CHAPTER 11

THE BACKSTORY OF THE RISK-FREE ASSET: HOW GOVERNMENT DEBT BECAME 'SAFE'[1]

Nina Boy

I Introduction

Collateral has since antiquity been used as a safeguard for contractual obligations, such as debt. But how did debt, and in particular government debt, itself become the most common form of collateral in the financial system? In other words, how did government debt become 'safe'? The safety of sovereign debt corresponds to the establishment of sovereign creditworthiness: from sovereign bonds being charged a significantly higher interest rate than commercial loans in the Middle Ages to circulating 'unsecured', that is, no longer requiring additional security in the form of either collateral or a high interest rate but trading merely on 'full faith and credit'.[2] As such sovereign safety has underwritten the rise of collateral-based finance in the 20th century and plays a crucial role both for financial lubrication and financial stability.

Premised on the government's power to tax and print money, modern finance theory and standard economics have treated the safety of sovereign debt as an assumption that has been fundamental to the main pricing models for stocks and derivatives in the form of the risk-free asset. Economic history at the same time however tells us that "there is no such thing as a perfectly safe sovereign" even if the "whole development of capitalist institutions can be seen as a succession of attempts at addressing the problem of the production of safe assets" (Flandreau 2013: 24). Safety, as Alberto Giovannini, advisor to the European Commission from 1996-2010, notes, "is, of course, a relative concept, being determined by human perceptions" (2013: 3). How can one make sense of *both* these stories: sovereign safety as an axiom of modern finance as well as its historical contingency, relativism and dependency on perception?

Much can be learned in this regard from the vantage point of the "increased questioning of sovereign debt representing a genuine risk-free rate" (BlackRock 2011a) that has spread in the wake of the sovereign debt crisis. The first thing pointed out at numerous conferences over the last years speculating on the consequences of the waning of the risk-free asset in the form of sovereign debt is generally that sovereign bonds, strictly speaking, were never entirely risk-free, not only in the sense of duration and inflation risks, but also in the sense of credit risk. But, as General manager of the Bank for International Settlements, Jaime Caruana, put it in January 2013, sovereign risk was so low that investors were willing and able to behave "as if that debt was risk-free" (2013: 4). 'As if' can be said to indicate two things: 1) a hypothesis, but also 2) a fiction and, more specifically, a "working fiction", that is: a fiction that is not identified with falsehood but treated 'as if' it was real[3].

This chapter argues that, in order to understand the axiomatic presence of sovereign safety in modern finance theory against its historical relativism, attention needs to be turned to that which the discipline of

[1] In Charles Goodhart, Daniela Gabor, Jakob Vestergaard and Ismail Ertuerk (2014) (eds) *Central Banking at a Crossroads*, London: Anthem Press

[2] In the 15th century, Italian banks charged Charles VIII of France an interest rate of 100% on war loans while charging Italian merchants 5-10% and the Bank of England's first loan to government carried the double interest than that at which it discounted trade bills (Haldane 2009b:1).

[3] See Vaihinger (1911) The Philosophy of ,As if': A System of the Theoretical, Practical and Religious Fictions of Mankind' for a seminal analysis of the productive, heuristic function of fiction in the sciences.

history has traditionally sought to distinguish itself from: the genre of fiction. Drawing on influential studies in the field of the 'New Economic criticism', the chapter traces in particular the role of fictional realism in making the financial fictions of fiat money and sovereign bonds creditworthy. What is hereby illustrated is that economic credibility is anchored in wider cultural determinants, and sovereign creditworthiness crucially related to changing criteria of credibility of fiction.

Section II will draw out two contradictory purposes of economic history: to show that sovereign safety is relative as well as to explain how it came about; Section III will offer a doubtless partial yet nonetheless significant account of a different source of public credit in the form of the forgotten special relationship of literature and economics. Section IV will formulate some conclusions.

II The mystery/ history of sovereign safety

How does economic history treat the emergence of the safety of sovereign debt? Two rather different endeavours can be made out: On the one hand, economic historians point out that sovereign debt crises and defaults over the centuries abound and since the early 19th century have tended to occur in waves: from the 1870s, the 1890s Baring crisis, to the interwar crisis that represented the largest wave of sovereign defaults in history, the 1980s debt crisis in Mexico, 1990s East Asia crisis and the crises in the 1990s and early 2000s in Latin America. The intention thus is to reveal what Kenneth Rogoff and Carmen Reinhart have termed the *this-time-is-different syndrome* as unfounded, based primarily on the "failure to recognise the precariousness and fickleness of confidence" (2009: x) and the firmly held assumption that "crises do not happen to us, here and now" (ibid: 15). Similarly Marc Flandreau (2013) points to earlier attempts at calculating sovereign risk and classifying sovereigns according to safety at the end of the 19th century only to show how easily these calculations were upset by political and historical events. Sovereign safety, one might infer from these accounts, is 'ahistorical'.

