

1 **Central**
2 **banking**
3 **monetary**
4 **stability and**
5 **financial**
6 **stability**

FINANCIAL CRISIS RESOLUTION – THE STATE AS A LENDER OF LAST RESORT?

Charles B. Blankart and Erik R. Fasten

7 *What is the theoretical basis for spending billions of dollars to fight the financial*
8 *and economic crisis? Neither the model of an omnipotent state nor that of a*
9 *welfare-maximising state seems appropriate. We propose a model of a contractual*
10 *state resulting from an exchange of protection against systemic risks against*
11 *regulation of the banking sector. During the years of globalisation governments*
12 *have neglected to install institutions to reduce systematic risks and currently pay the*
13 *price for their laxity. We evaluate what can be undertaken in both the short and*
14 *long run and how far a framework can be enforced internationally.*

15 **Keywords:** Financial crisis, public finance, bailouts, European Union.
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18 **Historic amounts of money** 19 **spent to fight the crisis**

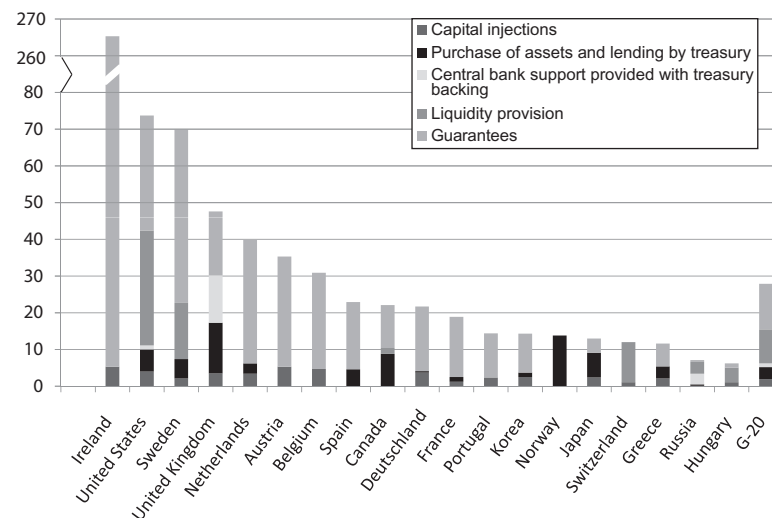
20 Unprecedented amounts of money have been
21 provided by governments of industrialised as
22 well as emerging countries to fight the current
23 financial and economic crisis: trillions of
24 dollars of bank guarantees, fiscal stimuli of
25 about US\$2.5 trillion and up to US\$1.1 trillion
26 for developing countries via the International
27 Monetary Fund (IMF, 2009a). Most of the
28 agreed expenditures have not affected
29 government budgets yet; but they will increase
30 expenditures tremendously if they come into
31 effect. In the beginning, mostly financial
32 institutions received public funds in various
33 different forms (Figure 1) to ensure their
34 survival. Later on, financial aid was also
35 devoted to the real economy in attempts to
36 overcome the crisis. Different transmission
37 channels were used: almost two-thirds of
38 the fiscal stimuli around the world were
39 dedicated to expenditure measures, such as
40 infrastructure projects. Tax relief measures,
41 mainly on personal and income tax, were also
42 initiated.

43 But why did governments all over the
44 world who ostensibly believed in markets
45 make such a U-turn within a few months in
46 2008/09? Is this the end of capitalism? Or is
47 such spending part of capitalism's 'rules of the
48 game'? In this paper we show that the
49 observed pattern is consistent with a
50 contractarian view of the state.

Three models of the state are compared: 51
an omnipotent state, a welfare-maximising 52
state and a contractual state. In the latter a 53
contractual obligation of the state to 54
guarantee systemic stability in banking and in 55
turn financial stability is traded off against the 56
right to regulate the banking system. Starting 57
from this last model we show the experiences 58
generated by banking regulation before and 59
after the consolidation of banking institutions 60
in a globalised market. We point to its 61
deficiencies and consider what policy 62
measures could be undertaken to address 63
these in both the short and long run. After 64
this mainly national analysis we turn to 65
international banking where an international 66
regulator is absent and national governments 67
have an incentive to build up systemic risks in 68
order to let their economies be saved by the 69
community of nations. 70

71 **Comparing three models of** 72 **the state** 73

74 With the banking sector and the economy in 75
crisis, all expectations for a rescue are directed 76
to the government. But what can we expect 77
from the government? Three theoretical 78
keywords come up: power, welfare and choice. 79
Each of them provides a basis for a model of 80
the state in which the present situation can be 81
characterised.



