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Evolutionary Theories of Derivatives Regulation

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Abstract

The neoclassical economics regards derivatives as the necessary instrument providing not only liquidity or risk spreading, but enabling the existence of the perfectly competitive market, since without derivatives there is no possibility to meet one of the core requirements of the General Equilibrium Theorem - the complete or contingent contract claim, according to which there should be the market for any possible state of affairs. On the level of law and economics the issue arises whether derivative law and massive stock and future exchange regulation leads to the zero transaction costs micro worlds and global market of markets. A drive toward dualism might be observed: regulated futures, stock and commodity exchange (with almost no litigation, due to technical regulations; deposits, clearing house, licenses, etc.) or sophisticated conventions (OTC market) are present on this market rather than typical contracts. The derivative OTC markets are regulated by soft law enforced in non-jurisdictional way. The paradox lies however in a fact, that derivatives work efficiently within a perfect competitive market structure, whose existence is conditioned upon the effective work of derivatives. The purpose of this research is to address the question whether the Coasean theory of regulation is correct and eventually how to explain the existence and growth of the OTC market for derivatives from the perspective of the transaction cost economics. The results of the survey could be implemented in preparation of the coherent normative theory of derivative regulation.

Keywords:
derivative regulation, financial innovation, transaction cost, Coase theorem, comparative institutions and market structures.

JEL classification:
K10, G20, L10

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Teorias evolutivas **en la regulación de derivados**

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Resumen

La economía neoclásica se refiere a los derivados como el instrumento necesario no solo para proporcionar liquidez o repartir riesgos, sino también para permitir la existencia de un mercado perfectamente competitivo, ya que sin los derivados que no hay posibilidad de que se cumpla uno de los requisitos básicos del Teorema del Equilibrio General —la demanda de un contrato completo o contingente de acuerdo con el cual se genere el mercado para cualquier estado posible de las cosas. En el plano del derecho y la economía la cuestión que se plantea es si la legislación sobre derivados y la regulación masiva sobre mercados de valores y futuros lleva a los micro-mundos de costes de transacción nulos y a un mercado global de mercados. Se puede apreciar un impulso hacia el dualismo: futuros regulados, bolsa de valores y mercancías (sin casi litigio debido a las regulaciones técnicas; depósitos, cámara de compensación, licencias, etc.) o sofisticadas convenciones (mercado OTC) están presentes en este mercado más que los contratos típicos. Los mercados OTC de derivados están regulados por una legislación blanda ejecutada en forma no jurisdiccional. La paradoja reside, sin embargo, en un hecho: que los derivados funcionan eficientemente en una estructura de mercado de competencia perfecta, cuya existencia está condicionada por el funcionamiento efectivo de los derivados. El propósito de este artículo es abordar la cuestión de si la teoría de la regulación de Coase es correcta y posteriormente tratar de explicar la existencia y el crecimiento del mercado OTC de derivados desde la perspectiva de la economía de los costes de transacción. Los resultados del estudio podrían ser implementados en la preparación de una teoría normativa coherente de regulación de derivados.

Palabras clave:

Regulación de derivados, innovación financiera, coste de transacción, teorema de Coase, instituciones comparativas y estructuras de mercado.

