



Ontology of Finance Redux

By [Dustin Breitling](#)

February 19, 2017

&&&

<https://tripleampersand.org/ontology-finance-redux/>

“Ontology of Finance Redux” is an abridged version of Suhail Malik’s long essay “The Ontology of Finance: Price, Power, and the Arkhéderivative” published in *Collapse Volume VIII* Edited by Robin Mackay.

Interweaving the works of Jonathan Nitzan and Shimshon Bichler, Elena Esposito and Elie Ayache, Malik provides a tour de force critique of the critique of political economy to demand an engagement with the byzantine operation of finance. The essay is an examination of the array of derivative tools and their constitutive role in hedging and speculating futures. It explains how the organizing element of ‘Capitalization’ via price renders all conceptions of temporality as a revisable, adaptable, and ultimately contingent operation. Malik’s philosophical assertion is that the traditional notions of social order and norms have always been subject to perpetual restructuring. ‘Risk-Order’ as the primary ingredient of ‘capital-power’ poses a tremendous challenge not only for Marxist and neoclassic political economy but also for Left-Accelerationism and its underlying neorational philosophies.

Taken from investopedia.com, The *Investopedia Appendix* at the end of the text provides a basic definition for financial instruments and processes.

1. FINANCE POWER

The 2008 financial crisis presented two overt lessons: Lesson one is that the derivatives markets presents a systemic risk to national and world economies. [p.629](#)

Lesson Two is that the relative size of these markets is a fundamental risk to geopolitical as well as economic security. [p.629](#)

The numbers indeed remarkable: the notional value of the derivatives market at the end of 2012 was 694.4 trillion/Compare this to 71.7 global market value of the 'real economy' of goods and services, Gross Domestic Product. [p.629](#)

The derivatives market is, in a word, gigantic, often estimated at more that \$1.2 quadrillion. Some market analysts estimate the derivatives market at more than 10 times the size of the total world gross domestic product, or GDP.

Over the counter trading-amounted to 642.1 trillion in a sum about seven times greater than global GDP.

They represented the sum total of claims traded on the market, not how much would have to be paid were everyone in the market to immediately cash-out.

The latter 'gross market value' at end-2012 is estimated at 24.7 tn just under four percent of the notional value of the market or just under a third of global GDP. [p.630](#)

Slightly more than the USA 15.7 tn and China 8.2 tn [p.630](#)

The notional value of traded contracts amplifies their credit exposure by two orders of magnitude. This multiplication is in part explained by the trade being one of contracts of ownership claims rather than direct ownership at full cost: similar to buying a lottery ticket for a multi-million jackpot at the price of a couple of local currency units, the claimed or notional worth of a derivatives contract can be any multiple of its cost.

The political issue brought into relief by these figures is that the pecuniary magnitude of derivatives markets in total is on a par with all but the most economically powerful national jurisdictions in which they are nominally located and which, assuming the power supremacy of state sovereignty, legislate over them. [p.631](#)

Firstly, according to the now-standard narrative of the causes of that crisis, the complexity of derivative instruments distributing the risk of interest-bearing loans across the international

financial architecture led to systemic and uncoordinated uncertainty in the credit-worthiness of such instruments as well as the guarantee against their default. [p.632](#)

Because financial instruments and their risk could not be securely priced across the sector or even per firm, financial institutions withdrew credit and liquidity from interfinancial trading from 2006, culminating in the collapse of major financial corporations in 2008. [p.632](#)

Credit also shrunk back in the wider economy of production, services, and consumption from 2006; sectors which in the Euro-American economies from the 90s onward, had themselves been increasingly sustained by a growing debt-dependency rather than then revenue. [p.632](#)

If finance (represented by banking or derivatives markets) presents a threat to states, the leading questions are: Why? What is finance power distinct from modern state sovereignty? Since 'finance' here is a euphemism for a systemic market led dynamic organization of capital accumulation. [p.637](#)

Power theory of finance that must take its lead from the operational complexity of financial markets. [p. 637](#)

The primary matrix of the argument is Jonathan Nitzan and Shimshon Bichler's identification of capital as power, the outline of which is followed by a mainly descriptive summary of basic derivatives construction and operations sufficient to explain how derivatives structures led to the 2008 financial crisis and specifically to the Two lessons elaborated above. [p.637](#)

That overview also presents the primary features of derivatives operations in general, leading to the primary contention here, which is the identification of the schematic logic of derivative pricing as a variant of Jacques Derrida's quasi concept of difference. [p.638](#)

The theorization mutates with the increasingly specific elaboration of derivative operation. In particular, derivatives are shown to systematically operationalise an unprecedented modality of the wager that is intrinsic to the standard notion of betting. [p.638](#)

The general theory of price requires the theoretical articulation of the *Arkhéderivative* on which basis the basic categories of modern political economy are then reverse-engineered as manifestations of finance-power. [p.639](#)

Left Acceleration must abandon its attachment to Marxian and labour-based determinations of capitalism and political economy, because these are not the prerequisites of capital-power in general and derivatives in particular-not Marxism. [p.640](#)

The following theorization of the extirpation of social norms by capital-power (a normativity that does not entail the destruction of social order but the chronic reinstitution of a risk order casts significant doubt upon its political and theoretical inadequacy of a 'neorationalist' programme to the ambitions of Left Accelerationism. [p.640](#)

That is, if neorationalism contends that social and subjective norms can be progressively transformed by the pragmatic universalism of self-revising rational norms, that contention supposes both the authority of reason not only over conceptual thought but also over social norms, and also the revisability of social norms. [p.640](#)

Risk itself proscribes any tendential organization or universalist determination, however rationally determined and revisable, other than that of greater capitalization. In other words, without an accurate and complex account of the transformability of social norms on the side of the social itself, neorationalism is left propounding a doctrine without traction. [p.641](#)

2. THE POWER THEORY OF CAPITALIZATION

Nitzan and Bichler propose a capital is directly power because it is neither a material entity, nor a productive process, but rather the very ability of absentee ownership owners to control, shape, and restructure society more broadly—a control of productivity that involves the entire spectrum of power institutions not least because the absentee ownership at its core requires complex and enforceable institutional structures across a society. [p.642](#)

Capital accumulation is at once and necessarily a political fact. Capitalist don't seek to maximize profits, but rather to 'beat the average' represented by the normal rate of return. [p.642](#)

That rate is set not just by the standard instruments such as interest rates, but also by the rate of accumulation of every company and absentee owner, who are therefore competitors for capital, Nitzan and Bichler's shorthand for accumulation by intracapitalist rivalry is differential accumulation, which also posits that accumulation for any one firm is locked into the spectrum of institutional arrangement at local, sectorial, or global scales. The normal rate of return represents the last-mentioned global benchmark for differential accumulation, the index against which any capitalist can measure whether they are beating the average or not. [p.643](#)

And, to return to its necessarily political dimension, it also indexes how the economic activity of capital accumulation requires broad social cohesion: a normal rate of return supposes that the underlying power institutions remain stable, the more stable these institutions the more normal the rate of return and vice versa. [p.643](#)

