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Dependent Uncertainties and Governance

Olivér Kovács

Background

There is an important thumb rule in economics, namely that building on easily observable, measurable and interpretable phenomena during any kind of analysis can result much precise knowledge. This is because we simply cannot always understand the ‘big picture’ comprehensively and precisely due to its complexity. We tend therefore to understand reality by investigating the microsphere and then approaching the macrosphere upon our obtained knowledge. As in physics, investigating elementary particles then drawing conclusions to the macro, (e.g. to the universe) is treated as an instructive direction of understanding the laws of nature that are not displayed in any code books like the code of Hammurabi or the Civil Codes in modern democracies. This holds in case of economic and societal ‘laws’ as well.

This is partly why the issue of uncertainty was once addressed by looking at the microsphere, namely at organisational optimising problems in uncertain environments (Duncan, 1972; Galbraith, 1977; Milliken, 1987). By now, research on uncertainty has to acknowledge that old approaches with microsphere focus should be transformed into a more systemic approach pervaded by macro-level analyses that may be better suited to the expectations of academics and economic policymakers as well. The old question is still the same, but the context in which it has to be addressed has changed radically: how does uncertainty affect economic activities, socio-economic developments?

As time passed, numerous economic fields got acquainted with the issue of uncertainty which shaped the line of thinking and reasoning. In cases of development economics and growth theory, recent research found that increases in uncertainty are mainly associated with protracted negative impetus on economic activity (Bachmann et al. 2013). In time of crises, socio-economic actors are to adapt, to refine their operations through incremental and radical changes that tend to trigger uncertainty by implying that the system and its changes should not be overlooked.

In this article we devote attention to uncertainties and their implications on governance, particularly on fiscal governance. We argue that a prone to high uncertainties is an embedded feature of our time and national fiscal governance should consolidate with a more systemic view to cope with indebtedness and dispiriting growth in medium and longer time.

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**Ever-more complex world**

In an era of increasing interconnectedness with asymmetrical interdependency being coupled with growing Knightian uncertainties (Knight, 1921) particularly due to the global financial and economic crisis, the old saying of ‘if a globally core country sneezes, the rest of the world would catches flu’ is here to stay irrespective of considering the US or China as the core country.

This is mainly because of the threat of permanent slowdown in China and the threat of budget standoff in case of the US (even if the US debt-ceiling is raised, the deeper problem persists making creditors’ calm a phantasmagoria and thus leading to higher borrowing costs). Importantly, both phenomena are likely to have various direct and indirect negative consequences on the rest of the world, including Europe where the more-than-fragile recovery is by no means in the cards, either.

With the quite dynamic development and diffusion of information and telecommunication technologies (ICT), accessing relevant as well as irrelevant information has become ubiquitous feature of nowadays (Perez, 2002, 2009; Lundvall, 2002). Affluent information about phenomena creates impressions, perceptions and decisions about how to act perpetually in the mindset of economic agents. What is more, in the course of this type of proactive perceptions, expectations over the timing of proper governmental interventions as reactions to problems are rising.

The age of immediacy is therefore here to stay by having an embedded prone to causing uncertainties because there is no governance – neither on national nor on international levels – that would be an omnipotent one having the necessary *lapis philosophorum* whereby that would carefully and scientifically properly overlook ex ante the whole system and the effects of the actions imposed. As the Nobel-laureate Daniel Kahneman rightly pointed out again, the predictive power of our knowledge reaches its diminishing marginal returns relatively fast (Kahneman, 2013). This time-tested insight also holds when it comes to predicting non-linear economic processes evolving in the above articulated complex system.

Complex system entails complex – so-called, wicked problems spanning over the traditional walls of national states – problems requiring, by their very nature, complex solutions such as demographic challenge (e.g. ageing population, increasing inequalities and impoverishment), climate change (e.g. increasing temperature, air pollution etc.), secularly decreasing productivity and innovation performance. These wicked problems establish a solid claim for policy actions even on the global sphere by leading therefore to wicked policies (Churchman, 1967; Rittel – Webber, 1973), “[...] where ends are neither well known nor agreed upon, and means-ends relationships are either poorly understood or unstable” (Paquet, 2013). Due to wicked policies, a certain level of uncertainty is always encoded into the modern socio-economic system.
Uncertainties and economic activities

