

Cost-Benefit Analysis and EU Policy: Limits and Opportunities

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The debate on the use of cost-benefit analysis (hereinafter, CBA) to support public policy decisions, and in particular regulatory initiatives, is far from new, but still rages in many international fora, as well as in academia.¹ The debate on CBA and public policy dates back almost three centuries, and the use of this method to support regulatory reform has since then made important inroads in many governments around the world. A preliminary map of the debate leads to identifying three main attitudes towards CBA: the *CBA enthusiasts* support the extensive, pervasive use of CBA to improve the rationality, transparency, accountability and efficiency of public policy;² the *constructive skeptics* try to modify the existing practice of CBA to reflect a number of methodological and ethical concerns (Adler 2012, 2017; Posner and Adler 2006);³ and the *opponents* of CBA consider that the methodological flaws and distortions generated by this method warrant the search for alternatives, such as multi-criteria analysis, trade-off analysis, a focus on minimizing compliance costs, or simply a qualitative assessment of the prospective or retrospective impacts of public policies (Heinzerling and Ackerman 2008).⁴

All these opinions have some theoretical and empirical support, as will be discussed in more detail below. At the international level, the more enthusiastic position has been dominant especially since the early 1980s thanks to the widespread promotion of CBA in policymaking by institutions such as the OECD and national administrations in the US, Canada, Australia and the United Kingdom. Against this background, in adopting and implementing its better regulation agenda since 2002, the European Commission has consistently, but not exclusively endorsed the use of CBA as overarching methodological framework for assessing and evaluating the economic, social and environmental impacts of proposed new EU major policy initiatives. This occurred despite the fact that the EU policy appraisal system features a much broader scope, and thus possibly more methodological complications, compared to homologous systems such as the US one (Renda 2006; 2011).⁵ Such difference led to tensions in the consistent application of CBA in the European Commission.

This paper explores the pros and cons of using CBA in support of public policy, and discusses the specific case for relying on this method in the EU better regulation agenda. The first part looks at the academic debate on CBA and its possible alternatives. The second part describes the place occupied by CBA in the EU better regulation agenda, and identifies a number of peculiar aspects of the EU impact assessment system, which inevitably led EU institutions to depart from a full-fledged, orthodox adherence to the use of CBA. The third part briefly concludes by discussing the potential for partly diverging from a CBA-oriented approach to improve the salience and usefulness of the EU better regulation toolbox and process.

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¹ CBA is used also for public investment projects, tax transfer reforms and social expenditures, see R Boadway, 'Cost-Benefit Analysis' in M Adler and M Fleurbaey (eds), *The Oxford Handbook of Well-Being and Fair Distribution* (New York, Oxford University Press, 2016). This paper focuses in particular on regulation.

² eg RW Hahn, *In Defense of the Economic Analysis of Regulation* (Washington DC, American Enterprise Institute, 2005).

³ eg MD Adler, *Well-Being and Fair Distribution: Beyond Cost-Benefit Analysis* (Oxford, Oxford University Press, 2012). MD Adler, 'A Better Calculus for Regulators: From Cost-Benefit Analysis to the Social Welfare Function'. Duke Law School Public Law & Legal Theory Series No. 2017-19. And MD Adler and E Posner, *New Foundations Of Cost-Benefit Analysis*, Cambridge, MA: Harvard University Press (2006).

⁴ A Sinden, 'Cost-Benefit Analysis, Ben Franklin, and the Supreme Court' (2014) *UC Irvine Law Review* Vol 4:1175.

⁵ A Renda, *Impact Assessment in the EU: the state of the art and the art of the state* (Brussels, CEPS, 2006); A Renda, *Law and Economics in the RIA World* (Amsterdam, Intersentia, 2011).

The desirability of using cost-benefit analysis as a decision-making tool has long been recognized in public policy. It has been traced back to the letter Benjamin Franklin wrote in 1772 to his friend Joseph Priestley, recommending that Priestley address a challenging decision by explicitly listing and comparing the pros and cons (Wiener 2013).⁶ Since then, the method is associated with the practice of identifying, listing and assessing the positive and negative consequences of alternative courses of action, and then choosing the alternative that maximizes net benefits. In public policy, CBA is seen as an instrument aimed at the maximization of social welfare, and as such often traced back to the seminal work of Jeremy Bentham. Bentham's vision of the role of public policy, described in his *Fragment on Government* in 1776, was one aimed at maximizing 'happiness' for the 'greatest number'.⁷ He defined happiness as the sum of all pleasures and pains, implicitly introducing a net benefit concept in the measurement of the impact of public policies. CBA was then formalized by economists like Jules Dupuit and Alfred Marshall during the 19th Century and is used in the US at the federal level since the 1930s, initially developed by the Army Corps of Engineers. It is now used widely by government agencies and international institutions around the world. However, the road from Bentham's utilitarian view to the current version of CBA used in public policy was more tortuous than often acknowledged. While an exhaustive account would fall outside the scope of this chapter,⁸ below the main methodological disputes are summarized.

