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**Capitalism as a System of Contingent Expectations**  
Toward a Sociological Microfoundation  
of Political Economy

Jens Beckert



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of Political Economy**

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## Abstract

Political economy and economic sociology have developed in relative isolation from each other. While political economy focuses largely on macrophenomena, economic sociology focuses on the level of social interaction in the economy. The paper argues that economic sociology can provide a microfoundation of political economy beyond rational actor theory and behavioral economics. Based on a discussion of what I call the *four Cs of capitalism* (credit, commodification, creativity, and competition), I argue that macroeconomic outcomes depend on the “contingent expectations” actors have in decision situations. Expectations are based on the indeterminate and therefore contingent interpretation of the situations actors face. This shifts attention to the “management of expectations” as a crucial element of economic activity and to the institutional, political, and cultural foundations of expectations. The dynamics of capitalist development are precarious because they hinge on the creation of expectations conducive to economic growth.

## Zusammenfassung

Politische Ökonomie und Wirtschaftssoziologie haben sich relativ isoliert voneinander entwickelt. Während die Politische Ökonomie vornehmlich Makrophänomene untersucht, konzentriert sich die Wirtschaftssoziologie zumeist auf die Ebene der sozialen Interaktion in der Wirtschaft. Der Beitrag zeigt, dass die Wirtschaftssoziologie Grundlagen für eine Mikrofundierung der Politischen Ökonomie jenseits der Theorie rationalen Handelns und behavioristischer Theorien bietet. Ausgehend von der Diskussion vier zentraler Elemente kapitalistischer Ökonomie, die ich als *the four Cs of capitalism* bezeichne (*credit, commodification, creativity, and competition*), zeige ich, dass makroökonomische Resultate auf den „kontingenten Erwartungen“ der Akteure in der Handlungssituation beruhen. Erwartungen gründen auf den unbestimmten und daher kontingenten Interpretationen der Handlungssituation, mit der die Akteure konfrontiert sind. Dies lenkt die Aufmerksamkeit auf das „Erwartungsmanagement“ als zentrales Element wirtschaftlichen Handelns und zu den institutionellen, politischen und kulturellen Grundlagen von Erwartungen. Die Dynamik kapitalistischer Entwicklung ist immer prekär, weil sie von der Schaffung von Erwartungen abhängt, die Wachstum befördern.

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## Capitalism as a System of Contingent Expectations: Toward a Sociological Microfoundation of Political Economy

The economy has long ceased to be the exclusive domain of economists. Political economy and economic sociology have both become important subfields in their respective academic disciplines over the past two decades, bringing the economy into the focus of political science and sociology.

Although both subfields share important premises, they have developed in relative isolation from each other. Research in political economy focuses on the varieties of capitalism and on the transformation of the institutional configurations of contemporary capitalism in the process of economic liberalization. Researchers are interested primarily in the explanation of macroeconomic outcomes, such as economic growth rates, inflation rates, aggregated demand, changes in the sector-composition of the economy, or accumulation crises (Boyer 2004; Hall/Soskice 2001; Thelen/Mahoney 2010). Economic sociology, by contrast, focuses on the “embeddedness” of economic action, showing in often meticulous case studies how economic outcomes depend on the structure of social networks, institutional configurations, and cultural contexts (Dobbin 2004; Smelser/Swedberg 2005; Granovetter 1985).

At first glance, this disconnection of the two subfields seems to become even more pronounced with the recent move in political economy to shift interest from the varieties of capitalism to the “commonalities of capitalism” (Streeck 2011). With this shift, political economy starts to abstract from historically specific institutional contexts and their complementarities and focuses interest on the general logics of capitalist reproduction.<sup>1</sup>

Contrary to the initial assumption of a further divide between political economy and economic sociology I argue that the shift towards the investigation of the commonalities of capitalism opens up avenues for a closer alignment of the two subfields. This holds true because economic sociology, with its focus on the micro and meso levels of analysis, offers a complementary perspective to political economy by providing a foundation for understanding the dynamics of capitalism from the actor perspective.

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I would like to thank Christoph Deutschmann, Timur Ergen, Ted Fischer, and Wolfgang Streeck for helpful comments on a previous version of the article.

1 For this shift see also Sewell (2008) and Kocka (2010). In economic sociology, the notion of capitalism is seldom used. Exceptions are the two volumes edited by Nee and Swedberg (2005, 2007). Interest in macroeconomic development has increased in economic sociology in recent years, motivated by the recent financial crisis and the “great recession” (Krippner 2011).

While the strength of political economy has been the focus of the institutionalist explanation of macroeconomic outcomes, including social structures such as inequality and skill distribution, its underdeveloped part has been the lack of a microfoundation explaining the concrete processes underlying the observed changes on the macro level. For the most part, political economists have either rejected the need for a microfoundation (Thelen/Steinmo 1992) or have made use of rational actor theory (Hall/Soskice 2001). Although some of the more recent accounts by political economists show increased interest in interpretive action theories (Blyth 2010; Nelson/Katzenstein 2010; Streeck/Thelen 2005; Thelen/Mahoney 2010) developed mostly in sociology, these have not been systematically integrated into the analysis of the dynamics of capitalism.

I follow the work done in the field of economic sociology and pursue a distinctively micro perspective. By micro perspective I mean an analysis of the economy from the perspective of actors and their cultural, social, and political contexts, with a particular eye to the decision problems they confront. However, in contrast to most work being done in the new economic sociology, I will apply this perspective to an analysis of the dynamics of capitalism. How does capitalism operate, when considered from the perspective of the social interactions of the actors who are enacting, reproducing, and changing the economic system through their decisions? What are the connections between these social interactions and the macrophenomena that are the focus of political economy?

To understand the “expansive dynamism of capitalism” (Sewell 2008: 522) one needs an understanding of the micro processes underlying macro outcomes (Deutschmann 2009). My main thesis is that capitalism, looked at from the perspective of social interaction, can be analyzed as a *system of contingent expectations*. It is on the basis of expectations that economic activities are pursued or abstained from. Under conditions of uncertainty, expectations and the decisions based on them are not determined by objective conditions but rather are the outcome of actors’ interpretations of the situation in the context of prevailing institutional structures, cultural templates, and social networks. The notion of *contingent expectations* expresses that the “future is an ambiguous canvas capable of multiple interpretations” (DiMaggio 2002: 90).

