the negotiations with Canada considering that it is difficult to establish, in general, a significant positive impact of GIs on the rural economy (Török & Moir, 2018) The Irish agricultural economist Alan Matthews argues that they mainly serve a political purpose in the EU's trade policy. As he argues in relation to the unsuccessful negotiations between the EU and the United States on the Transatlantic Trade and Investment Partnership (TTIP)**:**

"Politically, EU agriculture has relatively few offensive interests in the TTIP negotiations so gaining greater protection for foodstuffs as well as wines and spirits GIs is seen as a way to sell a deal to EU farmers as a compensating factor for likely losses for EU livestock producers. Even if the benefits of securing greater GI recognition accrue to relatively few countries and products at the expense of broader EU interests, the absence of a breakthrough on GIs could make a TTIP agreement more difficult to sell to farm groups." (Matthews, 2015)

In the farm trade negotiations between the Australia and EU, the situation is fairly similar: the EU has little to gain and even limited market opening in the sensitive commodity sectors will have to be legitimised in the Council of Agriculture Ministers and not least in the European Parliament to ratify an agreement. In addition to this political importance of the GIs, there may be a belief amongst EU agricultural policy makers that protecting the geographical names is important for rural livelihood. In their book on EU trade policy, Peterson and Young (2014) argue that an overarching feature of EU trade policy is the

reluctance of the EU to give concessions on agricultural trade in return for gains in other areas (Young & Peterson, 2014). Protection of GIs, therefore, may be what is needed for the EU to give some concessions on agricultural market opening.

References:

Matthews, A. (2015), *'What outcome to expect on Geographical Indications in the TTIP free trade agreement negotiations with the United States?, paper for the 145th EAAE Seminar 'Intellectual Property Rights for Geographical Indications: What is at Stake in the TTIP?'*, April 14-15, 2015.

Török, A. & H. V. J. Moir (2018), *Understanding the real-world impact of GIs: a critical review of the empirical economic literature*, ANU Centre for European Studies briefing papers series, vol. 9, no 3.

Young, A. R. & J. Peterson (2014), *Parochial Global Europe: 21st Trade Politics*, Oxford: Oxford University Press.

European Parliament, Parliamentary Questions http://www.europarl.europa.eu/doceo/document/E-8-2014-006196-ASW_EN.html?redirect, accessed 29 May 2019

Challenges for Effective Implementation of the Circular Economy in Urban Water Management

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Background

Our society has reached a level of maturity, which enables understanding that the 'cradle to cradle' economic model provides many more opportunities for sustainable development than the current "cradle to grave" economic model.

After transforming this understanding into a policy (COM/2014/0398; COM/2015/614), the public space has been flooded with publications, research works and best practice examples. However, there is still a long way to go from the conceptualization to full practical implementation.

In particular, related to urban water management, at a conceptual level it appears that there is consensus on:

- The need for a move from linear to circular thinking. Trophic networks in nature, proved to be less vulnerable and more sustainable than linear trophic chains. The linear water pathway, namely 'abstraction from nature – use - discharge in worse quality back to nature' (i.e. linear mode 'abstraction-use-waste), should be replaced by closed-loop networks. These closed loops could include techniques such as rainwater harvesting, grey water recycling, water reuse, individual appropriate solutions, etc.
- Wastewater should no longer be seen as 'wastewater' but as 'reusable water' rich in resources ready to be fed back into the economy.

There are a number of challenges associated with this otherwise noble concept. Among them are the following challenges.

Challenge 1: Gathering sufficient knowledge on the functioning of the new circular systems to avoid unwanted consequences

Historically, water supply and wastewater collection systems have been developed following a linear model as discussed above. Costly infrastructure has been constructed and it is unlikely to be entirely replaced in the near future. This means that transforming these systems into tighter closed looped ones is not likely to be an easy or short-term task, depending on the technologies and governance adaptations required.

Before undertaking any investment steps, credible knowledge should be accumulated on the following:

- reliable technologies with favourable cost to benefit ratios, based on multiple criteria (e.g. social, environmental, economic).

- risks and threats to environmental and human health of reusing water and sludge in particular ways (e.g. for agricultural fertilisation, irrigation or potable water).

