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From Regulatory Capture to Regulatory Space?¹

Influences on Regulation in the Run-Up to the Financial Crisis and the Relevance of EU Banking Union

The global financial crisis tends to confirm four findings from the literature on regulatory capture. First, the notion of binary capture – industries capturing agencies – is too simple: It is more accurate to think of a regulatory space in which these industries, agencies, politicians, consumer interests and other actors interact. Second, in changing the opportunities and constraints for capture, a key role is played by ideas – including, in the years before the crisis, an ideology of scepticism about regulation and the role of the state. Third, the economic habitat is a key factor; and notably, in the run-up to the crisis, debt-financed imbalances were important in shaping the context for both market participants and official agencies. Fourth, adaptive markets pose growing challenges of regulatory arbitrage, with complexity tending to change the distance and the balance of power between regulators and the regulated. Looking ahead, the creation of a banking union in Europe, and the role of the ECB as a single supervisor, can potentially be seen as a game-changer in some of these regards, potentially shifting incentives for players in the regulatory space. Nonetheless, important challenges will need to be overcome by the ECB in the macroprudential field – including in coordinating with other agencies to address issues of regulatory arbitrage.

“Economic regulation under advanced capitalism... invariably involves interdependence and bargaining between powerful and sophisticated actors against a background of extensive state involvement.”

(Hancher and Moran, 1989)

1 Introduction

The concept of regulatory capture has had a roller-coaster history. The capture of policy by industry interests was viewed at one time as the dominant paradigm for failures of regulation, following the work of Stigler (1971), Jordan (1972), Posner (1974) and others. Subsequently, the analysis of experience in different industries in the United States dethroned this concept. Industry capture of this *binary kind* was put in perspective as one among several risks and influences to which regulation is exposed. It was noted that the shift in the 1970s to more aggressive

regulatory approaches was hard to explain in terms of industry capture (Wilson, 1980). Thereafter, richer models evolved of capture and of warping of the public interest – ranging from group public interest theories, and insights from the literature on public choice, to the concept of a *regulatory space* in which powerful and interdependent actors bargain for favourable outcomes (Hancher and Moran, 1989; Vibert, 2014).²

Recently, the global and euro area financial crises have re-awoken interest in regulatory capture. Indeed, it is striking how regulators adopted much

¹ The author would like to thank particularly, without implication, Professors Robert Baldwin and Denis Galligan, Clive Briault, Chris Decker, Stewart Fleming, Valerie Herzberg, Russell Kincaid and Frank Vibert. All judgements in the paper, as well as remaining errors, are the responsibility of the author alone

² A discussion of this literature will be found in Breyer (1982), and Baldwin and Cave (1999). The scope to strengthen defence mechanisms against capture in light of the global crisis is discussed in ICFR (2012)

of the toolbox of bankers in assessing risks, and outsourced important aspects of risk assessment to rating agencies that were paid by debt issuers and worked closely with investment banks. The literature on capture certainly offers an interesting point of departure for analysing such influences.

The present paper therefore takes as a starting point the notion of capture, and some of the conceptual apparatus



from that literature. Subsequently, however, it moves beyond this frame of reference as it explores the ways in which a range of influences interacted to shift the philosophy and practice of regulation. The binary notion of industry capture is confirmed to be too narrow. Ideology, politics, economics, and technology all entered into the equation, at times in mutually-reinforcing ways. The paper discusses that the concept of capture as such does not provide an adequate framework to think about such complex interactions: A more promising approach is to envisage different influences interacting in a *regulatory space*. The main sections of the paper end with a review of the extent to which EU banking union, and the role of the ECB as a single supervisor, may serve as a game-changer in altering incentives within the regulatory space.

Some of the issues explored in the paper concern longstanding tensions concerning the consumer interest; political influence; and obstacles to preemptive policies. There are new issues too. Complexity has increased to a degree that changed relationships between the main actors; and relations between agencies and markets evolved beyond regulatory arbitrage to become an interactive learning experience, or even a game. These issues are found in other industries also. They are particularly important when the advanced economies, under severe fiscal stress, may tend to substitute regulation for public spending to achieve policy goals.

The paper is organised as follows. Section 2 outlines the analytical framework suggested by the literature on capture – including ideological capture, and public choice considerations. Section 3 discusses the interplay of factors that influenced regulation in the pre-crisis period. Section 4 discusses the limitations of the capture framework, and highlights key issues in regulation that emerge from this experience. Section 5 discusses the potential impact of EU banking union. Section 6 concludes.

2 The Concepts of the “Public Interest” and of “Regulatory Capture”

The hypothesis of *capture* presupposes a counterfactual. Conventionally, this is the notion that regulation exists to protect *the public interest*. One must acknowledge, however, great ambiguity in this concept. Mitnick (1980) warns that “the concept of the *public interest* is of course the most notorious and the most cautioned against”. There is, as Mitnick notes, some rhetorical value in the broad idea of the public interest. But this diffuse concept needs to be

made more concrete in terms of intermediate objectives in any industry context.

In the case of financial markets, the literature clearly indicates that regulation is specifically warranted by a number of economic concerns. These issues arise from specific hazards that are endemic in financial markets. These hazards go beyond those prevalent in many other industries, such as the abuse of dominant market power. They concern inherent imperfections and potentially costly externalities in the functioning of financial markets. The most commonly cited are severe asymmetries of information, dilemmas surrounding principal-agent relations, problems of adverse selection (gambling on risky projects with high returns), herd behaviour, institutions that are *too big to fail*, other instances of implicit public guarantees, and moral hazard in general. A concise summary of these hazards will be found in Demirguc-Kunt and Detragiache (1998).

These factors have been cited in connection with many financial crises in the past, which on any definition were seriously prejudicial to the public interest, and which were consequently followed by moves to tighten financial regulation (Reinhard and Rogoff, 2011). In the early 1930s, the Glass-Steagall Act, separating commercial and investment banking activity in the United States, and the Federal Reserve Board's Regulation Q, which limited interest payments on bank accounts, were high-profile examples of this process.

When we speak of the public interest in this paper, this concerns first and foremost the need to address such economic issues in financial markets in order to preserve economic and financial stability. To that extent, the phrase is typically shorthand for *effective economic*

regulation to ensure stability and efficiency in the financial sector. However, this is not the only dimension of the public interest discussed in the paper. The question of *the consumer interest* is also addressed – and found to be quite complex, as it is in many industries.