Differential accumulations a deceptively minimal axiom for what capitalism is extensively—as a system and method of capital accumulation, how it operates systematically and in its aggregate or micro tendencies as well as intensively, per transaction and in the sectorial and individual instantiations of intracapitalist conflict. [p.643](#)

Capital is determined through absentee ownership and this institutionally organized claim underpins not only bonds and corporate stock but also the derivatives contract. However, a more exact determination of the power of operational [p.644](#)

Price and Sabotage

Capitalists' primary grasp of capital is only in relation to anticipated business earnings, the discounted value of future earnings capacity. Future earnings capacity is the expected flow of future revenues; the paid now for that future income against the normal rate of return' discount this flow into present value. [p.644](#)

Tell us how much a capitalist would be prepared to pay now to receive a flow of money later. [p.645](#)

Price then is core to the capitalist cosmology as an organizing index of differential accumulation by price and pricing. [p.645](#)

Rather than being the substantial source of the revenue that is priced: bonds, corporate shares, preferred stocks, mortgages, bank accounts, personal loans or the registered ownership of an apartment block are simply different incarnations of the same thing: income-generating entities. [p.646](#)

Anticipated earnings-Capital accumulation [p.646](#)

Indexing the power of ownership indifferently to the specifics of what is owned , prices qua abstract financial magnitudes are 'uniform across space and time. [p.646](#)

As the measure of an ownership claim on future revenues, price is an exact index of differential accumulation of social power. Through price, capitalists understand their exact place in the order of power which is thereby quantitatively organized: price is the ordering element of capitalization. Such ordering should not, however be confused with stasis or structural fixity which thereby quantitatively organized; price is the ordering element of capitalization. Such ordering should not, however be confused with stasis or structural fixity. [p.647](#)

To the contrary: because what matters in capitalization is not what is priced but rather increasing the magnitude of price qua financial abstraction for all its ordering and universality price structures the dynamic reordering of power, countermanding traditional notions of social order. [p.647](#)

Prices enable entirely new ways of reordering society. What previously required military conquest can now be done through currency devaluation...The highly malleable nature of prices i.e. their remarkable ability to go up and down-makes capitalism by far the most dynamic of all historical orders. In fact, in capitalism change itself has become the key moment of order. [p.647](#)

Price is then the medium of power in capitalism. Capitalism is in short a dynamic power-ordering organized through price as its measure/medium of order and reordering (a double that Nitzan and Bichler call capitalism's creative order of creorder) Price is the index and medium of a transformative power-rationality whose specific historical organization is a result of intracapitalist conflict. That always sociohistorically specific struggle is fought through the abstracting universality of price as much as through given and sought for social arrangements, all of which are therefore transitional.[p.648](#)

In every instance the delocalising and dematerialising abstraction wrought by capitalization is the condition for and the effect of the universal dynamic social reordering of power qua differential accumulation. On this account, 'all that is solid' does not 'melt into air' but is ordered via abstract financial magnitudes in and as a power-rationality that is the political real of capitalization. All political mobilization consequently has to determine its real and its own capacity with regard to the quantification of power as price—an initial indication of how the power theory of capitalization adapted here takes leave of Marxian doctrine, a divergence that will become more emphatic as the analysis proceeds through the specifics of derivative structures and operations. [p.648](#)

Sabotage—Differential accumulation names the logic and dynamic of intracapitalist conflicts, more colloquially formulated as 'beating the average' There are two effectively equivalent ways to meet this imperative: increasing ownership over future earnings- which is what pricing does and/ or ensuring that other firms do not accumulate as much as they otherwise could. [p.649](#)

The latter operation happens in two ways: sectorially competing firms capital accumulation has to be diminished compared to one's own; globally it requires 'limiting the average rate of growth of profit' in order to secure a differentially greater accumulation per firm against the average rate. Nitzan and Bichler identify this intrinsic and necessary diminution of overall growth as the sabotage wrought by business, the latter terms meaning ownership of capital accumulation. [p.649-650](#)

Sabotage is the socioindustrial correlate to pricing, a systemic characteristic of capitalization, which now has to be understood as the diminishing of aggregate social productivity. Veblen calls 'industry' for example taking out competitors or limiting technical or institutional capacities with patent restrictions. This holds for interfirm rivalry per sector as it does in the global and sectorial dimensions, which are all thereby interlinked: sabotage is a determinate of the normal rate of return, which indexes the systemic organization of the spectrum of power. Extending sabotage to encompass the broader social organization and pricing. [p.650](#)

The very existence of this normal rate of return enables the most insignificant actors to exercise their 'natural rights' for universal sabotage. Since individual capitalists, however, small, can always earn the normal rate of return by simply owning a diversified portfolio, they have no reason to produce a less than that rate....In accepting the normal rate of return as a minimum yardstick below which production should not be extended, they effectively propagate sabotage—even when they themselves do not have the differential power to back it up. Sabotage becomes invisible 'business as usual' as they say. [p.650](#)

Marxist and Neoclassical accounts capitalists do not accumulate capital by seeking to maximize profits by increasing production, innovation, and consumption but that differential accumulation requires compromising production as such. Business is then not just unproductive but, moreover, necessarily counterproductive—as are capitalist societies overall and in general. [p.651](#)

Nitzan and Bichler establish that price directly indexes the political economy of capitalization by generalizing Gardiner Mean's observations of how business fared in the Great Depression. Means

demonstrated that concentrated industries which are inflexible and set ‘administered prices’ relatively unresponsive to market conditions, increase their share of differential accumulation against competitive firms whose ‘market prices’ are more responsive to changing market conditions. This because the prices and profits of the former ‘responded only partly or not at all to market conditions’, instead fixing a long-term target rate of profit and then back-calculating the markup necessary to realize the this rate of return over the long haul. [p.652](#)

Prices and profits for such firms during the Great Depression resulted in relatively small declines in prices correlated to start drops in productivity and employment. In contrast, firms setting ‘market prices’ had smaller drops in employment and productivity, but took a larger hit on profits. For Nitzan and Bichler, this demonstration of differential accumulation via price-setting strategies makes explicit that the administering price according to mark-ups already embodies the power to incapacitate the social order. [p.653](#)

That power of fiat pricing can be identified with Michal Kalecki’s notion of a ‘degree of monopoly’ which ‘measures the consequence for relative profit margins of monopolistic institutions and forces’, that is the degree of power concentrated in a firm relative to the entire spectrum of social institutions. The mark-up of administered prices is then not only directly the power to incapacitate by competition and the ability or not to won at a given price; it is also the direct measure of the firm’s concentration of power in the entire social spectrum. The key theoretical consequences is that if price-setting advances differential accumulation via both accumulation and the concentration of power, then prices set the market. [p.653](#)

3. GENERAL OUTLINE OF FINANCE POWER

Administered prices make explicit that price is the medium of capital accumulation qua power ordering. [p.653](#)

