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LEGAL BUBBLES: A PRIMER IN THE ECONOMICS OF 'LEGAL CREATIVE DESTRUCTION'

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Legal Bubbles: A primer in the economics of 'legal creative destruction'

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Abstract

A legal bubble is a notion that applies to the making of the legal foundations of innovative services. There is a legal bubble when economic agents plan their economic actions with respect to a new resource, in the light of property rights solutions provisionally backed by courts, in the belief they are stable. That gives rise to a period of accumulation of expectations about the possibility to secure robust property rights over the newly discovered resource, which in turn fuel further investments. In fact, courts' backing is only temporary and economic agents' expectations turn to be wrong, because early property rights have been supplied by courts out of haste and ignorance as to the implications of the new activities in terms of hierarchically superior rights – e.g. fundamental rights. Once courts learn about the actual implications of the newly emerged activity they start revising the balance between commodification claims and competing hierarchically superior rights. The burst of legal bubbles comes as a result of courts' hindsight attempt to re-adapt the legal foundations to the actual legal implications that previously were ignored. The economic fallout of the revision of early property rights solutions can generate investment debasement and economic disarray in ways similar to speculative bubbles. In fact, entrepreneurs discover their investments have been made in the light of still in-adapted property rights solutions doomed to be – often retroactively – reversed with potential demise of an whole industry.

KEYWORDS: legal institutionalism, property rights dynamics, legal creative destruction, legal instability

JEL CODES: K10, K20, K40 L10, L50

1. Introduction

Courts, judges make their decisions and base their normative judgments upon their knowledge of the underlying facts (Petersen, 2011). They often do so by incorporating much of non-legal knowledge about the implications of the facts underlying their decisions. This means that they have to access this knowledge, which might be hard to retrieve and use because they often "lack the necessary expertise to deal with empirical questions" (Petersen, 2011), especially when disruptive innovative activities are involved. They also have to learn what are the various legal, competitive and political dimensions involved in the new transactions subject to their decisions (Vatiero, 2020). In particular, they have to learn about the implications of granting property rights solutions in terms of the prevailing order of hierarchically superior legal interests – e.g fundamental rights, antitrust or democratic order (Kolac et al 2019). As Jural relations are interdependent (Hofeld, 2013), if the newly released property rights solutions turn out to be in conflict with the prevailing fundamental legal interests of the legal system they will necessarily be revised or discarded.

Because judges' normative beliefs are shaped by their knowledge of the actual implications of innovative activities (Petersen, 2011), they do not stabilizes insofar they have adequately learnt about them. As courts learn about the actual implications of the newly emerging activities they start revising the balance between commodification claims and competing hierarchically superior rights. This learning process takes time, a time during which economic agents go on with their economic activities and in particular innovate. In fact, the latter cannot wait for courts to form their stable normative views before entering and investing in the new market. Equally, courts cannot avoid deciding upon cases concerning the new reality, just because they haven't formed their views yet. As a result, economic agents use legal rules that may not be adapted to their activities yet, for courts are adjudicating cases upon partial knowledge, if not mere guesses about the actual implications of the newly emerging activity (Calabresi, 1985, 2018).

This situation generates a state of affairs where economic agents plan their economic actions with respect to a new resource, in the light of property rights solutions provisionally granted by courts, in the belief they are stable. A sense of stability that may eventually turn to be wrong, because of courts' hindsight attempt to re-adapt their normative judgments to the actual legal implications that previously were ignored. The phenomenon corresponds to the temporary case

when the existing legal rules have not been able to adapt yet to the new economic situation created by the innovation. The faster the pace of technological innovation, the wider the lag between the change in the economic order and the stable adaptation of the order of rules. From this delay, a window of legal fragility opens up, during which economic interests amass upon unstable legal foundations.

Yet, the revision of early simplistic views about the compatibility between the early property rights solutions granted over the new resources and the prevailing order of rights, may lead to their reversal in a retroactive way. With the consequence that entrepreneurs may discover that they have been using resources they did not really own. Retroactive revision is more common when hierarchically superior legal interests are discovered to be involved (Kołac, Quintavalla, Yalnazov 2019) – e.g. fundamental rights, competition law or the public order. Think of the removal of gender discrimination in marriage issues with retroactive effects in the domain of property rights and security interests (Tritt Lee-Ford, 2016).

