World Economics Association
Conferences, 2017

Public Law and Economics: Economic Regulation and Competition Policies

2017, n.1: 1st June – 30th June 2017

Title of paper:

THE EFFICIENCY-GROWTH DILEMMA: AN ANALYSIS OF REGULATION'S IMPACT ON SHORT AND LONG-TERM DEVELOPMENT

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ABSTRACT

In the midst of an ongoing recovery of economies worldwide, a growing concern regarding competitiveness and efficient regulations has arisen. Countries have taken different paths in the hopes of procuring higher growth rates, be it through austerity or expansion of State expenditures. Nonetheless, a common concern pertains to installing appropriate incentives, via regulation, in order to expedite desired results. The term "regulation" is used in a broad sense, insofar as governmental initiatives, under different forms and issued from all three branches, directly impact the main objective of instilling economic growth. To this end –namely the analysis of regulations' adequacy to reach their assumed goals–, a Law and Economics framework is of great utility. This paper seeks to investigate efficiency under an intertemporal perspective, rather than the traditional static angle. Our premise is that, amongst several functions of norms, is the potentialization of expected returns and impairment of undesired results. In this sense, although several studies involving immediate impacts on efficiency fomented by means of regulation, legislation, or jurisprudential interpretations already exist, a careful analysis considering the dynamic gain in efficiency remains lacking. In some cases norms generate initial reductions of social welfare, widely compensated by future gains. The contrary may also occur, when regulations apparently produce a momentaneous raise in social welfare, followed by long lasting losses. In the present text, using the framework provided by Law and Economics, particularly the Welfare Overtaking Theorem, the efficiency of legal provisions and judicial rulings is analyzed, in a short and long-term perspective. To this end, an initial outline of the referred theorem is exposed, highlighting important matters that can be better addressed through its teachings, such as the offset of initial inefficiencies due to sustainable growth and the correlation between (in)equality and economic development. In sequence, a brief review of important Law and Economics literature is disclosed in the interest of (a) exemplifying the complexities that surround this debate and (b) furthering the current stance of academic reflections. Mainly in pursuance of the latter, various Brazilian case

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studies are invoked, such as provisions in the bankruptcy act, an emblematic Supreme Court ruling, and welfare programs instituted by government. The conclusions show that in drafting regulations, laws, and rulings, previous considerations of present and future costs and benefits must be acknowledged, including impacts on society's dynamic efficiency. The findings focus on the Brazilian context, but are undoubtedly replicable in numerous other countries.
KEY WORDS:
Welfare Overtaking Theorem. Dynamic Efficiency. Regulation. Court Rulings. Legislative Impact Assessment.

1. INTRODUCTION

When analyzing regulations[3] under a Law and Economics framework, considerations on increases or decreases of social welfare commonly arise. Such analysis is only natural, since every norm creates a set of incentives for individuals and firms, which directly impacts the efficiency of economic transactions.

By enhancing social welfare, norms contribute to economic growth in a direct and indirect manner. The former takes place, for example, through economic activity stimulus, while the latter occurs when public resource allocation is improved (*i.e.* when the group benefited by a public intervention is better targeted).

Nevertheless, it is important to keep in mind that a dilemma between short and long-term efficiency may develop due to a change in regulation. For instance, it is possible for new legislation to cause an initial decrease in social welfare, but still be pertinent when considered the intertemporal efficiency and its impact on economic growth.

Such complexities are verified, for instance, when one analyzes innovation and its role on economic growth. Illustratively, consider the regulation impeding cartel formation –such as established in the Brazilian Competitiveness Defense System (*Sistema Brasileiro de Defesa da Concorrência* - Statute nº. 12.529/11) and by legislation that incriminates conducts considered harmful to the economic order (*e.g.* Brazilian Federal Laws nº. 8.137/90 and 8.176/91). These set of norms do not present the aforementioned dilemma given they promote, simultaneously, growth and efficiency in the short and long run. By promoting competitiveness, such legislations favor higher efficiency incentivizing innovation (oligopolies and monopolies tend to lack innovation due to a guaranteed market share). Furthermore, consumer's and producer's surpluses will not be reduced by deadweight loss, leading to higher consumption, therefore promoting economic growth (and reduction of income concentration).

However, there are laws which present a clear short-term trade-off, such as the ones that guarantee exclusivity in exploring intellectual property rights; wins on the one hand, losses on the other. The establishment of intellectual property rights is justified by a market failure (leading to suboptimal supply of innovation). In order to solve this market failure, patents are enacted, guaranteeing exclusivity of development and production. Patents, that ascertain a temporary legal monopoly for innovators enable returns on resources invested for the development of new technologies.

As with all monopolies, patents lead to an inherent inefficiency. Having secured market power, inventors may set the goods' price at a higher level than would be socially optimal. In practice, this means innovation will be disseminated, but less so than it could be.[4] Thus, it is fundamental to know if the loss in social welfare in the short run will be countered by gains in following periods. As this scenario shows, a dilemma between static efficiency and economic growth arises.

Regulations usually produce collateral effects and contemplate trade-offs. If legislation is to be considered well drafted and thought out, it is imperative that it optimizes expected gains and reduces the extent of undesired effects. This article seeks to examine these briefly exposed concepts in order to highlight that, while analyzing norms and public policies, one cannot render to simple short-term results, disregarding important dynamic efficiency effects. In some situations, norms can lead to initial

[3] The term "regulation" is to be considered in a broad sense, not restricting itself to norms issued by the Executive branch for market control or guidance purposes. Here, it is used as synonymous to norms as abstract and generic mandates.