1. Scope and purpose

The paper aims at analysing whether regulation of financial markets and exempting such transactions as options, futures or swaps, performed by set-off from existing anti-speculative regulation (or abolishing of the majority of anti-speculative rules) may have a wider impact on the notion of risk in private law. In law and economics the issue arises whether derivative law and massive stock and future exchange regulation leads to the zero transaction costs micro worlds and global market of markets. A drive toward dualism might be observed: regulated futures, stock and commodity exchange (with almost no litigation, due to technical regulations; deposits, clearing house, licenses, etc.) or sophisticated conventions (over the counter market) are present on this market rather than typical contracts. The derivative OTC markets are regulated by soft law enforced in non-jurisdictional way. The paradox lies however in the fact that derivatives work efficiently within a perfect competitive market structure, which' existence is conditioned upon the effective work of derivatives. The normative Coase theorem suggests that regulation and judicial decisions should pursue efficiency and diminish transaction costs (Coase, 1988). Additionally Coase suggests that the regulatory framework diminishes the level of transaction costs. If this is so, what is the function of the OTC derivatives' market? Why did the regulated market not supersede the OTC market, even if statutory and judge made law in many jurisdictions aimed at eliminating the OTC market? The theory of efficiency of the common law will be scrutinised from this point of view, together with the "origin of law" hypothesis (La Porta et. al, 2008) and the "incompleteness of law" theory (Pistor and Xu, 2002, 2003). These characteristics should include the examination of the existing legal regulations in reference to the Coase theorem and the assumptions purported by transaction costs economics. The prima facie thesis is that recognition of risk-shifting legal instruments may be a next step on a long way of the immanent evolution of this system toward higher efficiency. The final part of the paper will concentrate on the notion of evolution of law as a process induced by the change of the economic theory (in light of the previous scrutiny on the relation between legal theory and regulation and underlying economic theory and policy recommendations concerning derivatives and in a broader sense the speculation as a kind of market activity). A brief look at the American deregulatory reform justifies some scepticism toward any theory of linear legal evolution, especially in a form of the "incomplete law theory". It seems that there is no determinism as far as the alleged evolution of the financial regulations is concerned. Additionally the dynamic growth of financial innovation does not facilitate the regulatory task. The question remains how to combine innovation with security under the conditions of uncertainty (the normative uncertainty hypothesis). The normative theory of regulation would favour "dynamic efficiency" and the capability to adopt the regulation to changing

circumstances rather than a fixed regulatory approach, concentrated on one particular purpose. The future regulatory frameworks will have to be responsive and multi-purposive. Three different kinds of regulatory frameworks could possibly be distinguished: transaction-oriented regulation, institution oriented regulation and market oriented regulation. It seems that the evolution of the regulatory regimes could usefully be analysed against this analytical framework.

2. The legal origin hypothesis and derivatives regulation

The paper of La Porta, Lopez de Silanes, Shleifer and Vishny stipulates that a 'legal origin' in the form of either common law or civil law has different effect in relation to the protection of shareholders interests. According to the paper the regulation shaped within the common law legal systems creates better conditions for the protection of shareholder's interests in comparison with the civil law systems. Concurringly companies in common law systems could have developed much faster, having better access to financial resources (La Porta *et al.*, 1998). Sometimes the legal origin hypothesis is being elaborated further and said to contain two substantial claims: the "law matters" claim and the "legal origins" claim (Armour *et al.*, 2008). According to the "law matters" claim, legal rules create the institutional framework for the market economy, establishing property rights (Barzel, 1997) and enforcing contracts (Hermelin *et al.*, 2007). Legal rules and their enforcement by the state could thus indirectly influence the economic output (Coase, 1959, 1960), attracting investors by safeguarding their potential returns.

Therefore the quality of regulation plays an important economic role, even if transaction costs are relatively low (Coase, 1960, 1988). Additionally, the "legal origins" claim states that the quality of laws varies depending on whether the legal system belongs to the common law or the civil law legal family. The reason for that contention is not clear, although it is generally claimed that the common law as a judge-made law is more flexible and prone to be adapted to changing circumstances. Additionally, it is claimed that judicial independence creates a very good safeguard against the anomalies of the political process, so often penetrating the statutory lawmaking process. The anomalies of the lawmaking process are supposed to influence civil law systems, leading to wasteful results due to the influence of interest groups. Additionally the civil law is said to be more 'rigid'. The question remains whether the same could be said about the difference between civil law and common law regulatory regimes on derivatives.

In this context it is instructive to mention the traditional legal doctrine opposing speculation in reference to derivatives known as the common law rules against

contracts for differences in American law (e.g. *Irwin v. Williar* 110 U.S. 499 (1884). The doctrine is based on the assumption that the speculative transactions are inherently bad from moral point of view and put into jeopardy both the people affected by gambling practices and the whole society as well, as it has been stipulated in the whole line of cases. In *Irwin v. Willar* 110 U.S. 510 Justice Matthews lucidly compared the position of the American common law on contracts for differences with English statutory law on wagering, observing that: "In England, it is held that the contracts, although wagers, were not void at common law, and that the statute has not made them illegal, but only non-enforceable (*Thacker* v. *Hardy, ubi supra*), while generally, in this country, all wagering contracts are held to be illegal and void as against public policy; *Dickson's Ex'r* v. *Thomas*, 97 Pa. St. 278; *Gregory* v. *Wendell*, 40 Mich. 432; *Lyon* v. *Culbertson*, 83 Ill. 33; *Melchert* v. *Amer. Union Tel. co.* 3 McCrary, 521; S. C. 11 Fed. Rep. 193, and note; *Barnard* v. *Backhaus*, 52 Wis. 593; [S. C. 9 N. W. Rep. 595;] *Kingsbury* v. *Kirwan*, 77 N. Y. 612; *Story* v. *Salomon*, 71 N. Y. 420; *Love* v. *Harvey*, 114 Mass. 80."