This is an example of cross-sector retroactive revision of property rights, because the legal acknowledgment of fundamental rights violation does not affect the legal foundations of an whole industry as such. By contrast, there are cases when the acknowledgment of the actual legal implications in terms of fundamental rights affects the legal foundations of an industry, as it bears on the very possibility of commodifying and trading a resource. There are instances - however rare - where the learning about the actual implications of early property rights solutions may eventually disrupt the legal foundations of the industry. That may generate a collapse of an whole industry caused by courts turning their backs to entrepreneurs' claims thereby withdrawing their early legal backing.

In this chapter, to characterize this situation, we introduce a new concept, very similar to speculative bubbles, namely the concept of legal bubbles. Akin to speculative bubbles which stem from herd behavior embracing wrong views about the stability of prices of some assets, legal bubbles emerge out of wide-spread adoption of ill-founded views about the stability of legal rules – e.g. property rights. In both cases expectations of return attached to investments in an industry may eventually turn to be ill-founded. The burst of such bubbles follows the revocation of courts' backing to economic agents' claims, for they have proved incompatible with the prevailing fundamental rights framework.

Although we cannot analyze in detail any specific example of a legal bubbles, which would go beyond the scope of this general and theoretical essay, we can give a couple of examples. Each of which will be thoroughly examined in separate papers.

One historical example of property rights revisions due to the acknowledgment of the incompatibility between commodification of and hierarchically superior rights is the slave economy. Which eventually went burst when courts – e.g. Somerset v. Stewart [1772] - started eroding the legal foundations of the commodification of human beings because of the acknowledgment its incompatibility with innate and universal freedoms. Today, the most promising candidates to qualify as a legal bubbles are those industries based on the commodification of personal data, as the new currency of the internet and AI enabled industries. Despite growing investments and consensus surrounding these rising industries, their legal foundations are marked by radical uncertainty. Because no one can anticipate how they will impact fundamental rights and other hierarchically superiors legal interests (Forsh-Villaronga 2019). The day of reckoning has long been coming to the fore, as courts and rule makers talk about a "boiling point" reached by the digital ecosystem. There is growing concern that we are actually "trading fundamental rights" (Florez Rojas, 2016, Buttarelli, 2018), with a rising consensus to partly make them inalienable as fundamental rights or constitutionally protected interests, in the EU and the US respectively (Hijman, 2016).

Apart form specific cases, in the following we sketch out the general dynamics that lead to the formation of a legal bubble. Then we share some remarks on the legal creative destruction, that is the result of the combination between the constitutive role of law within a market economy and the fact that rules are interdependent and no one can anticipate how they may eventually interplay. Than it concludes.

2. The formation of a legal bubble over a newly discovered resource

2.1 The twofold innovation required to exploit a new resource

New services and goods tend to be exploited and marketed in a context of legal incompleteness (Nicita, 2006, Barzel, 1997, Merryl and Smith, 2019). That is even more the case when they are based on a newly discovered resource or technology surrounded by strong economic interests attached to their commodification. In these case, despite radical uncertainty as to the legal implications of the commodification of the new resource, economic agents press ahead to exploit and create a new market (Kuchar, 2016). Because there is no specific legal provision to regulate the new resource or activity, entrepreneurs must experiment with both the economic and the legal dimension of innovation. And they usually do so by releasing 'property rights by contract' solutions to turn their actual control of the new resource into a legally protected claim to it (Van erp, 2015, Pistor, 2019).

Given the uncertainty surrounding the success of both the economic and legal dimension of their innovative activities, economic agents plan their actions in the light of mere expectations of both legal and economic nature. As to the economic dimension of their guesses they relate to the success in selling new services or goods in the market. They are uncertain as they are contingent on agents' ability to persuade customers to buy – or subscribe to - them. While, as to the legal profile of the innovation, entrepreneur's expectations are conditional on their success in securing property rights over the new resource and the activity it enables. Which is uncertain too, as it depends on their ability to persuade courts to side with them. In fact, the very nature of innovation is both legal and economic and these two dimension are complement to each other. If entrepreneurs' expectations are let down in either of these two dimensions, returns on their investments are undermined as their economic value is no longer secured by sound legal foundations (Cole, 2015).

