Session on Financial Regulation:
Is there a Goodhart’s Law of Financial Regulation?
Working with Market Forces

Discussion by
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Introduction
I started to work with Charles on financial regulation at the LSE Financial Markets Group in
the Summer of 1991, just after the collapse of BCCI. Charles has always been very mindful of
the fact that failures can (and should) happen and that supervisors will be criticised for it,
rightly or wrongly. Both Andrew Sheng and Michael Foot seem to acknowledge this point
from practical experience.

The origin to Charles’ work on regulation is twofold. First, in his masterpiece ‘The Evolution
of Central Banks’ Charles showed that central banks started off in their micro-capacity as
crisis managers (lender of last resort) and that only later the macro-monetary policy side of
central banks came to prominence (Goodhart, 1985; 1988a). Second, with the establishment
of the SIB, the legal predecessor of the FSA, in the mid eighties, Charles became involved in
the regulatory debate on the economics of regulation and started to write on issues such as the
costs of regulation (Goodhart, 1988b).

I have learned much from Charles about the central bank roots to regulation and will finish
my discussion with some unsettled issues in that domain.

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1 As an economist, Charles has always argued that the optimal ratio of bank failures is larger than zero.
In the first paper, Andrew Sheng argues that Goodhart’s Law helps to explain why financial regulation can fall short in its target to achieve financial stability. In the second paper, Michael Foot shows how the regulator may work with market forces. The supporting arguments are well articulated and I fully agree with the main message from both papers. However, as Charles has shown on many occasions, the role of a speaker or discussant is to be provocative and I will try to adopt that role.

*Does Goodhart’s Law apply to capital ratios?*

Andrew Sheng applies Goodhart’s Law, ‘that any observed regularity will tend to collapse once pressure is placed upon it for control purposes’ (Goodhart, 1984, p.96) to financial regulation. He provides a few interesting examples. In one of these, Sheng argues that capital adequacy rules are circumvented by expanding off-balance sheet activities, moving offshore or establishing non-regulated entities. I would like to explore this example further. The Basle capital ratios -or Cooke ratios named after its founding father- have become the centrepiece of prudential supervision, almost reaching the status that monetary aggregates once had during the heydays of monetarism. Have the ratios of the Basle Capital Accord of 1988 served their purpose, or have they collapsed? The purpose of the Capital Accord -which was designed as a broad-brush framework- was twofold: i) bringing more capital in the banking industry; and ii) creating a level playing field for internationally operating banks.

In a recent BIS working paper (BIS, 1999), it is shown that the average capital ratio of the major banks in the G-10 countries rose from 9.3% in 1988 to 11.2% in 1996, an increase of almost 2% (see figure 1). The BIS study concludes that the Basle Accord has served its first purpose. At the margin, of course, the capital adequacy rules have been circumvented: investment bankers have been innovative with ‘capital’ instruments that are no real equity to count as Tier I or II capital and semi-government bodies have lined up at regulators’ doorsteps to argue that their paper should get a zero risk-weight. The major loophole is securitisation: assets are taken from the balance sheet and capital is accordingly reduced, while banks often keep, formally or informally, the top-slice of the risk of the securitised assets. Nevertheless,

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2 See also earlier work of Berger, Herring and Szegö (1995). They show that the aggregate equity / asset ratio of US commercial banks rose from 6.2% in 1989 to 8.0% in 1993, an increase of almost 30% in four years.

3 At the conference, Brian Quinn (former Director of the Bank of England) noted that Basle has also achieved its second purpose of an international level playing field. After 1988, Japanese and French banks toned down their international strategy of expanding market share.
the available evidence shows that capital on the whole has been increased in the banking industry since 1988 and that the capital ratio framework has not collapsed.

Figure 1: Average capital ratios in G-10 countries

Source: BIS (1999)

Michael Foot observes that banks tend to keep much more capital than the regulator sets as the minimum. The question is whether this is due to pure market forces, as Foot seems to argue, or regulators have been leading the way. By putting emphasis on the Basle capital ratio, I believe that regulators have been instrumental in making capital an important policy variable (this is the first part of Goodhart’s Law). Next, market forces have joined the bandwagon and all banks disclose prominently their Basle capital ratio in their annual report. Market discipline serves thus as a useful complement to regulation.