A first problem that emerged in operationalizing Bentham's original view is the difficulty of directly measuring happiness and well-being. While the economics literature has made important progress in this respect,⁹ early neo-classical economists did not come out with a fully satisfactory way of comparing inter-personal utility without relying on an imperfect proxy such as income;¹⁰ and ended up incorporating utility into their models without paying 'much attention to its doubtful philosophical and psychological foundations'.¹¹ More specifically, neoclassical economists have come to rely on individual willingness to pay (WTP) as a measure of the intensity of happiness or utility associated with future states of the world. In other words, regulatory impacts are appraised by asking individuals how much they would in theory be willing to pay to realize specific future outcomes; whereas scenarios associated with negative WTP are considered to be associated with a worsening of the individual's perceived utility.

As observed in by Boadway,¹² this preference-based approach has both advantages and shortcomings. On the positive side, it appears non-paternalistic as it takes a bottom-up view of what individuals consider to be an improvement: put differently, it does not incorporate any normative agenda set by the policymaker, but exclusively relies on the observation of what affected people would prefer ('willing to pay for'). However, this approach has several limitations. First, for marketed goods it incorporates all the behavioral biases and imperfections featured by market outcomes, including imperfect information, bounded rationality, externalities and many more. Second, by considering willingness to pay in the absence of income constraints, it only considers the preferences of those on the demand curve that end up participating in the market: if a person does not have a sufficient ability to pay for a specific good or service, CBA will consider that person as having

⁶ JB Wiener, 'The Diffusion of Regulatory Oversight', in MA Livermore & RL Revesz (eds.), *The Globalization of Cost-Benefit Analysis in Environmental Policy*, Oxford: Oxford University Press, 2013, Chapter 8.

⁷ See A *Fragment on Government*, in which Bentham describes as a fundamental axiom: 'it is the greatest happiness of the greatest number that is the measure of right and wrong.'

⁸ See *ia*, Renda 2011, above n 5.

⁹ D Fujiwara and R Campbell, *Valuation Techniques for Social Cost-Benefit Analysis: Stated Preference, Revealed Preference and Subjective Well-Being Approaches. A Discussion of the Current Issues*, Report for the UK government, HM Treasury and Department for Work and Pensions, July 2011; M Fleurbaey and D Blanchet, *Beyond GDP: Measuring Welfare and Assessing Sustainability* (Oxford, Oxford University Press, 2013); MD Adler and M Fleurbaey, *The Oxford Handbook of Well-Being and Fair Distribution* (New York, Oxford University Press, 2016).

¹⁰ Bentham himself suggested that happiness could be proxied by money. See J Bentham, *An introduction to the principles of morals and legislation. In Utilitarianism and Other Essays* (Harmondsworth, Penguin, 1789).

¹¹ K Binmore, 'Interpersonal Comparison of Utility' in D Ross and H Kincaid (eds), *The Oxford Handbook of Philosophy of Economics* (Oxford University Press, 2009).

¹² Boadway, above n 1.

insufficient WTP and thus no specific preference for that good or service. Third, for non-market goods such as eg environmental quality or fundamental rights the only way to incorporate monetary value in the analysis is to infer some measure of WTP and build shadow prices: this has been criticized as utterly arbitrary and leading to ‘knowing the price of everything, and the value of nothing’,¹³ as exemplified in particular in the debate over the value of a statistical life¹⁴ and on pricing environmental goods.¹⁵ Fourth, economists have long debated the need to differentiate gains from losses in the individual perception of preferences and regulatory outcomes, and this has led to estimating values of WTP for gains, and willingness to accept compensation (WTA) for losses, which are wildly diverging; practice with CBA has shown that obtaining reliable WTA measures is a nightmare, and that in most cases the figures obtained are greatly exaggerated. Fifth, and relatedly, the need to use income as a proxy for utility and the need to avoid difficult comparisons between heterogeneous measures (WTP and WTA) has led economists to largely ignore distributional issues when using CBA: this was mostly done by implicitly assuming that income has constant marginal returns, an assumption fact that is both intuitively and empirically found to be unfounded. Finally, these problems are also exacerbated by the fact that CBA is based on methodological individualism, ie it assumes that that individual preferences are dependent on each individual’s specific condition, and not on external constraints. More precisely, under a methodologically individualist approach marginal utilities – and thus individual preferences in market and non-market contexts – do not depend on what society as such has, but on what individual members have.¹⁶ All inter-dependencies between individuals are necessarily ruled out.