In more traditional domains of the economy, economic agents can test both dimensions of their innovation at more or less the same time, and decide on their investment strategy by knowing the property rights governing the exploitation of the new resource. By contrast, in those industries characterized by creative disruption, the well known "pacing problem" between technology and law prevents their smooth co-evolution (Ebers, 2020). Technological innovation triggers a quick change in the order of economic actions and that order of rules takes time to catch up. Because the normative issues raised by the new reality incompleteness expose law's incompleteness, and requires the adaptation of the order of rules which takes time to be performed and properly gauged. During the time lag that emerge before the order of rules adapts to the order of actions, economic agents keep planning their investments in a context of complementary uncertainty cutting through both the legal and economic order. Namely, a state of affairs where economic plans are conditional on property rights solutions whose stability is conditional on the actual legal implications of economic exploitation of the new resource, which are yet to be discovered.

So, economic agents must plan their investments in the light of property rights solutions they have designed by contract, whose success is contingent on them being finally validated by the keepers of the legal systems - the courts . Which, in turn, can only properly gauge the normative implications of early property rights solutions after sometime. As a result, at the frontier of technological innovation, economic agents make their investment despite the actual consolidation of the legal foundations of the industry - they provisionally have proposed by contract – is yet to be secured.

2.2 Initial courts' baking of legal innovation based on ignorance, conformism, and fear of stifling innovation

Courts are the keepers of the legal systems and are also those to filter out unacceptable property rights by contract solutions supplied by economic agents. Courts must do so, despite they may actually lack adequate knowledge to gauge the actual implications of the new reality, especially at the early stage of development o a new technology. Often they lack the skills necessary to make sense of the underlying empirical reality (Petersen, 2011), let along the ability to anticipate all the legal implications of property rights solutions advanced by entrepreneurs. Because courts are staffed with human beings, who "face severe constraints in terms of resources, time and expertise. In a world of increasing technological complexity" (Macey, 1989:97), they lack knowledge to adequately form their normative judgments on the matter (Petersen, 2011). And yet, they cannot avoid deciding upon opposing claims on the part of entrepreneurs, users and other stake holders, just because they haven't formed their views yet. .

In a context of uncertainty, often surrounded by technological enthusiasm and fear of hampering innovation, "decision makers have a tendency to be blinded by spectacular technological achievement and consequently neglect the underlying legal concerns" (Mandel, 2017: 235). Courts tend to adopt indulgent decisions favoring innovation when they lack robust justification for alternative solutions (Klonick, 2017, Calabresi, 2018). And legal scholarship may not be of assistance in courts' quest for alternatives, as they may only "find an unhelpful melange of limited, seemingly mutually exclusive theories that is of little practical use. (Bennet, 2019:754)". The tension between courts' time-consuming process of accommodating the innovation within the prevailing order of rules and principles – beyond the technical delay that is typical of legal decision making (D'Agostino E., Sironi E., Sobbrio G. (2018) – and the haste of economic agents to seek legal protection for their investment, lead to the adoption of early solutions with poor epistemic justifications (Calabresi, 1985).

Moreover, the normative views encysted in early solutions rapidly spread, favored by several biases from judges, which tend "to take only a limited number of factors into serious consideration" (Simon and Scurich, 2009:419). They tend to confirm their status quo preferences (Tockson, 2015), when that allows for avoiding to have "to rethink the merits of a particular legal doctrine' (Macey, 1998:71). Moreover group dynamics may favor the adoption of ealry solutions on the spur of imitation as legal rules boil down to "temporary approximations which some people in their wisdom

have found to be convincing at certain points of time."(Goff, 1987). These collective dynamics make conformism socially rewarding (Harnay, Marciano 2006, Sayo and Ryan, 2015) which paves the way for 'precedential cascades'(Talley, 1999, Daughety and Reinganum, 1999)." In this way, early and weakly scrutinized legal decisions can become normative and confirm investors' views about their ability to secure stable property rights over new resources.

