

# Mandatory Quotas for Women on Boards of Directors in the European Union: Harmful to or Good for Company Performance?

Monika Leszczyńska<sup>1,2</sup>

Published online: 14 November 2017

© The Author(s) 2017. This article is an open access publication

**Abstract** Impact assessments are an important component of a better regulation programme—an initiative of the European Commission launched to improve the quality and transparency of the EU (European Union) law-making process. In the current article, I take a closer look at the Impact Assessment (IA) issued by the European Commission together with a Directive proposing a 40% obligatory female representation on the boards of directors in European public companies. In the IA, the Commission defined an improvement of corporate governance as one of the objectives to be achieved by the Directive. The Commission claimed that the more gender-diverse a corporate board is, the better it will perform. However, it is questionable whether mandatory quotas indeed have such a positive impact on corporate governance. Here I argue that, to properly assess the impact of a given policy, it is crucial to examine how the policy measure itself interferes with corporate performance. I present both field and laboratory studies investigating the influence of mandatory quotas on company performance, individual attitudes and group cooperation. Next, I discuss implications of these findings for the evaluation of the IA quality as well as the legality of the Directive. The current analysis of the IA shows that despite recent improvements there are still considerable flaws in conducting impact assessments of the EU legal initiatives.

**Keywords** Positive action · Gender quotas · Impact assessment · Company performance · Board of directors · Better regulation

---

✉ Monika Leszczyńska  
monika.leszczynska@nyu.edu

<sup>1</sup> New York University School of Law, New York, NY, USA

<sup>2</sup> Max Planck Institute for Research on Collective Goods, Bonn, Germany

## 1 Introduction

Impact assessment is a core element of a better regulation programme, that has been initiated by the European Union (EU) in 2001.<sup>1</sup> A procedural framework for conducting impact assessments was established in 2002 by the European Commission.<sup>2</sup> The procedure has evolved and several measures intended to improve the quality of impact assessments have been implemented since then.<sup>3</sup> Yet, the ultimate goal of impact assessment remained the same: it should provide evidence-based information in the law-making process. Importantly, it should assist with but not replace a political decision.<sup>4</sup> To this end, the results should be presented in an unbiased and objective way. Here, I demonstrate that when evaluating the quality of an impact assessment it is crucial to look not only at the elements required by the procedure but also at the assumptions underlying the reported policy analysis. In this article, I challenge the assumptions adopted by the Commission in the Impact Assessment (IA) issued together with the Proposal of a Directive on improving the gender balance among non-executive directors of companies listed on stock exchanges. I show that what seemingly looks like a diligent policy analysis might in fact contain several shortcomings that undermines its objectivity.

Achieving gender equality in the workplace has been an important policy goal in European countries for many years. Policymakers recognized that the gender inequalities in employment hinder full exploitation of the human resources available on the European labour market.<sup>5</sup> This in turn might contribute to rendering the EU incapable of establishing its status as a leading world economy.<sup>6</sup> Furthermore, promoting gender equality has been acknowledged as one of the main objectives of the EU.<sup>7</sup>

As much as the need of establishing gender equality is generally approved and broadly recognized, the legislation implemented to achieve this goal is often controversial. In particular, measures which actively support the underrepresented groups have been heatedly discussed. Such measures, called positive actions,<sup>8</sup> might take a form of vocational training, improved child care or preferential treatment in

<sup>1</sup> See: Final Report of the Mandelkern Group on Better Regulation from 13 November 2001, available at: [http://ec.europa.eu/smart-regulation/better\\_regulation/documents/mandelkern\\_report.pdf](http://ec.europa.eu/smart-regulation/better_regulation/documents/mandelkern_report.pdf); European Governance: A White Paper from 25 July 2001, COM(2001) 428, available at: [http://europa.eu/rapid/press-release\\_DOC-01-10\\_en.htm](http://europa.eu/rapid/press-release_DOC-01-10_en.htm).

<sup>2</sup> Communication from the Commission on Impact Assessment from 5 June 2002, COM(2002) 276, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52002DC0276>.

<sup>3</sup> On the newest initiatives see the European Commission website: [https://ec.europa.eu/info/law/law-making-process/better-regulation-why-and-how\\_en](https://ec.europa.eu/info/law/law-making-process/better-regulation-why-and-how_en).

<sup>4</sup> From the most recent documents, see, for instance: Communication from the Commission, 'Better Regulation for better results—An EU agenda', 19 May 2015, COM(2015) 215, available at: [https://ec.europa.eu/info/law/law-making-process/better-regulation-why-and-how\\_en](https://ec.europa.eu/info/law/law-making-process/better-regulation-why-and-how_en).

<sup>5</sup> European Commission (2010a).

<sup>6</sup> European Commission (2010b).

<sup>7</sup> Art. 8 of the Treaty on the Functioning of the European Union (TFEU).

<sup>8</sup> For a definition of positive action, see: European Commission (2009).

selection procedures.<sup>9</sup> From this broad range of actions the particularly intrusive one is a mandatory quota rule which imposes an obligation of achieving a fixed share of underrepresented group members in a target group within a specified period.

Disappointed by a slow growth of women participation in economic decision-making, the European Commission in 2012 proposed a Directive that would establish mandatory quotas for women on corporate boards.<sup>10</sup> Although the Directive has not yet successfully gone through the legislative procedure, it has already evoked intense political and legal debate. In this article, I will take a closer look at the Impact Assessment issued by the European Commission as an accompanying document to the Directive. In particular, I will challenge the assumptions of the European Commission presented in the Impact Assessment with respect to the positive influence of mandatory quotas on company performance and corporate governance. The Commission states that increased gender diversity in a boardroom improves corporate governance and company performance—the more gender-diverse a board is, the better its performance. Some scholars have already pointed out that the Commission misinterpreted the existing scientific evidence by assuming that an increase in the number of women would have a causal influence on company performance.<sup>11</sup> Rather than discussing the influence of gender diversity on company performance, I will argue that it is important to consider the way in which gender diversity is achieved. In particular, it is crucial to evaluate how the undertaken measure itself influences company performance and corporate governance. I will describe two types of studies investigating the impact of mandatory quotas on company and board performance. First, I will introduce the research on Norwegian companies in a period following implementation of mandatory quota. Next, I will review laboratory experimental studies focusing on the impact of quota rules on fairness perception and team cooperation. Finally, I will discuss implications of these findings for assessing the quality of the Impact Assessment as well as the legality of the Directive with respect to its compliance with procedural requirements and the proportionality principle. I will also refer to the literature discussing the challenges of regulatory assessments in the area of corporate governance, in which the difficulties in assessing potential consequences of intended reforms are particularly pronounced due to complexity of the corporate environment and often contradictory empirical results.

## 2 Background

### 2.1 The Directive: State-of-the-Art

On 14 November 2012, the European Commission proposed a Directive on improving the gender balance among non-executive directors of companies listed on

---

<sup>9</sup> European Commission (2011).

<sup>10</sup> European Commission (2012).

<sup>11</sup> Smith (2014); Szydło (2015).

stock exchanges.<sup>12</sup> The Directive provides that all listed companies shall increase the proportion of the underrepresented sex<sup>13</sup> among non-executive directors to 40% by 2020 (Article 4(1)). Moreover, the appointment rules shall be made transparent and clear. In the selection procedure, candidates of the under-represented sex shall be preferred unless they are not equally qualified as candidates of the opposite sex (Article 4(3)). In case the preferential rule is not followed, an unsuccessful candidate may challenge the selection procedure. The company shall prove that in fact a better qualified candidate was chosen (Article 4 (5)). Furthermore, companies that are not able to reach the objective of 40% must provide an appropriate explanation for the noncompliance as well as demonstrate measures undertaken to achieve the objectives in the future (Article 5(3)). Otherwise, sanctions shall apply (Article 6).

Almost a year after issuing the Directive, the European Parliament adopted a position at first reading and communicated it in a resolution issued on 20 November 2013.<sup>14</sup> In the resolution, the Parliament expressed its general approval for the Directive with only minor amendments. The Parliament stressed the importance of assuring that the appointments be made from a gender-balanced selection pool. Moreover, it proposed additional forms of sanctions for noncomplying companies.

In December 2014 and June 2015, the Directive was discussed by the Council of the European Union.<sup>15</sup> Under the Luxembourg presidency, the proposed Directive was redrafted. Among other changes, a ‘flexibility clause’ and extended implementation deadlines were introduced to facilitate a compromise.<sup>16</sup> The ‘flexibility clause’ would allow the Member States to choose their own measure in order to achieve the goals stated in the Directive. The Member States needed to ensure that those measures would be equally effective and that sufficient progress would be achieved. Despite the proposed changes, the Council was still not able to reach an agreement during the meeting in December 2015 at which the Directive was discussed.<sup>17</sup>

<sup>12</sup> See European Commission (2012).

<sup>13</sup> The Commission uses the term ‘sex’ in the text of the Directive and the term ‘gender’ in the Impact Assessment.

<sup>14</sup> European Parliament legislative resolution of 20 November 2013 on the proposal for a directive of the European Parliament and of the Council on improving the gender balance among non-executive directors of companies listed on stock exchanges and related measures, 2012/0299(COD), available at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A7-2013-0340+0+DOC+XML+V0//EN>.

<sup>15</sup> Press release, Outcome of the Council Meeting on 11 December 2014, 16803/1/14 REV1, available at: <http://www.consilium.europa.eu/en/meetings/epsco/2014/12/11/>; Press release, Outcome of the Council Meeting on 18 and 19 June 2015, 10088/15, available at: <http://www.consilium.europa.eu/en/meetings/epsco/2015/06/18>.