In summary, the full-fledged version of CBA assumes that income is a good proxy for happiness (wealth equals welfare); that individuals behave rationally and are unconstrained, and thus market outcomes are efficient; that (almost) everything can be priced based on observed or stated WTP; that income has constant marginal returns and as such distribution is irrelevant; and that happiness does not depend on context, but only on what individuals have. All these assumptions are at least questionable: but does this make CBA a bad tool for policymaking? The answer is not easy, and would necessarily have to take into account available alternatives to CBA, and in particular their level of complexity. Authoritative Chicago-school economists such as Milton Friedman (1957) explicitly rejected any further sophistication of neoclassical economics, which would have undermined its phenomenal predictive power. And Richard Posner followed this approach in proposing an economic analysis of the law, which would basically draw on neoclassical economics to create a fictional world in which individuals always express their preference through market acts. Putting a price thus ironically became the price to pay to preserve the power and primacy of economics among social sciences: a price that can be considered as very high, in particular when CBA is applied to sensitive issues from the standpoint of fairness, distribution and social justice.¹⁷

Not surprisingly, the idea that CBA should permeate all aspects of public policy, advocated in by scholars like Richard Posner during the 1970s – met with significant resistance across the academic community. Already in the ‘Symposium on Efficiency as a Legal Concern’ culminated in two issues of the Hofstra Law Review in 1980, the use of efficiency criteria (in particular, the Kaldor-Hicks potential Pareto-superiority criterion) in all areas of policymaking, advocated ia by Posner, was

¹³ F Ackerman and L Heinzerling, *Priceless: On Knowing the Price of Everything and the Value of Nothing* (The New Press, 2004).

¹⁴ WK Viscusi and JE Aldy, ‘The Value of a Statistical Life: A Critical Review of Market Estimates throughout the World’ (2003) 27(1) *Journal of Risk and Uncertainty* 5-76.

¹⁵ D McFadden and K Train, *Contingent Valuation of Environmental Goods. A Comprehensive Critique* (Cheltenham UK and Northampton MA USA, Edward Elgar, 2017).

¹⁶ Following Schumpeter (1909), “nobody values bread according to the quantity of it which is to be found in his country or in the world, but everybody measures the utility of it according to the amount that he has himself, and this in turn depends on his general means”. See J Schumpeter, ‘On the Concept of Social Value’, *Quarterly Journal of Economics*, Volume 23, 1908-9. pp. 213-232. See ia H Hovenkamp, ‘The Limits of Preference-Based Legal Policy’ (1994) 89 *Northwestern University Law Review* 4, at 6, L Udehn, ‘The Changing Face of Methodological Individualism’ (2002) 28 *Annual Review of Sociology* 479, 484, GM Hodgson, ‘Meanings of Methodological Individualism’ (2007) 14:2 *Journal of Economic Methodology* 211-26 and RB Ahdieh, ‘Beyond Individualism in Law and Economics’ (2009) *Emory Public Law Research Paper No 9-78*; *Emory Law and Economics Research Paper No 9-48*.

¹⁷ G Calabresi, ‘The Future of Law and Economics: Essays in Reform and Recollection’ (2016) *Yale University Press*.

heavily criticized.¹⁸ While Posner argued that Kaldor-Hicks efficiency (which implies the adoption of net beneficial solutions with no concern for distributional impacts) would be the preferred one by individuals under a ‘veil of ignorance’ as a guiding principle for governing society as a whole, many other scholars resisted this view by highlighting the major limitations of CBA and potential Pareto superiority especially in terms of fairness, distribution and justice.¹⁹ More recently, Cass Sunstein used the term ‘cost-benefit state’ to denote the widespread use of cost-benefit analysis in all aspects of public decision-making;²⁰ but in the United States, where this debate has reached the highest level of sophistication, academics are still debating the issue: the last opportunity for debate was offered by the US Supreme Court’s decision in *Michigan v EPA*, in which the Court argued that the Environmental Protection Agency had failed to adequately consider regulatory costs when deciding whether to regulate hazardous air pollutant emissions from power plants. This decision led to enthusiastic statements by the supporters of CBA, and to more dismissive replies by the CBA opponents, in what became, once and again, a debate over the merits of the whole CBA approach.²¹