The example of phosphorus in the current wastewater management system provides a good illustration on how our thinking can be improved. Specifically, most wastewater treatment technologies did not consider phosphorus removal when they were first designed. The necessity for phosphorus removal was only acknowledged later when issues of environmental impacts through eutrophication of rivers and lakes occurred. As a result, wastewater treatment technologies based on slight modification of the existing schemes was developed. In 2014, phosphorus was included on the list of Critical Raw Materials of the European Commission and since then an interest in recovering it from wastewater treatments plant has emerged (COM, 2014). The techniques developed in response were also based on modification of existing wastewater treatment regimes. The final recapitulation of these two phosphorus-related modifications in the WWTPs is that phosphorus entering the treatment plants is first chemically bound in the activated sludge to be removed from the wastewater, then it is chemically unbound to be recovered. This leads to phosphorus production cost of three to ten times higher than rock phosphorus extraction as well as to high use of chemicals. Here we can ask whether this practice should be considered as a positive achievement of engineering thinking, or whether there are more efficient ways to develop phosphorus recovery systems.

Challenge 2: Overcoming inertia in behaviour

Transferring the concept of the circular economy to the urban water sector is often seen narrowly as only the opportunities present through the upgrading wastewater treatment technologies. Indeed, it is possible to apply some principles through extracting valuable resources as discussed above. However, a circular economy can and indeed would benefit more from being looked at with a broader perspective that includes the entire urban water chain.

In the traditional linear urban water value chain, there is typically bulk water that is supplied to consumers (from various sources – dams/reservoirs, groundwater and more recently desalination) then the urban area and consumers produce two major waste streams – sludge and wastewater. To transform this traditional linear chain into a more closed looped system, there are a number of possibilities, including:

- *At the scale of the entire urban chain*:
    - Develop more decentralised water cycle management, not necessarily connected to existing water and sewerage infrastructure, through the use of local rainwater collection, treatment and reuse (including using the tools of water sensitive urban design/low impact development, such as rainwater tanks, raingardens and swales/wetlands for biological treatment and to slow down and treat urban stormwater runoff)

    - Collect, treat and re-use different water streams separately with different quality (e.g. stormwater, greywater, sewerage), so they can be made fit for purpose and reduce costs (e.g. irrigation water does not require the same level of treatment to drinking water)
    - Reduce pollutants at the source, which will enable the production of "cleaner" wastewater not requiring deeper treatment
- *At the scale of the final node of the chain, the WWTP*:
    - Improve treatment in existing WWTPs to increase the quality of wastewater and sludge streams so that they can be re-used for different purposes like irrigation, agricultural fertilisation, etc.
    - Develop new treatment technologies, not producing sludge and achieving better quality water (e.g. microbial fuel cells)

Although some of these options appear more as 'pure' engineering work, others require changes to be made in peoples' cultures and behaviours. In an ideal world to reduce pollutants at the source, for example, people should use fully biodegradable cleaning and washing detergents, as well as medicines without dangerous residuals. This would enable less costly wastewater treatment and be less dangerous for the environment and human health. Continuing with the phosphorus story, there are positive aspects, as it was not that far away when it was widely used for producing detergents. However, after its negative impact on receiving water bodies was understood, its use was gradually reduced. This example makes us believe that preventive treatment (stopping pollution at source) is possible, although can be difficult since it requires overcoming of behavioural inertia in society, governments and business.

Challenge 3: Transforming the existing linear business model of water use

In most countries there is a linear business model of water use – a water operator maintains the urban water system and there are only two actors in the process – a water operator, who sells the water service and consumers who buy it. To break this linear model, new players should appear, such as operators of individual appropriate solutions for wastewater treatment; companies, which extract valuable resources from wastewater and sludge; companies or collectives of individuals/local governments who can maintain rainwater harvesting or grey water re-use, etc. Water operators could cooperate with agricultural and industrial players to produce new products – energy, reusable water, reusable sludge, etc. This network of players would be able to facilitate the transition from linear to closed-loop systems and could contribute to sustainable economic, social and environmental development.

Conclusion

Given the complexity of these three groups of challenges and regardless of whether they are considered separately or together, a possible way to overcome them and to shift the

economy to a “cradle to cradle” model appears to be that all actors - citizens, practitioners, researchers, decision-makers and businesses need to be actively involved in and work together to realize such a transition. Urban water systems are managed not only by water operators, but depends highly on users – citizens and industry. Therefore, it appears necessary to invest in human capital to ensure that any possible and desirable cyclical options can be effectively implemented and supported over the longer-term.

