Zombie banking regulation from Basel? Pillar 1 after the crisis

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1 What happened to a neoliberal Basel?

1.1 Banking made in Basel

The Basel Committee on Banking Regulation (BCBS) has set the ground rules for how supervisors regulate "internationally active banks" since 1988 and Basel 1 (Basle Committee on Banking Supervision 1988). Since, then the Accord has seen multiple rounds of reforms and overhauls. The 30 page document has ballooned into a complex regulatory juggernaut spanning hundreds of pages, over ten regulatory regimes and hundreds of equations.

BCBS is a hugely influential regulatory body within the international financial architecture (Eernisse 2011; Elson 2011). Although lacking formal standing under international law, BCBS has succeeded in creating a nearly uniform playing field for internationally active banks. E.g. EU banking regulation directives follow closely the standards set in Basel (Camilli 2011).

Despite both its significance and research potential, the Committee has remained relatively stealthy to regulatory theory scholars. Only few studies have mapped the Committee's work in relation to regulatory theory and law (Barr and G. P. Miller 2006; Gerding 2009; Weber 2010). This is unfortunate. The crisis driven reforms have constituted a hugely active living regulatory laboratory where experiments with a wide variety of regulatory technologies and strategies have been conducted.

1.2 Basel and neoliberalism

In this article, I will try to analyse the relationship between the Basel Accord and neoliberalism—a particularly neglected issue in scholarship. The neoliberalism connection has been

analysed only in article by Aaron Major (Major 2012). Even Major's piece is only a partial hit: the main target is international financial architecture, not BCBS. In the article, Major argues—in a similar vein to many others (Dumenil and Levy 2011; Harvey 2007:78–80; cf. Konings 2009; Peck and Tickell 2002)—that neoliberalism has two faces.

Starting in 1970s, neoliberalist policies have, on one hand, sought to decrease the quantitative intensivity of regulation. This deregulatory push resulted in the dismantling of the restrictive Keynesian regulatory paradigm dating back to 1940's and the Bretton Woods consensus. The international financial markets were set free. Governments set their formerly "stable but semi-flexible" currencies to float freely according to the whims of market. Short-term lending facilities to countries with balance of payment problems were banished. Concurrently with the dismantling of the Bretton Woods consensus structures, neoliberalism also cut down banking regulation within the national economies. Governments shed the former Keynesian curbs on interest rates and permitted activities (Major 2012:539).

The deregulatory agenda reached its limits during the 1980s and 1990s. Bretton Woods had been successfully dismantled. Banks were set free. Free capital markets and banking did not give rise to a perpetual bliss. Internal tensions and contradictions (Harvey 2007) of neoliberalism brought about the conditions for its failure. Financial crises still occurred, market failures abounded. As a response, reregulation was now needed to sustain the global financial markets. "A compromise between neoliberal and Keynesian principles" was brokered, but in a distinctly neoliberal frame.

Thus, despite the appearance of compromise and retreat, Major argues, the acquiescence was never real. Although distinctly reregulatory, the new governance practices were characteristically neoliberal. Neoliberalism had morphed to survive. The new regulations were administered and designed by private financial actors, they used non-regulatory techniques which refuse to genuinely impact the underlying practices, and the regulations push the reforms out of the reach of democratic controls (Major 2012:541–542).

How is the Accord Basel related to the two faces of neoliberalism? In Major's account, the 1988 Accord is a part of the reregulatory agenda. The Accord was a "new way to regulate transnational capital flows in an era when direct capital controls had been taken off the policy table" and neoliberal to the core: its "origins and evolution fit within the kind of reregulation described by the second face of neoliberalism" (Major 2012:543). The Committee put together a technocratic a technocratic assemblage of "as hands-off as possible" capital adequacy controls, a way of regulating banks without actually intervening. In later version, a considerable amount of regulatory power was outsourced to private actors. And finally, it all was negotiated in a gentlemen's club, outside of the reach of democratic controls.

1.3 Objectives and structure

There is, undoubtedly, much that is right in Major's argument. However, the picture he paints of the BCBS's neoliberalism and the way the Accord governs banks is simplistic. It is lacking in detail. In particular, one essential aspect is missing from Major's account: risk. Risk is the conceptual centrepiece of the Basel Accord. The way Basel regulated markets is conditioned by a host of risk technologies—i.e. Basel 1 risk weights, VaR modelling and credit rating agencies that facilitated the minimum intervention strategy Major refers to "as hands of possible".

The article has two objectives. First, I hope to shed some light on the way the Accord attempts to govern banks after the crisis. Second, I hope to say something about the relation-

ship of the Accord and neoliberalism. The question is basically the same Major asked in his article: ""In what way does the Basel Accord fit with the model of neoliberal state regulation of markets?" I only extend its temporal reach the to the post-crisis period.

I believe that the relationship between the Basel Accord and neoliberalism can be best analysed by looking in detail at the transformation of the regulatory strategy that best characterises Basel 2: the strategy of non-governing at a distance.[1]

The discussion is methodologically inspired by governmentality analysis. To understand the strategy, I describe the regulatory technology (used as a synonym to technology of government) that arises when BCBS uses banks' internal models to determine capital adequacy standards. The focus is on "the actual mechanisms through which authorities of various sorts have sought to shape, normalize and instrumentalize the conduct, thought, decisions and aspirations of others in order to achieve the objectives they consider desirable" *(P. Miller and Rose 1990)*.

The strategy works through a particular set of mechanisms. The strategy gravitates around Pillar 1 advanced minimum capital requirement calculation methodologies, i.e. internal risk technologies. These internal risk technologies, once turned into regulatory risk technologies, allowed BCBS to enhance banking system stability but, simultaneously, get out of the way.