<sup>16</sup> Presidency report from 30 November 2015, 14343/15, available at: <http://data.consilium.europa.eu/doc/document/ST-14343-2015-INIT/en/pdf>.

<sup>17</sup> Outcome of the Council Meeting on 7 December 2015, 14968/15, available at: [http://www.consilium.europa.eu/en/meetings/epsco/2015/12/st14968\\_en15\\_pdf/](http://www.consilium.europa.eu/en/meetings/epsco/2015/12/st14968_en15_pdf/). Although no official statements regarding the status of the Directive has been issued since then, it does not seem that the Directive has been abandoned, see, for instance: [http://ec.europa.eu/justice/gender-equality/files/gender\\_balance\\_decision\\_making/1607\\_factsheet\\_final\\_wob\\_data\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/gender_balance_decision_making/1607_factsheet_final_wob_data_en.pdf) and [http://ec.europa.eu/justice/gender-equality/gender-decision-making/index\\_en.htm](http://ec.europa.eu/justice/gender-equality/gender-decision-making/index_en.htm).

## 2.2 Impact Assessment and Its Critique

The impact assessment procedure was introduced in European legislature in order to promote good quality of the law-making process. The aim of an impact assessment is to enable the legislative decision-makers to reach more informed judgments about the intended policy measures.<sup>18</sup> An impact assessment shall include ‘evidence [...] on the advantages and disadvantages of possible policy options’.<sup>19</sup>

The IA on costs and benefits of improving the gender balance in the boards of companies listed on stock exchange<sup>20</sup> was issued in November 2012. It formulates two general objectives: (1) ‘gender equality in economic decision-making’ and (2) full exploitation of ‘the existing talent pool’. Furthermore, the European Commission identifies two specific objectives of the Directive: (3) reduction of ‘demand side’ barriers women are confronted with when applying for leadership positions and (4) improvement of corporate governance and performance.

Having stated the objectives, the Commission proceeded with examining different policy options (i.e., no action, voluntary quotas, or mandatory quotas for executive and non-executive directors) with respect to their effectiveness in achieving the defined objectives. Here, I will focus only on the very last objective, which is the improvement of corporate governance and company performance.<sup>21</sup> First, the Commission assessed to which extent the presence of women on boards of directors would increase as a result of each policy option.<sup>22</sup> Next, it defined which indicators should be taken into account when evaluating corporate governance and company performance improvement. On the basis of the studies on gender diversity and company performance, the Commission identified nine non-financial criteria of corporate governance, which have been shown to be influenced by the presence of women on corporate boards. These criteria include accountability, risk and audit, monitoring and control, innovation and creativity, work environment and values, direction and leadership, pay policies, corporate reputation and corporate social responsibility, understanding of the market, and board dynamics. As an indicator for company financial performance, the Commission adopted a return on equity which represents the ratio of a company’s net income to the book value of its equity.<sup>23</sup>

<sup>18</sup> See, e.g., Meuwese (2008); Renda (2006).

<sup>19</sup> European Commission, Impact Assessment Guidelines 2009, SEC(2009) 92, available at: [http://ec.europa.eu/smart-regulation/impact/commission\\_guidelines/docs/iag\\_2009\\_en.pdf](http://ec.europa.eu/smart-regulation/impact/commission_guidelines/docs/iag_2009_en.pdf). New guidelines have been issued in May 2015 (Commission Staff Working Document, SWD(2015) 111 final): [http://ec.europa.eu/smart-regulation/guidelines/docs/swd\\_br\\_guidelines\\_en.pdf](http://ec.europa.eu/smart-regulation/guidelines/docs/swd_br_guidelines_en.pdf). Since the IA had been conducted before the new guidelines were issued, I discuss the IA referring to the 2009 Guidelines.

<sup>20</sup> European Commission, Impact assessment on costs and benefits of improving the gender balance in the boards of companies listed on stock exchanges, SWD(2012) 348, available at: [http://ec.europa.eu/justice/gender-equality/files/womenonboards/impact\\_assessment\\_quotas\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/womenonboards/impact_assessment_quotas_en.pdf).

<sup>21</sup> There is a growing body of literature on effects of mandatory quota rules on ‘demand side’ barriers and ‘glass ceiling’ women are confronted with in their corporate career. See, e.g., Bertrand et al. (2014).

<sup>22</sup> The details on the evaluation method described in this paragraph can be found in: European Commission, Annex 8 to the Impact assessment on costs and benefits of improving the gender balance in the boards of companies listed on stock exchanges, SWD(2012) 349, available at: [http://www.parliament.gov.at/PAKT/EU/XXIV/EU/09/79/EU\\_97957/imfname\\_10383186.pdf](http://www.parliament.gov.at/PAKT/EU/XXIV/EU/09/79/EU_97957/imfname_10383186.pdf), pp 73–112.

<sup>23</sup> Berk and DeMarzo (2011), p 32.

Finally, the Commission assessed the impact of each policy option assuming that the defined indicators and performance measures increase proportionally to the increase in female participation achieved by a given policy option.<sup>24</sup> When evaluating the economic impact of mandatory quotas, the Commission admitted that

[w]hile the potential for improved financial company performance in general has been estimated on the basis of experience gained with company performance in cases of higher female representation achieved without binding obligations imposed by law there is a discussion as to whether the same results could be expected following the introduction of a binding quota or whether one would even have to reckon with a lower positive or even a short-term negative impact on company results due to the imposition by law.<sup>25</sup>

Here the Commission referred to the studies showing some negative consequences of binding quota rules in Norwegian companies. Nevertheless, it disregarded these results, claiming that the mandatory quotas proposed in the EU differ considerably from the Norwegian quota. In contrast to the Norwegian case, the Directive assures that only well-qualified women will be selected as board directors by granting priority to female candidates only in case of qualifications equal to or better than those of the male candidates and guaranteeing more time for compliance. The Commission also stressed that a mandatory quota introduced by the Directive affects only non-executive positions. In contrast to executive directors who are engaged in day-to-day management activities, the non-executives deal mostly with supervisory tasks that require general skills instead of ‘specialized professional experience’.<sup>26</sup> This argument seems to refer to a conclusion of studies on Norwegian quota identifying a lack of competencies, skills and experience of new female directors as a potential channel for negative impact of mandatory quotas on company performance. However, it is flawed, since the Norwegian quota also applied only to non-executive directors, and yet the negative consequences of this policy measure were observed. Despite these doubts, the Commission finally refrained from quantifying any potential risk related to mandatory quotas and concluded that ‘it can be assumed to be very limited at the most’.<sup>27</sup>

I suggest that the Commission falsely assumed that gender diversity positively influences corporate governance and financial performance, *irrespective of the way it has been achieved*. The Commission arguments, disregarding the relevance of the Norwegian experience, seem unconvincing and superficial. First, the empirical studies identified other channels (e.g., leadership style<sup>28</sup>) of the obligatory quota impact on company performance. Second, the Commission also failed to consider any other empirical evidence on the behavioural consequences of positive action measures. For example, research has shown that this kind of policy measures

<sup>24</sup> Impact assessment on costs and benefits of improving the gender balance in the boards (2012), above n. 20, pp 41–42.

<sup>25</sup> Ibid., p 51.

<sup>26</sup> Ibid., p 51.

<sup>27</sup> Ibid., p 51.

<sup>28</sup> Matsa and Miller (2013).

might negatively affect individual evaluations and attitudes (e.g., perception of competence<sup>29</sup>) as well as group performance.<sup>30</sup> This is particularly important since it suggests that quota rules might have a much broader influence on board performance than assumed by the Commission.

I propose that, in order to evaluate the impact of a given policy measure properly, it is crucial to investigate how the policy itself will affect company performance. In particular, a specific policy measure is likely to affect important aspects of board functioning other than gender diversity or professional qualifications of directors. Below, I present evidence which casts doubts on a claim that mandatory quotas bring about improvement in corporate governance and company performance.

### 3 Research on Mandatory Quotas

Research suggests that quota rules might influence at least two other features of board functioning besides gender diversity. These are:

- Board structure, i.e., quotas induce change in board size, in the number of new members, as well as their characteristics and leadership styles (see Sect. 3.1);
- Individual attitudes, team dynamics and group decision-making processes, i.e., group cooperation changes due to fairness perceptions of the selection procedure (see Sect. 3.2).

These features should be considered while evaluating whether corporate governance and companies' financial performance will benefit from mandatory quotas.

#### 3.1 'Natural Experiment' in Norway

In 2002, the Norwegian Trade Minister warned the Norwegian companies that if they did not change their policy of appointing predominantly male directors, a quota rule would be introduced. One year later, a law was passed, implementing 40-percent quota for women on boards of public companies. At first the quota rule was voluntary. However, since the rate of compliance was low, in 2006 the mandatory quota entered into force. According to the binding quota rule the level of 40-percent female participation was to be reached by 2008. The sanctions for non-compliance would be very severe—dissolution of the company.

This event established a unique environment for research on impact of quota rules on company performance as an exogenously imposed increase in share of female directors. Ahern and Dittmar<sup>31</sup> and Matsa and Miller<sup>32</sup> serve as good examples. Both studies use different approaches to investigate the very same

---

<sup>29</sup> Heilman et al. (1996).

<sup>30</sup> Dorrough et al. (2016).

<sup>31</sup> Ahern and Dittmar (2012).

<sup>32</sup> Matsa and Miller (2013).

question regarding performance of companies listed in Norway in the aftermath of the quota rule announcement.