Since then, the debate has moved forward, mostly in the direction of modifying CBA to incorporate more methodologically and normatively agreeable arrangements, at the same time possibly increasing the complexity of the method (eg utilitarian social welfare functions; accounting for inter-individual effects); to radically simplify it to allow for application by civil servants;²² or to entirely replace it with allegedly better alternatives (eg fair allocation approaches, equality of opportunities approaches). Most notably, from a methodological perspective the direct measurement of subjective well-being and happiness made significant progress,²³ but its operationalization in public policymaking would probably require its simplification, in many government contexts. At the same time, research on distribution and inequality²⁴ has eventually become more applied and spurred a discussion on possible alternative social welfare functions, for example in the context of the World Bank’s Shared Prosperity agenda and more recently in the debate on the Sustainable Development Goals.²⁵

That said, it is fair to state that a very limited number of practical alternatives to the use of CBA in regulatory policy has emerged to date. All of them have pros and cons, of course. For example, Cost Effectiveness Analysis (CEA) is often preferred by the CBA critics, as it does not imply the monetization of benefits. Benefits can be quantified in other metrics, and then CEA will compare alternative options based on the cost per unit of benefit (for example, the monetary cost of every life saved, or the cost per QALY – quality-adjusted-life-year).²⁶ But in most circumstances, CEA is less appropriate than CBA as it does not imply a calculation of the net addition to well-being, and it can then lead to choosing alternatives that are less beneficial for society, if it displays a higher benefit-cost ratio. Likewise, feasibility analysis has been proposed especially in the United States as a more ‘moral’ alternative to CBA, especially for those statutes in which Congress directs the agency to

¹⁸ Renda (2011), above n 5.

¹⁹ Posner’s ‘pre-constitutional view’ implied that in all areas of common law, including legal adjudication and government regulation, the real objective should be wealth maximization; that economic efficiency is the natural way to achieve wealth maximization; and that this goal is justified on moral grounds as it is a measure (better, an ‘ancillary paradigm’) of justice. The direct consequence of the Posnerian view of efficiency was that efficiency criteria *à la* Pareto (including potential Pareto efficiency, or Kaldor-Hicks efficiency) could be justified on ethical grounds. See Renda (2011), above n 5.

²⁰ CR Sunstein, ‘The Cost-Benefit State’, University of Chicago Law School, John M Olin Law & Economics, Working Paper No 39, May 1996.

²¹ <https://www.theregreview.org/2016/09/26/debate-cost-benefit-analysis/>.

²² C Carrigan and S Shapiro, ‘What’s wrong with the back of the envelope? A call for simple (and timely) benefit–cost analysis’ (2017) 11 *Regulation & Governance* 203-12.

²³ Adler and Fleurbaey, above n 9.

²⁴ A Atkinson, *Inequality. What can be done?* (Harvard University Press, 2015).

²⁵ World Bank, *Policy Research Report 2014: A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals*, available at <http://www.worldbank.org/en/topic/measuringpoverty/publication/a-measured-approach-to-ending-poverty-and-boosting-shared-prosperity>.

²⁶ The QALY is a generic measure of disease burden, used in economic evaluation to assess the value for money of medical interventions. One QALY equates to one year in perfect health. See ia PJ Neumann PJ, *Using cost-effectiveness analysis to improve health care* (New York, Oxford University Press, 2005).

reduce a risk to the extent ‘feasible’, or to the ‘maximum’ extent, with no mention of costs:²⁷ this method operates mostly with technology-based assessments, and was criticized for being unable to offer consistent methodological guidance.²⁸ Other alternatives include the measurement of macroeconomic impacts and general equilibrium analyses; application of prioritarian social welfare functions; capabilities-based approaches; and more generally various blends of multi-criteria analysis, in a debate that parallels the one occurring at the more macro level on possible alternatives to GDP measurement)²⁹.

All these methods have advantages and disadvantages: the debate on their possible introduction is mirrored by slow, but significant adjustments in the economic analysis of regulation, and by a progressive blurring of the boundaries between CBA and alternative, often simpler methods for justifying regulation. More specifically, in the United States the Trump administration seems to be focusing almost exclusively on cost minimization, despite the administrations’ efforts to show continued interest for regulatory benefits.³⁰ In the UK, emphasis on CBA in *ex ante* impact assessment and *ex post* evaluation have been gradually accompanied, and almost replaced, by a renewed attention for regulatory budgeting and cost-focused stock-flow linkage rules such as ‘one in, three out’. In Australia, Mexico and Canada, similar trends are observed, with CBA gradually losing ground to red tape reduction strategies.³¹