[4] For more information, see: Cooter & Schäfer (2012) and Dosi, Marengo & Pasquali (2007).

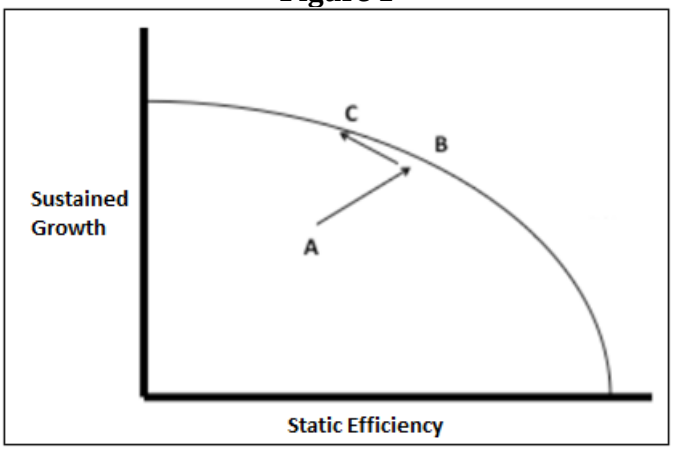
decrease of social welfare widely compensated by future gains. Public interest can and must be assessed under an intertemporal perspective.

To develop the proposed content, the following text is divided as follows. In section 2 the Welfare Overtaking Theorem is presented, emphasizing the dilemmas between efficiency, growth and equality. In section 3, a Law and Economics literature review on the matter at hand is presented. In sections 4 and 5, several examples routinely encountered in the Brazilian context are laid out, including cases in which there is an initial efficiency, with subsequent economic growth, but also decisions that hinder economic development, although initially they appear to bring about increase in social welfare. Finally, section 6 presents the conclusions of the article.

2. WELFARE OVERTAKING THEOREM

Anti-cartel laws, such as the aforementioned, may be represented in Figure 1 by dislocating from point A to B, leading to more efficiency and higher growth.

Figure 1



Source: Cooter e Edlin (2010)

However, this is not always the case. An instructive example can be found in the debates regarding the Brazilian Civil Procedural Code, recently approved by Congress and sanctioned by former president Dilma Rousseff (2015). Throughout its elaboration there was a constant concern regarding modernizations in legal procedural tradition. Surely there will be an initial cost of adaptation (as there continues to be), in both the adjustment and implementation of new guidelines, as well as in the interpretation of more complex provisions. Nevertheless, it is believed that the social long-run benefits[5] will surpass initial losses.

In this case, can the loss of initial efficiency be offset by gained benefits in a medium and long-term perspective? Will a more modern procedural legislation provide economic growth and social welfare in subsequent periods? If the answer is positive, the change is represented from the movement from point B to C in Figure 1 (above).

Cooter & Edlin (2010) show that this compensation could occur in their Welfare Overtaking Theorem. Looking again at the previous example –exclusivity

[5] Some benefits mentioned by the commission of jurists in charge of drafting the bill were (i) procedural celerity (enhanced by the suppression of some instruments that prompted legal challenges and judicial review by higher courts, for example), (ii) legal certainty (cornerstone of a new system of binding and stable precedents, among other innovations) and (iii) equitable rulings (motif for the requirement of profound and expansive reasoning of judicial decisions).

guaranteed by patents–, the authors argue that the initial costs (namely higher price, due to the absence of competition and the need to recover initial development investments), including decline in consumption, may be offset in the long run by a higher sustainable growth rate (by stimulating investments needed for technological innovations); therefore, in a long-term perspective the initial inefficiencies will have been compensated. The conclusion is unambiguous: new regulation may be efficient in an intertemporal perspective, even though it provokes an initial inefficiency.

To concretely illustrate the theorem, the aforementioned academics propose the following hypothesis: consider a change in current policy that leads to a 50% decline in efficiency in the first period, followed by a permanent 2% increase in the growth rate in subsequent periods. The 2% increase capitalized throughout a century will increase the final result by approximately 7 times the start off point. Hence, the increase in long-term social gains compensates the initial loss due to inefficiency.

The lesson to be drawn is that policy changes should be approved, in spite of initial inefficiencies, when they raise sustained economic growth that surpasses said inefficiencies.

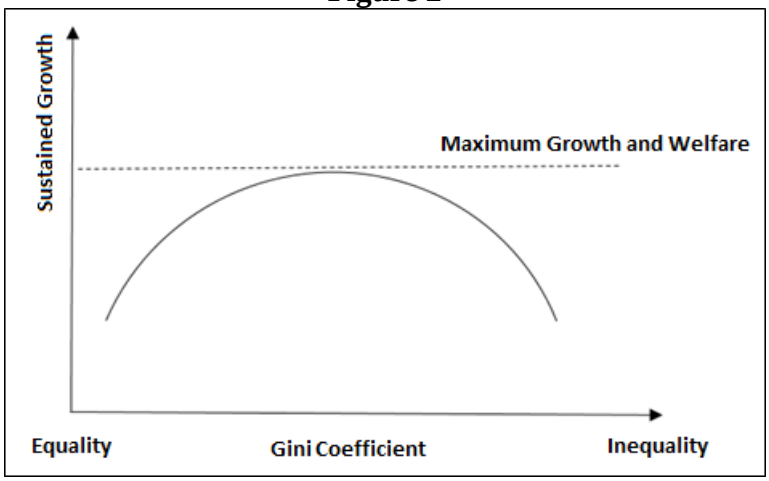
Cooter & Edlin (2010) use the same argument to defend that, in some situations, public policies may increase income concentration, but the loss in welfare may be compensated by higher growth rates generated later on. This brings about a manner of thinking that can assist in deciding between economic growth and equality, another common discussion present in economic literature.