Ahern and Dittmar investigated shifts in stock prices after the announcement made by the Norwegian Trade Minister in 2002. Additionally, they analysed changes in Tobin's Q<sup>33</sup> as a measure of firm performance. As a control group they used listed companies which already had one or more female directors on board before the introduction of mandatory quota was announced. Those companies had to make smaller adjustments in order to comply with the new law. Therefore, they were only slightly affected by the 2002 announcement. As such, they constitute a control group for the companies which had no women on board in 2002 and had to make major changes in order to fulfil the new requirements. Ahern and Dittmar revealed a negative effect of the announcement of quota rules on stock prices. This negative effect was driven by the performance of companies which had no women on boards in 2002. Furthermore, Ahern and Dittmar observed a smaller Tobin's Q, in the period between 2003 and 2009, in companies with no female directors compared to the control group. This indicates a negative impact of quota rules on firm performance. Ahern and Dittmar concluded that it is the forced change in board composition which drives the negative effect of quotas. They stressed that new female directors are younger and less experienced than the directors they replaced, although alternative explanations are possible.

In contrast, Matsa and Miller focused on changes in accounting measures of affected public companies in 2006–2009. They also used a different approach to identify a control group. They compared variation in profitability of listed companies with that of a matched sample of private companies which were not subject to the quota requirement. Overall, the profitability of listed companies in Norway decreased after the introduction of the mandatory quota in 2006. The decline could also be observed when compared with changes in profitability of private companies. Matsa and Miller noticed that the decrease in profitability was mainly due to increased costs of employment and a decrease in layoffs. They indicated that the leadership styles of new female directors might differ from that of previous board directors. Based on the studies regarding gender differences in preferences and attitudes of board directors,<sup>34</sup> as well as their own analysis, they inferred that an increase in the share of female board directors influences corporate strategy. According to these authors, this effect is channelled by a specific corporate leadership style of female board directors.

Although the studies on Norwegian experiences with mandatory quota provide valuable insights into understanding potential impacts of gender quotas on corporate performance, the results need to be interpreted with adequate caution. First, other studies show different effects of mandatory quotas on firm performance. For instance, Nygaard reported that the impact of mandatory quotas on stock prices depends on the information structure within the corporation.<sup>35</sup> More specifically, the author revealed that firms with more outsider directors on board are negatively

---

<sup>33</sup> Tobin's Q represents a ratio of a market value of a company to the replacement costs of its total assets.

<sup>34</sup> Adams and Ferreira (2009).

<sup>35</sup> Nygaard (2011).



influenced by the mandatory quotas, in contrast to firms with insiders on board, which show a positive impact. Storvik conducted interviews with board members in order to assess the impact of quota legislation on the perception and qualifications of new female directors.<sup>36</sup> She concluded that the new female members are generally perceived as having the same formal qualifications as the other directors and are not perceived as less competent. Furthermore, as Smith and Ferreira noticed, it is difficult to draw unambiguous conclusions from the divergent effects observed. It is impossible to identify a driving force of the influence of mandatory quotas on company performance.<sup>37</sup> This is due to dissimilarities in approaches adopted in the studies on the Norwegian quota. The studies described above focus on distinct time frameworks and performance indicators. Additionally, they adopt different selection criteria of control groups and identify different channels of quota impact. In addition to these issues, some concerns related to sample selection have been expressed.<sup>38</sup> Bøhren and Staubo showed that many companies in Norway decided to change the organizational form in order to avoid the need to comply with quota rules.<sup>39</sup> This evidence might be interpreted as additional support for a claim that companies expected to have to bear costs resulting from compliance with mandatory quotas. In order to avoid these costs, companies were willing to change their organizational form. On the other hand, this suggests that the studies by Ahern and Dittmar as well as Matsa and Miller investigate a very specific sub-sample of all Norwegian companies as they refer only to the companies which decided to uphold the current organizational form. Furthermore, the data from Norway provide evidence only on short-term consequences. Therefore, it is as yet unknown what would be the long-term impact of the policy.

The research presented above cast doubts on the Commission's claim that an increase in female participation in corporate boards achieved through mandatory quotas will directly lead to better corporate governance and company performance. The empirical results also undermine the Commission's counterarguments, adduced to diminish the importance of Norwegian experience for European case. First, the authors of the studies revealed other mechanisms, such as leadership styles, which might drive the observed effects. Second, surveys showed that new female directors on Norwegian corporate boards are perceived as equally competent as male directors. This suggests that there should be other channels of a negative impact of mandatory quota on the performance of Norwegian companies than lack of specialised professional experience of new female directors. In this case, introducing requirements to promote female candidates only in case of equal (or better) qualifications compared to male candidates might be insufficient to attenuate the negative consequences of mandatory quota observed in Norway. Altogether, it demonstrates that the Commission conclusion to disregard the results from Norway might have been too hasty.

---

<sup>36</sup> Storvik (2011).

<sup>37</sup> Ferreira (2015); Smith (2014).

<sup>38</sup> Ferreira (2015).

<sup>39</sup> Bøhren and Staubo (2014).

## 3.2 Quotas and Individual Behaviour—Experimental Research

One limitation of the field data gathered in Norway is that they do not allow the investigation of more basic mechanisms underlying the impact of quota rules on the functioning of corporate boards. This is the reason for laboratory experiments to complement field insights like those performed in Norway.

### 3.2.1 Evaluations and Attitudes

There is mounting empirical evidence on the impact of positive action policies on various aspects of individual behaviour.<sup>40</sup> Social psychology research has investigated the impact of positive action policies on evaluations and attitudes in experimental and vignette studies. These studies looked at the self-perception of beneficiaries,<sup>41</sup> an evaluation by others of the beneficiaries' ability<sup>42</sup> or a task choice following a preferential selection.<sup>43</sup> The first study revealed that, when selected to be a leader based on gender and provided with no information on their ability, women rated their leadership abilities lower than when they are selected based on performance.<sup>44</sup> In contrast, male participants had lower self-perception only if chosen based on gender and provided with negative information about their own performance.<sup>45</sup> In another study, participants were asked to evaluate the competence of male or female co-workers. The results showed that, if participants associated a colleague with a positive action policy, they perceived him or her as being less competent.<sup>46</sup> One study also focused on the task choice following a selection procedure based either on performance or gender. In this experiment, female participants who were selected based on preferential treatment subsequently chose a less demanding task than when chosen on the basis of performance. The selection method did not affect the task choice of male participants.<sup>47</sup>

Other studies implemented surveys to demonstrate that positive action policies do not necessarily result in negative responses. Taylor examined the data from the General Social Survey. According to the results, positive action policies did not have a negative influence on job attitudes and preferences of workers hired by employers applying such policy measures.<sup>48</sup> Pious provided further evidence showing that people do not have negative attitudes towards positive action policies.<sup>49</sup> Contrary to those findings, a survey conducted with female managers

---

<sup>40</sup> For a review: Crosby et al. (2006).

<sup>41</sup> Heilman et al. (1990).

<sup>42</sup> Heilman et al. (1992).

<sup>43</sup> Heilman et al. (1991).

<sup>44</sup> Heilman et al. (1990).

<sup>45</sup> Heilman et al. (1990).

<sup>46</sup> Heilman et al. (1992).

<sup>47</sup> Heilman et al. (1991).

<sup>48</sup> Taylor (1994).

<sup>49</sup> Pious (1996).

who believed to be hired because of their gender revealed a negative influence of such beliefs on their job satisfaction and commitment.<sup>50</sup>

The more recent research investigated how the provision of additional information on the selection procedure might mitigate the negative impact of positive action policies on people's attitudes and preferences. Experimental results demonstrated that participants who were informed that merit played a role in a preferential selection procedure tended to perceive the selected women as more competent. Furthermore, women's self-perception did not suffer from preferential treatment if they knew that their performance was also considered in the selection for a leadership position.<sup>51</sup>

Another study by Ritov and Zamir suggested that attitudes towards positive action policies depend on identifiability of individuals who are adversely affected by the policy measure.<sup>52</sup> In the study, participants were presented with different scenarios describing admission or selection procedures implementing positive action policies. Acceptance of positive action measures decreased when it was made clear in the scenario which individuals suffered from implementing such a procedure.

The findings presented above concentrated on the impact of positive action on how people perceive themselves as beneficiaries of that action, how others evaluate them and how they feel when selected based on positive action. They showed that positive action did influence evaluations, views and attitudes. This impact varies depending on the information provided either on the procedure itself, the candidates' abilities or the identifiability of individuals adversely affected by a positive action policy.

The empirical evidence suggests that considering qualifications and skills as an additional appointment criterion might attenuate negative reactions towards the positive action policy as well as its beneficiaries. This is an important finding which should be considered when evaluating the impact of mandatory quotas in the form proposed in the Directive on board functioning. Although motivated by the European Court of Justice requirement with regard to positive action measures<sup>53</sup> rather than empirical results, the Commission introduced a provision taking into consideration candidates' qualifications in the Directive. More specifically, the Directive states that the 40% quota shall be achieved through appointments made 'on the basis of a comparative analysis of the qualifications of each candidate' (Article 4(1) of the Directive). Furthermore, female candidates will be selected only if they are equally qualified as male candidates 'in terms of suitability, competence and professional performance' (Article 4(3) of the Directive). In light of the empirical findings, this condition seems very important in mitigating potential

---

<sup>50</sup> Chacko (1982).

<sup>51</sup> Heilman et al. (1998).

<sup>52</sup> Ritov and Zamir (2014).

<sup>53</sup> Case C-409/95 *Marschall v. Land Nordrhein-Westfalen* [1997] ECR I-6383; Case C-450/93 *Kalanke v. Bremen* [1995] ECR I-3069; Case C-407/98 *Abrahamsson* [2000] ECR I-5562; Case C-158/97 *Badeck* [2000] ECR I-1902.

negative effects of mandatory quotas on attitudes towards the measure and its beneficiaries.