Indeed, courts can learn about actual implications of innovative services and may revise their early solutions, though not immediately (Buchi et al, 2020). The process of discovery of the actual implications of legal innovation may require sometime even at the single judge level, in ways similar to the evolution present in the economic order labeled "from infancy to maturity", or from "craft to science" (Vincenti, 1990, Bohn, 2002). Indeed courts must learn about the practical implications of the new reality because their "normative argument may be misleading if that is based on unrealistic empirical assumptions (Petersen, 2011). And they have to articulated their judgments in a way "to achieve an intellectually satisfying body of rules and principles' (Bell and Ibbetson 2012: 163, see also Graziadei, 2009).

Moreover, the process of revision can indeed be slowed down by conformism and subsequent resistance to legal change as it is the case for any 'political' deliberation. For case law dynamics, as any social process, is marked by unconscious political dynamics shaped by conformism, consensus and opposition to the prevailing order (Lord Goff, 1987). That social dimension of legal adjudication and law's evolution, as it happens in unexpected political revolutions (Kuran, 1989), makes judges and courts reluctant "to take the lead in publicizing their opposition" (Kuran,1989:42) to the prevailing property rights solution and keep it private. At least as far as it seems to enjoy widespread public support (Kuran, 1989:42)". That may generate "spiral of silence" (Noelle- Neumann, 1974) where courts monitor the social environments and stick – at least for a while - to opinions that are popular and seem to be endorsed by a normative consensus.

As a result, courts may keep enforcing early property rights solutions even when they have already lost actual support within the judiciary at the single judge level, which are not revised yet because of coordination issues and reputation fears. As a result, despite the growing opposition to the prevailing property rights solutions, economic agents keep using legal rules based on mere guesses about the actual implications of the newly emerging activity (Calabresi, 1985, 2018). All that, not until external shocks may trigger consensus shifts within the judiciary.

2.3 Legal bubbles: the (re)making of the legal foundations of innovative markets

As we have seen from the above, the emergence of a new resource elicits various discovery processes, interdependent with one another, each concerning some institutional implications of the enabled transactions. Each is aimed at establishing specific implications concerning the competitive, the legal and the political consequences of the newly emerging activities. We concentrated on the legal and economic dimensions, that have the most straightforward implications for the making of the legal foundations of the new markets via property rights by contract. That is mainly the results of two process concerning the legal implications of new activities, because economic agents need to discover them to plan their investments, while courts need to gauge them to properly adjudicate legal claims (Harnay and Marciano, 2006).

Initially, the co-evolutionary discovery processes take place in a context cf radical uncertainty where the two groups are led by nothing but reciprocally reinforcing guess. In a first stage, the overall result is that out of ignorance, conformism, and fear of stifling innovation, courts backs property rights by contract solutions initially advanced by entrepreneurs. The reciprocal confirmation between courts and economic agents about the desirability of the commodification of the new resource provides a sense of legal consensus, that in turn spurs investment with the result that new industries can be edified upon fragile legal foundations. The courts' learning about the legal implications of the new activities affects economic agents' own plans to exploit the new resource, which in turn affects the legal implications of their activities, which again affects courts' views etc etc. he reciprocal adaptation is yet slowed and delayed by coordination issues and individual motives, and that generates a time window during which economic agents use legal rules that are inadapted to the newly emerging reality and increasingly unstable.

The gradual and consistent divergence between economic expectations of legal protection and courts' generates a period of legal fragility. During which economic agents load up investments and increase the amount og value-at-risk for lack of legal foundations. The longer before early solutions are revised and more carefully considered legal rules come to maturity, the worse the ensuing economic disruption.

As it is the case for political deliberation processes (see e.g. Kuran, 1989), external shocks like public scandals or incidents can help expose tensions and disagreements with respect to a legal regime which seems to enjoy widespread support within the judiciary (Van Elten and Rehder, 2020). The spark of contestant provided by an

external event can help single judges take leadership in publicizing their opposition (Friedman, 2009) and thereby eliciting the legal shift and toppling the prevailing order or property rights.