For capitalist economies to operate, societies must succeed in inducing expectations in actors that motivate them to engage in the activities on which growth is based. Hence the dynamics of capitalism can be analyzed as based on the fluctuations of expectations in a world characterized by uncertainties. As a consequence, the development of the economy depends crucially on the *management of expectations*; motivating the decisions of economic actors by shaping their expectations and by shaping the social and political structures underlying these expectations, becomes one of the main tasks of political regulators and a major goal of speech acts uttered in the field of the economy.

I will start by briefly defining capitalism and identify four different elements that make up the main activities underlying the dynamics of capitalism: credit, commodification, innovation, and competition. Following this I will discuss each of the four elements

separately, showing the role of expectations in their operations. In their historical development, capitalist societies succeeded increasingly in the development of institutional and cultural capacities which allowed for the unfolding of expectational structures conducive to the expansion of the four elements to be discussed. At the same time, the economy also became more fragile because of enlarged interdependencies in an increasingly global economic system and the associated expansion of cognitive demands. In the conclusion I will argue that the perspective developed provides the basis for a microfoundation for understanding the dynamics of capitalist economies, which offers an alternative to rational actor theory and behavioral economics.

## 1 The four Cs of capitalism

What is capitalism? Capitalism can be defined as an endemically dynamic economic system in which the production of goods and services is motivated by expected profits, materializing in market exchange. What distinguishes capitalism from all other economic systems is its need to grow – it can stabilize itself only by continuously undermining its own historical forms in the relentless search for new profit opportunities. The capitalist economy can never be in equilibrium, but remains always in a “dynamic disequilibrium” (Beckert 2009). In the analysis of capitalism the explanation of this restlessness stands at the center. While the issue can be addressed in highly abstract form by analyzing the processes of capital accumulation, the more telling matters for examination are found on a less abstract level: through what *elements* does capitalism produce its continuous dynamics, which has led to unprecedented growth over the past 200 years but also recurrently to sharp economic crises? To address this question I take up – and amend – a categorization recently introduced by Wolfgang Streeck (2012) which distinguishes between four core elements underlying the expansiveness of capitalism: credit, commodification, creativity, and competition.<sup>2</sup> These elements I call the *four Cs of capitalism*.

*Credit* stimulates economic activity by providing purchasing power in the present based on the expectation that the loan can be repaid by the debtor through his surplus production in the future. *Commodification* provides the “raw material” for capitalist expansion by turning goods and services into tradable products that are produced to generate

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2 This categorization is in principle open to further elements. Two possible candidates would be property rights and social class. Theories of capitalism usually emphasize the crucial role of property rights (North 1990; Richter/Furubotn 2003) for the development of capitalism (Collins 1980). While I follow the claim of the importance of property rights I maintain that they take a derived place by being necessary conditions for the expansion of credit, innovation, competition, and commodification. Social class comes in as an important element of the operation of the elements discussed. The Marxist tradition of defining class relations in capitalism through the commodification of labor is included under the heading of commodification.

profits on markets. *Creativity*, i.e. innovation, stimulates economic dynamics through the invention of new products and efficiency gains. *Competition* forces suppliers to seek gains in efficiency in order not to be swept from the market by other producers.

The four elements all relate to market processes. They are interdependent and only in combination do they produce the dynamic restlessness of the capitalist order. Innovation is a means of coping with competition and leads to new commodities. Competition motivates innovation but also commodification. One form of innovation is to put new products into the market. Innovation depends on credit to secure the means to cover costs in the innovation process which will only later be recovered through the sales of the product. The extension of credit relations creates capital for innovation and investments fostering commodification processes. The interdependencies between the four Cs of capitalism are multifaceted. But nevertheless it is useful to distinguish between them analytically.

Bringing the four Cs of capitalism to the forefront of an analysis of capitalism does not imply that they would appear only in capitalism or even only in contemporary capitalism. Rather we can understand capitalism as a system which unfolds through the expansion of the four elements:<sup>3</sup> the development of modern credit and monetary systems, together with the emergence of institutional trust devices that provide the foundation for the expansion of credit (Carruthers/Ariovich 2010; Graeber 2011; Ferguson 2008); the increasing commodification of the provision of goods and services, especially through the emergence of labor markets, the receding of subsistence economies, and the emergence of a consumer society since the eighteenth century (Marx [1867]1977; Campbell 1987); the systematic expansion of innovative activities through the application of rational science to the production process (Baumol 2002; Landes 1969); and finally the creation of competitive markets through the provision of infrastructures facilitating the exchange of commodities – first at a national, later at a global level –, the introduction of standards, and the institutionalization of freedom of trade, including the banning of guilds and other protectionist measures (Braudel [1979]1985; Fligstein 2001).

Making the four Cs of capitalism the cornerstone of analysis mirrors approaches in political economy analyzing the financial system, processes of “land grabbing,” competition regimes, and innovation systems. However, unlike these macro oriented approaches, mine focuses on the level of social interaction, concentrating on the creation (and destruction) of actors’ expectations which are necessary for these elements to operate in a manner conducive to the dynamic reproduction of the system.

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3 By highlighting the four elements I am not aiming at a theory of the origins of capitalism and its different forms. My only claim is that the dynamics of capitalism operates through the four elements identified and that they have increased in scope in the course of modern capitalism’s development.



## Credit

*Credit* is undoubtedly one of the main elements of capitalist economic growth. “Without the foundation of borrowing and lending, the economic history of our world would scarcely have got off the ground” (Ferguson 2008: 31). Credit as a form of social relationship can be traced back 5000 years in history (Graeber 2011), but in no other system did it have the scope it has in modern capitalism. Schumpeter (1912: 95ff) even defined capitalism as a system of indebtedness.<sup>4</sup> Through credit an actor obtains purchasing power in the present against a promise – the promise to repay the loan at a specified point in time, together with an additional sum called interest. The fact that credit becomes available only against interest means that it must be utilized to produce a surplus. Hence credit relations put pressure on the economic system to expand.