### 3.2.2 Procedural Justice

Researchers also investigated the underlying mechanisms of people's attitudes and reactions towards positive action measures. Nacoste<sup>54</sup> suggested that they might be driven by people's evaluations of procedural justice. More specifically, positive action policies might be judged within two dimensions of justice: distributive and procedural. Whereas the first one is concerned with rules according to which distribution of resources is made (i.e., equity rule), the second one relates to procedures by which the decisions on distribution are met (i.e., all affected individuals can present their views before a decision is made).<sup>55</sup>

The social psychology research on procedural justice focused on psychological consequences of different procedural features.<sup>56</sup> Nacoste suggested that people's evaluations of procedural fairness depend on how much 'voice' they are granted in a procedure. Nacoste argued that selection procedures subject to positive action measures might be perceived as less fair than procedures based on performance because the former assign more weight to group membership (such as gender, race) than the latter. As a result, individuals cannot influence the outcome of a selection procedure subject to positive action policy by, for instance, stressing their good performance in a relevant task. Lind and Tyler, in turn, pointed out that positive action policies might be perceived as unfair because they are not consistent across people.<sup>57</sup> The authors referred to findings by Barret-Howard and Tyler, who suggested that procedural consistency across people and time is a crucial feature for the fairness perception of a procedure.<sup>58</sup>

Meritocracy might be yet another factor that is relevant for fairness evaluations of positive action policies.<sup>59</sup> Meritocracy is an ideology—widespread in Western societies—which supports an allocation principle according to individual performance and input.<sup>60</sup> However, its relevance for attitudes towards positive action policies is not clear. On the one hand, it has been found that people who endorse the merit principle strongly oppose positive action policies.<sup>61</sup> On the other hand, the objection towards positive action diminishes if supporters of a meritocracy recognize the currently existing high level of work discrimination.<sup>62</sup>

Summing up, there are different reasons why selection procedures subject to positive action policies might be perceived as less fair than performance-based

<sup>54</sup> Nacoste (1990).

<sup>55</sup> Bobocel et al. (1998).

<sup>56</sup> Lind and Tyler (1988), p 7.

<sup>57</sup> Lind and Tyler (1988), p 165.

<sup>58</sup> Barrett-Howard and Tyler (1986).

<sup>59</sup> Bobocel et al. (1998).

<sup>60</sup> Son Hing et al. (2002).

<sup>61</sup> Bobocel et al. (1998).

<sup>62</sup> Son Hing et al. (2002).

procedures. Although theoretical research has suggested that positive action policies might affect both the procedural (lack of consistency, lack of ‘voice’) as well as the distributive justice evaluations (violation of the meritocracy principle) of selection procedures and their outcomes, it has been empirically shown that people relate positive action policies to procedural fairness evaluations.<sup>63</sup>

What kind of insights does this research provide for the assessment of the possible consequences of mandatory quotas for corporate boards? The empirical evidence suggests that procedural aspects might be crucial for the fairness perception of positive action measures. Therefore, both efficiency and fairness considerations might potentially play a role when introducing policy interventions. The need for intervention regarding the composition of corporate boards was justified not only by the fact that most of the current boards consist of an unequal share of men and women. It has been argued that present appointment practices to corporate boards are based on personal and social connections rather than on the individual skills and qualifications of the candidates, and that women are facing a so-called ‘glass ceiling’ when applying for leadership positions.<sup>64</sup> It has been claimed that mandatory quotas are necessary to overcome these existing ‘demand-side’ barriers and reverse the persisting discrimination of female candidates.<sup>65</sup> Unfortunately, this fairness argument might not be sufficient to convince mandatory quota opponents and change their attitudes towards this policy measure. According to the results of stakeholder consultations, the business community favored a self-regulation approach, claiming that a ‘self-regulatory method ensures ownership and substantial change in corporate culture, through a bottom-up approach and realistic targets, without undue interferences into the freedom of business’.<sup>66</sup> A recent survey interviewing more than 4000 directors from 60 countries revealed that 75% of them do not support gender quotas.<sup>67</sup> Empirical research provides evidence that people tend to disregard existing group discrimination even when confronted with direct evidence, unless they experience it personally.<sup>68</sup> The belief that present procedures comply with a merit principle seems to be very strong and people uphold this conviction although the reality might be very different.<sup>69</sup> Thus, it is rather unlikely that the current directors would change their attitude towards a mandatory quota rule in a reaction to arguments justifying quotas based on fairness or provided with information on persisting discriminations. The proponents of mandatory quotas should therefore reckon with possible negative reactions of current corporate directors towards the new female directors who will be selected on the basis of

---

<sup>63</sup> Cohen-Charash and Spector (2001).

<sup>64</sup> Singh and Vinnicombe (2004); Doldor et al. (2012).

<sup>65</sup> Impact assessment on costs and benefits of improving the gender balance in the boards (2012), above n. 20, pp 17–19.

<sup>66</sup> Annex 2 to the Impact assessment on costs and benefits of improving the gender balance in the boards (2012), above n. 22, pp 10–18.

<sup>67</sup> Groysberg and Cheng (2016).

<sup>68</sup> Stroebe et al. (2010).

<sup>69</sup> Barreto (2015).

quotas. This might affect board performance and should be taken into consideration when evaluating the impact of the measure on board performance.

### 3.2.3 Group Behaviour

Given that positive action policies influence the procedural fairness perception of a selection procedure, cooperation within a group might be one of the potential aspects of group performance affected by quotas. The group engagement model by Tyler and Blader (2000, 2003) describes how interactions of group members are influenced by their fairness perception of procedures in the group. According to this model, group members develop their collective identity depending on how fair they perceive the group procedures to be. The more fairly the procedures are perceived, the stronger the individuals identify with a group. Furthermore, the model predicts that the stronger the group identity, the more willing individuals are to cooperate within the group.<sup>70</sup> The group engagement model, together with research on the fairness perception of quota rules, indicate that, since the mandatory quota rules are perceived as unfair procedures, they might affect cooperation within groups selected according to quotas.

Superficially, the problem of group cooperation might seem unrelated to board processes. However, in the literature on corporate governance, the effort norms of board members are recognized as one of the main predictors of board task performance.<sup>71</sup> Board dynamics, and in particular effort norms, were also mentioned in the IA as one of the relevant factors of corporate governance.<sup>72</sup> The directors face a dilemma when preparing for and participating in board meetings. They can either actively contribute to the tasks of the board, or free-ride and be passive, hoping that the other directors will do all the work. Furthermore, the group cooperation problem in corporate boards might demonstrate itself in putting personal best interests over the company's. Individuals face the same dilemma when deciding whether or not to cooperate in a group—they can either exert valuable effort for the group or do nothing, exploiting the effort of other group members. Therefore, to estimate the impact of quotas on board performance accurately, it is necessary to know how mandatory quotas influence group cooperation.

Recent economics experiments have provided first insights into the impact of positive action on behavior in a group.<sup>73</sup> Balafoutas and Sutter conducted a laboratory experiment to investigate how different positive policy measures affect competition, coordination and cooperation between individuals.<sup>74</sup> In the

<sup>70</sup> Blader and Tyler (2003); Tyler and Blader (2000).

<sup>71</sup> Wright et al. (2013); Minichilli et al. (2012).

<sup>72</sup> Impact assessment on costs and benefits of improving the gender balance in the boards (2012), above n. 20, p 41.

<sup>73</sup> There is also a growing experimental literature on the effects of positive action on competitive behavior and results of selection procedure, i.e., Niederle et al. (2013). This literature focuses on the behavior in the selection procedure. As I am interested in behavior following the selection procedure, I have refrained from reviewing this literature here.

<sup>74</sup> Balafoutas and Sutter (2012). An extended version of a paper including some additional results is: Balafoutas and Sutter (2010).

experiment, participants formed groups of six, composed of three male and three female persons. Participants in those groups competed against each other by performing a real-effort task that consisted of adding as many two-digit numbers as possible within three minutes. Depending on the experimental condition, the experimenters changed the rules of choosing two winners of the competition. In the baseline treatment, two persons who performed best in a task were selected as winners. In other treatments, the winners were chosen according to different preferential rules:

1. at least one woman was chosen to be a winner, irrespective of her performance,
2. female participants were given one additional point,
3. female participants were given two additional points,
4. the competition was repeated if no female participant was among the winners.

After the competition stage, participants in all treatments performed a cooperation and coordination task. In the cooperation task participants once again performed the same real-effort task. This time, however, the number of correct calculations was relevant for the six-person group outcome. Correct calculations conducted by six persons in a group were added up and divided among all group members. In the coordination task, subjects played a two-person coordination game with each member of a group. In the coordination game, participants had to choose a number between 1 and 7. The payoffs were determined by a number simultaneously selected by the other player. The outcome of both players was the most efficient if they both chose 7. The lower the number chosen by one of the players was, the lower the outcome they both received. An additional feature of this coordination game was that the player who picked a lower number than the other player received a higher outcome. For instance, if player 1 chose number 3 and player 2 chose number 4, player 1 received €4.50 and player 2 received €4.00. This posed an additional hurdle for reaching an efficient coordination outcome of both players choosing 7. This game is also known as a ‘weak-link’ game.<sup>75</sup> Camerer gives an illustration of the dilemma that players of such a game face.<sup>76</sup> He compares it to a situation in professional organizations where one project needs to be completed within strict time limits and there are several people working on it. If one of them fails to deliver his/her part on time, the whole project fails. Such a game has multiple equilibria—either all workers perform well and deliver the project on time or all workers do nothing and the project fails. Delivering on time is the most efficient option for all workers. However, it is not clear which action will be chosen by the players—doing nothing or delivering on time.