Cooter & Schäfer (2012) present the following example: suppose that, due to a new regulation, participation of entrepreneurs in the social benefits generated from inventions increases in 40%. This directly reduces wealth of other economic agents, such as workers and consumers whereas the wealth accumulated by entrepreneurs leads to a short-term increase in income concentration. However, using the same theorem, one may conclude that the additional gain obtained by entrepreneurs can guarantee sustained industrial growth, which will outweigh the initial loss in social welfare derived from income concentration.

A historical analysis of many countries allowed Cooter & Shäfer (2012) to formulate generalized conclusions regarding the relationship between equality and growth. Factors such as oligopolies, cartels, and low skilled workers increase inequality and slows down economic growth; but a market economy alongside a qualified workforce, despite allowing for the existence of some inequality, promotes rapid economic growth.

This generalization suggests that exacerbated inequality hinders growth, but moderate inequality may coexist with maximum economic growth, as indicated by Figure 2 (as follows).

Figure 2



Source: Cooter e Schäfer (2012).

Strict equality with low economic growth, as depicted near the point of origin, is explained by the authors as situations in which forced egalitarianism occurred, discouraging entrepreneurships and reducing incentives to innovate.

The following topic exposes a concise summary of the development of research on the matter at hand carried out by Law and Economics academia.

3. THEME POSITIONING: A BRIEF LITERATURE REVIEW

A clear and honest understanding of Law and Economics must accept that this discipline is not tailored to ascertain the justice or injustice, morality or immorality of any given objective that governments seeks to attain. Nevertheless, after establishing the goal to be pursued by public policies, elected officials have a duty to model schemes that produce the greatest benefits at the lowest possible cost; after all, the notion of public interest encapsulates, in its core, an indisposable mandate (*i.e.* no one has authorization to mitigate its effectiveness and efficiency, or disregard public interests). This means that, in order to establish and implement the correct legal model, regulations must acknowledge the consequences projected over efficiency, economic growth and equality.

Such imperative is innate to the theme developed in this article, since it draws from all three notions (specifically, intertemporal efficiency, sustainable growth and social equality).

In other words, even though Law and Economics cannot value the worthiness of social claims (since they encompass moral, ethical and philosophical standings, which strictly concern the political debate), an economic analysis of laws provides great service in the elaboration of policies pursuant to such claims. As Rawls (1999, p.5) well stated:

> Some measure of agreement in conceptions of justice is, however, not the only prerequisite for a viable human community. There are other fundamental social problems, in particular those of coordination, efficiency, and stability.

Provided this premise, it is noteworthy that there has been a growing acceptance in the use of economic theories in the analysis of several legal institutes,

notwithstanding some residual resistance and criticisms.[6] Ackerman (1986) noted, decades ago, the inevitability of the permeation of Law and Economics in legal doctrine. As the Yale professor highlighted, institutions formerly taken over by a "traditional legal rationale", including Courts and Agencies, have absorbed the interdisciplinary exchange. The scholar anticipated the obsolescence of legal experts who did not adapt to the new scientific repertoire, parallel to the ascension of a new category of scholars: the "lawyer-economists" (1986, pgs. 929-934).

It is important to emphasize that, although some restricted sectors of Law (such as tax and finance law) where already habituated to the use of economic concepts in the early 50s, Coase (1960) and Calabresi (1961) where the first to expand Law and Economics as a general form of legal reasoning, propelling its "modernization". These scholars studied not only categories innate to Economics (such as interests; loans and monetary restatement), but also various legal systems and their complexities. They questioned, for example, the optimal degree in protection of property rights; how competitive systems should be structured; and many other fields.

One (very important) example, useful to clarify the present reflections, pertains to civil liability, mainly in cases of torts.

Consider an ordinary traffic accident where a pedestrian is ran over by a car. There are various theoretical possibilities to consider when imputing liability. In the current Brazilian (and American) system, culpability is verified in a case-by-case basis. Courts must consider all the proof presented by litigants in order to verify the party at fault and impute the duty to pay damages to the innocent party (*i.e.*, was the driver speeding; was he drunk; was the pedestrian on a crossing; was the traffic light red; etc.).

Other possibilities would be: impose strict liability to the driver or, inversely, to the pedestrian; or, even, exempt both and attribute the obligation to indemnify to a fund, which could be composed of public resources (such as a Social Security plan) or private contributions (obliging all citizens –pedestrian, drivers or both– to pay for private insurance). The choice between one or another model produces significant divergent effects on cost distribution (determining which agent will be compensated and who should bear the cost) and risk allocation, therefore guiding the agents' decision making (deterrent or incentive effect).