CBA AND THE EU BETTER REGULATION AGENDA

The European Commission has endorsed CBA as a method to assess the impacts of new EU policy initiatives since the early days of its better regulation agenda. The 2002 Communication on Impact Assessment took a relatively cautious stance on the method to be used to perform the analysis of alternative policy options, stating that ‘a number of analytical methods can be used to assess impacts. They differ in concept and coverage (eg cost-benefit analysis, cost-effectiveness analysis, compliance cost analysis, multi-criteria analysis and risk assessment)’; and that ‘the choice of method and the level of detail will vary with the nature of the problem and judgments about feasibility.’³² Interestingly, the Commission also added that ‘when assessing impacts, strict cost-benefit analysis may not always supply the most relevant information; for example, the degree of irreversibility should also be considered’; the Communication went on advocating the use of the precautionary principle when appropriate;³³ and the impact on established policy objectives where available.³⁴ Already in 2004, however, in re-launching the impact assessment system the Commission clarified that the analysis of prospective economic, social and environmental impacts should occur first qualitatively, and possibly with monetization of impacts, covering ‘not only the costs associated with the proposal but also its expected benefits over time.’³⁵ However, the revised 2009 guidelines attached more importance to CBA by mandating that for the most important (so-called cross-cutting) initiatives, after

²⁷ A Sinden, DA Kysar and DM Driesen, ‘Cost-benefit analysis: New foundations on shifting sand’ (2009) 3 *Regulation & Governance* 48-71, doi:10.1111/j.1748-5991.2009.01044.x and DK Kysar, *Regulating from Nowhere. Environmental Law and the Search for Objectivity* (Yale University Press, 2010).

²⁸ MIT Professor Nicholas Ashford proposed an alternative termed ‘trade-off analysis’, which however meaningful has not been implemented to date in federal agencies. N Ashford, ‘The Legacy Of The Precautionary Principle In U.S. Law: The Rise of Cost-Benefit Analysis and Risk Assessment as Undermining Factors in Health, Safety and Environmental Protection’ in N de Sadeleer (ed), *Implementation the Precautionary Principle: Approaches from the Nordic Countries. the EU and the United States* (London, Earthscan, 2007) 352-78. See also JS Masur and EA Posner, ‘Against Feasibility Analysis’ (2010) 77 *University of Chicago Law Review* 657; University of Chicago Law & Economics, Olin Working Paper No 480; University of Chicago, Public Law Working Paper No 274.

²⁹ D Philipsen, *The Little Big Number. How GDP Came to Rule the World and What to Do about It* (Princeton University Press, 2015); P Schreyer, ‘Cost-Benefit Analysis’ in Adler and Fleurbaey, above n 9.

³⁰ See the letter from 95 economists and legal scholars, critiquing EO13771 for focusing only on costs. At https://www.eenews.net/assets/2017/05/24/document_gw_07.pdf. And see also ia N Ashford, ‘Trump Rejects Science, Technology, Economics, and the Constitution With His Two-for-One Executive Order’ *Huffington Post*, 1 February 2017.

³¹ See A Renda (2017), ‘Introducing EU Reduction Targets on Regulatory Costs: a Feasibility Study’, Study for RegWatchEurope, forthcoming July 2017.

³² <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52002DC0276>.

³³ On the compatibility between CBA and the precautionary principle, see ia D Driesen, ‘Cost-Benefit Analysis and the Precautionary Principle: Can They Be Reconciled?’ (2013) *Michigan State Law Review* 771.

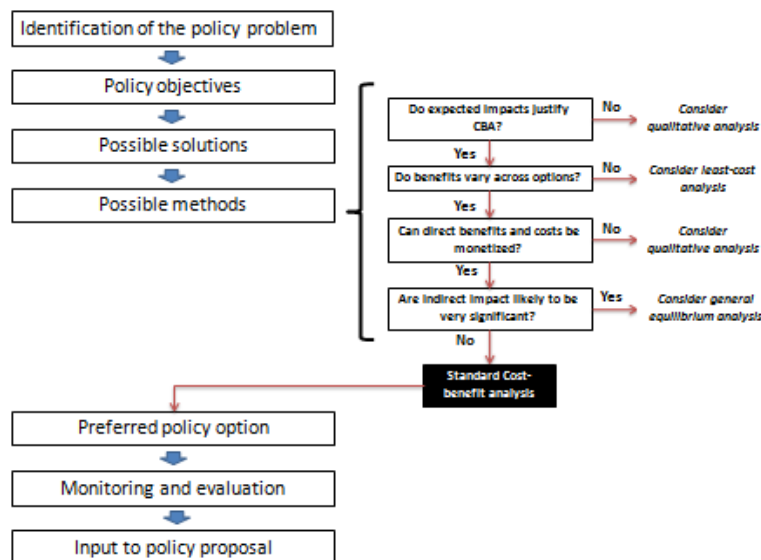
³⁴ *idem*.