As courts discover widespread opposition to the prevailing order and discover the actual legal implications of the new activities, they start enforcing their new normative views retroactively to past facts thereby remaking the legal foundations of the industry. In a cascade similar to the one that favored the adoption of the now rejected early solution, courts start defending the overarching legal interest that has proved to be incompatible with the previous property rights' framework based on wrong views about the mechanisms in place within the innovative industry.

Although, the evolution of law tend to be smooth, and even when truth is discovered .In some instances, part of the judiciary may pull towards stability and legal certainty if "the truth [concerning the underlying reality] is too dangerous or too much at war with past experience", and so ignore ita at least for sometime (Calabresi, 2018:171). However, there are other instances when newly emerged political and cultural attitudes are translated into formal judicial decisions, even if at war with precedents (Lipkin, 2000). They are called constitutional revolutions, which translate into property rights by contracts shifts in the domain of private ordering, and come under the form of the withdrawal of courts' backing of economic commodification claims.

In these cases, the change can be so fast and retroactive that economic agents do not manage to divest from the industry in an orderly fashion and the economic disruption becomes unavoidable. In cases of technological innovation (Martini, 2020), ex post facto solutions are more frequent than expected and "are typically treated as merely a recognition of what the law has always been' (Calabresi, 2018:164), meaning that the shifts "operate retroactively in the sense that they affect conduct that already has occurred" (Macey, 1989:100). Thus the shift questions the very legal foundations of the innovative market.

To make sense of these legal shockwaves sent through markets by the discovery processes underlying to the making of the legal foundations of innovative markets, we articulate the notion of legal bubbles. A legal bubble exist when:

> economic agents plan their economic actions with respect to a new resource, in the light of property rights solutions provisionally granted by courts in the belief they are stable. That gives rise to a period of accumulation of expectations about the possibility to secure robust property rights over the newly discovered resource, which in turn fuel further investments. In fact,

> courts' backing is only temporary and economic agents' expectations turn to be wrong, as early property rights have been supplied by courts out of haste and ignorance as to the implications of the new activities in terms of hierarchically superior rights – e.g. fundamental rights. Once courts learn about the actual implications of the newly emerged activity they start revising the balance between commodification claims and competing hierarchically superior rights. The burst of legal bubbles comes as a result of courts' hindsight attempt to re-adapt the legal foundations to the actual legal implications that previously were ignored. The economic fallout of the revision of early property rights solutions can generate investment debasement and economic disarray in ways similar to speculative bubbles.

The acknowledgment of the existence of legal bubbles, indeed, highlights the constitutive role of courts as the keepers of the legal system in a market economy (Deakin, Gindis, Hodgson, Kainan, Pistor, 2017). It allows to caution against institutional exuberance in the making of the legal foundations of innovative markets, whereby the discarding of early an in-adapted property rights solutions may require more time, as unintended and harmful consequences may only be discovered after a while. Legal bubbles underscore the complementarity between legal and economic dimensions of an innovation for it to be successful. The revision of the legal foundations of an innovative industry can be as disruptive as a technological breakthrough.

From another perspective, namely that of entrepreneurs, legal bubbles can also be characterized as failed bets that economic agents make industry-wide on the commodification of new resource, in a context of legal incompleteness. Their bets are contingent upon their persuasive ability to get courts back their claims (Pistor, 2019), at least as long as the new industry has grown big enough to make politically and economically difficult to implement any hindsight revision of its legal foundations. Indeed, as Collindridge pointed put, in early stages of development of a new technology, rule makers do not have knowledge to properly gauge the implications of the new activities and their early backing is based on mere guesses.

By contrast, when their undesirable consequences are discovered, the degree of penetration in the economy and society is already such that it tends to shield the industry from any hindsight attempt to re-regulate it (Collindrdge, 1980). This awareness, sounds like a sort of incentive for institutional moral hazard pushing economic agents to rush to edify an new industry irrespective of the stability of its legal foundations. Provided that it gets big enough, entrepreneurs might be betting that the industry's legal foundations will not be revised.