In the second chapter, I will first map the basic mechanics through which the non-governing at a distance strategy works. It is important to understand why Pillar 1 advanced methodologies do not govern. The act of non-governing through regulation is premised on the convergence of two factors that mitigate the inherent propensity of capital adequacy rules to affect investment decisions. First, the regulatory use of internal risk technologies align banks' internal and external incentives in asset selection decisions. When alignment is reached, regulation has no impact. Second, the strategy contains a conceptual backstop. Even eventual misalignments are irrelevant. The regulatory risk technologies faithfully perform "real" risks. The "real" risks are not regulatory fabrications, but realistic estimates of the actual risks banks run. This property leads to a situation where the rules induce banks to select assets that "good" banks would have taken anyway. The chapter concludes by arguing that the strategy is thoroughly neoliberal.

The game changed in 2007. The global financial crisis put Basel 2 under significant strain. The Accord was reformed. The capital adequacy methodologies sustaining the non-governing at a distance strategy were a ground zero for reforms. Many of the technologies had failed miserably and now stood to be replaced. The entire neoliberal facilitative regulatory paradigm was discredited. The sane option would have been to dismantle the approach and start from the scratch.

In the third chapter I will argue that a perplexing reform end-game has emerges after the dust has settled. The non-governing at a distance strategy seems to stand intact. Whatever its problems, BCBS has fixed them. The Committee has repaired the technological shortcomings that led to excessively low capital pre-crisis capital levels. The Accord still works as if it prescribes and proscribes nothing and lets all financial products live, provided that the risks are adequately capitalised. On closer inspection, the neoliberal edifice, however, crumbles.

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[1] In addition to this strategy, the Accord enacts a host of other regulatory strategies. During the crisis reforms the strategies have multiplied. I will, however, now concentrate only on the one chosen strategy.

The non-governing strategy has disintegrated. The two facilitating mechanisms: incentive alignment and faithful reproduction of risk have disappeared. In addition, BCBS has, in fact, banned activities, albeit in a passive-aggressive way. The neoliberal strategy is no more there.

The final chapter concludes the article and returns to the discussion of neoliberalism and the Basel Accord.

2 Basel 2: contours of a neoliberal dream

2.1 Dream landscape

On January 1, 2007, Basel 2 was ready. The final Basel 2 documents had been published in 2004 and 2005, and consolidated in 2006. National legislators and supervisors had laboured for two years to. In many jurisdictions, EU included, Basel 2 had been transformed into applicable hard law, while e.g. US was still dragging its feet (Herring 2007).

Drafting had been a lengthy process. The Committee had taken the first steps towards Basel 2 in 1996 when it issued the Market Risk Amendment (MRA) (Basle Committee on Banking Supervision 1996). The second step on the road was taken in 2001 when work on the Accord's credit risk rules began . A year after completion (Basel Committee on Banking Supervision 2004), the Committee added the counterpart risk rules and revised the market risk framework *(Basel Committee on Banking Supervision 2005b)*.

The result spanned 333 pages, a ten-fold increase from Basel 1. The Accord had three separate pillars. The first pillar contained the traditional core of the Accord, i.e. the binding minimum capital requirements. The second pillar established the Supervisory Review Process (SREP) and augmented the first pillar capital charges. It ensured that banks measure and manage risks adequately. The third pillar, in turn, set up a regime of market disclosure. The hope was that greater transparency would allow investors to work with regulators to ensure that banks are run prudently (Basel Committee on Banking Supervision 2001 s. 1).

One overbearing theme dominates Basel 2. The rapid evolution of financial risk technologies during late 1980s and early 1990s had changed the entire regulatory landscape. The industry had developed unprecedented capabilities to measure and manage financial risks. Sophisticated, computer-based technologies were transforming poorly articulated, subjective assessments into firm objective estimates. The era of quantitative finance had dawned. Risk was becoming quantifiable, measurable and manageable, a known known.

As a result, supervisors' perception of risk was swiftly changing shape. The revolution was epitomised by one technological complex, value-at-risk (VaR) analysis. VaR is a combination of statistical analysis and probabilistic calculus, firmly embedded (Dowd 1998; Jorion 2002). It first allowed banks to produce estimates of future return probability distributions for trading books (J.P. Morgan/Reuters 1996) and, later, for banking book exposures as well (J.P. Morgan 1997).

VaR was a revolutionary invention. The hugely complex trading books could be reduced down to a single dollar figure, "an easily interpretable summary measure of risk" (Basak and Shapiro 2001:371). A new kind of question could be answered: how much do we stand to lose if, say, an adverse market scenario that will take place with one percent probability unfolds tomorrow?

VaR disrupted the foundations of the regulatory game. It offered capital adequacy regulation a robust scientific framework. BCBS could discard the former rough Basel 1 "seat-of-the-

pants" guesstimates (Goodhart 2011:253) and replace them with hard scientific facts. The regulators did not have to guess: banks knew how much they stood to lose.

The new technologies also opened up a new heuristic for capital requirements. The charges could be set to match the losses that a bank was likely to suffer in a preset adverse scenario. For market risk heuristic was the loss a bank could expect to suffer with one percent probability in an adverse market scenario that lasts ten days (MRA B.4)—times three (e.g. Danielsson, Hartmann, and de Vries 1998), while for credit risk it the extent of unexpected credit within the next year with 0.1 percent probability *(Basel Committee on Banking Supervision 2005a)*.

The risk revolution allowed BCSB to perfect a longstanding neoliberal dream. The Committee could reshape the way it governed banks.

Remember that in the mid-1990s banks were subject to Basel 1. The primary objectives of Basel 1 were threefold. Two are well-known. First, BCBS had been hoping to improve the "stability of the international banking system" and, second, eliminate micro and macro level distortions in competition caused by national differences in banking regulation. The third has received less attention. The Committee wanted to attain the two other objectives without affecting or interfering with banks' asset selection decisions. It did not want to provide banks any incentives to choose certain assets over others. BCBS wanted banks to make those decisions.