1 [2] **Figure 1:** Support of the financial sector in per cent of GDP
2 Source: IMF (2009a).

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4 *The omnipotent state*

5 Quite a few politicians seem to believe in an omnipotent state
6 in which the scale of public spending cannot be large enough
7 given the costs of the current financial and economic crisis.
8 The underlying conviction is that the more is spent, the
9 quicker economies will recover and full employment will be
10 re-established. The state appears as an unlimited lender of last
11 resort that should stand by whenever problems arise.

12 In this miraculous world the state is an omnipotent
13 troubleshooter. Accordingly, individuals partially lose the
14 incentives to take care of themselves. Eventually the state will
15 have to take over the responsibility for all kinds of public and
16 private needs. It will be hopelessly overburdened and will
17 eventually collapse. Since it relies upon public spending
18 without a realistic idea of its limits, this is hardly a useful
19 concept of the state.

21 *The welfare-maximising state*

22 Others view the state as a welfare-maximiser which supports
23 distressed economic actors according to their needs so that the
24 returns of public means are equalised at the margin. This
25 approach is superior to the previous one since the capacity of
26 the state is limited. But individuals still have little incentive to
27 provide for themselves and therefore it cannot be stated
28 whether the state is too large or too small. Moreover, the
29 motivations of the welfare-maximising state remain unclear.
30 To overcome these problems we need a model which generates
31 the size of the state from choice.

33 *The contractual state*

34 A contractual state provides a menu of services to its citizens
35 and private enterprises at a specific price. In the standard case
36 it promises to protect firms' property rights in exchange for
37 taxes. Risks will usually not be part of the contract as the risks
38 of the different firms are too specialised to be covered by the
39 state and might be better assessed by the market than by the
40 state. Banks, however, are special. They are subject to two

risks: private risks and systemic risks. Banks' private risks are
comparable to firms' risks in the standard case. A bank has an
incentive to provide for its private risks, for example to
calculate and to run risk assessment models, stress tests etc.,
in order to overcome the ups and downs of its business
similarly to all other firms. Systemic risks, however, are joint
risks for all banks and in fact to the whole economy. They
might materialise in domino effects when a bank's failure and
its defaulting credits affect other banks, which consequently
will default as well. In globalised financial markets, financial
interlinkages and in turn contagion probabilities of bank
failures increased. Even rumours that a bank could default
may cause other banks to reconsider and possibly to terminate
interbank exchange. Furthermore, bank runs of customers,
who wish to secure their deposits, may result. The systemic
risk is therefore a public bad, and its counterpart, system
stability, a public good. While each bank has an incentive to
employ an efficient amount of resources to avoid private risks,
it will only put an inefficiently small amount of resources into
avoiding systemic risks. Because systemic risks are spread over
the whole banking community, the benefits of individual
preventive measures benefit merely to a minimal amount the
bank that made the expenses.

As banks cannot provide system stability on a
decentralised basis, common action organised by the state is
needed. One can think of an implicit contract between the
state and the banks in which the former guarantees system
stability as a lender of last resort in exchange for subjecting
the latter to regulation that constrains their behaviour such
that it does not threaten the system's stability.

A crucial point now is the quality of regulation. Prudent
regulation imposes on banks the extra costs that exactly
compensate for the increase of systemic risk they create. If
regulation is too tight, the banking system will lag in its
development, which consequently also affects the real
economy and lowers growth, whereas if regulation is too lax,
systemic risk may remain too large while the government still
remains responsible for the contingent costs, which threatens
financial stability.

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Historical experiences with banking regulation

It is no trivial task to find the equilibrium between system stabilisation and regulation, even though the stability of financial markets is crucial for investments and savings, risk sharing, information provision and ultimately economic growth.¹ But history illustrates how the two can be matched. Before financial globalisation, national entry restrictions into the banking sector, restrictions on international currency transfers and other sorts of market segmentations allowed national governments to regulate their national markets by price–cost margins and reserve requirements. Governments restricted the markets so that banks obtained comfortable profits and system stability was guaranteed, while at the same time voting citizens experienced comfortable interest rates and other bank charges – supervision was easily feasible. Following the analyses of Peltzman (1976) and Stigler (1971), political entrepreneurs balanced campaign contributions and regulatory favours in a way that maximised votes.