Viewed from the actor level, for credit relations to come into existence, the creditor must hold the expectation that he will be repaid the sum of money and the agreed upon interest at the point in time stipulated in the contract. That this expectation stands at the center of credit relations can be seen etymologically. The term “credit” stems from the Latin “credere,” meaning “to believe.” The “belief” consists in the expectation that the debtor will repay the loan. Hence credit relations are anchored in the *credibility* of the borrower’s promise to repay the loan, which has its basis in an assessment of the debtor’s trustworthiness (see also Carruthers/Stinchcombe 1999). Credit is essentially a relationship of trust and confidence.<sup>5</sup>

The central role of trust extends to the monetary system as such. “[T]he value of a unit of currency is not the measure of the value of an object, but the measure of one’s trust in other human beings” (Graeber 2011: 47). It is not incidental that banknotes were originally called “promissory notes.” The acceptance of money, which as such is worthless, is based on the contingent expectation that everybody else will accept the pieces of paper as payment (Ganßmann 2011). Trust is conferred in the promise of the issuer of the money – today the state or its central bank – that he will not increase monetary supply at a rate which leads to the devaluation of the money through inflation.<sup>6</sup>

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4 Credit allows entrepreneurs access to economic goods before they have a “normal claim” to them. “It temporarily substitutes, as it were, a fiction of this claim for the claim itself” (Schumpeter 1912: 107).

5 The difference between the two concepts I see as follows: trust is demarcating a situation in which the other party may take the deliberate decision to damage me for his own benefit. Confidence is a situation in which I engage in incalculable risks which emerge from the openness of the future which is unforeseeable for both parties. Fraud would be a breach of trust. The expectation, say, that Goldman Sachs will stay in business is an expression of confidence.

6 In a monetary system in which paper money is covered by a commodity – mostly gold – the promise is that the issuer will redeem the bill against a certain amount of the commodity. Effectively this was to make credible the promise of the issuer of paper money that he will not increase the money supply at a rate which will devalue the currency.

What makes credit and money so interesting from a sociological perspective is that the expectation that a debtor – whether a private person, an organization or the state – will indeed live up to the promise to repay the loan can never be rationally calculated because the future cannot be foreseen. Since the ability and willingness of the debtor to repay the loan are ultimately uncertain, the expectations of creditors and hence their willingness to give credit are dependent on interpretation.<sup>7</sup> Viewed from the macro perspective, the trust entailed in credit is justified only if the economy grows and repayment of the credit can be enforced. Viewed from the actor level, the promise to repay a loan depends on the debtor being able to utilize the production factors purchased with the loan in a way that he makes a profit from selling the products at a later point in time. “If the expectations are not sufficiently fulfilled the whole system becomes destabilized” (Ganßmann 2011: 14).

The uncertainty entailed in the expectations regarding the risks involved in credit holds also for the operation of the monetary system. Philip Mirowski has called the assumption that the value of money will not have deteriorated at the point in time when the holder wants to use it for the purchase of goods a “working fiction of a monetary invariant” (Mirowski 1991: 581). It is a fiction because monetary stability depends on the actual commitment of central banks to low inflation (Ingham 2004: 31), on banking regulation, and on macroeconomic development in the future (Ganßmann 2012: 231f), all of which are uncertain. As the history of monetary crises shows, the devaluation of money is a recurrent phenomenon. Nevertheless, in a money economy actors must act *as if* the value of money were invariant in order to accept money as means of payment and to abstain from wage and price increases in anticipation of inflation. Because the future is open, the expectation of the stability of money cannot be justified on calculative grounds and requires, as Georg Simmel argued, an element of “supra-theoretical belief” or “social-psychological quasi-religious faith” (Simmel [1907] 1978: 179, quoted from Ingham 2004: 65).

Therefore, if capitalist expansion depends on credit, societies must succeed in creating the expectation in capital owners that the promise entailed in the credit relation will indeed be honored. On the side of debtors the expansion of credit relations presupposes the willingness of potential actors to become indebted to improve their monetary wealth in the future. This can also not be taken for granted: borrowing money for investment has a social precondition in a life-plan of individuals which is directed towards the future and entails the willingness to engage in risks and speculation to increase one’s wealth (Deutschmann 2009: 32). Once a person is indebted – be it for investment or for consumption purposes – credit has a disciplinary effect by pressuring the debtor to act in ways conducive to his ability to repay the loan together with interest (Calder 1999). Through this pressure, credit itself has a motivational effect relevant for capitalist growth.

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7 See also Prato/Stark (2012) for the role of interpretation in the valuation of financial assets.

Viewed from a historical perspective the ability to expand credit relations by expanding expectations of trustworthiness has been one of the most important – but often unnoticed – preconditions for the unfolding of capitalism. How was this unprecedented expansion of trust achieved? The foundations of trust in credit are social in character. They can be cultural as in, for instance, the prevalence of a shared universalistic ethic (Weber [1930]1992), a commitment to rules of conduct on the part of the “respectable merchant” (Braudel [1979]1985), or classification schemes that seek to guide expectations (Carruthers/Stinchcombe 1999: 356).<sup>8</sup> They can be based on social networks, as they are, for instance, in ethnic communities (Portes/Sensenbrenner 1993). For the most part, however, they are institutional: they are based on the existence of a legal system able to effectively enforce property rights (North 1990), on accounting laws, bankruptcy laws (Halliday/Carruthers 2009), the risk regulation of banks, and on laws on the independence of the central bank. These are all institutional devices aimed at supporting the trust and trustworthiness of actors in the credit system. Without them, the expansion of credit relations over the past 200 years would have been impossible.