For Calabresi (1965; 1970), a system that combined strict liability and fines (civil and criminal) would best allocate risks and costs, and better obviate important factors that should influence agents decisions (such as more caution while driving or walking, choosing less dangerous means of transportation, etc.). The study in question concentrated on modeling a system that efficiently reduced the "costs of accidents".[7]

Calabresi's reflections, however, were somewhat limited to the modeling of an efficient cost-risk allocation mechanism. Still, it could be stated that his reasoning also sought out to ensure sustainable social growth, by advocating the reduction of so-called "tertiary" costs (consistent in time, efforts and resources spent on applying the law, among which were the sum spent with legal fees, time allocated by judges, public defenders, prosecutors, lawyers, etc.).[8/9] Even more, granting that it was not the primary

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[6] For criticism regarding the use of Law and Economics in legal doctrine, namely the harm to legal epistemology, see: Rodrigues Jr. (2011).

[7] A mitigated form of this model was adopted in the Netherlands pertaining to vehicle-cyclist accidents. Laws impose strict liability to drivers (in most cases) and obliges them to have insurance against accidents.

[8] Growth is an influential factor (though less evident) in *primary* (incurred by the victim of accidents) and *secondary* (social costs due to system failures in not providing adequate compensation to the victims, leading to an economic shift of incentives) costs.

focus of his reflections, one can easily note the desire to contribute to wellbeing, by crediting the proposed mechanism as the most adequate to achieve collective objectives.

Posner (1970; 2005) emphatically disagreed. Among other considerations, he defended that the model proposed by Calabresi was inadequate, pointing to the lack of empirical data, and doubts that such a scheme would lead to better results than the existing system. At the very least, he argued, creating an abstract model that could bring justice to all cases would be a difficult task, given the innumerable variables present in concrete occurrences.

Although there was not an explicit discussion, a mindful reader will note the existence of a relevant underlying moral issue present in the controversy: even if, in theory, an abstract design consistent in conjugating strict liability and fines –as construed by Calabresi– could curtail costs, its application would induce iniquitous results in many cases, harming growth (because of the misplacement of costs). Under this perspective –Posner would argue–, imputing liability based on guilt would be advantageous, and it is not coincidental that such a system has prevailed throughout the years (POSNER, 2005, pgs. 20-21).

This debate –since advanced by Law and Economics academia– is far from resolved. For illustrative purposes, consider the evolution of civil liability schemes proposed to regulate parents' responsibility for torts carried out by their underage children, under Brazilian law.

In the previous Civil Code, enacted in 1916, parents' liability was subjective, which is to say victims had the burden of proving not only the fault of the child, but also that of his parents in supervising or educating the youngster (the so-called culpability for faults *in vigilando* and *in educando*, respectively –arts. 1.521, I and 1.523). Later, in 1927, the Minors Code altered this stance, establishing a presumption of parents' guilt (art. 68, § 4º); here, the burden was on them to prove that they had adopted reasonable and adequate measures to prevent their child from committing torts. Finally, the current Civil Code instituted a vicarious liability system, in which parents have vicarious liability for torts practiced by their underage child (art. 932, I).

Evidently, such alterations placed victims in a much more comfortable situation by increasing the probability of obtaining damages (primary cost); also, they stimulated parents to properly educate and guard the minor under their responsibility (secondary cost); finally, they decreased litigation rates since, given the awareness of likely conviction, parents tend to abdicate from hiring expensive lawyers and submitting their case to a long and costly suits, spontaneously complying with their duty to indemnify the victim (tertiary cost).[10] But it is easy to come across some injustices brought about by the current vicarious liability imposition.[11]

A similar evolution can be seen regarding torts committed by employees and the civil liability of employers. Originally, proof of guilty conduct –consistent in selecting an inadequate employee (*in eligendo*) or wrongfully supervising him (*in vigilando*)–

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[9] The division of costs into primary, secondary and tertiary constitutes a categorization formulated by Calabresi and is used as such.

[10] It is true that the findings are intuitive and there are no empirical studies to substantiate the claims. It is in this manner that Posner's critiques were built. However, the lack of empirical evidence does not diminish the subsequent conclusion: there is a moral issue at hand, consistent with the weighing of efficiency and equality or growth.

[11] For instance, should a divorced father, with shared custody, be compelled to pay damages when his child was under the mother's care? What of fathers that must live in a location far away from their household to provide for the family; should they too be considered liable? Majoritarian jurisprudence dictates that yes, in both cases.

was required, burdening victims (Civil Code of 1916, art. 1.521, III); the situation was altered and a presumption of the employer's fault was institutes (in this case, due to jurisprudential interpretation, leading to the approval of Brazilian Supreme Court's persuasive precedent nº. 341); once again, the current Civil Code imposed vicarious liability to employers for damages caused by employees while discharging their duties or in the line of work (art. 932, III). In this case, a similar effect as previously stated occurs regarding victims (*i.e.*, stronger guarantee of obtaining damages). But the current mechanism burdens society as hole, and consumers in particular: the value spent by employers to compensate victims (and the uncertainty of being obliged to do so in the future), even if they adopt all possible precautions, is reflected on the prices of products and services, burdening economic activities (which become less competitive in a globalized market system).[12]

These examples illustrate the difficulties in attempting to achieve an adequate equilibrium between efficiency and economic growth, and, surely, Law and Economics can assist in its ascertainment.