Accumulation/sabotage is organized by the absentee ownership of assets, which is not ownership of production but of price-setting. This is what power is in capitalism. By definition, such power is held by capitalists; more salient than this sociological truism is the fact that finance is the structural and constitutive condition for that power. Determined initially as the absentee ownership and pricing of assets, finance is also the basis for capitalism’s durable yet dynamic revision of ownership and pricing of assets as well as broader institutional structures of capitalization. [p.653](#)

At the most basic level, it allows owners to lever technical change...as a tool of power. At a higher level it lets them use the monetary symbols of prices and inflation to restructure power. And at a still higher level, and perhaps most importantly, it permits them to reorganize power directly, by buying and selling vendible ownership claims. [p.654](#)

In contrast to other manifestations of social power, the market of vendible ownership claims—financial markets whether or not they are explicitly characterized by such structure institutions according to the primary generative order’ of capitalization a ‘formula that is special in that it doesn’t specify what capital-power would look like. Indifferent to the specifics and qualitative

particularities of how power is organized, markets and pricing predicated on finance enable social reshaping and reformatting in innumerable ways that 'no other ruling class has ever been able' to undertake. It is thanks to finance that the market is the condition instantiation, and medium of the indefinitely variable, anonymizing and fungible capital-power. [p.654](#)

As the structural condition of capitalization, finance logically precedes it; and capitalization itself precedes and exceeds economics as the constitutive and necessary politics of that restricted regime. Economic practice is restricted theoretical and practical rendition of capitalization, and capitalism is only a particular order of financialisation, meaning that it is not the only possible one. The analysis and politics of capitalization advanced here requires that it is finance that is the a priori of all historical and theoretical determinations of 'industrial capital. [p.655](#)

Marxian and Neoclassical doctrines determine prices to be set by interfirm rivalry given exogenous conditions (such as supply-demand, labour and capital costs, consumption) such that the supposed priority of the latter casts finance capital as parasitical, supplementary, or fictitious, according to theory of price, financially-set prices are the primary elements for the dynamic organization of capital-power. That this renders untenable distinction between a finance capital and a putative 'real capital' ostensibly predicated on conditions exogenous to finance does not prevent analysis of how the financial sector impacts the nonfinancial sector. [p.655](#)

Finance promulgates sabotage in general, meaning that that it is an inherently counterproductive power. The capitalization of business earnings 'represents nothing but incapacitation'; or contrasted to price as an abstract financial magnitude, 'capital is a negative industrial magnitude. To extend Nitzan and Bichler's formulation, the positive determination of price qua abstract financial magnitude, is on the other hand that it directly indexes capital-power's ordering and reordering. [p.657](#)

States have of course been the principal matrix of political modernity since the establishment of the power supremacy of state sovereignty with the 1648 Treaty of Westphalia. If derivatives and states are now of the same order of magnitude of capital-power, this signals that sovereignty is no longer the supreme power in the quantitative regime of capitalization, [p.657](#)

As Haldane and Alessandri recognize at this historical juncture dominant power consist in the power of finance-markets as much as in state sovereignty their respective capital-powers can be gauged by the magnitude of each as aggregate 'pecuniary assets' That combination forms an organizational and operational nexus of dominant power that can, for ease of recognition be called neoliberal governmentality. Such governmentality is a quasi-statist power formation, while it is in part constituted by the established configuration of modern statehood, at the same time corrodes its primacy as exemplified by two interrelated transformations in its primary structures: firstly, the size of contemporary finance capital, as well as its interconnectedness require a transnational organization of legislative and regulatory conditions for finance. [p.658](#)

Consequently, territory as the spatial extension of the state power is not an adequate basis upon which to contend with finance-power today. Put otherwise, the jurisdictional powers of nation-

states are interlocked jurisdictional powers of nation-states are interlocked with the transnationality of contemporary finance power, corroding the boundedness and autonomy of their sovereignty. Secondly, the power supremacy of sovereignty in authority, up to and including military and police powers is now subject to the reordering wrought by capital-power and conditioned by finance. [p.659](#)

The state-capital nexus transforming modern statehood is but one consequence of the dynamic power-rationality wrought by capitalization. Finance is to repeat the structural and operational a priori of capital-power's reordering an aprioricity here called capitalization's financiality operationally tantamount to prices being set only as a mark-up against other prices. The trading of contracts, for future exchange of the absentee ownership of assets in financial derivatives markets explicitly demonstrates this condition. While it therefore seems that the operations of finance markets concretely instantiate the a priori financiality of capital-power, now transactionally liberated from the alibi or convention of the commodity, service or income stream as exogenous condition for pricing, any such identification has to be cautiously made. While the a priori financiality of capital-power is the systemic condition for capitalization, the finance markets are practical and institutional operating mechanisms and facts of capital accumulation. [p.659](#)

And its power rationality (its transcendental condition, in critical philosophical terminology) finance markets cannot be directly identified with financiality because the former are an institutionally specific sector of capitalization. However, maintaining the distinction between finance markets and states: the categorical distinction between financiality and financial operations advanced here means that the shifts in the relative power magnitudes between the finance markets and states do not necessarily index transformations in what power is, in power types. [p.659](#)

Consequently, the state finance nexus could be deemed to be wholly coherent and mark nos significant change in power: just more the same in another guise. Derivatives are contracts between two parties whereby one side pays out a mutually agreed amount (the 'delivery price') if circumstances specified in the contract take place at a designated termination date ('maturity') or ('expiration') The eventualities may be those of prices (of a commodity, company stock, interest rates) at some determined point in the future, of cash flows or payment defaults, or other non-monetary eventualities—for example the weather (snowball determining skiing conditions, and therefore revenue for a resort, a month of rain for agriculture production), livestock population and diseases, technological innovations and so on. [p.659](#)

4. DERIVATIVES:

The contracted claim is contingent in a double sense: firstly, it depends upon an eventuality independent from and external to the contracted price, which is known as the underlying asset (something reduced to the underlying); secondly, asset (sometimes reduced to the underlying) in the prevalent sense in which the payout depends may or may not be occasioned, meaning that the contract will lead to a gain or a loss by one party or another, but without certainty as to who will be the gaining/losing party. Gains or losses are made independent on whether the price agreed in the contract, the delivery price is higher or lower than the market price of the underlying the

spot price at maturity. These are three principal distinct strategies of derivatives trading: arbitrage, hedging, and speculating. [p.661](#)

Arbitrage is trading across markets in order to secure riskless gains. For example, buying an asset in one country to sell to another to take advantage of the price differentials and exchange relations across the market. It is the practice of taking advantage of a price difference between two or more markets; striking a combination of matching deals that capitalize upon the imbalance, the profit being the difference between the market prices. [p.662](#)

Hedging: reduces risks on a given investment either by locking down prices of assets on a future transaction with a forward contract or by offsetting risks price movement of owned assets in one direction by making gains from counter-movements of price. Hedging insures against variations in fluctuating financial rates and contingencies in supply-demand levels (crop fields, fuel prices, interest rates, monetary instability) and stabilizes contract prices. Hedging also introduces risk, because the delivery price set by the forward contract may not be equal to the spot price at maturity, to the cost of one of the signatories. [p.664](#)