However, the institutional safeguards have not led to the vanishing of uncertainty in credit relations. The vulnerability of creditors has two sources: fraud and unpredictability. Despite institutional safeguards, malfeasance remains a threat to creditors, as can be seen from spectacular instances of fraud, such as the bankruptcy of Enron or the Ponzi scheme run by Bernard Madoff. Because institutional structures made possible new forms of risk taking associated with profit opportunities, but also with increased opportunities for fraud, the contingency of expectations regarding the repayment of credit has remained.<sup>9</sup>

The second source of vulnerability is the unpredictability of the debtor’s economic success. Debtors may be fully committed to repaying their loan, but the market may turn against them with the consequence that they are *unable* to repay their debt. Due to uncertainty, future economic development cannot be foreseen, either by debtors or by investors. Credit decisions, like any other investment decision, are therefore based on what John Maynard Keynes called the state of confidence. This, however, is nothing but the contingent expectations of economic actors regarding the economic outlook and debtors’ creditworthiness. If entrepreneurs have pessimistic expectations regarding the economic outlook they will reduce their borrowing. At the same time, the owners of financial wealth will develop a preference for liquidity and charge higher interest to debtors in precisely those situations in which firms or the state need additional liquidity

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8 Since the functioning of institutions also depends on the “good will” of those regulated by the institutions, moral resources may be an indispensable factor in the possibility of capitalist dynamics (Streeck 2006: 17).

9 The willingness to give credit also depends, of course, on the interest rate. But it would be shortsighted to see the expansion of credit only as a function of the interest rate, as can be seen in economic crises when even interest rates close to zero do not lead to an increase in lending. Cf. Keynes ([1936]1964).

(Keynes [1936]1964). By withholding capital from its employment in the production process, economic output is reduced. Expectations determine the level of investment and lie at the root of business cycles and financial bubbles.

The current financial and economic crisis provides ample evidence of the role of contingent expectations in macroeconomic development. The expansion of credit in the American housing market – as well as some European housing markets, such as the United Kingdom, Ireland, and Spain – was based on the “fictional expectation” (Beckert 2011a) of ever-increasing housing prices which would have made it possible for home owners to repay their mortgages. Only based on this shared expectation did banks and borrowers see a benefit in the expansion of credit. However, even if investors and borrowers do not share the same expectation regarding market outlook, the contingency of expectations can still open up room for the extension of credit. If credit risks can be sold on a secondary market – for instance, on the market for collateralized debt obligations – it is not the expectation of the creditor regarding the risk of the debtor that is relevant but the expectation of the party to whom the debt is subsequently sold. Hence what is relevant for the investment decision is market opinion (Keynes [1936]1964). Even if an individual investor holds the belief that an asset is overpriced, he may stay in the market because he assumes “that he will be first in line when the borrower gets into difficulties and a run takes place” (Hellwig 1998: 718). This type of (over-)confidence lies at the root of market bubbles.

Since investments are not only risky but also a source of profit and because expectations concerning a debtor’s ability to repay his loan are contingent, the *management of confidence* must become a prime activity in the economy (see Figure 1). Through “impression management” (Goffman 1959) trust-takers try to signal their trustworthiness (Beckert 2005; Bacharach/Gambetta 2001). The debtor (trust-taker) will attempt to convince potential creditors of the prudence of investing in his business. Through signals he will attempt to convince the trust-giver of his honesty and demonstrate the soundness of his business. In this sense enterprise “depends on hopes” (Keynes [1936]1964: 162). Seen from the side of the investor (trust-giver) in search of profitable investment opportunities, he must convince himself – or his principals – of the potential profitability of the deal. For this he needs to interpret the signals provided by the debtor and the market. Rating agencies and credit scoring systems (Hiss/Rona-Tas 2011) are intermediaries in financial markets whose function it is to interpret the debtors’ signals to assess their creditworthiness. They thereby serve to stabilize investors’ expectations and can be used to influence expectations.

The management of confidence regarding creditworthiness can also proceed from the creditor. A creditor already holding debt from a debtor will attempt to downplay any problems of the debtor to avoid market depreciation of his assets by influencing the expectations of other investors while perhaps already looking for an exit strategy.<sup>10</sup> On

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10 When S&P downgraded American government debt in the summer of 2011 Warren Buffet went

Figure 1 The four Cs of capitalism

	Management of expectations	Motivating belief	Underlying social arrangements (examples)
<b>Credit</b>	Management of confidence	Belief in promise	<ul style="list-style-type: none"> <li>– Economic ethics</li> <li>– Classifications (e.g. credit rating, scoring models)</li> <li>– Legal system</li> <li>– Social networks</li> <li>– Power</li> </ul>
<b>Commodification</b>	Management of value	Belief in performance of good	<ul style="list-style-type: none"> <li>– Private property rights</li> <li>– Legitimation of profit-oriented exchanges</li> <li>– Classification of goods</li> </ul>
<b>Creativity (Innovation)</b>	Management of imaginaries	Belief in imaginary	<ul style="list-style-type: none"> <li>– Stories and myths</li> <li>– Social inequality</li> <li>– Legitimation of success-seeking through risk taking</li> <li>– Social networks</li> </ul>
<b>Competition</b>	Management of expectations regarding others' decisions	Belief in strategy outcome	<ul style="list-style-type: none"> <li>– Stories</li> <li>– Economic theories</li> <li>– Power</li> </ul>

the other hand, assessment of a debtor's creditworthiness can be deliberately cast into doubt by investors speculating on his default.<sup>11</sup> If expectations are themselves a source of profits or losses the management of confidence becomes a crucial element of capitalist production.

Depending on a debtor's need for credit, the management of confidence can become a power game in which capital owners force the trust-taker to comply with their conditions. Creditors exercise "voice" by threatening "exit." This argument was made as early as the 1930s by Keynes: "[E]conomic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average business man" (Keynes [1936]1964: 162). A few years later, Polish economist Michal Kalecki took up this argument, giving it a much more political twist: if employment levels depend on the state of confidence, this "gives to the capitalists a powerful indirect control over Government policy: everything which may shake the state of confidence must be carefully avoided because it would cause economic crisis" (Kalecki 1943: 325).

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on TV to show his conviction that American debt is fully secure for investors. Incidentally, the holding firm Berkshire Hathaway, of which Warren Buffet is the CEO, owns 40 billion dollars in US government debt.