Results from both tasks—coordination and cooperation—revealed no negative influence of positive action policies (irrespective of their type) on the outcome of interactions between the winners and the losers of the competition.

---

<sup>75</sup> Huyck et al. (1990). For an overview, see: Camerer (2003).

<sup>76</sup> Camerer (2003).

In contrast, Mollerstrom showed that people cooperate less with each other when selection procedure favors members of one group.<sup>77</sup> In a laboratory experiment participants were assigned one of two colours, either orange or purple. This manipulation is based on the minimal group paradigm developed by Tajfel.<sup>78</sup> According to Tajfel, even a seemingly irrelevant basis for assignment to different groups (i.e., scores received in a simple visual task) might create discrimination between members of one's own and the other group. This discrimination might manifest itself in different performances when interacting with a member of the own group, compared to the performance when interacting with a member of the other group. In Mollerstrom's study, in each treatment, participants performed a math task which was a basis for promotion from a basic group (16 persons) to a high-stake group (8 persons). The promotion procedure varied depending on the treatment. In the quota treatment, there were 12 orange and four purple participants in the basic group. Out of them, four orange and four purple participants could be promoted to the high-stake group. As there were only four purple participants present in the basic group, all of them were promoted irrespective of performance in the math task. Orange participants had to compete against each other for being promoted to the high-stake group. In the control treatment, there were 8 participants assigned to orange and 8 assigned to the purple group. The four best orange and the four best purple participants were selected to the high-stake group, which means that both orange and purple participants had to compete for promotion. Two further treatments introduced different justifications of the quota rule. The treatments followed the same procedure as the basic quota treatment, but were justified either with efficiency or with fairness arguments. According to the efficiency justification, the high-stake group would receive the higher earnings only if it was composed of an equal share of orange and purple participants. In the treatment in which the quota rule was justified with fairness arguments, purple participants had to complete a harder maths task for the same compensation as orange participants. Automatic promotion to the high-stake group was supposed to compensate purple participants for this unfair treatment. In each treatment after the promotion procedure, participants selected to the high-stake group played two-person public-goods games with each member of the high-stake group. In a public-goods game, participants have to decide how much of their endowment to contribute to the common pool. Subsequently, contributions of both players were multiplied by 1.5 and divided equally between them. The study demonstrated that, in the quota treatment, participants contributed less than in the control treatment. Furthermore, contributions in both quota treatments with different justifications were also lower compared to the control treatment. Interestingly, despite the lack of differences in behavior, the procedure justified by fairness reasons was perceived as fairer than when an efficiency justification or no justification was provided.

---

<sup>77</sup> Mollerstrom (2012).

<sup>78</sup> Tajfel (1970).



Another study on quota rules by Dorrough et al.<sup>79</sup> focuses on cooperation within a high-status group.<sup>80</sup> The authors examined the interaction between an incumbent member of a high-status group and an incoming member promoted from a low-status to a high-status group. Participants were categorized either according to their gender or according to randomly selected colours (green or orange). Whereas male and orange participants were randomly assigned to either high- or low-status groups, female and green participants were always allocated to the low-status group. Such an assignment is supposed to reflect the disadvantages underrepresented groups are facing in the real world. In the course of the experiment, participants initially assigned to the low-status group had a chance of being promoted to the high-status group. The promotion procedure was conducted on the basis of performance or gender/colour. In the latter case, women and green participants were promoted unconditionally (quota rule). The study revealed a negative impact of the quota rule on cooperation between incumbent and incoming members of a high-status group. Whereas cooperation increases when promotion is based on performance, it decreases when promotion is based on gender or colour. Promotion based on gender is found to be the most unfair among all promotion rules.

The experimental results on the influence of the mandatory quota rules on group cooperation are still too sparse to make any unambiguous inferences about the behaviour of groups in the real world. Yet, it seems that group cooperation is susceptible to the procedures of group selection. More research is required in order to identify what exactly are the driving forces of the behavioural reactions towards the quota rules. This would enable designing alternative policy measures which would avoid the potential side effects of mandatory quotas.<sup>81</sup> It would also be of great importance to study how different policy action measures influence other factors of corporate governance and board functioning such as board decision-making processes, monitoring activity or risk assessment. Nevertheless, from the research discussed here it is clear that the positive effects of mandatory quota rules are not as obvious as presented in the IA.

## 4 Implications of the Findings

The research presented above revealed the shortcomings of the assumptions underlying the Commission's evaluation of different policy options with respect to their influence on corporate governance and company performance. First, the evidence suggests that in its Impact Assessment the EU Commission neglected a very important aspect—mandatory quotas themselves might affect the functioning of the board for other than gender diversity reasons. Secondly, the results on the impact of mandatory quotas on board functioning might cast doubts on the

---

<sup>79</sup> Dorrough et al. (2016).

<sup>80</sup> In the experiment, a high-status group is defined by the earnings, which are higher than in a low-status group.

<sup>81</sup> Alternative measures that would target the 'real causes' of women underrepresentation in corporate boards have also been suggested by Pieters (2012).

Commission's conclusions about the positive effects of the proposed policy measures on corporate governance and company performance. This calls into question the quality of the Impact Assessment as well as the legality of the Directive. Given the empirical results there are at least three possible grounds for questioning these documents. First of all, it is doubtful whether the Impact Assessment conforms to the Impact Assessment Guidelines 2009. Second, the Directive might pose an infringement of the procedural requirements. Third, it is questionable whether the Directive complies with the proportionality principle that is recognized as a general principle of EU law. Additionally, the approach adopted by the Commission regarding assessment of the consequences of the Directive also triggers a question of how the legislator should proceed in the face of mixed or scarce empirical evidence.

#### 4.1 Compliance with Impact Assessment Guidelines 2009

Previous studies have already revealed that regulatory impact assessments of EU policies are not free of imperfections.<sup>82</sup> They often lack some important elements or features, such as an estimation and comparison of costs and benefits, an evaluation of alternative policy options or clarity of presentation.<sup>83</sup> Yet, more recent evidence has shown that the quality of impact assessments has improved.<sup>84</sup> Indeed, the IA discussed here seems to include many of the key features that were missing in previous policy analyses—very broad public consultation, consideration of different policy options (e.g., voluntary quotas), and assessment of some costs and benefits of the proposed policy measures. However, a closer look at the IA raised considerable doubts regarding its actual quality.

The initial idea of impact assessments was to provide legislative decision-makers with high-quality advice. According to the Impact Assessment Guidelines 2009, the assessment should not be limited to the 'direct effects' of a given policy option, but should also take into account the potential side or crowding-out effects.<sup>85</sup> The evidence included should be 'transparent, comprehensive and balanced'.<sup>86</sup> Such considerations are missing in the IA of mandatory quotas for women on boards. This view finds support in the opinion of the Impact Assessment Board.

In 2005, the European Commission launched the Impact Assessment Board (IAB)<sup>87</sup> in order to guarantee high standards of analyses presented in impact assessments. The Impact Assessment at hand was substantially criticized by the Impact Assessment Board. In its first opinion to the draft version of the IA from 20 June 2012, the Impact Assessment Board raised the objection, among others, that the relation between a higher participation of women on corporate boards and

<sup>82</sup> Renda (2006); Meuwese (2008).

<sup>83</sup> Cecot et al. (2007); Cecot et al. (2008); Torriti (2010); Noguera (2013).

<sup>84</sup> Fritsch et al. (2012).

<sup>85</sup> Impact Assessment Guidelines 2009, p 32.

<sup>86</sup> *Ibid.*, p 4.

<sup>87</sup> The Impact Assessment Board has been replaced by the Regulatory Scrutiny Board: [http://ec.europa.eu/info/files/decision-establishment-independent-regulatory-scrutiny-board\\_en](http://ec.europa.eu/info/files/decision-establishment-independent-regulatory-scrutiny-board_en).

company performance should be presented and treated more cautiously.<sup>88</sup> In particular, the evidence on the potential positive impacts should be presented ‘more transparently and in a more balanced manner’.<sup>89</sup> The second opinion of the IAB to the second draft version from 10 August 2012, although not as critical as the first one, still questioned the evidence presented.<sup>90</sup> More specifically, it was pointed out that ‘the robustness of the income estimates [impacts on company performance] presented should be further reviewed and qualified and presented with the necessary degree of caution’.<sup>91</sup>

It seems that the final version of the Impact Assessment did not improve much after the second critical opinion of the IAB. The quality of the assessment regarding consequences of different policy options for corporate performance is still questionable. In particular, the evidence is presented in a selective manner and thus cannot be qualified as ‘transparent, comprehensive and balanced’. Furthermore, all evaluations of the impact on company performance and corporate governance are based on the assumption that gender diversity has a positive influence, irrespective of the policy measure. This assumption seems dubious in light of the research evidence presented in this chapter.

Unfortunately, a direct challenge of the Impact Assessment is—as for now—doomed to failure. Although the ‘Better Regulation’ programme and the Impact Assessment Guidelines have received a broad political attention, they still remain only a set of rules self-imposed by the EU institutions. As such, they are considered ‘soft-law’ without clear legal effects.<sup>92</sup> In practice, it is highly unlikely that a direct challenge of a particular impact assessment would be successful.