Speculation: is accumulation by trading on market-generated movements. The speculator buys or sells derivatives contracts in view of the gains to be made on the interplay of the current prices of the underlying, a corresponding derivative and the difference between the “delivery price” and the spot price at expiration. The latter gives the speculator much greater leverage than the investor or shareholder who trades in the underlying asset or security at market price. [p.664](#)
Furthermore, because speculators make gains by their primary interest is in the prices of the assets and financial instruments rather than underlying assets the latter being immediately resold in order to realize them as only as pecuniary assets. [p.664](#)

As speculation demonstrates especially clearly derivatives markets in general are not markets for vending underlying assets external to them at their ‘live’ price nor for investment, which looks to make gains by taking a share of profits or revenues made by the underlying asset as an element of industry, agriculture and production (in short, in the ‘real economy’) This is often the basis for criticism of speculation, along with profits maximizing market leverage of financial instruments over the non-financial sector, leading to distortions in pricing across all markets as well as a disregard for the fate of the underlying asset and the real economy it represents. Defences of speculations are based on its ‘absorption of risk’ since (i) the vending of financial instruments is based on anticipating higher returns and (ii) speculation is the other side of hedging: the hedge that anticipates and insures against prices movements presumes a speculator who accepts the risk of differential between spot and delivery prices as worth bearing. [p.666](#)

Moreover, since speculation exploits the price differentials (spreads) over time as well as between buyers and sellers prices, speculation bridges these differentials, providing liquidity to markets where exchange and trade would otherwise diminish. The historical, material or qualitative particularity of the underlying is irrelevant beyond the price conditions set in the contract, as it is fate once the contract expires. By virtue of this endogeneity of accumulation by pricing contracts, and despite the frequent use of the terms ‘investor’ or ‘hedge fund’ to designate activity on derivatives

markets ultimately it is speculation that is the defining category for all derivatives contracts and their markets. [p.666](#)

Trading in derivatives markets relies on the operationalisation of financial markets instruments that practically compose them. This section presents a rudimentary elaboration of the primary mechanisms of derivative contracts, Four basic structures are presented here in order of increasing complexity: forward contracts, futures, options, and swaps. [p.669](#)

A forward contract is the most straightforward financial derivative mechanism the agreement to buy or sell an asset at a certain price in the future. The contract itself is trade off-exchange and costs are borne at maturity. Agreeing to buy the asset is called the long position, while agreeing to sell it is the short position. The agreed price is called the delivery price. [p.669](#)

The long position (having agreed to buy the asset) at time t is worth $S_t - K$ [p.670](#)

The short position (having agreed to sell the asset) at time t is worth $K - S_t$ [p.670](#)

This straightforward illustration demonstrates that derivatives are so-called because they stipulate a price in relation to the spot price which is itself set by the market in the underlying. [p.671](#) That is while in this case it is Meillassoux's reputation that drives up the price of the underlying of the forward contract in the imagined competitive market, the speculator is interested only in the increase in price for whatever reason. [p.671](#)

Future contracts are forward contracts whose trade is guaranteed not by the counter parties but by the exchange on which the contract is made as is delivered date (to the month)

Trade on an exchange price, prices of futures contracts vary according to 'market prices' the delivery price of an asset (K) goes up if more trades take a long position (that is agree to buy an asset at a future date at delivery price) [p.672](#)

Because of this 'self-correction' futures market is speculative in the sense that it 'rewards' risk-taking on contingent claims greater gains are to be made betting on a delivery price before there is a preponderant view that it is set too low and before the price of the underlying asset rises to meet it. [p.673](#)

The contract is then loss profitable for the short position. [p.673](#)

In other words, futures markets price forward contracts according to the derivatives market price movement as well as those of the underlying market. [p.673](#)

A delivery price before there is a preponderant view that it is set too low and before the price of the underlying asset rises to meet it. In the standard account, both long and short expectations of making a gain by advantage of this spread. As for forward contracts these anticipations are

obviously contradictory ,upon which a gain or loss is occasioned depends upon the strike price which is necessarily. [p.673](#)

Market is speculative in the sense that it 'rewards' risk-taking on contingent claims: greater gains are to be made betting on a delivery price before there is a preponderant view that it is set too low and before the price of the underlying asset rises to meet it. [p.673](#)

As for forward contracts these anticipations are obviously contradictory, but their common conditions is that the eventuality upon which a gain or loss is occasioned depends upon the strike price which necessarily and constitutively unknown at the time the contract is made. [p.673](#)

Insofar that unknown comes to be determined by the pricing of the underlying in its primary market, the derivative's exogenous relation to that price is that of a traditionally conceived wager: the throw of the dice does not depend on the bet being made upon it. [p.673](#)

Insofar as that unknown comes to be determined by the pricing of the underlying in its primary market, the derivative's exogenous relation to that price is that of a traditionally conceived wager: the throw of the dices does not depend. [p.673](#)

Derivatives are then but wagers on a price differential over time, an interpersonal and subjectively constituted reckoning on circumstances external to the wager itself, predicated upon the non-knowledge of the future. [p.673](#)

Options are contracts for the right to buy (call) or sell (put) underlying assets without necessarily having to trade the underlying asset at the agreed price (now called the 'exercise price' or 'strike price') by the agreed date (the 'exercise date' or expiration).^{oo} Unlike forward contracts, there is a contract fee for making an option which is lost if the option is not taken. Options are primarily instruments for hedging. e call option (the right to buy) on the underlying is purchased (long position) in anticipation of the price of the underlying asset increasing from the strike price. [p.675](#)

The put option (the right to sell) is purchased anticipating a fall in price. To take the short position—to sell either call or put option at a later date—is to write the option: cash is taken upfront in exchange for the counterparty's right to buy/sell the option, taking the consequence of losing out on the gains (or not taking what would be losses) of the underlying at the option's expiration. [p.676](#)

However, it may be that if the increase in the price of the security is less than that often making the initial option trade, the option is not exercised and the trader writing the options hold both the initial contract fee and the asset at an increased price,which they can immediately sell.

The credit risk thereby built into the financial system as distributed, uncontained and without adequate capital backing. The result: systemic default. Furthermore, the deregulation of the OTC sector in 2000 stripped out its supervisory containment and capacity to prosecute, making it, in the words of the chair of the SEC in 2008, a regulatory black hole. [p.686](#)

The distinctive feature of all derivative structures, a feature explicitly demonstrated by forward and futures contracts, is that they are constructed and traded on the basis of a price differential. p.687

Trading strategies also exploit price differentials—across markets in arbitrage, but also in time across one market for hedging. At the simplest level of derivative construction, the delivery price of the forward contract (K) anticipates the future price of the underlying asset (S_t); more complex derivative structures take other factors into account (option cost, cashflow dynamics, etc.) p.687

Markets for financial rather than commodity derivatives have been massively operationalised since their institutionalization with the Chicago Mercantile Exchange and Chicago Board Options Exchange also most contemporary with Derrida's theoretic-philosophical identification of the logic of difference. p.695

As advocated by the CME (a market that was historically inaugurated precisely by the flexible exchange rates consequently upon the decline of the fixed-rate Bretton Woods system), or a market in stock options. p.696