11 A prominent example is the statement made by former Deutsche Bank CEO Rolf Breuer who, in 2002, publicly spread doubt concerning the creditworthiness of German media mogul Leo Kirch. Kirch had to declare bankruptcy shortly afterwards and sued Deutsche Bank for damage compensation. The lawsuit is still ongoing.

again similar to the strategic interventions of interested actors in the management of confidence on financial markets. The expectations creating the symbolic value of goods are contingent and fragile because they are contested in such competitive struggles but also because they are not based in an essential quality of the product. There is no “natural need” for their demand. Value is created through the social and cultural definitions of the performance of the good. Economic growth is therefore understandable only as a social and cultural process and not as being based on “the necessities of life” (Smith [1776]1976: 368).

### Creativity (Innovation)

Undoubtedly, innovations are a further cornerstone of the uniqueness of capitalist dynamics (Baumol 2002; Deutschmann 2009; Schumpeter 1912). Through innovation new factor combinations are introduced into the market which – if successful – satisfy previously unattended needs, create new needs, or enhance efficiency in the production process. Like credit and commodification, innovations are, looked at from the perspective of social interaction, based on actors’ contingent expectations. I want to refer to these expectations as *imaginaries of the future*. As in the case of the other two elements, the management of expectations plays an important part in innovation processes. It takes the form of a “management of imaginaries.”

The central role of imaginaries in innovation was recognized by Joseph Schumpeter (1912). Schumpeter’s analysis sets out from the observation that new combinations initially exist only in the consciousness of the actor. While most actors are caught up in routines, some actors “with more acute intelligence and a more active imagination envisage countless new combinations” (ibid.: 163). Hence innovations begin with imaginaries that lead the entrepreneur to “adapt his economic activities accordingly” (Schumpeter 1912: 165). The entrepreneur will, based on the imaginary of a new factor combination, change the value assessment of the goods offered in the market and change product demand which will lead to changes in relative prices. Hence it is a utopian vision at the outset, which shows a pretended future reality, that motivates innovative activity. In the contemporary economy the late Steve Jobs is the exemplification par excellence of the creation of successful innovations through the creation of imaginaries, captivating the computer industry and large consumer groups.

Imaginaries are expectations that allow actors to move beyond inherited thought patterns and categories by bringing them into an as-if world in which given reality is surpassed and a different one considered (Bronk 2009: 201; Tappenbeck 1999: 53). Schumpeter insists that innovation is incompatible with the calculative behavior assumed by economic theory because innovations cannot be rationally deduced from existing knowledge. Instead, the imaginaries of economic actors motivate and guide an inherently incalculable innovative process (see also Beckert 2002; Deutschmann 2008) based

on the belief in the imagined new combination as a “future present” (Esposito 2011). This implies that the expectations regarding novel factor combinations must necessarily be contingent and helps to explain why it is possible to predict the expansion of capitalism without being able “to predict the actual direction of future logics” (Sewell 2008: 523).

Schumpeter has rightly been criticized for providing an overly individualistic account of the motivation to engage in innovative activity. Entrepreneurs’ expectations must be understood much more as socially constituted. The “voicing of promises” which show the way to the future are in fact collective projections (van Lente/Rip 1998: 222). The utopian vision can be pursued successfully only if it is not considered to be purely the madness of an individual. That an imaginary of the future is shared collectively protects new ideas from disbelief (March 1995: 437).

Expectations regarding innovative activities have further social preconditions. “Capitalist entrepreneurs do not fall from heaven but can grow only in a particular structural, institutional, and cultural environment” (Deutschmann 2011: 4). Robert Merton (1957) showed that innovative activities are anchored in the normative structure of modern societies which value inner-worldly transcendence through success-seeking by risk taking. Another element of this environment is social inequality, without which there cannot be a motive to engage in activities that will lead to social rise. Secondly, it must in reality be possible to rise through entrepreneurial effort. Capitalism is historically unique also in being an economic formation which determines social status not by social origin but based on market success ascribed to effort. This holds true even if there are strong real barriers to social mobility. A motivation to engage in innovative activity can emerge only if the structural polarization of classes does not create expectations which assume that the barriers to upward mobility are individually insurmountable (Deutschmann 2011: 4). Here institutional, network, and cultural factors are important: the education system must be open to meritocratic principles, networks in the family or the (ethnic) community must be conducive to individual success-seeking (Portes/Sensenbrenner 1993), and cultural or religious traditions must support entrepreneurial orientations (see Deutschmann 2011: 4f). Neither a completely egalitarian society nor a society that actually or legally blocks status mobility will be able to create the expectations that usher in entrepreneurial activity. To create beliefs in the possibility of status enhancement is a necessary condition of capitalist reproduction. Failure in that respect deprives capitalism of one of its central pillars of growth.

Expectations in innovative processes are also subject to management of expectations, which takes the form of “management of imaginaries.” An example of this was provided by Sophie Mützel (2010) in a study investigating the innovation process in biotechnology firms aiming to develop genetically engineered medication for treating breast cancer. In this highly uncertain environment the success of firms’ research strategies cannot be foreseen and hopes of successful product development are often disappointed. Actors try to influence the expectations of others – and the decisions following from them –

“positional value” and “imaginative value” (Beckert 2011b). Both these forms of value refer to symbolic qualities that are created as part of cultural development and maintained through communicative processes and market devices. This implies that there is a “management of value” just as there is a “management of confidence” in the field of financial investments.

Positional value comes about because *third parties* value the commodity and position the owner of it in a desired position in the social space. I do not need to like Andy Warhol, but having one of his paintings in my apartment certainly impresses my visitors. The motivation for purchasing the painting hinges on aspirations of being recognized as a member of a certain community, in other words, on the social recognition the owner experiences. In the case of “imaginative value” the social surroundings are left out: my social surroundings may or may not like the Andy Warhol painting, but I value qualities “in” it that I ascribe symbolically to it.<sup>17</sup> Here the worth of objects stems from transcendental ideals and values which become symbolically represented by the object. In her work on life insurance Viviana Zelizer (1979) gave an example of how imaginative value is created: life insurance could become a marketable product in the nineteenth century only when it was interpreted as an expression of the family responsibility of the deceased. The product became a symbolic representation of the value of responsibility.<sup>18</sup>

Contemporary economies are increasingly built around expectations regarding the symbolic performance of goods. Markets for cars, tourism, computers, antiques, wine, lotteries, real estate, fair-trade products, or fashion cannot be understood without reference to contingent expectations regarding the positional and imaginative performance offered by the goods. Proceeding from this perspective, however, makes it at the same time utterly clear that the expansion of capitalist growth will continue to be problematic because of the contingent character of wants: the greatest threat to the car industry would stem from consumers losing interest in the symbolic qualities associated with cars.

