Agnar Sandmo – the Distinguished Economist

Agnar Sandmo has left us. He was a world-famous public finance economist in the Musgrave-Lindahl tradition, combining extraordinary theoretical skills with a profound sense of political relevance and the ability to communicate his knowledge in a way accessible to all.

In a speech he gave at CES in Munich, whose Council he chaired for many years, he defined economic excellence in exactly this way when he specified the criteria for the annual CES Prize: A "well-rounded" economist has "published important articles in most highly ranked academic journals", but he has also "written for a larger set of readers, partly in the form of more accessible writings for a non-specialist economic audience and partly for the general public in the form of newspaper articles". In short, he should be an "applied theorist" who is "always concerned with the application of theory to specific issues of economic policy". Agnar Sandmo himself satisfied these criteria to the highest possible extent.

He published a number of path-breaking articles in the *American Economic Review*, the *Journal of Political Economy*, the *Quarterly Journal of Economics* and *Econometrica*. The topics ranged from the behaviour of a competitive firm under price uncertainty, taxation and investment and optimal tax theory to externalities and portfolio choice. In addition he published many articles in the *European Economic Review*, the *Journal of Public Economics* and the *Scandinavian Journal of Economics*, which cover a large variety of additional themes.

In line with his own definition of an applied economist, he also wrote articles in numerous policy-oriented European journals and conference proceedings. And in the tradition of Nobel laureates like Milton Friedman, Paul Samuelson or Robert Solow he contributed thought-provoking newspaper articles to the public discourse. He published two English monographs with renowned international publishing houses.

Over the course of his academic career, Agnar crossed many different fields of economics. In the early years there was an emphasis on topics related to the theory of the firm as well as general equilibrium theory. He gave us many useful results on investment demand and supply reactions under uncertainty.

Later he applied the theory of uncertainty also to models about labour supply and individual savings decisions, often concentrating on tax problems.

Taxation was indeed a dominant theme of his career. His intriguing proof that a nonconstant cash flow tax would bring about severe intertemporal distortions in the economy has inspired many generalizations by others ranging from value added taxes to taxes on natural resources.

Agnar Sandmo became an expert in optimal tax theory. He managed to clarify this difficult topic in public finance to the discipline and to extend it with his clear mind and high mathematical skills in quite a number of papers.

His papers on tax evasion and shadow economies with Michael G. Allingham were seminal contributions to the field.

His paper on ex post welfare economics and merit goods not only justified Musgrave's controversial concept but, unwittingly, gave the paternalism of modern behavioural economics a theoretical justification. In fact, in conversations, he placed much emphasis on benevolent paternalism that he justified with the limited information of decision makers and their retroactive agreement.

Agnar was much interested in income redistribution and social policies, which he analysed in many theoretical and policy-oriented contributions. His profound sense of justice was always visible in his papers, which justified and explained the welfare state without neglecting the potential distortions. In a number of papers he expressed his concern that the welfare state would come under pressure from the forces of globalisation.

Another theme that interested him throughout his career was environmental economics and the problem of externalities. He authored sophisticated papers on Pigovian taxes and even wrote a book on *Public Economics of the Environment*, released by Oxford University Press. In recent years he also published on the economics of climate change.

Economists of the Chicago School tend to argue that public finance is a superfluous topic since it assumes a benevolent state which corrects market failure, which both do not exist. This was certainly not Agnar's view. As he emphasized in a lecture at CES, it would be naive to believe that markets could solve all sorts of economic problems, and he stressed that planning has to complement markets in solving the complex problems of modern societies.

Agnar Sandmo liked to dig into other economists' work. He wrote a number of papers on the history of economic thought, covering scholars like Henrik Borch, James Buchanan, Gary Becker, Ragnar Frisch, Trygve Haavelmo, Leif Johansen, Jan Mossin and Johann Heinrich von Thünen. Additional scholars are dealt with in his book *Economics Evolving*. *A History of Economic Thought*, published by Princeton University Press.