Turning to the concept of *regulatory capture*, this is well established in the literature. Here, we use the term *capture* to describe all industry efforts aimed at diverting regulation towards the industry's narrow economic goals. This is sometimes termed *binary capture*, since it concerns only the industry and the regulatory agency. The concept of binary capture has long been recognised to be too simple a description of influences that may divert regulation from the public interest. Hence the emergence of terms such as *ideological capture*.

However, when we then extend the use of the term capture beyond the industry to other influences and interest groups, there is a concern that it begins to lose clarity and traction. It is useful to identify this dilemma at the outset, and in particular to clarify the terminology used in the paper. At the end, we will return to this issue and ask whether experience in the financial sector sheds further light on satisfactory frames of reference – advancing the view that concepts along the lines of the *regulatory space* may prove more enlightening.

2.1 Industry Capture

The underlying process in *industry capture* is driven by economic motivation. As argued by proponents of the Chicago theory of capture, failures of competition generate rents. Firms seek to benefit from these rents; and when regulation is introduced, they seek to influence that regulation in order to derive *regulatory rents* (Jordan, Posner and

Stigler, op. cit.)³ This simple vision of an industry capturing its regulatory agency is referred to as binary capture.

Regulatory regimes can in fact be dominated and shaped by industry interests from their inception (Breyer 1982; Kolko 1977). Regulation may be created to serve the economic interests of the regulated, not the public, by reducing competition – in particular by raising entry costs to an activity. Air-line regulation in the United States is often cited in this regard. More commonly, the original goal of regulation is to protect the public interest, but it is – so to speak – hi-jacked over time by industry interests.

2.2 The Interests of Agencies

Corporations can only achieve capture if legislators or regulatory agencies are prepared to cater to their special interests. It takes two to tango. Any theory based solely on corporate endeavours is evidently incomplete. In this paper, however, we will not speak of *legislative capture* or *agency capture*, for example, when referring to self-interested action by legislators and agency officials. It is confusing to think of an agency capturing itself. We will instead follow convention in referring to a diversion, distortion or *warping* of legislator or agency goals (Mitnick, op. cit.).

The *venality* view holds that regulators are personally corrupted by opportunities for economic profit. Thus, the regulation they administer is warped to serve their personal interests – including future employment possibilities (Mitnick, op. cit.). They serve industry interests for economic gain. An interesting exploration is to be found in

Grabosky and Braithwaite (1986), who suggest that capture by the industry may be more likely where there is a low *relational distance* between agency officials and the regulated population in terms of experience, outlook, class and frequency of contact.

In the case of regulatory agencies, incentives that are unrelated to industry capture are highlighted in the *public choice* literature. These include the motivation of seeking for the agency larger budgets or greater political influence. Both legislators and regulatory agencies may thus pursue entirely their own agendas, differing from the prescribed goals of the agency and from industry's self-interested agenda.

Some *institutionalists* are sceptical of arguments that see economic motives as the sole factor diverting political or official actors from the public interest. They see institutional structure and arrangements and social processes (including norms that derive from cultural and historic contexts) as shaping regulation in ways that go beyond the play of individual preferences and economic interests (Baldwin and Cave, 1999; Wilson, 1980). One branch of this literature highlights *bureaucratic drift*, in which agency behaviour deviates autonomously from the intent of legislators (McCubbins, Noll and Weingast, 1987). Another insight (Wilson, 1980) is that there may be different coalitions within agencies, reflecting the existence of differently motivated officials (careerists, professionals, and politicians).

2.3 The Interests of Legislators⁴

The actions of politicians may be driven by the garnering of votes in local areas

³ As Adam Smith (1776) put it: "People of the same trade seldom meet together even for social merriment and diversion but the conversation ends in a conspiracy against the public or in some contrivance to raise prices..."

⁴ In a European context, the term "legislators" should be understood as relating not only to parliamentarians but to political figures who are initiating legislation (who in some countries may not be members of parliaments or national assemblies). We will therefore refer not to "legislators" but more broadly to "politicians".

affected by regulatory decisions. They may also reflect expectations of current or future favours, including a *revolving door* to employment in the industry concerned. Alternatively, they may be related to broader gains of a less personal sort: for example, the benefits for the ruling party of high employment or strong tax revenues from a flourishing industry. Such self-interested concerns are very different from the aim of balancing various special interests when securing the passage of legislation that is basically intended to serve the public interest.

An important area in which industry and policy-makers co-operate is regulatory competition. Just as countries protect favoured industries by subsidies and tariffs, the same can be achieved through industry-specific regulatory frameworks. In the United Kingdom, the issue of the City of London as a flagship industry gives this topic special prominence. It is part of a wider phenomenon in which politicians or officials act in a spirit of regulatory competition to avoid losing market shares of global business (Sun and Pelkman, 1995; Trachtman, 1993; and Siebert and Koop, 1993).

In practice, the public interest impact of industry-regulator transactions falls along a spectrum of outcomes. The results of such a dialogue, in other words, may not be malignant. A potentially benign variant of industry influence is to be found in *Group Public Interest Approaches* (Mitnick 1980, Bernstein 1955), where legislators negotiate a package that takes account of special interest groups, but is viewed as being in the public interest. Taken to an extreme, the nature and impact of regulation has been seen as arising from an *intermingling* of public sector motivation and private interests, which takes place in the shared *regulatory space* of Hancher

and Moran (1989). Indeed, the picture that emerges from recent experience in the financial sector may be most accurately described as an interplay of different influences within the regulatory space.

2.4 Other Interest Groups

As society becomes more complex, with political, structural and technological changes, additional groups – not just industry, regulatory agencies or consumers – may also seek to influence policy (Wilson, 1980). Their interests may include ideological elements, or they may reflect a confluence of diffuse interests that are economically affected by a regulation.

Frameworks such as the *Group Public Interest Approaches* assume a context of competing interest groups, with potentially benign effects, rather than a



single lobby that seeks to benefit from legislation. This said, a more sceptical rendering of such an interplay of interests is that *the idea of public interest becomes a fiction used to describe an amalgam which is shaped and reshaped in the furnace of conflicts* (Bentley 1908, quoted in Mitnick 1980, p. 109). An *amalgam* wrapped in a *fiction* has an almost Churchillian ring! But this dark view of the political process – potentially exploiting the concept of *public*

interest as a stalking horse for more venal influences – has to be kept in mind.