Additionally the doctrine against contracts for differences had from the beginning been based on the assumption that profit gained by the speculator was unjust. Later on this approach found some echo in economic theory, since such an ethical theory was delivered by F.B. Hawley as a theory of entrepreneurship perceived as risk bearing. F. Knight regarded such profit as rather unjust and related to massive losses (Knight, 1921). However it is the moral theory which seems to have been a supporting of the earliest anti-speculative regulations (Schwark, 1990).

Meanwhile the British and American legislation embraced statutory rules endorsed by the *Future Trading Act 1921, Grain Futures Act 1922, Securities Exchange Act 1934, Commodities Exchange Act 1936, The Commodity Futures Trading Commission Act 1974*. In the US and the UK the so called "antigambling legislation" has been adopted to the economic needs beginning with *Bernard's Act 1733*, through the sec. 18 *Gaming Act 1845* and sec. *1 Gaming Act 1892*, and sec. *5 of the Gambling Act* 2005 regarding contracts for differences as unenforceable. The application of the rule based on *Universal Stock Exchange Ltd v. Stracham* [1896] AC 166 in recent cases under the *FSA 1986* e.g. by Lord Donaldson MR in *City Index v. Leslie* [1991] AC 98 testifies that the statutory law was much more flexible and served as a vehicle for institutional and regulatory change. Moreover it seems that the traditional common law was unable to initiate the process of liberalisation.

The change of attitude towards derivatives which took part in late 1970-s and 1980-s resulted in massive deregulation and limitation of the previously enforced antispeculative laws, as it could be reflected by the British legislation dealing with derivatives and contracts for differences as specified investments: sec. *63 FSA 1986*,

Par. 7-9 Sch. 1 to *FSA 1986*, sec. 412 *FSMA 2000*, art. 83-85 *FSMA 2000 (Regulated Activitis) Order 2001*, *FSMA 2000 (Gaming Contracts) Order 2001* and exempting derivatives from the scope of regulation of sec. 5 of *The Gambling Act 2005*.

A very similar transformation took place in civil law jurisdictions, where the XIX century cautious approach to contracts for differences has been substituted with much more liberal one. The attitude of German and French law should also be mentioned; in particular the notion of the so-called *Börsentermingeschäft* in German law on stock exchanges in *Börsengesetz vom* 16. Juli 2007 (BGBl. I S. 1330, 1351), and in § 2 Abs. 2 Nr. 2 of the *Wertpapierhandelsgesetz* vom 9. September 1998 (BGBl. I S. 2708, as amended by the art. 3 des Gesetzes vom 20. März 2009 (BGBl. I S. 607) as well as earlier regulations such as *Börsengesetz vom 22 Juni 1896 (RGLB 157)*, § 53 of the amendment of 1908 (RGGl 215/BGBl III 4110-1), §§ 50, 53, 57, 58 of *Gesetz zur anderung des Börsengesätzes* 11.07.1989, BGBl I, within the context of §§ 763 and 764 BGB (including judiciary approach; e.g. BGHZ 93, 307, BGHZ 88,144,146) and the concept of financial futures (*les contrats financiers à term*) in French law and legal writing (Medjaoui, 1996, Valette, 1991, Nayer and Brochard, 1990).