Rules versus Discretion

Andrew Sheng draws an interesting parallel between monetary policy and financial supervision. Both aim to influence the behaviour of economic agents. The policy outcome depends on the credibility of the monetary or regulatory authority (i.e. the ability and track record of the authorities to exercise monetary and financial discipline). The key issue is how to avoid time inconsistency. In the monetary economics literature, there has been a long and intensive debate on whether monetary authorities should follow a rule or exercise judgement in deciding on interest rate changes (rules vs. discretion). On the literature on financial supervision, Andrew Sheng refers to the system of ex-ante prompt corrective action measures. Prompt corrective action was promoted by Benston and Kaufman (1994) in the aftermath of the S&Ls debacle and was subsequently implemented in the FDICIA legislation in the US.
Sheng favours this rules-based approach as ‘enhancing the discipline both of regulators and regulatees’.

I agree with the disciplinary working of such prompt corrective action rules, in particular in disciplining individual financial institutions in difficulties. However, I wonder how such rules would work during a system-wide crisis. A forebode of that was the recent response of the FSA to the declining stockmarket prices in the wake of the 11 September terrorist attack in the US. To avoid forced sales of equities and a further drop in equity-prices the FSA suspended part of its capital rules for insurance companies. Under a prompt corrective action mechanism, this suspension would not have been possible. Of course, it could be argued that such a mechanism should include a discretionary override for exceptional circumstances such as a system-wide crisis. However, this raises several questions. How would one define a system-wide crisis (for international banks)? Would such an override undermine the mechanism? Or, even worse, would such an override create moral hazard (e.g. if price-swings are on the border of the system-wide crisis definition, capital constrained financial institutions may have an incentive to force prices down further to let the override kick in)?

**Pro-cyclical nature of capital rules**

This leads us to the wider debate on the pro-cyclical nature of capital adequacy regulations. Charles has been an early observer of the problem that “most measures aimed at encouraging more prudent bank behaviour are liable to be pro-cyclical in the short run …” (Goodhart, 1995). This is the case with Basle I, where capital regulations become more binding. During periods of falling asset prices and bad debts, bank profits are down and thus lower the amount of available capital. Basle II will be worse: not only available capital may drop during bad times, but required capital will also increase because the Basle II proposals are more risk sensitive (capital will be based on, for example, stock market volatility or default risk which are likely to rise during bad periods). The increased risk-sensitivity of the Basle II capital rules is from a micro-prudential perspective a good thing, but the increased pro-cyclicality could have a destabilising effect. This latter aspect is worrisome from a macro-prudential perspective (see, for example, Danielsson, et al, 2001). At the time of writing, this issue is largely unresolved. Incorporating a discretionary override in the capital adequacy framework

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4 Charles has been in favour of the instrument of a discretionary override both in banking supervision (Goodhart, 1995) and in monetary policy (Begg, et al, 1993).
(or other forms of macro-managing the capital rules) is fraught with problems\(^5\) and may enhance moral hazard, as argued above. In good tradition of Charles, both Andrew Sheng and Michael Foot stress in their papers the importance of the interaction between micro-prudential supervision and macro-systemic stability.

**The concept of risk**

When designing risk-sensitive capital rules, one needs to adopt a risk-concept. In the second paper, Michael Foot is wondering what Value at Risk numbers really tell you about market risk. Are they actually telling you more about the market conditions in the last couple of years and proving of little use in markets such as those following the terrorist attack in September 2001? This outcry remembers me of another regulator’s warning: *Returns in the past are no guarantee for the future.* Academics, including Charles and his colleagues at the LSE (Danielsson, *et al.*, 2001), have argued that supervisors should be interested in what happens beyond the confidence interval (e.g. 99%) chosen by the supervisors for capital purposes. Other risk management tools such as extreme value theory could be useful. In addition, it is suggested using longer horizons (e.g. 10 years). This will increase forecast precision and may also reduce the pro-cyclicality, as risk is measured over the business cycle. Finally, risk (market volatility) is partly the outcome of interaction between market players and thus endogenous (a well-known example of the 1987 stock market collapse is programme trading), while existing risk models treat risk as an exogenous process. In sum, the concept of risk is still evolving.