On the other hand, historical sovereign defaults notwithstanding, it is possible to make out a different narrative of a gradual process of what might be termed sovereign accreditation (or, in other words, a process of amnesia of a default-laden history). The hallmark of sovereign creditworthiness may here be defined as two sides of the same coin: 1) the voluntary repayment by the sovereign and 2) the voluntary investment in sovereign bonds. The first is captured by the peculiar legal definition of sovereign solvency as both "ability and willingness to pay" and has puzzled economic theory to some extent: why would a self-interested sovereign borrower ever repay if he cannot be coerced to do so? Rational-choice explanations have resorted to reputation as a disciplining factor to ensure future lending (eg Eaton, Gersovitz and Stiglitz 1986) but these entail the presumption that borrowing continues infinitely: if a terminal year was specified, the borrower would refuse to pay but lenders recognizing this would also not lend – by backward induction for all years, the thought experiment shows that reputation can only be valuable if there is uncertainty about the terminal year (Kolb 2011: 4), thus implying a normalization of indebtedness.

But why did reputation not serve as a disciplining factor in the Middle Ages for sovereigns to repay their debt? Economic history has more to add on this account in its depiction of the shifting character of sovereign bonds from forced loans to voluntary loans: Bonds, long-term debt and secondary markets in government debt were features already of the Italian city-states, but their labeling as 'public debts' (cf. Ferguson 2009) has been termed a distorting anachronism of a forced loans system (Kirshner 2006) Although the Latin term *debitum publicum* was widely employed by civilian jurists in the late Middle Ages it "did not refer to government debt for the simple reason that it meant the opposite: monies owed by the taxpayer to *civitates"* (2006: 3). These loans received interest, which was distinguished from usury and reconciled with canon law as "compensation (damnum *emergens)* for the real or putative costs arising from a compulsory investment" (Ferguson 2009: 72). The first market in government debt was created in 1345 in Florence as a result of government insolvency: unable to repay its debt Florence consolidated its outstanding obligations into one fund and decreed that credits could henceforth be transferred to third parties. That way creditors could redeem their investment but it remained a forced contribution in the first place, premised on the moral and patriotic duty of the citizenry to its government. The emergence of public *credit* in the sense of a primary and voluntary market in government bonds based on trust in the return of principal and payment of interest is dated to the British post- revolutionary government at the end of the 17th century. Two institutional developments were critical: 1) the parliamentary guarantee of government loans following the Glorious Revolution of 1688, turning the royal debt into 'debts of the nation' or 'national debt'; and 2) the foundation of a central bank with the Bank of England in 1694. In different ways, these two changes instigated understandings of the 'public' that are still with us today: as parliamentary space of public opinion and legislative control and in the form of the public knowledge of financial markets. The first has been said to incite 'credible commitment' (North and Weingast 1989) in contrast to medieval royal loans, which were made upon security of estates belonging to the crown and mortgaged to the lender and hence, as Doubleday notes in 1847, "public in name but private in fact – private transactions in which the people were not implicated" (Doubleday 1847: 42). Regarding the second, it was paradoxically the newly created and "privately owned Bank of England (that) transformed the sovereign's *personal* debt into a *public* debt and, eventually in turn, into a *public* currency" (Ingham 2004: 128).