References

COM (2014) 0398. *“Towards a circular economy: a zero waste programme for Europe”*

COM, (2014). *On the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative, SWD (2014) 171 final*

COM (2015) 614. *"Closing the loop – An EU action plan for the circular economy"*

Optimising Electoral Ergonomics – Australian and European Experiences Understanding the Electoral Needs of Vulnerable and Under-Represented Voters

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Introduction

This series of policy labs were informed by evidence-based research to encourage innovative solutions to challenges faced by practitioners in the field of electoral management. The workshops that we organised at the ANUCES were informed by our worldwide comparative research that combines quantitative and qualitative methods to highlight best practice and offer expert advice and guidance to better understand the issues at stake. The structure of the workshops followed guiding principles of understanding the scope and fundamental questions, diagnosing problems in collaboration with practitioners, proposing and analysing solutions based on academic research, stakeholder engagement, and practitioner insights, and finally, discussing solutions and recommendations for future action.

The series of workshops that were jointly coordinated and delivered by Dr Sarah Harrison and Professor Michael Bruter were designed for a practitioner audience by focusing on the interface between elements of electoral management and the psychology of voters. The primary aim of this series of policy labs was to discuss measures that could be considered to improve voters' electoral experience and satisfaction. By analysing the intricacies of the organisation of elections in combination with the psychology enables us to bring a holistic understanding of the process. Placing citizens at the heart of electoral democracy throughout the electoral management process is integral to this aim.

Policy Lab 1: Wednesday 12 September 2018

The objective of the first workshop was to define the scope and objectives for the series of collaborative policy labs and to explore the potential fields of investigation. The discussions highlighted areas for collaboration and synergies and identified potential target voter categories that were considered to require further assistance during the electoral process and experience.

Policy Lab 2: Monday 13 May 2019

The second policy workshop developed the collaborative initiatives and discussed potential implementation plans with potential users and stakeholders.

Summary

Our discussions throughout the series of the policy labs identified some of the key problems and inefficiencies that Electoral Management Bodies face during the run up to an election and on election day itself. The interactive and dynamic nature of our sessions enabled us to propose and discuss practical solutions to these issues on a case by case basis.

A key innovation of this approach is to ensure that electoral management bodies are offering effective access, equality of experience, and inclusion both for voters in general and, in particular, for specific categories such as first time voters, elderly voters, voters with special needs such as those requiring wheelchair access, blind or low-vision voters, deaf voters, under-represented minorities including indigenous Australian communities, etc. During these discussions, it was evident that the Australian Electoral Commission, and in particular some of the initiatives offered by the State Commissions (South Australia, for example) are indeed leading the way in terms of offering specialist services for under-represented groups.

However, it was also acknowledged that there is scope for improvement in terms of what is being currently offered for voters such as those who are living with Alzheimer's disease, dementia, autism, bi-polar disorder, etc. The bespoke requirements of these voters are often overlooked in democracies all over the world. As a response, it was suggested that the Australian Electoral Authorities (both at the Federal and State level) could indeed be a pioneer by confronting these issues and be a world leader in terms of offering inclusive initiatives and solutions to ensure the equality of electoral experience for all voter categories. These discussions also enabled us to analyse the legal, financial, and political implications of such measures, whilst simultaneously considering the potential benefit in the short and medium term for citizens.

- Whilst the discussions we had throughout the series of policy labs were held under the Chatham House Rule to ensure confidentiality, some of the key elements of the discussions are listed below:
- Optimising the experience of first-time voters – for example: emphasising the curiosity and excitement factor of new voters, offering a 'welcome to electoral democracy' info pack that could be communicated to young voters
- Adapting electoral messages and organisation to specific voter categories (First time voters, disabled voters, indigenous voters, etc.) providing targeted campaigns to tailor voting communication and process
- Discussions of the problem of informality and spoilt ballots
- Questions of registration and misregistration
- Best practice in civic education

- Assistance in identifying categories of voters which require specific attention and understanding how to tailor procedures and communication to those individual groups
- How to make voters feel important and increase trust in and satisfaction with the system.

Next Steps

This series of policy labs were successful in connecting academic research insights with practitioner engagement in diagnosing problems and discussing practical solutions. As a result, we have fostered an ongoing working partnership with several key stakeholders from the Federal and State level Electoral Commissions. We have agreed upon an agenda for a series of future collaborative partnerships and initiatives, which will undoubtedly lead to further impact.