**Working with market forces**

Michael Foot gives a nice overview of market signals that supervisors can use. In particular chart 1, which contrasts the share price of Yamaichi with the share price of its competitors in the months up to Yamaichi’s failures, illustrates the usefulness of market signals for supervisors. Towards the end of his paper, Michael explores how market discipline may be further developed. He refers to the proposal to require banks to issue subordinated debt to provide an assured market signal. He argues, correctly, that such forms of market discipline would not replace supervision, but rather complement it. I agree and would add a further argument for the complementary nature of market discipline. Markets only care about the private cost of failure. Public authorities also care about possible externalities of a failure.

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\(^5\) Remember, for example, that Keynesian policies sometimes worked pro-cyclically due to implementation lags.
(Schoenmaker, 1996). Hence, markets would undersupply the monitoring of financial institutions. This concern of the wider implications of failure is the origin of the development of the lender of last resort function and the subsequent development of the supervisory function by central banks (Goodhart and Schoenmaker, 1995).

However, it is important to foster market forces and to reduce moral hazard effects of public intervention. Market discipline will only work insofar as market participants can reasonably expect to lose money in case of a failure. Bailouts of secured and unsecured creditors would undermine these expectations. Authorities could follow a mixed strategy of bailout to reduce moral hazard. See Freixas (1999) on constructive ambiguity.

**Disclosure by supervisors?**

Again, I will refer to the evolution of central banks. By acting for the public good rather than driven by profit-motives, central banks started their role of crisis manager of the banking system (Goodhart, 1988a). Banks in problems would solicit funds from the central bank and provide the central bank with confidential information about their problems. Given their non-profit orientation, the central bank would use this information discretely to form its judgement to provide lender of last resort funding to individual banks or not. This view contrasts with that of Goodfriend and King (1988), who argue that markets can provide this monitoring function. They assert that monitoring enables the commercial lender to distinguish illiquidity from insolvency in case of a request for funds. Reviewing the literature, they further conclude that there is no analysis that establishes the relative advantage of the central bank in monitoring and evaluating credit risks. It is sufficient for the central bank to conduct open market operations to maintain the liquidity of the banking system as a whole.

It would be beyond the scope of this short paper to give a full discussion of the market view versus the central bank view. It seems to me that Michael favours in general markets and disclosure, but still sees a role for the supervisor acting for the public good. This would explain his reluctance for supervisors to publish private information (such as the required capital requirement) about firms under their supervision. Once a supervisor starts to disclose such private information, it may lose its role as confidant in good times as well as in times of crisis.

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6 In addition, the free banking view argues that the banking system will be stable if left alone (i.e. no central bank intervention at all).
Concluding remarks

I would like to finish with a few unsettled issues in financial regulation. Although Charles has not argued against the establishment of a single regulator outside the central bank, he has raised the implication of crisis management by committee (i.e. supervisor, central bank and treasury). The recently established structures with a single regulator have not yet been tested on their capacity for crisis resolution.

Next, Charles has been an early observer of the pro-cyclical nature of capital rules: banks reduce business in bad times. By designing risk-sensitive capital rules, the Basle II proposals are more pro-cyclical and could have destabilising effects. This problem has not yet been resolved. Both authors acknowledge this point.

Finally, the above problems lay in the grey zone where micro- and macroeconomics interact. Combining the two domains seems to be key to solving them. The trend towards separate supervisors outside the central bank is in that respect worrying. In a recent survey on the skill profile of supervisors, Charles and I find that stand-alone supervisory agencies are more micro and legally oriented and may risk losing sight of the broader macro-picture.

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7 See, for example, Goodhart (2000). In the European context, Charles has argued that up to \(3n + 3\) parties can be involved in a crisis that hits \(n\) countries. Apart from the supervisor, central bank and ministry of finance of each country concerned, the European Central Bank (checking on monetary consequences), a putative EFSA (European System of Financial Services Authorities) and the European Commission (checking on state aid) will be involved (Goodhart, 2002).

8 Goodhart, Schoenmaker and Dasgupta (2001). Hellwig (1995) also stresses the importance of system-wide aspects in prudential supervision.
Bibliography