³⁵ http://ec.europa.eu/smart-regulation/impact/key_docs/docs/sec_2004_1377_en.pdf.

an initial qualitative analysis, a quantitative/monetary estimate of expected benefits and costs be provided when feasible. At the same time, methodological guidance remained case open to the use of other methods such as CEA and MCA: the Commission clarified that ‘full cost-benefit analysis should be used when the most significant part of both costs and benefits can be quantified and monetised, and when there is a certain degree of choice as regards the extent to which objectives should be met ... a measure is considered to be justified where net benefits can be expected from the intervention.’³⁶

The new 2015 Better Regulation Toolbox led to a more nuanced approach of the Commission towards CBA, which is featured as one of many methodologies that could be used to assess the impacts of prospective policy initiatives. CBA is described as having ‘significant potential to identify and inspire efficient regulatory choices, but is subject to several weaknesses, related to its relative ignorance of distributional impacts, its reliance on income as a proxy for utility and happiness, and a number of other underlying assumptions, which can prove detrimental for the accuracy of the whole exercise.’³⁷ As also recommended by an *ad hoc* study that contributed to the new guidelines,³⁸ cost-benefit analysis is indicated as an appropriate method only under specific circumstances, in particular when at least all direct benefits and direct costs can be monetized, the magnitude of impacts justifies the effort and time needed to perform CBA, and distributional impacts are unlikely to be substantial. In all other circumstances, CEA, least cost analysis or MCA are indicated as preferable to CBA.

Figure 1 – Cost-benefit analysis within the Impact Assessment process



Source: Renda et al., n 38.

Over the past years, and even more after the adoption of the better regulation package in May 2015, emphasis has been increasingly placed on the need to quantify both benefits and costs where possible, as demonstrated also by the recent Annual Report of the new Regulatory Scrutiny Board, which shows relatively encouraging data on the degree of quantification of costs and benefits in the Commission.³⁹ On the other hand, the system has become more fragmented and multi-dimensional, with operational guidance issued on a widely diverse set of impacts, (fundamental rights, competitiveness and micro-enterprises, employment, etc); and with increased pressure on the Commission to go in widely different directions, such as ia adopting net reduction targets for compliance costs, and mainstreaming the sustainable development goals into the policy process.⁴⁰

³⁶ See http://ec.europa.eu/smart-regulation/impact/commission_guidelines/docs/iag_2009_en.pdf.

³⁷ See http://ec.europa.eu/smart-regulation/guidelines/docs/br_toolbox_en.pdf.

³⁸ A Renda, G Luchetta, L Schrefler and R Zavatta, *Assessing the Costs and Benefits of Regulation*, Study for the European Commission’s Secretariat General, 2013.

³⁹ See https://ec.europa.eu/info/sites/info/files/2016-rsb-report_en.pdf.

⁴⁰ See A Renda (2017), above note 31.

In summary, the Commission has never officially indicated CBA as the key method to be used in *ex ante* impact assessment of policies, contrary to what happened in the United States for many types of federal regulation. The Commission has made more systematic use and reference to CBA in the appraisal of spending programmes and investment projects, and even more in specific fields such as regional policy and transport.⁴¹

The European Commission has completed more than 1,000 Impact Assessments since 2003. Looking at these documents, the use of real full-fledged CBAs seems to have been relatively limited. Below some of the available empirical literature on this issue is summarized.

- A comparison of the US RIAs produced between 1982 and 1999 and EU IAs completed between 2003 and 2007⁴² found that US RIAs monetized at least some benefits in 51 per cent of cases, whereas only 34 per cent of EU ones did; and that 68 per cent of US RIAs calculated net benefits or cost-effectiveness, against 26 per cent of EU ones (but for most important binding initiatives, the EU percentage went significantly up to 64 per cent).
- A comparison between EU and UK IAs completed in the period 2005-2010 showed that the extent to which IAs assessed net benefits or cost-effectiveness was greater for the EU in 2005, and after peaking in 2008 declined significantly in 2009-2010, contrary to what occurred in the UK.⁴³
- Overall, a quick glance through all impact assessments completed in the 2002-2017 timeframe reveals that the Commission often and increasingly engages in the quantification of at least some benefits and costs, but quite systematically refrains from calculating net benefits. Even less common is the calculation of the net present value of alternatives, which lies at the core of CBA. Only a few DGs in the European Commission actually engage in such an exercise.
- The European Commission also displays a tendency to use CEA *in lieu* of CBA, which is in many cases inappropriate from a methodological perspective especially if benefits computed in the CEA are anyway monetized. These two techniques, normally considered as substitute methods by impact assessment guidelines (including the EU ones), in reality yield very different results. While CEA can be considered preferable to the calculation of net benefits since it avoids the substantial problems created by the monetisation of benefits, the Commission actually uses it to compare monetised costs with monetised benefits, actually defeating its advantages. This can lead the Commission to express preference for more conservative policy options, which entail very small compliance costs compared to the baseline.⁴⁴