2.5 Ideological Capture – or the Influence of Ideas

It is conventional to use the term “ideological capture” in discussing periods when the influence of ideas became particularly important in shaping changes in regulatory philosophy or approach. Interest in the power of ideas was awoken from the mid-1970s onwards, when the regulation of several



industries, particularly in the United States, took a confrontational turn that does not fit with economically-based “industry capture” accounts, or indeed with a warping of regulation by agency officials (Wilson, 1980). With the advent of Nader’s consumer activism there was evidence of a powerful impact of ideas on regulatory regimes. Thus “ideological capture” became a topic of academic interest (Hood 1994, Harris and Milkis 1996; Wallace and Wallace, 1996). In the words of Wilson: “We must be struck at every turn by the importance of ideas. Regulation itself is such an idea; deregulation is another” (Wilson, 1980).

To take, first, a benign view, it was perceived that the persuasive power of ideas, and the public benefits they may target, can potentially empower politi-

cians to overcome vested interests in both industries and regulatory agencies. One might describe this as a *recapture* of regulation by the public interest! However, it is not predestined that ideological influences will serve the wider public interest. Ideology may potentially divert regulation from protecting the public interest, for example by overemphasizing the view that regulation causes costs by stifling initiative, while unfettered markets can assure competition. It thus becomes very important to explore the nature and impact of ideological currents and lobbies.

There are some problems with the term ideological capture, however. It can be questioned when it is that *ideas* amount to *ideology*. And the term capture may be read as having a pejorative connotation, by analogy with *industry capture*. This would be misleading. Most commentators judge, for example, that the influence of consumerist ideas (*Naderism*) was benign in strengthening public interest aspects of regulation. Indeed, in the run-up to the financial crisis, the intent of thinkers who emphasized the *magic of the marketplace* was to serve the public interest by cutting back harmful and distortive government regulation. This is one of several factors that lead the discussion in the paper towards a wider framework of analysis than *capture*. And it leads us to prefer the expression *influence of ideas*.

3 Influences on Regulation in the Run-Up to the Crisis

The literature on regulation identifies four main sets of influences that likely trigger major changes in the regulatory status quo: changes in ideas; changes in habitat, including economic changes and technological advances; a shift in interest group (including industry) pressures; and internal agency prob-

lems of incentives or practice that undermine the status quo (Hood, 1994; Baldwin and Cave, 1999). These factors reflect the role of ideas and of different interest groups which were highlighted above, with one addition: The effect that exogenous economic and technological change may have on some or all of these players.

Economic change and technological progress are crucial aspects of the changes in habitat cited by Hood (1994). As already cited, the financial crisis that preceded the Great Depression in the United States gave rise to a range of financial sector regulation. Continuing changes in communications, transport and energy technology over the past century have led to a great expansion of regulation. Changes in habitat may affect regulation directly, and they may also do so by changing the effectiveness of interest groups (see below). A further stimulus for regulatory changes at the national level may lie in responses to changes in the global regulatory habitat, to the extent that politicians or officials respond in a spirit of *regulatory competition* to avoid losing market shares of international business.

Changes in ideas can be of great importance in setting new directions for regulation. In the literature, the advent of consumer safety regulation in the United States is the locus classicus of a change in ideas, driven by an effective pressure group. Another instance is the emergence in the 1970s of the strong voices attacking industry capture, in the literature discussed above, which highlighted the dangers of such capture and became influential in shaping regulatory policy and institutions. In some cases it seems that “the economist’s pen is mightier than the lobbyist’s expense account” (Keynes, 1936, quoted by Hood, op. cit., p. 5).

This brings us to *changes in the effectiveness of interest groups*. The changes in habitat we have discussed, together with broader political and social factors can influence the effectiveness of dispersed groups (Wilson, 1980). An example would be changes in industrial structure. The impact of globalisation, technology, firm size, and the role of state ownership have undermined the power base of some trade unions. Advances in communications and information technology have also resulted in the cost of access to the political process being lowered (Wilson, 1980). Thus, both economics and technology can change the potential for diffuse interests to form effective coalitions.

The *incentives or context for action by agencies and legislators* may change. For example, changes in habitat and shifts in the effectiveness of interest groups may alter concerns and incentives. The literature also identifies a class of changes that occur when regulatory regimes or agencies have proved dysfunctional for internal reasons, and need to be reorganised. Among other factors, the passage of time has been seen as a key variable. On this view, regulatory regimes and agencies in their *youth* are in a state of vitality (though inexperience) as they seek to protect the public interest, but they decline into capture in their maturity and old age, due to internal and external forces (Bernstein, 1955).

The drivers for change discussed above may combine to catalyse change in a process of *confluence and coincidence*. The possibility that powerful interests might press certain ideas against a background of new technological advances was already highlighted by Baldwin and Cave (1999). So the dynamics of change can be complex – with coalitions of external influences acting on legislators and agencies, and coalitions of the latter responding.

In a globalised economy, then, it could seem appealing to picture broad and increasingly widespread swings in opinion that are ideologically driven, interacting with economic and technological changes affecting the international economy. The need for a sceptical critique of this vision is underscored by Hood (1994), who warns that similar outcomes across countries may have differing and complex causes. An important trigger for privatization in Japan, he notes was opportunistic U.S. economic policy activism, rather than domestic ideology; and new ideology is at times fashionable re-labelling: The era of deregulation has seen growth in many areas of regulation.

In other words, the factors causing change, as well as the substance of the change, may vary across countries and industries: One needs to probe the empirics of each case. This cautionary message about generalizing explanations recalls the salutary puncturing of industry capture as a dominant model by Wilson (1980) in his broad survey of industry experience.

We can now ask how far this analytical framework sheds light on possible regulatory capture in the run-up to the global and euro area crises. A useful starting point is the set of *drivers of change* outlined above. To what extent did shifts in ideas, in the economic and technological habitat, in the effectiveness of interest groups, or in incentives for politicians and officials pre-dispose the system towards regulatory changes which were not in the public interest?