The Cooke ratio risk weighting scheme (Goodhart 2011 Chapter 6; Tarullo 2008 Chapter 3) was the weapon of choice for attaining objective number three. The try was abortive. Basel 1 failed because it was not "risk sensitive" enough (Jones 1999; Working group led by Patricia Jackson 1999).

2.2 Non-governing at a distance

Peter Miller and Nikolas Rose wrote one of the seminal articles governmentality studies articles on 1990 (P. Miller and Rose 1990). In the article, the two authors introduced the idea of governing at a distance as a one of the signature technologies of modern advanced liberal governmentality. According to Miller and Rose when governing at distance one harnesses

"complex mechanisms through which it becomes possible to link calculations at one place with action at another, not through the direct imposition of a form of conduct by force, but through a delicate affiliation of a loose assemblage of agents and agencies into a functioning network" (P. Miller and Rose 1990:9–10).

The governing at a distance technology of government Miller and Rose sketched is an apt description of the Basel 2 capital adequacy strategy. Banks are governed with the help of a specific regulatory technology (Williams 2013:545–547) that centres around two artefacts maintained by accounting rules and bankers' self-interest: risk weighted assets and capital. The two artefacts channel the bankers' greed. They open up a nexus of deliberation for maximising returns. Instead of simply choosing what they feel will provide optimal returns, bankers now have to balance the asset returns with asset risk—defined as a future loss-waiting-to happen—to arrive at the optimal payoffs (Berger, Herring, and Szegö 1995; Santos 2001).

In the technology, the supervisors give a simple command: capital may never be less than eight percent of risk weighted assets. The command, however, is peculiar in its regulatory character. The regulators set an outcome to be attained, but in fact prescribe and proscribe absolutely nothing nor do they indicate how the outcome should be reached. Instead, the strategy establishes a limited space of freedom in which banks can do whatever they wish.

Banks can choose whatever assets they want, without regulators dictating the choices. Stability of the international banking system is enhanced, but the banks are left alone. Whatever effects the rules may have on banks' business decisions, they are unintended consequences.

Under Basel 1, the scheme was anything but perfect. Risk weights were few and far apart. Some borrower types, e.g. corporates, had only risk weight. As a consequence, risk mispricings and regulatory arbitrage opportunities abounded (Jones 1999; Working group led by Patricia Jackson 1999). The rules were creating perverse incentives.

The new risk technologies carried the potential to fix the shortcomings—and to consummate the dream of not governing. The VaR based Internal Models Approach (IMA) for market, Internal Ratings Based Approach (IRBA) for credit risk and Internal Models Method (IMM) for counterparty credit risk were built on the adoption of banks' internal risk technologies for regulatory use. Their adoption, consequently, entailed that BCBS outsourced great deal of its regulatory power to banks, or rather the methodologies *(Gerding 2009)*, an apt neoliberal move.

The shift of regulatory power, however, had another crucial consequence. The move aligned internal and external regulation. The distance between what banks themselves used to control themselves—internal cognitive, control and management devices—and those devices offered by regulation disappeared— or at least shrunk to minimum.

Banks used the internal risk technologies as internal cognitive, control and management devices. Management priced and allocated economic capital to business units and sometimes individual transactions with the help of VaR-based techniques such as RAROC and RORAC (Froot and Stein 1998; Milne 2002:12–13). Positions and vulnerabilities were understood through the prism of VaR. Even pricing was VaR related. Traders priced deals with models that were based on the same conceptual framework as VaR. Imagine what happens when these internal technologies become regulatory technologies. Regulatory and economic capital is aligned (Moosa 2012:326) as both the banks and the regulators had the same understanding of risk.

This alignment of risk ontologies was a hugely significant transition. It ensured that the incentives to which regulation gave rise were, in fact, insignificant. They were commensurate with the incentives the banks' internal cognitive, control and management devices created.

A second mechanism also contributed to eliminating the incentive effects capital adequacy regulation has. To understand it, we must bear in mind that the Committee and the industry agreed that the new risk technologies were both accurate and reliable. The technologies captured, i.e. performed real risks. This meant that the VaR technologies produced accurate renderings of real-life threats, not "seat-of-the-pants estimates" or distorted, non-granular renderings that had to do when nothing better was attainable.

That the risks were real, initiates a flow of conceptual transformation that ultimately makes the rules' incentive effects disappear. For contemporary readers the idea that banking is a risk business is a natural inevitability. The sense of inevitability, however, masks the contingency of the conceptualisation. Before a variety of quantification techniques had rendered risk a "crisp", clear-cut object, banking was an activity with far fuzzier boundaries. Bankers relied on ill-defined and subjective techniques—"a banker's unique insight into the creditworthiness of each customer"—to guarantee the survival and profitability of their banks. Peter Cooke, the "father" the Basel 1 Cooke ratio, e.g. argued in 1992 that the "great benefit" of Basel 1 was that it had "focused banks' own thinking on how to price capital and how it should be

allocated" (1992:5). VaR technologies were integral to the transformation. They changed the ontological status of risk. The threat of losses ceased to be an uncertain object of which no certainty could be gained and migrated into a quantifiable, actuarial risk on a similar transition *(Carruthers 2013:537–540)*.

Once accurate risk quantification emerges and the technologies that enable it are incorporated into capital adequacy standards, the incentives that the regulatory capital scheme creates lose their significance. Banks—now in a new guide of prudent risk actors—reappear to perfect the regulatory technology. A prudent bank always optimises the trade-off between risk and return in asset selection decisions. If the regulatory risk assessments are real, they no more push banks anywhere but to the direction the bank would gone without the rules.

With Basel 2, the neoliberal dream had finally coagulated. VaR fulfilled the longstanding hopes of governing from a distance but not intervening. BCBS was able to improve financial stability while not impacting banks' asset selection decisions. A strategy of non-governing at a distance was ready.