Yet one needs to be careful to explain the accreditation of sovereign debt in terms of the neat threshold of private and public implied here, as these categories did not function in the same way as they are conceived of now. At the time the much debated 'public credit' was seen as coterminous with the emerging financial market and more generally understood to refer to all new paper instruments or new forms of 'virtual' property (Moore 2004: 87) emerging in the 'financial revolution' including stocks and shares, promissory notes and insurance services (Dickson 1967). This was partly because, as Carruthers and Stinchcombe (1999) elaborate, government debt was 'liquidified' through the indirect capitalisation via the three main joint- stock companies of the Bank of England, the South Sea Company and the East India Company[4]: these issued shares on the stock market and loaned funds to the government so that buying a share represented an indirect investment into the national debt (1999: 373)[5]. The London stock market had been highly 'illiquid' during the 17th century due to high transaction costs and the cumbersome transferral of title[6] but by the early 18th century turned "very active, highly centralised, and extremely liquid" (370) while direct forms of government lending such as annuities and lotteries remained illiquid (373). The correspondence of stock prices of the South Sea Company with the French Mississippi Company marked a structural interdependence that further tied national credit to the financial market (Mitchell 2008). Next to this signification of public credit that confounds the modern public/ private divide, in particular paper money was seen by contemporaries as "national debt by another name" (De Bolla, 1989: 117). It is in the sense therefore, the "publick Faith" (Mitchell 2008: 125) in all new financial instruments that was at stake in the development of sovereign credibility.

Even when considered in terms of the wider implications of public credit, sovereign credibility was not a

[4] Of the three, two were explicitly created to fund the public debt: the Bank of England in 1694 and the South Sea Company in 1711, while the East India Company, incorporated since 1600, loaned funds to the government from 1709.
[5] Joint-stock companies in themselves somewhat defy the modern public-private distinction as they were central colonizing forces equipped with their own armies and authorized to extend and defend their trade routes (de Goede 2010).
[6] The most active trader in Royal Africa Company stock (John Bull) traded 13 times from 1672 to 1679 (Carruthers and Stinchcombe 1999: 370).

sudden discovery of virtue and linked to a wide array of political and cultural influences: de Goede (2005) for example has described the mastery of 'Lady Credit' – the female personification under which public credit was debated in 17th and 18th century Britain – as crucially hinged on the invention of 'financial man'; particularly through the new technique of double-entry bookkeeping the speculative temptations of 'Lady Credit' were disciplined, producing the 'public credit' of the gentleman and in turn the public credit of the nation. Other significant factors were the consolidating political competition between the emerging parties of Whigs and Tories (Carruthers 1996), the reform of tax collection and administration (Brewer 1990), the moral legitimisation of the insurance trade (Lobo-Guerrero 2012) as well as the dramatic increase of the credibility of contract as such during the 18th century (Muldrew 1998) and the pre-existence of a stable monetary standard and thus homogenous monetary space in Britain (Ingham 2004). Over the 18th and 19th centuries, the British national debt is said to have transformed from a "poorly coordinated, heterogeneous, illiquid and expensive pool of funds into a modern-style national debt" (Quinn 2006: 1) providing the "blueprint of public credit" and precedent of modern fiscal credibility. The occurrence of sovereign defaults notwithstanding, there was a marked difference to the earlier , "financial and commercial distractions which prevailed when States openly violated their solemn contracts, laughed at their obligations, and appeared insensible of the disgrace of disregarding their plighted honour", as the New York Times states in 1865 (*New York Times* 1865). Where previous sovereigns resorted to coercion justified by the necessity of war to preserve freedom and independence, contemporary debts had come to be seen as "by definition inherently lawful and legitimate", eliminating justification by higher norms (cf. Kirshner 2006: 15)[7]. Since the 1940s, so-called 'advanced economies' have not defaulted on their debt (Reinhart and Rogoff 2012)[8] and sovereign creditworthiness as a concept developed into a combination of 'risk-free' in theory and liquid in practice that enabled the investment company Blackrock, in a re-assessment of sovereign bonds in 2012, to identify four 'traditional' elements characterizing sovereign debt as an asset class: 1) an apparently riskless rate of return upon which all other assets trade at a risk premium; 2) a very high degree of liquidity, whereby government debt assumed high-powered money characteristics; 3) its function as a reference point for the valuation of virtually all other asset categories; and 4) its role as a safe-haven asset during times of market stress.

If debt as a "conditionality spanning the future" (Lepinay 2007: 95) entails uncertainty, the price of which is paid in the form of interest, the peculiar phenomenon of liquid debt has come to be instilled with the certainty (and unprofitability) of the present – as Keynes held, interest is not a reward for saving but for parting with liquidity ([1936] 2008: 108). Liquidity, as Lepinay notes, is "an index of a common world" and depends on plausible narratives and trust, while periods of high volatility are described as "moments of high uncertainty about the definition of individuals and goods, moments in which stable ontologies crumble" (2007: 99). The next section will turn attention to those cultural determinants that contributed to imbue financial instruments with plausible narratives and trust.