3.1 Changes in Ideas

There was a sea-change in economic ideology in the decades preceding the global financial crisis, and this exercised a strong influence on academic and policy elites in both advanced and emerging market economies. The new

ideology stressed the economic and political virtues of private markets, and stimulated a concern that these were being dampened and distorted by government intervention and ownership. This intellectual movement – in its more extreme forms, termed *neo-liberal* – had its roots in Hayek (1944) and von Mises (1920), and it flourished particularly strongly in the U.S. academic community.

This was a political as well as an economic view of the world. In part it was a reaction against a dominant view in the early post-war period, which had featured a benign and crucial role of the state not just as an economic rule-setter (nationally and globally), a fiscal and monetary manager, and a regulator, but also as a planner, owner and employer directly influencing major reaches of the economy. To borrow the vocabulary of Priestland (2012), that post-war vision had seen the state as a sage, countering merchant interests which, left to play freely, would be destabilizing.

By the end of the 1960s a neo-liberal *counter-reformation* was beginning to get under way, seeking to roll back the much expanded role of the state, after a period of tight regulation that began in the Depression. The combination of economic stagnation and inflation in the 1970s undermined the view that Keynesianism and/or state planning (of some variety) could assure full employment – and in economic management this *stagflation* underscored the risks and limits of *fine-tuning*. Subsequently, the collapse of the Soviet Union at the end of the 1980s further reinforced a neo-liberal view of the state in so far as it discredited the opposite extreme – a vision of the state as a comprehensive, indispensable and benign planner.

This shift in ideology had a pervasive effect on policy frameworks in ad-

vanced economies. It is no coincidence that it was accompanied by a change in approaches to macroeconomic management. The new faith in private markets encouraged policy architects to believe that monetary and fiscal policy could be assigned simple and transparent targets (such as inflation targeting, and debt sustainability), since imbalances in private markets could be regarded, over time, as reflecting fundamentals efficiently, and as being essentially self-stabilising. Discretionary adjustments to policy were seen as largely misguided and destabilising.

These medium-term macroeconomic policy frameworks seemed to fulfil Tinbergen's desideratum of *one instrument, one goal* (Tinbergen, 1956), and also to insulate official agencies from capture by deficit- and inflation-biased politicians. But too simple a set of macroeconomic policy rules – and major failures in the field of macrofinancial risk assessment and policy coordination – eventually contributed to a policy disaster in terms of financial stability and levels of public debt.

It was in financial regulation and supervision that, in some countries, theories of efficient markets and rational expectations had their most devastating effect. They seemed to lend depth and intellectual credibility to a view that financial markets will deliver growth and stability, provided only that they are not intrusively regulated; and that instability largely reflects misconceived intervention by governments. This confidence flew in the face of experience with markets and their supervision over many decades, and it was misplaced.

As a general proposition, the swing towards deregulation or liberalisation (the two words are used interchangeably here) was not confined to right-wing or neo-conservative political

groupings. It reflected broader intellectual currents. Indeed, financial deregulation began to take root somewhat before the advent of the Reagan and Thatcher administrations – although economic and technological factors also help explain this, as discussed below. In the United Kingdom, a shift away from state intervention and towards greater competition in the financial sector dates from the *Competition and Credit Control* reforms of 1971. In the United States, it was the Carter administration at the end of the 1970s that initiated industrial and financial deregulation, and which saw the initiation of the *monetarist* revolution of Paul Volcker at the Federal Reserve.



To be fair, these moves towards deregulation were often accompanied or followed by various forms of re-regulation, so the number of regulators employed in many cases rose even during periods of deregulation. The question is whether this re-regulation was well-adapted to changing markets, and whether it was sufficiently intrusive and assertive.

It was the period after 2000, however, that saw the most striking ideological claims made by some policy-makers concerning private markets. The philosophy of former Federal Reserve Chairman Greenspan showed

great faith in markets, despite some concerns about *irrational exuberance*; featured a resistance to pre-emptive action in the face of possible bubbles; but stood ready to *pick up the pieces* after market crises. Yet in many ways this was also the praxis of central banks in other advanced economies also, as they



failed to take policy action or sound macroprudential alarm bells during credit and asset price booms, but stood ready with an official underwriting of risks – which set perverse incentives. More diffusely, the philosophy and practices in the Basel supervisory community showed much increased dependency on the internal risk assessment processes of market firms and on rating agencies, and placed more reliance on this approach than was sensible.

This climate strongly influenced national practices in the regulation and supervision of banks in some countries. Among the leading *crisis cases*, Ireland, the United Kingdom and the United States are clear examples in which regulation and supervision was not sufficiently intrusive, critical, or insistent – as indicated in the U.K.’s various reviews of supervision, and in the reports on Ireland’s crisis (Honohan, 2010; Regling and Watson, 2010). And, more generally, central banks and regulatory agencies in advanced economies bought

into the idea of a much greater reliance on markets in performing risk assessment.

3.2 Changes in Economic and Technological Habitat

The changes in regulation that were set in train in the United States and the United Kingdom in the 1970s can partly be attributed to the evolving intellectual climate of the time; but they also had roots in changes that were underway in the material habitat of financial markets. The shift towards financial deregulation in the 1970s reflected to an important extent exogenous changes in the economic and technological environment in which markets functioned.

The economic roots lay mainly in fiscal imbalances and excessive monetary expansion. Stresses of this kind were evident in the United Kingdom from the late 1950s, and similar pressures emerged in the United States during the Vietnam War period, and especially from 1968 onwards. Such tensions spread more widely among advanced economies after the oil price shocks of the 1970s. The core feature was that governments sought to sustain economic activity in the private sector at levels that were unrealistically high, given prevailing conditions. This environment, coupled in some cases with rather rigid labour markets, bred accelerating inflation in a setting of weak growth.

This volatile macroeconomic setting implied a need for higher and more variable interest rates to maintain monetary stability. But financial sector regulations in many countries made that difficult technically – as well as unpalatable politically – to implement. In some cases, such as the United States, there were ceilings on deposit interest rates. In other cases (such as France),

credit was rationed not by price but by quantitative limits, and a move to market-clearing interest rates would have involved a major shock. Thus economic tensions and strains worsened, whether suppressed or explicit.