The symbolic dimensions of goods create an attraction to them but also exert a structural force to exercise demand beyond functional necessity because social status positions hinge on the possession of these goods. For advanced economies to grow, however,

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17 To avoid a possible misunderstanding: this does not imply that imaginative value is purely individual. To the contrary, the preferences are rooted culturally and socially. However, the value does not necessarily emerge from calculated effects of positioning the owner in a certain position in social space.

18 Another example of imaginative value is the emergence of a market for whale watching (Lawrence/Phillips 2004). Paying money to board a ship which sails off the coast for the sole purpose of observing whales swimming in the ocean would have appeared an act of utter madness to any contemporary of Herman Melville. Only through a cultural shift of symbolic connotations of whales as wild creatures to be feared to symbolic representations of freedom and intact nature – or from “Moby Dick” to “Free Willy” – could whale watching become a commodity, although its value is purely symbolic. Observing whales makes it possible to “experience” a transcendent value.



it is not only necessary that objects be bought for their symbolic performance. Producers will only be able to keep selling new products if their symbolic value is dynamic, that is, if the value of a purchased product can diminish in order to create a desire for new purchases. The dynamics of the symbolic value of goods can be explained by two mechanisms. The first is based on the desire for social distinction, described by Georg Simmel ([1908]1919) to explain fashion and referring to the positional value of goods. If the purpose of consumption is to signal higher social status through the exclusivity and novelty of the products consumed, goods lose value once they are diffused into the mainstream. This means that ever-novel objects must be defined as symbolic representations of distinction, a mechanism that finds expression in continuous processes of symbolic valuation and devaluation. The second mechanism has its root in the process of appropriation itself, which leads to a devaluation of the acquired object. The desire for goods, being built upon mental images, may differ considerably from reality and may hence be the source of disappointment once the object is purchased (Hirschman 1982: 12). This relationship between appropriation and devaluation was also examined by Simmel when he analyzed value as emerging from a distance between subject and object:

We desire objects ... in terms of [their] distance as something not-yet-enjoyed, the subjective aspect of this condition being desire. ... The object thus formed, which is characterized by its separation from the subject, who at the same time establishes it and seeks to overcome it by his desire, is for us a value. The moment of enjoyment itself, when the separation of subject and object is effaced, consumes the value. Value is only reinstated as contrast, as an object separated from the subject. (Simmel [1978]2004: 66)

The two mechanisms indicate that – as in the case of credit – the “management of value” becomes a prime task on which the growth of capitalist economies hinges. Enormous efforts are necessary to create, maintain, and shift the symbolic qualities of goods. These efforts lead to the emergence of a huge industry in its own right. The marketing departments of firms and firms specializing in marketing services adjust their marketing mix in an attempt to shape consumers’ expectations. In the historical development of capitalism marketing costs have become an increasing large part of the cost schedule of firms. The management of value, however, also takes place through “judgment devices” (Karpik 2010) produced and applied mostly by intermediaries in the field. Critics, guide books, product rankings, product tests, opinion leaders, certificates of authenticity or fair-trade labels, all shape consumer expectations with regard to the functional and symbolic qualities of goods. In addition, consumers themselves, through their definitions of what is “hip” and what is “out” contribute to the dynamics of symbolic value. Only based on the promises created through the communication of (symbolic) qualities do actors form expectations with regard to goods conducive to the creation of demand and to economic growth.

At the same time, actors’ expectations are the subject of competitive struggles between interested actors who attempt to get customers attached to their products and to detach them from their competitors’ products (Callon/Méadel/Rabeharisoa 2002). This is

again similar to the strategic interventions of interested actors in the management of confidence on financial markets. The expectations creating the symbolic value of goods are contingent and fragile because they are contested in such competitive struggles but also because they are not based in an essential quality of the product. There is no “natural need” for their demand. Value is created through the social and cultural definitions of the performance of the good. Economic growth is therefore understandable only as a social and cultural process and not as being based on “the necessities of life” (Smith [1776]1976: 368).

### Creativity (Innovation)

Undoubtedly, innovations are a further cornerstone of the uniqueness of capitalist dynamics (Baumol 2002; Deutschmann 2009; Schumpeter 1912). Through innovation new factor combinations are introduced into the market which – if successful – satisfy previously unattended needs, create new needs, or enhance efficiency in the production process. Like credit and commodification, innovations are, looked at from the perspective of social interaction, based on actors’ contingent expectations. I want to refer to these expectations as *imaginaries of the future*. As in the case of the other two elements, the management of expectations plays an important part in innovation processes. It takes the form of a “management of imaginaries.”

The central role of imaginaries in innovation was recognized by Joseph Schumpeter (1912). Schumpeter’s analysis sets out from the observation that new combinations initially exist only in the consciousness of the actor. While most actors are caught up in routines, some actors “with more acute intelligence and a more active imagination envisage countless new combinations” (ibid.: 163). Hence innovations begin with imaginaries that lead the entrepreneur to “adapt his economic activities accordingly” (Schumpeter 1912: 165). The entrepreneur will, based on the imaginary of a new factor combination, change the value assessment of the goods offered in the market and change product demand which will lead to changes in relative prices. Hence it is a utopian vision at the outset, which shows a pretended future reality, that motivates innovative activity. In the contemporary economy the late Steve Jobs is the exemplification par excellence of the creation of successful innovations through the creation of imaginaries, captivating the computer industry and large consumer groups.