III Fiction and public credit

This chapter argues that a neglected but fundamental dimension to the underwriting process of sovereign credit hinges on concurrent transformations in the genre of fiction. Particularly fruitful work on the historical connections between financial and literary fictions has been undertaken in the field of the 'New Economic Criticism' (NEC), an Anglo-Saxon movement in literature studies beginning in the 1990s influenced by Marc Shell (1978; 1982), Jean- Joseph Goux (1973; 1994) and Kurt Heinzelman (1980) that set out both to

---

[7] The moral connotation nonetheless endures: for a modern recurrence of a patriotic rationale for investing in government bonds see Aitken's (2006)analysis of US Savings and Defence Bonds in the name of national security during the Cold War .

[8] With the exception of Greece's default on 9th March 2012 that triggered sovereign CDS payments.

"unveil the buried metaphors and fictions" of the discipline of economics as well as investigate the economic – for example exchanges of tropes and metaphors – as ordering principle of literary works (Woodmansee and Osteen 1999: 3-4). As Nicky Marsh states, "the paradox of credit, its transmutation of the insubstantial into the substantial, has been a productive one for literary critics as it suggests an obvious parallel with the action of literature itself" (2010: 1). Thus financial instruments like fiduciary money and stocks are understood as forms of writing, and subject to 'credit' in the sense of conferred belief in the same way as literary fiction (Shell 1999: 53). Both drew a substantial attribution of credit from the new technology of print. As Mary Poovey's (2008) work has shown, economic and literary fictions not only share common features and principles but they were not explicitly or consistently distinguished until the mid-18th century. Financial instruments and 'economic' and 'imaginative' writing presented a "continuum" in which objective data and imaginative or rhetorical representations were not differentiated. Thus, "a shipping list was identical in format to the lists that appeared in poetic blazons or satiric catalogues, for example, and the promissory note used to acknowledge a debt contained phrases that also appeared in fictional texts" (2008: 2). Early writings on credit mixed "satire, analogy, allegory, polemics, history, pseudologic, irony, panegyric, parody and news reporting" (Backscheider 1981), and early political economic texts shared many features with the literary form of the novel (Poovey 2008: 92). According to Poovey, it was the gradual differentiation of these two genres of writing based on stabilising a distinction between fact and fiction that effected the naturalisation of credit instruments: that is, a state where their feature as forms of writing has "passed beneath the horizon of cultural visibility" (2008: 4) and the historical linkage between the genres of economic and imaginative writing was erased. Neither economic nor imaginative writing lost their visibility as writing in the same way as financial instruments: yet the authority of economic writing came to be based in characterising itself as writing that was *transparent,* describing economic and financial matters, while imaginative writing sought evaluation in terms of internal criteria and disclaimed any reference to the real world. The thus propelled fact/ fiction distinction was modelled on, and always bore close reference to, a similar distinction between valid and invalid monetary tokens (2008: 80) – a relationship still evident today when financial claims are revealed as fraudulous.