Faced with volatile capital flows, and pressure on public bond markets, governments in some cases responded by introducing or intensifying capital controls and/or wage and price restraints. This included the United States, with the Interest Equalisation Tax, the Voluntary Restraint Programme on capital outflows, and a brief period of wage and price controls. But macroeconomic imbalances eventually undermined such regulations and controls.⁵ Thus economic pressures, and not just ideology, made it well-nigh impossible to persist with a financial system that was subject to comprehensive price and quantity regulation.

Technology and market innovation also played important roles in triggering deregulation. Two examples illustrate this well. In the United States, technological changes made it possible to sweep funds overnight into savings accounts from current accounts, which were not allowed to pay interest, thus vitiating the impact of the regulation. In the United Kingdom, the regime of credit ceilings on established banks that existed until 1971 proved increasingly porous as new financial institutions sprang up to provide credit outside this framework. Hence the term *regulatory arbitrage* entered the financial lexicon.

Indeed, as financial innovation expanded, the public sector often led the charge. Governments with large borrowing requirements experimented

with innovative borrowing techniques. During the 1980s, for example, the Swedish National Debt Office led bond market innovations as it sought to contain public borrowing costs. The first mortgage securitisation in the United States was effected by a U.S. housing agency.

The wave of innovation that started to gather pace in the 1980s ended in the alphabet soup of securitised products whose mispricing was a key flaw in pre-crisis markets. Information technology played an essential role in the development of such products. The complexity of the transactions and financial linkages that grew up tended to obscure where ultimate risks had been passed to. It was possible to assert that the unbundling and re-packaging of risks, by spreading risks more widely, was diminishing systemic risk; but in key fields the reverse turned out to be the case.

In these respects, macroeconomics and technical innovation interacted in a mutually-reinforcing manner during the 1970s and 1980s to peel back financial regulation, for reasons that were certainly complementary to, but not inherently driven by, industry pressures or ideology. As technology advanced over the following decades, indeed, it became growingly important for policy-makers to anticipate future regulatory arbitrage; and markets in turn increasingly shaped their activities to regulation in an adaptive manner. In a sense, regulators became too dependent on the risk assessment of markets; but also, markets were losing sight of fundamentals as they moulded the structure of their activities to the forms of regulation.

⁵ *Germany was an exception to these trends: It avoided macroeconomic imbalances and largely abstained from controls, except occasionally on inflows. However, it maintained a strict segmentation of short-term markets, avoiding the emergence of traded instruments in this sector, in order to facilitate monetary management.*

3.3 Changes in the Effectiveness of Interest Groups

Advances in technology – including information technology – and a deepening of globalisation also contributed to reshaping the influence of different interest groups in society. It is not just that trades unions lost ground in the workplace. Households, firms and other associations of individuals became connected – at falling prices – to the internet, the worldwide web, and a range of electronic media. The cost of access to the political process, identified by Wilson (1980) as an important factor in the effectiveness of interest groups, was steeply reduced. The challenge is to disentangle the relevant ways in which these trends affected regulation. This deserves systematic research in the future, but one can perhaps identify already several important strands.

First, where individuals or firms were dissatisfied with outputs of the financial sector, their ability to make their opinions effective increased. However, public concern before the crisis was not typically in the direction of reducing risk-taking. An illuminating example was discontent in Ireland with a lack of competition in banking, which included the levying of high charges, and a failure to provide reasonably easy access to mortgages. This campaign gained strong political momentum. One reflection of this was that the director for competition of the reformed financial services agency was made an ex officio board member of the agency, whereas the director for prudential supervision was not. That public concern was warranted. But the policy response overshot, and the climate it helped foster was one factor contributing to Ireland's financial crisis. This example shows how complex it is to foresee the impact of changes in interest group effectiveness. Moreover, calls to mitigate

capture by *measures to strengthen the position of consumer groups and other groups with a diffuse membership in the policy-making process* (International Centre for Financial Regulation, 2012) need to bear in mind that the goals of such groups may not be well aligned with those of prudential regulation and supervision.

Second, changes also took place in the power of interest groups in the labour market, and in the culture surrounding pay: remuneration and incentives for risk-taking in the financial sector, if extreme, were still an instance of a wider trend. It is clear that globalization and technology drove a secular decline in the relative pay of low-skilled labour in advanced economies. These factors, together with a shifting industrial structure, also contributed to a decline in unionisation: the United Kingdom saw union membership fall from 39% of the labour force in 1989 to 26% in 2011. There may have been some influence, too, from the collapse of the competing economic model in centrally-planned economies, which had appeared to offer a more egalitarian model.

While the share of labour income did not fall everywhere (in the United Kingdom it was fairly stable from the 1970s onwards), returns to high skills and to a managerial elite commanded a growing share. Gini coefficients in countries as egalitarian as Sweden signalled widening inequality, and only part of such shifts reflected tax changes. In the United States, the pay of the median worker virtually stagnated after 1976, despite ongoing productivity gains. In the literature on the financial crisis, it is acknowledged that pay trends not only affected risk-taking incentives in the financial sector but were also a factor behind rising household debt levels. In the United States, offi-

cial concern about distributional issues affected housing finance policy, and Rajan (2011) sees this as a significant contributing factor in lowering income and collateral standards for residential mortgages (Rajan, 2011).

As a third example of the role of interest groups, one may perhaps view rating agencies, for the purpose of this analysis, as such a group – distinct from the remainder of the financial sector in their risk assessment role. As such, they provide an example of the changing influence of interest groups as a result of technology and innovation. As financial products became more far more complex, regulators became dependent on rating agencies in evaluating the riskiness of portfolios. The rating agencies were also increasingly conflicted: They had always been paid by issuers, but now the securities they assessed were at times designed by banks with the active participation of the rating agencies themselves. This nexus was a factor in the mispricing of financial products that was a key source of the crisis.

Finally, and related to this point on rating agencies, there is a more general issue about the impact of technical complexity on the supervisory process and the effectiveness of industry influence. The sheer difficulty for supervisors of understanding the techniques being used in the market place means that “a constant and close interaction with market participants under their surveillance is required in order to stay abreast of constantly changing financial markets, to monitor the build up of risks and to understand the impact of their regulatory policies” (ICFR, 2012). Such constant interaction may present heightened opportunities for market participants to influence regulators, and if the latter are poorly remunerated may even result in a form of skill dependency on the side of the agency.