Even though it is highly restricted in its assumptions and applicability, the Black-Scholes-Merton Model equation has been the orthodox integral acknowledged, and massively operationalised pricing model of derivatives markets since the inauguration of the modern derivatives exchanges. That institutional consolidation has been warranted specifically for the formalization's determination of derivatives constative predictions of price movements exogenous to the derivative for which the price that the derivative is written is an initial boundary condition. p.696

The following schematic overview of the BSM equation not only serves to explicate the standard options pricing model, allowing its countertheorization to be better located; it also directly exposes the praxical instantiations of the standard economic doctrine of differential pricing and temporization. p.693

Black-Scholes: Meaning that Prices are measures—that is description of changing conditions external to prices themselves over time (what Means called market prices) p.698

Derivatives prices explicitly factor the uncertainty of future prices into the pricing calculation as their precondition—no gains or losses could be made with a derivative if the delivery price could be guaranteed according to this account, future prices are at best calculated guesses constructed from the known price at the time the derivative contract is made. They are a constative anticipation of the price development of the underlying (exogenous to the derivative's pricing) The insurmountable yet structuring difficult of this formulation is that such anticipatory pricing is each instance only a reckoning with the next step of a price development that is in fact unknown. p.698

The problem is resolved by formulating differential pricing as a stochastic process, for which the fluctuations of a particular element of the system cannot be predicted (the next price of the underlying; in physics paradigmatically, the position or velocity of an individual particle in a gas). The

account of aggregate systems-development given the 'random walk' of its elementary units places two stipulations of its formalization: that succeeding states of elements in the systems are discontinuous from preceding conditions, and the the future states of the system cannot be exactly predicted but only described probabilistically, meaning a statistical determination of the path development system both in its individual elements and in aggregate. Such processes requires a calculative model distinct from Laplacian systems, path development of every element in the system can be directly predicted if the initial conditions are known as in Newtownian Mechanics. p.700

Key elements of the required countertheory are provided by the sociological accounts of finance markets given by Donald MacKenzie and Elena Esposito. Both propose that derivatives markets are not constative but performative—in MacKenzie's words 'an engine not a not a camera' because derivatives pricing is shaped by the fact and method of pricing itself, rather than exogenous factors such as the vicissitudes of the underlying prior to pricing. MacKenzie's work mainly historical-institutional account identifies two salient regimes of performativity for options markets. p.710

The first is Barnesian performativity in which economic processes and outcomes transform to better fit the theoretical model in a 'self-validating feedback loop': consequent use of the financial markets changed. p.711

Time is specific to a system, produced in order to organize its operations and make them more complex. By incorporating the inactual past and future presents into its present actuality. As this paradoxical unity, the present is the manifestation of time. p.715

Because the time binding that is the relation between the actual and the inactual depends entirely on the system in question, there is no absolute objective time. p.715

Rather the pragmatic incorporation of inactuality into the present enables the system to structure its present operations in view of that inactuality. Time therefore permits the complexification of a system to a degree greater than its its actuality allows (as with debt in regard to fiscal conditions, for example). p.715

Thanks to time, the actual and the inactual inform one another, albeit asymmetrically; through anticipating of the inactual and unknown future in the present and by organizing the actual present in view of the future. p.715

Generally, time allows the system to operate itself from its own operations and its own situation, linking it with other (past and future) situations in a complex framework of connections' attest to and acknowledge its contingency amongst other possibilities. p.715

The possibilities of a system-its unactualised states—are only theoretically and practically available to it because of its time qua relation to the inactualities—In particular, the revisions of plans

for the future and reconsideration of the (once future) present is the ‘internal reflexivity of time.’
p.715

Derivative pricing makes explicit in the present the relation to an inactual and necessarily uncertain future present—as a present future. As such, it indexes the core characteristic of time in Esposito’s systems-theoretical method, namely that because they are never the present, the ‘past and future are never given, but become actualize as horizons of inactuality for a present that does not last.’ In the general pragmatic terms of systems theory, a relations such as the management of price movements between the present and the future constituent ‘the unity of actuality and inactuality’ which is time. That is, derivative pricing makes explicit in the present the relation or an inactual and necessarily uncertain future present-as a present future. As such, it indexes the core characteristic of time in Esposito’s systems-theoretical method, namely that because they are never the present ‘the past and future are never given but becomes actualized as horizons of inactuality for a present that does not last. p.714

The unity of actuality and inactuality’ which is time. Time, on this account, is always system-specific in that the maintenance with in the present of past and future presents depends entirely on the structure, organization and capacities of any given system. p.716

The possibility of a system—its unactualised states—are only theoretically and practically available to it because of its time qua relation to the inactual. p.716

In particular the revision of plans for the future and reconsideration of the once future present is the internal reflexivity of time. Operators in a system with time know they can make decisions for an anticipated future which, while itself unknown, permits ‘the freedom to decide difference once that future has become present (a present they will have contributed to and where they know how to intervene.) Such is the flexibility and freedom granted by time. Emancipation is a time relation. p.716

The freedom of time for an operator in a system is the freedom to choose ‘in a non-random way’, and to re-choose in view of the consequences of the preceding choices. Similarly, the past offers a selectivity of remembrance: everything could be possible, but only some possibilities come about and these conditions the possibilities that are made available for the future. p.716

Time’s unity is asymmetric: the past present can only be understood for what it was and wasn’t (qua condition and projection to the future that is now present) in its future, while the future present continues to be strictly unknown but can be anticipated and prepared-for. Furthermore, operations in the future condition the future but do not determine it; past operation do determine their future, which is the present. p.716

In these terms, systems have freedom qua possibilities constructed via their relations to inactualities of its present state. p.717

Esposito's theory of derivatives pricing as counter-performative exemplifies this general theory of systems time and freedom of future revision. As options in particular demonstrate, derivatives build in revisability of trading the underlying at expirations into their contract. [p.717](#)

Esposito's theory of derivatives pricing as counterperformative exemplifies this general theory of systems time and freedom of future revision. As options in particular demonstrate, derivatives build in revisability of trading the underlying at expiration into their contract. Trading of the options contract on derivatives markets 'allows one to make decisions today that affect the way the future will be, while preserving the freedom to decide one way or the other when this future will be present.' [p.717](#)

As opposed to the BSM model, in this case derivative pricing is not constative with regard to an exogenous referent of that process. Rather, it refers to the 'contingency of future events' not only as regards the strike price, which is ostensible (exogenous) content, but primarily as a reflexive (endogenous) consequence pricing itself as a mode of time engineering. at is, the reflexivity or revisability of derivative pricing means 'that future oriented expectations and decisions [on price] affect what will become present in the future' [p.717](#)

Taking the modality of the 'maybe' up to their expiration, derivatives 'leave the indeterminacy of the future open, and at the same time, produce it with their decisions. [p.718](#)

Generating indeterminacies upon which they subsequently act, derivatives are counterperformative. Consequently, these indeterminacies are not random (within the parameter of the standard deviation of a normal distribution, as the BSM model stipulates); rather, they are structured by the 'minimal continuity' of derivatives pricing in the present, a pricing which is predicated on the contingency of revision.[p.718](#)