The strategy is thoroughly neoliberal. First, it consummates the deregulatory agenda by entrenching the neoliberal disembedditive regulatory framework as the global "gold standard" for banking regulation. The introduction of Basel 2 guarantees that banks are regulated as little and as non-intrusively as possible.

Second, the strategy reproduced the basic characteristics of the neoliberal deregulatory agenda. The methodologies are technocrats' dreams, "sophisticated" proprietary models running on supercomputers and designed and operated by rocket scientists. They were based on industry best practices and, consequently, enforced the non-interventionist regulatory paradigm. And, finally, the models resides outside all democratic control.

It must, however, be born mind that the strategy was in many respects still only a dream, not a waking reality. The VaR revolution only affected the biggest, most advanced banks. Others had to contend with less "risk sensitive" regulatory capital adequacy schemes in the credit risk Standardised Approach, market risk Standardised Measurement Method. Most of these schemes built on the integration of credit rating agencies into regulatory flows, which with was another catastrophic decision (King and Sinclair 2003; The Joint Forum 2009). Even in the advanced banks, VaR did not see full-scale, unattenuated regulatory use, simply because BCBS did not believe in the banks' modelling capabilities (Young 2013). As a consequence, Basel 2 was full of safety layers, conservative approximations and half-baked models, ranging from the IMA multiplication factor (Danielsson et al. 1998; Goodhart 2011:255–256), backtesting add-ons and the disastrous specific market risk "4xVaR" arrangement (Goodhart 2011:260–261) to the gutted IRB ASFR credit risk model established in the place of full credit risk models (Young 2013:673) and the very conservative counterparty credit risk EPE regime.

3 Post-crisis strategies

3.1 An abysmal failure

Basel 2 fared abysmally during the financial crisis. The crisis provided ample proof that freshly minted regulatory juggernaut did not work. There was simply too much risk and leverage *(Financial Services Authority 2009:19–21)*. Some commentators put part of the blame directly on Basel: the Accord fueled the securitisation bonanza (Atik 2011; Blundell-Wignall, Atkinson, and Lee 2008:4–5). The problems were fundamental.

The crisis experiences discredited the core technological assemblage underlying the Accord. VaR collapsed. VaR technologies did not produce reliable estimates of tail losses, they churned out exceptions—days when actual losses exceeded the regulatory VaR figure indicating "a misplaced reliance on sophisticated maths" *(Financial Services Authority 2009)*. Risk coverage was spotty and trading books infested with unsuitable assets (Campbell 2009). Significant risk sources went undetected and resulted in hundreds of billions in losses *(Financial Services Authority 2010 chapter 5)*. Risk management incentives were misaligned. VaR consistently underestimated the risk of extreme price movements. Tail risk was cheap—and offered great returns.

Use of VaR technologies and credit ratings offered the exact opposite of what was hoped. The technologies had rigged the banking system to fail. There was too little capital and too much leverage. Even the ICAAP had not helped. Banks' risk management capabilities had not always been as good as advertised (Senior Supervisors Group 2008).

3.2 Reactions

Less than two year after Basel 2 had been supposed to enter into force, it had been proved a dismal failure. The Accord needed another revision.

The reaction was surprisingly swift. Basel 2,5 package (Basel Committee on Banking Supervision 2009d; 2009b)—first of the post crisis revision patches—was ready in the fall 2009, barely a year after September 2008 and the fall of Lehman. Another package, Basel 3 (Basel Committee on Banking Supervision 2010a; 2010b), followed a year later. It capped off the primary reform effort, albeit a limited number of mop-up actions and Basel 3,5 reform efforts are still ongoing.

The face of banking regulation has undergone a significant transformation. Most reforms have nothing very little to do with the regulatory technologies underlying the non-governing at a distance strategy. E.g. the brunt of Basel 3 reforms circumvents the issue altogether, albeit the changes constitute the main thrust of the reforms. Basel 3 raised capital requirements significantly. Capital quality improved. BCSB even revamped the charge structures, migrating from a single one-level-fits-all floor-like design to flexible capital target approach complete with a countercyclical capital buffer and add-ons for both globally and locally systemically important banks. A non-risk based simple back-stop leverage ratio was introduced to guard against the risks of risk sensitivity. Basel 3 also added liquidity standards to the fold. Now, the rules also try to constrain banks' maturity mismatch.

I cannot analyse all the initiatives within this article. Instead I concentrate on one restricted aspect of Basel post-crisis reforms: what happened to the Pillar 1 non-governing at a distance strategy? Is the Pillar 1 pre-crisis strategy still intact or has it been modified? If so, how?

My narrative targets the core of the Pillar 1 transformation. I follow the fate of the Pillar 1 advanced modelling-based risk technologies. I discern three contradictory developments that, in the end, give rise to a fundamentally conflicted Accord which has lost its sense of purpose. First, BCBS retained the general Basel 2 model-based risk technology framework but resolved to fix its shortcomings. A flurry of revisions to mend technologies and "improve risk sensitivity and enhance risk coverage" followed. This strand of BCBS's work conserves the Basel 2 regulatory strategy. Paradoxically, the same reforms also disrupt the regulatory technologies underpinning the strategy. The risks BCBS no longer aligned with the risks that banks performed internally, nor were they real. And, the Committee even went on to effectively ban a number of activities, although mostly with passive-aggressive measures.

3.3 Fast fixes

If someone had hoped for a revolution in banking regulation (Eichengreen and Baldwin 2008), BCBS's crisis reactions were, undoubtedly, a major disappointment. The Committee did no bold rethinks (on mapping of reform options see e.g. Cukierman 2011), it just tinkered within the existing framework making the banking system incrementally better and safer.