Without understating the irrefutable value of the abovementioned debate between Calabresi and Posner, it could be said that their main focus was on static efficiency, as presented in figure 1 by the trajectory from point A to B. They did not expressly investigate trade-offs between (in)efficiencies and long-term growth or social wellbeing. Rather, their intent was to formulate a structurally efficient system that could satisfactorily allocate costs and resolve disputes. Therefore, there is another viewpoint that deserves more scrutiny –particularly when questioning public policies, regulations and judicial reasoning– and that has only recently come to light: the dynamic efficiency of mechanisms instituted by legal frameworks and precedents, and the possible compensation of initial inefficiency by sustained growth in the long run, causing a net gain in intertemporal efficiency.

The following cases refer precisely to dynamic efficiency (movement from point B to C in figure 1). There are cases of initial inefficiency, but also ones in which inefficiency is spread, causing serious problems for future generations.

4. Initial Inefficiency and Posterior Wellbeing

4.1. Corporate Bankruptcy and Reorganization: Debt Assumption of Labor and Tax Liabilities

In the Brazilian system, the acquisition of a business usually implies the acquirer's assumption of all tax and labor debts due by the seller, even those not indicated as carrying debts. This conclusion is foreseen in articles 130 and 131 of the National Tax Code (Statute nº. 5.172/66), and article 448 of the Labor Laws Consolidation (Decreed Law nº. 5.452/43).

Although such provisions may be justified under normal conditions, in some scenarios they are detrimental, undermining negotiations amongst interested parties, even if economically beneficial. For this reason, Congress enacted laws exempting buyers from this burden when acquiring factories and productive units from bankrupt businesses or from companies undergoing reorganization (arts. 60 and 141, II of the Brazilian Bankruptcy and Reorganization Act - Federal Law nº. 11.101/05).

This exception gives rise to initial inefficiency; after all tax and labor creditors will find it difficult to recuperate their credits, undergoing losses (or at the very least,

[12] Under this hypothesis, retrogressive action (*i.e.* the filing of a suit by the employer against the employee, seeking restitution) is feasible, as a general rule. However, the difficulty in obtaining said restitution, coupled with an expensive and tardy judicial system is reflected on prices of goods and services.

postponing it). This imposes a structural cost to innocent parties. Howbeit, the policy promotes efficiency in the medium and long run: there is an incentive to, on one hand, purchase goods of a restructuring or bankrupt corporations, enabling the sale of assets and discharge of liabilities, and on the other, the continuation of economic production (and efficient allocation of capital goods), generating new jobs and promoting tax payments.

This was the Supreme Court's understanding when assessing a *Direct Unconstitutionality Action* that challenged the mentioned provision contained in the Bankruptcy and Reorganization Act.[13] In this suit, the Democratic Labor Party (*Partido Democrático Trabalhista* - PDT) anchored its arguments on *"a disregard to labor's rights and to the dignity of workers"*. These claims clearly relate to considerations of short-term (in)efficiency, brought upon by the challenged articles.

The argument, however, did not convince the Supreme Court Justices. Justice Peluso stated *"the law's engineering was actually thought out to preserve corporations as a source of social benefits and wealth"*. With an overtly economic bias, Justice Celso de Mello affirmed *"the economic rational underlining the law adjusts itself to the standard, criteria and parameters contained in the Federal Constitution regarding economic activity and employer safeguarding"*. It is clear that the analysis of long-term efficiency surrounded the Justices' reasoning while overviewing the constitutionality of the Bankruptcy and Reorganization Act.

Under those justifications, Brazilian Supreme Court deemed it constitutional to exempt purchasers of tax and labor debts when acquiring assets from bankrupt or reorganizing companies, as stated in article 60 and 141, II, of the Bankruptcy Act.[14]

If this exemption were ruled unconstitutional, certainly the willingness in acquiring assets from bankrupted or reorganizing companies would be harmed. Fearful of assuming labor and tax liabilities (which are extraordinarily difficult to quantify, since, in many cases, they are only discovered after the purchase), there would be few or no interested buyers, and the discount provided by the seller would have to be considerable. Therefore, the bankrupt or restructuring corporation would find it hard to sell its assets (at least for a price close to the real economic value), undermining creditor payments, entangling the efficient allocation of productive goods, and jeopardizing the continuity of economic activities. Therefore, the ruling propitiates efficiency in the medium and long run, despite initial inefficiency.

4.2. AUTOMATIC STAY OF CLAIMS AGAINST THE REORGANIZING COMPANY

The same Bankruptcy and Reorganization Act establishes an automatic stay, for up to 180 days, on claims and suits filled against the company undergoing reorganization (article 6)[15], with some exceptions.[16] Clearly, the provision promotes severe inefficiency by imposing a moratorium on creditors independently of their acceptance or any previous agreement.

Since the aforesaid stay is legally dictated (*i.e.* does not depend on the willingness of creditors) and can be obtained by (almost) any businessman or

[13] ADI 3.934/DF, Brazilian Supreme Court, Full Bench, ruled on May 11th, 2009.

[14] Extraordinary Appeal nº. 583.955-9/RJ, Brazilian Supreme Court, ruled on May 28th, 2009.