Understandably, Agnar was particularly interested in the contributions of Scandinavian economists, arguing that the regional focus would give researchers the "opportunity for studying the connections between social and political institutions on the one hand and the development of economics on the other" as a "background for a more global view of intellectual developments".

In his thinking, the world cannot properly be described by pure economic theories about phenomena that are true regardless of time and space. To be meaningful, theories should be firmly imbedded in local and specific institutional environments. Good economics needs good theory, a good numerical data base and, in particular, a good knowledge of the actual institutional rules of the game characterising particular economies. This explains why he wrote very many scholarly articles in his own language plus a large number of newspaper articles, trying to address local problems and inform local policy makers as well as the general public.

For Agnar the natural institutional environment was that of the Nordic countries. He used his leisure time at his cabin in Telemark to develop his interesting papers on redistributional and environmental issues and many other topics. Telemark is a remote highland in the South of Norway which is marked by its beautiful and untouched nature, by its distinct cultural traditions and its egalitarian farmer society dating back to the Viking Age.

Despite his deep local roots, Agnar was firmly embedded in an international network of economists, including people like Kenneth Arrow, Tony Atkinson, Robin Boadway, Avinash Dixit, Jacques Drèze, Mervyn King, Assar Lindbeck, Jim Mirrlees, and Joseph Stiglitz, to name only a few. He explained this once by saying that working in a small economy like Norway would have otherwise led to isolation. "An economist who was active in research had few colleagues in his own country with whom to communicate and discuss, and he would be very lucky to have close colleagues in his own university. This kind of situation can lead to isolation and provincialism – but it can also lead people to adopt a more international orientation than would otherwise have been the case."

This insight explains why he preferred to spend his sabbaticals at foreign universities like Yale, Queen's or Indiana and at CORE in Belgium. It also explains why he supported the CESifo Network, why he came so often to Munich and why he co-founded the Norwegian-German Seminar of Economics, a biennial conference of public finance.

With these foreign contacts and even more so at home at Norges Handelshøyskole in Bergen he gave ample support to young scholars and colleagues who took the opportunity of confronting him with their own research problems. He was always open for discussion, gave useful hints on how to proceed and was encouraging to students who did not yet see the path through the jungle of formal difficulties they encountered in their research. His sense of responsibility and care may stem from serving as corporal and sergeant in the Norwegian army.

Although Agnar Sandmo knew how to express himself in mathematical terms with the highest degree of sophistication, he also understood how to talk to non-specialist economists, policy makers and the general public. His straightforward logic, pronounced, but calm way of speaking and his dry sense of humour won him wide-spread respect. Small wonder that he regularly received awards for his excellent teaching and was invited to consult the Ministry of Finance and other branches of government.

He also received many awards for his research, among them the NHH Prize for outstanding research, the Möbius Prize of the Norwegian Research Council, the Norwegian Association of Economics award for the best article in 2016, the Fridjof Nansen Prize of the Norwegian Academy of Sciences and the EARE Award in Environmental Economics.

In addition he received honorary doctoral degrees from the Universities of Oslo and Uppsala, and was knighted by the King of Norway.

While Agnar Sandmo's professional achievements are outstanding, his warm personality and his open-mindedness made him many friends in academia and beyond. He was an enthusiastic supporter of the Bergen football team, and he was an award-winning master of crossword puzzles. He loved classical music, and enjoyed spending leisure time hiking through Telemark and visiting his wife's family's summer house at Balestrand. Above all, he was a wonderful father, husband, friend and colleague. He will be missed not only by Tone and their children.

In the speech quoted at the outset, Agnar Sandmo defined what he perceived as a distinguished fellow. He is "noble or dignified in appearance and behaviour". Moreover, he is "eminent, famous and celebrated". There are few people to whom this qualification would fit better than to him. This fine gentleman defined his ideals and lived by them.

Now, Agnar Sandmo no longer listens to the waves of the ocean and no longer enjoys the fresh scent of nature. But we will keep listening to him and read his books and papers, which will be of enduring value for economics, and soon we will even be able to read his memoirs on a "life as an economist" that he was able to finalize in the last days of his life.

Hans-Werner Sinn, Munich, 4 September 2019