As an endogenous process, the reflexive measure of the necessary uncertainty of pricing movement in the present is given within the terms of the at pricing system itself: it is volatility the index of the presence of inactuality in present actualities. And it is priced. [p.718](#)

It instead reproduces the time relations that derivatives are (vectored qua pricing) only as an implicit an aftereffect of its probabilistic formulation.[p.718](#)

5. RISK ORDER

Esposito's account, in which it is a corollary of her determination of risk: 'all forms of time binding have social costs, because they...also bind the opportunities and perspectives of all other operators. [p.719](#)

Time binding thereby constitutes possibility and limitation with regard to others, which is to say that it constitutes social binding as such, which is in each instance organized and comprehended as the norms of a given social order. [p.720](#)

Contrary to risk-ordered societies, for which norms are determined according to the constraints that have determined and stabilize the present on the basis of the selectivity of the past, social binding constituted in view of the inactuality of the future stipulates a reflexive and revisable relation between the actual (present) and inactual (past and future). p.720

Social binding qua time binding requires the revision of social norms. Esposito illustrates by way of an example: ‘the reflexivity of time introduces a future contingency into the present that cannot be bound [...]. How can one accept the production of GMOs (even if it is legal) if one cannot dismiss the possibility that [...] they produce unpredictable genetic damages? p.720

Such damages are a future uncertainty, necessarily indeterminate in the present yet indexed in it as a risk—now meaning the uncertainty of the future in the present. p.720

Consequently, the necessarily social dimension of time binding complexifies the actuality and rationale of social organization—the available justifications of social norms—because the latter are subject to the revisability of the present in view of the future.p.720

It constrains social orders to effectuate their norms in their contingent and future-facing contemporaneity. As such, societies of reflexive time-binding are definitionally modern. What is characteristic of them is that ‘the current constraint, which should [qua norm] neutralize future uncertainties [...] comes to depend on these same uncertainties’, making the ordering itself uncertain in its binding and ‘depriving the [social order of the] very meaning of normativity’. p.720

The coeval constitution of social and temporal uncertainties that is modernity is, then a generalized condition of uncontrolled exposure to future contingency.p.721

A stable judgement on what to do in the present could only be made in the future, not the historically organized actuality of the present. But the future is inactual and itself unknown, which is why all judgments now are themselves only risks. at judgments are made on condition of a necessarily inactual and unknown future and suppose their revision, such that there is no certainty as to what may come to be a gain or a loss, security or damage, is what Esposito calls ‘the rationality of risk.’ p.721

Double necessity of an ignorance of the future and the insufficiency of the past to guide judgments. Even though norms as such are deprived of any final authority and legitimating sanction, the rationality of risk nonetheless generates a ‘recursive, circular and revisable’ quasi-order of binding uncertainties p. 722

That quasi-order is the ‘minimal continuity’ of sociotemporal binding, a binding ‘between the contingency of time and the contingency of observers’ that is enough to form decisions and give the capacity for control, revision, and correction ‘in a non-random way.’ p. 723

Control not over what the future will be as such (per planning), but control as the construction of possibilities for the future ‘without knowing or having to know’ whether those possibilities will

come to pass. Disestablishing social norms while constructing a binding social reality predicated on uncertainty and constitutive ignorance, the rationality of risk requires and fabricates increasingly 'complex forms of time management'. p.723

Specifically, by constructing a deferral of the vending of the underlying in view of taking advantage of changes in price once that contract is made and others react to it, the derivatives trader 'buys contingency (i.e., the freedom to decide otherwise starting from the decision taken today).' p.723 For Esposito, whatever quasi-order persists in the rationality of risk is 'governed by reference to the uncertainty of the behavior of others', given that their uncertainty is also attributable to the horizon of a future that is inactual to them. p.724

Not only do judgments and actions take place within the constitutive ignorance of reflexive time-binding but, for that reason, 'observers do very well in observing each other because the world is not a primary given [...], but comes into play when one observes what and how other observers observe'. p.724

This broad constructivist determination of the quasi-order of societies at risk—of the risk order (the term is not Esposito's)—is the general sense in which all judgments and observations in the risk order are necessarily counterperformative. p.724

Consequently, financial markets are not directed to or organized for the 'satisfaction of needs' insofar as these are external to market determinations. Rather, they require the abandonment of any reference to a given external world, even in the form of the discourses about the difference between investment (which should operate in the real economy) and speculation (which should be a mere financial transaction), where the second should refer sooner or later to the first. p.725

For Esposito, the volatility of pricing demonstrates that the reality of the derivatives market is indifferent and detached from any referent exogenous to the derivatives markets: (i) volatility does not refer to a reality beyond the system of observation, and (ii) even when it seems to (with, say, the movement of prices putatively in relation to an underlying), that exteriority qua real. p.730

Determined by that logic, price is 'a calculable measure' that is systemic, ordering, and external to the subjective observation and action which it shapes. p.732

A form of rationality that includes the volatility smile and its consequences for markets. According to this rationality, paper markets are not unreal, and their operations are (often) not irrational at all. p.732

In terms of the systemic objectivity of pricing, such rationality and reality are those of capital accumulation's finance power, but now determined as an objective risk order. The systemic objectivity and logic of capital accumulation then require a noncorrelationist theory of derivatives pricing that accommodates both the endogeneity of market making and the sociosubjective dimension mandating Esposito's constructivism. p.732

If 'the future is not the present future or the future present, but the difference between the two', then the pricing or risk by derivatives 'manages' the future qua inactuality in the present. The present/pricing is then no longer present to itself, but is deferred from itself qua futurity. What is deferred from the present in pricing risk is the future: the uncertainty and inactuality that the present maintains. p.734

Risk is the present manifestation of future uncertainty and as such displaces the actuality of the present into an inactuality within the present. Possibility, the freedom occasioned by the distinction in kind between actuality and inactuality in time binding, is then granted by differential temporization. But differential temporization also immediately constraints possibility, not because of the limitations of the given actuality of the present but because the constitutive imbrication of true and present means that the future present is not wholly distinct from the present. That is, possibility and the freedom of the present are constrained because the deferral of the present future from itself opens to the future present in the present. That is, possibility and the freedoms of the present are constrained because the deferral of the present future from itself opens to the future future from itself opens to the future present in the present (which intrinsic condition is also why there can be a present future at all). p.734

The future present is therefore itself susceptible to revision in the way Esposito describes, as integral to a social binding permitting the future revision of decisions made today, but now with regard to the real of the infrawager. e logical a priori of the contract in the present is the absolute futurity of its thetic contingency. p.756

Anticipatory pricing. Future prices cannot ever be predicted or anticipated, because the delivery price qua conditionality structuring the derivative 'collects as one writing the two branches of the alternative incompatible in actual reality'. p.757

Rather, volatility is the absolute of derivative pricing: there is no derivative pricing without the splitting of the real of price into unknown actual and inactualisable futures; without, that is, a futural contingency that, in the endogeneity of the derivative market pricing, is instantiated in the indefinite plasticity of the infrawager. p.759