This finite world was fairly characteristic of regulatory policy up to the 1970s. But thereafter it was continuously eroded by globalisation, with international transferability of money, nearly free entry into banking, and last but not least the four basic liberties of the EU. In this global competition of financial institutions, national regulators often had little choice. In retreat, they increasingly practised a ‘race to the bottom’ in terms of loosening regulation while competing with other financial centres. Those banks that were able to survive with the lowest equity ratio became competitive in the market, since a low equity ratio allowed a high leverage and promised higher profits. Equity returns of more than 30% per annum were feasible.

In the mid-1980s, governments of the industrialised world became aware that, with low equity ratios, the costs for maintaining systemic stability were increasingly shifted back to themselves. They urged a renegotiation of the implicit contracts under which they were supposed to guarantee systemic stability. In particular, minimum capital requirements should better mirror and limit the attached risks. Their aim was to ‘strengthen the soundness and stability of the international banking system while maintaining sufficient consistency that capital adequacy regulation will not be a significant source of competitive inequality among internationally active banks’ (BIS, 2004, p. 2). Hence, they wanted to hinder a circumvention of national regulations and reduce regulatory distortions. Banks, however, opposed such undifferentiated regulation, as the regulation was itself distorting investment decisions. They argued that their own sophisticated risk models were much more appropriate than the imposed equity quotas of regulators. The Basel group of BIS partially followed these arguments and allowed banks to calculate their exposure and the associated equity ratios in the Basel II framework (BIS, 2004). Moreover, it required all assets to be valued using the mark-to-market method following the fair value principle, as this would reflect the true value of the portfolios.

These new regulations, however, did not shift the costs of the provision of systemic stability back to the banks. On the contrary, they, along with the loose monetary policy of the

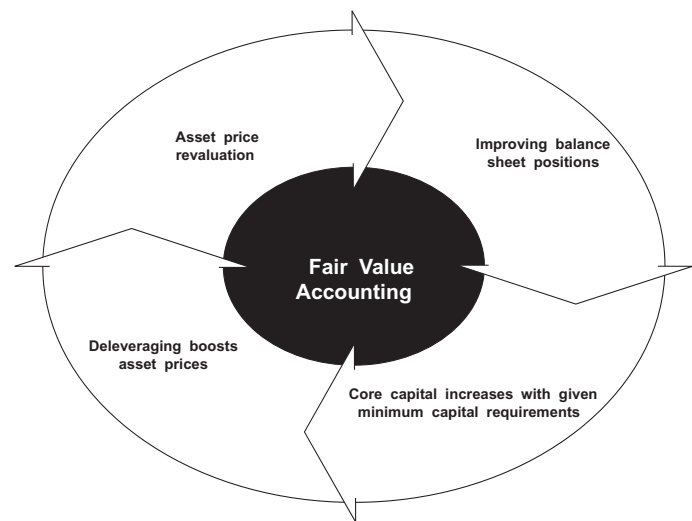


Figure 2: Dynamics of fair value accounting

Federal Reserve in the USA and other factors, created excellent conditions for leveraging as long as security prices went up, and hence contributed to the formation of a bubble up to 2006.² The spiral of Figure 2 turned clockwise to ever higher levels in a procyclical manner. Subsequently, the regulations made the spiral turn counterclockwise leading to ever lower security prices after the bubble burst in 2007. Now the worldwide banking system became systemically unstable. The task to restore systemic stability fell back to the governments according to the original contract as they were unable to regulate banks in a way that maintained system stability. Billions of dollars had to be spent by governments as they were responsible for systems’ stability.

What can be done?

The international community of governments failed in its task to efficiently regulate banks in return for their promise to guarantee the public good of stability of the financial system. It allowed and in fact incentivised banks to engage in increasingly more innovative, extravagant and fancy contracts³ and it has now to pay the price of its negligence. Nevertheless, it is possible to investigate which measures are currently required in both the short and long run.

Short-term options

In the short run governments have little discretion. They have to fulfil the implicit contract while aiming to save taxpayers’ money as far as possible. Consequently, some propose to assist the financial system first of all with an easy-money policy. But one should be critical and not trust treatments of symptoms. The true reason for the banking crisis is not a lack of liquidity, but a lack of mutual trust leading to contagion effects and systemic instability (Hellwig, 2008).

A second proposal in the short run is to give financial bank guarantees to restore trust in the hope that they will not materialise before the banks recover. Guarantees have some attractiveness. But one should not fall into self-deception; rather one should calculate rationally their expected cost as the

1 guarantees might turn into payments and thereby require
2 massive amounts of public spending.