This inherently conservative and cautious approach was apparent since the seminal G20 Washington Action Plan. The global leaders decided that no major banking revolution was in the works (Basel Committee on Banking Supervision 2008; 2008). This choice was fleshed out in further detail in a joint FSF and BCBS document in April 2004 (Joint FSF-BCBS Working Group on Bank Capital Issues 2009). It entailed that the basic Basel 2 strategies would stay put. The balance sheet mediated Pillar 1 regulation would still be the weapon of choice for banking regulators. Risk weights schemes would linger. Modelling would be still accepted and realistic risk measurement and management remain the centrepieces of the Accord. The more radical, nuclear options were off the table. There would be no modern-day Glass-Steagal Act and no end to fractional reserve banking.

Consequently, a big portion of Basel 2 reforms are quick, pragmatic fixes that seek to correct the most egregious risk sensitivity shortcomings of the pre-crisis regime. The Basel 2,5 stressed VaR, incremental risk charge and securitisation initiatives seek to revise the weaknesses the crisis revealed in the advanced VaR based regulatory capital methodologies, while retaining the general framework of Basel 2. The reforms manipulate the existing VaR based technologies to improve the regime's risk sensitivity and strengthen its ability to capture and measure risks. The same continuity strategy for reform is present in the risk weights revisions to the standardised capital methodologies and Basel 3 counterparty risk and IRB updates.

Stressed VaR is a good example of how BCBS fixed the failed methodologies. The revision targets IMA market risk methodologies, one of the ground zeros of Basel 2 failure. Under IMA, the Basel 2 market risk capital charge equalled the losses the bank is expected to suffer with one percent probability in a ten day instantaneous price shock. The banks were essentially tasked with imagining what would happen if the their books froze for ten days while a one percent outlier adverse market scenario played out. The rules had further required banks to base their models on at least two years of recent market data (Basel 2 § 718(Lxxvi)).

In 2007 and 2008, the assemblage proved disastrous. The loss estimates reflected the benign, low volatility and moderate correlation conditions banks had experienced during the Great Moderation. Correspondingly, capital reserves for market risk were low. When market volatility surged during the crisis and correlations broke, banks were caught on the wrong side of trades, in particular in securitizations. They racked up sizeable losses (for the UK experience see Financial Services Authority 2010:42) which in many cases even exceeded the regulatory loss estimates (E.g. German banks had experienced 120 exceptions during 2008 according to Federal Financial Supervisory Authority 2010:138–139).

sVaR fixes most of the shortcomings, in a way. First, it makes crisis a permanent component of the capital charge. In sVaR the capital requirement of is the arithmetical sum of two separate VaR figure: the old Basel 2 loss estimate—the "normal" VaR (nVaR) —and a new stressed condition "stressed" VaR (sVaR) figure. nVaR retains the Basel 2 approach: the capital charge equals the one percent ten day losses based on two years of recent market data (Basel 2,5 § 718). The sVaR charge is similar, but calculated on the basis of a twelve month period of stress (Basel 2,5 § . Instead of asking what is likely to happen within the next ten

days if the future is like the recent past—as Basel 2 VaR did—, banks must imagine what happens to the trading book if markets become stressed within the risk horizon (Chen 2014:197–198).

Second, sVaR is a surefire antidote to the inadequacy of the market risk capital requirements. It, at least, doubles the market risk capital charge. BCBS estimated that the sVaR revision was likely to raise IMA charges by at least 100 percent, but possibly even to sixfold levels (Basel Committee on Banking Supervision 2009a:7; Burchi 2013:300).

IRC is a similar response, yet the technological assemblage is much more complex. Another perceived shortcoming of the IMA regime was that it was structurally bound to underestimate the risk of loss embedded in trading book debt instruments, the focal point of losses during the crisis.

The one percent ten day VaR framework was a poor fit. It, first, assumes that asset prices vary stochastically day-to-day as a result of active trading. Second, to function well the framework requires that price variation patterns are diffusion processes with small, incremental changes following each other. Third, the ten day risk horizon also presupposes that all positions can be closed or hedged relatively quickly.

During the height of the crisis, many debt instruments—in particular CDOs and other ABS assets—met none of the conditions. Many issues did not trade at all after initial placement. They had no firm market prices. The price change processes were dominated by rare but significant discrete jumps, triggered in response to e.g. rating downgrades. Instead fluctuating mildly , debt instrument prices stayed still, until a violent swing took place. Finally, when the crisis hit, debt instrument markets froze. Banks could not close their positions nor hedge them. Losses followed *(Gorton and Metrick 2012)*.

The story is ironic to the core. The problems with the debt instruments had already been identified in 2005 (Basel Committee on Banking Supervision 2005b:64). They had been on the Basel 2 agenda. In fact, the Committee had established an Incremental Default Risk Charge seeking to ameliorate the very shortcomings listed above (Basel 2 § 718(Xcii). IDRC was, essentially a banking book style capital charge: the charge was to "meet a soundness standard comparable to that"of IRB, but "under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging, and optionality" (Basel 2 § 718(Xciii).

Despite being in the book, IDRC, however, did nothing to help in the crisis. The reason was prosaic. BCBS had granted a long transition period extending to 2010 (Basel 2 § 701(iii), fn. 113).

Thus, when the crisis invalidated the ten day 99 percent VaR for debt instruments, BCBS had to do very little to react. The fix was already in the books: what remained was to flesh out the the admittedly "very high-level standards" and enforce them. Only one problem existed. The IDRC was a default charge. The majority of crisis loss on trading book instruments had, however, not flowed from defaults but from downgrades. The assets had been marked-to-market. Their deteriorating quality had deflated asset marks resulting in the losses. BCBS modified the existing IDRC to reflect the new loss driver perception. It added a requirement that the charge capture migration risks in addition to mere default risk (Basel 2 718(Xcii)).