Imaginaries are expectations that allow actors to move beyond inherited thought patterns and categories by bringing them into an as-if world in which given reality is surpassed and a different one considered (Bronk 2009: 201; Tappenbeck 1999: 53). Schumpeter insists that innovation is incompatible with the calculative behavior assumed by economic theory because innovations cannot be rationally deduced from existing knowledge. Instead, the imaginaries of economic actors motivate and guide an inherently incalculable innovative process (See also Beckert 2002; Deutschmann 2008) based

on the belief in the imagined new combination as a “future present” (Esposito 2011). This implies that the expectations regarding novel factor combinations must necessarily be contingent and helps to explain why it is possible to predict the expansion of capitalism without being able “to predict the actual direction of future logics” (Sewell 2008: 523).

Schumpeter has rightly been criticized for providing an overly individualistic account of the motivation to engage in innovative activity. Entrepreneurs’ expectations must be understood much more as socially constituted. The “voicing of promises” which show the way to the future are in fact collective projections (van Lente/Rip 1998: 222). The utopian vision can be pursued successfully only if it is not considered to be purely the madness of an individual. That an imaginary of the future is shared collectively protects new ideas from disbelief (March 1995:437).

Expectations regarding innovative activities have further social preconditions. “Capitalist entrepreneurs do not fall from heaven but can grow only in a particular structural, institutional, and cultural environment” (Deutschmann 2011: 4). Robert Merton (1957) showed that innovative activities are anchored in the normative structure of modern societies which value inner-worldly transcendence through success-seeking by risk taking. Another element of this environment is social inequality, without which there cannot be a motive to engage in activities that will lead to social rise. Secondly, it must in reality be possible to rise through entrepreneurial effort. Capitalism is historically unique also in being an economic formation which determines social status not by social origin but based on market success ascribed to effort. This holds true even if there are strong real barriers to social mobility. A motivation to engage in innovative activity can emerge only if the structural polarization of classes does not create expectations which assume that the barriers to upward mobility are individually insurmountable (Deutschmann 2011: 4). Here institutional, network, and cultural factors are important: the education system must be open to meritocratic principles, networks in the family or the (ethnic) community must be conducive to individual success-seeking (Portes/Sensenbrenner 1993), and cultural or religious traditions must support entrepreneurial orientations (see Deutschmann 2011: 4f). Neither a completely egalitarian society nor a society that actually or legally blocks status mobility will be able to create the expectations that usher in entrepreneurial activity. To create beliefs in the possibility of status enhancement is a necessary condition of capitalist reproduction. Failure in that respect deprives capitalism of one of its central pillars of growth.

Expectations in innovative processes are also subject to management of expectations, which takes the form of “management of imaginaries.” An example of this was provided by Sophie Mützel (2010) in a study investigating the innovation process in biotechnology firms aiming to develop genetically engineered medication for treating breast cancer. In this highly uncertain environment the success of firms’ research strategies cannot be foreseen and hopes of successful product development are often disappointed. Actors try to influence the expectations of others – and the decisions following from them –

through the communication of stories providing accounts of which development strategy they expect to succeed. The stories are imaginaries that send signals to competitors and the financial community. Hence, since decisions hinge on expectations, the manipulation of expectations becomes a means in the competitive struggle for resources for research and development. This is a power struggle about a dominant interpretation of how the “future present,” on which present decisions are based, will look.

## Competition

Finally, competition is the fourth element of the dynamics of capitalism. In competitive markets, superior performances are rewarded through profits made by those who prevail in the competitive struggle. The competitive force that gives capitalism its dynamism stems, however, not only from the strong *pull* created by the prospect of gain for the winners, but also, and especially, from the *push* that competition institutionalizes for all market actors. Because competition licenses “depriving one’s peers of their livelihood by outbidding them” (Streeck 2012: 6), competition forces firms and individuals to employ resources in places where they are expected to yield the largest return.

Competitive markets are socially legitimated by the expectation that they lead to the creation of wealth in society (Hirschman 1986). Despite the costs involved for those who are ruined by competition, competition does increase overall welfare. For the actors involved, competition on the one hand provides an institutional assurance that individual gain can be realized through outperforming others *and*, on the other, constitutes a risk that others can put them out of business by outbidding them. Pre-capitalist social formations imposed strict limitations on competitive markets and restricted them to the margins of society in order to limit their destructive consequences for the stability of communities. It is only in the capitalist order that the fear stemming from competition has been brought to the center of society as the price to be paid for reaping the expected benefits (growth) stemming from the restless striving for superiority in the competitive struggle. The rise of capitalism in the nineteenth century is closely related to the lifting of restrictions on competition by banning guilds, reducing tariffs, and liberalizing market access. (Braudel [1979]1985; Polanyi [1944]1957; Weber [1922]1978: 635ff).

From a micro perspective, the question arises of how expectations regarding opportunities for profit are created in competitive markets. In its standard models, economic theory assumes perfect competition. Such a market situation, however, is profoundly unattractive for market participants because it eliminates the chance for profits beyond the “opportunity costs of equity capital provided by the owner of the firm” (Douma/Schreuder [1991]2002: 30). Expectations of profit opportunities in markets depend, paradoxically, on the limitation of competition (Beckert 2009: 260). Through innovation, product differentiation, increase in market share, vertical integration, or the

creation of entry or exit barriers, firms attempt to create niches of at least temporary monopoly in which they are shielded from competitive forces (Porter 1985; Knight [1921]1985).

The strategies applied by firms to protect themselves from competition, and their strategic decisions in a given competitive situation, are the subject of industrial economics. In economic sociology they are debated by Harrison White (1981) in his analysis of markets as a set of differentiated firms with distinct identities.<sup>19</sup> Product differentiation produces niches with relative protection from competition. According to White, producers observe their competitors in the market in order to determine the niche in which they specialize. White's model reflects the structural conditions under which positive expectations for investments can emerge based on the relative stability of the market structure. Both White's model and industrial economics assume that observing the competitive situation allows firms to coordinate towards a particular equilibrium. Following game theory reasoning (Fudenberg/Tirole 1989), players can coordinate expectations based on pay-off matrices. If this holds true, expectations and strategies in games of competition would not be contingent but determined by a focal point.