The French anti-speculative approach had been reflected by the enactment of the *Law nr 1885-03-28 of 28.03.1885* "sur les marchés à terme", according to which unauthorized transactions have fallen within the scope of the art. 1965 of the Civil Code, stipulating *a contrario* the unenforceability of such transactions: "Tous marchés à terme sur effets publics et autres sur valeurs mobilières, denrées ou marchandises ainsi que tous marchés sur taux d'intérêt, sur indices ou sur devises sont reconnus légaux. Nul ne peut, pour se soustraire aux obligations qui en résultent, se prévaloir de l'article 1965 du code civil, lors même qu'ils se résoudraient par le paiement d'une simple différence." The regulation has not been changed until 1996 (art 93 of the *Law nr 96-597 du 02.06.1996* "de modernisation des activités financières"). According to the current regulation encapsulated within the art. L211-1 III of the CMF, as Amended by the *Ordonnance nr 2009-15 of 08.01.2009*, derivatives are treated as so-called financial contracts: "Les contrats financiers, également dénommés 'instruments financiers à terme', sont les contrats à terme qui figurent sur une liste fixée par décret". Nonetheless those transactions which are not mentioned within the decree are no longer "financial contracts" within the meaning of the 2009 Act. This point should be especially stressed within the context of the Article L211-35 of CMF.

According to the law's origin hypothesis the common law regulation should be more flexible. It can only be said that the brief sketch of the evolution of the anti-speculative laws proves the opposite, the main vehicle of change being statutory law and the common law being often even an obstacle towards liberalization. Moreover, there is no evidence that the civil law jurisdictions adopted a significantly different attitude

towards derivatives. The difference lies rather in the style of regulation and the institutional regime. In Germany the general legislation was enforced for a long time directly by the courts. The same can be said about France and the UK in the XIX and the first half of the XX century. Moreover there was virtually no difference of the scope of regulation. All anti-speculative laws having been established in the second half of the XIX century were essentially similar, reflecting the same attitude towards speculation: the general enforceability of contracts for differences was balanced with the exemption clauses concerning organized stock exchanges. Thus the presently called OTC derivatives became unenforceable.

This (European) approach could be contrasted with the American common law which took a much more rigid attitude, as it has been endorsed by the Supreme Court in *Irwin v. Willar* 110 U.S. 508-509 (1884), where the doctrine against contracts for differences had been affirmed in following way: "The generally accepted doctrine in this country is, as stated by Mr. Benjamin, that a contract for the sale of goods to be delivered at a future day is valid, even though the seller has not the goods, nor any other means of getting them than to go into the market and buy them; but such a contract is only valid when the parties really intend and agree that the goods are to be delivered by the seller and the price to be paid by the buyer; and if, under guise of such a contract, the real intent be merely to speculate in the rise or fall of prices, and the goods are not to be delivered, but one party is to pay to the other the difference between the contract price and the market price of the goods at the date fixed for executing the contract, then the whole transaction constitutes nothing more than a wager, and is null and void. And this is now the law in England by force of the statute of 8 & 9 Vict. *c.* 109, § 18, altering the common law in that respect. Benj. Sales, §§ 541, 542, and notes to 4th Amer. Ed. by Bennett."

Nevertheless, the hostility of judges towards derivatives does not seem to be a peculiar feature of the XIX century American common law. British judges also seem to be rather reluctant to promote freedom of contract where the suspicion of speculative transaction looms in the horizon. It is quite instructive how judges comment on the merits of derivative instruments under the shadow of the statutory regime which thoroughly authorizes those transactions. One of the most striking examples of this judicial attitude towards the financial innovations has been purported by Lord Donaldson MR, who observed: "In the common coin of political life it is not uncommon to encounter condemnation of "City speculators." It is not for me as a judge to join in that debate, but the day to day working of the markets form part of the background to this dispute and have to be taken into consideration. (...) Clearly this system would not work if all dealers in the market took the same view as to future movements in prices and equally clearly the more people there are dealing in the market, the greater the opportunity for a diversity of view. So it comes about that the intervention of "speculators" from outside

the market is not wholly unwelcome and indeed may in some circumstances contribute towards the achievement of the real objective of the market, although in some circumstances they can unsettle a market in no one's interests other than their own." (*City Index v. Leslie* [1991] AC 98). The examined problem concerned the question whether the transaction constituted the investments within the meaning of section 1(1) of the FSA 1986, given the fact that the plaintiff had already been found "authorized person" for carrying out investment business for the purposes of the Financial Services Act 1986.

In this context one may examine the question: either the liberalization of the derivative market is inefficient from the economic standpoint or the judge-made law falls short in terms of flexibility and production of economically efficient rules. Assuming that the evolution of market for derivatives is efficient and that the financial innovations meet important economic needs such as increase of fluidity, spread of information and dispersing risk, it seems that the law's origin hypothesis does not work in the context of derivative regulation. Moreover, the differences between the American and British approaches and regulatory techniques create a source of puzzlement for the potential adherents of the law's origin hypothesis. It is not clear to what extent the law's origin matters since both systems finally arrive to very different conclusions adopting strikingly different regulatory regimes. Moreover, the discrepancy between the American and English regulatory approaches is additionally paired with significant similarity between the English, French and German regulations. In all of these European jurisdictions the regulatory framework seems to be at least analogical, if not the same.