As our system we live in is becoming ever-more complex, uncertainties can arise in a more vigorous way that has negative impetus on investment, consumption and, what is perhaps even more important in the era of knowledge economies, on innovation as well as on research and development activities. Human being has a predilection to think that certainty is everything. This is the reason why risk-aversion is escalating with the scale of innovation which is pervaded by uncertain successfulness. It is hardly by chance that the policy uncertainty index, developed by Baker et al. (2013) to capture the economic policy related uncertainties observable in selected countries, has been exemplifying the lots of opinions, perceptions evolving on the accuracy and necessity of economic measures taking place or should be take place in their humble opinions. As the authors emphasised, “Since 2008, economic policy uncertainty has averaged about twice the level of the previous 23 years.”.

![Chart 1. Uncertainty and Real GDP Growth](chart.png)

**Chart 1. Uncertainty and Real GDP Growth**

*Note:* left axis refers to the policy uncertainty index developed by Baker et al. 2013, 2010=100, annual average; while right axis refers to the real GDP growth performance in percentage. Uncertainty indices for 2013 are up to September 2013.  
*Source:* Eurostat, Baker et al. 2013, World Bank

Let us add immediately, that in time of immediacy and growing interconnectedness, policy related uncertainties in the US affect uncertainties perceived in China and vice-versa. Uncertainties and perceptions can be exported and imported in this way by giving no chance of such a seductive line of thinking that uncertainties across countries would be independent from each other.
All the more uncertainty has implications on real GDP growth that also affects perceived uncertainties. Our state-of-the-art knowledge on the relationship between them suggests negative, but by no means linear (from growth to uncertainty, or from uncertainty to growth) correlation.

As a corollary, our knowledge on uncertainties can be at best imperfect, because uncertainty is not an independently existing phenomenon (objectum) that should be identified and estimated, but it is the dynamically evolving pattern of perceptions (subjectum) over economic policies. Since the importance of a momentum can be even higher if it generates significant differences in the experience and perceptions of another momentum, uncertainties become a complex web of mutually reinforcing phenomena perceived dynamically over time.²

**Implications for fiscal governance**

Numerous advanced economies are facing today mashrooming public debt-to-GDP ratios and the threat of sovereign debt crisis. In our turbulent time, interspersed with indebtedness and dispiriting growth performance at the same time together with growing uncertainties, the above presented considerations call for uncertainty-reducer and trust-builder policies. Since trust is a fundamental prerequisite of socio-economic development (Akerlof – Schiller, 2009); fiscal policies should underpin this type of purpose in a meaningful way.

To this end, national fiscal governance that is not only to stabilise on mechanistically derived deficit and debt-to-GDP targets to please financial markets and investors, but also to have a more nuanced view by taking into account what are the building blocks of economic growth and development of today’s techno-economic paradigm is of paramount importance.

Since current techno-economic paradigm – ICT-based, services sector dominated knowledge or learning economy (Kovács, 2013), is based on innovation and relevant knowledge utilisation necessary fiscal consolidations (optimally being loaded predominantly on the expenditure side) should bear the torch of anti-cyclical and pro-cyclical measures in reinvigorating research and development, innovation activities, while reducing excessive expenditures on unproductive fields (social transfers, public sector salaries, wages). Public sector should serve as a demonstrator being tailored towards an approach which cultivates innovation, and eventually tries to address and alleviate wicked problems.

Since accumulating debt does not happen overnight, reducing it should also be a more organic and strategic way of fiscal management over a medium or a longer run. Moreover, it seems that neither

² This was explicitly the case after the eruption of the Greek crisis when financial markets’ confidence with regard to Spain and Portugal was also crumbled because their tolerance level against the degree of macroeconomic instability (linked to international competitivenesss and sustainability of public finances) lowered substantially.
the fiscal stimuli, nor the fiscal austerity worked as expected (Blyth, 2013). Fiscal consolidations are required being barded with innovation-based growth oriented views; otherwise stabilisation can easily become destabilisation. Since R&D and innovation does not have positive impetus immediately either, trying to estimate precisely the volume of fiscal multiplier *ex ante* loses its importance. Not to mention that because of the earlier documented nuances and complexities of our world economy, it cannot be estimated precisely, as Nobel-laureates emphasised (Solow, 2012; Romer, 2012). Apart from this fact, as literature suggest, fiscal consolidation affects growth primarily through investment channel, providing the necessary financial backing for new start-ups (who have nothing to lose, but to win) and for firms in supporting not to delay important investment and innovations is of paramount importance.