On their face, the revisions discussed above do nothing to Basel 2 strategy of non-governing at a distance. Banks are still governed through their balance sheets, by establishing risk-based limits on the leverage banks may employ. The technologies BCBS uses still seek to be risk sen-

sitive. The idea is to reproduce the likely unexpected losses in a regulatory worst case scenario and match the losses with capital reserves. The same fundamental commitment to non-intervention is also present. By imposing risk sensitive capital requirements, BCBS tries to refrain from influencing banks' asset selection decisions. Even after the worst financial crisis in decades and the reforms it triggered, the neoliberal strategy stands proudly, unaffected.

3.4 Disrupting by fixing

The fixing and retaining diagnosis is, however, both complacent and deeply flawed. Albeit Basel 2,5 and Basel 3 packages retained modelling as the core ingredient of the regulatory technology, the details of the initiatives convey a strikingly different picture of how banks are governed post-crisis. Despite sustained commitment to modelling, the non-governing at a distance strategy starts to rot from within. Basel 2,5 and Basel 3 initiatives disrupt both the models and the regulatory technology framework in which modelling is embedded. To add to the irony, BCBS was working with the full knowledge that the VaR era is over *(Basel Committee on Banking Supervision 2013)*. The technologies are beyond rescue.

The reforms destroy the mechanisms that mediated the regulators' non-governing aspirations. After the Basel 2,5 and Basel 3 methodology fixes, the capital charges are no more scenario-based loss estimates produced by banks' internal risk technologies, they are something else. No bank would use the arithmetical sum of nVaR and sVaR as a risk management system input if not forced to do so, nor do the actors believe that the nVaR plus sVaR approach produces accurate quantifications of the actual real risks banks run. The two facilitating factors that sustained the non-governing strategy are on the verge of collapse. Incentive alignment is shaken, the idea that that the regulatory risks are "real" risks is coming apart. The 99 percent ten day VaR framework is not only site of decay. The case is the same for Basel 2,5 IRC and Basel 3 CVA charge. Both are neither internal nor realistic risk measures.

sVaR, is again an excellent example. Once the nVaR plus sVaR framework is introduced, the conceptual tie to a single, articulated loss scenario is severed. The two figures measure expected losses in widely divergent worlds, but the rules require banks to imagine both, simultaneoisly. Although the move is intuitively understandable and may have the desired impact of boosting capital charges, imposing two scenarios upon each other is technically and mathematically questionable, if not non-sensical. No new composite scenario emerges out of the move. The sum is a disjointed composite. The banks face a very complicated set of incentives. They have multiple optimisation targets. The trading book could be optimised to find an appropriate balance between return and nVaR, sVaR, the composite VaR figure, or the internal VaR target, whatever it is (International Swaps and Derivatives Association et al. 2009:8–10; Moosa 2012:326–327).

The end-game is similar for IRC. Again, IRC will raise capital requirements and plugs an established hole in the Accord's risk coverage. However, the IMA capital charges for debt instruments will not be real. There is no single scenario are required to use in understanding the instruments and risk embedded in them. Some of the risks, i.e. the general market risk which arises out of the effects that interest rate fluctuations will have on asset prices, are modelled in the one percent ten day framework, while the rest, specific market risks, fall under the 0.1 percent varying risk horizon treatment.

Theoretical orthodoxy likely was—as it should be—the least of BCBS's concerns when reacting to the financial crisis. Nevertheless, the Committee's decision to jettison quantitative finance theory has serious consequences. It destroys a crucial pillar of the Basel 2 neoliberal

governmentality: the alignment of regulatory and internal risk incentives. With the BCBS's pragmatic fixes, a fissure opens up between the banks' internal and regulators' imposed understandings of risk. As a consequence, the methodologies cease to not impact bank behaviour. Instead, they have undeniable, yet diffuse and unpredictable incentive effects.

Only anecdotal evidence exists of the incentive effects the sVaR charge has. IRC, likely, has similar incentive effects, but documentation is missing. The evidence is, however, stronger for a Basel 3 initiative, the credit valuation adjustment (CVA) charge.

The CVA charge has been a highly contentious issue since the charge design was first published in December 2009. The charge targets banks' derivative transaction counterparty risk exposures (Basel Committee on Banking Supervision 2010a:31). The charge has its provenance in crisis experiences. Credit valuation adjustments gave rise to hundreds of billions of losses during the crisis (International Swaps and Derivatives Association 2011:5). The lossed had gone uncapitalised in Basel 2.

CVAs are a complex issue. Basel 2 had introduced a revamped, highly sophisticated approach to setting capital charges for counterparty credit risk (Basel 2 Annex 4). The advanced Internal Models Method (IMM) technologies allowed the biggest banks to model future derivative exposures and, ultimately, counterparty credit risk capital requirements. Despite the rules, BCBS found a number of banks wobbling under the weight of under unexpected counterparty risk related losses during the height of the crisis. The Basel 2 CCR rules seemed to have completely missed the possibility of CVA.

The Basel 2 CCR risk dragnet had, indeed, been outmanoeuvred. The losses flowed from a novel, unanticipated source. BCBS learned that derivative portfolios could hemorrhage value even if no counterparty defaulted—the eventuality the CCR rules covered. A rating downgrade was enough.

The entire CVA phenomenon is situated in a minefield of accounting and capital adequacy rules(Schubert 2011). At the core of the CVA debacle is a mismatch between the accounting treatment and Basel 2 capital adequacy frameworks for derivate assets. Accounting conventions require that derivatives are always marked to market. Mark-to-market valuation is performed in two separate valuation processes. Banks, first, value the contracts in a risk free frame, without taking into account the uncertainty of receiving payments from the counterparty. Second, a counterparty credit valuation adjustment to allow for payment uncertainty *(Gregory 2012)*. CVAs are driven by all events affecting counterparty creditworthiness. No boundary conditions exist. The Basel 2 CCR regime, instead, built on an impairment accounting loss frame and performed CCR as a credit risk. CVA was, however, more akin to market risk.