It is not merely the differentiation of economic and imaginary writing and credit instruments however that fostered public credit but particularly the special relationship that continued between these as they evolved. Thus a critical role in the underwriting of public credit is accorded by a number of authors to changes brought about by the realist novel (Brantlinger 1996; Vernon 1984; Thompson 1996; Poovey 2008). As political economy – the 'adjacent legislating discourse' of public credit – dropped its early theories of the intrinsic value of coins in favour of nominalist views of the value of paper money over the 18th century, the concept of intrinsic value "migrated generically from political economy to the novel, which asserts and regrounds intrinsic value" (Brantlinger, 1996: 156). The sincerity of the novel warrants the secure investment of the reader, who can "give as full credit to the narrative as to 'the funds' because it will contain nothing extravagantly romantic, sensational, or improbable" (1996: 156). The crediting effect of fictional realism functioned precisely not because it claimed to imitate reality but because it created a second world *like* reality with plots and characters marked by probability in the sense of verisimilitude (Poovey 2008). Rather than real referentiality, the novel performed a fictive referentiality and thus "helped readers practice trust, tolerate deferral, evaluate character, and in a general sense, believe in things that were immaterial" (2008: 89). This implied a major transformation of the criteria of credibility of fiction: Where the classical plausibility of fiction was premised on its moral content, and truth or lie decided on its (im)morality, the novel grounded plausibility in the internal criteria of text such as unity and consistency of character, "...enabling *us to conjecture* what a Person of the Drama will do in the *future,* from what already he has done in the *past"* (James Harris qu. in Poovey, 2008: 116, sic). This development of character, from outside features based on the legibility of physical marks to characteristics of inner depth, was a central feature of the novel, providing a "means by which cultural coherence was produced" and the ground for the inexhaustible re-readability of literary works since the 19th century (Lynch 1998: 17). While earlier pastoral fiction had defended itself against the latent accusation of lying by depicting clearly fantastical and unreal events, making its fictional status transparent, the modern novel – though equally self-conscious of its fictive character – grounds its plausibility in a structured coherence that surpasses that of reality: it represents the *conditions* (not observable in the real world) under which something appears realistic: as Esposito states, "to be realistic, the novel cannot be real" (2007: 17). By thus reforming the criteria of credibility, the novel contributed to the "increasing acceptance of increasingly realistic fictional realities" (2007: 13), or in Vernon's words, as "money was becoming more fictional, fiction was becoming ... more realistic" (1984: 18). The era of the "final generalisation – and general acceptance – of credit as a basic, unavoidable aspect of modern money and modern economic processes" (Brantlinger 1996: 139) that comes with the rise of realism further entails a peculiar disconnection of public and private credit. Social critical discourse begins to portray the negative effects of a society defined by monetary relations in "private" terms, while the governmental institutions responsible for producing the paper currency and creating and managing the national debt come to be seen as "virtuously constructive" (1996: 157): in the Victorian realist novel the focus changes from government bankruptcy to the private insolvency of "spendthrift, shiftless individuals" and to country banks as opposed to the central bank. Allusions to the national debt are rare, and if made, refer to the "security" of the money the characters have invested in "the funds" (1996: 155). Later eras of modern and postmodern cultural criticism are similarly directed at the commodity fetishism and consumer society associated with the 2nd industrial revolution, and since the 19th century public credit has not been perceived as a visible target. That is, while the novel seems to have played an instrumental part in providing the credit economy with plausible narratives and models for 'character', it underwrote the credibility of government debt as much by letting its fragility 'disappear'[9].

Brantlinger points to the irony that despite the novel's powerful structural role in eliciting public credit it generally sought to undermine the socio-political as much as the literary *status quo,* and its 'intrinsically novelistic' character was directed against the state-founding theme of the epic - yet this did not prevent its inclusion in the canons of 'national literature' (ibid). Public credit seems not only to have been paradoxically promoted through discourses intended as critique and attempts of 'unmasking', but its hallmarks also to have been born from *crisis:* the first market in government debt in Medieval Florence, the creation of the Bank of England and the first paper money era in 1797 were all born out of insolvency. The normalising role of crisis, which should be seen to instigate a new norm rather than re-establish a pre-defined norm, can also be seen at work in the aftermath of the sovereign debt crisis of 2010-2012: Until then sovereign creditworthiness was defined in terms of size and liquidity, as represented by the closest proxy to the safe asset in the form of the US Treasury. This particular view also informed a practice of bond-indexing based on issuance weighting, or market capitalization, that weighed bond portfolio shares according to the countries who issued the most debt. Index funds based on issuance weights trace their origins to the Capital Asset Pricing Model, introduced by Sharpe in 1964, that suggests that the market portfolio – the capitalization-weighted portfolio of all assets – should have the highest return per unit of risk (Goldsticker and Lowell 2012: 4). This definition is increasingly being challenged and bond-indexes based on capitalization, liquidity and demand are now accused to overweight large issuers of liabilities and thus to "reward failure… and penalize success" (BlackRock Website 2011). BlackRock in particular has promoted new criteria for sovereign creditworthiness in launching its own sovereign risk index as a deliberate move

[9] Other underwriting factors were of course the establishment of a national reserve system and the status of the pound/ dollar as global reserve currencies: yet even here liquidity relies on the fiction that all promises-to-pay in circulation could be converted simultaneously – the realization of that illusory guarantee is the classic motivation for the bank run.

away from issuance-weighting: the most creditworthy countries are here not the most liquid but the most isolated from external shock, such as Norway, Sweden and Switzerland[10]. As this last point demonstrates it is not contemporary fiction that is seen to exert the most palpable influence on sovereign creditworthiness and as much as the realist novel has coined a "semantic of the modern" (Esposito 2007: 12), the present interlinkages of economic theory, monetary policy, fiction and financial instruments remain to be defined further.