To be clear, and to draw the argument back to the broader political economy of derivatives markets: the 'preservation' of contingency by derivatives markets, its technology, is necessarily contrary to stability. p.761

Locating the instantiation of pricing identifies the market as the sociotechnical condition—the institution—for the contract-exchange that determines price on each occasion. Ayache literalises that condition as the trading pit for options, whereas Esposito notes that derivatives markets are, amongst other markets, now geospatially 'distributed [...] as a ubiquitous form of calculation and reasoning', in accordance with the weakening norms of jurisdictional authority in the geospatially attenuated institutional forms of the risk-order. p.762

Derivatives pricing is a particularly complex and advanced form of sociotemporal binding that determines the present as revisable (plastic) maintained primarily with regard to the inactual and unknown future (absolute volatility) a condition typical of the risk-order constituting modernity in general. p.776

Nitzan and Bichler note that price as the elementary unit of capital-power cannot be established because both the anticipated earnings and the future normal rate of return for the asset, meaning that the basic discount price formula can not in fact be known. Accordingly, the price of capitalization in the present, which orders industry is always and necessarily speculative, variable (plastic), and contingent (abstract) and thereby permit differential accumulation. Value is but the exogenous determination of price, the conversation of one pricing process to others or to what lies outside of price altogether. p.776

The *Arkhéderivative* is then the a priori of the political economy constituted by the ontology of price. That is, the *Arkhéderivative* is not only manifestly and explicitly operationalised by finance markets for capital accumulation, it is also the ontology of every instantiation of capital-power. As regards the former it is not just the fact of price but also the ontology of price that is made explicit and operationalised by the complexities of the time-binding of derivative pricing. p.778

The *Arkhéderivative* is the ultimate term in this argument or the ontology of price, serving as a summarizing metonym for the various determinations contributing to the general theory of price and permitting. p.780

The complex institutional practical operations of financial markets are integrated with the a priori financiality of capitalization by the *Arkhéderivative* in the real of price as its respectively operational (power) and constitutive (infrawager) dimensions, and this can be stated without making the category error of directly identifying them. Conjoining these otherwise disparate dimensions of financial pricing, the *Arkhéderivative* is the comprehensive realist ontology of finance. Financial markets make explicitly manifest and operationalise not just price but also the ontology of the instantiation of capitalization in general. p.780

Arkhéderivative is the real of finance in its constitutive and operational dimensions, then derivative markets are the truth of market financiality qua the dynamic power-ordering of capitalization. p.781

Moreover, that dynamism is constituted by the triadic contingency of the *Arkhéderivative* generally actualized by the universal fungibility of what is priced (contingency of abstraction), the variability of price (contingency of revision), and the futural absolute volatility of pricing (thetic contingency) p.781

These are the primary conditions of the risk-order instituted by price; a risk-order determined now not in terms of the sociology of the markets, but the real of price. Constituting the financiality of price, the *Arkhéderivative* is no less the ontology of capital-order. Capital order is risk order. p.781

Distinct from the broad characterization of modernity as a society at risk social-institutional order in capital power is contingent not because the future is uncertain in the present in general (Esposito) but, more exactly because the present of capital-order absolute volatility. p.781

Minimally, then, finance=power is typologically a counterpower to sovereignty: the primacy and irreducibility of sovereignty qua determinant of power is violated by finance-power both in principle (quantity and triadic contingency against the particularity and the insuperability of authority) and soci-institutionally (finance markets out price states) p.803

6. THE POLITICAL RISK OF FUTURITY

The command of prices is not that of a state-controlled economy, but rather the price that the state can raise on the basis of its sovereignty. While this injunction practically presumes the hierarchy of social institutions and order, the channeling of command via price, qua instance of finance power, necessarily imposes a dynamic reorganization of social order. In its conservative formulation, states are committed to their reorganization in order to sustain their integral role. p.805

The State-finance nexus is riven in its power ontology is riven in its power ontology. The argument is not primarily that the operational-historical growth of the finance sector deprioritizes sovereignty in favor of other modes of power or that indebtedness and other financial commitments of the state require it to resort to finance markets to maintain itself. p.805

And it is this last-mentioned condition that provides the more comprehensive formulation of the reorganizing command structure of states in the condition of finance-power: that sovereignty is not the theoretical or operational basis of political economy nor exempted from it, but is institutionally and theoretically determined by it. This consequence is partially recognized in other terms, in MMT for which state sovereignty is tantamount to the authority to impose and maintain as legitimate unit of account for creditor relations, a generating a demand for those units and destroying them i.e. taxation. p.806

Which is only to reiterate through the monetary dimension of finance=power that sovereignty and finance comprise a nexus-modern capitalism-that s at once congruent and also and also internally disparate, but is in any case constituted as finance-power. As such, the state-finance nexus is a particularly prominent, because systematically ineliminable, example of a general requirement of capital power: that finance-power maintain institutions in order to advance capitalization, including, for example, sovereign jurisdictions with the authority to sanction and enforce the contracts fabricating derivatives (jurisdictions which in theory need not be in nation-states) p.807

Yet if the state is a financial institution, it is the only one that fabricates and imposes money on a population that must then use it to pay taxes, and it is for this reason also a distinct and unique financial institution in its sovereignty. p. 807

In general, then finance power is bound to capital-order, an organization of power by which greater and lesser magnitudes of capitalization can be socially implemented—and transformed at every instance thanks to the price indexing of that power ordering: price qua misfortune transforms the order of power it measures. Constituted by the *Arkhéderivative*, the dynamism of capital-power (the most dynamic of all historical orders) is not reducible to nor predicated on the history or sociology of the capitalist-order but is a result of the thetic futural contingency and auto-sabotage of price. Capital-power is in other words a prevailing risk-order dedicated to the future contingency of the present and at the same time to its partial incapacitation. p.808

In terms of finance-power taxation is the price of the state—the price of monetisation—for then non-state sector. Furthermore, as condition of the monetary arrangement of price, the sovereign state is only a subordinated necessity for the chronic reordering of complex modern societies qua risk-orders. p.808

The state as a political-economic term deposes the inviolability of sovereignty in its actuality and also its theoretical-ideological justification. The state may be a term of social sabotage, but in this it is not typologically distinct from any other instance of capital-power (which is the free market is an untenable doctrine; it is distinct only with regard to its still relatively large size in terms of price s it can set, in being an identifiable actor and the authority to explicitly transmit its finance-power across all social institutions by law and taxation. As the sabotage and typically a large power over collective thetic future. p.809

APPENDIX: Investopedia Definitions

[An option is a contract that gives the buyer the right, but not the obligation, to buy or sell an **underlying** asset at a specific price on or before a certain date. An option, just like a stock or bond, is a **security**. It is also a binding contract with strictly defined terms and properties.

Still confused? The idea behind an option is present in many everyday situations. Say, for example, that you discover a house that you'd love to purchase. Unfortunately, you won't have the cash to buy it for another three months. You talk to the owner and negotiate a deal that gives you an option to buy the house in three months for a price of \$200,000. The owner agrees, but for this option, you pay a price of \$3,000.