In summary, the use of CBA in the European Commission is neither systematic, nor frequent. Both the official guidance documents and the practice of IA suggest that CBA is not the reference method used by the Commission to reach its decisions on future policies. Rather, the Commission uses a variety of methods (with certain DGs more inclined to using specific methods instead of others);⁴⁵ and very often relies on the quantification/monetization of costs and benefits as a step towards the determination of those policy alternatives that appear most effective in achieving the stated goals of its proposals. In other words, the approach adopted by European Commission in its *ex ante* IA system appears to be *de facto* converging towards the framework used for *ex post* evaluation (where efficiency is given the same weight as effectiveness, relevance, coherence and EU added value) more than towards a CBA framework. In this respect, the Commission has developed a specific

⁴¹ <https://www.eufunds.bg/archive/documents/1295270958.pdf>. http://www.tide-innovation.eu/en/upload/Results/T495_TIDE-Assessment-Handbook-Lite.pdf.

⁴² C Cecot, RW Hahn, A Renda, and L Schrefler, 'An Evaluation of the Quality of Impact Assessment in the European Union with Lessons for the US and the EU' (2008) 2(4) *Regulation & Governance* 405-424(20).

⁴³ O Fritsch, CM Radaelli, L Schrefler and A Renda, 'Comparing the content of regulatory impact assessments in the UK and the EU' (2013) *Public Money & Management*.

⁴⁴ Suffice it to recall two recent examples: the impact assessment of the Directive on periodic roadworthiness tests (2012), and the impact assessment on the Proposal for a Regulation on Requirements relating to Emission limits and Type-approval for Internal Combustion Engines for Non-road Mobile Machinery (2014). In both cases, the Commission ended up choosing on the basis of CEA (benefits/costs) an option that would have been discarded under CBA (benefits – costs), with negative consequences for the stringency of the resulting rules. More generally, while using these alternative techniques can provide some flexibility in accepting policies otherwise rejected under a strict net benefits approach, they suffer from several problems including monetising conventions of questionable validity and time discounting practices, which biases choices against far-future outcomes.

⁴⁵ See A Renda, *European Union*, in CA Dunlop and CM Radaelli (Eds.), *The Edward Elgar Handbook of Regulatory Impact Assessment*, Cheltenham, UK: Edward Elgar Publishing, 2016, pp. 304-318.

multi-criteria analysis framework, which awaits further specification, and is very far from the original CBA model.

The reasons for supporting a departure from CBA in the European Commission are many. First, the scope of the Commission's IA system is very different, and much broader, compared to scope of impact assessments completed in the United States, Australia, Mexico or the UK. As a matter of fact, the recent extension of the IA system to implementing and delegated acts, together with the IA practice of some agencies (in particular in the financial sector) has created more overlaps between these systems.⁴⁶ But CBA may be worth pursuing only for a subset of the implementing and delegated acts, and for a subset of the policy initiatives. In most cases, other methods will be preferable.

Second, the EU IA system is explicitly designed to achieve consistency with the Commission's priorities or medium-term goals (currently, Juncker's ten priorities, in the future the 2030 sustainable development agenda).⁴⁷ This means that the major initiatives that undergo IA will most likely have far-reaching social and environmental impacts, as well as impacts on fundamental rights. The need to test the new initiatives for policy coherence and consistency with medium-term goals determines in turn a need to emphasize the role of policy objectives in the IA. This is clearly reflected in the need to specify the general, specific and operational objectives of all new initiatives, and to pre-select alternative policy options based on their ability to achieve such objectives, rather than based on the likelihood that they will solve the market or regulatory failures identified in the section on problem definition.

Third, since 2009 the Commission has advocated the combined use of *ex ante* IA and *ex post* evaluation to enable a more complete appraisal of policy outcomes and impacts during the policy cycle. After the introduction of the 'evaluate first' principle, which mandated that an *ex post* evaluation be carried out before any new IA, in October 2010 the Communication on 'Smart Regulation' reinforced and relaunched the importance of better regulation throughout the policy cycle. Still, since then the methodologies for *ex ante* IA and *ex post* evaluation have remained different, and are still subject to rather different sections of the better regulation guidelines. However, since the European Commission is departing from the use of CBA or other specific methods in its *ex ante* IAs, such divergence might be reconsidered to achieve more consistency between the *ex ante* and *ex post* analysis. In particular, to borrow language from a (still pending) bipartisan proposed bill presented in the US Congress last year,⁴⁸ the *ex ante* IA could more explicitly be transformed into a 'prospective retrospective review', which anticipated and facilitates *ex post* evaluation. Were this the case, the Commission services would then be called to specify, already during the *ex ante* phase, the main elements of effectiveness, efficiency (including CBA where appropriate), relevance, coherence and EU added value of new major initiatives. On that basis, both monitoring and evaluation could enable more direct policy learning effects, by facilitating the comparison between the *ex ante* IA, and the *ex post* evaluation.