3 Some hardliners argue that the governments should, as a
4 third option, reject any bailout (Miron, 2009) and instead
5 allow for regular bankruptcy filings, for example under
6 Chapter 11 or FDIC in the USA. Such a strategy may be viable
7 for smaller banks which are not of systemic relevance, but if a
8 bank is large enough to have an attached systemic risk, it
9 would be unproductive to deny a bailout as it may be the only
10 way to avoid systemic distrust, as evident after the default of
11 Lehman Brothers in September 2008, and potential bank runs.

12 A fourth alternative is recapitalisation or a public takeover
13 of a bank, which is a bailout that instantly generates costs for
14 taxpayers. The government infuses new capital into a bank
15 and puts its representatives on the board of directors to
16 guarantee that public money remains, at least partly, under
17 public control.

18 *Long-term options*

19 In the long run, the implicit contract on financial systems'
20 stability between the government and the banks should be
21 renegotiated. New regulatory rules should be designed
22 constraining the banks so far that they effectively have to bear
23 the costs of system stabilisation. We shall distinguish between
24 two main pillars, which are essential in this respect, namely
25 *minimum capital requirements* and a *procedure how to handle*
26 *system-relevant banks under financial distress*.

27 We have seen above that fixed *minimum capital*
28 *requirements* in combination with mark-to-market evaluation
29 were a source of dynamic expansion and dynamic contraction
30 of the banking system between 2002 and 2009. Therefore, the
31 two criteria should be disentangled in a new regulation. On
32 the one hand, it is desirable to have higher equity ratios in
33 order to dampen excessive credit expansion for high-risk
34 banks. But, on the other hand, one should be flexible when
35 asset values according to the mark-to-market evaluation drop
36 so that the minimal equity ratio is undercut. A rigorous
37 minimal equity requirement has no function as it cannot
38 cushion banks.⁴ Therefore, a new regulation needs rules on
39 how to use the capital below the minimum requirement and
40 how to rebuild capital reserves thereafter and over what time
41 period. These new rules should be enforced internationally –
42 maybe in a Basel III accord or by the newly created financial
43 stability board of the G20 group – in order to prevent
44 international competition incentivising authorities to adopt a
45 lax regulatory environment.

46 In addition, there have to be rules on how to treat
47 *system-relevant banks* in cases of financial distress and
48 bankruptcy. Admittedly it is true that it is not precisely clear at
49 what point in time a bank is or becomes system relevant.
50 Recent experience has, however, shown that the probability
51 that a bank becomes a systemic risk and that it has to be
52 rescued in case of distress increases with the size of the bank.
53 Therefore, banks may have a strategic incentive to grow. In
54 order to make that unattractive, banks should be given clear
55 signals. They may be free to grow internally or through merger
56 and acquisition, but they must know *ex ante* that in case of
57 distress or bankruptcy followed by a bailout or restructuring,
58 the management will be replaced and will be liable with
59

60 previously received bonus payments. The shareholders and
61 other stakeholders, who themselves have no systematic risk
62 attached, will be expropriated. They will not gain from the
63 revaluation of the bank that is due to the investment of public
64 funds (in fact taxpayers' money) to avoid systemic contagion.
65 Therefore, an *ex ante* threat of losing the entire investment will
66 exist, which discourages risky strategies at the expense of
67 taxpayers. So private investors will internalise the social costs
68 of the respective financial institution, while at the same time,
69 contagion to other financial institutions is limited and
70 therefore distrust is reduced.

71 **International regulation**

72 It has already been said that these standards should be
73 followed internationally. Financial stability is not only a
74 national but an international public good. But would
75 national governments have an incentive to abide by these
76 international rules? One has to be sceptical. During upswings
77 abiding by standards is disadvantageous; their restrictions
78 dampen profits of domestic banks and result in competitive
79 disadvantages. Abiding by standards may also be detrimental
80 in downswings as the government might have to decide
81 strategically whether it should allow distressed banks to
82 deviate to reduce short-term losses in order to increase their
83 own re-election chances by, for example, reducing job losses
84 in the respective bank. Government action may therefore be
85 inconsistent over time, as stressed by Kydland and Prescott
86 (1977).
87