Now, consider two theoretical situations that might arise:

It's discovered that the house is actually the true birthplace of Elvis! As a result, the market value of the house skyrockets to \$1 million. Because the owner sold you the option, he is obligated to sell you the house for \$200,000. In the end, you stand to make a profit of \$797,000 (\$1 million – \$200,000 – \$3,000).

While touring the house, you discover not only that the walls are chock-full of asbestos, but also that the ghost of Henry VII haunts the master bedroom; furthermore, a family of super-intelligent rats have built a fortress in the basement. Though you originally thought you had found the house

of your dreams, you now consider it worthless. On the upside, because you bought an option, you are under no obligation to go through with the sale. Of course, you still lose the \$3,000 price of the option.

Swaps are highly complex off-exchange futures contracts whose underlying is not asset prices but cash flows. Invented in the early 1980s swaps exchange advantageous rates in different markets to hedge income streams by each party effectively paying for the others's cash flow via an intermediary financial institutions.

Swaps are highly complex off-exchange futures contracts whose underlying is not asset prices but cash flows. Invented swaps exchange advantageous rates in different markets to hedge income streams by each party effectively paying for the other's cash flow via an intermediary financial institution. Example: a firm able to obtain preferential terms in fixed interest rate markets wants to borrow funds at a variable rate or for a shorter term than is available in the fixed-rate market. Swapping the preferential loan in the fixed-rate market for a loan obtained by another agency in the variable-rate market advantages not only the first company but also a counter party seeking what, for it, is a preferable rate on the fixed-rate market.

Calculated only in terms of their notional amount, swaps are detached from any relation to non financial assets. Swaps make explicit qua market instruments the abstraction and exogeneity of derivatives from the nonfinancial dimension of the underlying, a structural condition of the financial crisis.

A swap is an agreement between two parties to exchange sequences of cash flows for a set period of time. Usually, at the time the contract is initiated, at least one of these series of cash flows is determined by a random or uncertain variable, such as an interest rate, foreign exchange rate, equity price or commodity price. Conceptually, one may view a swap as either a portfolio of forward contracts, or as a long position in one bond coupled with a short position in another bond. This article will discuss the two most common and most basic types of swaps: the [plain vanilla](#) interest rate and [currency swaps](#).

Unlike most standardized [options](#) and [futures](#) contracts, swaps are not exchange-traded instruments. Instead, swaps are customized contracts that are traded in the [over-the-counter](#) (OTC) market between private parties. Firms and financial institutions dominate the swaps market, with few (if any) individuals ever participating. Because swaps occur on the OTC market, there is always the risk of a counterparty defaulting on the swap.

The plain vanilla currency swap involves exchanging principal and fixed interest payments on a loan in one currency for principal and fixed interest payments on a similar loan in another currency. Unlike an interest rate swap, the parties to a currency swap will exchange principal amounts at the beginning and end of the swap. The two specified principal amounts are set so as to be approximately equal to one another, given the exchange rate at the time the swap is initiated.

For example, Company C, a U.S. firm, and Company D, a European firm, enter into a five-year currency swap for \$50 million. Let's assume the exchange rate at the time is \$1.25 per euro (e.g. the dollar is worth 0.80 euro). First, the firms will exchange principals. So, Company C pays \$50 million, and Company D pays 40 million euros. This satisfies each company's need for funds denominated in another currency (which is the reason for the swap).

Products between two or more parties. In a credit default swap, the buyer of the swap makes payments to the swap's **seller** up until the **maturity date** of a contract. In return, the seller agrees that, in the event that the **debt issuer defaults** or experiences another **credit event**, the seller will pay the buyer the security's **premium** as well as all **interest** payments that would have been paid between that time and the **security's** maturity date.

A credit default swap is, in effect, **insurance** against non-payment. Through a CDS, the buyer can mitigate the risk of their investment by shifting all or a portion of that risk onto an insurance company or other CDS seller in exchange for a periodic fee. In this way, the buyer of a credit default swap receives credit protection, whereas the seller of the swap guarantees the **credit worthiness** of the debt security. For example, the buyer of a credit default swap will be entitled to the **par value** of the contract by the seller of the swap, should the issuer default on payments.

Any situation involving a credit default swap will have a minimum of three parties. The first party involved is the **financial institution** that issued the debt security in the first place. These may be bonds or other kinds of securities and are essentially a small **loan** that the debt issuer takes out from the security buyer. If an institution sells a bond with a \$100 premium and a 10-year **maturity** to a buyer, the institution is agreeing to pay back the \$100 to the buyer at the end of the 10-year period as well as regular interest payments over the course of the intervening period. Yet, because the debt issuer cannot guarantee that they will be able repay the premium, the **debt buyer** has taken on risk.

The debt buyer in question is the second party in this exchange and will also be the CDS buyer should they agree to enter into a CDS contract. The **third party**, the CDS seller, is most often an **institutional investing** organization involved in credit **speculation** and will guarantee the **underlying debt** between the issuer of the security and the buyer. If the CDS seller believes that the risk on securities that a particular issuer has sold is lower than many people believe, they will attempt to sell credit default swaps to people who hold those securities in an effort to make a **profit**. In this sense, CDS sellers profit from the security-holder's fears that the issuer will default.

In this eventuality, the buyers of the CDS gets reimbursed for the underlying loan—the insurances against default—and the seller pays to take the credit off the buyers's hands, leaving the seller with a double cost: the unpaid debt itself and the payout to the buyer. In case of no credit event, the seller receives the premium payments to maturity. In short, the credit risk is hedged. The CDS is similar to insurance in case of loan defaults, except that (i) the seller of the CDS holds the risk of credit default without holding the credit itself; (ii) the seller can sell the protection without capital reserves to compensate the buyer; and (iii) the buyers need not have any ownership claims over the underlying loan nor any direct insuranceable interests in it.

Financial establishments and regulators supported the development of the naked CDS market, again in the interest of increasing liquidity for the reference bonds: the increased number of sellers and insurance like structures against credit defaults enabled a greater number of credit event risks to be bought, and also greater flexibility in the market for risk, increasing the overall size-now meaning the credit exposure-of the market.

The primary difference between options and futures is that options give the holder the *right* to buy or sell the **underlying asset** at expiration, while the holder of a **futures contract** is *obligated* to fulfill the terms of **his/her contract**.

In real life, the actual delivery rate of the underlying goods specified in futures contracts is very low. This is a result of the fact that the hedging or **speculating** benefits of the contracts can be had largely without actually holding the contract until expiry and delivering the good(s). For example, if you were long in a **futures contract**, you could go short in the same type of contract to offset your position. This serves to exit your position, much like selling a stock in the **equity markets** would close a trade.]con

Despite the evident credit risks of such structures, financial establishments and regulators supported the development of the naked CDS market, agains in the interest of increasing liquidity for the reference bonds: the increased number of sellers and insurance-like structures against credit defaults enabled a greater number of credit event risks to be bought, and also greater flexibility in the market for risk, increasing the over size meaning the credit exposure.