Populist Governments and Voters in Europe

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Introduction

For almost five years now populist parties in Europe have demonstrated to be very competitive at election time. Voters selected populist governments in Poland (2015), Austria (2017), the Czech Republic (2017), Italy (2018), and Hungary (2014 and 2018). Other European countries have populist parties in coalitional governments, such as in Estonia since April 2019. It is fair to think that populist governments exist in countries where the average voter shows support for populist leaning values and policies. The label 'populist' has been used to describe political parties who favor national independence, xenophobic positions and anti-elites sentiments, among many goals on their party programs. It is not clear whether populist leaders recruited potentially populist voters or populist citizens created populist parties. In the case of Europe, political leaders are riding a populist wave in the electorate, claiming to represent the interests of the average citizen in their country. Do populist governments really reflect the positions of the average citizen in their respective nation? Do populist governments and their policies enjoy strong approval rates in the electorate? Ideally, populist governments are in power in countries where populist values are dominant, but the reality of the situation could actually be that populist values are present across many more countries in Europe, including where populist parties did not win the elections. The comparative use of appropriate measures of populism can help in answering these questions.

Measures of Populism

As one of the most employed words in electoral studies in recent analyses, populism is a loaded term with different possible applications. When considering a citizen's positions on a variety of issues, four main factors can be identified to measure the populist propensity in people across countries. The first factor of populism is an *anti-elites* disposition: political elites are viewed as distant from the people, unresponsive and untrustworthy. Anti-elites values often develop after corruption scandals involving politicians. The second factor of populism is an *anti-minority* standing: an influx of immigrants is used to defend a strict interpretation of national identity. The people, i.e. the majority in society, is portrayed as being under attack. National culture and values are negatively affected by multiculturalism in general, as each country can be strong if it only has one homogeneous culture. The third factor of populism is an *anti-institutions* attitude: democratic bodies are not very respected any longer. Democracy is a failure in the eyes of populist citizens, people's votes and policy preferences are ignored by professional politicians. Democracy is no longer a political system

where the rule of the people counts. The fourth factor of populism is an *anti-economic insecurity* view: voters suffer from economic anxiety, related to job insecurity, economic crises, budget cuts and competition with other workers (in particular foreigners). Populist individuals expect national economic policies that are protective of local workers and businesses, opposing unfair economic globalization.

Once multiple factors of populism are considered, a comparative empirical outlook on the correspondence between populist voters and governments appears.

A Picture of Populism in Europe

With the help of survey data from the European Social Survey (2016), Figure 1 depicts the location of countries and voters in Europe along two axes. The horizontal axis is the average national measure of trust in politicians, a score ranging from 0 (low) to 10 (high). The vertical axis is the national average score with regard to immigrants making the country better or worse. The range in this case too is from 0 (absolutely worse) to 10 (absolutely better). Lastly, the actual size of each country bubble measures the average national level of economic satisfaction in citizens. Countries in yellow are controlled by populist governments in 2018, whereas nations in blue are not. This visual representation is testing the correspondence between the voters' populist positions in 2016 and the subsequent election of populist governments in their respective countries.

As a first interpretation of this graph, the average citizen in Europe seems to be in different positions with regard to populist values depending on the country considered. Europe is not such a homogeneous continent as many may think. In particular, there is a group of countries in the right upper corner of the figure where the average citizen in 2016 does not support strong populist positions. In those same countries (Sweden, Finland, the Netherlands, Switzerland, and Norway), no populist governments came to power by 2018. In the opposite corner of Figure 1, Italy represents the perfect correlation between populist voters and governments: the average citizen recorded strong populist views in 2016, and populist parties won control of government in 2018. Among the remaining countries in this study, some of them show populist tendencies among their citizens. Slovenia, France, Portugal, Spain and Poland have a low score on trust in politicians, and Hungary, the Czech Republic, Lithuania, Austria and Estonia recorded a low national average measure on the impact of immigrants on the country. The first group of countries is associated with the first factor of populism primarily, whereas the second group of nations is linked mostly to the second factor of populism. Citizens in both groups of countries share some partial populist positions, but less than half of those nations had a populist government in power in 2018 (Austria, the Czech Republic, Hungary, and Poland). For the last remaining countries in the graph (Ireland, the United Kingdom, Germany and Belgium), citizens share moderate opinions on either populist. None of them has a populist government in 2018.

An important point in the big picture of populist views in European citizens is the overall range of the scores for the entire group of countries. The national average trust level in politicians ranges from 2.2 to 5.3. The corresponding average score for the impact of immigrants on the country goes from 3.5 to 6.2. Most countries have scores smaller than 5 (out of 10), confirming the importance of both factors of populism. European countries may not have many populist governments as of 2018, but European citizens across countries share significant populist traits. Claims made by populist governments about representing the people in their policies are for now supported by initial data on approval ratings. Figure 2 displays data from the Executive Approval Project for few available European countries: on average populist governments enjoy higher approval ratings in 2018/2019 in comparison to non-populist governments.