3.4 Changes in Incentives Affecting Legislators and Agencies

Looking beyond the changes in ideology discussed above, there is a question whether more tangible factors (including economic gain) changed the incentives for parties in power and regulatory agencies. There are indeed several areas involving economic benefits, in which legislators and agency officials may potentially have been particularly open to *capture* during this period.

First, political parties in power in many countries benefited strongly from a surge in tax revenues during extended financial booms. In some cases, such as Ireland and Spain, they were alerted by international agencies to the fact that these revenues were transient, and also that their structure was increasingly



vulnerable to an economic downturn (Martinez-Mongay et al., 2007). These warnings may have seemed inconvenient: they were certainly ignored. This is an important additional element in the *political cycle* outlined by Green (ICFR, 2012), in which public support for tough regulation fluctuates over the business cycle, being weakest at the cyclical low point (when small firms complain about access to credit) and highest just after a crisis breaks.

An important question is whether this and other more venal consider-

ations led Ministers to guide agency officials to take an unduly benign view of financial sector risks. This question was explored in a report on Ireland’s banking crisis by incoming central bank governor Honohan, whose analysis illustrates how difficult it can be to nail down such a trend: “While it is easy to imagine that senior management or CBFSAI Board or Authority Members



might have instinctively and almost unconsciously shied away from aggressive action to restrain politically connected bankers and developers during a runaway property boom, no evidence has been presented suggesting that this was the case. Furthermore, although the climate of regulatory deference might have been unconsciously reinforced by social interaction – modest though it might have been – organised by regulated institutions, there is no evidence or hint of corrupt regulatory forbearance” (Honohan, 2010). It is easy to imagine that a nuanced assessment along these lines might apply also in other countries at issue.

Second, in countries such as Ireland, the United Kingdom and the United States, one can see a relevance of the suggestions by Grabosky and Braith-

waite (1986), referred to above, as regards the influence of a low *relational distance* between agency officials and the regulated population in terms of experience, outlook, class and frequency of contact.

Third, and more specifically, in the United States, and to a lesser degree in some other countries, there has been over time what is uncharitably termed a *revolving door* between the financial services industry and senior government appointments. Whether earlier or prospective employment in the financial sector influenced government officials unduly during their tenure is an issue on which there seems to be no hard evidence.

Fourth, there is clear and recent evidence from the United States that voting patterns in Congress on financial sector issues reflected the garnering of local votes (Mian et al., 2010).

A further set of political incentives is evident in the fact that countries with large financial industries – important sources of employment and of tax revenue – found ways to allow them an expanding global role outside the scope of national controls. The United States allowed a large market in *eurodollars*, with active participation of its own banks. The United Kingdom welcomed the growth of offshore activities in London in US-dollars, and later in other currencies that were regulated at home, such as Japanese yen and indeed pound sterling itself – in a sense an example of the *regulatory competition* referred to earlier. These offshore markets facilitated capital flows; and they offered arbitrage opportunities that, over time, contributed to eroding domestic controls.⁶

An interesting question in the case of the United Kingdom (and also in Ire-

⁶ One of the roots of U.S. support for action in Basel on capital ratios was to ‘normalise’ the competitive position of the highly-leveraged Japanese banking sector.

land) is how far the *light-touch* approach that was in fact adopted in financial regulation, under the disarming caption of *principles-based regulation*, reflected considerations of regulatory competition with other centres. Certainly, for the U.K., the creation of the euro and growing integration of euro area financial markets could have intensified such concerns; and the statutes of the FSA obliged it to pay regard to the competitiveness of the U.K.'s financial services industry (ICFR, 2012). There is some anecdotal evidence – in the form of comments by officials under the *Chatham House Rule* – to support the view that this was an important driver of regulatory ease. Briault (in ICFR, 2012) cites the concession given in 2004 to U.S. investment banks to operate in the U.K. even though they were not supervised as banks in their home country. The financial crisis in Cyprus in 2013 is adding a chapter to this branch of the literature.

Turning to the internal workings of regulatory agencies – a major theme in the literature – there is indeed some evidence that these proved dysfunctional, though in *new* ways. Partly for ideological and partly for technological reasons, there was a trend in the advanced economies to separate bank regulation from central banking. This seemed desirable not only to insulate the *pure* pursuit of monetary stability (often in the form of inflation targeting), but also because of the scope for arbitrage among instruments designed by different types of financial institutions, including insurance companies – some of which had typically never been among the entities regulated by central banks.

The divorce between central banking and regulation may have diminished the sensitivity of regulators to systemic risks – although there are counter-ex-

amples, such as the Federal Reserve Board, which is a supervisor. The hybrid central banking/supervisory structures created in some cases – such as Ireland and the Netherlands – did not show a good track record in diagnosing the emergence of risks. A further organisational problem was that agencies with overlapping responsibilities – as in the United States, and in Spain (for the *cajas*) – also seem to have shown striking risk blindness. Taking this together with issues discussed in the previous section, the issue of a clear agency mandate is evidently key.

3.5 Confluence, Coincidence and Impact

The recent literature, and even anecdotal evidence, leave some ambiguity about the extent to which pressures from the industry to *capture* regulators actually increased during this period. In a broad sense, all reports on the period suggest that regulators *bought into* market risk assessment to far too great an extent, and failed to criticise systemic risks as they built up in banks. The large amounts spent on lobbying activities by Wall Street firms are also well documented (ICFR, 2012). However, the drivers and influences described in this paper – along with evidence presented in the recent literature – do not in themselves substantiate a much greater vigour on the side of the industry in seeking and obtaining specific gains at the expense of the public interest.

In some countries, the commitment of regulators to an intrusive questioning of risk positions rather seems to have crumbled under the weight of these various, mutually-reinforcing influences. In some cases, at least, it seems that the root of the problem was an intellectual or moral failure to identify, follow-up, and contain concentra-

tions of risk – with Northern Rock in the United Kingdom, and certain major lenders in Ireland, being clear cases in point. In Spain, reflecting local political factors, very risky property lending went unchallenged at the level of the *cajas*, although the major banks were successfully challenged on the potential use of *special purpose vehicles* to acquire U.S. debt instruments.