[15] The automatic stay is also applicable in bankruptcy cases, but the motive is to safeguard the *par condictio creditorum* principle (in which the association with dynamic efficiency is more complex, although also existent). Therefore, we have restricted the analysis to reorganization.

[16] There are some suits exempted from the automatic stay. They are an exception to the general rule, expressed in article 52, III, of the Bankruptcy and.Reorganization Act.

company[17], it imposes a considerable risk for all creditors. Obviously, this risk increases the costs inherent to commercial transactions, inducing a short-term inefficiency. Here again one can note the curtailing of business competitiveness in the short run.

Yet, a medium and long-term perspective justifies the prerogative. If the automatic stay were not implemented, it is unlikely that the debtor would be able to recover –given his precarious economic situation. Furthermore, if the business actually went bankrupt, a considerable share of its liabilities will not be fulfilled.

Therefore, the determination of an automatic stay seeks to coordinate creditors interests, enabling medium-term efficiency: there will be a delay in compliance (short-run inefficiency), but by increasing the probability of a successful reorganization, the chances of effective integral discharge of debts increases, besides allowing

> … the debtor to overcome the situation of economic-financial crises, granting productive source and job maintenance, as well as the interest of creditors, promoting the company's preservation, its social function and the stimulus of economic activity (art. 47).

It is no surprise that most corporate reorganization laws contemplate an *ex lege* stay, as can be seen in American (U.S. Code, Chapter 11, § 362) and French (*procédure de sauveguarde*) legislation.

4.3. THE EFFICIENT EQUILIBRIUM BETWEEN ECONOMIC GROWTH AND THE ENVIRONMENTAL PRECAUTIONARY APPROACH – BRAZILIAN'S SUPREME COURT RULING ON THE EXTRAORDINARY APPEAL Nº. 627.189

The dilemma between static and dynamic efficiency (taking into account social welfare) arose in the Supreme Court's ruling of the Extraordinary Appeal nº. 627.189. [18] The case, that presented a series of complexities, referred to an appeal moved by *Eletropaulo Metropolitana – Eletricidade de São Paulo S.A.* against a decision issued by São Paulo's State Court (TJ/SP). The challenged decision had determined that the appellant should take all necessary measures to reduce the electromagnetic field in transmission lines located near two neighborhoods, due to its potentially harmful effect on local populace's health, in accordance to standards considered adequate by Swiss Law.

During the trial, Supreme Court Justices addressed the precautionary principle, which states:

> In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation (principle 15 of the Rio Declaration on Environment and Development, Rio/92).

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[17] The initial decision to grant the appeal is based, although superficially, on the analysis of compliance of the debtor company to the requirements foreseen in article 51 of the Bankruptcy and.Reorganization Act, independently of the presentation of the restructuring plan –presented in later proceedings (article 53 of the same statute), and the evaluation and approval of the plan by creditors.

[18] RE 627.289, Supreme Court, Full Bench, ruled on June 8th, 2016.

As stressed by the appellant, the decision rendered by São Paulo's State Court adopted a Swiss regulation that was far more rigorous than national prescriptions (that in turn followed the World Health Organization directives).

Before going deeper, it is important to shed light on the relationship between precaution and efficiency.

If the precautionary principle were taken to its full extent, the environment would be better protected (and, consequently, so would the citizens); in contrast, uncontestable proof that economic activity did not produce serious risks to the environment and public health would be required (a very difficult task for innovative actions).

Under an economic long-term efficiency perspective, the requirement of severe standards to minimize (possible) detrimental effects caused by economic activities, given scientific uncertainty, can create barriers to innovation. This takes place because the costs imposed on inventors and corporations for the development and supply of state-of-the-art goods and services would greatly increase. Alternatively, this could favor the development of technologies to detect and reduce environmental and human damages, besides stimulating the consumption of cutting-edge technology (since consumers, aware of the barriers to the supply of new goods and services, would not fear their consumption).

It is possible to manipulate the table presented by Cooter and Edlin (2014) to clarify the logic presented.

Figure 3

Time	1	2	3	4
	Development[19]	Launch[20]	Imitation[21]	Equilibrium[22]
Market Structure & Net profits	-8	Monopoly +7	Imperfect Competition +4	Perfect Competition 0

Source: Cooter & Edlin (2014).

If precaution imposes an additional cost equal to or superior than (-)3 at time "1", the project will not be carried out and investment in development will not occur, since not even the guarantee of patent monopoly would provide sufficient profit. If such a cost is between -3 and 0, the project can be developed, depending on the risks involved. In return, consumers trust in manufactures and developers –and their precaution– could increase profits obtained in time "2", as consumers are more willing to acquire the new technology (or, inversely, poor reputation can disincentive consumption, decreasing profits in moment "2" and, possibly, moment "3"). Such variables must be considered not only by entrepreneurs, but also by legislators and judges, since their decisions directly impact the scenario.

[19] At Time 1, necessary development investments take place. Therefore, in terms of entrepreneur benefits, valuation is negative (-8).

[20] At Time 2, the product is launched. The patent monopoly guarantees exclusivity, leading to high profits (+7).

[21] At Time 3, the invention falls into public domain. Competitors can explore and produce substitute products, which decreases inventor profits (+4).