Conclusion

The populist wave that is sweeping across Europe has not come to its end yet. Electoral victories for populist parties have given populist leaders across the continent a possible blueprint for political campaigns. Up until now, European voters have not necessarily embraced a populist party for government, but citizens share similar populist positions that can favour more populist parties in more countries. There is rarely a perfect correspondence between populist voters and governments in Europe. In some cases, populist parties have come to government where the average voter had some populist views, at least in part. The overall low scores on both factors of populism in Europeans reveal a potential electorate where more populist parties can win elections and take control of governments. More populist leaning voters across Europe are waiting for populist parties to find them.

Fig. 1 Populist Measures and Governments in Europe (2016)

Source: European Social Survey

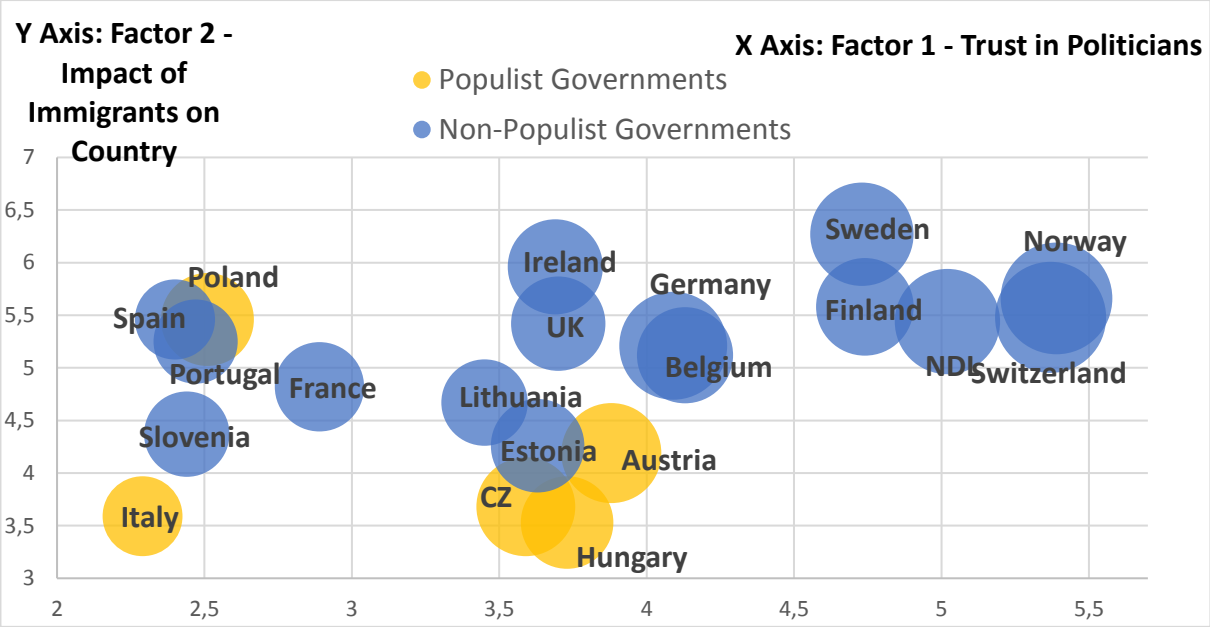
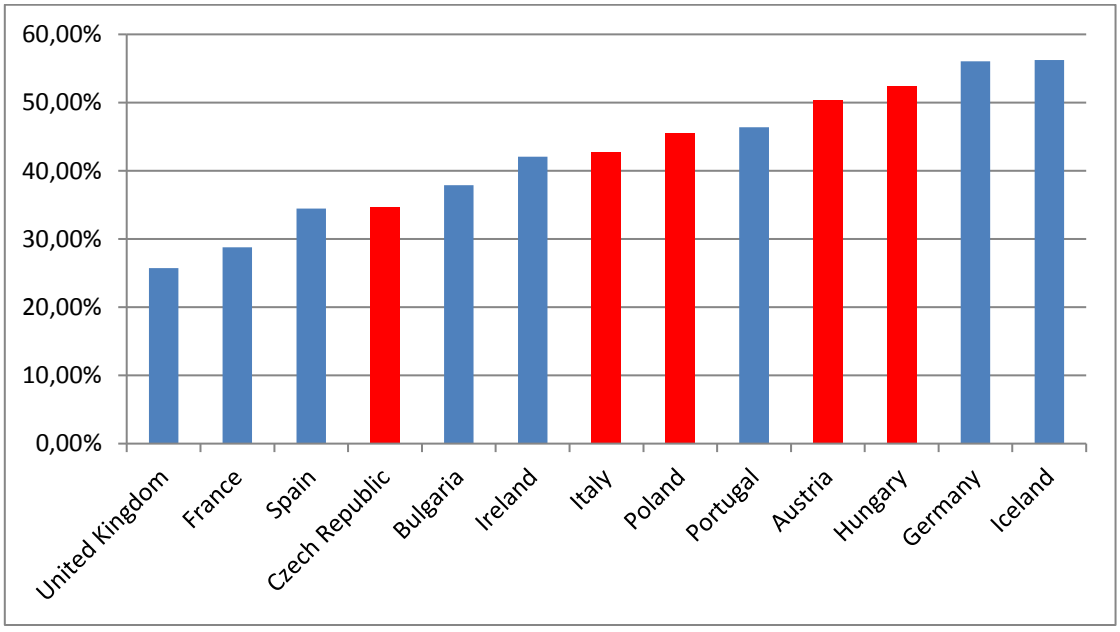