88 But international co-ordination is essential, as the
89 interesting example of Austria in the current crisis illustrates.
90 Austrian banks became pioneers as investors in Central and
91 Eastern Europe after the fall of communism.⁵ Growth rates
92 were high and profits abundant, hence nobody queried the
93 concentration of risk. To the contrary, most foreign banks
94 were envious of Austrian banks' strong position in Eastern
95 Europe. But with the downturn of the world economy
96 many of these countries had to devalue their currencies,
97 experienced drastically reduced growth rates, had less foreign
98 direct investment and problems in servicing their external
99 debt loads. The crisis in the Eastern European countries in
100 turn brought the Austrian banks into distress. With
101 outstanding credits of about €277 billion – roughly
102 equivalent to Austrian GDP at the end of September 2008
103 (BIS, 2009) – they became a systemic risk for the Austrian
104 economy. What should the Austrian government do? Letting
105 the banks go bankrupt would induce a major economic
106 crisis potentially dangerous for governments' survival.
107 Recapitalising them would be beyond governments' means.
108 Hence the alternative of guaranteeing a bailout in case of
109 insolvency remained as a promising option. Should the
110 guarantee materialise, Austria could be close to a bankruptcy
111 in 2010.

112 But would it? Would the European Union and its member
113 states allow such a bankruptcy affecting not only Austria and
114 its eastern neighbours, but possibly also Italy via Unicredito or
115 Germany because of its close trade relations? It is uncertain. In
116 any case, promising a bailout to distressed banks is
117 presumably the best strategy the Austrian government could
118 follow. Should the guarantee materialise and the Austrian

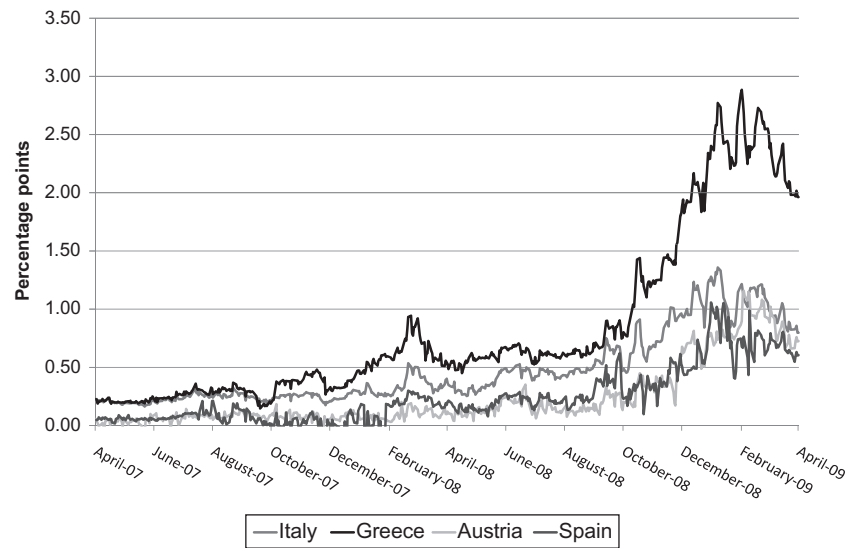


Figure 3: Yield spreads of ten years' government bonds versus Germany

government fall into bankruptcy, the other EU governments may be obliged to help in order to avoid contagion effects and severe harm to their economies (Árvai *et al.*, 2009). Note that the Austrian government is not a unique case in the European Union. Severely distressed public finances, which could ultimately result in state bankruptcies, are also evident in other countries such as Latvia, Hungary and Romania that have already received funds from the IMF and the EU Emergency Fund (under the pretext of correcting their balance of payments), as well as Portugal, Italy, Greece and Spain.

Therefore, the question arises: how can other EU governments protect themselves from being passively obliged to bail out these risky countries including their banks?

The answer is straightforward: by deliberately binding their hands not to grant a bailout. Such a firm and irreversible commitment would give a clear signal to national governments that a bailout will not take place, would avoid moral hazard and would provide incentives to beware of risky strategies.

The fathers of the Treaty Establishing the European Community were quite aware of this problem. Therefore, they built a quadruple legal fortification to prevent politicians from granting a premature bailout:

- Firstly, Article 103 EC establishes a general multilateral no-bailout clause for all levels of government in the EU.
- Secondly, Article 119 EC states that, as an exception, financial aid to a member state can be given in case of balance of payments problems inhibiting the internal market (hence excluding eurozone countries which lack balance of payments problems by definition).
- Thirdly, Article 267 EC pertains to the European Investment Bank. It constrains the bank to particular projects in the member states and hence excludes budgetary subsidies.
- Fourthly, Article 269 EC requires the budget to be 'financed wholly from own resources' and prohibits deficit spending.