[22] At Time 4, product or service substitutes are perfected and competition is intensified. The inventor's profit drops and profit rates stabilize. Note that "0" does not mean the lack of profit, but rather ordinary profit rates (equilibrium in a competitive setting).

In synthesis, given the antagonistic effects on efficiency, the adequate adjustment is at an intermediary point: one cannot be excessively lenient, nor excessively demanding, in applying the precautionary principle.[23]

Noteworthy, however, is the variation of this point of adjustment given specific societies. For instance, Switzerland possesses advanced technologies, highly qualified workforce, specialized laboratories and a balanced competitive market (in general). Therefore, imposing a high level of precaution can, in thesis, foster the development of technologies favorable to the assessment and reduction of environmental and social damages caused by economic activities, and favor consumption of innovations. In other words, the stimulation effect on consumption of innovation and the development of alternative technologies can overcome the inhibitory effect to innovation brought on by an increase in entry cost.

However, going back to the case at hand, Brazil does not possess the same conditions as Switzerland. Imposing a "mitigated" precaution (but not suppressing it) can be more efficient in the medium run, gradually increasing existing precaution. Long-term efficiency can entail a choice in initial conditions involving, not rarely, short-term efficiency. That is to say there is no universal and immutable guarantee for long-term efficiency.

This logic could have guided Brazilian Supreme Court Justices. Be that as it may, the Court preferred to grant the appeal basing its ruling on a more subjective notion of proportionality, affirming the reasonableness of standards established in national legislation. This meant it did not have to consider the (in)efficiency caused by a excessively precautionary approach and the inhibitory effect on economic growth[24] This led to the following thesis decided by a majority vote:

> … as long as there is no scientific clarity on the harmful effects of occupation and general population harm due to the exposure to electric, magnetic and electromagnetic fields generated by electricity, the parameters proposed by the World Health Organization (WHO), enforced by Law nº. 11.934/2009, are to be adopted [less rigorous than Swiss law].

5. MOMENTANEOUS WELLBEING, GENERATIONAL INEFFICIENCY

Not to endorse a proposed norm or public policy due simply to initial inefficiency, without considering future generational benefits, is to impede the realization of public interests in its fullest extent. Despite that, there is an even worse situation: decisions taken to improve present welfare leading to enormous generational losses in the future. Such decisions usually derive from government's inability to deny claims made by "special interest" groups or the need to obtain rapid electoral response to its initiatives.

In economic literature, this is known as the Political Budget Cycle (ROGOFF, 1990). The author focuses his analysis on government tax plans, inter-federative transfers and current expenditures. The conclusion indicates that governments tend to distort fiscal policy, reducing taxes and increasing transfers and expenditures, so as to bring about immediate visibility. These actions from elected representatives most usually produce (or worsens) fiscal budget disequilibrium, adding on debts. According to this study, the Politician that increases fiscal imbalance tends to receive more votes; on the other hand, responsible Politicians tend to lose election cycles. This takes place

[23] Evidently, ascertaining the ideal point of equilibrium between precaution and growth is a difficult effort. An intense debate takes place regarding the application of the precautionary principle. For more on this subject, see: Aragão (2013), Cezar & Abrantes (2003) and Gonçalves (2013).

[24] The concern with economic development was emphasized by some Ministers of the Court.

because, while generating deficits, governmental expenditures produce a mirage of efficiency, at least in the short run.

This phenomena is archetypical to Brazilian political decision-making, namely, but not only, in regard to the national social security benefits and wealth transfer programs, which correspond to over half of the primary federal expenditure, with an unsustainable growth rate in the following years.

This problem is severely aggravated by the real increase in minimum wages. For obvious reasons, a large number of voters consider increases of the national minimum wage as positive. However, in doing so, governments take on tremendous costs; worse, this policy does not necessarily benefit the most in need of assistance.

Nery (2005) directly addresses the issue. Brazilian federal government substantially increased expenditure by raising minimum wage due to a:

- Constitutional link of social security benefits to the minimum wage;
- Rise in the number of people considered eligible for social benefits (because of the increase in national minimum wage, more people are eligible for social welfare programs, such as the "Continuous Cash Benefit" [*Benefício de Prestação Continuada*], which guarantees a minimum wage for poor elderly and disabled citizens).

The problem is that, besides increasing public debt, minimum wage has lost the ability to reach the neediest. Successive real increases in minimum wage has led to a gap between its amount and the poorest in Brazilian society; consequently, this policy does not lead to a decrease in income inequality

For instance, in 2015 the minimum wage was at BRL $ 788,00 (approximately US $ 200), ten times above the national extreme poverty line (US $ 19,54 – BRL $ 77) and five times above the national poverty line (US $ 39 – BRL $ 154). These two measures are the reference value for the *Programa Bolsa Família*, one of the main national cash transfer policy (Nery, 2015).

It goes without saying that the mentioned welfare programs (*Benefício de Prestação Continuada* and *Bolsa Família*) are financed through taxation, which is especially ironical in Brazil, where the tax modeling induces a much heavier proportionate burden on lower income families.[25] It would be difficult to find a clearer example of Director's Law in action: *"Public expenditures are made for the primary benefit of the middle class, and financed with taxes which are borne in considerable part by the poor and rich"* (STIGLER, 1970).