Fig. 2 Executive Approval Levels in Europe (2018 and 2019)

Source: Executive Approval Project



Mobility in Times of Retirement

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According to the "The 2018 Pension Adequacy Report" (European Commission 2018), about 18.2 percent of people aged 65 and older in the EU remain at risk of poverty or social exclusion. Most retirees rely solely on pensions as their main income source. However, little is said about the living conditions and the higher risk of poverty or social exclusion that former mobile workers face at older ages, particularly after reaching the statutory retirement age at destination countries.

Among other factors, having a migratory background might be later reflected in a higher degree of vulnerability given the scarce portability of social benefits across systems. Measures have been taken to preserve the rights acquired in other EU countries – such as the *European Directive 2014/50/EU of 16 April 2014 on minimum requirements for enhancing worker mobility between Member States* and the subsequent national transposition measures. The legislation improves the acquisition and preservation of supplementary pension rights. However, this may not be sufficient for closing the gap if the living conditions of current retirees have already been penalized.

The increase in life expectancy of today's aging society means individuals must prepare for a longer length of retirement. However, ensuring an adequate pension becomes more complicated with increased work-related mobility in Europe as more individuals will have fractioned contributions to different social security systems. Therefore, the effect of work-related mobility should be included in the analysis of living conditions and how to prevent the risk of exclusion of one of the most vulnerable populations.

We provide empirical evidence about the relevance of the mobility histories of older people in Europe. To do so, we reconstructed the residential mobility and working trajectories of more than 65,000 individuals aged 50+ that took part in the retrospective waves 3 and 7 of the Survey of Health, Ageing and Retirement in Europe (SHARE) and were living in one of the 28 survey countries at the time of the interview.[iii] Using the country of interview as

[iii] This paper uses data from SHARE Waves 3 and 7 (DOIs: 10.6103/SHARE.w3.700 and 10.6103/SHARE.w7.700), see Börsch-Supan et al. (2013) for methodological details. The SHARE data collection has been funded by the European Commission through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982) and Horizon 2020 (SHARE-DEV3: GA N°676536, SERISS: GA N°654221) and by DG Employment, Social Affairs & Inclusion. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01,

reference, we classified individuals in two main groups based on their residential lives: mobile - for individuals who spent at least one year in a country different than their final residence – and immobile. We consider the flows from the interview country and not the country of origin. The interview country is the one that will probably pay the pension benefit of the retirees (workers).

The majority of respondents were female, worked about 35 years and had an average age at the time of the interview of 69.7 for movers and 63.8 for their immobile peers. Those who reported at least one place of residence abroad during their lifetime (about 13% of our sample), spent on average 14,8 years abroad. Regarding locations, Germany, Switzerland, Belgium and Luxembourg concentrate the majority of the inflows from the EU.