Rather than a quantum shift in *capture energy* on the side of the banks, it seems more as if economics, technology, ideology and politics reduced resistance to the risk assessments put up by the industry, and perhaps contributed to a failure of analytical diagnosis with regard to mounting systemic risks. This experience strikingly illustrates the general assertion by Baldwin and Cave (1999) cited earlier: Factors of different kinds may come together to trigger regulatory change; and, specifically, that powerful interests may be able to press home certain ideas more effectively against a background of technological advances.

The run-up to the crisis thus saw technology and economics interacting to change regulation of the financial sector, and it also saw these factors interacting with changes in ideology and with economic interests in a mutually-reinforcing manner. The path of this process seems, in retrospect, steeped in irony. In essence, an exaggerated faith in private markets contributed to new macroeconomic policy and regulatory regimes that were designed to avoid government-induced distortions and to promote stable and non-inflationary growth. Yet the outcome has been a deep and enduring recession, and, in the advanced economies, an economic, financial and public debt crisis of historic magnitude.

4 New Issues in Regulatory Capture

The aim of this paper has been to explore influences that affected regulatory philosophy and approaches in the run-up to the global and euro area financial crises, taking as a starting point the insights of the literature on regulatory capture. The wider issues that emerge from this analysis can be grouped under three headings.

4.1 The Analytical Framework

The concept of regulatory capture arose from a binary relationship between industry actors and regulatory agencies. It was not proposed as a comprehensive framework within which to explore all changes in regulation. Subsequently, it was enriched by the notion of ideological capture. Further complexity was added by the consideration of other interest groups in society; and at times the term capture has also been used to describe the self-interested behaviour of legislators and regulatory agencies.

As foreshadowed at the outset of this paper, there are problems in expanding the use of the term capture so broadly. This may have some expositional attractions – it is eye-catching to say that *financial regulation underwent ideological capture by proponents of efficient financial markets*. But such extensions of the term capture tend to overburden it. Among others concerns, the term is typically has a pejorative connotation (whereas the influence of ideas may be benign, as in the original consumerist example). It can also be confusing to say that a regulatory agency captures regulation for its own advantage, a phrase that could refer to many different aspects of agency behaviour and probably generates more heat than light. More fundamentally, the notion

of capture is one-dimensional and transitive: it does not reflect the complexity and interactivity of various influences in the pre-crisis period.

The way in which actors and influences interacted in the run-up to the crisis points towards more subtle and dynamic interactions, which may best be explored in the *regulatory space* featured by Hancher and Moran (1989). And the complex nature of interactions within that space deserves deeper study in its own right. At a minimum, one has to see the relations between actors and influences as everywhere growing in complexity; as a *learning process*, very far from a static concept of regulation or a linear process driven by agencies; and at the extreme one might ask if they take on some features of a *regulatory game*.

4.2 Continuing Tensions in Regulation

Experience in the run-up to the crisis highlighted a number of tensions in regulation that are not new, but have gained in importance. These issues have recently been prominent in other industries also; and in some instances the financial sector experience has shed additional light on them.

A first issue is the difficulty in categorising and channelling the *consumer interest*. The Irish example cited above illustrates how immediate *consumer* and longer run *household* interests (including as tax payers) can diverge over a medium-term time horizon. This experience also highlights the challenge in finding effective channels for consumer representation, an issue that has often been prominent in, for example, utilities regulation.

A second issue is political influence. Here the experience with policy frame-

works affecting the financial sector is troubling in several respects:

- In some countries, the effectiveness of financial regulation was impaired by political factors that official agencies internalised. Rajan reports this concerning social goals of housing finance in the United States; political *deference* is alleged in Ireland; and the fiscal benefits of boom revenues seems to have weakened political willingness to take *away the punch bowl* in several countries. In the U.K. the flagship industry status of the financial sector may also have affected official attitudes to regulation.
- The macroeconomic frameworks and rules designed to safeguard, fiscal, financial and price stability were in some cases (including the U.K.) drawn



quite narrowly. This is often a *quid pro quo* for taking important time-consistency issues (inflation, debt sustainability) out of the political arena, where myopia is a risk. Narrow authority is the price of delegation. However, the lack of peripheral vision in monetary and fiscal policy, which were part of the framework which should have assured the stability of financial markets, resulted in a neglect of destabilising trends in

credit, asset prices and capital flows. This was a regulatory failure in a broad sense.⁷

- The failure in many countries to introduce pre-emptive policies that would have moderated their financial



booms provides a striking example of a political economy hazard that is featured in the regulatory literature. The benefits would have been diffuse over time and over segments of the population. The costs would have fallen immediately on potentially vocal interest groups. This suggests an inherent problem in pursuing financial stability policies, and it may raise a question whether pre-emptive financial policies need to be subject to some sort of pre-agreed triggering mechanism.

4.3 New Issues in Regulation

There are probably few truly new regulatory topics under the sun, but two issues deserve more attention in light of the crisis. Indeed, there have been reports (for example at the FLJS workshop referred to in footnote 1) that they are gaining importance in other industries also:

- **Complexity:** It was suggested above that the complexity of financial products and transactions may have decreased the relational distance between regulators and the industry, reducing regulatory independence – and perhaps also credibility. It seems that this feature of growing complexity has been registered in other industries as well, including utilities. Possibly, it may tend to constrain market entry and other forms of competition. Innovation and technology no doubt account for this in part; but there is scope to wonder about an endogenous tendency for industries to increase complexity as a means of dominating the regulatory debate or shutting others out.
- **Interactivity:** Regulatory arbitrage emerged at an early stage in the liberalisation of the financial sector. Subsequently, the interaction between regulators and adaptive financial markets seems to have taken on some features of a *game*. With very severe capital and liquidity constraints in the financial sector, this has implications for *shadow banking* – the migration of financial intermediation to channels that are less regulated and supervised. This experience may have relevance in other fields of regulation. The information and communication industry displays some of the same features of rapid adaptation; and utility companies are reported to *game* the system by loading profits on non-regulated products, leading to a more intrusive (and complex) analysis of costing by regulators. More broadly, the importance of addressing such dilemmas in regulation is increasing. A distinctive feature of the crisis, in many advanced economies,

⁷ Regulation is at times used in such a sense. The U.S. Congressional Budget Office noted that wide definitions would result in the definition of most federal actions as regulatory (CBO, 1976, cited in Mitnick, 1980).

was the ensuing rise in public debts, which is unprecedented in peacetime. This has implications for the way governments may structure their activities in the future. Severe fiscal pressures mean that governments may choose to pursue economic and social goals through regulatory initiatives rather than spending programmes.