The anti-speculative, restrictive regulations were established by statutory instruments and supplemented by traditional private law. In France and Germany the regulation restricted the doctrine of the freedom of contract. It had been issued in the form of the provision of the civil code. In England the Gaming Act 1845 played a similar role, influencing the common law doctrine of enforceability of contracts. Additionally, all relevant European legal systems adopted the same regulatory instrument: contract for differences were generally unenforceable but valid and certainly not illegal. On the other hand, those transactions entered into on the stock exchange were generally exempted from the anti-speculative regulations.

Nevertheless, it may be beneficial to assume that this evidence is not conclusive and that the American approach finally favoured the most efficient regulatory regime Therefore, even though it had been true, the restrictive regulatory approach should be flexible enough to react to the evolution of the economic theory pertaining to the economic function of derivatives. Meanwhile it should be stressed that the basic framework of the American derivative regulation remained virtually untouched for almost one hundred years. It seems however that the difference between the American style and European styled regulation is conceptually too broad to be useful.

3. The "incomplete law" hypothesis and derivatives' regulation

The fundamental assumption purported by K. Pistor and Ch. Xu (Pistor and Xu, 2002, 2003) is that firstly, law is in general inherently incomplete and secondly, that the incomplete system cannot be effectively enforced. The power to interpret existing law, to adapt it to changing circumstances and to extend its application to new cases is thus called 'residual lawmaking power'. According to the "incompleteness of law" theory, residual lawmaking powers may be conferred to the legislature, courts, or regulators. Hence depending on the identity of the residual lawmaker, the regulatory regime could be legislator-oriented, judicially-oriented or administrative-oriented.

While analysing the development of financial law between the XIX and the XX century, the authors come to the conclusion that legal evolution leads from the judicially- or legislator-oriented regulatory frameworks to the more developed forms in which the administrative agencies have the last say. This hypothesis is illustrated by the parallel development of the English, American and German financial law, leading all jurisdictions towards the paramount influence of specialized administrative agencies, playing a crucial and double role of residual lawmakers and ultimate enforcing agencies at the same time. Both common law systems with the paramount role of judge-made law and civil law countries, where the statutory enactments responded to the problem of incomplete law, tend to develop the specialized agencies.

It has been suggested that the regulatory powers of either private or public regulatory agents developed faster in common law jurisdictions such as the US and the UK than in Germany. This could be an effect of both faster development of financial markets and relatively wider scope of incompleteness of law in those countries. Nevertheless it seems that the incompleteness thesis leads to two claims. According to the positive claim all jurisdictions, under some assumptions such as the growth of financial market, economic growth and industrialization, tend to create the specialized regulatory agencies. The normative claim suggests that such a development is the optimal path of evolution. The regulatory agencies could effectively match the alleged incompleteness of law as the most flexible lawmakers and at the same time they could join the lawmaking function with the supervision and proactive enforcement of the relevant regulation.

It seems that even if the "incompleteness of law theory" applies to the financial regulations concerning market for shares and shareholder capital, for various reasons it is not necessarily an adequate instrument to be used within the development of derivatives. Firstly, it does not capture the fundamental difference between the stock

exchange traded derivatives and the OTC derivatives. Secondly, the smooth evolution from judge-made or statutory rules to the sophisticated regulatory frameworks administered by specialized regulatory agencies is questionable. There are two reasons for this criticism: firstly, there is no integral regulatory regime for all derivative instruments in the majority of jurisdictions, the regulation being based on a patchwork of security regulators, stock exchange supervision, and judicial enforcement in case of the OTC contracts, the sole existence of an integrated regulator and supervisor being nothing more than either a political and regulatory challenge or a mere wishful thinking. This line of reasoning is albeit not conclusive. It surely undermines the positive claim while keeping the normative claim untouched. Analytically it could be possible that derivative market as a whole has not yet reached the stage already attained by the regulation on financial securities.