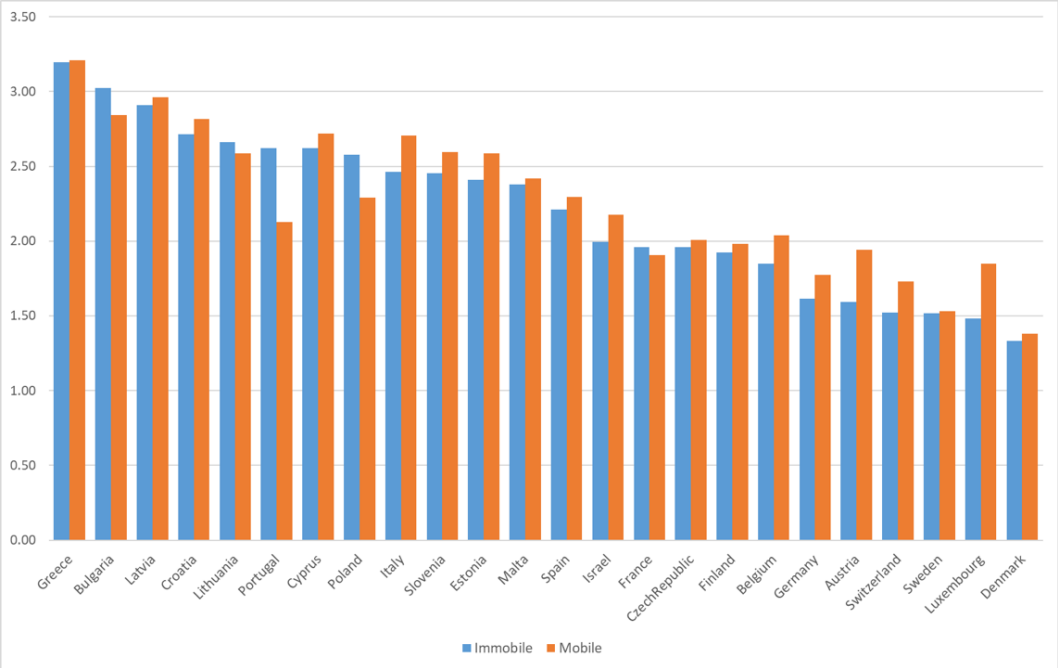
The number of years working and living abroad also provide an indicator of the relevance of the period abroad with respect to the acquisition of pension rights. The mobile population spent on average almost 22% of their working lives (approximately 7 years) in countries other than their current residence. Discontinuous working lives have further implications linked to lower contribution rates. For many EU pension systems, this determines access to benefits and could potentially affect the affordability of services such as health and care at later ages.

Among other measures, the analysis of the current living conditions of the respondents was approached by their reported financial distress (see Figure 1). Through this measure we can see how difficult it is for the individuals to make ends meet. The results suggest that there is heterogeneity across countries. Within countries we do not see a clear pattern between mobile and immobile individuals. Some countries, such as Luxembourg and Switzerland, display wider gaps between the two groups. Statistically significance of the difference is low.

IAG_BSR06-11, OGHA_04-064, HHSN271201300071C) and from various national funding sources is gratefully acknowledged (see www.share-project.org).

Figure 1. Financial distress

Source: Own calculations based on SHARE Waves 3 and 7 data.



Further analysis might contribute to disentangling the effects of the time when residential and employment changes happened, as well as the potential push factors such as family migration and childbearing. This is particularly relevant for individuals who were mobile at younger ages or during their early career years, as it could be reflected in lower pension payments after retirement. This would be of particular interest for those at the bottom of the income distribution who might have worked abroad, as well as for nationals or former workers in non-Member States as the penalty for contributing to those systems might be even higher.

References

Boersch-Supan, A. (2019). *Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 7.* Release version: 7.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w7.700

Boersch-Supan, A. (2019). *Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 3 – SHARELIFE.* Release version: 7.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w3.700

Boersch-Supan, A., M. Brandt, C. Hunkler, T. Kneip, J. Korbmacher, F. Malter, B. Schaan, S. Stuck, S. Zuber (2013). *Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE)*. International Journal of Epidemiology. DOI: 10.1093/ije/dyt088

European Commission (2018): *The 2018 Pension Adequacy Report. Current and future income adequacy in old age in the EU. Volume I*. Luxembourg: Publications Office of the European Union. DOI: 10.2767/927523

International challenges in engaging local government and community in mental health policy: the case of suicide prevention policies in France and Australia

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Mental health problems, including suicide behaviour disorders, are a public health problem worldwide which also represents equally a high financial burden to society. Nevertheless, it is estimated that in high-income countries, half of people in need do not receive any form of care. This is largely related to the absence of awareness among a broader population of mental health problems, needs, services and to a high level of stigmatisation.

Engaging local government and community in mental health policy has been shown to have an ecological effect on decreasing stigmatization related to mental health issues in the civil society and improving attitudes and norms associated with adult help for psychological problem in the general population. This would in turn facilitate help-seeking behaviours leading to a decrease in the occurrence of psychological distress and suicidal ideations ultimately preventing suicidal acts. Suicide prevention measures relayed in the community have been shown to be particularly effective in several studies (Allen et al., 2009; Bean & Baber, 2011; Walker et al., 2009; Scott & Guo, 2017) and previous research has involved cities or counties in the development of such measures (Ono et al., 2013; Székely et al., 2013) as it has been the case in France and Australia. However, it appears that the involvement of local communities has been uneven and that great variations remain.