A very difficult regulatory constellation arose. Banks had accumulated hundreds of billions in CVA losses. CVA was, however, a highly complicated risk with highly complicated sensitivity structure. It was difficult to model as a the exposures were driven by not only creditworthiness but also market risk factors—and their interaction. A highly complex political situation arose. The Committee developed its own regulatory methodology to capture the CVA risk (Basel Committee on Banking Supervision 2009e:32–33). The first proposal met fierce criticism from the industry and was later revamped—to match an industry compromise proposal. The industry was arguing that it could model the CVA risk (Global Financial Markets Association, British Bankers' Association, International Swaps and Derivatives Association 2010; Rebonato, Sherring, and Barnes 2010), but allowing full scale, unlimited modelling was out of the question for BCBS. Instead, BCBS settled on an awkward, but highly complicated semi-

modelling approach which utilises CDS spread data. The final CVA methodology (Basel 3 Annex 4 VIII) is complicated but still seriously mangles CVA risk. It performs CVA in as counterparty credit risk and shuns the other sensitivities. In addition, the Committee made a decision to exclude the CVA companion adjustments—DVA and FVA from regulatory calculus—further complicating the incentive calculi.

The issues with CVA modelling are very complicated and delicate. However, one thing seems certain. The risk insensitive CVA charge methodologies have created an explosive amalgam of uncertain incentive effects, market structure implications and possible feed-back loops. The charge complicates pricing and confuses hedging (Carver 2013) and may even trigger procyclical and systemically destabilising CDS price feedback loops (Murphy 2012).

Once the Basel 2,5 and Basel 3 fixes are in place, Basel 2 advanced risk methodologies stand corrected—and gutted. Modelling bludgeons along, but the reforms have disrupted the networks that sustained the governmentality that modelling was facilitating. Banks may still use internal models to determine capital charges. They are still under use the test obligations and required to integrate the model outputs into internal risk management flows. The rules are still acting as if risk measurement and management and non-governing banks at a distance is possible.

The head-fast commitment to the prior regulatory strategy, however, suggests a decoupling of the actual regulatory technologies and the regulatory strategy they are understood to perform. The Basel 3 continues on the neoliberal tracks despite the fact that the tracks have already ran out. A discrepancy between regulatory reality and regulatory justificatory accounts has emerged. Here, the picture is blurred. Remember that even Basel 2 was, first and foremost a dream and not a waking reality. The strategy was buckling under the strain of technological imperfections and shortcomings. The discrepancies, however, now run much deeper than under Basel 2 and, most significantly, there is no more hope of a future rally as there was in 2004 (Chorafas 2004 p. xxiv) .

3.5 Abolishing by fixing

The Basel 2,5 and Basel 3 reforms were motivated by a highly pragmatic overall objective. Capital requirements had to increase, as soon as possible. The reforms attained this objective, with the methodology fixes doing some of the lifting. The Basel 2 market risk framework amendments alone doubled or tripled the market risk capital charges, while the securitisation framework amendments gave rise to a significant capital level boosts, as did the CVA charge (Basel Committee on Banking Supervision 2010c:13). And, the changes were only a sideshow. The most significant quantitative impact flowed Basel 3 capital requirement and quality reforms (Basel Committee on Banking Supervision 2010c:10).

The industry found itself under serious capital strain. It is, however, important to note that the reforms did have a target. The methodological fixes concentrated on trading books as table 6 of the Basel 3 Comprehensive QIS demonstrates. For Group 1 banks—the large global conglomerates—banking book reforms made up less than 10 percent of the RWA impact. The "innocent" risk sensitivity fixes had drastic structural consequences for trading books business. Many formerly lucrative activities became highly unprofitable, and thus were effectively banned.

BCBS was acting in a passive-aggressive mode. It was routing out trading business, making sure that the days of gambling with other peoples' and taxpayers' money were over. In the political climate of the day, BCBS, of course, seemed to have an irrefutable case to do so.

IMA had failed. The loss attribution exercises, however, suggest that the Committee was actually pushing the case further than evidence could support. Market risk capital charges had not been excessively low for e.g. most equity, forex or commodity position, but the instruments still faced the overall sVaR hikes (Financial Services Authority 2010).

The passive-aggressive attitude has allowed the Committee to circumvent the difficult question of what kind of financial markets and banks should exist. Paradoxically, real risks are doing the heavy lifting for BCBS, despite the fact that risk had disintegrated. Retreating behind the banner of risk sensitivity entailed that BCBS did not have to ban anything. It just had to manufacture risk methodologies that did the Committee's "dirty" work. The retreat signals that on a global level regulators are committed to the neoliberal regulatory paradigm, despite the numerous national initiatives—such as the US Volcker rule, the UK ring-fencing reforms *(Independent Commission on Banking 2011)*, the German banking reform act and EU structural reform proposals (European Commission 2014)— that have explicitly tackled the scope of permissible banking activities. The only explicit Basel-initiated global structural reform project has targeted OTC derivatives(Glass 2009). They are being pushed to centralised counterparties (Basel Committee on Banking Supervision and Supervision 2014). The reasons for Committee reticence are unclear. One may surmise that the interests for enacting e.g. a proprietary trading ban are distinctly national. Proprietary trading is a concern because deposit guarantee schemes—taxpayers' credit—have been used to support what it is essentially gambling for private benefit.

The fate of IMA specific market risk modelling for securitisations is an example of the limits of BCBS's passive-aggressive regulation. The issue was one of the most contentious during Basel 2,5 drafting. A considerable portion of all trading book losses during the crisis had emanated from securitisation positions. The concerns that gave rise to the incremental risk charge were particularly pressing for securitisations. Markets were shallow, many issues traded sparingly, and price movements were characterised by long bouts of low volatility combined with rare jumps. The fit was so bad that it was questionable whether many securitisation should have been allowed under IMA in the first place.