Fourth, such a move partially away from methods like CBA could also facilitate the Commission in embracing so-called adaptive regulation, in particular when it comes to emerging technologies for which it is difficult to provide a fully informed prospective assessment. Technologies like artificial intelligence and the Internet of Things are so rapidly evolving that policymakers are placed in a state of continual adaptive impact assessment, or constant ongoing market monitoring, rather than being able to rely on an *ex ante* and *ex post* phase. This is even truer in the case of EU institutions.

Finally, other EU institutions are not primarily relying on CBA to assess their major amendments or the Commission's initial proposals. The European Parliamentary Research Services (EPRS) is producing a significant amount of *ex ante* IA and *ex post* evaluation, but most of these documents do not contain a complete CBA. As a matter of fact, as already observed by Ashford and

⁴⁶ See A Renda, *From Impact Assessment to the Policy Cycle: Drawing Lessons from the EU'S Better-Regulation Agenda* (2016) 9(33) University of Calgary School of Public Policy Technical Paper.

⁴⁷ See Commission Communication 'Better regulation for better results', May 2015 and for a comment A Renda, *Too good to be true? A quick assessment of the European Commission's new Better regulation Package* 108 (2015) CEPS Special Report. Available at SSRN <http://ssrn.com/abstract=2613343>.

⁴⁸ <https://www.congress.gov/bill/114th-congress/senate-bill/1817>.

Renda,⁴⁹ the EPRS could increase its impact on the work of the Members of the European Parliament if it adopted a more coherence-oriented approach to policy evaluation. And the Council of the EU could rely on such an approach to more usefully inform the decisions of the various Council formations.

TOWARDS CONVERGENCE BETWEEN *EX ANTE* IMPACT ASSESSMENT AND *EX POST* EVALUATION METHODS IN THE EU?

Some scholars would argue that having a RIA system based on cost-benefit analysis is ideal, whereas others argue that it is at least better than having no system at all. In the case of the European Commission, it seems that the adoption of CBA has been partial, and the use of CBA has been patchy and *sui generis* during the fifteen years that have elapsed since the first completed impact assessment. Meanwhile the EU better regulation toolbox has become much richer and articulate, bringing a more *nuanced* approach to the identification of positive and negative impacts of regulation, without necessarily requiring or even recommending the monetization of all impacts, or the direct calculation of the net present value of policy alternatives.

This paper argued that this is a welcome feature of the EU system, well aligned with its peculiarities; and that further clarifications and more explicit methodological guidance in this direction would make the EU better regulation agenda even more attractive and world-class than it is today. At a minimum, the adoption of consistent methods for the *ex ante* and *ex post* evaluation of policy initiatives would at once enable more direct policy learning, more adaptive regulation, and more accountability for the Commission and other EU institutions. More specifically, working with a common monitoring and evaluation scheme and engaging in prospective retrospective review may strengthen accountability by facilitating the identification of policy changes (including amendments, and implementation measures by Member States and local governments) that have generated positive or negative impacts.

Furthermore, stronger emphasis on coherence with medium-term goals would help EU institutions stay away from ill-advised de-regulatory approaches, enabling a more direct focus on the achievement of 2030 goals. A closer look reveals a number of outstanding challenges for the better regulation agenda to really embrace the sustainable development goals included in the Europe 2030 agenda. As a matter of fact, the EU better regulation guidelines could guide the Commission services (and the EPRS) in measuring policy impacts in terms of SDGs, and the distance from the goals set for 2030. This would end up involving several phases of the Commission's *ex ante* impact assessment work, from problem definition to the monitoring and evaluation strategy.

Finally, explicitly departing from CBA would not mean that EU institutions cease identifying and where possible quantifying positive and negative impacts of policy alternatives. Rather, it implies that quantification and monetization are not imposed anymore on services that have to handle non-market, hard-to-quantify impacts such as impacts on fundamental rights. Such a move may strengthen the ownership of the better regulation agenda, and its integration with other pillars of policymaking in all EU institutions. It would occur at a time in which academics increasingly ask for an improvement of the standard CBA framework, when not a complete replacement; and government experiment with more specific screens such as cost reduction strategies and targets. And it would make the EU better regulation agenda even more unique, and more tailored to the needs of a project that needs consistency and salience to be successfully relaunched.

49 N Ashford and A Renda, *Aligning policies for low-carbon systemic innovation in Europe* (2016) Report for the European Climate Foundation's Institute for Industrial Innovation and Competitiveness (i24c), November 2016.