Starting from the examples of the involvement of local government in suicide prevention policies, our work studied challenges in involving local governments and communities in work on suicide prevention policy in both France and Australia. France has developed an organizational tool to facilitate the implementation of mental health policies in the communities: Local Health Councils for Mental Health (LHCMH). By promoting cross-sector coordination, these are in line with WHO guidelines. They are concertation platforms ran by elected officials that bring together users and families and all the professionals of health, social, justice and insertion services. Their aim is to put the citizen back at the heart of the decision, provide local analysis of mental health needs and develop concrete actions, that are, at the end of the process, submitted for the approval of the elected representatives. However, suicide prevention programs are scarcely developed at the local level and a recent approach had the aim to involve LHCMH in the promotion of an e-tool (app and website) “stopblues” developed to prevent suicidal acts in the general population. Internet indeed presents the advantage of addressing a broader population that includes people with psychological distress who are not aware of their potential risk of suicide, thereby enabling the development of prevention programs. Moreover, programs available through

smartphones and computers have the potential to prevent suicide among socially isolated and vulnerable individuals who are otherwise hard to reach. Australia, on the other hand, has developed several programs of suicide prevention, notably covering the lifespan, and has a long experience in involving local government and community in mental health policy, but does not have an organization such as the LHCMH.

While the political involvement of the local government is important, our results show that irrespective of the organizational structures in place, formalized or not, the involvement of local government and community faces similar challenges in both countries, leading to variations in the effectiveness of a suicide prevention program. First, the discrepancies among communities and local governments in their ability to participate in a program are related to available resources for a given program from a quantitative and qualitative perspective. Local human resources vary in scarcity or in terms of a workload, but also in terms of competences as local human resources are often employed to deliver several tasks and may not show the skill required to work on mental public health actions. Local financial resources vary and can be too small for increasing human resources or logistic resources needed to achieve genuine involvement in the project.

Indeed, locally elected representatives can show great interest in responding to their community's needs with regards to the prevention of suicide, while not turning it into adequate resources for the project. This is either because they do not have the financial power to do so or have other priorities when facing budget constraints. in any case, political will is insufficient if there are not enough resources for a program for financial reasons. Finally, whatever the scientific basis of the development of a program and its level of co-construction with professionals and end-users, personal convictions of local actors about the appropriateness, the content, the structure or the constraints of the program as a whole or partially, can be a strong challenge to the involvement of the communities, in particular if these actors are key to the implementation of the program.

These observations provide the basis for developing recommendations for good practice in the involvement of local government and communities in suicide prevention programs. Further work must be done to define if, how and when these can be done.

References

Allen J, Mohatt G, Fok CCT, Henry D, (2009) *People Awakening Team. Suicide prevention as a community development process: understanding circumpolar youth suicide prevention through community level outcomes.* Int J Circumpolar Health. 68, 274–91.

Bean G, Baber KM. (2011) *Connect: an effective community-based youth suicide prevention program. Suicide Life Threat Behav*. 41, 87–97.

Ono Y, Sakai A, Otsuka K, Uda H, Oyama H, Ishizuka N, et al. (2013) *Effectiveness of a*

multimodal community intervention program to prevent suicide and suicide attempts: a quasi-experimental study. PloS One. 8:e74902.

Scott A, Guo B. (cited 2017) *For which strategies of suicide prevention is there evidence of effectiveness?* [Internet]. Copenhagen, Denmark: WHO regional office for Europe; 2012 Available from: http://www.euro.who.int/__data/assets/pdf_file/0003/168843/HEN-Suicide-Prevention-synthesis-report.pdf

Székely A, Konkolÿ Thege B, Mergl R, Birkás E, Rózsa S, Purebl G, et al. (2013) *How to Decrease Suicide Rates in Both Genders? An Effectiveness Study of a Community-Based Intervention (EAAD)*. PloS One. 8:e75081.

Walker RL, Ashby J, Hoskins OD, Greene FN. (2009) *Peer-support suicide prevention in a non-metropolitan U.S. community. Adolescence.* 44, 335–46.

Contributors

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For detailed information on the contributors to the Europa Policy Labs, please visit: https://politicsir.cass.anu.edu.au/centres/ces/research/projects/jean-monnet/europa-policy-labs/about

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