The first Basel 2,5 proposal contained a radical solution. BCBS banned specific market risk modelling for all securitisations and nth to default assets. All securitisation positions would attract the SMM specific market capital charge, although they could be included in IMA models (Basel Committee on Banking Supervision 2009c:16). The industry response was hostile. Banks argued that the proposal would destroy the correlation trading business (International Swaps and Derivatives Association et al. 2009:11–12). In correlation trading, a small group of huge transnational broker-dealers buys and sells complicated bespoke CDS and CDS index products(for an overview see Kakodkar, Martin, and Galiani 2003).

BCBS was forced to retreat, probably because in the end the Committee did not want to kill correlation trading. The business had proved an integral part of the credit market asset price discovery process. CDS and CDS index prices (MacKenzie 2012)—which correlation trading operations sustained—served as proxies for other credit risks, i.e. many bonds for which markets were too shallow to allow price discovery. Consequently, In the final Basel 2,5 rules, full scale modelling of correlation trading positions was allowed under the new Basel 2,5 Comprehensive Risk Measure (CRM). The situation is ironic. CRM is by far the most complicated and scantly defined of all post-crisis modelling approaches, yet the complex methodology emerged where modelling had fared worst (Moosa 2012:334).

4 Lost in limbo?

There is no doubt: the post-crisis reforms have made banking safer and the system more stable. Scope of risk coverage is wider and the methodologies more robust to tail risk effects. Most significantly, banks hold considerably more and better capital, and some rudimentary macro prudential tools are in place. In addition, new safety layers have been added to the Accord. Stability is now safeguarded by liquidity standards, enhanced stress testing and a non-risk based last resort backstop, the leverage ratio. Supervisory cultures have also changed. Balance sheet scrutiny is undoubtedly stricter than before and supervisors better resourced.

Despite these improvements, the two Basel 2 regulatory I have discussed strategies seem to remain intact. Banks are still governed by both a non-governing capital adequacy regulation strategy and a subjectivity regulation project. Both have seen changes, but no fundamental upheavals. As far as regulatory strategies are concerned, Basel is the "mouse that never roared"

The situation is perplexing. The technological basis of both strategies was decimated as actuarial, calculable risks turned to Knightian uncertainty (Carruthers 2013) at least in some quarters of financial markets. Simultaneously, the response has been to fix the shortcomings of what were essentially abortive technologies. In a way, BCBS repaired the irreparable.

The paradoxes run even deeper. The fixes may make the technologies more robust to a rerun of the crisis. They, however, simultaneously decimate the strategies' core regulatory mechanisms. The fixes destroy the alignment of banks' internal and regulatory risk technologies and shred the last hopes of the methodologies actually capturing something that was "real". Both were crucial factors in eliminating the incentive effects regulation had. BCBS is back to governing banks, incentivising their investment decisions. This newfound regulatory zeal is, however, mostly concealed. The departures from the non-governing strategy are stealthy, passive-aggressive.

Externally, the rules follow the blueprints of the non-governing at a distance strategy but the mechanisms that underlie the regulatory technologies seem to have evolved into something else. What, that seems uncertain. What is the strategy arising out of the motley collection of robust but distinctly external regulatory risk technologies that do not perform real risks? Or is there, in fact, no strategy? Only a hope of all the pragmatic things done will keep the system from imploding while not rocking the boat too much?

In 2010, Jamie Peck introduced the idea of zombie neoliberalism (Peck 2010). He argued that after the crisis the neoliberal project collapsed in to the hands of pragmatists and technocrats, "the market-oriented guys", who no longer subscribe to theoretical and ideological orthodoxy of core of neoliberalism, the "proactive forms of liberal state statecraft" (Peck 2010:108). The zeal to reform was lost, replaced by a wary understanding that options were few and recasting the system would be a painful process. For Peck, this state of affairs resulted in a dire outlook. Instead of a new non-neoliberal beginning, the new post-crisis version of neoliberalism "might just as likely lead to further rounds of flawed, promarket reregulation", which by sheer force of impetus reproduce the previous paradigm and suppress all the alternatives.

This is what seems to be happening in Basel. Despite its utter failure, the Accord has not imploded, but simply staggers on, unable to shed its ties to previous intellectual design, and incapable of imagining a new beginning. "The brain has apparently long since ceased functioning, but the limbs are still moving, and many of the defensive reflexes seem to be working too", as Peck writes.

The idea risk is still capturing the regulators' imaginaries, with an unyielding longing to the days when banking still could be free but under control. This leads to a visionless reform where abortive technologies are fixed despite the fact that they are beyond repair. The repairs slowly eat into the foundations of free banking, but allow the industry to regroup and engineer or lobby its way out of holes the Committee finds the courage to dig. At the same time, the senseless retreading the familiar paths allows the regulators to not tackle with the entrenched interests of the big market players. It can preempt the worst threats to the stability of the system.

At the same time, zombie banking regulation is what we are likely to receive for the foreseeable future. Two dynamics seems to destined to take care of that. First, the collapse of free-market banking coincided with the downfall of actuarial risk. Risk is gone. Nothing has emerged to take its place. BCBS is in an intellectual and technological limbo. It cannot mend capital adequacy regulation, but at the same it can't escape regulating banks with that particular regulatory technology. Banking is firmly a risk game. To change that would need a bold rethink.

That rethink is not in the cards. Any radical rethink has will be prohibitively expensive in the short run. All radical reforms would entail a rough transition period where credit provision would contract and a recessionary period would likely follow. Any future benefits would have to be bought with prohibitive amounts of immediate pain. The neoliberal has not failed badly enough to allow that trade-off to be made. Maybe next time.

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