## 4.2 Procedural Challenge

The drawbacks of the Impact Assessment might also call into question the legality of the Directive itself. One of the bases expressed in Article 263(2) of the Treaty on the Functioning of the European Union (TFEU) for questioning the legality of the EU acts is the ‘infringement of an essential procedural requirement’. A potential procedural infringement rests on the assumption that the European Court of Justice (ECJ) would recognize the binding effect of self-imposed rules such as Impact Assessment Guidelines. In this case, the Directive based on a badly performed IA could potentially be deemed inconsistent with procedural requirements.<sup>93</sup> However, it should be mentioned that, despite the EU Commission’s efforts to strengthen the

<sup>88</sup> Impact Assessment Board, ‘DG JUST-Impact Assessment on costs and benefits of improving the gender balance in the boards of companies and stock exchanges (draft version of 20 June 2012)’, available at: [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/cia\\_2012\\_en.htm](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/cia_2012_en.htm), p 1.

<sup>89</sup> *Ibid.*, p 2.

<sup>90</sup> Impact Assessment Board, ‘DG JUST-Impact Assessment on costs and benefits of improving the gender balance in the boards of companies and stock exchanges (resubmitted draft version of 10 August 2012)’, available at: [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/docs/ia\\_2012/sec\\_2012\\_0592\\_en.pdf](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2012/sec_2012_0592_en.pdf).

<sup>91</sup> *Ibid.*, p 2.

<sup>92</sup> Alemanno (2011), pp 11–12.

<sup>93</sup> Alemanno (2009); Alemanno (2011).

meaning of ‘Better Regulation’ programme, the ECJ has so far been rather reluctant to recognize a binding and judicially enforceable character of the Impact Assessment Guidelines.<sup>94</sup>

### 4.3 Substantive Challenge

Given that the shareholders’ and companies’ interests are at stake when complying with mandatory quotas for corporate board, the legality of the Directive might be questioned with regard to its compliance with the proportionality principle. According to Article 263(2) TFEU, the legality of an EU act might be revised on the grounds of ‘infringement of the Treaties or of any rule of law relating to their application’. The principle of proportionality is one such rule and states that any policy measure needs to be suitable and necessary to achieve its objectives.<sup>95</sup> It is as yet unclear whether the proportionality principle applied in EU law also entails the third element—proportionality *stricto sensu*.<sup>96</sup> This component of the proportionality principle includes assessment of burdens imposed on individual interests and their proportionality to the objectives pursued by the policy measure.<sup>97</sup> In principle, the European courts would examine the legal act in light of the proportionality *stricto sensu*, given that this issue was explicitly raised by the challenging party.<sup>98</sup>

The policymaker defines the improvement of corporate governance and company performance as one objective of the Directive. For assessing the proportionality of mandatory quotas it is important to identify whether this measure is indeed suitable and necessary to achieve the defined goal. Furthermore, the introduction of mandatory quotas might potentially lead to adverse effects on the functioning of companies. In this case, the proportionality test would also include weighing the competing interests—of companies, on the one hand, and of achieving gender equality in practice, on the other. The Directive could potentially be challenged for imposing an excessive burden disproportionate to the desired objectives.

The ECJ has usually been reluctant to intervene into legislation within the EU competence in economic or social policy matters. It adopted the ‘manifestly inappropriate’ test for evaluating compliance of such measures with the proportionality principle. Instead of going into the substance of the case, the ECJ focuses only on the EU legislators’ assessment of the consequences of the challenged act.<sup>99</sup> If the assessment is not manifestly incorrect given the available information, the ECJ respects the wide discretion of the EU legislators and accepts the final

<sup>94</sup> Rose-Ackerman et al. (2015), p 220.

<sup>95</sup> The scope of the principle was developed by the jurisdiction of the Union courts: Case C-11/70 *Internationale Handelsgesellschaft v Einfuhr- und Vorratsstelle Getreide* [1970] ECR 1125; Case C-331/88 *Fedesa and Others* [1991] ECR I-4023. In addition, it is entailed in the Art. 5 of the Protocol (No. 2) on the Application of the Principles of Subsidiarity and Proportionality.

<sup>96</sup> Craig (2012), pp 591–592.

<sup>97</sup> *Ibid.*

<sup>98</sup> *Ibid.*, p 592.

<sup>99</sup> Tridimas (2007), pp 143–144.

conclusions of the assessment.<sup>100</sup> Nevertheless, despite their broad discretion, European institutions should be able to show before the Court that while exercising discretion all ‘relevant factors and circumstances’<sup>101</sup> were taken into account. In a recent judgment in the *Vodafone* case, the ECJ recognized that ‘even though it has a broad discretion, the Community legislature must base its choice on objective criteria’.<sup>102</sup> If the Community does not take into account all relevant information, the Court is not able to ascertain that the proportionality principle has not been violated.<sup>103</sup> In such cases, the Court might conclude that the principle was infringed.<sup>104</sup> Given these judgments, together with the research presented above, it is questionable whether the Commission indeed took into account ‘all relevant factors’ and chose a mandatory quota on the basis of ‘objective criteria’. In my opinion, the Commission missed an important factor in its evaluations. It assumed that gender diversity has a positive impact on corporate governance and company performance irrespective of the policy measure. The lack of information on how the given policy measure affects aspects of corporate governance, other than gender diversity, would not allow the Court to evaluate properly whether the goal of improved company performance can indeed be achieved with a mandatory quota.

Finally, the Directive could potentially be challenged based on an infringement of the rights recognized in the EU Charter of Fundamental Rights: freedom to conduct a business (Article 16) and the right to property (Article 17). The EU courts had already acknowledged the property rights<sup>105</sup> and freedom to conduct business<sup>106</sup> as fundamental EU rights before the EU Charter of Fundamental Rights was incorporated into the European legal system. Nevertheless, the proportionality test regarding restrictions imposed by the EU policy measures on property rights and freedom to conduct business had been performed in a rather terse manner.<sup>107</sup> An EU legal act will not be struck down unless it constitutes ‘a disproportionate and intolerable interference, impairing the very substance of the rights guaranteed’.<sup>108</sup> However, since the EU Charter of Fundamental Rights became legally binding, the new developments have been observed in the EU case law.<sup>109</sup> It is still too early to make any speculations on whether the EU Court would be willing to engage in a more comprehensive review of the Directive regarding limitations imposed by mandatory quotas on the fundamental rights. It is also

---

<sup>100</sup> *Ibid.*, p 144.

<sup>101</sup> Case C-310/04 *Spain v. Council* [2006] ECR I-7318.

<sup>102</sup> Case C-58/08 *Vodafone and Others* [2010] ECR I-5026.

<sup>103</sup> Case C-310/04 *Spain v. Council* [2006] ECR I-7318.

<sup>104</sup> *Ibid.*

<sup>105</sup> Case C-491/01 *British American Tobacco* [2002] ECR I-11550.

<sup>106</sup> Case C-184/02 and C-223/02 *Spain and Finland v. European Parliament and Council* [2004] ECR I-7829.

<sup>107</sup> See: Case C-491/01 *British American Tobacco* [2002] ECR I-11550; Case C-184/02 and C-223/02 *Spain and Finland v. European Parliament and Council* [2004] ECR I-7829.

<sup>108</sup> Case C-491/01 *British American Tobacco* [2002] ECR I-11550; Case C-184/02 and C-223/02 *Spain and Finland v. European Parliament and Council* [2004] ECR I-7829.

<sup>109</sup> Case C-236/09 *Test-Achats v. Council of Ministers* [2011] ECR I-801.

important to note that the empirical research discussed in the current paper has shown that under certain conditions the quota rules might lead to the negative impact on company performance and group cooperation. Further investigation is needed to discover what other side effects might be observed. Only an extensive empirical description of costs and benefits would allow us to answer the question of whether the body of evidence is sufficient to deem the mandatory quotas a ‘disproportionate and intolerable interference’ with fundamental rights.

The evaluation of the impact of the mandatory quotas on company performance requires a detailed and comprehensive analysis of the existing scientific evidence on consequences of the proposed measures. Yet, the Commission neglected the evidence on several important and potentially detrimental consequences, some of which I have reviewed in the current paper (see Sect. 3). Any future policy-making and recommendations by the Commission on introducing gender equality in economic decision-making would greatly benefit from a more careful and exhaustive review of the scientific work, as well as a better understanding of the processes influenced by the measures introduced. In particular, it is of great importance to also consider the impact of a measure itself instead of focusing exclusively on the effects of the increased gender diversity which a given measure would achieve.

#### 4.4 Impact Assessment in Face of Uncertainty

Analysing costs and benefits of policy options might be particularly challenging within the realm of corporate law and corporate governance.<sup>110</sup> The existing empirical evidence is often mixed and the complexity of the corporate environment might prevent clear predictions and a quantification of the consequences of the proposed measures.<sup>111</sup> The regulator faced these difficulties when assessing the effects of different policies promoting the participation of women on boards of directors. The Commission relied on studies examining the relationship between the presence of women on boards and a number of indicators in order to evaluate the impact of these policies on corporate governance and company performance. The Commission recognized that some of the results show neutral or negative effects. These mixed results were attributed to the differences in ‘regulatory and governance structures, economic climate and culture, and size of capital markets’.<sup>112</sup> Nevertheless, the Commission concluded that the impact of all analysed policy measures will be positive in comparison to no action at the EU level. Although the Commission briefly mentioned the empirical results showing negative consequences of mandatory quota in Norway, it disregarded them by providing very limited counterarguments. As a consequence, the Commission refrained from estimating (even qualitatively) the potential costs of mandatory measures for corporate governance, assuming that they would ‘be very limited at the most’.<sup>113</sup> Such an

---

<sup>110</sup> Petrin (2016), p 538.

<sup>111</sup> Petrin (2016), p 538; Carroll (2010); Hayden and Bodie (2012).

<sup>112</sup> Impact Assessment, p 15.