IV Conclusion

There is an obvious discrepancy between the assumption of sovereign safety in economic and financial theory on the one hand and economic history that tends to question the 'givenness' of sovereign safety on the other. Yet both need to be explained. Rather than denouncing economic theory for its 'unrealistic' abstractions such as the efficient market, *homo oeconomicus* and the risk-free asset, the aim of this chapter was to better understand the phenomenon of 'working fictions' of the economy. Recourse to modern finance theory/ standard economics or economic history alone is not capable of supplying an answer, and misses a critical dimension of the accreditation of sovereign debt that took place in the wider cultural context. The 'securitisation' of sovereign debt (Quinn 2006) occurred not only in the broader domain connotated by the historical term public credit and thus requires a careful treatment of the modern terminology of public/ private. Public credit as such was mediated, negotiated and supported by a differentiation of a continuum of "writing", broadly speaking, into the economic and imaginary genres that we are familiar with, as well as the "invisibility" of credit instruments as writings that their taking at face value implies. Here the genre of fictional realism is argued to have developed critical features to support plausible narratives of public credit in the form of a new conception of probability, the evolution of character and self-referentiality that redefined the criteria of credibility of both financial and literary fictions. As a result, as Heinzelman put it, "fictions *work* even when they are recognised as fictions" (1980: 101). This is not to say that crucial economic debates such as the bullionist controversy in the 19th century have not influenced perceptions of sovereign credit, or that the developments presented here were the only determining factor in the perception of sovereign safety. Yet the forgotten linkage of financial and imaginary fictions suggests that it is in the wider history of the public/ private and fact/ fiction distinctions as well as in their co-evolution that one should seek to place a history of sovereign safety.

[10] The overall methodology is more complex but the result is a new sovereign risk global order where the traditional safe haven countries figure in the medium range of the index and emerging economies such as Singapore, Chile and Taiwan feature in the top 10.

References

Aitken, Rob (2006) 'Performativity, Popular Finance and Security in the Global Political Economy' in Marieke de Goede (ed.) *International Political Economy and Post-Structuralist Politics.* London: Palgrave

BlackRock (2011a) 'A Rapidly Changing Order – the Rising Prominence of Asian Debt Markets'. BlackRock Investment Institute, October

BlackRock (2011b) 'Introducing the BlackRock Sovereign Risk Index – A More Comprehensive View of Credit Quality'. BlackRock Investment Institute, June

BlackRock Website (2011c) Available at http://www.blackrockinternational.com/Intermediaries/InvestmentInsight/Strategic-Solutions/Articles/sovereign-debt/index.htm

Brantlinger, Patrick (1996) *Fictions of State – Culture and Credit in Britain, 1694-1994.* Ithaca, NY: Cornell University Press

Brewer, John (1990) *The Sinews of Power – War, Money and the English State 1688-1783.* Cambridge, MA: Harvard University Press

De Bolla, Peter (1989) *The Discourse of the Sublime – Readings in History, Aesthetics and the Subject.* Oxford: Basil Blackwell

Carruthers, Bruce (1996) *City of Capital: Politics and Markets in the English Financial* Revolution. Princeton: Princeton University Press

Carruthers, Bruce and Arthur Stinchcombe (1999) The Social Structure of Liquidity: Flexibility, Markets and States, *Theory and Society* 28: 353-382

Caruana, Jaime (2013), Welcoming Remarks, BIS Papers No. 72 Dickson, P.G.M. (1967) *The Financial Revolution: A Study in the Development of Public Credit 1688-1756.* London: Macmillan

Doubleday, Thomas (2005 [1847]) *A Financial, Monetary and Statistical History of England – From the Revolution of 1688 to the Present Times.* London: Elibron

Eaton, Jonathan, Mark Gersovitz and Joseph Stiglitz (1986) The Pure Theory of Country Risk. *European Economic Review*, 30 (3): 481-514

Esposito, Elena (2007) *Die Fiktion der wahrscheinlichen Realität.* Frankfurt a. M.: Suhrkamp Verlag

Ferguson, Niall (2009) *The Ascent of Money.* London: Penguin Books

Finn, Margot C. (2003) *The Character of Credit: Personal Debt in English Culture, 1740- 1914.* Cambridge: Cambridge University Press

Flandreau, Marc (2013) Do Good Sovereigns Default? Lessons of History. BIS papers No. 72

Gaillard, Norbert (2012) *A Century of Sovereign Ratings.* New York, Dordrecht, Heidelberg, London: Springer