In addition, the procedural rules of the Treaty generally require that collective decisions by the Council or the European Parliament can only be made following a proposal by the European Commission. Hence, the Treaty is shielded from myopic desires coming from politicians that depend on electoral success. The Commission, in contrast, is nominated for a fixed term of five years by member-state governments and approved by the European Parliament, and therefore can hardly be dismissed for political reasons. One should therefore expect that these provisions are enough to motivate the members of the Commission to act as 'guardians of the Treaty' and abstain from political manoeuvres.

When we look, however, at how the Commission reacted to impending member-state bankruptcies in early 2009, one can see that political considerations remained very strong. Instead of providing clear signals, EU commissioners reacted with unclear statements. European Union Monetary Affairs Commissioner Joaquín Almunia said on 3 March 2009: 'If the crisis emerges in one euro-area country, there is a solution'. But the details of the solution were intentionally left unclear: 'it's not clever to talk in public about this solution, but the solution exists'. Furthermore, he said that EU officials 'are equipped intellectually, politically and economically to face this crisis scenario'.⁶

In fact such statements are highly unproductive. They contribute to making the situation opaque and raise expectations of a bailout. Their goal is presumably to reassure creditors that they will receive their money. But they do not provide incentives towards budgetary self-sufficiency. In fact, markets immediately took notice and reacted, and spreads of national bonds compared to German bonds came down in March after a considerable hike at the end of 2008 and the beginning of 2009 (Figure 3).

Alternatively, the European authorities should have relied on the expertise of other lenders of last resort, such as the IMF, which possess the funds and the expertise to decide on how to distribute financial funds most suitably. The distorting effects (as shown by Corsetti *et al.*, (2006)) and the influence of vote-maximising politicians would be lower.

Conclusion

This paper started with the question: how can we explain the enormous amounts of government money spent in the course of the current economic and financial crisis? Three alternative models have been presented: a model of an omnipotent government, a model of a welfare-maximising government and a contractarian model of the state. Only with the last model are we able to explain system stabilisation through regulation as a result of choice. It has been shown that regulation worked reasonably in the banking sector before the era of intensive globalisation, but it became deficient in the years thereafter, jeopardising system stability. The subsequent attempts to re-establish regulation within the Basel I and II accords were mostly unsuccessful. In some respects, they added to the dynamics of the market instead of regulating it.

Reforms have to be considered in both the short and long run. In the short run policy-makers have little choice. They have to fulfil their contractual obligation to re-establish system stability as far as possible and to do it at least cost to the taxpayer. In the long run new regulatory rules regarding equity ratios and systemic risks have to be designed and agreed on. Equity ratios should be higher and flexible in order to provide more security for investors as well as cushioning the ups and downs of economic activity. Banks should be allowed to grow through internal growth and through merger without limits (as long as they do not inhibit competition). They may also become systemic risks. But it should be made clear by law that their managers shall lose command over their enterprise and shareholders their property rights when a bank that has grown into a systemic risk becomes insolvent. Hence, clear signals are given that becoming a systemic risk is not only a risk for society but also for the bank stakeholders themselves.

It would appear to be particularly difficult to make these rules binding for governments at the international level. National governments, instead of applying the international regulatory rules, have an incentive to shift their national risks on to the international community and in turn make themselves a systemic risk. International politicians are then tempted to grant bailouts in order to avoid contagion effects. Only strong international rules, for example at the level of the European Union, can prevent politicians from yielding to such political temptations.

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1. See Allen and Gale (2004) for an intensive overview of the literature on the effects of institutional differences on economic development.

2. The anticipation of a loose monetary policy in the event of financial distress is also known as the Greenspan-put, as it used to be Fed's policy to ease monetary policy after crisis, such as the 1987 stock market crash, the Gulf War, the Mexican crisis, the Asian crisis, the burst of the internet bubble, and the 9/11 attacks. Investors anticipated the Fed's reaction to a crisis and invested heavily in boom phases.
3. Further details of the crisis evolution shall not be enumerated here because they were the morphology, not the cause of the crisis. For details refer *inter alia* to FSA (2009), IMF (2009a, 2009c) and Larosière (2009).
4. See Hellwig (2008) for a detailed discussion of this argument.
5. The major Austrian banks involved are: Raiffeisen International, Erste Bank, Vienna Insurance, Unicredito and Volksbank.
6. *Bloomberg Press*, 3 March 2009.

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