On closer inspection, it appears that entrepreneurs' legal bet is actually twofold at least. First it relates to the possibility of securing property rights before the legal implications of a new activity have been established. That is attained by persuading judges to supply early baking to their claims. Second, it also relates to the possibility of acquiring a sort of "too big to fail" protection in the legal sphere where, despite the violation of hierarchically superior legal interests concerning fundamental rights, competition law or the democratic order has been discovered by courts.

3. Legal bubbles as an instance of legal creative destruction

The existence of legal bubble underscores the economic implications of the combination between the constitutive role of law within a market economy and the fact that rules are interdependent and no one can anticipate how they may eventually interplay (Torre, 2014), especially with regard to fundamental rights and other legal boundary conditions. As many conflicting courses of actions can eventually turn to be incompatible within the economic order, two sets of legal rules and principles can unexpectedly prove to be incompatible. Moreover, the role of group dynamics that favors conformism and entry barriers is an additional element to challenge the one-sided view of Austrian economics that courts are mere middlemen who apply the law (Marciano, 2012).

Taken from this perspective, creative disruption that redefines market relations is present in law too, as it results out of recombination of legal materials (legal formants) in the light of courts' learning about actual interdependence between legal situations within the new industry. The revision of early solutions has both a creative and a disruptive side to it. On the one hand, it creates and reinforces the protection of fundamental rights and other hierarchically superior interests which until then were compressed in favor of property rights over the new commodity. On the other it has a disruptive effect on the property rights of the commodity which are eventually set aside in favor of hierarchically superior interests.

As a conclusion, the existence of legal bubbles challenges the mid-term efficiency of the spontaneous emergence of property rights as advocated by Demsetz and the property rights school. Because, it runs counter the idea that property rights are instrumental to the market discovery process and emerge out of smooth "trial and error, so that bad solutions [that] lead to unsatisfactory performance [...] tend to be discarded in favor of superior institutional answers"(Barzel, 1989, see also Colombatto and Tavromina, 2017). Instead, it shows that unsatisfactory property rights solutions may persist over time only because their undesirable implications in

terms of hierarchically superior rights (Kołac, Quintavalla, Yalnazov 2019), are yet to be discovered. And that to emphasizes the implications of creative legal destruction which may follow, which consists of the economic consequences of wrong expectations about the stability of the prevailing order of property rights. The recognition of the role of time, uncertainty, and wide-spread ignorance about the implications of disruptive technologies allows to adopt an "indeterministic dynamic subjectivism" (O'Discroll and Rizzo, 1985) to analyze judges' activity of scrutiny of legal entrepreneurs' legal innovations.

Therefore, the role of ignorance and lack of foresight cannot be overestimated in the process of emergence of law in general, that is even more the case in the presence of disruptive technological innovation. In particular, the inability of courts to anticipate the consequences of their actions can first help the bubble grow, as they do not anticipate the implications in terms of fundamental rights and other hierarchically superior rules (Mandel, 2017, Zywicki and Boettke, 2017). Similarly, the inability of economic agents to gauge the economic implications of the instability of early property rights solutions underlies over-investment in the new product. In turn, when the actual implications of a new technology become clear, courts may inadvertently trigger the bursting of the bubble as they do not anticipate or do not consider the economic consequences of the revision of early property rights solutions. Ignorance, in both periods, fuels the bubble's evolution.

4. Conclusion

Legal bubbles underscore the complementarity between the legal and economic dimension of an innovation for it to be successful. They show that at the edge of technological innovation, creative destruction characterizes both economic and legal relationships, with potential economic shocks coming from both entrepreneurs' and courts' discovery processes.

Akin to speculative bubbles that stem from ill-adaptation of the price system to the economic implications of the underlying reality, legal bubbles grow because of the ill-adaptation of legal rules to the legal implications of the underlying reality. To conclude, legal and speculative bubbles alike, refer to economic disruption generated by ill-based anticipation of "what others anticipate" with regard to a specific coordination mechanisms within the market economy (Keynes, 1936). The former refers to prices, the latter to legal rules.

The two of them can be traced back to the genus of *institutional bubble* which

characterizes all investment decisions based on expectations "sustained largely by investors' enthusiasm" (Shiller, 2000:xiii) rather than on expectations sustained by the fundamental objectives of the underlying institution.

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