The aforementioned situations illustrate the need to rethink constitutional links to minimum wage, despite the difficulty to approve such a measure in Congress. The future, however, is not daunting. The use of policies leading to fiscal imbalances – generating severe long-term economic problems– for the sake of immediate electoral returns, has been constantly criticized, even within the political sphere.

As former Brazilian president Fernando Henrique Cardoso has stated (2016):

> The recognition of inequality only increases distress and responsibility of those who are aware of it. In Brazil, we are faced with something of the sort. There are some who should be held accountable, but I shall not point fingers. Probably a few of them, if intellectually honest, are wondering: how did I not foresee that overburdening the country with increase in public debt, even if under the pretext of momentarily increasing wellbeing and creating the illusion of economic growth, is dire, and that future generations will pay the price? A simple example: when Congress rejected a constitutional amendment that established a minimum age for public

[25] Studies developed by the Planning and Taxation Brazilian Institute (IBPT) in 2015 show that over 79% of Brazilians earning less than 3 times the minimum wage on a monthly basis contribute to 53% of total tax revenues.

> retirement pension during my presidency, many cried victory. Some, a decade later, noticed that it was not about being "neoliberal", but of projecting the financial consequences of inevitable demographic tendencies to the near future. In light of the harm done, there is no use crying over spilled milk, we must unite to find new paths.

Both examples –minimum wage links and minimum age for public retirement pensions– refer to political decisions that have constitutional stature (art. 201, § 2º, and art. 203, V, of the Brazilian Federal Constitution). Therefore, alterations would require constitutional amendments, demanding significant congressional support (3/5 of favorable votes in each House).

However, a number of other situations can also cause long-term inefficiencies and are subject to quicker resolutions. Ilan Goldfajn (2016), current president of the Brazilian Central Bank, mentioned one when questioned about the existing mechanisms to reduce high interest rates charged by financial institutions:

> We must remember that interests are a cost, because most measures lead to an increase in cost without us even realizing it. For instance, sometimes ideas involving directing credit allocation and increasing mandatory deposits, or reallocating capital for short-term purposes, may seem good in the short run, but in the long run increases costs. It would be great if we could look at the medium run effect of the short-term decisions.

Even these changes encounter resistance. Even more so because long-term costs are postponed and widely spread throughout society (*e.g.* inflation or low GDP growth), while short-term (apparently) favorable effects directly impact groups of people, generating immediate political returns (*e.g.* governmental subvention of credits to rural workers or housing). It is true that some Politicians seem unwilling to implement the necessary changes. Nevertheless, this should not impede the public demand for adjustments of policies; ultimately, government's sole concern should not be immediate recognition, and, moreover, it cannot be held hostage to corporations or special interests. Government must be *"of the people, by the people, for the people"*, as well put in Lincoln's atemporal Gettysburg Address, and the notion of *people* includes all citizens. Fortunately, these certainties gradually permeate the Brazilian political rational.

6. CONCLUSION

The presented theory sheds light on important lessons for Brazil, as well as many other Countries, in terms of legislation and public policies: some regulatory change may lead to initial loss in welfare, compensated by increased economic growth in the medium and long-term.

Examples of such findings are encountered in Bankrupcy laws regarding (a) provisions that relieve buyers from the assumption of labor and tax debts owed by bankrupt or reorganizing sellers, and (b) provisions that enact an automatic stay of claims and suits in place against the debtors undergoing restructuring. In these cases, there is an initial inefficiency, by stalling or impairing the fulfillment of liabilities, but also an arousal of conditions that increase efficient allocation of goods or the probability of business recuperation, factors that will benefit workers, creditors and State in the long run.

Additionally, Brazilian Supreme Court had to face the dilemma, although covertly, between static and dynamic efficiency, when judging the Extraordinary Appeal nº. 627.189. This ruling reviewed the establishment of adequate levels of precaution that should be adopted, in light of scientific uncertainty regarding the possible harmful effects of electromagnetic fields on human health. The Court adopted

an intermediate solution, allowing the adoption of parameters set out by the World Health Organization, even though such parameters were less secure than those enforced by Swiss regulations. This case analysis reinforces that a debate involving efficiency must consider the current state of economic, social and scientific development in each country.

It is important to stress, however, that there are various governmental initiatives that are extremely harmful, notwithstanding an initial increase in welfare levels, since they induce intergenerational inefficiencies. In this subset are initiatives that unnecessarily increase fiscal debts, without producing significant or justifiable impacts on societies wellbeing as a whole. Normally, these harmful actions are related to the State's incapacity to deny claims made from powerful interest groups or to the need of rapid electoral returns. One must bear in mind, when confronted with these sort of demands made by "special interest" groups, that yielding is not only detrimental to genuine public interests in a long-term perspective, but also corrosive to democratic parliamentarian representation, executive technocracy, and judicial impartiality.

Succinctly, we can further Timm's (2014, p. 28) claim that *"inefficiency is always unjust"*, clarifying that this isn't the case when benefits generated by medium and long-term economic growth supersede said (initial) inefficiency.

The legislative and regulatory decisions, and even judicial rulings, should be aware of repercussions in social welfare, notably under a dynamic efficiency prism. In other words, the analysis of norms, regulations and public policies pertinence must consider an intertemporal framework. Neglecting to do so may lead to not enacting positive decisions when considering only present gains, or, worse, adopting measures that brings about ulterior generational hazards.

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