<sup>113</sup> Ibid., p 51.

approach seems unjustified in light of the research presented in this article and poses certain risks. First, the decisive legislative body might remain unaware or, at best, underestimate potential costs related to the proposed policy measure. Second, this approach might also create an inaccurate belief regarding the certainty of projected benefits of the policy measure.

Cass R. Sunstein proposed that, even if there is high uncertainty regarding possible consequences of the intended reforms, policy-makers should ‘aspire’ to conduct a full cost and benefits analysis since ‘the aspiration can itself encourage agencies to acquire important information’.<sup>114</sup> This suggestion might be plausible provided that the regulator indeed makes an effort to acquire all relevant information and also present it in an unbiased way without giving greater weight to selected beneficial effects. Another concern was raised by Martin Petrin, who noticed that an assessment that presents a quantitative and qualitative evaluation of the impacts might do more harm than good if it is based on the wrong assumptions.<sup>115</sup> The addressees of the impact assessment might focus on the final conclusions of what looks like a diligent policy analysis instead of considering the underlying assumptions which might be false. This way, a regulatory assessment could possibly serve as a ‘manipulative tool’ providing arguments supporting a preferred policy option.<sup>116</sup>

The discussed IA seems to reflect all these flaws. The empirical evidence is presented in a selective manner—whereas results showing beneficial effects are discussed in detail, the studies revealing negative impacts (although directly addressing the impact of the evaluated policy measure) are quickly disregarded without broader consideration and with no conceptual understanding.

I raise these arguments not to criticize the value of a cost–benefit policy analysis, but rather to draw attention to its weaknesses resulting from a potentially biased presentation of empirical findings. I advocate the view presented by Martin Petrin that ‘regulatory analysis in corporate law should be understood as a process for enhancing information, transparency, and monitoring, independently of specific normative criteria’.<sup>117</sup> This goal could be achieved if the IA included exhaustive empirical findings both on the positive as well as on the negative effects of a mandatory quota. Furthermore, apart from a simple enumeration of studies, an informative IA should also contain an attempt to translate these findings into real life conditions. Only in this way can an impact assessment truly fulfil its role as an ‘aid to decision-making, not a substitute for political judgment’.<sup>118</sup>

---

<sup>114</sup> Sunstein (2014), p 279.

<sup>115</sup> Petrin (2016), p 568: ‘RA is more in danger of becoming a form of rhetoric designed to advance already selected policy positions that are based on empirically ungrounded assumptions’.

<sup>116</sup> Petrin (2016), p 562; Ahdieh (2013), pp 2011 and 2019.

<sup>117</sup> Petrin (2016), p 561.

<sup>118</sup> Communication from the Commission on impact assessment, COM(2002) 276.

## 5 Conclusion

In 2012, the European Commission issued a Proposal for a Directive requiring a 40% share of women on the boards of directors in all publicly listed European companies, to be achieved by 2020. Besides increasing female participation in economic decision-making, the European Commission declared its intention to pursue the improvement of corporate governance and company performance with a proposed measure. The Commission claimed that mandatory quotas will be most effective in increasing gender diversity in corporate boardrooms within a relatively short period. The increased gender diversity, in turn, will contribute to better corporate governance. Despite the necessity to increase the number of females among board directors I doubt that the current measure is optimal. Recent research in economics and psychology shows that mandatory quota rules bring some negative side effects to board and company performance. Hence, its suitability to achieve the goals stated is doubtful and requires careful investigation. Furthermore, the research suggests that the burdens imposed by the mandatory quotas on affected companies should be evaluated more carefully, taking into account the potential negative consequences.

In addition, the research presented here indicates that it is necessary to reconsider the economic rationale of mandatory quota. An alternative could be putting more emphasis on the equality rationale.<sup>119</sup> If there are serious doubts about positive effects of mandatory quotas on company performance, it is rather unlikely that stressing an economic rationale in a gender diversity debate will convince the involved actors to increase female participation in economic decision-making. Additionally, further empirical research on alternative measures might help selecting the most efficient ways of introducing more women on boards of directors.

In 2015, the European Commission announced the ‘Better Regulation Agenda’.<sup>120</sup> The proposed reforms also addressed the impact assessment procedure, introducing two important changes. First, the Impact Assessment Board was replaced with an independent Regulatory Scrutiny Board. Second, it has been suggested to extend the impact assessment process and conduct it throughout the whole legislative process, also at the initiative of the Parliament or the Council. These improvements are very welcome. A Regulatory Scrutiny Board might be more likely than the Impact Assessment Board to capture the kind of flaws that I identified in the IA discussed in this article. Additionally, performing impact assessments also at the later stage of the law-making process might increase the chances of including new empirical evidence on the proposed and alternative policy measure. Nevertheless, it is still too early to conclude whether these changes in the future will help avoiding shortcomings when presenting the results of a policy analysis.

---

<sup>119</sup> Choudhury (2014).

<sup>120</sup> See n. 4 above.



**Acknowledgements** Open access funding provided by Max Planck Society.

**Open Access** This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

## References

- Adams RB, Ferreira D (2009) Women in the boardroom and their impact on governance and performance. *J Financ Econ* 94:291–309. doi:[10.1016/j.jfineco.2008.10.007](https://doi.org/10.1016/j.jfineco.2008.10.007)
- Ahdieh RB (2013) Reanalyzing cost–benefit analysis: toward a framework of function(s) and form(s). *N Y Univ Law Rev* 88:1983–2073
- Ahern KR, Dittmar AK (2012) The changing of the boards: the impact on firm valuation of mandated female board representation. *Q J Econ* 127:137–197. doi:[10.1093/qje/qjr049](https://doi.org/10.1093/qje/qjr049)
- Alemanno A (2009) The better regulation initiative at the judicial gate: a trojan horse within the Commission’s walls or the way forward? *Eur Law J* 15:382–400
- Alemanno A (2011) A meeting of minds on impact assessment. *Eur Public Law* 17:485–506
- Balafoutas L, Sutter M (2010) Gender, competition and the efficiency of policy interventions. Working papers in economics and statistics. <https://eeecon.uibk.ac.at/wopec2/repec/inn/wpaper/2010-12.pdf>. Accessed 11 Sept 2017
- Balafoutas L, Sutter M (2012) Affirmative action policies promote women and do not harm efficiency in the laboratory. *Science* 335:579–582. doi:[10.1126/science.1211180](https://doi.org/10.1126/science.1211180)
- Barreto M (2015) Experiencing and coping with social stigma. In: Mikulincer ME, Shaver PR, Dovidio JF, Simpson JA (eds) *APA handbook of personality and social psychology, vol 2. Group processes*. American Psychological Association, Washington, DC, pp 473–506
- Barrett-Howard E, Tyler TR (1986) Procedural justice as a criterion in allocation decisions. *J Pers Soc Psychol* 50:296–304. doi:[10.1037/0022-3514.50.2.296](https://doi.org/10.1037/0022-3514.50.2.296)
- Berk JB, DeMarzo PM (2011) *Corporate finance*, 2nd edn. Pearson, Boston
- Bertrand M, Black SE, Jensen S, Lleras-Muney A (2014) Breaking the glass ceiling? The effect of board quotas on female labor market outcomes in Norway. NBER working paper series 1–54
- Blader SL, Tyler TR (2003) What constitutes fairness in work settings? A four-component model of procedural justice. *Hum Resour Manag Rev* 13:107–126. doi:[10.1016/s1053-4822\(02\)00101-8](https://doi.org/10.1016/s1053-4822(02)00101-8)
- Bobocel DR, Son Hing LS, Davey LM, Stanley DJ, Zanna MP (1998) Justice-based opposition to social policies: is it genuine? *J Pers Soc Psychol* 75:653–669. doi:[10.1037/0022-3514.75.3.653](https://doi.org/10.1037/0022-3514.75.3.653)
- Bøhren Ø, Staubo S (2014) Does mandatory gender balance work? Changing organizational form to avoid board upheaval. *J Corp Financ* 28:152–168
- Camerer C (2003) *Behavioral game theory: experiments in strategic interaction*. Princeton University Press, Princeton
- Carroll P (2010) Does regulatory impact assessment lead to better policy? *Policy Soc* 29:113–122. doi:[10.1016/j.polsoc.2010.03.009](https://doi.org/10.1016/j.polsoc.2010.03.009)
- Cecot C, Hahn RW, Renda A (2007) A statistical analysis of the quality of impact assessment in the European Union. AEI-Brookings Joint Center working papers 07–09
- Cecot C, Hahn R, Renda A, Schrefler L (2008) An evaluation of the quality of impact assessment in the European Union with lessons for the US and the EU. *Regul Gov* 2:405–424. doi:[10.1111/j.1748-5991.2008.00044.x](https://doi.org/10.1111/j.1748-5991.2008.00044.x)
- Chacko TI (1982) Women and equal employment opportunity: some unintended effects. *J Appl Psychol* 67:119–123. doi:[10.1037/0021-9010.67.1.119](https://doi.org/10.1037/0021-9010.67.1.119)
- Choudhury B (2014) New rationales for women on boards. *Oxf J Legal Stud* 34:511–542. doi:[10.1093/ojls/gqt035](https://doi.org/10.1093/ojls/gqt035)
- Cohen-Charash Y, Spector PE (2001) The role of justice in organizations: a meta-analysis. *Organ Behav Hum Decis Process* 86:278–321. doi:[10.1006/obhd.2001.2958](https://doi.org/10.1006/obhd.2001.2958)
- Craig P (2012) *EU administrative law*, 2nd edn. Oxford University Press, Oxford