This turn of events is full of irony. It is scarcely too cruel to say that the economic legacy of major failures in the field of regulation may lead governments to rely even more on regulation to secure their policy goals. The most obvious concern in the financial sector is that contingent liabilities will develop which, over time, further increase the public debt. High vigilance will be required in this setting to safeguard the public interest. All fields of regulation – not just financial regulation – are potentially at issue here.

5 Is EU Banking Union a Game-Changer?

It is clear, first of all, that there has been a major shift in ideas in the international community about financial regulation and about the circumstances in which the benefits of financial integration can be realised. Continental Europe, of course, was never a hotbed of hands-off regulation along Anglo-Saxon lines: but still, the euro area crisis has alerted policy-makers to the need for a more effective macro- and microprudential policy framework to avoid destabilising shocks from financial markets. This sea-change in official awareness is a first reason for some optimism that next time could be different.

Moreover, the supervisory and resolution set-up under banking union should change incentives in ways that are very relevant to the issues of regulatory capture raised in this paper. Sev-

eral very promising aspects can be identified:

- By placing microprudential responsibilities at the level of the ECB, key assessments are removed to a greater degree from capture by national interests – and this includes national political as well as industry interests. *relational distance* is increased. This should address two major influences in the regulatory space that are potentially problematic (and can be mutually reinforcing).
- Similarly, the political economy of macroprudential action is substantially shifted to a level where the longer-run and area-wide gains from pre-emptive action can be better internalised.
- The ECB is uniquely placed to limit negative spillover effects across borders in the monetary union - including using the principle of reciprocity to avoid cross-border flows undermining national macroprudential measures.
- Moving responsibilities to a new body may also break up some of the agency culture problems of the past, and certainly sets out a very clear mandate for area wide supervision.

As regards some of the newer issues in regulatory capture that we identified earlier, *the proof of the pudding will lie in the eating*:

- One can expect that regulatory arbitrage and the gaming of regulatory systems will continue apace in the future, with the role of nonbanks growing as leverage and liquidity constraints bite on the banking system. Addressing these interactions will require close and effective cooperation between the ECB and the ESRB. Yet it is most important that the need for cooperation and coordination in the financial stability area does not *contaminate* the operating

independence of the central bank in the monetary policy domain.

- Complexity will remain an issue that potentially jeopardises supervisory independence and distance, including as the technological habit evolves further: the ECB will need to build up outstanding technical expertise in this area, including on linkages to nonbank markets and flows under its broad financial stability mandate. Links between banks and securities markets will be a crucial area, and the behaviour of nonbank entities such as investment funds may raise financial stability issues that the central bank cannot ignore.

Finally, it is impossible to divorce the effectiveness of prudential and financial stability policies from the macroeconomic setting in the euro area. In terms of the literature on capture, changes in the economic habitat may create new opportunities and new gains from risk-taking, regulatory arbitrage, and innovation designed to defeat regulatory constraints. Debt-financed imbalances are, we have seen, a particular hazard in this regard – and they may create their own defensive interest groups, at the national and perhaps the EU level.

Going forward, one can see here a recurring concern. When euro area member states experience country-specific shocks, they may develop wide imbalances – particularly where mismatched monetary conditions during a boom foster financial and real estate market exuberance (echoing the experience in Ireland and Spain). Emerging rapidly, such imbalances are likely to be debt-financed, and accompanied by sizable swings in the nontraded goods sector. Financial stability questions may reemerge. The EU Macroeconomic Imbalances Procedure is designed to address such imbalances, but it is not clear how forward-looking this is, and the

content of advice so far seems mainly concerned with structural policies.

In the future, macroprudential policies can also be brought to bear to try to dampen such debt-financed imbalances within the euro area. This is a potentially very important area, but when booms get underway, it does depend on overcoming the well-known arguments of lobbyists that *this time is different*. Moreover, the evidence on using macroprudential policies in a time-varying or cyclical way is not conclusive. Possibly national fiscal policies may also need to be used to dampen country-specific imbalances. These are issues for the future, but they deserve careful preparation in the present.

6 Conclusions

The decades before the financial crisis saw a progressive shift away from the tightly regulated financial regimes of the early post-war period. This shift involved deregulation; re-regulation in ways that eventually became very dependent on market risk assessments; and also the basing of macroeconomic and financial policy regimes on an assumption that market behaviour was efficient and ultimately self-stabilising. At the end of this process, the global and euro area crises resulted in severe and protracted damage to output and employment, and a rise in the public debt unprecedented in peace time. Faith in markets had gone too far.

The growing influence of market techniques of risk assessment, and in some countries the move away from intrusive forms of supervision, was probably not mainly driven by a quantum jump in the vigour of industry efforts to capture regulators. In the short-term, of course, these trends served industry interests. But what changed was more subtle. It included a somewhat extreme shift in ideas about private

markets and the distortive role of government; new currents in economics and then technology, which undermined some forms of regulation and also spawned innovations that greatly increased complexity; and political influences – not least a disinclination to look behind the superficial benefits of financial booms. Something much more complex than industry capture in a 1970s sense.

The main lessons of the experience concern the need to regulate the financial sector more effectively and to adjust macroeconomic policy regimes to help dampen destabilising swings in private sector behaviour. But the experience also underscores some wider issues, relevant to the theory and practice of regulation in finance and in other industries. Old issues concerning consumer interests, political influence, and inherent problems in pre-empting boom-bust cycles; and new issues arising from complexity and interactivity in regulation. It is the latter issues that reinforce the case for thinking about regulation less in terms of capture and more in terms of dynamically interacting influences in a regulatory space.

In Europe, the creation of a banking union, and the role of the ECB as a sin-

gle supervisor, presents an opportunity to change the incentives affecting actors in the regulatory space. It will create greater distance from national banking industries, and it will benefit from a clear mandate with a cross-border scope of operations – including in the macroprudential domain. At the same time, this set of changes clearly entails potential challenges of co-operation and co-ordination in a world where



financial markets feature shifting institutional perimeters and regulatory arbitrage, and where financial stability is influenced by many official and private sector actors.

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