The more disruptive conclusions may be drawn from the closer scrutiny of the American path breaking history of derivative regulation. Once again the American experience seems to produce a counteracting effect. The very short story of the US derivative's regulatory framework reads as follows. In the beginning was the word or concept called "unrestricted freedom of contract". This lasted until the middle twenties of the XX century. Later on the massive regulation made the world better off, for the financial world has been dramatically tortured by the glooms of Great Depression.

The whole structure of federal agencies has been established as the offspring of the New Deal policy. The regulatory powers over derivatives have been divided between the Stock Exchange Commission and the Commodity Future Commission. Those agencies regulated, supervised and enforced restrictive anti-gambling rules. Then the trend to the liberalization came in 1970's, the derivatives still being generally regulated by the CEA with the growing list of exemptions issued by the Commodity Futures Trading Commission (CFTC). In general all 'contracts for future delivery' were either exchange-traded or void. Thus the OTC market existed only within the scope of the CFTC exemptions, concerning basic OTC transactions. Such a regulatory framework lasted to the year 2000, when the US congress passed the Commodity Futures Modernization Act (CFMA) deregulating the OTC derivatives by virtue of exemption from the application of CEA and the regulatory power of the CFTC. According to the sec. 2 d 1 of the CFMA parties who are "eligible contract participants" to any individually negotiated derivative contract on any commodity are excluded from the application of the CEA. Moreover sec. 2 d 2 stipulates that the CEA is generally not applicable at all to those transactions. The only exception to that is the set of provisions concerning fraud and manipulation of market price.

Thus the statutory law resulted with deregulation on one hand and at least partial incapacitation of the existing federal agencies on the other. At the same time such a

deregulatory approach created some doubts concerning the existence of any regulatory framework for the OTC derivatives. The underlying assumption might have been such that the very statues of the "eligible contract participants" would create a sufficient regulatory safeguard, since the requirement for ECP's would have selected only the sophisticated professional market participants (US financial institutions, non-US regulated insurance companies and banks and their US branches and agencies, participants acting as brokers, agents, investment advisers or fiduciaries) and natural persons with more than 5,000,000$ in assets who enter into the related transactions for risk management purposes. In effect the CFMA acted as a double sword: it either excluded some markets participants from any supervisory regime as in case of eligible natural persons or shifted that task to other agencies, already supervising some categories of financial institutions. The move to defragmentation and decentralization of the supervision may be regarded as striking if compared to the British FSMA 2000, which adopted the opposite approach, creating a single integrating supervising agency, i.e. FSA.

Thus the step back is not excluded and the sound theory of legal evolution should take it into account. Additionally, in reference to the "incomplete law theory" it should be observed that in the majority of jurisdictions the regulating and enforcing agencies do not in fact have the last say, taking the powers of judicial control of the administrative actions into account. In the majority of cases the administrative decision can be overruled by the court. Hence, the judicial control plays an increasingly important role, creating a counterbalance to the growth of the so-called "regulatory state". It is not certain however whether it means that there is no legal evolution and the regulatory regimes may not fruitfully be analysed against any evolutionary background.

4. The "normative uncertainty" hypothesis and three models of derivatives' regulation

The problem with any coherent legal theory of derivative regulation is that such a theory is always depending on the economic theory. Since there is no coherent normative economic theory of derivatives, it is very difficult to expect lawyers to offer any coherent legal theory as well. Is the whole effort doomed to failure then? It seems that the economic function of derivatives is somehow paradoxical. The neoclassical economics regards derivatives as the necessary instrument providing not only liquidity or risk spreading, but enabling the existence of the perfectly competitive market, since without derivatives there is no possibility to meet one of the core requirements of the General Equilibrium Theorem - the complete or contingent contract claim, according to which there should be the market for any possible state of affairs.

The paradox lies however in the fact that derivatives work efficiently within a perfect competitive market structure, whose existence is conditioned upon the effective work of derivatives. As Coase observed many years ago, economists very often behave as if we live in an ideal world of zero transaction costs, or to put it differently, within a world of a perfect competitive market economy. The sheer fact is that derivative markets are diversified, since it is very difficult to analyse derivatives as such. Certainly an optimal regulation concerns well institutionalized stock exchanges. This is not to say that there is no place for the OTC derivatives - the question should be raised however how to minimize the possible market failures on the OTC derivatives markets. Additionally the dynamic growth of financial innovation does not facilitate the regulatory task. The question remains how to combine innovation with security under the conditions of uncertainty (the normative uncertainty hypothesis).