In this way, uncertainties, generated from the fact that changes are needed in the microsphere to compete on the global scale, can be mitigated by supporting start-ups, already existing and innovating firms to maintain their innovation activities without resorting inevitably to uncertainty-heightener restructuring.

**Concluding remarks**

We are now living in a world in which the willingness to uncertainty is embedded. As we emphasised, uncertainty is a complex web of mutually reinforcing phenomena perceived dynamically over time. Uncertainty is here to stay when market actors and governments are to make more than incremental changes that of end results are unpredictable and estimated carefully *ex ante* (and may be *ex post*), to solve wicked problems, like sovereign debt crisis and eurozone crisis.

Uncertainty makes firms to defer innovations because of deteriorating trust base in the future and in governance’s ability to impose adequate actions in dampening uncertainties. In an effort to reinvigorate the necessary trust infrastructuer, governments should pursue innovation in the public sector to have better service qualities together with improved accessibility in order to rebuild trust of citizens and entrepreneurs.

Along this way, innovation milieu can be underpinned in the private sector as well. Public sector innovation – even in the form of innovative fiscal policy that enshrines a more systemic view by focusing on fundamental sources of growth and development even during consolidations – shall become a trust-builder channel which presumably counterbalances uncertainties over the future and the final result of any economic policy intervention in coping with the recent crisis.

This type of innovative fiscal policy should also have a systemic approach in a different sense. As Phelps (2013) pointed out, if nations are to unfold the potential of innovation and speed it up again, they shall take into account the factors behind grassroots innovation. In this respect, the basic
institutional architecture comes to the forefront as a framework in which people are living, wondering, having and creating ideas and trying to put them into practice. Institutional architecture (i.e. the degree of decentralisation and the form of existing transfer system) matters and the economic history on fiscal federalism suggests that highly decentralised structures are more likely to offer a more fertile ground for innovation mainly due to a more effective parallel learning. This was one of the major points of a 2012 paper on public sector innovation (Kovács, 2012). This is one of those facts that should be considered with meticulous care when it comes to how to improve fiscal governance.
References


Hungary – New Innovation Strategy

Olivér Kovács

During this Summer, the Hungarian government accepted the new innovation policy strategic document, called *Investment in the Future - National Research and Development and Innovation Strategy 2013-2020* (henceforth: Strategy).³

By bearing in mind the fact that innovation is not owned exclusively by the market, not only the private sector innovation – including all forms of innovation, defined in Oslo Manual – should be fostered, but also public sector innovation. Let us add immediately that public sector innovation differs in many aspects from innovations happening in the market.

Still, considering any opportunity on how to enhance the general innovativeness of the Hungarian public sector is of essence in time when painful measures are needed to meet other strategic objectives (i.e. meeting fiscal targets in favour of providing the financial sustainability of the state).

One of the observable merits of the Strategy is the recognition that the Hungarian public sphere is *weak in innovation*, it lacks of some sort of healthy innovative milieu that would lead to permanent trial and error process, and ultimately to better policies as well as public services. The document mentions public sector innovation as an *opportunity* of supportive mechanisms to enhance competitiveness of Hungary from the side of the rather heterogeneous public sector.

Although the Strategy aims at “invigoration of the innovation activities in the health care, environment, energy, education, transport/logistics sectors” (p. 40); it leaves at loose ends the instruments and techniques that are more likely to direct the public sector towards pro-active innovation. The Strategy juxtaposes instruments as follows:

1) Elaboration of reading and strategic proposals on the health care, environmental, energy and transport-logistics innovation systems, similarly to the educational field;
2) Use of the innovative public procurement instruments (including pre-commercial procurement, PCP) in the professional field;
3) Order and use of applied researches based on the knowledge bases in the public policy and public sector;
4) Public procurement of innovative goods and services based on such performance and functions that require development.

The Strategy should have comprehensively contemplated the framework conditions for innovation (i.e. institutional architecture) that affects innovation processes since it has internal enablers and hampering factors for innovation. In our views, a more systemic understanding is needed on public sector innovation by engaging both in technological and non-technological innovations.