De Goede, Marieke (2005) *Virtue, Fortune and Faith – A Genealogy of Finance.* Minneapolis: University of Minnesota Press

Giovanninni, Alberto (2013) Risk-free Assets in Financial Markets, BIS Papers No. 72

Goldsticker, Ralph and Bennett Lowell (2012) 'Rethinking Bond Index Weightings and Concentration Risk', *Mellon Capital*, January. Available at http://www.mcm.com/core/public/assets/.../sISSG_Bond_Index.pdf

Goux, Jean-Joseph (1990 [1973]) *Symbolic Economies – After Marx and Freud.* Ithaca, NY: Cornell University Press

Goux, Jean-Joseph (1994) *The Coiners of Language*. Norman, Oklahoma: University of Oklahoma Press

Heinzelman, Kurt (1980) *The Economics of the Imagination.* Amherst, MA: University of Massachusetts Press

Ingham, Geoffrey (2004) *The Nature of Money*. Cambridge: Polity Press Keynes, John Maynard ([1936] 2008), *The General Theory of Employment, Interest and Money*. Macmillan: Cambridge University Press

Kirshner, Julius (2006) 'States of Debt'. Paper for Mellon Sawyer Seminar on Debt, Sovereignty and Power. Paper presented at the University of Cambridge, 18 November

Kolb, Robert W. (ed) (2011) *Sovereign Debt – From Safety to Default.* Hoboken, New Jersey: John Wiley & Sons

Lepinay, Vincent Antonin (2007) 'Decoding Finance' in Donald A. MacKenzie, Fabian Muniesa and Lucia Siu (eds) *Do economists make markets? On the Performativity of Economics.* London and New York: Routledge

Lobo-Guerrero, Luis (2012) *Insuring War: Sovereignty, Security and Risk.* London and New York: Routledge

Lynch, Deidre (1998) *The Economy of Character: Novels, Market Culture and the Business of Inner Meaning.* Chicago: University of Chicago Press

Moore, Sean (2004) The Culture of Paper Credit: The New Economic Criticism and the Postcolonial Eighteenth Century. *The Eighteenth Century*, 45(1): 87-108

Muldrew, Craig (1998) *The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England.* Basingstoke: Palgrave Macmillan

The New York Times (1865), 'Government Securities The Public Credit', 1 December. Available at http://www.nytimes.com/1865/12/01/news/government-securities-the-public- credit.html?pagewanted=all

Nicholson, Colin (1994) *Writing and the Rise of Finance – Capital Satires of the Early Eighteenth Century.* Cambridge: Cambridge University Press

North, D.C. and B.R. Weingast, (1989) Constitutions and Commitments: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England. *Journal of Economic History*, 49: 803-32

Poovey, Mary (2008) *Genres of the Credit Economy – Mediating Value in Eighteenth- and Nineteenth-Century Britain.* Chicago: University of Chicago Press

Quinn, S. (2007) Securitisation of Sovereign Debt: Corporations as a Sovereign Debt Restructuring Mechanism in Britain 1688-1750. Paper presented at the University of Cambridge 18 November

Reinhart, Carmen M. and Kenneth S. Rogoff (2009) *This Time Is Different – Eight Centuries of Financial Folly.* Princeton and Oxford: Princeton University Press

Rogoff, Kenneth S. and Carmen Reinhart (2012) Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten, Working Paper, 9 December 2012

Shell, Marc (1978) *The Economy of Literature.* Baltimore: John Hopkins Press   Shell, Marc (1982) *Money, Language and Thought.* Berkeley: University of California Press

Shell, Marc (1999) 'The issue of representation' in Woodmansee, Martha and Mark Osteen (eds) *The New Economic Criticism – Studies at the Intersection of Literature and Economics.* London: Routledge

Thompson, James (1996) *Models of Value – Eighteenth-Century Political Economy and the Novel.* Durham and London: Duke University Press

Vaihinger, Hans (1935) The philosophy of ‚As if': A system of the theoretical, practical and religious fictions of mankind' trans. C.K. Ogden. London: Routledge

Vernon, John (1984) *Money and Fiction – Literary Realism in the Nineteenth and Early Twentieth Centuries.* Ithaca, NY: Cornell University Press

Woodmansee, Martha and Mark Osteen (1999) (eds) *The New Economic Criticism – Studies at the Intersection of Literature and Economics.* London: Routledge