However, economists themselves have also cast severe doubts on this reasoning. Actors are frequently confronted with multiple equilibria, exposing them to decision situations in which they cannot anticipate the decisions of other actors and therefore depriving them of a basis for optimal decision-making (Elster 1986: 19).

[E]ven apparently simple multi-period games of incomplete information often have multiple (perfect Bayesian Nash) equilibria that can be uncovered only by very sophisticated analysis. The assumption that boundedly rational humans can solve the much more complex games they face in real life seems to push the rationality assumption very far indeed. (Schmalensee 1988: 59)

Because actors lack the ground on which to form rational expectations, competition struggles are uncertain and market outcomes open. The indeterminacy of these situations makes the expectations an actor forms about a competitor's reactions, the outcome of contingent interpretations and power struggles over these interpretations. The indeterminacy creates space for "creative dissonance," which is the source of profits beyond the opportunity costs for equity capital, but also the source of unpredictable losses due to a wrongly assessed situation (Ergen 2011; Stark 2009). This idea has been explored by David Stark (2009), who showed that a given situation in which actors hold the same information allows for the simultaneous existence of different evaluative an-

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19 According to White, competition is a process that takes place through the mutual observation of the strategies through which competing firms position their product in the market. Each product occupies a distinct niche and the positioning of any of them takes place through the attempt to find a not yet occupied niche in which the product finds demand but is differentiated from competing products. Hence markets are understood as stable relational role structures, and the reproduction of markets and the survival of the firms operating in them presuppose this structuring of markets.

gles. Entrepreneurship, Stark argues, “exploits the indeterminate situation” (Stark 2009: 17). Each structuring of the market situation through the formation of expectations reduces uncertainty in decision-making but can be challenged by other profit-seeking actors providing alternative interpretations on which they form new expectations (Beckert 1999; Deutschmann 2009).

Since expectations, once they become dominant, affect a strategic situation, the *management of expectations* also plays a crucial role in the development of strategies in competitive markets. An example of this is provided in a study on the emergence of the American electricity industry by Yakubovich et al. (2005). The authors conclude that the economic outcomes of the pricing system introduced in the electricity industry at the turn to the twentieth century – a crucial feature in the competitive struggle between firms in the industry – were uncertain for the actors and that the system introduced prevailed because of “complex manipulations and exercises of power by leading industry actors, who mobilized support through their personal networks and domination of industry trade associations” (Yakubovich/Granovetter/McGuire 2005: 581f).

For a microsociology of competition, questions arise on exactly how firms form expectations regarding the decisions of other firms, despite the indeterminacy of the situation, and on how they succeed in influencing other actors’ expectations in ways favorable to themselves. The underlying assumption is that competition is also cognitively structured through the interpretation of the game being played which at the same time constitutes it.

## 2 Conclusion

Political economists have recently returned forcefully to the topic of capitalism and its dynamics. Most of this research, however, says nothing about the microfoundation of the developments it observes. I have suggested here that economic sociology is well equipped to provide this microfoundation. When applied to the question of capitalism’s dynamics, the numerous sociological studies on trust, the constitution of value, innovation, and competition that have been conducted in recent years contain insights that illuminate the emergence of economic macrophenomena from a perspective of social interaction and the social, political, and cultural contexts in which decisions are made.

To this end I have discussed four elements at the center of the capitalist economy: credit, commodification, creativity (innovation), and competition. These elements I have called the four Cs of capitalism. My hypothesis is that capitalism can be understood from the perspective of actors as a system of “contingent expectations.” I use the notion of contingent expectations to show that decisions made under conditions of uncertainty are the outcome of indeterminate interpretations of a given situation that reflect

the unpredictability of the future. The expectations are not rational in the sense of economic theory, nor do they transform uncertainty into risk. Rather they constitute beliefs in promises, in the performance of goods, in imaginaries of the future, and in the adequacy of strategies. These beliefs motivate decisions whose consequences are ultimately incalculable. While most research in the social sciences explains present action due to past occurrences, I argue here that it is the future which shapes the present – or, to be more precise: it is the images of the future which shape present decisions.

The dynamics of capitalism depend on the creation of expectations that make promises appear credible, goods desirable, imaginaries worth pursuing, and strategies plausible. By influencing macroeconomic outcomes, expectations provide a link between micro and macro levels of analysis. To enable the expansion in scope and complexity that has been characteristic of contemporary capitalist economies, societies needed to develop the cultural, political, and institutional prerequisites that allowed for highly unlikely expectations of perceived opportunities that stemmed from an engagement in uncertain market transactions. Societies also had to create a desire to pursue these opportunities and, where needed, structures that would enforce compliance. Expectations are shaped communicatively by actors in the field – firms, the state, market intermediaries, advocacy groups, etc. – and are based on institutional, cultural, and network structures. Crises are the immediate effect of sudden shifts in expectations.

Due to its impact on outcomes, the management of expectations is a pivotal element of capitalist development and the struggle for profit. Influencing the expectations of others and communicating expectations about the behavior of others means exercising social power in the economy. Given the contingency of expectations, it is not price information from markets that determines decisions, but rather a political game of negotiation on the interpretation of a situation.

Bringing contingent expectations to the center of the microfoundation of political economy treats “interests, preferences, and group identities as *the product of endogenous social processes*” (DiMaggio 2002: 94). Social interaction in the economy is neither determined by rational calculation nor does it reflect decisions based on hard-wired structures in our brains, as behavioral economics suggests. Rather, it is a profoundly social, political, and cultural process. Rational-choice explanations are misguided because decisions affecting the future “cannot depend on strict mathematical expectation, since the basis for making such calculations does not exist” (Keynes [1936]1964: 162f). Behavioral economics is unsuitable because it disregards the social foundations of expectations. Instead, economic dynamics should be explained based on a theory of expectations weighted by economic and political power. Anchoring a theory of the dynamics of capitalism to the theory of expectations sketched here could provide the basis for the much-desired link between political economy and economic sociology.

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