The normative theory of regulation would favour "dynamic efficiency" and the capability to adopt the regulation to changing circumstances rather than fixed regulatory approach, concentrated on one particular purpose. The future regulatory frameworks will have to be responsive and multi-purposive. This is especially important given the fact that the regulators lack a solid normative economic theory, thus are regulating under uncertainty. If the regulation should be multi-purposive, reflexive and adequate in a sense that it maintains the balance between restrictive and liberal attitudes, then three different kinds of regulatory frameworks could possibly be distinguished:

1) transaction-oriented regulation (e.g. contract for differences - both statutory and judge-made law, as in the UK: statutory consequences of the gamming act set out in judicial decisions; common law on contracts for differences);
2) institution-oriented regulation (the institutional regulation as in FSA 1986 - stock exchange regulator (might be private), commodities, OTC, securities, banking system, etc.);
3) market-oriented regulation (the need for integrated supervision in form of the *FSMA 2000*, *MiFID 2006*, probably the future US regulation).

It seems that the evolution of those regulatory regimes could usefully be analysed against the above distinction between transactions-oriented, institution-oriented and market-oriented regulations. The enactment of the *FSMA 2000* could thus be described as a move from institution- (stock exchange oriented *FSA 1986*) to a new, market-oriented regulatory framework. That framework does not concentrate on a particular institution, embracing the whole spectrum of agents, transactions, markets and institution. The exhaustive scope of regulation has been combined with the creation of the integrated supervisor (FSA), but the existence of such a single supervision does not necessarily belong to the essential characteristics of the market-oriented regulations.

At the same time the enactment of the *Commodity Futures Modernization Act 2000* could be perceived as a step back from the institution-oriented CEA regulation to the transaction-oriented one, with the definition of the derivative transaction becoming a crucial element of the regulatory regime and virtually establishing the boundaries and scope of the potential regulation. Alternatively the same fact, namely the passage of the Commodity Futures Modernization Act, could be perceived as market-oriented deregulation, since in fact it created the whole complex of the unregulated OTC derivative market, exempted from any supervision.

The British and American approaches can thus be usefully contrasted. The *FSMA* adopted a liberal approach toward OTC derivatives accompanied by the extensive supervision. The regulation could therefore be responsive and complete. On the other hand the American regulation created the heavily regulated patchwork with a huge unregulated sector of the market. It could be concluded that the *CFMA 2000* generally focuses on the regulation of products and markets, whereas under the British *FSMA* the market-oriented nature of regulation concentrates on information standards and customer protection. As a result all potential derivative transactions are organized and supervised. There is for example no restriction for the natural person being unsophisticated and unauthorized party to enter highly sophisticated derivative transaction, provided the product is offered by the authorized person complying with all consumer protection requirements. The *FSMA* as a market-oriented regulation contains the principle of segmentation, based on the assumption, that access to the financial market should be open and at the same time the participants should be covered by different levels and intensity of regulatory instruments, beginning with the authorization requirements for the business institutions and ending with the consumer and credit protection rules in case of physical, unauthorized persons. As such the regulation essentially aims at the creation of the biggest possible market characterized by the highest prudential standards.

5. Conclusions

The evolutionary path dependence leads from free market transactions to the highly regulated financial instruments being traded exclusively on the stock exchange. The growth of administrative costs leads to creation of the less regulated market (OTC). On the other hand, the growth of complexity and transaction costs leads to extensive forms of regulation including the stock exchange for derivatives. Taking the unusual and diversified evolution of markets for derivatives into account, two lessons should possibly be remembered. Firstly, the financial crisis proved that regulatory regimes not only compete between themselves but also evolve. This evolution should not however be identified with the straightforward juxtaposition of legal institutions created within either *common law* or *civil law* systems, since many regulatory regimes

have been created within a mixed regulatory environment. It seems that the *market oriented* model of regulation has not accidentally been adopted by the European Commission (*MiFID* 2006) and many other jurisdictions including Germany, France and Poland (*Financial Services Act 2005*). However the existing diversity of regulatory approaches creates a serious problem. It seems that the deregulated American market for derivatives, especially for credit derivatives such as credit default swap's (CDS), created a regulatory externality, hence a more coordinated regulatory activity would be recommended.

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