- Crosby FJ, Iyer A, Sincharoen S (2006) Understanding affirmative action. *Annu Rev Psychol* 57:585–611
- Doldor E, Vinnicombe S, Gaughan M, Sealy R (2012) Gender diversity on boards: the appointment process and the roles of executive search firms. Equality and Human Rights Commission Research report, 85. <https://www.equalityhumanrights.com/en/publication-download/research-report-85-gender-diversity-boards-appointment-process-and-role>. Accessed 11 Sept 2017
- Dorough AR, Leszczyńska M, Barreto M, Glöckner A (2016) Revealing side effects of quota rules on group cooperation. *J Econ Psychol* 57:136–152. doi:10.1016/j.joep.2016.09.007
- European Commission (2009) International perspectives on positive action measures. A comparative analysis in the European Union, Canada, the United States and South Africa. <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=180&furtherPubs=yes>. Accessed 11 Sept 2017
- European Commission (2010a) Europe 2020: a strategy for smart, sustainable and inclusive growth. COM(2010) 2020. <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%200007%20-%20Europe%202020%20-%20EN%20version.pdf>. Accessed 11 Sept 2017
- European Commission (2010b) Strategy for equality between women and men 2010–2015. COM(2010) 491. [http://ec.europa.eu/justice/gender-equality/files/strategy\\_equality\\_women\\_men\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/strategy_equality_women_men_en.pdf). Accessed 11 Sept 2017
- European Commission (2011) Positive action measures to ensure full equality in practice between men and women, including company boards. [http://ec.europa.eu/justice/gender-equality/files/gender\\_balance\\_decision\\_making/report\\_gender-balance\\_2012\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/gender_balance_decision_making/report_gender-balance_2012_en.pdf). Accessed 11 Sept 2017
- European Commission (2012) Proposal for a Directive of the European Parliament and of the Council on improving the gender balance among non-executive directors of companies listed on stock exchanges and related measures. COM(2012) 614 final. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52012PC0614>. Accessed 25 Sept 2017
- Ferreira D (2015) Board diversity: should we trust research to inform policy? *Corp Gov Int Rev* 23:108–111. doi:10.1111/corg.12092
- Fritsch O, Radaelli CM, Schrefler L, Renda A (2012) Regulatory quality in the European Commission and the UK: old questions and new findings. Centre for European Policy working paper no 362. [http://aei.pitt.edu/33551/1/WD362\\_Fritsch\\_et\\_al\\_Regulatory\\_Quality\\_in\\_the\\_Commission\\_and\\_the\\_UK.pdf](http://aei.pitt.edu/33551/1/WD362_Fritsch_et_al_Regulatory_Quality_in_the_Commission_and_the_UK.pdf). Accessed 11 Sept 2017
- Groysberg B, Cheng Y-J (2016) Global board of directors survey. [http://c.ymcdn.com/sites/www.womencorporatedirectors.com/resource/resmgr/Knowledge\\_Bank/WCDBBoardSurvey2016\\_FINAL.pdf](http://c.ymcdn.com/sites/www.womencorporatedirectors.com/resource/resmgr/Knowledge_Bank/WCDBBoardSurvey2016_FINAL.pdf). Accessed 11 Sept 2017
- Hayden GM, Bodie MT (2012) The bizarre law and economics of business roundtable v. SEC. *J Corp Law* 38:100–137
- Heilman ME, Lucas JA, Kaplow SR (1990) Self-derogating consequences of sex-based preferential selection: the moderating role of initial self-confidence. *Organ Behav Hum Decis Process* 46:202–216. doi:10.1016/0749-5978(90)90029-9
- Heilman ME, Rivero JC, Brett JF (1991) Skirting the competence issue: effects of sex-based preferential selection on task choices of women and men. *J Appl Psychol* 76:99–105. doi:10.1037/0021-9010.76.1.99
- Heilman ME, Block CJ, Lucas JA (1992) Presumed incompetent? Stigmatization and affirmative action efforts. *J Appl Psychol* 77:536–544. doi:10.1037/0021-9010.77.4.536
- Heilman ME, McCullough WF, Gilbert D (1996) The other side of affirmative action: reactions of nonbeneficiaries to sex-based preferential selection. *J Appl Psychol* 81:346–357. doi:10.1037/0021-9010.81.4.346
- Heilman ME, Battle WS, Keller CE, Lee RA (1998) Type of affirmative action policy: a determinant of reactions to sex-based preferential selection? *J Appl Psychol* 83:190–205. doi:10.1037/0021-9010.83.2.190
- Huyck JBV, Battalio RC, Beil RO (1990) Tacit coordination games, strategic uncertainty, and coordination failure. *Am Econ Rev* 80:234–248. doi:10.2307/2006745
- Lind EA, Tyler TR (1988) The social psychology of procedural justice. Plenum Press, New York
- Matsa DA, Miller AR (2013) A female style in corporate leadership? Evidence from quotas. *Am Econ J Appl Econ* 5:136–169. doi:10.1257/app.5.3.136
- Meuwese AC (2008) Impact assessment in EU lawmaking. Kluwer Law International, Alphen aan den Rijn
- Minichilli A, Zattoni A, Nielsen S, Huse M (2012) Board task performance: an exploration of micro- and macro-level determinants of board effectiveness. *J Organ Behav* 33:193–215. doi:10.1002/job.743

- Mollerstrom J (2012) Quotas and cooperation. <http://scholar.harvard.edu/jmollers/publications/quotas-and-cooperation>. Accessed 11 Sept 2017
- Nacoste RB (1990) Sources of stigma: analyzing the psychology of affirmative action. *Law Policy* 12:175–195. doi:10.1111/j.1467-9930.1990.tb00046.x
- Niederle M, Segal C, Vesterlund L (2013) How costly is diversity? Affirmative action in light of gender differences in competitiveness. *Manag Sci* 59:1–16. doi:10.1287/mnsc.1120.1602
- Noguera AM (2013) Impact assessment: empirical evidence. In: Larouche P, Cserne P (eds) *National legal systems and globalization: new role, continuing relevance*. T.M.C. Asser Press, The Hague, pp 311–343
- Nygaard K (2011) Forced board changes: evidence from Norway. NHH Dept. of Economics Discussion paper no 5/2011; 24th Australasian finance and banking conference 2011 paper. <http://ssrn.com/abstract=1793227>. Accessed 11 Sept 2017
- Petrin M (2016) Regulatory analysis in corporate law. *Mod Law Rev* 79:537–574. doi:10.1111/1468-2230.12201
- Pieters K (2012) More efforts needed to improve gender equality in corporate governance in the EU. *Eur Bus Organ Law Review* 13:475–496. doi:10.1017/s1566752912000316
- Pious S (1996) Ten myths about affirmative action. *J Soc Issues* 52:25–31. doi:10.1111/j.1540-4560.1996.tb01846.x
- Renda A (2006) Impact assessment in the EU: the state of the art and the art of the state. Centre for European Policy Studies. <https://www.ceps.eu/system/files/book/1291.pdf>. Accessed 11 Sept 2017
- Ritov I, Zamir E (2014) Affirmative action and other group tradeoff policies: identifiability of those adversely affected. *Organ Behav Hum Decis Process* 125:50–60. doi:10.1016/j.obhdp.2014.04.002
- Rose-Ackerman S, Egidy S, Fowkes J (2015) *Due process of lawmaking: the United States, South Africa, Germany, and the European Union*, 1st edn. Cambridge University Press, New York
- Singh V, Vinnicombe S (2004) Why so few women directors in top UK boardrooms? Evidence and theoretical explanations. *Corp Gov Int Rev* 12:479–488. doi:10.1111/j.1467-8683.2004.00388.x
- Smith N (2014) Quota regulations of gender composition on boards of directors. *CESifo DICE Rep* 12(2):42–48
- Son Hing LS, Bobocel DR, Zanna MP (2002) Meritocracy and opposition to affirmative action: making concessions in the face of discrimination. *J Pers Soc Psychol* 83:493–509. doi:10.1037/0022-3514.83.3.493
- Storvik A (2011) Women on boards—experience from the Norwegian quota reform. CESifo DICE report 9(1). <http://www.cesifo-group.de/DocDL/dicereport111-rm2.pdf>. Accessed 11 Sept 2017
- Stroebe K, Barreto M, Ellemers N (2010) When searching hurts: the role of information search in reactions to gender discrimination. *Sex Roles* 62:60–76. doi:10.1007/s11199-009-9700-y
- Sunstein CR (2014) Financial regulation and cost–benefit analysis. *Yale Law J Forum* 124:263–279
- Szydło M (2015) Gender equality on the boards of EU companies: between economic efficiency, fundamental rights and democratic legitimisation of economic governance. *Eur Law J* 21:97–115. doi:10.1111/eulj.12074
- Tajfel H (1970) Experiments in intergroup discrimination. *Sci Am* 223(5):96–102
- Taylor MC (1994) Impact of affirmative action on beneficiary groups: evidence from the 1990 general social survey. *Basic Appl Soc Psychol* 15:143–178. doi:10.1080/01973533.1994.9646076
- Torriti J (2010) Impact assessment and the liberalization of the EU energy markets: evidence-based policy-making or policy-based evidence-making? *J Common Mark Stud* 48:1065–1081. doi:10.1111/j.1468-5965.2010.02089.x
- Tridimas T (2007) *The general principles of EU law*, 2nd edn. Oxford University Press, Oxford
- Tyler T, Blader S (2000) *Cooperation in groups: procedural justice, social identity, and behavioral engagement*. Psychology Press, Philadelphia
- Wright M, Siegel DS, Keasey K, Filatotchev I (2013) *The Oxford handbook of corporate governance*, 3rd edn. Oxford University Press, Oxford